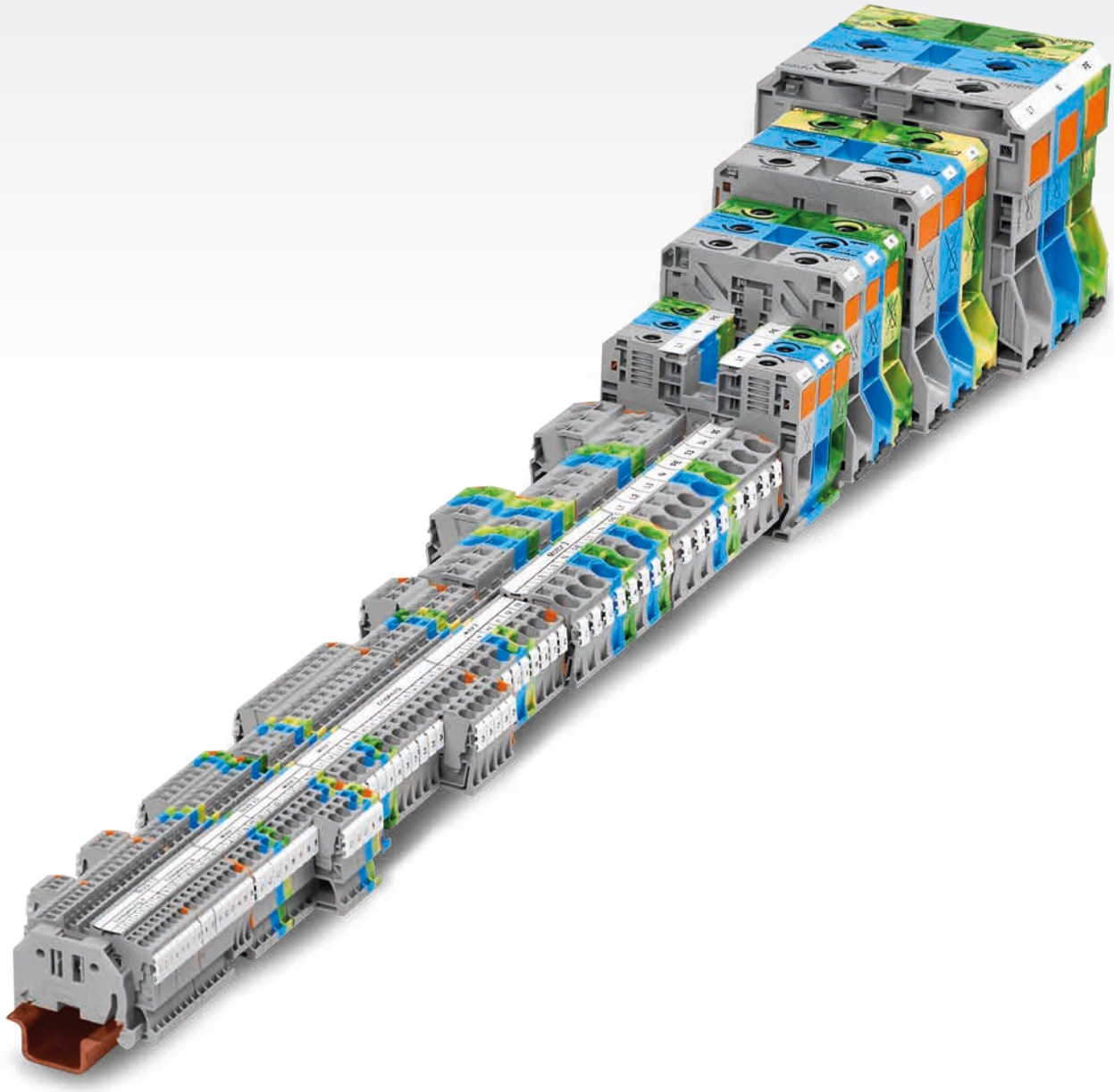
Rail-Mounted Terminal Block Systems

Full Line Catalog, Volume 1
Edition: 2015



WE INNOVATE!

WAGO®

WAGO Full Line Catalogs



Volume 1, Rail-Mounted Terminal Block Systems

- Rail-Mounted Terminal Blocks
- Rail-Mounted Terminal Blocks with Pluggable Connector (X-COM®-SYSTEM and X-COM®S-SYSTEM)
- Patchboard Systems
- Terminal Strips
- PUSH WIRE® Connectors for Junction Boxes
- Lighting Connectors
- Shield Connecting System



Volume 2, PCB Terminal Blocks and Connectors

- PCB Terminal Blocks
- SMD PCB Terminal Blocks
- *MULTI CONNECTION SYSTEM (MCS)*
- Pluggable PCB Terminal Blocks
- Feedthrough Terminal Blocks
- Specialty Connectors
- Empty Housings



Volume 3, Automation Technology

- Software
- Operating & Monitoring - *PERSPECTO*®
- Controllers
- Modular I/O-SYSTEM, IP20/IP67
- Industrial Switches
- Radio Technology, *TO-PASS*® Telecontrol Technology
- IP67 Sensor/Actuator Boxes, IP67 Cables and Connectors



Volume 4, Interface Electronic

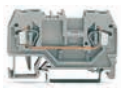
- Relay and Optocoupler Modules
- *JUMPFLEX*® Signal Conditioners and Isolation Amplifiers
- Current and Energy Measurement Technology
- *EPSITRON*® Power Supply System
- Interface Modules and System Wiring
- Overvoltage Protection
- Interface Modules with Specialty Functions
- Empty Housings



Volume 5, WINSTA® – The Pluggable Connection System

- *WINSTA*® MINI – Pluggable Connectors
- *WINSTA*® MINI special – Pluggable Connectors
- *WINSTA*® MIDI – Pluggable Connectors
- *WINSTA*® MIDI special – Pluggable Connectors
- *WINSTA*® MAXI – Pluggable Connectors
- *WINSTA*® RD – Cable Assemblies
- *WINSTA*® KNX – Pluggable Connectors
- *WINSTA*® IDC – Flat Cable Systems
- *WINSTA*® – Distribution Boxes

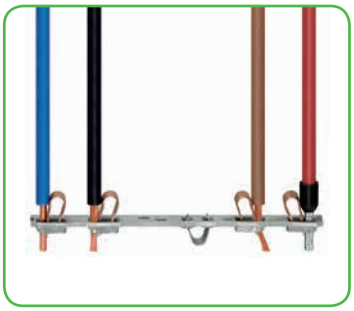
Volume 1, Rail-Mounted Terminal Block Systems

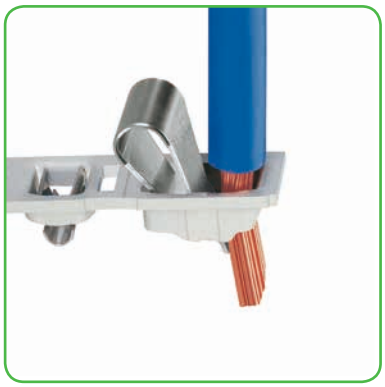
			Page
	**Rail-Mounted Terminal Blocks, TOPJOB® S** Front-Entry Wiring	CAGE CLAMP® S Push-In Connection Technology 1 mm² to 16 (25 "f-st") mm² (16–4 AWG) for DIN 35 Rails	5
	**Rail-Mounted Terminal Blocks with Pluggable Connector, X-COM®S-SYSTEM** Front-Entry Wiring	CAGE CLAMP® S Push-In Connection Technology 1 mm² to 2.5 (4) mm² (16–12 AWG) for DIN 35 Rails	113
	**Installation Rail-Mounted Terminal Blocks, TOPJOB® S** Front-Entry Wiring	CAGE CLAMP® S Push-In Connection Technology 1 mm² to 4 (6) mm² (16–10 AWG) for DIN 35 Rails	149
	**High-Current, Rail-Mounted Terminal Blocks High-Current Connectors** Side-Entry Wiring	POWER CAGE CLAMP 35 mm² to 185 mm² (2 AWG – 350 kcmil), 1500 V Nominal Voltage, for DIN 35 Rails	165
	**Rail-Mounted Terminal Blocks, Classic Installation Rail-Mounted Terminal Blocks, TOPJOB®, Classic** Front-Entry Wiring	CAGE CLAMP® 1.5 mm² to 35 mm² (16–2 AWG) for DIN 35 Rails	177
	**Rail-Mounted Terminal Blocks with Pluggable Connector, X-COM®-SYSTEM, Classic** Front-Entry Wiring	CAGE CLAMP® 2.5 (4) mm² (12 AWG) for DIN 35 Rails	297
	**Rail-Mounted Terminal Blocks, Miniature Rail-Mounted Terminal Blocks, Compact** Front-Entry Wiring	CAGE CLAMP® 2.5 mm² (4 mm²) (12 AWG) for DIN 35 and DIN 15 Rails	365
	**Modular Terminal Blocks and Terminal Strips** Side-/Front-Entry Wiring	CAGE CLAMP® 1.5 mm² to 4 mm² (16–12 AWG) for Panel Mounting	389
	**Power Supply Terminal Blocks and Chassis-Mount Terminal Strips** Side-Entry Wiring	CAGE CLAMP® S 2.5 mm² (22 AWG), 4 mm² (12 AWG) for Panel Mounting	419
	**Rail-Mounted Terminal Blocks, Classic** Side-Entry Wiring	CAGE CLAMP® 1.5 mm² to 16 mm² (16–6 AWG) for DIN 35 Rails	447
	**Terminal Blocks for Matrix Patching and Potential Distribution** (Busbar Terminal Blocks)	CAGE CLAMP® 1.5 mm² to 16 mm² (16–6 AWG)	459
	**Lighting Connectors, PUSH WIRE® Connectors for Junction Boxes, Lever-Actuated Splicing Connectors** Installation Connectors		481
	**Shield Connecting Systems, Marking, Accessories and Tools**		509
	**Technical Section**		577
	**Index Addresses**		625

Operation of WAGO Connection Technologies

Please follow applicable product instructions for product-specific handling.

CAGE CLAMP®S





The universal connection with "SPECIAL"

Handling:
- Open clamping unit
- Insert the conductor
- Release clamp – done!
- Terminate both solid and ferruled conductors by simply pushing them in – no operating tool needed.



CAGE CLAMP® S terminates the following copper conductors:
solid



stranded



fine-stranded, also with tinned single strands



fine-stranded, tip-bonded



fine-stranded, with ferrule (gastight crimped)

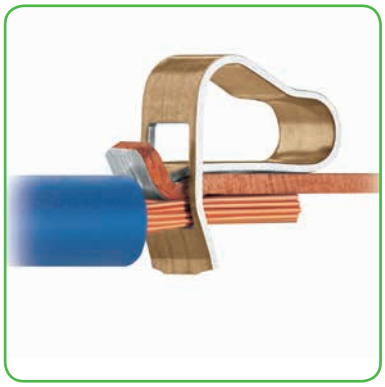


fine-stranded, with pin terminal (gastight crimped)

For aluminum conductors, see notes in Section 14.

CAGE CLAMP®





The universal connection for solid, stranded and fine-stranded conductors

Handling:
- Open clamping unit
- Insert the conductor
- Release the clamp – done!



CAGE CLAMP® terminates the following copper conductors:
solid



stranded



fine-stranded, also with tinned single strands



fine-stranded, tip-bonded



fine-stranded, with ferrule (gastight crimped)



fine-stranded, with pin terminal (gastight crimped)

For aluminum conductors, see notes in Section 14.

Operation of WAGO Connection Technologies

Please follow applicable product instructions for product-specific handling.

POWER CAGE CLAMP®







POWER CAGE CLAMP terminates the following copper conductors:
solid



stranded



fine-stranded, also with tinned single strands



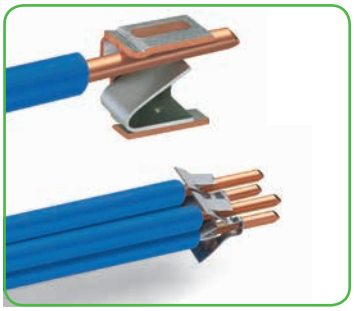
fine-stranded, with pin terminal (gastight crimped)

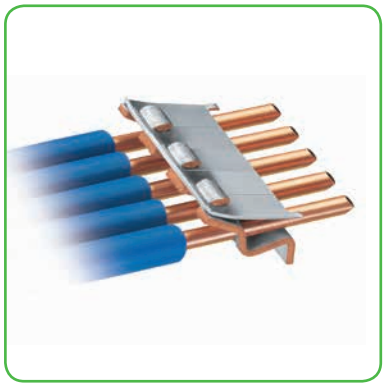
For aluminum conductors, see notes in Section 14.

The universal connection for conductors larger than 2 AWG (35 mm²)

Handling:
- Open clamp by turning an Allen wrench counter-clockwise.
- Press integrated latch to open clamping unit for hands-free wiring.
- Insert conductor.
- A small counter-clockwise rotation closes the clamp, securing conductor.

PUSH WIRE®







PUSH WIRE® terminates the following copper conductors:
solid

For aluminum conductors, see notes in Section 14.

PUSH WIRE® connection for solid and stranded conductors (depending on model used)

Handling:
Tool-free, twist-free terminations for solid and rigid stranded conductors – simply push into unit.

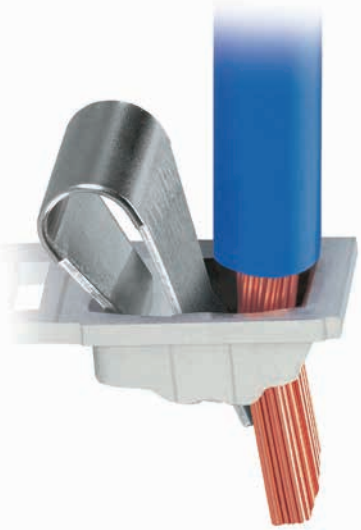
CAGE CLAMP®S

The universal connection with "SPECIAL"

Handling:
- Open clamping unit
- Insert the conductor
- Release clamp – done!
- Terminate both solid and ferruled conductors by simply pushing them in – no operating tool needed.

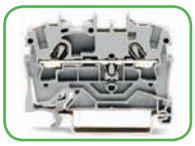
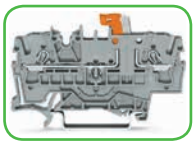
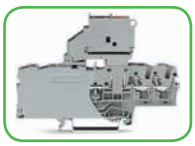
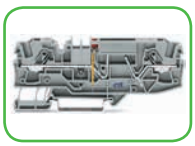
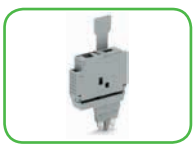
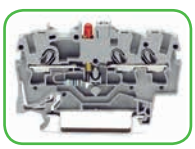






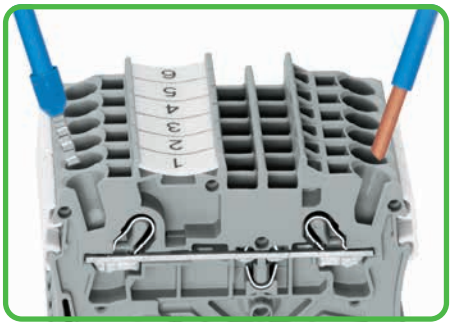
Rail-Mounted Terminal Blocks, TOPJOB® S

Front-Entry Wiring

			Page
	**Through, Ground Conductor, Shield and Ex Terminal Blocks** 0.14 mm² to 16 (25 "f-st") mm² (24–4 AWG)	2000 – 2016 Series	10
	**Multilevel Rail-Mounted Terminal Blocks** 1 (1.5) mm² (16 AWG) and 2.5 (4) mm² (12 AWG)	2000/2002 Series	24
	**Disconnect/Test/Fuse Terminal Blocks and Through Terminal Blocks of Same Profile** 0.25 mm² to 2.5 (4) mm² (22–12 AWG)	2002 Series	42
	**Fuse Disconnect Terminal Blocks with Pivoting Fuse Holder** 0.25 mm² to 2.5 (4) mm² (22–12 AWG)	2002 Series	50
	**Disconnect, Ground Conductor Disconnect Terminal Blocks and Fuse Terminal Blocks** 0.5 mm² to 6 (10) mm² (20–8 AWG)	2006 Series	60
	**Disconnect/Test Terminal Blocks for Current and Voltage Transformer Circuits** 0.5 mm² to 6 (10) mm² (20–8 AWG)	2007 Series	72
	**Fuse Plugs on Carrier Terminal Blocks**	2004/2006 Series	76
	**Diode and LED Terminal Blocks** 0.25 mm² to 4 (6) mm² (22–10 AWG)	2001/2002/2004 Series	80
	**Multilevel Diode and LED Terminal Blocks** 0.25 mm² to 2.5 (4) mm² (22–12 AWG)	2002 Series	86
	**Diode, LED Modules and Empty Component Plug Housings**	2002 Series	90
	**Accessories for TOPJOB® S Rail-Mounted Terminal Blocks**		
	– Banana Plugs		292
	– Marking Accessories		108
	– Various Jumpers		101
	– Step-Down Jumpers for Through Terminal Blocks		23
	– Connectors and Connector Strips	2001 – 2016 Series	96

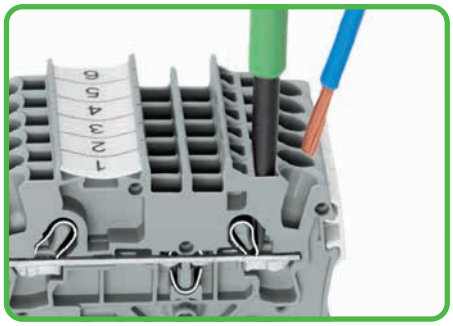
CAGE CLAMP®S Rail-Mounted Terminal Blocks 2000 to 2016 Series

Simply push-in



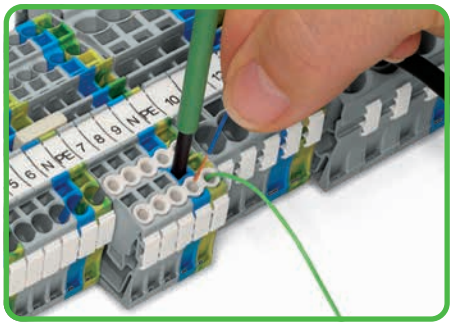
Directly insert solid and ferruled conductors.

Conductor termination



Terminating fine-stranded conductors using an operating tool.

Insulation stop



Conductor termination – Insulation stop.

Simply jumpered



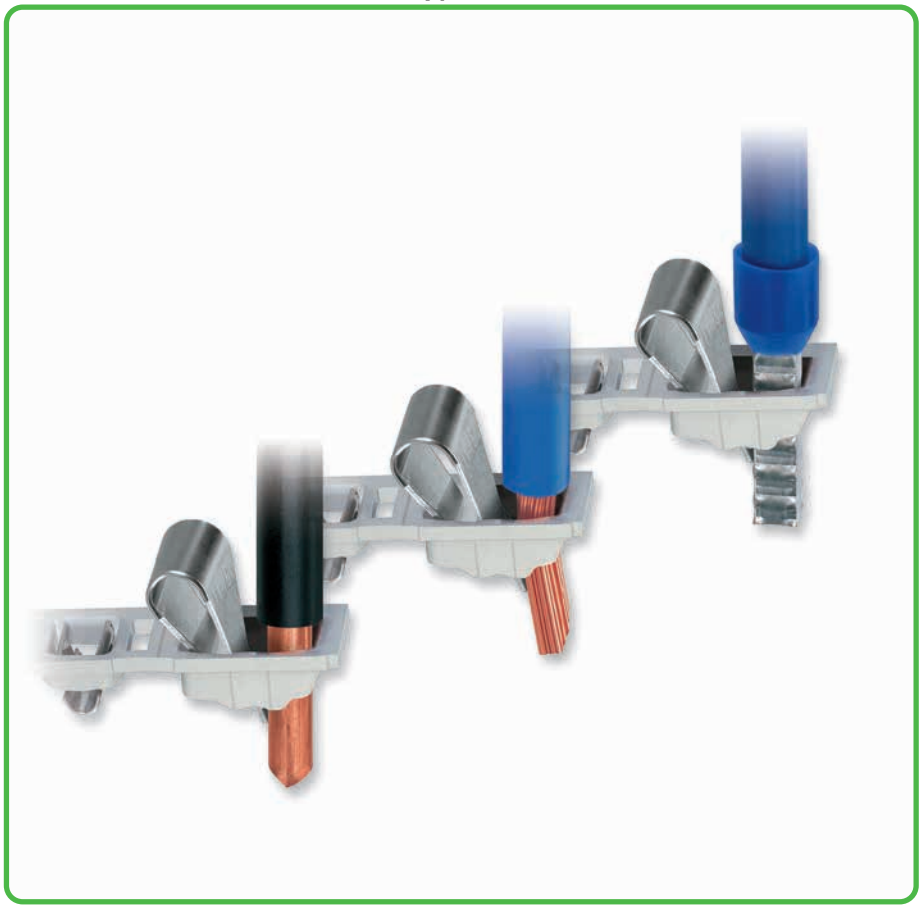
Insert push-in type jumper bar and push down firmly until it hits the backstop.

Customizable push-in type jumper bars

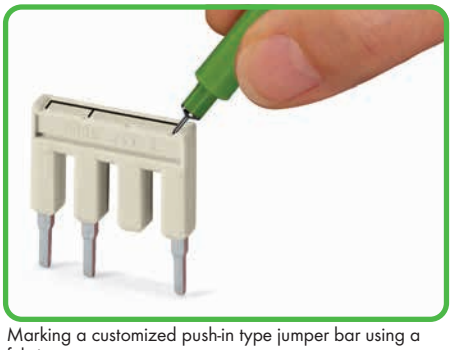


Breaking off jumper contacts (2000, 2001, 2002, 2004 Series)

CAGE CLAMP® S for all conductor types

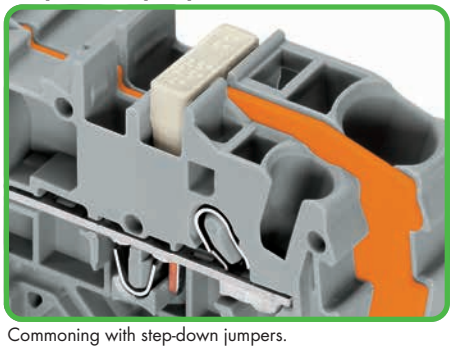


Customizable push-in type jumper bars



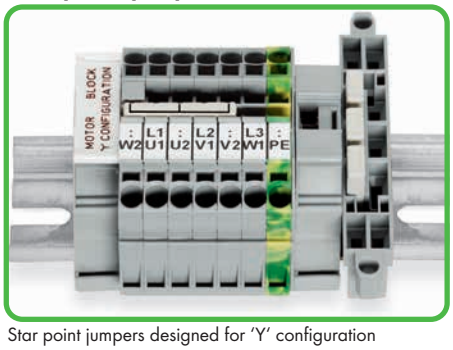
Marking a customized push-in type jumper bar using a felt-tip pen.

Step-down jumpers



Commoning with step-down jumpers.

Star point jumpers



Star point jumpers designed for 'Y' configuration



CAGE CLAMP®S clamps the following copper conductors:*

solid



stranded

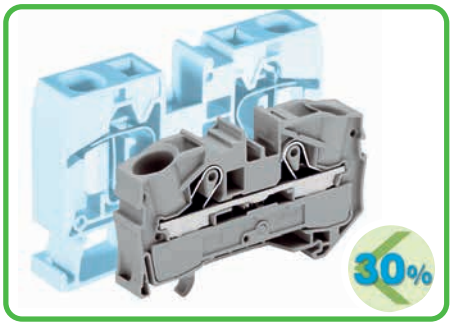


fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

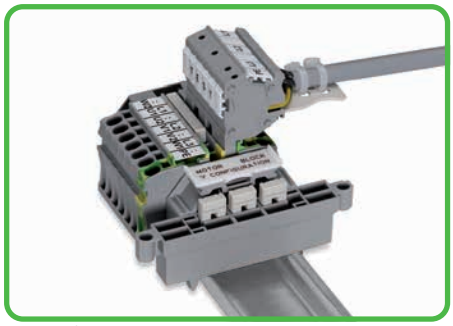
– Description and Handling –

Simply smaller



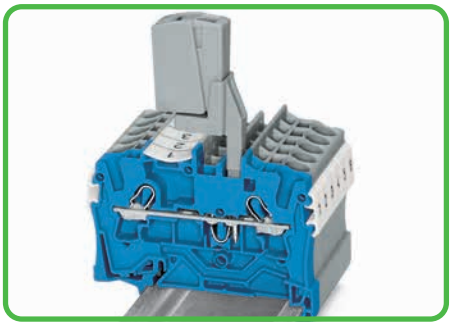
Up to 30% more compact. Advantage: More wiring space or smaller switch cabinets/junction boxes.

TOPJOB®S connectors



TOPJOB® S Connectors for the 2001 to 2016 Series can be easily inserted into jumper slots to provide an additional power tap.

Testing tap

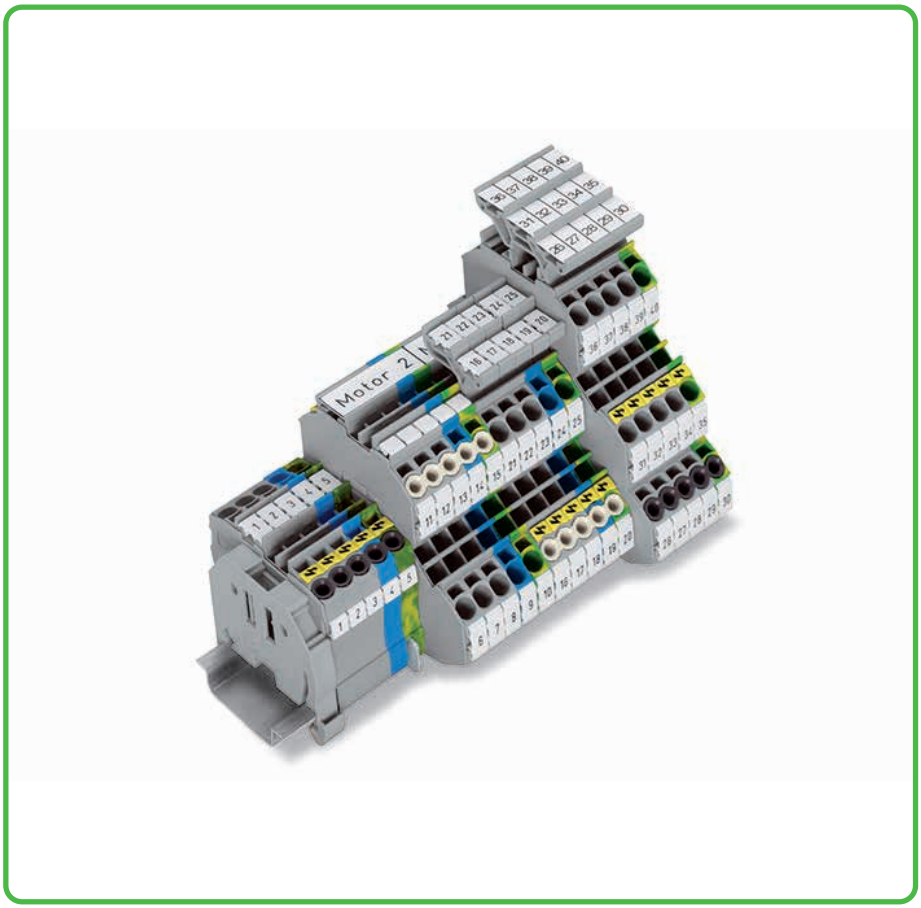


Testing tap suited for 2000 to 2016 Series terminal blocks. Tool-free connections for individual test wires up to 2.5 mm²/AWG 12.

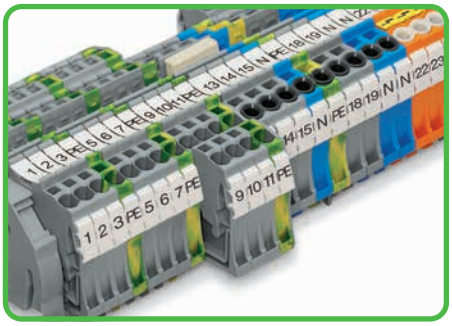
Test plug adapter



The test plug adapter for 4 mm Ø plugs is suited for 2000 to 2016 Series terminal blocks.

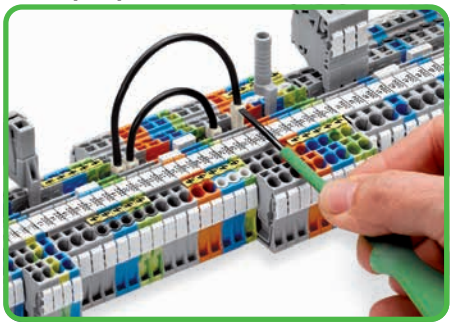


Simply marked



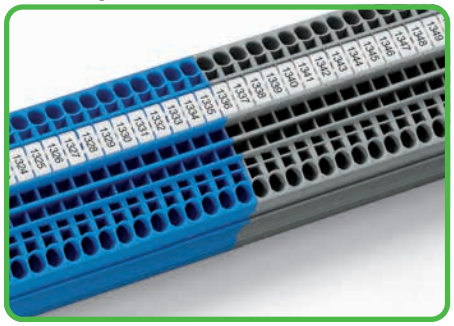
Marker strips for center marking

Wire jumpers



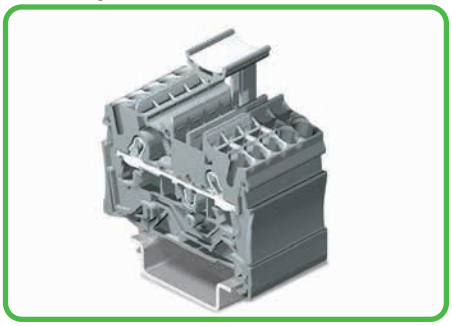
Push down the wire jumper until fully inserted.
Lift the jumper with an operating tool for rewiring.

Marking



WMB Inline
WMB markers on roll

Marking



TOPJOB®S group marker carrier, snap-on type for jumper slot



fine-stranded,
tip-bonded

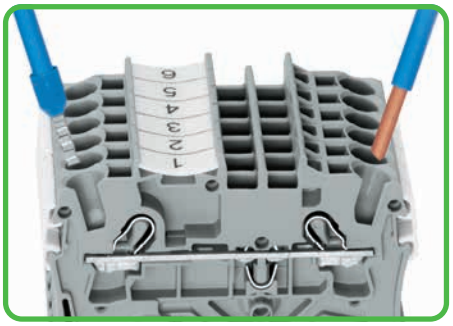


fine-stranded,
with ferrule
(gastight crimped)

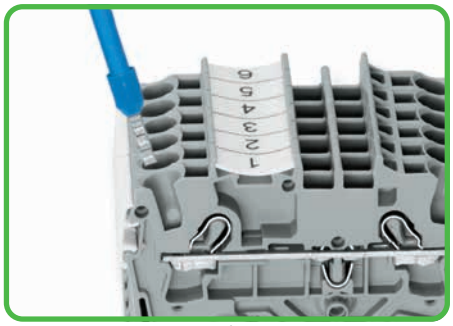


fine-stranded,
with pin terminal
(gastight crimped)

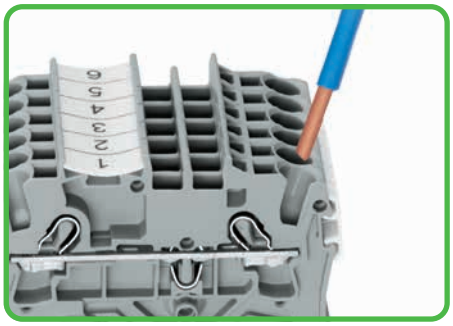
– Simply Push-In –
Conductor Termination/Removal
Handling Ex e/Ex i Separators



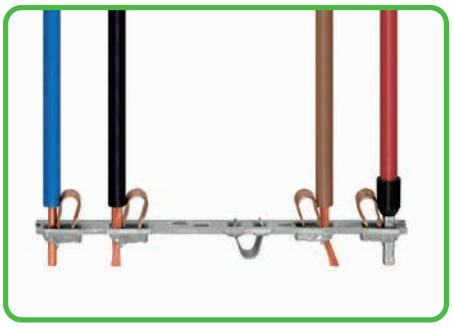
Tool-Free Terminations
Stripped solid, ferruled or ultrasonically "bonded" conductors are easily terminated by simply pushing them into a contact.
This advantage significantly reduces costs for conductors rated 0.5 mm² to 16 mm² (AWG 20-4) in applications such as electrical installations or factory wiring.



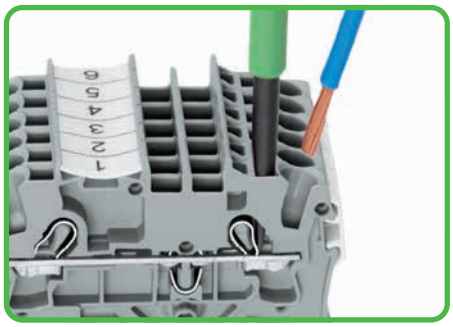
Stranded conductors with ferrules
from at least two sizes below the rated cross section up to the rated cross section can also be simply pushed in – without tools.



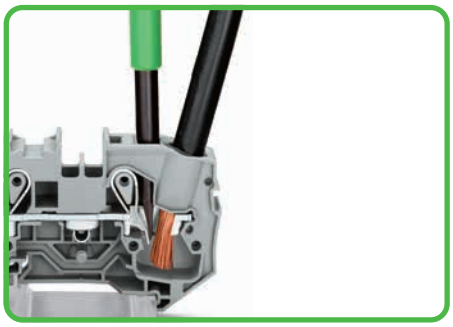
Conductor termination – Push-in connection
Solid conductors with cross sections from either one size above, or up to two sizes below, the rated cross section can be inserted directly – without tools.



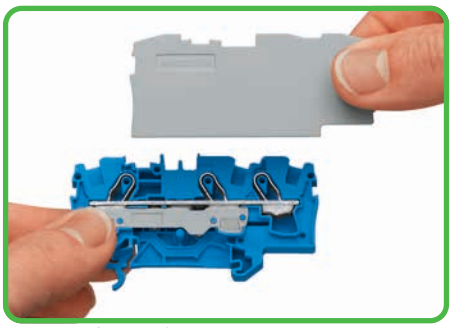
TOPJOB® S features universal CAGE CLAMP® S connection technology for all conductor types.



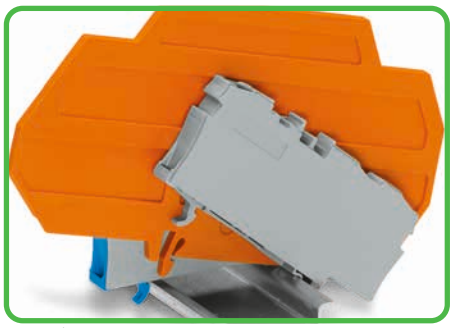
Conductor termination with operating tool
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® - just use an operating tool.
The smart feature:
To open the clamp, the operating tool is inserted vertically. The conductor entry is less than 15 degrees resulting in easier wiring.



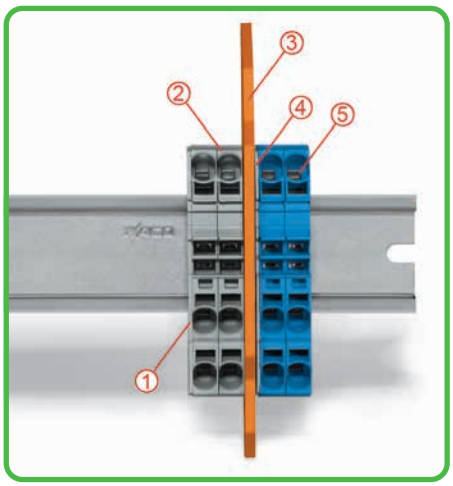
Conductor removal
Like the original CAGE CLAMP® an operating tool is used for conductor removal with CAGE CLAMP®S.



Separator for Ex e/Ex i applications
An end plate must be applied to the terminal block located directly behind an Ex e/Ex i separator plate.

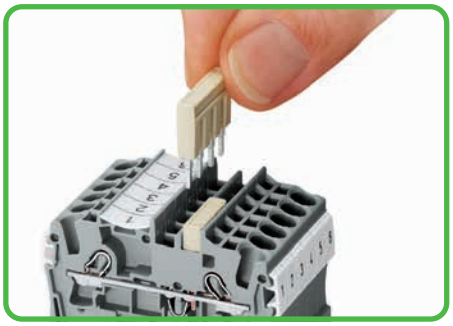


Ex e II/Ex i terminal strip
Notice:
The movable feet of terminal blocks and separator plates must face the same direction.

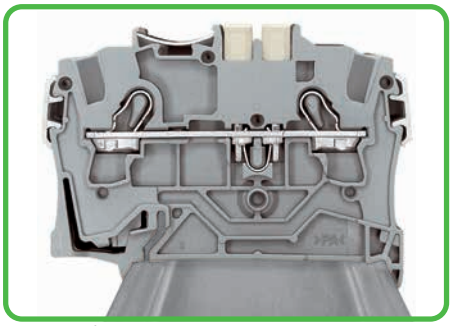


Separator located between Ex e II and Ex i terminal strip
① End plate
② Ex e II terminal blocks
③ Ex e/Ex i separator plate
④ End plate
⑤ Ex i terminal blocks
According to EN 50020, a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. The use of Ex e/Ex i separators is a space-saving solution when Ex e and Ex i terminal blocks are mounted on a common carrier rail.

– Simply Jumpered –
Handling Push-In Type Jumper Bars
Angle-Type Rail-Mounted Terminal Blocks



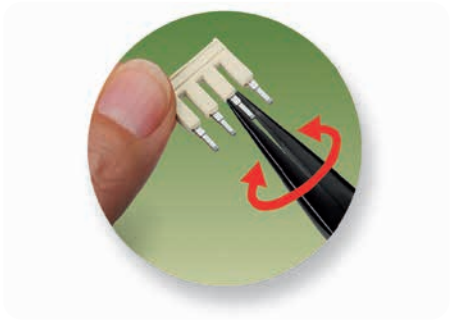
The push-in type jumper system is based on the common plug and socket principle. Each terminal block is spring-loaded with a double socket and a resilient CrNi steel spring. Therefore the jumpers, which consist of cathode copper, can be produced with particularly small dimensions. This does not impair their load carrying capacity in accordance with the terminal block rated current. Ground terminal blocks can also be commoned using the same jumper system. Custom jumpers are created by breaking and removing jumper contacts (2000, 2001, 2002, 2004 Series).



The smart feature:
Jumper slots can also be used for:
- push-in type jumper bars and step-down jumpers
- test plug adapters and testing taps
- preharnessed plugs for subassembly connections.



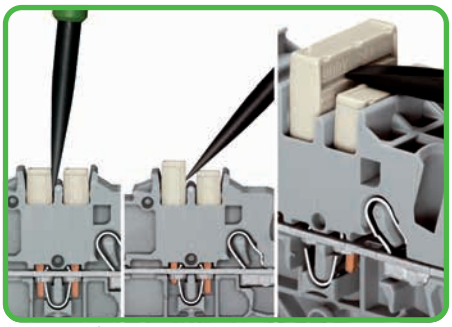
Push-in type jumper bars
800 V
600 V
550 V



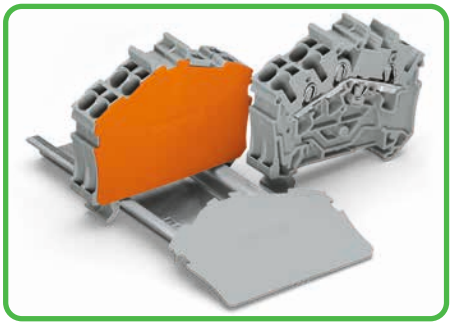
Push-in type jumper bar
Breaking off jumper contacts (picture shows pin 3)
500 V
300 V

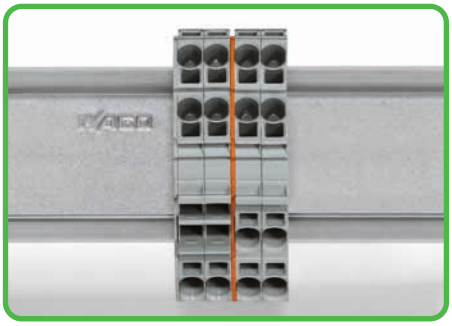


Push-in type jumper bar
Marking a customized push-in type jumper bar using a felt-tip pen.



Removal of push-in type jumper bar
Insert the operating tool between the jumper and the partition wall of the dual jumper slots.
Place the operating tool in the center of jumpers up to 5 contacts (see above), or alternately on both sides for jumpers with more than 5 contacts.





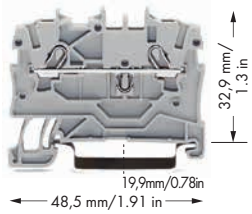
With continuous terminal strips an end plate must be used when changing from 3- to 4-conductor terminal blocks.

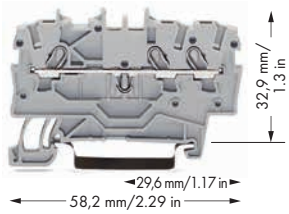
TOPJOB® S
Through/Ground Conductor/Ex and Double-Potential Terminal Blocks
1 (1.5) mm², 2000 Series

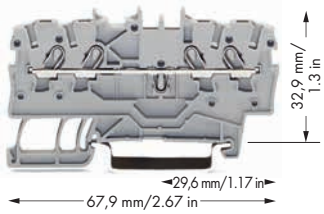
0.14 - 1 (1.5) mm² ❶	AWG 24 - 16	
800 V/8 kV/3 ❷	600 V, 10 A	
I_N 13.5 A (18 A)	600 V, 10 A	
Terminal block width 3.5 mm / 0.138 in		
9 - 11 mm / 0.39 in ❸		

0.14 - 1 (1.5) mm² ❶	AWG 24 - 16	
800 V/8 kV/3 ❷	600 V, 10 A	
I_N 13.5 A (18 A)	600 V, 10 A	
Terminal block width 3.5 mm / 0.138 in		
9 - 11 mm / 0.39 in ❸		

0.14 - 1 (1.5) mm² ❶	AWG 24 - 16	
800 V/8 kV/3 ❷	600 V, 10 A	
I_N 13.5 A (18 A)	600 V, 10 A	
Terminal block width 3.5 mm / 0.138 in		
9 - 11 mm / 0.39 in ❸		







	Item No.	Pack. Unit
2-conductor through terminal block		
gray Ex	**2000-1201** ❺	100
blue Ex	**2000-1204** ❹ ❺	100
orange Ex	**2000-1202** ❺	100
red Ex	**2000-1203** ❺	100
black Ex	**2000-1205** ❺	100
yellow Ex	**2000-1206** ❺	100
2-conductor ground terminal block		
green-yellow Ex	**2000-1207** ❺	100

	Item No.	Pack. Unit
3-conductor through terminal block		
gray Ex	**2000-1301** ❺	100
blue Ex	**2000-1304** ❹ ❺	100
orange Ex	**2000-1302** ❺	100
red Ex	**2000-1303** ❺	100
black Ex	**2000-1305** ❺	100
yellow Ex	**2000-1306** ❺	100
3-conductor ground terminal block		
green-yellow Ex	**2000-1307** ❺	100

	Item No.	Pack. Unit
4-conductor through terminal block		
gray Ex	**2000-1401** ❺	100
blue Ex	**2000-1404** ❹ ❺	100
orange Ex	**2000-1402** ❺	100
red Ex	**2000-1403** ❺	100
black Ex	**2000-1405** ❺	100
yellow Ex	**2000-1406** ❺	100
4-conductor ground terminal block		
green-yellow Ex	**2000-1407** ❺	100

Item-Specific Accessories

End and intermediate plate, 0.7 mm thick



orange	**2000-1292**	100 (4x25)
gray	**2000-1291**	100 (4x25)

Ex e/Ex i separator, orange, ❻



3 mm thick		
90 mm	**209-190**	50 (2x25)
120 mm	**209-191**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 0.7 mm thick



orange	**2000-1392**	100 (4x25)
gray	**2000-1391**	100 (4x25)

Ex e/Ex i separator, orange, ❻



3 mm thick		
120 mm	**209-191**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 0.7 mm thick



orange	**2000-1492**	100 (4x25)
gray	**2000-1491**	100 (4x25)

Ex e/Ex i separator, orange, ❻



3 mm thick		
120 mm	**209-191**	50 (2x25)

2000 Series Accessories

Appropriate marking systems: WMB/Marking strips
(see Section 13)

Push-in type jumper bar, insulated, ❻



I_N 14 A, light gray

2-way	**2000-402**	200 (8x25)
3-way	**2000-403**	200 (8x25)
4-way	**2000-404**	200 (8x25)
5-way	**2000-405**	100 (4x25)
6-way	**2000-406**	100 (4x25)
7-way	**2000-407**	100 (4x25)
8-way	**2000-408**	100 (4x25)
9-way	**2000-409**	100 (4x25)
10-way	**2000-410**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 14 A, light gray

from 1 to 3	**2000-433**	200 (8x25)
from 1 to 4	**2000-434**	200 (8x25)
from 1 to 5	**2000-435**	100 (4x25)
from 1 to 6	**2000-436**	100 (4x25)
from 1 to 7	**2000-437**	100 (4x25)
from 1 to 8	**2000-438**	100 (4x25)
from 1 to 9	**2000-439**	100 (4x25)
from 1 to 10	**2000-440**	100 (4x25)

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks

yellow	**2000-115**	100 (4x25)

Delta jumper, insulated, ❻



I_N = I_N terminal block, light gray

1-2 3-4 5-6	**2000-406/020-000**	100 (4x25)

Star point jumper, insulated, ❻



I_N = I_N terminal block, light gray

1-3-5	**2000-405/011-000**	100 (4x25)

Push-in type wire jumper, ❻



insulated, I_N 16 A, wire size 1.5 mm²

L = 60 mm	**2009-402**	100 (10x10)
L = 110 mm	**2009-404**	100 (10x10)
L = 250 mm	**2009-406**	100 (10x10)

Test plug adapter,



for 4 mm Ø test plug

gray	**2009-174**	100 (4x25)

Banana plug,



for socket 4 mm Ø, color mixed

	215-111	50

Testing tap,



for max. 2.5 mm²

gray	**2009-182**	100 (4x25)

Test plug,



with 500 mm cable, 2 mm Ø

red	**210-136**	50

Test plug,



with 500 mm cable, 2.3 mm Ø

yellow	**210-137**	50

Marking strip, plain,



11 mm wide, 50 m roll

white	**2009-110**	1

WMB Multi marking system,

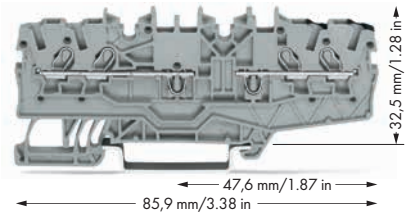
10 strips with 10 markers per card, for 3.5 mm terminal block width

plain	**793-3501**	5

Certification organizations can be found in the overview on pages 622 and 623.

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16
800 V/8 kV/3 ❷
I_N 13.5 A (18 A)

Terminal block width 3.5 mm / 0.138 in
9 - 11 mm / 0.39 in ❸



❶ Conductor sizes: 0.14 mm² – 1.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 1.5 mm² "s" and 0.5 mm² – 0.75 mm² "insulated ferrule, 10 mm"

❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ Suitable for Ex i applications

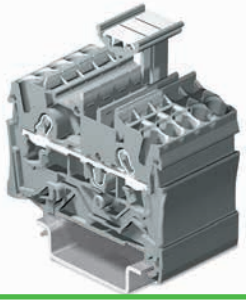
❺ Suitable for Ex e II applications
550 V, 13 A
Jumper 12 A
(see Section 14)

❻ See application notes for:
Ex e/Ex i separator plate, page 19
Colored push-in type jumper bars, page 101
Star point jumper, page 103
Delta jumper, page 103
Push-in type wire jumper, page 102

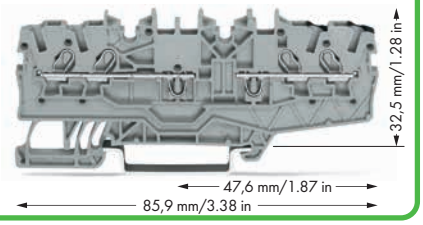
	Item No.	Pack. Unit
Double-potential terminal block, both potentials can be commoned		
gray	**2000-2141**	50

Item-Specific Accessories

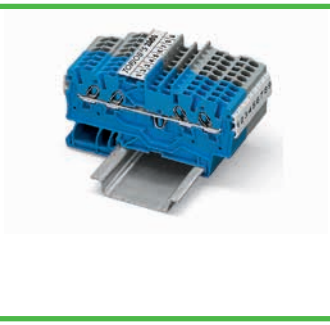
End and intermediate plate, 0.7 mm thick			
	orange	**2000-2196**	100 (4x25)
	gray	**2000-2195**	100 (4x25)



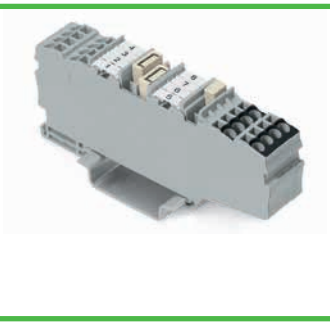
TOPJOB®S group marker carrier
equipped with WMB Multi marking system.
Suitable for all 2000 to 2016 Series TOPJOB®S rail-mount terminal blocks
Do not use on an end plate!



Double-potential terminal blocks are space savers. Two independent feedthrough circuits are placed in one insulated housing on one level in just 3.5 mm. This achieves a width of just 1.75 mm/0.069 in versus standard through terminal blocks.
Input and output contacts of one circuit are placed on the same side of the terminal block. Both circuits can be individually marked according to input and output.



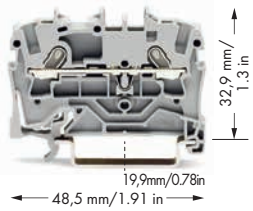
Standard and quick marking options:
Three marker slots are available for both individual markers and marking strips.

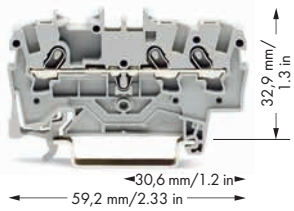


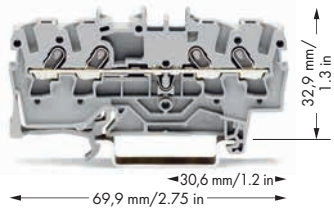
Standard and fast marking options:
Four marker slots (double-potential terminal blocks) are available for both individual markers and marking strips

TOPJOB® S
Through/Ground Conductor/Shield and Ex Terminal Blocks 1.5 (2.5) mm²
2001 Series

0.25 - 1.5 (2.5) mm² ❶ 800 V/8 kV/3 ❷ I_N 18 A (24 A)	AWG 22 - 14 600 V, 15 A 600 V, 15 A	Terminal block width 4.2 mm / 0.165 in 9 - 11 mm / 0.39 in ❸
0.25 - 1.5 (2.5) mm² ❶ 800 V/8 kV/3 ❷ I_N 18 A (24 A)	AWG 22 - 14 600 V, 15 A 600 V, 15 A	Terminal block width 4.2 mm / 0.165 in 9 - 11 mm / 0.39 in ❸
0.25 - 1.5 (2.5) mm² ❶ 800 V/8 kV/3 ❷ I_N 18 A (24 A)	AWG 22 - 14 600 V, 15 A 600 V, 15 A	Terminal block width 4.2 mm / 0.165 in 9 - 11 mm / 0.39 in ❸







Item No.		Pack. Unit
2-conductor through terminal block		
gray	**2001-1201** ❺	100
blue	**2001-1204** ❹ ❺	100
orange	**2001-1202** ❺	100
red	**2001-1203** ❺	100
black	**2001-1205** ❺	100
yellow	**2001-1206** ❺	100
2-conductor ground terminal block		
green-yellow	**2001-1207** ❺	100
Other terminal blocks with the same profile:		
Diode	**2001-1211/1000-411** Page 80	

Item No.		Pack. Unit
3-conductor through terminal block		
gray	**2001-1301** ❺	100
blue	**2001-1304** ❹ ❺	100
orange	**2001-1302** ❺	100
red	**2001-1303** ❺	100
black	**2001-1305** ❺	100
yellow	**2001-1306** ❺	100
3-conductor ground terminal block		
green-yellow	**2001-1307** ❺	100
Other terminal blocks with the same profile:		
Diode	**2001-1311/1000-411** Page 80	
LED	**2001-1321/1000-434** Page 80	

Item No.		Pack. Unit
4-conductor through terminal block		
gray	**2001-1401** ❺	100
blue	**2001-1404** ❹ ❺	100
orange	**2001-1402** ❺	100
red	**2001-1403** ❺	100
black	**2001-1405** ❺	100
yellow	**2001-1406** ❺	100
4-conductor ground terminal block		
green-yellow	**2001-1407** ❺	100
4-conductor shield terminal block		
white	**2001-1408**	100
Other terminal blocks with the same profile:		
Diode	**2001-1411/1000-411** Page 80	
LED	**2001-1421/1000-434** Page 80	
Double-potential	**2001-1441** Page 13	

Item-Specific Accessories

End and intermediate plate, 0.8 mm thick



orange	**2002-1292**	100 (4x25)
gray	**2002-1291**	100 (4x25)

Separator, oversized, 2 mm thick



orange	**2002-1294**	100 (4x25)
gray	**2002-1293**	100 (4x25)

Ex e/Ex i separator, orange,



3 mm thick		
90 mm	**209-190**	50 (2x25)
120 mm	**209-191**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 0.8 mm thick



orange	**2002-1392**	100 (4x25)
gray	**2002-1391**	100 (4x25)

Separator, oversized, 2 mm thick



orange	**2002-1394**	100 (4x25)
gray	**2002-1393**	100 (4x25)

Ex e/Ex i separator, orange,



3 mm thick		
120 mm	**209-191**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 0.8 mm thick



orange	**2002-1492**	100 (4x25)
gray	**2002-1491**	100 (4x25)

Separator, oversized, 2 mm thick



orange	**2002-1494**	100 (4x25)
gray	**2002-1493**	100 (4x25)

Ex e/Ex i separator, orange,



3 mm thick		
120 mm	**209-191**	50 (2x25)

2001 Series Accessories

Appropriate marking systems: WMB/WMB Inline/Marking strips
(see Section 13)

Insulation stop,



5 pcs/strip,		
0.25 - 0.5 mm²		
light gray	**2001-171**	200 (8x25)

Step-down jumper, insulated, ❻



I_N 32 A		
light gray	**2006-499**	50 (2x25)

Protective warning marker,



with high-voltage symbol, black,		
for 5 terminal blocks		
yellow	**2001-115**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 18 A,		
light gray		
2-way	**2001-402**	200 (8x25)
3-way	**2001-403**	200 (8x25)
4-way	**2001-404**	200 (8x25)
5-way	**2001-405**	100 (4x25)
6-way	**2001-406**	100 (4x25)
7-way	**2001-407**	100 (4x25)
8-way	**2001-408**	100 (4x25)
9-way	**2001-409**	100 (4x25)
10-way	**2001-410**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 18 A,		
light gray		
from 1 to 3	**2001-433**	200 (8x25)
from 1 to 4	**2001-434**	200 (8x25)
from 1 to 5	**2001-435**	100 (4x25)
from 1 to 6	**2001-436**	100 (4x25)
from 1 to 7	**2001-437**	100 (4x25)
from 1 to 8	**2001-438**	100 (4x25)
from 1 to 9	**2001-439**	100 (4x25)
from 1 to 10	**2001-440**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

Double-Potential Terminal Blocks 1.5 (2.5) mm²
2001 Series

1 Conductor sizes: 0.25 mm² – 2.5 mm² "s + f-st";
Push-in conductor sizes: 0.5 mm² – 2.5 mm² "s"
and 0.75 mm² – 1.5 mm²
"insulated ferrule, 12 mm"

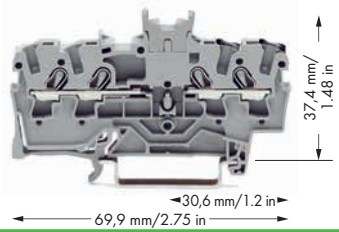
2 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

3 Strip length, see packaging or instructions.

4 Suitable for Ex i applications

5 Suitable for Ex e II applications
550 V, 17 A
Jumper 16 A
(see Section 14)

6 See application notes for:
Ex e/Ex i separator plate, page 19
Step-down jumper, page 23
Star point jumper, page 103
Delta jumper, page 103
Push-in type wire jumper, page 102
TOPJOB®S connector, page 96



Double-potential terminal block with double marker slot centered on terminal block
gray 2001-1441
Packing unit: 100 pcs

Notice: This double-potential terminal block cannot be commoned with push-in type jumper bars!

Double-potential terminal blocks are space savers. Two independent feedthrough circuits are placed in one insulated housing on one level in just 4.2 mm. This achieves a width of just 2.1 mm/0.083 in versus standard through terminal blocks.
Input and output contacts of one circuit are placed on the same side of the terminal block. Both circuits can be individually marked according to input and output.

For technical data and accessories,
see www.wagocatalog.com

2001 Series Accessories

Appropriate marking systems: WMB/WMB Inline/Marking strips
(see Section 13)

Delta jumper, insulated,
6
$I_N = I_N$ terminal block, light gray
1-2 3-4 5-6 **2001-406/020-000** 100 (4x25)

Star point jumper, insulated,
6
$I_N = I_N$ terminal block, light gray
1-3-5 **2001-405/011-000** 100 (4x25)

Push-in type wire jumper,
6
insulated,
I_N 16 A,
wire size 1.5 mm²
L = 60 mm **2009-412** 100 (10x10)
L = 110 mm **2009-414** 100 (10x10)
L = 250 mm **2009-416** 100 (10x10)

Modular TOPJOB®S connector,
6
can be snapped together,
for jumper contact slot
gray **2001-511** 100 (4x25)

Spacer module, can be snapped together,
e.g., for bridging commoned terminal blocks
gray **2001-549** 100 (4x25)

End plate,
for modular TOPJOB®S connectors,
1.5 mm thick
gray **2002-541** 100 (4x25)

Test plug adapter,
for 4 mm Ø test plug
gray **2009-174** 100 (4x25)

Banana plug,
for socket 4 mm Ø,
color mixed
215-111 50

Testing tap,
for max. 2.5 mm²
gray **2009-182** 100 (4x25)

Test plug,
with 500 mm cable,
2 mm Ø
red **210-136** 50

Test plug,
with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

WMB Inline, plain,
stretchable 4 - 4.2 mm,
2,000 WMB markers, 4 mm, on roll
white **2009-114** 1

WMB Multi marking system,
10 strips with 10 markers per card,
stretchable 4 - 4.2 mm
plain **793-4501** 5

WMB Multi marking system, plain,
10 strips with 10 markers per card,
stretchable 4 - 4.2 mm
yellow **793-4501/000-002**
red **793-4501/000-005**
blue **793-4501/000-006**
gray **793-4501/000-007**
orange **793-4501/000-012**
light green **793-4501/000-017**
green **793-4501/000-023**
violet **793-4501/000-024**
5

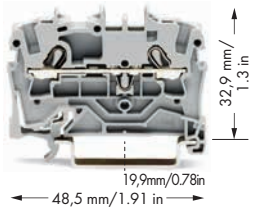
Marking strip, plain,
11 mm wide,
50 m roll
white **2009-110** 1

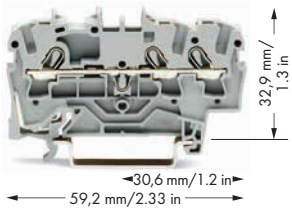
Screwless end stop,
for DIN 35 rail,
6 mm wide
gray **249-116** 100 (4x25)

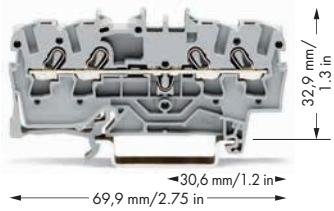
Screwless end stop,
for DIN 35 rail,
10 mm wide
gray **249-117** 50 (2x25)

TOPJOB® S
Through/Ground Conductor/Shield and Ex Terminal Blocks 2.5 (4) mm²
2002 Series

0.25 - 2.5 (4) mm² ❶ 800 V/8 kV/3 ❷ I_N 24 A (32 A)	AWG 22 - 12 600 V, 20 A 600 V, 20 A	Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸
0.25 - 2.5 (4) mm² ❶ 800 V/8 kV/3 ❷ I_N 24 A (32 A)	AWG 22 - 12 600 V, 20 A 600 V, 20 A	Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸
0.25 - 2.5 (4) mm² ❶ 800 V/8 kV/3 ❷ I_N 24 A (32 A)	AWG 22 - 12 600 V, 20 A 600 V, 20 A	Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸







Item No.		Pack. Unit
2-conductor through terminal block		
gray	**2002-1201** ❺	100
blue	**2002-1204** ❹ ❺	100
orange	**2002-1202** ❺	100
red	**2002-1203** ❺	100
black	**2002-1205** ❺	100
yellow	**2002-1206** ❺	100
2-conductor ground terminal block		
green-yellow	**2002-1207** ❺	100
Other terminal blocks with the same profile:		
Diode	**2002-1211/1000-411** Page 82	

Item No.		Pack. Unit
3-conductor through terminal block		
gray	**2002-1301** ❺	100
blue	**2002-1304** ❹ ❺	100
orange	**2002-1302** ❺	100
red	**2002-1303** ❺	100
black	**2002-1305** ❺	100
yellow	**2002-1306** ❺	100
3-conductor ground terminal block		
green-yellow	**2002-1307** ❺	100
3-conductor shield terminal block		
white	**2002-1308**	100
Other terminal blocks with the same profile:		
Diode	**2002-1311/1000-411** Page 82	
LED	**2002-1321/1000-434** Page 82	

Item No.		Pack. Unit
4-conductor through terminal block		
gray	**2002-1401** ❺	100
blue	**2002-1404** ❹ ❺	100
orange	**2002-1402** ❺	100
red	**2002-1403** ❺	100
black	**2002-1405** ❺	100
yellow	**2002-1406** ❺	100
4-conductor ground terminal block		
green-yellow	**2002-1407** ❺	100
4-conductor shield terminal block		
white	**2002-1408**	100
Other terminal blocks with the same profile:		
Diode	**2002-1411/1000-411** Page 82	
LED	**2002-1421/1000-434** Page 82	
Double-potential	**2002-1441** Page 15	

Item-Specific Accessories

End and intermediate plate, 0.8 mm thick			
	orange	**2002-1292**	100 (4x25)
	gray	**2002-1291**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**2002-1294**	100 (4x25)
	gray	**2002-1293**	100 (4x25)
Ex e/Ex i separator, orange,			
❻	3 mm thick		
	90 mm	**209-190**	50 (2x25)
	120 mm	**209-191**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 0.8 mm thick			
	orange	**2002-1392**	100 (4x25)
	gray	**2002-1391**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**2002-1394**	100 (4x25)
	gray	**2002-1393**	100 (4x25)
Ex e/Ex i separator, orange,			
❻	3 mm thick		
	120 mm	**209-191**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 0.8 mm thick			
	orange	**2002-1492**	100 (4x25)
	gray	**2002-1491**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**2002-1494**	100 (4x25)
	gray	**2002-1493**	100 (4x25)
Ex e/Ex i separator, orange,			
❻	3 mm thick		
	120 mm	**209-191**	50 (2x25)

2002 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

Insulation stop,			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**2002-171**	200 (8x25)
Insulation stop,			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**2002-172**	200 (8x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**2002-115**	100 (4x25)

Push-in type jumper bar, insulated,			
❻	I_N 25 A,		
	light gray		
	2-way	**2002-402**	200 (8x25)
	3-way	**2002-403**	200 (8x25)
	4-way	**2002-404**	200 (8x25)
	5-way	**2002-405**	100 (4x25)
	6-way	**2002-406**	100 (4x25)
	7-way	**2002-407**	100 (4x25)
	8-way	**2002-408**	100 (4x25)
	9-way	**2002-409**	100 (4x25)
	10-way	**2002-410**	100 (4x25)

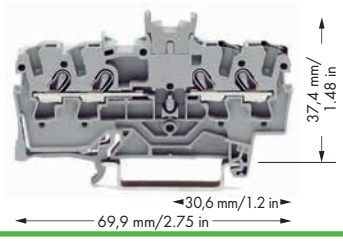
Push-in type jumper bar, insulated,			
	I_N 25 A,		
	light gray		
	from 1 to 3	**2002-433**	200 (8x25)
	from 1 to 4	**2002-434**	200 (8x25)
	from 1 to 5	**2002-435**	100 (4x25)
	from 1 to 6	**2002-436**	100 (4x25)
	from 1 to 7	**2002-437**	100 (4x25)
	from 1 to 8	**2002-438**	100 (4x25)
	from 1 to 9	**2002-439**	100 (4x25)
	from 1 to 10	**2002-440**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

Double-Potential Terminal Blocks 2.5 (4) mm²
2002 Series
Accessories for Rail-Mounted Terminal Blocks

CAGE CLAMP®S

1. Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"
2. 800 V = rated voltage
   8 kV = rated surge voltage
   3 = pollution degree
   (see Section 14)
3. Strip length, see packaging or instructions.
4. Suitable for Ex i applications
5. Suitable for Ex e II applications
   550 V, 22 A
   Jumper 20 A
   (see Section 14)
6. See application notes for:
   Ex e/Ex i separator plate, page 19
   Colored push-in type jumper bars, page 101
   Staggered jumper, page 104
   Delta jumper, page 103
   Star point jumper, page 103
   Step-down jumper, page 23
   Adjacent jumper for continuous commoning, page 101
   Push-in type wire jumper, page 102
   TOPJOB®S connector, page 96
   TOPJOB®S L-type test plug module, page 100
   Marker carrier, page 109



Double-potential terminal block with double marker slot centered on terminal block
gray 2002-1441
Packing unit: 100 pcs

Notice: This double-potential terminal block cannot be commoned with push-in type jumper bars!

Double-potential terminal blocks are space savers. Two independent feedthrough circuits are placed in one insulated housing on one level in just 5.2 mm. This achieves a width of just 2.6 mm/0.103 in versus standard through terminal blocks.
Input and output contacts of one circuit are placed on the same side of the terminal block. Both circuits can be individually marked according to input and output.

For technical data and accessories, see www.wagocatalog.com

2002 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

Staggered jumper, 6
insulated, I_N 25 A, light gray

2-way	**2002-472**	100 (4x25)
3-way	**2002-473**	100 (4x25)
4-way	**2002-474**	100 (4x25)
5-way	**2002-475**	50 (2x25)
6-way	**2002-476**	50 (2x25)
7-way	**2002-477**	50 (2x25)
8-way	**2002-478**	50 (2x25)
9-way	**2002-479**	50 (2x25)
10-way	**2002-480**	50 (2x25)
11-way	**2002-481**	50 (2x25)
12-way	**2002-482**	50 (2x25)

Customized staggered jumper,
insulated, I_N 25 A, light gray

1-3	**2002-473/011-000**	100 (4x25)
1-3-5	**2002-475/011-000**	
1-3-5-7	**2002-477/011-000**	
1-3-5-7-9	**2002-479/011-000**	
1-3-5-7-9-11	**2002-481/011-000**	50 (2x25)

Delta jumper, insulated, 6
I_N = I_N terminal block, light gray

1-2 3-4 5-6	**2002-406/020-000**	100 (4x25)

Star point jumper, insulated, 6
I_N = I_N terminal block, light gray

1-3-5	**2002-405/011-000**	100 (4x25)

Step-down jumper, insulated, 6
I_N 32 A, light gray **2006-499** 50 (2x25)

Adjacent jumper for continuous commoning, insulated, 6
I_N 25 A, light gray
2-way **2002-400** 100 (4x25)

WMB Inline, plain,
stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll
white **2009-115** 1

Push-in type wire jumper, 6
insulated, I_N 18 A, wire size 1.5 mm²

L = 60 mm	**2009-412**	100 (10x10)
L = 110 mm	**2009-414**	100 (10x10)
L = 250 mm	**2009-416**	100 (10x10)

Modular TOPJOB®S connector, 6
can be snapped together, for jumper contact slot
gray **2002-511** 100 (4x25)

Spacer module, can be snapped together,
e.g., for bridging commoned terminal blocks
gray **2002-549** 100 (4x25)

End plate,
for modular TOPJOB®S connectors, 1.5 mm thick
gray **2002-541** 100 (4x25)

Test plug adapter,
for 4 mm Ø test plug
gray **2009-174** 100 (4x25)

Testing tap,
for max. 2.5 mm²
gray **2009-182** 100 (4x25)

TOPJOB®S L-test plug module, 6
can be snapped together
gray **2002-611** 100 (4x25)

TOPJOB®S L-type spacer module, can be snapped together,e.g., for bridging commoned terminal blocks
gray **2002-649** 100 (4x25)

End plate, for modular TOPJOB®S test plugs, 1.5 mm thick
gray **2002-641** 100 (4x25)

Marker carrier, 6
for jumper slots 2002 Series, 5 mm wide
gray **2002-161** 100 (4x25)

WMB Multi marking system,
10 strips with 10 markers per card, stretchable 5 - 5.2 mm
plain **793-5501** 5

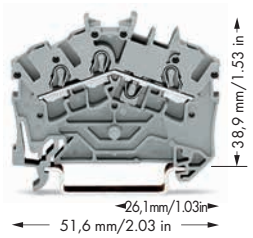
WAGO®

TOPJOB® S
Through/Ground Conductor/Shield and Ex Terminal Blocks
2.5 (4) mm², 2002 Series

CAGE CLAMP®S

0.25 - 2.5 (4) mm² ❶	AWG 22 - 12
800 V/8 kV/3 ❷	600 V, 20 A
I_N 24 A (32 A)	600 V, 20 A

Terminal block width 5.2 mm / 0.205 in
10 - 12 mm / 0.43 in ❸



❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st";
Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ Suitable for Ex i applications

❺ Suitable for Ex e II applications
550 V, 22 A
Jumper 20 A
(see Section 14)

❻ See application notes for:
Ex e/Ex i separator plate, page 19
Colored push-in type jumper bars, page 101
Staggered jumper, page 104
Delta jumper, page 104
Star point jumper, page 101
Adjacent jumper for continuous commoning, page 101
Push-in type wire jumper, page 102
TOPJOB®S connector, page 96
TOPJOB®S L-type test plug module, page 100
Marker carrier, page 109

Item No.		Pack. Unit
3-conductor through terminal block		
gray	**2002-6301** ❺	100
blue	**2002-6304** ❹ ❺	100
orange	**2002-6302** ❺	100
red	**2002-6303** ❺	100
black	**2002-6305** ❺	100
yellow	**2002-6306** ❺	100
3-conductor ground terminal block		
green-yellow	**2002-6307** ❺	100
3-conductor shield terminal block		
white	**2002-6308**	100

2002 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

Push-in type jumper bar, insulated,



I_N 25 A, light gray

from 1 to 3	**2002-433**	200 (8x25)
from 1 to 4	**2002-434**	200 (8x25)
from 1 to 5	**2002-435**	100 (4x25)
from 1 to 6	**2002-436**	100 (4x25)
from 1 to 7	**2002-437**	100 (4x25)
from 1 to 8	**2002-438**	100 (4x25)
from 1 to 9	**2002-439**	100 (4x25)
from 1 to 10	**2002-440**	100 (4x25)

Delta jumper, insulated, ❻



I_N = I_N terminal block, light gray

1-2 3-4 5-6	**2002-406/020-000**	100 (4x25)

Star point jumper, insulated, ❻



I_N = I_N terminal block, light gray

1-3-5	**2002-405/011-000**	100 (4x25)

Staggered jumper, ❻



insulated, I_N 25 A, light gray

2-way	**2002-472**	100 (4x25)
3-way	**2002-473**	100 (4x25)
4-way	**2002-474**	100 (4x25)
5-way	**2002-475**	50 (2x25)
6-way	**2002-476**	50 (2x25)
7-way	**2002-477**	50 (2x25)
8-way	**2002-478**	50 (2x25)
9-way	**2002-479**	50 (2x25)
10-way	**2002-480**	50 (2x25)
11-way	**2002-481**	50 (2x25)
12-way	**2002-482**	50 (2x25)

Customized staggered jumper,



insulated, I_N 25 A, light gray

1-3	**2002-473/011-000**	100 (4x25)
1-3-5	**2002-475/011-000**	
1-3-5-7	**2002-477/011-000**	
1-3-5-7-9	**2002-479/011-000**	
1-3-5-7-9-11	**2002-481/011-000**	50 (2x25)

Push-in type wire jumper, ❻



insulated, I_N 18 A, wire size 1.5 mm²

L = 60 mm	**2009-412**	100 (10x10)
L = 110 mm	**2009-414**	100 (10x10)
L = 250 mm	**2009-416**	100 (10x10)

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks, yellow **2002-115** 100 (4x25)

Modular TOPJOB®S connector, ❻



can be snapped together, for jumper contact slot, gray **2002-511** 100 (4x25)

TOPJOB®S L-test plug module, ❻



can be snapped together, gray **2002-611** 100 (4x25)

Test plug adapter,



for 4 mm Ø test plug, gray **2009-174** 100 (4x25)

Testing tap,



for max. 2.5 mm², gray **2009-182** 100 (4x25)

WMB Inline, plain,



stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll, white **2009-115** 1

WMB Multi marking system,

10 strips with 10 markers per card, stretchable 5 - 5.2 mm, plain **793-5501** 5

Marking strip, plain,



11 mm wide, 50 m roll, white **2009-110** 1

TOPJOB®S group marker carrier,



snap-on type for jumper slot, 5 mm wide, gray **2009-191** 50 (2x25)

Marker carrier, ❻



for jumper slots 2002 Series, 5 mm wide, gray **2002-161** 100 (4x25)

2002 Series Accessories

End and intermediate plate, 0.8 mm thick



orange	**2002-6392**	100 (4x25)
gray	**2002-6391**	100 (4x25)

Ex e/Ex i separator, orange,



3 mm thick, 120 mm **209-191** 50 (2x25)

Insulation stop,



5 pcs/strip, 0.25 - 0.5 mm², light gray **2002-171** 200 (8x25)

Insulation stop,



5 pcs/strip, 0.75 - 1 mm², dark gray **2002-172** 200 (8x25)

Push-in type jumper bar, insulated, ❻



I_N 25 A, light gray

2-way	**2002-402**	200 (8x25)
3-way	**2002-403**	200 (8x25)
4-way	**2002-404**	200 (8x25)
5-way	**2002-405**	100 (4x25)
6-way	**2002-406**	100 (4x25)
7-way	**2002-407**	100 (4x25)
8-way	**2002-408**	100 (4x25)
9-way	**2002-409**	100 (4x25)
10-way	**2002-410**	100 (4x25)

Adjacent jumper for continuous commoning, insulated, ❻

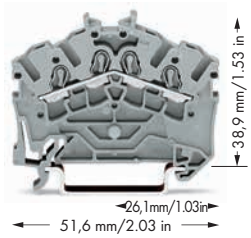


I_N 25 A, light gray, 2-way **2002-400** 100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® S
Through/Ground Conductor and Ex Terminal Blocks 2.5 (4) mm²
2002 Series

0.25 - 2.5 (4) mm² ❶	AWG 22 - 12
800 V/8 kV/3 ❷	600 V, 20 A
I_N 24 A (32 A)	600 V, 20 A
Terminal block width 5.2 mm / 0.205 in	
10 - 12 mm / 0.43 in ❸	



❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

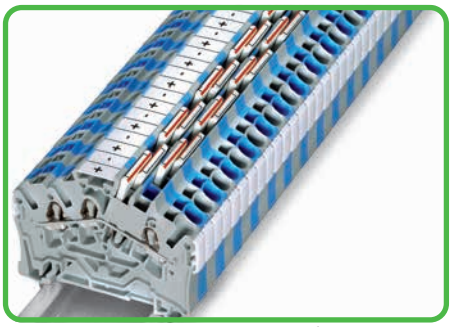
❹ Suitable for Ex i applications

❺ Suitable for Ex e II applications
550 V, 22 A
Jumper 20 A
(see Section 14)

❻ See application notes for:
Ex e/Ex i separator plate, page 19

	Item No.	Pack. Unit
4-conductor through terminal block		
gray	**2002-6401** ❺	100
blue	**2002-6404** ❹ ❺	100
orange	**2002-6402** ❺	100
red	**2002-6403** ❺	100
black	**2002-6405** ❺	100
yellow	**2002-6406** ❺	100
4-conductor ground terminal block		
green-yellow	**2002-6407** ❺	100

Notice:
These terminal blocks cannot be commoned with push-in type jumper bars.



3- and 4-conductor terminal blocks of angled type
The TOPJOB®S rail-mounted terminal blocks have a 35-degree conductor entry angle permitting a very small bend radius and an extremely short wiring distance to the cable duct. For applications in switchgear and control cabinets using the LSC wiring system from Lütze, e.g., these terminal blocks are a space- and cost-saving solution. This allows the cable duct to be placed very close to the terminal blocks, keeping its height relatively low.

2002 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

End and intermediate plate, 0.8 mm thick



orange	**2002-6392**	100 (4x25)
gray	**2002-6391**	100 (4x25)

Ex e/Ex i separator, orange, ❻



3 mm thick

120 mm	**209-191**	50 (2x25)

Insulation stop,



5 pcs/strip,
0.25 - 0.5 mm²

light gray	**2002-171**	200 (8x25)

Insulation stop,



5 pcs/strip,
0.75 - 1 mm²

dark gray	**2002-172**	200 (8x25)

Protective warning marker,



with high-voltage symbol, black,
for 5 terminal blocks

yellow	**2002-115**	100 (4x25)

WMB Inline, plain,



stretchable 5 - 5.2 mm,
1,500 WMB markers, 5 mm, on roll

white	**2009-115**	1

Marking strip, plain,



11 mm wide,
50 m roll

white	**2009-110**	1

WMB Multi marking system,

10 strips with 10 markers per card,
stretchable 5 - 5.2 mm

plain	**793-5501**	5

WMB Multi marking system, plain,



10 strips with 10 markers per card,
stretchable 5 - 5.2 mm

yellow	**793-5501/000-002**	
red	**793-5501/000-005**	
blue	**793-5501/000-006**	
gray	**793-5501/000-007**	
orange	**793-5501/000-012**	
light green	**793-5501/000-017**	
green	**793-5501/000-023**	
violet	**793-5501/000-024**	
		5

Screwless end stop,



for DIN 35 rail,
6 mm wide

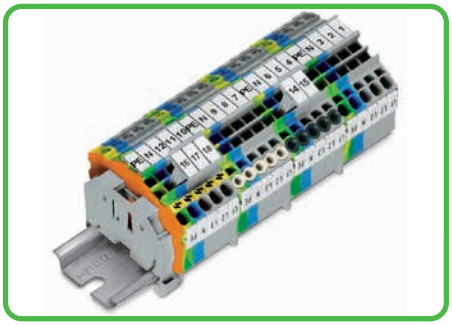
gray	**249-116**	100 (4x25)

Screwless end stop,



for DIN 35 rail,
10 mm wide

gray	**249-117**	50 (2x25)



Product features:
- CAGE CLAMP®S connection for all conductor types, with the additional benefit of stripped solid wires and fine-stranded ferruled wires being simply pushed in
- Vibration-proof, fast, maintenance-free terminations
- 3-conductor through and ground conductor terminal blocks equipped with a dual jumper slot
- 4-conductor terminal blocks permit potential multiplication – no additional jumpers or terminal blocks needed
- 3- and 4-conductor terminal blocks have **the same dimensions**

An end plate must be applied when changing from a 3-conductor terminal block to a 4-conductor terminal block and vice versa.

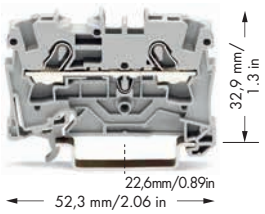
Certification organizations can be found in the overview on pages 622 and 623.

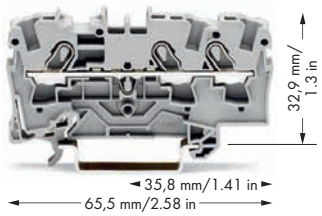
TOPJOB® S
Through/Ground Conductor/Shield and Ex Terminal Blocks 4 (6) mm²
2004 Series

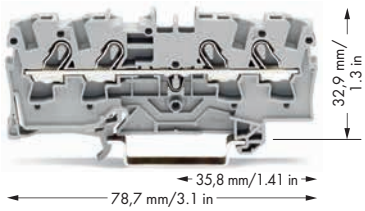
0.5 - 4 (6) mm² ❶	AWG 20 - 10	
800 V/8 kV/3 ❷	600 V, 30 A	
I_N 32 A (41 A)	600 V, 30 A	
Terminal block width 6.2 mm / 0.244 in		
11 - 13 mm / 0.47 in ❸		

0.5 - 4 (6) mm² ❶	AWG 20 - 10	
800 V/8 kV/3 ❷	600 V, 30 A	
I_N 32 A (41 A)	600 V, 30 A	
Terminal block width 6.2 mm / 0.244 in		
11 - 13 mm / 0.47 in ❸		

0.5 - 4 (6) mm² ❶	AWG 20 - 10	
800 V/8 kV/3 ❷	600 V, 30 A	
I_N 32 A (41 A)	600 V, 30 A	
Terminal block width 6.2 mm / 0.244 in		
11 - 13 mm / 0.47 in ❸		







Item No.		Pack. Unit
2-conductor through terminal block		
gray	**2004-1201** ❺	50
blue	**2004-1204** ❹ ❺	50
orange	**2004-1202** ❺	50
red	**2004-1203** ❺	50
black	**2004-1205** ❺	50
yellow	**2004-1206** ❺	50
2-conductor ground terminal block		
green-yellow	**2004-1207** ❺	50
Other terminal blocks with the same profile:		
Diode	**2004-1211/1000-401** Page 84	

Item No.		Pack. Unit
3-conductor through terminal block		
gray	**2004-1301** ❺	50
blue	**2004-1304** ❹ ❺	50
orange	**2004-1302** ❺	50
red	**2004-1303** ❺	50
black	**2004-1305** ❺	50
yellow	**2004-1306** ❺	50
3-conductor ground terminal block		
green-yellow	**2004-1307** ❺	50
Other terminal blocks with the same profile:		
Diode	**2004-1311/1000-401** Page 84	

Item No.		Pack. Unit
4-conductor through terminal block		
gray	**2004-1401** ❺	50
blue	**2004-1404** ❹ ❺	50
orange	**2004-1402** ❺	50
red	**2004-1403** ❺	50
black	**2004-1405** ❺	50
yellow	**2004-1406** ❺	50
4-conductor ground terminal block		
green-yellow	**2004-1407** ❺	50
4-conductor shield terminal block		
white	**2004-1408**	50
Other terminal blocks with the same profile:		
Diode	**2004-1411/1000-401** Page 84	

Item-Specific Accessories

End and intermediate plate, 1 mm thick			
	orange	**2004-1292**	100 (4x25)
	gray	**2004-1291**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**2004-1294**	100 (4x25)
	gray	**2004-1293**	100 (4x25)
Ex e/Ex i separator, orange,			
	3 mm thick		
	90 mm	**209-190**	50 (2x25)
	120 mm	**209-191**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick			
	orange	**2004-1392**	100 (4x25)
	gray	**2004-1391**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**2004-1394**	100 (4x25)
	gray	**2004-1393**	100 (4x25)
Ex e/Ex i separator, orange,			
	3 mm thick		
	120 mm	**209-191**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick			
	orange	**2004-1492**	100 (4x25)
	gray	**2004-1491**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**2004-1494**	100 (4x25)
	gray	**2004-1493**	100 (4x25)
Ex e/Ex i separator, orange,			
	3 mm thick		
	120 mm	**209-191**	50 (2x25)

2004 Series Accessories

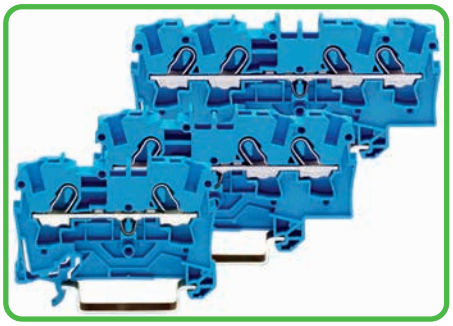
Appropriate marking systems: WMB/Marking strips
(see Section 13)

Insulation stop,			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**2004-171**	200 (8x25)
Push-in type jumper bar, insulated,			
	I_N 32 A,		
	light gray		
	2-way	**2004-402**	200 (8x25)
	3-way	**2004-403**	200 (8x25)
	4-way	**2004-404**	100 (4x25)
	5-way	**2004-405**	100 (4x25)
	6-way	**2004-406**	100 (4x25)
	7-way	**2004-407**	100 (4x25)
	8-way	**2004-408**	100 (4x25)
	9-way	**2004-409**	100 (4x25)
	10-way	**2004-410**	100 (4x25)

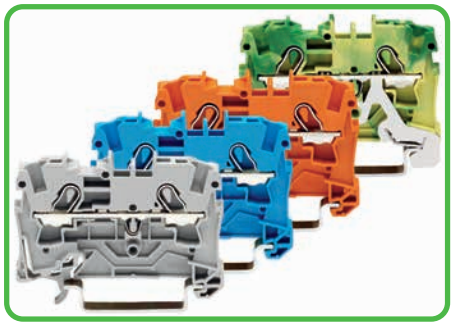
Insulation stop,			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**2004-172**	200 (8x25)
Push-in type jumper bar, insulated,			
	I_N 32 A,		
	light gray		
	from 1 to 3	**2004-433**	200 (8x25)
	from 1 to 4	**2004-434**	200 (8x25)
	from 1 to 5	**2004-435**	100 (4x25)
	from 1 to 6	**2004-436**	100 (4x25)
	from 1 to 7	**2004-437**	100 (4x25)
	from 1 to 8	**2004-438**	100 (4x25)
	from 1 to 9	**2004-439**	100 (4x25)
	from 1 to 10	**2004-440**	100 (4x25)

Delta jumper, insulated,			
❻	I_N = I_N terminal block, light gray		
	1-2 3-4 5-6	**2004-406/020-000**	
			100 (4x25)
Star point jumper, insulated,			
❻	I_N = I_N terminal block, light gray		
	1-3-5	**2004-405/011-000**	
			100 (4x25)
Step-down jumper, insulated,			
❻	I_N 32 A		
	light gray	**2006-499**	50 (2x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**2004-115**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.



Through terminal blocks with blue insulated housing are suitable for Ex i applications.



All through and ground conductor terminal blocks are suitable for Ex e II applications.

❶ Conductor sizes: 0.5 mm² – 6 mm² "s + f-st"; Push-in conductor sizes: 1 mm² – 6 mm² "s" and 0.75 mm² – 4 mm² "insulated ferrule, 12 mm"

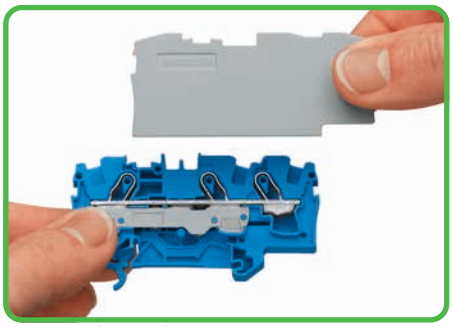
❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

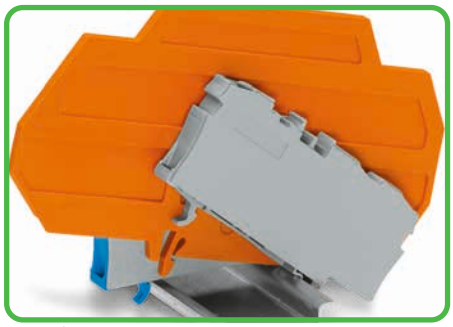
❹ Suitable for Ex i applications

❺ Suitable for Ex e II applications
550 V, 30 A
(see Section 14)

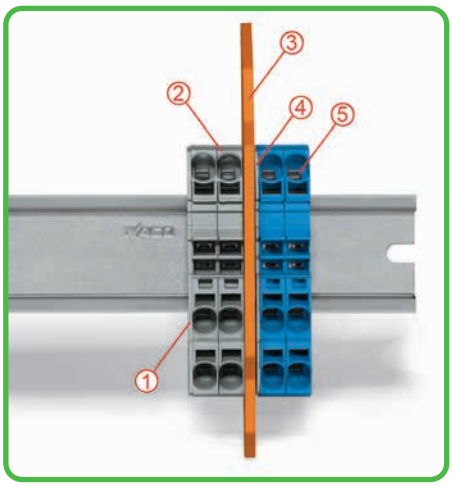
❻ See application notes for:
Step-down jumper, page 23
Star point jumper, page 103
Delta jumper, page 103
TOPJOB®S connector, page 134



Separator for Ex e/Ex i applications
An end plate must be applied to the terminal block located directly behind an Ex e/Ex i separator plate.



Ex e II/Ex i terminal strip
Notice:
The movable feet of terminal blocks and separator plate must face the same direction.



Separator located between Ex e II and Ex i terminal strip
① End plate
② Ex e II terminal blocks
③ Ex e/Ex i separator plate
④ End plate
⑤ Ex i terminal blocks
According to EN 50020, a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. The use of Ex e/Ex i separators is a space-saving solution when Ex e and Ex i terminal blocks are mounted on a common carrier rail.

2004 Series Accessories

Modular TOPJOB®S connector, ❻	can be snapped together, for jumper contact slot		
	gray	**2004-511**	100 (4x25)
Spacer module, can be snapped together,	e.g., for bridging commoned terminal blocks		
	gray	**2004-549**	100 (4x25)
End plate,	for modular TOPJOB®S connectors, 1.5 mm thick		
	gray	**2004-541**	100 (4x25)
Test plug adapter,	for 4 mm Ø test plug		
	gray	**2009-174**	100 (4x25)
Banana plug,	for socket 4 mm Ø, color mixed		
		**215-111**	50
Testing tap,	for max. 2.5 mm²		
	gray	**2009-182**	100 (4x25)
Test plug,	with 500 mm cable, 2 mm Ø		
	red	**210-136**	50
Test plug,	with 500 mm cable, 2.3 mm Ø		
	yellow	**210-137**	50
WMB Multi marking system,	10 strips with 10 markers per card, stretchable 5 - 5.2 mm		
	plain	**793-5501**	5
Marking strip, plain,	11 mm wide, 50 m roll		
	white	**2009-110**	1
TOPJOB®S group marker carrier,	snap-on type for jumper slot, 5 mm wide		
	gray	**2009-191**	50 (2x25)
Screwless end stop,	for DIN 35 rail, 6 mm wide		
	gray	**249-116**	100 (4x25)

TOPJOB® S
Through/Ground Conductor and Ex Terminal Blocks 6 (10) mm²
2006 Series

CAGE CLAMP®S

0.5 - 6 (10) mm² ❶	AWG 20 - 8
800 V/8 kV/3 ❷	600 V, 50 A
I_N 41 A (57 A)	600 V, 50 A
Terminal block width 7.5 mm / 0.295 in	
13 - 15 mm / 0.55 in ❸	

0.5 - 6 (10) mm² ❶	AWG 20 - 8
800 V/8 kV/3 ❷	600 V, 50 A
I_N 41 A (57 A)	600 V, 50 A
Terminal block width 7.5 mm / 0.295 in	
13 - 15 mm / 0.55 in ❸	

❶ Conductor sizes: 0.5 mm² – 10 mm² "s + f-st"; Push-in conductor sizes: 1 mm² – 10 mm² "s" and 1.5 mm² – 6 mm² "insulated ferrule, 12 mm"

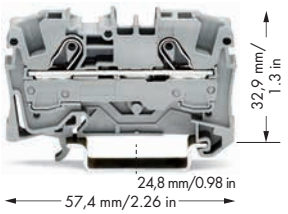
❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

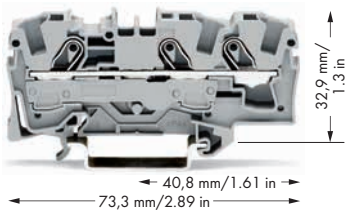
❸ Strip length, see packaging or instructions.

❹ Suitable for Ex i applications

❺ Suitable for Ex e II applications
550 V, 38 A for 2-conductor terminal blocks
550 V, 36 A for 3-conductor terminal blocks
Jumper 33 A
(see Section 14)

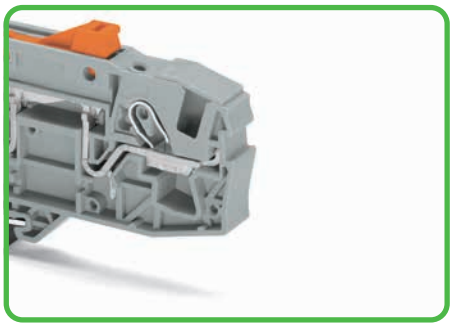
❻ See application notes for:
Ex e/Ex i separator plate, page 19
Step-down jumper, page 23
Star point jumper, page 103
TOPJOB®S connector, page 98





	Item No.	Pack. Unit
2-conductor through terminal block		
gray Ex	**2006-1201** ❺	50
blue Ex	**2006-1204** ❹ ❺	50
orange Ex	**2006-1202** ❺	50
2-conductor ground terminal block		
green-yellow Ex	**2006-1207** ❺	50
2-conductor shield terminal block		
white Ex	**2006-1208** ❺	50

	Item No.	Pack. Unit
3-conductor through terminal block		
gray Ex	**2006-1301** ❺	25
blue Ex	**2006-1304** ❹ ❺	25
orange Ex	**2006-1302** ❺	25
3-conductor ground terminal block		
green-yellow Ex	**2006-1307** ❺	25



Lockout cap for covering unused clamping units of 2006 Series TOPJOB®S terminal blocks.

Item-Specific Accessories

End and intermediate plate, 1 mm thick



orange	**2006-1292**	100 (4x25)
gray	**2006-1291**	100 (4x25)

Separator, oversized, 2 mm thick



orange	**2006-1294**	100 (4x25)
gray	**2006-1293**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick



orange	**2006-1392**	100 (4x25)
gray	**2006-1391**	100 (4x25)

Separator, oversized, 2 mm thick



orange	**2006-1394**	100 (4x25)
gray	**2006-1393**	100 (4x25)

2006 Series Accessories

Appropriate marking systems: WMB/Marking strips
(see Section 13)

Ex e/Ex i separator, orange, ❻



3 mm thick		
120 mm	**209-191**	50 (2x25)

Push-in type jumper bar, insulated,



I_N 41 A, light gray		
2-way	**2006-402**	50 (2x25)
3-way	**2006-403**	50 (2x25)
4-way	**2006-404**	50 (2x25)
5-way	**2006-405**	50 (2x25)

Push-in type jumper bar, insulated,



I_N 41 A, light gray		
from 1 to 3	**2006-433**	50 (2x25)
from 1 to 4	**2006-434**	50 (2x25)
from 1 to 5	**2006-435**	50 (2x25)

Star point jumper, insulated, ❻



I_N = I_N terminal block, light gray		
1-3-5	**2006-405/011-000**	50 (2x25)

Step-down jumper, insulated, ❻



I_N 32 A		
light gray	**2006-499**	50 (2x25)

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks		
yellow	**2006-115**	100 (4x25)

Lockout cap,



for conductor entry hole and operating slot		
gray	**2006-191**	25

Modular TOPJOB®S connector, ❻



can be snapped together, for jumper contact slot		
gray	**2006-511**	50 (2x25)

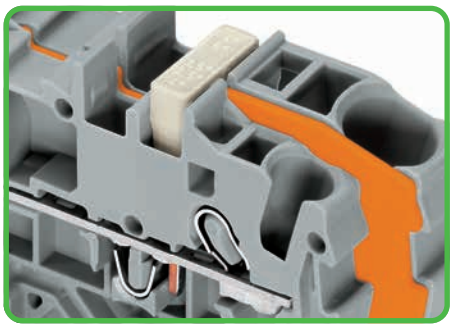
Test plug adapter,



for 4 mm Ø test plug		
gray	**2009-174**	100 (4x25)

WMB Multi marking system,

10 strips with 10 markers per card, stretchable 5 - 5.2 mm		
plain	**793-5501**	5



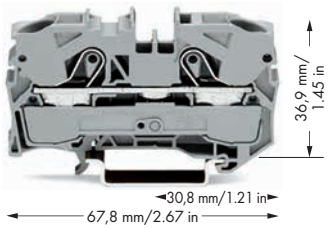
Commoning with step-down jumpers
An end plate must be inserted between the terminal blocks to be jumpered. Step-down jumper 2006-499 commons 6/4 mm² AWG 10/12 (2006/2004 Series) terminal blocks with 4/2.5/1.5 mm² AWG 12/14/16 (2004/2002/2001Series) terminal blocks.
Step-down jumpers are simply pushed down for full insertion, similar to other push-in type jumper bars.
Note:
The total current flowing shall not exceed the rating of the step-down jumper/push-in type jumper bar.

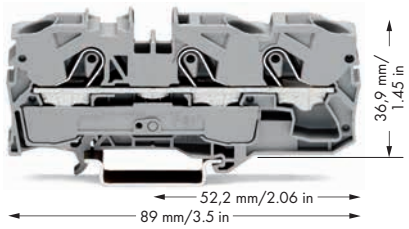
Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® S
Through/Ground Conductor and Ex Terminal Blocks 10 (16) mm²
2010 Series

0.5 - 10 (16) mm² ❶	AWG 20 - 6
800 V/8 kV/3 ❷	600 V, 65 A
I_N 57 A (76 A)	600 V, 65 A
Terminal block width 10 mm / 0.394 in	
17 - 19 mm / 0.71 in ❸	

0.5 - 10 (16) mm² ❶	AWG 20 - 6
800 V/8 kV/3 ❷	600 V, 65 A
I_N 57 A (76 A)	600 V, 65 A
Terminal block width 10 mm / 0.394 in	
17 - 19 mm / 0.71 in ❸	





❶ Conductor sizes: 0.5 mm² – 16 mm² "s + f-st"; Push-in conductor sizes: 2.5 mm² – 16 mm² "s" and 2.5 mm² – 10 mm² "insulated ferrule, 18 mm"

❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ Suitable for Ex i applications

❺ Suitable for Ex e II applications
550 V, 51 A for 2-conductor terminal blocks
550 V, 50 A for 3-conductor terminal blocks
(see Section 14)

❻ See application notes for:
Ex e/Ex i separator plate, page 19
Step-down jumper, page 23
Star point jumper, page 103
TOPJOB®S connector, page 98

	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**2010-1201** ❺	25
blue	**2010-1204** ❹ ❺	25
orange	**2010-1202** ❺	25
2-conductor ground terminal block		
green-yellow	**2010-1207** ❺	25
2-conductor shield terminal block		
white	**2010-1208** ❺	25

	Item No.	Pack. Unit
3-conductor through terminal block		
gray	**2010-1301** ❺	25
blue	**2010-1304** ❹ ❺	25
orange	**2010-1302** ❺	25
3-conductor ground terminal block		
green-yellow	**2010-1307** ❺	25

Item-Specific Accessories

End and intermediate plate, 1 mm thick



orange	**2010-1292**	100 (4x25)
gray	**2010-1291**	100 (4x25)

Ex e/Ex i separator, orange, ❻



3 mm thick		
120 mm	**209-191**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick



orange	**2010-1392**	100 (4x25)
gray	**2010-1391**	100 (4x25)

2010 Series Accessories

Appropriate marking systems: WMB/Marking strips
(see Section 13)

Push-in type jumper bar, insulated,



I_N 57 A,		
light gray		
2-way	**2010-402**	50 (2x25)
3-way	**2010-403**	50 (2x25)
4-way	**2010-404**	50 (2x25)
5-way	**2010-405**	50 (2x25)

Push-in type jumper bar, insulated,



I_N 57 A,		
light gray		
from 1 to 3	**2010-433**	50 (2x25)
from 1 to 4	**2010-434**	50 (2x25)
from 1 to 5	**2010-435**	50 (2x25)

Star point jumper, insulated, ❻



I_N = I_N terminal block, light gray		
1-3-5	**2010-405/011-000**	
		50 (2x25)

Step-down jumper, insulated, ❻



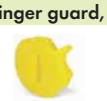
I_N 57 A		
light gray	**2016-499**	50 (2x25)

Protective warning marker,



with high-voltage symbol, black,		
for 5 terminal blocks		
yellow	**2010-115**	50 (2x25)

Finger guard,



touchproof cover protects unused conductor entries		
yellow	**2010-100**	100 (4x25)

Modular TOPJOB®S connector, ❻



can be snapped together,		
for jumper contact slot		
gray	**2010-511**	50 (2x25)

Test plug adapter,



for 4 mm Ø test plug		
gray	**2009-174**	100 (4x25)

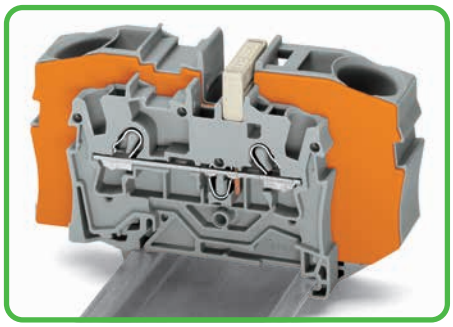
WMB Multi marking system,

10 strips with 10 markers per card,		
stretchable 5 - 5.2 mm		
plain	**793-5501**	5

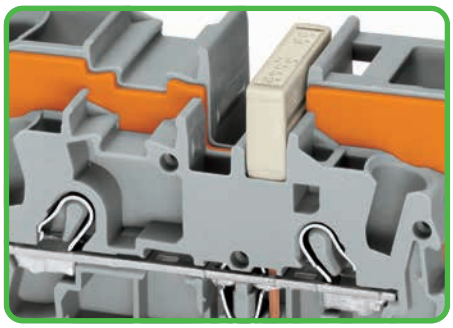
Marking strip, plain,



11 mm wide,		
50 m roll		
white	**2009-110**	1



Commoning with step-down jumpers
An end plate must be inserted between the terminal blocks to be jumpered. Step-down jumper 2016-499 commons 16/10 mm² AWG 16/8 (2016/2010 Series) terminal blocks with 10/6/4/2.5 mm² AWG 8/10/12/14 (2010/2006/2004/2002 Series) terminal blocks. Step-down jumpers are simply pushed down for full insertion, similar to other push-in type jumper bars.



Note:
The total current flowing shall not exceed the rating of the step-down jumper/push-in type jumper bar.

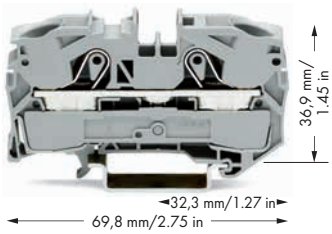
Certification organizations can be found in the overview on pages 622 and 623.

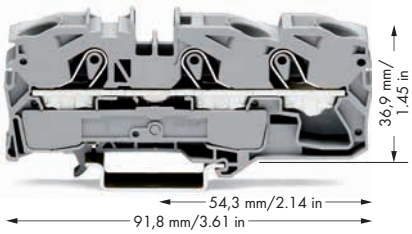
TOPJOB® S
Through/Ground Conductor and Ex Terminal Blocks
16 (25 "f-st") mm², 2016 Series

CAGE CLAMP®S

0.5 - 16 (25"f-st")mm² ❶	AWG 20 - 4
800 V/8 kV/3 ❷	600 V, 85 A
I_N 76 A (90 A)	600 V, 85 A
Terminal block width 12 mm / 0.472 in	
18 - 20 mm / 0.75 in ❸	

0.5 - 16 (25"f-st")mm² ❶	AWG 20 - 4
800 V/8 kV/3 ❷	600 V, 85 A
I_N 76 A (90 A)	600 V, 85 A
Terminal block width 12 mm / 0.472 in	
18 - 20 mm / 0.75 in ❸	





❶ Conductor sizes: 0.5 mm² – 16 mm² "s + f-st", 25 mm² "f-st";
Push-in conductor sizes: 2.5 mm² – 16 mm² "s" and 2.5 mm² – 16 mm² "insulated ferrule, 18 mm"

❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ Suitable for Ex i applications

❺ Suitable for Ex e II applications
550 V, 70 A for 2-conductor terminal blocks
550 V, 67 A for 3-conductor terminal blocks
Jumper 65 A
(see Section 14)

❻ See application notes for:
Ex e/Ex i separator plate, page 19
Step-down jumper, page 23
Star point jumper, page 103
TOPJOB®S connector, page 99

	Item No.	Pack. Unit
2-conductor through terminal block		
gray Ex	**2016-1201** ❺	20
blue Ex	**2016-1204** ❹ ❺	20
orange Ex	**2016-1202** ❺	20
2-conductor ground terminal block, 15mm-high DIN 35 rails shall be used for a current load higher than 76A!		
green-yellow Ex	**2016-1207** ❺	20
2-conductor shield terminal block, 15mm-high DIN 35 rails shall be used for a current load higher than 76A!		
white	**2016-1208** ❺	20

	Item No.	Pack. Unit
3-conductor through terminal block		
gray Ex	**2016-1301** ❺	20
blue Ex	**2016-1304** ❹ ❺	20
orange Ex	**2016-1302** ❺	20
3-conductor ground terminal block, 15mm-high DIN 35 rails shall be used for a current load higher than 76A!		
green-yellow Ex	**2016-1307** ❺	20

Item-Specific Accessories

End and intermediate plate, 1 mm thick			
	orange	**2016-1292**	100 (4x25)
	gray	**2016-1291**	100 (4x25)
Ex e/Ex i separator, orange, ❻ 	3 mm thick		
	120 mm	**209-191**	50 (2x25)

Item-Specific Accessories

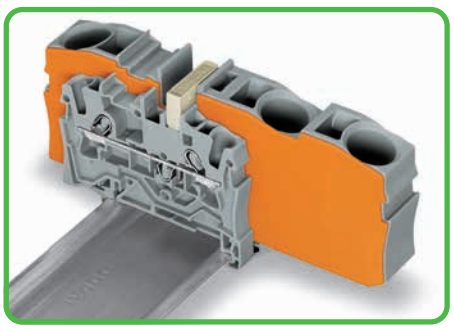
End and intermediate plate, 1 mm thick			
	orange	**2016-1392**	100 (4x25)
	gray	**2016-1391**	100 (4x25)

2016 Series Accessories

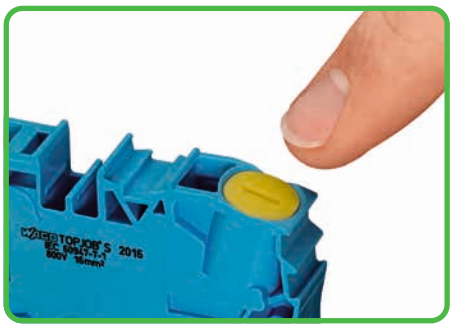
Appropriate marking systems: WMB/Marking strips (see Section 13)

Push-in type jumper bar, insulated, 	I_N 76 A, light gray		
	2-way	**2016-402**	50 (2x25)
	3-way	**2016-403**	50 (2x25)
	4-way	**2016-404**	50 (2x25)
	5-way	**2016-405**	50 (2x25)
Push-in type jumper bar, insulated, 	I_N 76 A, light gray		
	from 1 to 3	**2016-433**	50 (2x25)
	from 1 to 4	**2016-434**	50 (2x25)
	from 1 to 5	**2016-435**	50 (2x25)
Star point jumper, insulated, ❻ 	I_N = I_N terminal block, light gray		
	1-3-5	**2016-405/011-000**	50 (2x25)

Step-down jumper, insulated, ❻ 	I_N 57 A, light gray	**2016-499**	50 (2x25)
Protective warning marker, 	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**2016-115**	50 (2x25)
Modular TOPJOB®S connector, ❻ 	can be snapped together, for jumper contact slot		
	gray	**2016-511**	50 (2x25)
Finger guard, 	touchproof cover protects unused conductor entries		
	yellow	**2016-100**	100 (4x25)
Test plug adapter, 	for 4 mm Ø test plug		
	gray	**2009-174**	100 (4x25)



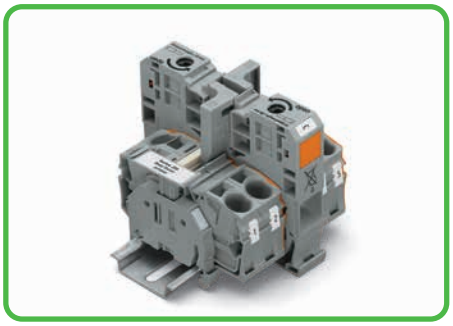
Commoning with step-down jumpers
An end plate must be inserted between the terminal blocks to be jumpered. Step-down jumper 2016-499 commons 16/10 mm² AWG 16/8 (2016/2010 Series) terminal blocks with 10/6/4/2.5 mm² AWG 8/10/12/14 (2010/2006/2004/2002 Series) terminal blocks. Step-down jumpers are simply pushed down for full insertion, similar to other push-in type jumper bars.



Inserting a finger guard seals unused conductor entries.

Certification organizations can be found in the overview on pages 622 and 623.

– Simply Jumpered –
Commoning via Step-Down Jumpers and Push-In Type Jumper Bars

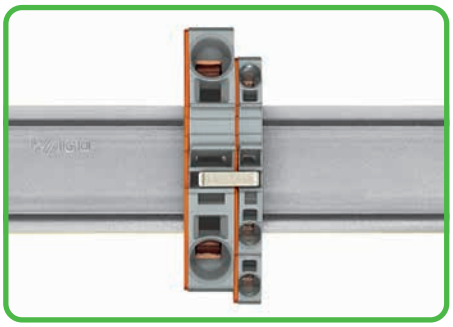


Commoning from 35 mm²/AWG 2 POWER CAGE CLAMP terminal blocks to 10/16 mm² (AWG 8/10) TOPJOB®S terminal blocks

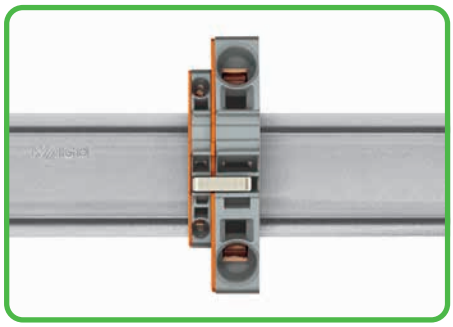
Step-down jumpers may common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point.

Step-down jumpers are simply pushed down for full insertion, in the same way as all other push-in jumpers. Commoning may be made in either direction using the special thin end plate to cover the open side. Further terminal blocks of the smaller cross section may be commoned using standard push-in type jumper bars.

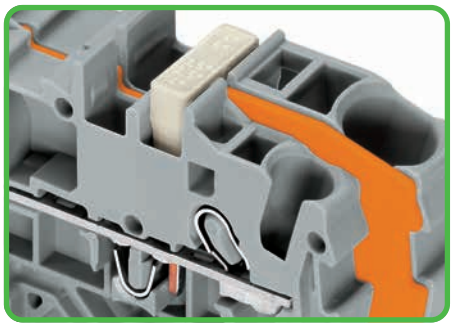
In this case, pay attention that:
The total current flowing does not exceed the rating of the step-down jumper.



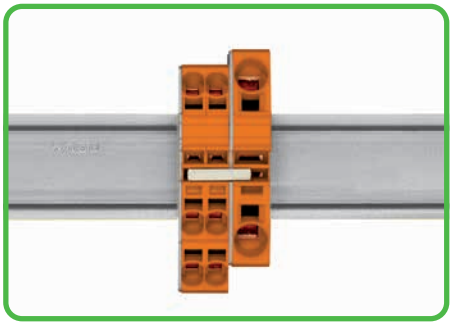
Using step-down jumpers, an end plate must be inserted between the terminal blocks to be commoned.



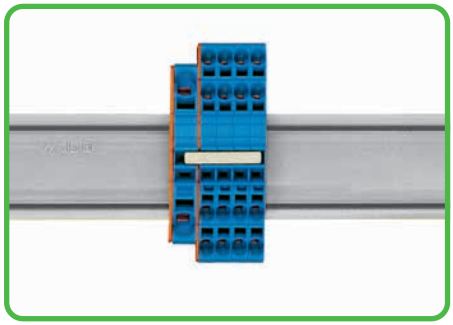
Step-down jumper 2016-499 commons 16/10 mm² AWG 16/8 (2016/2010 Series) terminal blocks with 10/6/4/2.5 mm² AWG 8/10/12/14 (2010/2005/2004/2002 Series) terminal blocks. Step-down jumper 2006-499 commons 6/4 mm² AWG 10/12 (2006/2004 Series) terminal blocks with 4/2.5/1.5 mm² AWG 12/14/16 (2004/2002/2001) terminal blocks.



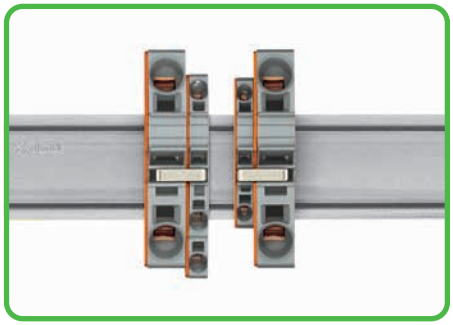
Commoning with step-down jumpers
An end plate must be inserted between the terminal blocks to be jumpered. Step-down jumper 2016-499 commons 16/10 mm² AWG 16/8 (2016/2010 Series) terminal blocks with 10/6/4/2.5 mm² AWG 8/10/12/14 (2010/2006/2004/2002 Series) terminal blocks. Step-down jumpers are simply pushed down for full insertion, similar to other push-in type jumper bars.



Commoning with push-in type jumper bars
Commoning via open terminal side with end plate allows jumpering over two cross section sizes for 16 mm²/AWG 6 and 10 mm²/AWG 8 and one cross section size for 6/4/2.5 mm² (AWG 10/12/14); e.g., from 16 mm²/AWG 6 to 6 mm²/AWG10 (see illustration above) or from 10 mm²/AWG 8 to 4 mm²/AWG 12.



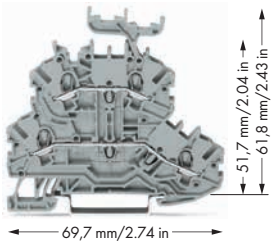
Commoning with push-in type jumper bars
Commoning via closed terminal side with end plate allows jumpering over two cross section sizes; e.g., from 16 mm²/AWG 6 to 6 mm²/AWG 10 or from 6 mm²/AWG 10 to 2.5 mm²/AWG 14 (see illustration above).

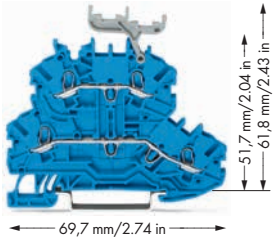


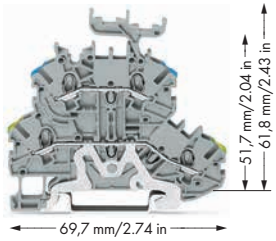
Note:
The total current flowing shall not exceed the rating of the step-down jumper/push-in type jumper bar.

TOPJOB® S
Double-Deck Terminal Blocks 1 (1.5) mm²
2000 Series

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 **500 V/6 kV/3 ❷** **I_N 13.5 A (16 A)** **Terminal block width 3.5 mm / 0.138 in** **9 - 11 mm / 0.39 in ❸**	**0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16** **500 V/6 kV/3 ❷** **I_N 13.5 A (16 A)** **Terminal block width 3.5 mm / 0.138 in** **9 - 11 mm / 0.39 in ❸**	**0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16** **500 V/6 kV/3 ❷** **I_N 13.5 A (16 A)** **Terminal block width 3.5 mm / 0.138 in** **9 - 11 mm / 0.39 in ❸**



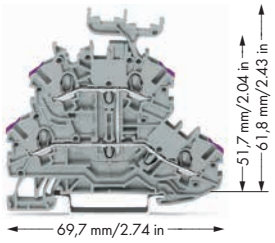


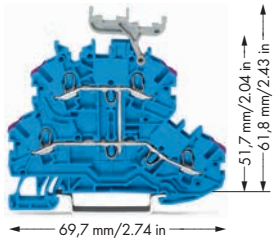


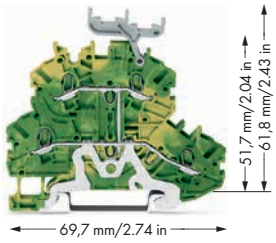
	Item No.	Pack. Unit
Through/through terminal block,		
with marker carrier,		
gray housing		
L/L	**2000-2231**	50
N/L	**2000-2232**	50
L/N	**2000-2233**	50
Through/through terminal block,		
without marker carrier,		
gray housing		
L/L	**2000-2201**	50
N/L	**2000-2202**	50
L/N	**2000-2203**	50

	Item No.	Pack. Unit
Through/through terminal block,		
with marker carrier,		
blue housing		
N/N	**2000-2234**	50
Through/through terminal block,		
without marker carrier,		
blue housing		
N/N	**2000-2204**	50

	Item No.	Pack. Unit
Ground conductor/through terminal block,		
with marker carrier,		
gray housing		
PE/N	**2000-2247**	50
PE/L	**2000-2257**	50
Ground conductor/through terminal block,		
without marker carrier,		
gray housing		
PE/N	**2000-2217**	50
PE/L	**2000-2227**	50







	Item No.	Pack. Unit
4-conductor through terminal block,		
with marker carrier, internal commoning, conductor entry		
position colored in violet,		
gray housing		
L	**2000-2238**	50
4-conductor through terminal block,		
without marker carrier, internal commoning, conductor		
entry position colored in violet,		
gray housing		
L	**2000-2208**	50

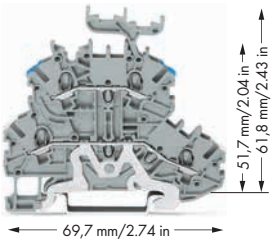
	Item No.	Pack. Unit
4-conductor through terminal block,		
with marker carrier, internal commoning, conductor entry		
position colored in violet,		
blue housing		
N	**2000-2239**	50
4-conductor through terminal block,		
without marker carrier, internal commoning, conductor		
entry position colored in violet,		
blue housing		
N	**2000-2209**	50

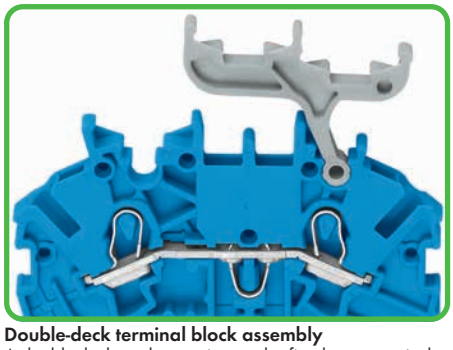
	Item No.	Pack. Unit
4-conductor ground terminal block,		
with marker carrier, internal commoning,		
green-yellow housing		
PE	**2000-2237**	50
4-conductor ground terminal block,		
without marker carrier, internal commoning,		
green-yellow housing		
PE	**2000-2207**	50

Certification organizations can be found in the overview on pages 622 and 623.

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16
500 V/6 kV/3 ❷
I_N 13.5 A (16 A)

Terminal block width 3.5 mm / 0.138 in
9 - 11 mm / 0.39 in ❸





Double-deck terminal block assembly
A double-deck marker carrier can be fitted retrospectively to double-deck terminal blocks without marker carrier.

❶ Conductor sizes: 0.14 mm² – 1.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 1.5 mm² "s" and 0.5 mm² – 0.75 mm² "insulated ferrule, 10 mm"

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Colored push-in type jumper bars, page 101
Vertical jumper, page 105

Item No.		Pack. Unit
Shield conductor/through terminal block, with marker carrier, gray housing		
Shield/N	**2000-2248**	50
Shield/L	**2000-2258**	50
Shield conductor/through terminal block, without marker carrier, gray housing		
Shield/N	**2000-2218**	50
Shield/L	**2000-2228**	50

2000 Series Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

End and intermediate plate, 0.7 mm thick



	Item No.	Pack. Unit
orange	**2000-2292**	25
gray	**2000-2291**	25

Push-in type jumper bar, insulated, ❹



I_N 14 A, light gray

	Item No.	Pack. Unit
2-way	**2000-402**	200 (8x25)
3-way	**2000-403**	200 (8x25)
4-way	**2000-404**	200 (8x25)
5-way	**2000-405**	100 (4x25)
6-way	**2000-406**	100 (4x25)
7-way	**2000-407**	100 (4x25)
8-way	**2000-408**	100 (4x25)
9-way	**2000-409**	100 (4x25)
10-way	**2000-410**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 14 A, light gray

	Item No.	Pack. Unit
from 1 to 3	**2000-433**	200 (8x25)
from 1 to 4	**2000-434**	200 (8x25)
from 1 to 5	**2000-435**	100 (4x25)
from 1 to 6	**2000-436**	100 (4x25)
from 1 to 7	**2000-437**	100 (4x25)
from 1 to 8	**2000-438**	100 (4x25)
from 1 to 9	**2000-439**	100 (4x25)
from 1 to 10	**2000-440**	100 (4x25)

Double-deck vertical jumper, insulated, ❹

I_N 13.5 A

	Item No.	Pack. Unit
light gray	**2000-492**	100 (4x25)

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks

	Item No.	Pack. Unit
yellow	**2000-115**	100 (4x25)

Double-deck marker carrier,



pivoting

	Item No.	Pack. Unit
gray	**2000-121**	50 (2x25)

WMB Multi marking system,

10 strips with 10 markers per card, for 3.5 mm terminal block width

	Item No.	Pack. Unit
plain	**793-3501**	5

Marking strip, plain,



11 mm wide, 50 m roll

	Item No.	Pack. Unit
white	**2009-110**	1

Test plug adapter,



	Item No.	Pack. Unit
for 4 mm Ø test plug, gray	**2009-174**	100 (4x25)

Banana plug,



	Item No.	Pack. Unit
for socket 4 mm Ø, color mixed	**215-111**	50

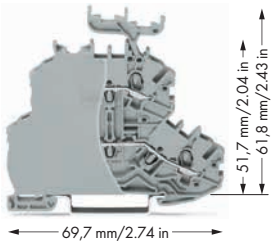
Testing tap,

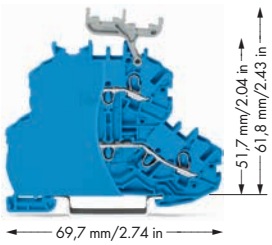


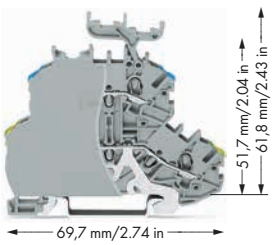
	Item No.	Pack. Unit
for max. 2.5 mm², gray	**2009-182**	100 (4x25)

TOPJOB® S
Double-Deck Terminal Blocks 1 (1.5) mm²
2000 Series

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 **800 V/8 kV/3 ❷** **I_N 13.5 A (16 A)** **Terminal block width 4.2 mm / 0.165 in** **9 - 11 mm / 0.39 in ❸**	**0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16** **800 V/8 kV/3 ❷** **I_N 13.5 A (16 A)** **Terminal block width 4.2 mm / 0.165 in** **9 - 11 mm / 0.39 in ❸**	**0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16** **800 V/8 kV/3 ❷** **I_N 13.5 A (16 A)** **Terminal block width 4.2 mm / 0.165 in** **9 - 11 mm / 0.39 in ❸**



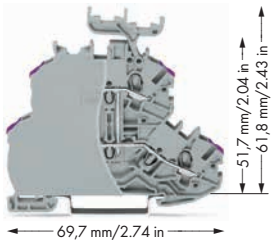


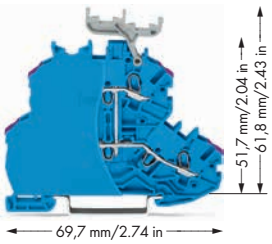


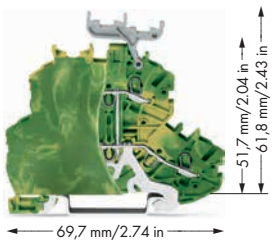
	Item No.	Pack. Unit
Through/through terminal block, with end plate, with marker carrier, gray housing		
L/L	**2000-2231/099-000**	50
N/L	**2000-2232/099-000**	50
L/N	**2000-2233/099-000**	50
Through/through terminal block, with end plate, without marker carrier, gray housing		
L/L	**2000-2201/099-000**	50
N/L	**2000-2202/099-000**	50
L/N	**2000-2203/099-000**	50

	Item No.	Pack. Unit
Through/through terminal block, with end plate, with marker carrier, blue housing		
N/N	**2000-2234/099-000**	50
Through/through terminal block, with end plate, without marker carrier, blue housing		
N/N	**2000-2204/099-000**	50

	Item No.	Pack. Unit
Ground conductor/through terminal block, with end plate, with marker carrier, gray housing		
PE/N	**2000-2247/099-000**	50
PE/L	**2000-2257/099-000**	50
Ground conductor/through terminal block, with end plate, without marker carrier, gray housing		
PE/N	**2000-2217/099-000**	50
PE/L	**2000-2227/099-000**	50







	Item No.	Pack. Unit
4-conductor through terminal block, with end plate, with marker carrier, internal commoning, conductor entry position colored in violet, gray housing		
L	**2000-2238/099-000**	50
4-conductor through terminal block, with end plate, without marker carrier, internal commoning, conductor entry position colored in violet, gray housing		
L	**2000-2208/099-000**	50

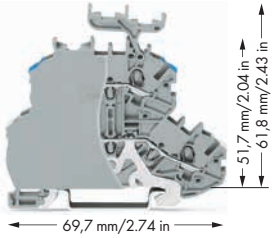
	Item No.	Pack. Unit
4-conductor through terminal block, with end plate, with marker carrier, internal commoning, conductor entry position colored in violet, blue housing		
N	**2000-2239/099-000**	50
4-conductor through terminal block, with end plate, without marker carrier, internal commoning, conductor entry position colored in violet, blue housing		
N	**2000-2209/099-000**	50

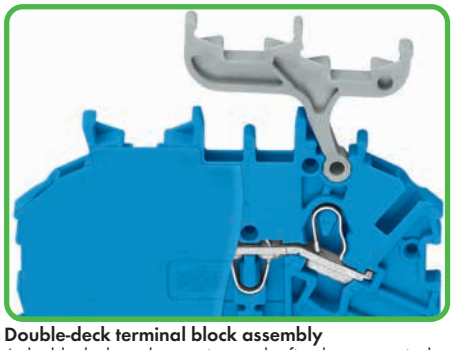
	Item No.	Pack. Unit
4-conductor ground terminal block, with end plate, with marker carrier, internal commoning, green-yellow housing		
PE	**2000-2237/099-000**	50
4-conductor ground terminal block, with end plate, without marker carrier, internal commoning, green-yellow housing		
PE	**2000-2207/099-000**	50

Certification organizations can be found in the overview on pages 622 and 623.

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16
800 V/8 kV/3 ❷
I_N 13.5 A (16 A)

Terminal block width 4.2 mm / 0.165 in
9 - 11 mm / 0.39 in ❸





Double-deck terminal block assembly
A double-deck marker carrier can be fitted retrospectively to double-deck terminal blocks without marker carrier.

❶ Conductor sizes: 0.14 mm² – 1.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 1.5 mm² "s" and 0.5 mm² – 0.75 mm² "insulated ferrule, 10 mm"

❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Vertical jumper, page 105

	Item No.	Pack. Unit
Shield conductor/through terminal block, with end plate, with marker carrier, gray housing		
Shield/N	**2000-2248/099-000**	50
Shield/L	**2000-2258/099-000**	50
Shield conductor/through terminal block, with end plate, without marker carrier, gray housing		
Shield/N	**2000-2218/099-000**	50
Shield/L	**2000-2228/099-000**	50

2000 Series Accessories

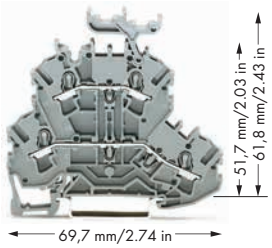
Appropriate marking systems: WMB/Marking strips (see Section 13)

End and intermediate plate, 0.7 mm thick			
	orange	**2000-2292**	25
	gray	**2000-2291**	25
Push-in type jumper bar, insulated,			
	I_N 18 A, light gray		
	2-way	**2001-402**	200 (8x25)
	3-way	**2001-403**	200 (8x25)
	4-way	**2001-404**	200 (8x25)
	5-way	**2001-405**	100 (4x25)
	6-way	**2001-406**	100 (4x25)
	7-way	**2001-407**	100 (4x25)
	8-way	**2001-408**	100 (4x25)
	9-way	**2001-409**	100 (4x25)
	10-way	**2001-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 18 A, light gray		
	from 1 to 3	**2001-433**	200 (8x25)
	from 1 to 4	**2001-434**	200 (8x25)
	from 1 to 5	**2001-435**	100 (4x25)
	from 1 to 6	**2001-436**	100 (4x25)
	from 1 to 7	**2001-437**	100 (4x25)
	from 1 to 8	**2001-438**	100 (4x25)
	from 1 to 9	**2001-439**	100 (4x25)
	from 1 to 10	**2001-440**	100 (4x25)
Double-deck vertical jumper, insulated, ❹			
	I_N 13.5 A, light gray	**2000-492**	100 (4x25)
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks, yellow	**2001-115**	100 (4x25)
Double-deck marker carrier,			
	pivoting, gray	**2000-121**	50 (2x25)
Marking strip, plain,			
	11 mm wide, 50 m roll, white	**2009-110**	1

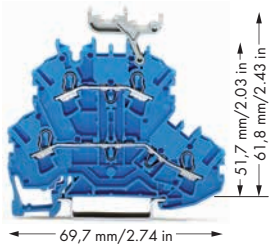
Test plug adapter,			
	for 4 mm Ø test plug, gray	**2009-174**	100 (4x25)
Testing tap,			
	for max. 2.5 mm², gray	**2009-182**	100 (4x25)
Banana plug,			
	for socket 4 mm Ø, color mixed	**215-111**	50
WMB Inline, plain,			
	stretchable 4 - 4.2 mm, 2,000 WMB markers, 4 mm, on roll, white	**2009-114**	1
WMB Multi marking system,			
	10 strips with 10 markers per card, stretchable 4 - 4.2 mm, plain	**793-4501**	5
WMB Multi marking system, plain,			
	10 strips with 10 markers per card, stretchable 4 - 4.2 mm, yellow	**793-4501/000-002**	
	red	**793-4501/000-005**	
	blue	**793-4501/000-006**	
	gray	**793-4501/000-007**	
	orange	**793-4501/000-012**	
	light green	**793-4501/000-017**	
	green	**793-4501/000-023**	
	violet	**793-4501/000-024**	
			5

TOPJOB® S
Double-Deck Terminal Blocks 2.5 (4) mm²
2002 Series

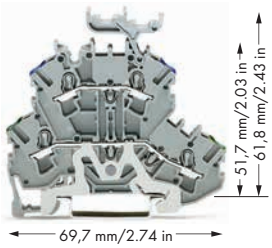
0.25 - 2.5 (4) mm² ❶	AWG 22 - 12	
500 V/6 kV/3 ❷	300 V, 20 A	
I_N 24 A (28 A)	600 V, 20 A	
Terminal block width 5.2 mm / 0.205 in		
10 - 12 mm / 0.43 in ❸		



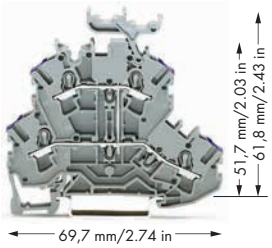
Item No.		Pack. Unit
Through/through terminal block,		
with marker carrier,		
gray housing		
L/L	**2002-2231** ❺	50
N/L	**2002-2232** ❺	50
L/N	**2002-2233** ❺	50
Through/through terminal block,		
without marker carrier,		
gray housing		
L/L	**2002-2201** ❺	50
N/L	**2002-2202** ❺	50
L/N	**2002-2203** ❺	50
Other terminal blocks with the same profile:		
Diode	**2002-2211/1000-410**	Page86
LED	**2002-2221/1000-434**	Page86



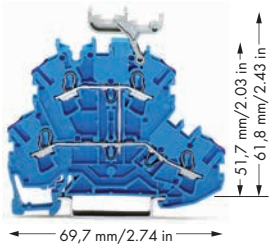
Item No.		Pack. Unit
Through/through terminal block,		
with marker carrier,		
blue housing		
N/N	**2002-2234** ❹ ❺	50
Through/through terminal block,		
without marker carrier,		
blue housing		
N/N	**2002-2204** ❹ ❺	50



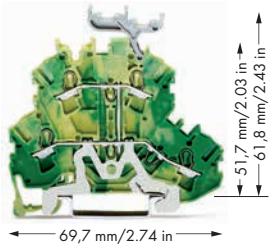
Item No.		Pack. Unit
Ground conductor/through terminal block,		
with marker carrier,		
gray housing		
PE/N	**2002-2247** ❺	50
PE/L	**2002-2257** ❺	50
Ground conductor/through terminal block,		
without marker carrier,		
gray housing		
PE/N	**2002-2217** ❺	50
PE/L	**2002-2227** ❺	50



Item No.		Pack. Unit
4-conductor through terminal block,		
with marker carrier, internal commoning, conductor entry		
position colored in violet,		
gray housing		
L	**2002-2238** ❺	50
4-conductor through terminal block,		
without marker carrier, internal commoning, conductor		
entry position colored in violet,		
gray housing		
L	**2002-2208** ❺	50



Item No.		Pack. Unit
4-conductor through terminal block,		
with marker carrier, internal commoning, conductor entry		
position colored in violet,		
blue housing		
N	**2002-2239** ❹ ❺	50
4-conductor through terminal block,		
without marker carrier, internal commoning, conductor		
entry position colored in violet,		
blue housing		
N	**2002-2209** ❹ ❺	50

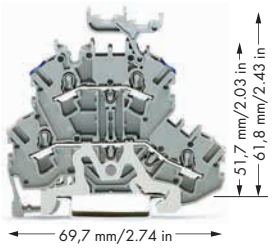


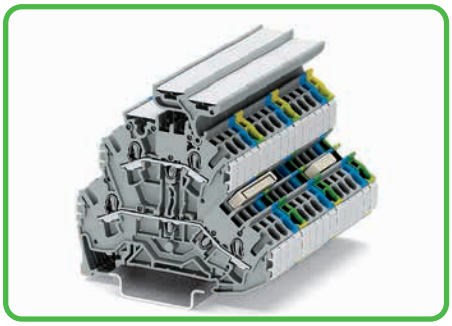
Item No.		Pack. Unit
4-conductor ground terminal block,		
with marker carrier, internal commoning,		
green-yellow housing		
PE	**2002-2237** ❺	50
4-conductor ground terminal block,		
without marker carrier, internal commoning,		
green-yellow housing		
PE	**2002-2207** ❺	50

Certification organizations can be found in the overview on pages 622 and 623.

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12
500 V/6 kV/3 ❷
I_N 24 A (28 A)

Terminal block width 5.2 mm / 0.205 in
10 - 12 mm / 0.43 in ❸





Double-deck terminal block assembly

❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

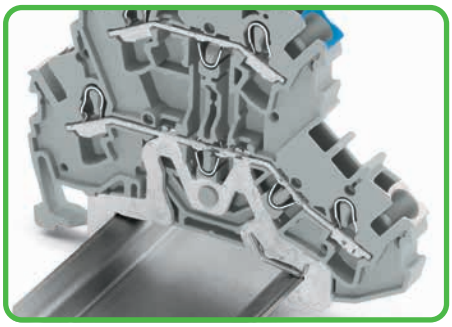
❸ Strip length, see packaging or instructions.

❹ Suitable for Ex i applications

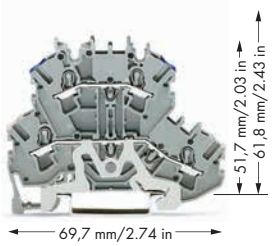
❺ Suitable for Ex e II applications
440 V, 20 A
Jumper 18 A
(see Section 14)

❻ See application notes for:
Ex e/Ex i separator plate, page 19
Colored push-in type jumper bars, page 101
Vertical jumper, page 105

	Item No.	Pack. Unit
Shield conductor/through terminal block,		
with marker carrier,		
gray housing		
Shield/N	**2002-2248**	50
Shield/L	**2002-2258**	50



The ground conductor or shield terminal blocks have a contact foot in the bottom level, automatically establishing direct contact to the carrier rail.
The flexible double-deck marker carrier, which is placed above the wiring levels, can be pushed aside during the wiring or commoning operation. The marker carrier has two levels for two different WMB markers relating to the two decks of the terminal blocks.
With a terminal block width of only 5.2 mm an effective width of only 2.6 mm for terminal blocks of same or different potentials can be realized for conductor sizes from 0.25 mm² to 4 mm² (AWG 22 - 12).
For protection against external interfering signals, an increasing number of shielded control cables are being used.
Shield terminal blocks for front-entry are suitable for connecting the cable braid. Like ground conductor terminal blocks for front-entry, they are equipped with a grounding foot for direct electrical connection to the rail, however they differ significantly by their white insulated housing. Shield terminal blocks can be directly mounted beside signal-conductor terminal blocks and provide excellent deflection of interfering signals.



	Item No.	Pack. Unit
Shield conductor/through terminal block,		
without marker carrier,		
gray housing		
Shield/N	**2002-2218**	50
Shield/L	**2002-2228**	50

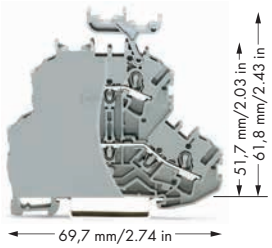
2002 Series Accessories

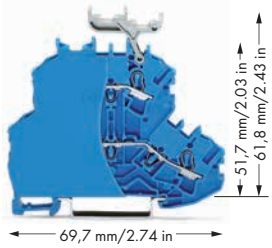
Appropriate marking system (see Section 13)

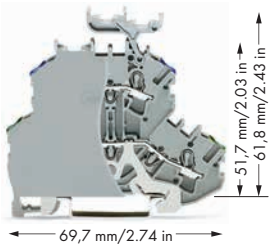
End and intermediate plate, 0.8 mm thick			
	orange	**2002-2292**	100 (4x25)
	gray	**2002-2291**	100 (4x25)
Ex e/Ex i separator, orange,			
❻	3 mm thick		
	125.5 mm	**209-192**	50 (2x25)
Double-deck marker carrier,			
	pivoting		
	gray	**2002-121**	50 (2x25)
Insulation stop,			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**2002-171**	200 (8x25)
Insulation stop,			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**2002-172**	200 (8x25)
Push-in type jumper bar, insulated,			
❻	I_N 25 A,		
	light gray		
	2-way	**2002-402**	200 (8x25)
	3-way	**2002-403**	200 (8x25)
	4-way	**2002-404**	200 (8x25)
	5-way	**2002-405**	100 (4x25)
	6-way	**2002-406**	100 (4x25)
	7-way	**2002-407**	100 (4x25)
	8-way	**2002-408**	100 (4x25)
	9-way	**2002-409**	100 (4x25)
	10-way	**2002-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 25 A,		
	light gray		
	from 1 to 3	**2002-433**	200 (8x25)
	from 1 to 4	**2002-434**	200 (8x25)
	from 1 to 5	**2002-435**	100 (4x25)
	from 1 to 6	**2002-436**	100 (4x25)
	from 1 to 7	**2002-437**	100 (4x25)
	from 1 to 8	**2002-438**	100 (4x25)
	from 1 to 9	**2002-439**	100 (4x25)
	from 1 to 10	**2002-440**	100 (4x25)
Double-deck vertical jumper, insulated,			
❻	I_N 24 A		
	light gray	**2002-492**	100 (4x25)
	orange	**2002-492/000-012**	

TOPJOB® S
Double-Deck Terminal Blocks 2.5 (4) mm²
2002 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 800 V/8 kV/3 ❷ I_N 24 A | 600 V, 20 A Terminal block width 6.2 mm / 0.244 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 800 V/8 kV/3 ❷ I_N 24 A | 600 V, 20 A Terminal block width 6.2 mm / 0.244 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 800 V/8 kV/3 ❷ I_N 24 A Terminal block width 6.2 mm / 0.244 in 10 - 12 mm / 0.43 in ❸



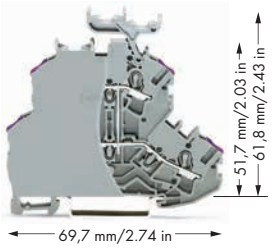


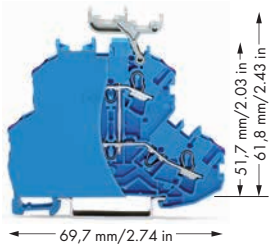


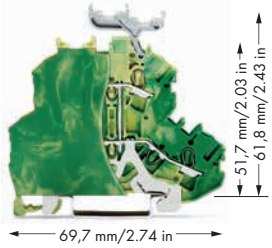
	Item No.	Pack. Unit
Through/through terminal block, with end plate, with marker carrier, gray housing		
L/L	**2002-2231/099-000**	50
N/L	**2002-2232/099-000**	50
L/N	**2002-2233/099-000**	50
Through/through terminal block, with end plate, without marker carrier, gray housing		
L/L	**2002-2201/099-000**	50
N/L	**2002-2202/099-000**	50
L/N	**2002-2203/099-000**	50
Other terminal blocks with the same profile:		
Diode	**2002-2211/1000-410**	Page86
LED	**2002-2221/1000-434**	Page86

	Item No.	Pack. Unit
Through/through terminal block, with end plate, with marker carrier, blue housing		
N/N	**2002-2234/099-000** ❹	50
Through/through terminal block, with end plate, without marker carrier, blue housing		
N/N	**2002-2204/099-000** ❹	50

	Item No.	Pack. Unit
Ground conductor/through terminal block, with end plate, with marker carrier, gray housing		
PE/N	**2002-2247/099-000**	50
PE/L	**2002-2257/099-000**	50
Ground conductor/through terminal block, with end plate, without marker carrier, gray housing		
PE/N	**2002-2217/099-000**	50
PE/L	**2002-2227/099-000**	50







	Item No.	Pack. Unit
4-conductor through terminal block, with end plate, with marker carrier, internal commoning, conductor entry position colored in violet, gray housing		
L	**2002-2238/099-000**	50
4-conductor through terminal block, with end plate, without marker carrier, internal commoning, conductor entry position colored in violet, gray housing		
L	**2002-2208/099-000**	50

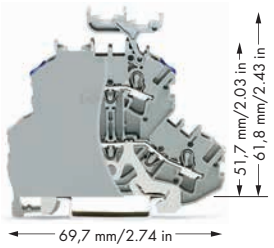
	Item No.	Pack. Unit
4-conductor through terminal block, with end plate, with marker carrier, internal commoning, conductor entry position colored in violet, blue housing		
N	**2002-2239/099-000** ❹	50
4-conductor through terminal block, with end plate, without marker carrier, internal commoning, conductor entry position colored in violet, blue housing		
N	**2002-2209/099-000** ❹	50

	Item No.	Pack. Unit
4-conductor ground terminal block, with end plate, with marker carrier, internal commoning, green-yellow housing		
PE	**2002-2237/099-000**	50
4-conductor ground terminal block, with end plate, without marker carrier, internal commoning, green-yellow housing		
PE	**2002-2207/099-000**	50

Certification organizations can be found in the overview on pages 622 and 623.

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12
800 V/8 kV/3 ❷
I_N 24 A

Terminal block width 6.2 mm / 0.244 in
10 - 12 mm / 0.43 in ❸



Protective warning marker and insulation stop must be applied individually. Due to the 6.2 mm width of double-deck terminal blocks with end plate, 2004 Series jumpers must be used.

❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ Suitable for Ex i applications

❺ See application notes for:
Vertical jumper, page 105

Item No.		Pack. Unit
Shield conductor/through terminal block, with end plate, with marker carrier, gray housing		
◯ Shield/N	**2002-2248/099-000**	50
◯ Shield/L	**2002-2258/099-000**	50
Shield conductor/through terminal block, with end plate, without marker carrier, gray housing		
◯ Shield/N	**2002-2218/099-000**	50
◯ Shield/L	**2002-2228/099-000**	50

2002 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

End and intermediate plate, 0.8 mm thick



orange	**2002-2292**	100 (4x25)
gray	**2002-2291**	100 (4x25)

Double-deck marker carrier,



pivoting gray	**2002-121**	50 (2x25)

Insulation stop,



5 pcs/strip, 0.25 - 0.5 mm² light gray	**2002-171**	200 (8x25)

Insulation stop,



5 pcs/strip, 0.75 - 1 mm² dark gray	**2002-172**	200 (8x25)

Push-in type jumper bar, insulated,



I_N 32 A, light gray

2-way	**2004-402**	200 (8x25)
3-way	**2004-403**	200 (8x25)
4-way	**2004-404**	100 (4x25)
5-way	**2004-405**	100 (4x25)
6-way	**2004-406**	100 (4x25)
7-way	**2004-407**	100 (4x25)
8-way	**2004-408**	100 (4x25)
9-way	**2004-409**	100 (4x25)
10-way	**2004-410**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 32 A, light gray

from 1 to 3	**2004-433**	200 (8x25)
from 1 to 4	**2004-434**	200 (8x25)
from 1 to 5	**2004-435**	100 (4x25)
from 1 to 6	**2004-436**	100 (4x25)
from 1 to 7	**2004-437**	100 (4x25)
from 1 to 8	**2004-438**	100 (4x25)
from 1 to 9	**2004-439**	100 (4x25)
from 1 to 10	**2004-440**	100 (4x25)

Double-deck vertical jumper, insulated,

❺

I_N 24 A

light gray	**2002-492**	100 (4x25)
orange	**2002-492/000-012**	

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks

yellow	**2002-115**	100 (4x25)

Test plug adapter,



for 4 mm Ø test plug gray	**2009-174**	100 (4x25)

Banana plug,



for socket 4 mm Ø, color mixed	**215-111**	50

WMB Multi marking system,

10 strips with 10 markers per card, stretchable 5 - 5.2 mm plain	**793-5501**	5

WMB Multi marking system, plain,



10 strips with 10 markers per card, stretchable 5 - 5.2 mm yellow	**793-5501/000-002**	
red	**793-5501/000-005**	
blue	**793-5501/000-006**	
gray	**793-5501/000-007**	
orange	**793-5501/000-012**	
light green	**793-5501/000-017**	
green	**793-5501/000-023**	
violet	**793-5501/000-024**	
		5

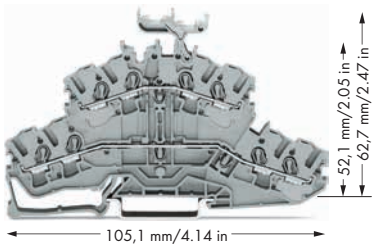
Marking strip, plain,



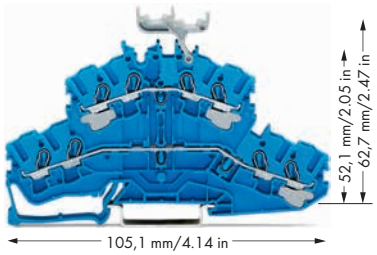
11 mm wide, 50 m roll white	**2009-110**	1

TOPJOB® S
4-Conductor, Double-Deck Terminal Blocks 2.5 (4) mm²
2002 Series

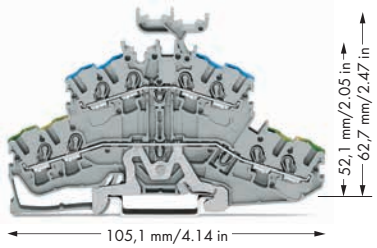
0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 800 V/8 kV/3 ❷ | 600 V, 20 A I_N 24 A (28 A) | 600 V, 20 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 800 V/8 kV/3 ❷ | 600 V, 20 A I_N 24 A (28 A) | 600 V, 20 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 800 V/8 kV/3 ❷ I_N 24 A (28 A) Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸



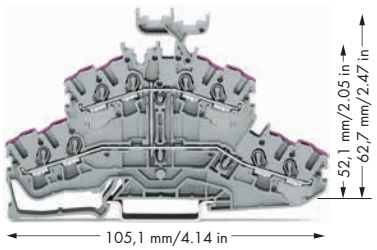
Item No.		Pack. Unit
Through/through terminal block,		
with marker carrier,		
gray housing		
L/L	**2002-2431**	50
N/L	**2002-2432**	50
L/N	**2002-2433**	50
Through/through terminal block,		
without marker carrier,		
gray housing		
L/L	**2002-2401**	50
N/L	**2002-2402**	50
L/N	**2002-2403**	50
Ex Approvals are pending		



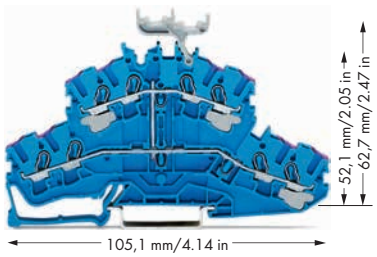
Item No.		Pack. Unit
Through/through terminal block,		
with marker carrier,		
blue housing		
N/N	**2002-2434** ❹	50
Through/through terminal block,		
without marker carrier,		
blue housing		
N/N	**2002-2404** ❹	50



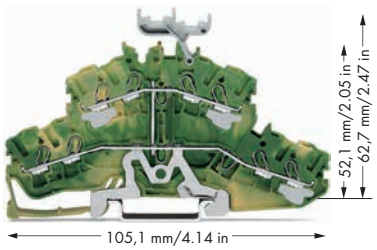
Item No.		Pack. Unit
Ground conductor/through terminal block,		
with marker carrier,		
gray housing		
PE/N	**2002-2447**	50
PE/L	**2002-2457**	50
Ground conductor/through terminal block,		
without marker carrier,		
gray housing		
PE/N	**2002-2417**	50
PE/L	**2002-2427**	50



Item No.		Pack. Unit
8-conductor through terminal block,		
with marker carrier, internal commoning, conductor entry		
position colored in violet,		
gray housing		
L	**2002-2438**	50
8-conductor through terminal block,		
without marker carrier, internal commoning, conductor		
entry position colored in violet,		
gray housing		
L	**2002-2408**	50



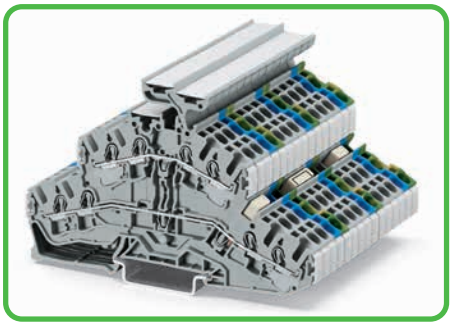
Item No.		Pack. Unit
8-conductor through terminal block,		
with marker carrier, internal commoning, conductor entry		
position colored in violet,		
blue housing		
N	**2002-2439** ❹	50
8-conductor through terminal block,		
without marker carrier, internal commoning, conductor		
entry position colored in violet,		
blue housing		
N	**2002-2409** ❹	50



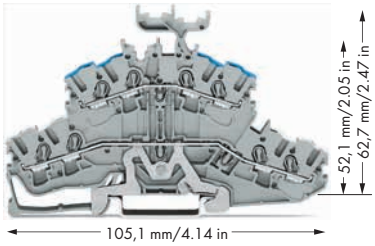
Item No.		Pack. Unit
8-conductor ground terminal block,		
with marker carrier, internal commoning,		
green-yellow housing		
PE	**2002-2437**	50
8-conductor ground terminal block,		
without marker carrier, internal commoning,		
green-yellow housing		
PE	**2002-2407**	50

Certification organizations can be found in the overview on pages 622 and 623.

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12
800 V/8 kV/3 ❷
I_N 24 A (28 A)
Terminal block width 5.2 mm / 0.205 in
10 - 12 mm / 0.43 in ❸



Double-deck terminal block assembly



❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ Suitable for Ex i applications

❺ See application notes for:
Colored push-in type jumper bars, page 101
Vertical jumper, page 105

	Item No.	Pack. Unit
Shield conductor/through terminal block, with marker carrier, gray housing		
Shield/N	**2002-2448**	50
Shield/L	**2002-2458**	50
Shield conductor/through terminal block, without marker carrier, gray housing		
Shield/N	**2002-2418**	50
Shield/L	**2002-2428**	50

2002 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

End and intermediate plate, 0.8 mm thick



orange	**2002-2492**	100 (4x25)
gray	**2002-2491**	100 (4x25)

Double-deck marker carrier,



pivoting gray	**2002-121**	50 (2x25)

Insulation stop,



5 pcs/strip, 0.25 - 0.5 mm², light gray	**2002-171**	200 (8x25)

Insulation stop,



5 pcs/strip, 0.75 - 1 mm², dark gray	**2002-172**	200 (8x25)

Push-in type jumper bar, insulated, ❺ I_N 25 A, light gray



2-way	**2002-402**	200 (8x25)
3-way	**2002-403**	200 (8x25)
4-way	**2002-404**	200 (8x25)
5-way	**2002-405**	100 (4x25)
6-way	**2002-406**	100 (4x25)
7-way	**2002-407**	100 (4x25)
8-way	**2002-408**	100 (4x25)
9-way	**2002-409**	100 (4x25)
10-way	**2002-410**	100 (4x25)

Push-in type jumper bar, insulated, I_N 25 A, light gray



from 1 to 3	**2002-433**	200 (8x25)
from 1 to 4	**2002-434**	200 (8x25)
from 1 to 5	**2002-435**	100 (4x25)
from 1 to 6	**2002-436**	100 (4x25)
from 1 to 7	**2002-437**	100 (4x25)
from 1 to 8	**2002-438**	100 (4x25)
from 1 to 9	**2002-439**	100 (4x25)
from 1 to 10	**2002-440**	100 (4x25)

Double-deck vertical jumper, insulated, ❺ I_N 24 A

light gray	**2002-492**	100 (4x25)
orange	**2002-492/000-012**	

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks, yellow	**2002-115**	100 (4x25)

Test plug adapter,



for 4 mm Ø test plug, gray	**2009-174**	100 (4x25)

Banana plug,



for socket 4 mm Ø, color mixed	**215-111**	50

Testing tap,



for max. 2.5 mm², gray	**2009-182**	100 (4x25)

WMB Multi marking system,

10 strips with 10 markers per card, stretchable 5 - 5.2 mm, plain	**793-5501**	5

WMB Multi marking system, plain,



10 strips with 10 markers per card, stretchable 5 - 5.2 mm, yellow	**793-5501/000-002**	
red	**793-5501/000-005**	
blue	**793-5501/000-006**	
gray	**793-5501/000-007**	
orange	**793-5501/000-012**	
light green	**793-5501/000-017**	
green	**793-5501/000-023**	
violet	**793-5501/000-024**	
		5

WMB Inline, plain,



stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll, white	**2009-115**	1

Marking strip, plain,



11 mm wide, 50 m roll, white	**2009-110**	1

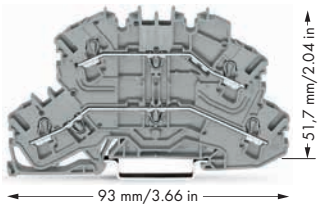
TOPJOB®S group marker carrier,



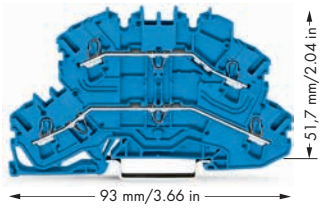
snap-on type for jumper slot, 5 mm wide, gray	**2009-191**	50 (2x25)

TOPJOB® S
Double-Deck Terminal Blocks 2.5 (4) mm²
2002 Series

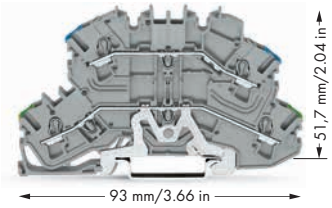
0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 500 V/6 kV/3 ❷ I_N 24 A (28 A) Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 500 V/6 kV/3 ❷ I_N 24 A (28 A) Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 500 V/6 kV/3 ❷ I_N 24 A (28 A) Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸



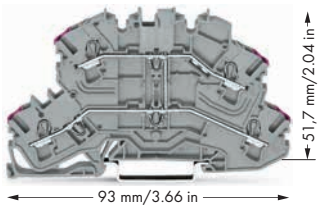
Item No.		Pack. Unit
Through/through terminal block,		
same profile as double-deck disconnect terminal block		
without marker carrier,		
gray housing		
L/L	**2002-2601**	50
N/L	**2002-2602**	50
L/N	**2002-2603**	50
Other terminal blocks with the same profile:		
Carrier	**2002-2661**	Page 36
Disconnect	**2002-2671**	Page 36
Fuse	**2002-2611**	Page 37



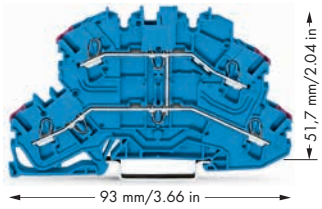
Item No.		Pack. Unit
Through/through terminal block,		
same profile as double-deck disconnect terminal block		
without marker carrier,		
blue housing		
N/N	**2002-2604** ❹	50



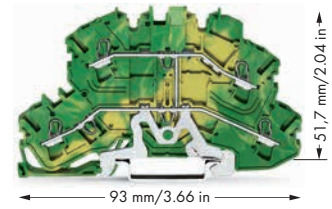
Item No.		Pack. Unit
Ground conductor/through terminal block,		
same profile as double-deck disconnect terminal block		
without marker carrier,		
gray housing		
PE/N	**2002-2647**	50
PE/L	**2002-2657**	50



Item No.		Pack. Unit
4-conductor through terminal block,		
same profile as double-deck disconnect terminal block,		
without marker carrier, internal commoning, conductor		
entry position colored in violet,		
gray housing		
L	**2002-2608**	50

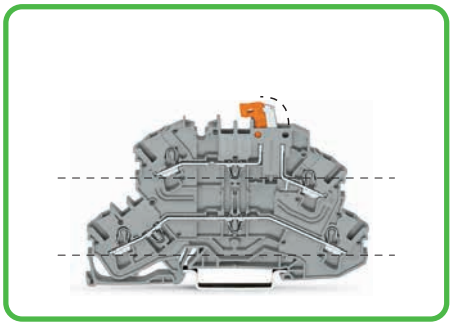


Item No.		Pack. Unit
4-conductor through terminal block,		
same profile as double-deck disconnect terminal block,		
without marker carrier, internal commoning, conductor		
entry position colored in violet,		
blue housing		
N	**2002-2609** ❹	50



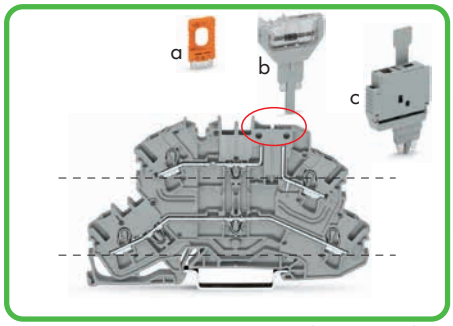
Item No.		Pack. Unit
Through/through terminal block,		
same profile as double-deck disconnect terminal block		
without marker carrier, internal commoning,		
green-yellow housing		
PE	**2002-2607**	50

Certification organizations can be found in the overview on pages 622 and 623.



Multifunctional terminal blocks:
The double-deck disconnect terminal block with movable knife disconnect (2002-2671) can be used as through terminal block on the lower deck and as disconnect terminal block on the upper deck.

Besides disconnection and measurement, the **2002-2667 double-deck carrier terminal block** also provides ground conductor functionality.



The associated **carrier terminal block (2002-2661)** has the same design as the disconnect terminal block. However, disconnect plugs (a: 2002-401), pluggable diode (b: 2002-800/1000-411) and LED modules (not shown here, 2002-800/1000-541) or fuse plugs (c: 2004-911) can alternatively be used here.

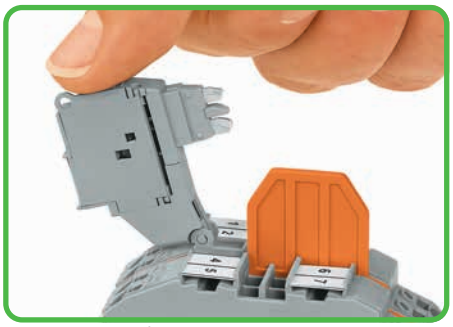
❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

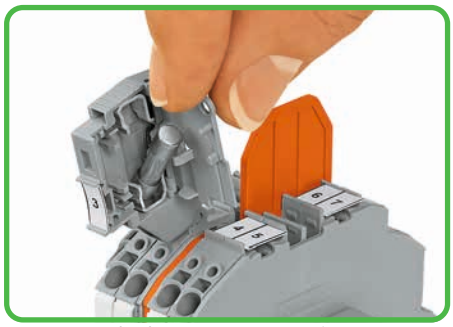
❸ Strip length, see packaging or instructions.

❹ Suitable for Ex i applications

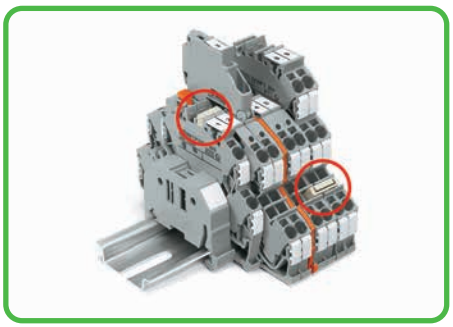
❺ See application notes for:
Colored push-in type jumper bars, page 101
Vertical jumper, page 105



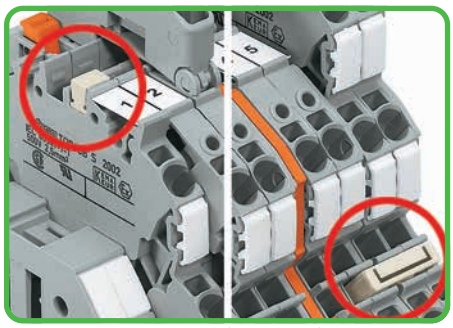
The **double-deck fuse disconnect terminal block with pivoting fuse holder (2002-2611, gray)** is compatible with disconnect, carrier, through and ground conductor terminal blocks. The fuse holder is also available with a blown fuse LED indicator.
(e.g., 2002-2611/1000-541 for 12–30 V)



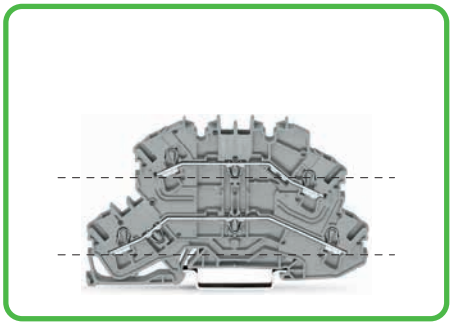
An **end plate for fuse terminal blocks (shown in orange, 2002-1092)** is used for additional protection, preventing the fuse shaft from being opened. The fuse cannot be replaced until disconnecting the fuse holder from the power supply.



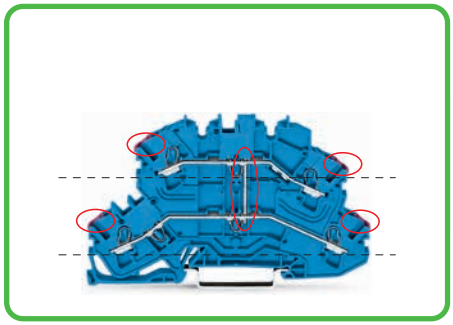
Same profile allows for commoning with TOPJOB® S double-deck terminal blocks (upper deck) and with triple-deck terminal blocks (lower deck).



Left picture – Vertical jumper **(2002-492)**
Right picture – Push-in type jumper bar for 2002 Series



The **through terminal block (2002-2601)** features two independent current bars on both lower and upper deck, sharing the same profile as the disconnect terminal block. Commoning is also possible for these terminal blocks using the double-deck vertical jumper (2002-492).



The **4-conductor through terminal block (2002-2609)** with internal commoning can be immediately identified via violet-colored conductor entry.

2002 Series Accessories

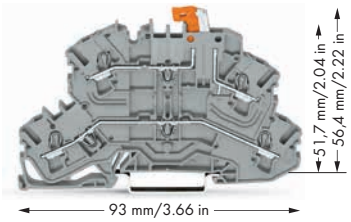
Appropriate marking systems: WMB/Marking strips/WMB Inline

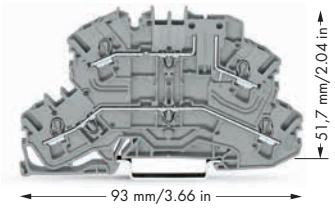
End and intermediate plate,			
	1 mm thick		
	orange	**2002-2692**	100 (4x25)
	gray	**2002-2691**	100 (4x25)
Double-deck marker carrier,			
	pivoting		
	gray	**2002-121**	50 (2x25)
Insulation stop,			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**2002-171**	200 (8x25)
Insulation stop,			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**2002-172**	200 (8x25)
Push-in type jumper bar, insulated,			
❺	I_N 25 A,		
	light gray		
	2-way	**2002-402**	200 (8x25)
	3-way	**2002-403**	200 (8x25)
	4-way	**2002-404**	200 (8x25)
	5-way	**2002-405**	100 (4x25)
	6-way	**2002-406**	100 (4x25)
	7-way	**2002-407**	100 (4x25)
	8-way	**2002-408**	100 (4x25)
	9-way	**2002-409**	100 (4x25)
	10-way	**2002-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 25 A,		
	light gray		
	from 1 to 3	**2002-433**	200 (8x25)
	from 1 to 4	**2002-434**	200 (8x25)
	from 1 to 5	**2002-435**	100 (4x25)
	from 1 to 6	**2002-436**	100 (4x25)
	from 1 to 7	**2002-437**	100 (4x25)
	from 1 to 8	**2002-438**	100 (4x25)
	from 1 to 9	**2002-439**	100 (4x25)
	from 1 to 10	**2002-440**	100 (4x25)
Double-deck vertical jumper, insulated,			
❺	I_N 24 A		
	light gray	**2002-492**	100 (4x25)
	orange	**2002-492/000-012**	
Adjacent jumper for continuous commoning, insulated,			
	I_N 25 A,		
	light gray		
	2-way	**2002-400**	100 (4x25)

TOPJOB® S
Double-Deck Disconnect Terminal Blocks and Carrier Terminal Blocks 2.5 (4) mm², 2002 Series

CAGE CLAMP®S

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 400 V/6 kV/3 ❷ I_N 16 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 400 V/6 kV/3 ❷ I_N 16 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸





❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

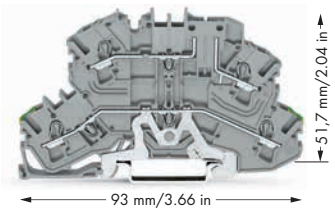
❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Colored push-in type jumper bars, page 101
Vertical jumper, page 105

	Item No.	Pack. Unit
Double-deck disconnect terminal block,		
with movable knife disconnect,		
gray housing		
L/L	**2002-2671**	50
N/L	**2002-2672**	50

	Item No.	Pack. Unit
Double-deck carrier terminal block,		
upper deck carrier,		
gray housing		
L/L	**2002-2661**	50
N/L	**2002-2662**	50



	Item No.	Pack. Unit
Double-deck carrier terminal block,		
upper deck carrier,		
gray housing		
PE/L	**2002-2667**	50

2002 Series Accessories

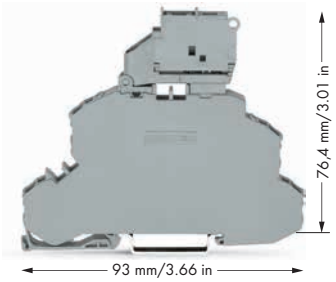
Appropriate marking systems: WMB/Marking strips/WMB Inline

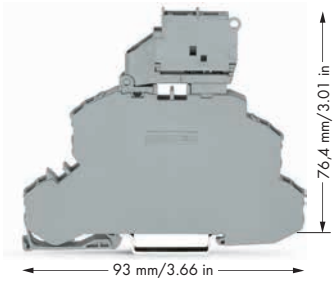
End and intermediate plate,			
	1 mm thick		
	orange	**2002-2692**	100 (4x25)
	gray	**2002-2691**	100 (4x25)
Double-deck marker carrier,			
	pivoting		
	gray	**2002-121**	50 (2x25)
Insulation stop,			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**2002-171**	200 (8x25)
Insulation stop,			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**2002-172**	200 (8x25)
Push-in type jumper bar, insulated,			
❹ 	I_N 25 A,		
	light gray		
	2-way	**2002-402**	200 (8x25)
	3-way	**2002-403**	200 (8x25)
	4-way	**2002-404**	200 (8x25)
	5-way	**2002-405**	100 (4x25)
	6-way	**2002-406**	100 (4x25)
	7-way	**2002-407**	100 (4x25)
	8-way	**2002-408**	100 (4x25)
	9-way	**2002-409**	100 (4x25)
	10-way	**2002-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 25 A,		
	light gray		
	from 1 to 3	**2002-433**	200 (8x25)
	from 1 to 4	**2002-434**	200 (8x25)
	from 1 to 5	**2002-435**	100 (4x25)
	from 1 to 6	**2002-436**	100 (4x25)
	from 1 to 7	**2002-437**	100 (4x25)
	from 1 to 8	**2002-438**	100 (4x25)
	from 1 to 9	**2002-439**	100 (4x25)
	from 1 to 10	**2002-440**	100 (4x25)
Double-deck vertical jumper, insulated,			
❹	I_N 24 A		
	light gray	**2002-492**	100 (4x25)
	orange	**2002-492/000-012**	
Adjacent jumper for continuous commoning, insulated,			
	I_N 25 A,		
	light gray		
	2-way	**2002-400**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® S
Double-Deck Fuse Disconnect Terminal Blocks with Pivoting Fuse Holder 2.5 (4) mm², 2002 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 250 V/6 kV/3 ❷ I_N 6.3 A Terminal block width 6.2 mm / 0.244 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 250 V/6 kV/3 ❷ I_N 6.3 A Terminal block width 6.2 mm / 0.244 in 10 - 12 mm / 0.43 in ❸





❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 250 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

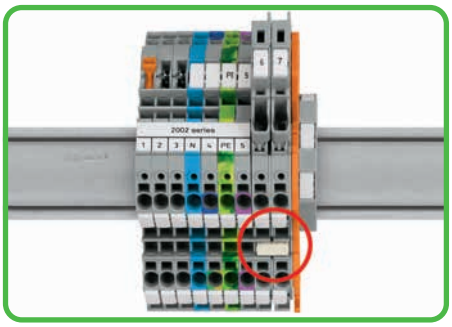
❸ Strip length, see packaging or instructions.

❹ See application notes for:
Vertical jumper, page 105

❺ Protective warning marker and insulation stop must be applied individually.

❻ Due to the 6.2 mm width of fuse terminal blocks with pivoting fuse holder, 2004 Series jumpers must be used.

	Item No.	Pack. Unit		Item No.	Pack. Unit
Double-deck fuse disconnect terminal block with pivoting fuse holder, Through/fuse terminal block, for miniature fuses 5 x 20 mm, without blown fuse indication. Nominal voltage and current are given by the fuse.			**Double-deck fuse disconnect terminal block with pivoting fuse holder, Through/fuse terminal block,** for miniature fuses 5 x 20 mm, with blown fuse indication by LED, gray. Nominal voltage and current are given by the LED or fuse. Leakage current in case of blown fuse: LED 2mA		
◯ L/L	**2002-2611**	25	◯ 12 - 30 V	**2002-2611/1000-541**	25
◯ N/L	**2002-2612**	25	◯ 30 - 65 V	**2002-2611/1000-542**	25
			◯ 230 V	**2002-2611/1000-836**	25

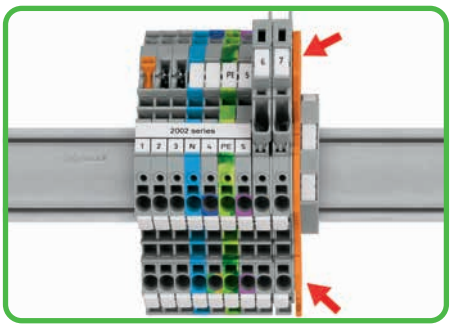


A spacer plate is supplied with all 6.2 mm wide fuse terminal blocks.
Due to the 6.2 mm width of fuse terminal blocks with pivoting fuse holder, 2004 Series jumpers must be used.

2002 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

End and intermediate plate,				**End plate for fuse terminal blocks,**		
	1 mm thick			2 mm thick		
	orange	**2002-2692**	100 (4x25)	orange	**2002-1092**	100 (4x25)
	gray	**2002-2691**	100 (4x25)	gray	**2002-1091**	100 (4x25)
Push-in type jumper bar, insulated,				**Insulation stop,**		
❹ ❻	I_N 32 A,			❺ 5 pcs/strip,		
	light gray			0.25 - 0.5 mm²		
	2-way	**2004-402**	200 (8x25)	light gray	**2002-171**	200 (8x25)
	3-way	**2004-403**	200 (8x25)	**Insulation stop,**		
	4-way	**2004-404**	100 (4x25)	5 pcs/strip,		
	5-way	**2004-405**	100 (4x25)	0.75 - 1 mm²		
	6-way	**2004-406**	100 (4x25)	dark gray	**2002-172**	200 (8x25)
	7-way	**2004-407**	100 (4x25)	**Protective warning marker,**		
	8-way	**2004-408**	100 (4x25)	❺ with high-voltage symbol, black,		
	9-way	**2004-409**	100 (4x25)	for 5 terminal blocks		
	10-way	**2004-410**	100 (4x25)	yellow	**2002-115**	100 (4x25)
Push-in type jumper bar, insulated,				**Test plug,**		
	I_N 32 A,			with 500 mm cable,		
	light gray			2 mm Ø		
	from 1 to 3	**2004-433**	200 (8x25)	red	**210-136**	50
	from 1 to 4	**2004-434**	200 (8x25)	**Test plug,**		
	from 1 to 5	**2004-435**	100 (4x25)	with 500 mm cable,		
	from 1 to 6	**2004-436**	100 (4x25)	2.3 mm Ø		
	from 1 to 7	**2004-437**	100 (4x25)	yellow	**210-137**	50
	from 1 to 8	**2004-438**	100 (4x25)	**Marking strip,** plain,		
	from 1 to 9	**2004-439**	100 (4x25)	11 mm wide,		
	from 1 to 10	**2004-440**	100 (4x25)	50 m roll		
				white	**2009-110**	1
Double-deck vertical jumper, insulated,						
❹	I_N 24 A					
	light gray	**2002-492**	100 (4x25)			
	orange	**2002-492/000-012**				

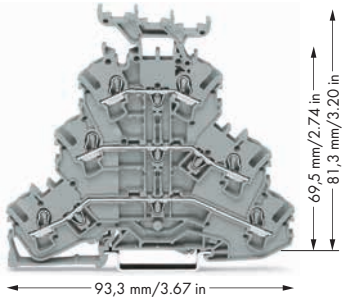


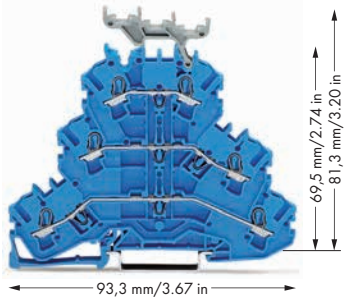
Additionally, an end plate for fuse terminal blocks (e.g., 2002-1092, orange) must be used at the end of an assembly or if there is **no** adjacent fuse terminal block.

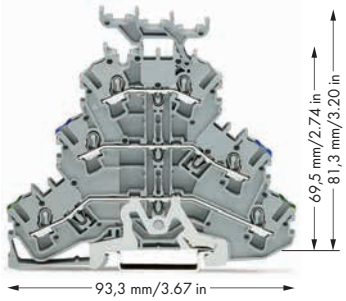
Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® S
Triple-Deck Terminal Blocks 2.5 (4) mm²
2002 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 500 V/6 kV/3 ❷ I_N 24 A (28 A) | 300 V, 20 A 600 V, 20 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 500 V/6 kV/3 ❷ I_N 24 A (28 A) | 600 V, 20 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 500 V/6 kV/3 ❷ I_N 24 A (28 A) Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸



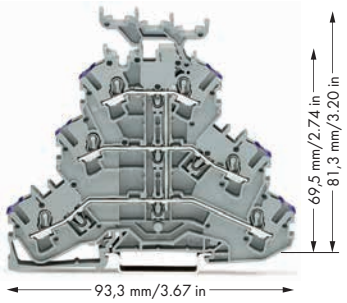


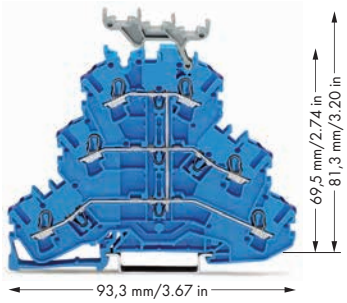


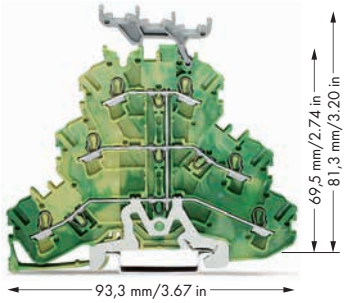
	Item No.	Pack. Unit
Through/through/through terminal block,		
with marker carrier,		
gray housing		
L/L/L	**2002-3231** ❺	50
L/L/N	**2002-3233** ❺	50
Through/through/through terminal block,		
without marker carrier,		
gray housing		
L/L/L	**2002-3201** ❺	50
L/L/N	**2002-3203** ❺	50
Other terminal blocks with the same profile:		
Diode	**2002-3211/1000-410** Page 88	
LED	**2002-3221/1000-434** Page 88	

	Item No.	Pack. Unit
Through/through/through terminal block,		
with marker carrier,		
blue housing		
N/N/N	**2002-3234** ❹ ❺	50
Through/through/through terminal block,		
without marker carrier,		
blue housing		
N/N/N	**2002-3204** ❹ ❺	50

	Item No.	Pack. Unit
Ground conductor/through/through terminal block,		
with marker carrier,		
gray housing		
PE/N/L	**2002-3247** ❺	50
PE/L/L	**2002-3257** ❺	50
Ground conductor/through/through terminal block,		
without marker carrier,		
gray housing		
PE/N/L	**2002-3217** ❺	50
PE/L/L	**2002-3227** ❺	50







	Item No.	Pack. Unit
6-conductor through terminal block,		
with marker carrier, internal commoning, conductor entry		
position colored in violet,		
gray housing		
L	**2002-3238** ❺	50
6-conductor through terminal block,		
without marker carrier, internal commoning, conductor		
entry position colored in violet,		
gray housing		
L	**2002-3208** ❺	50

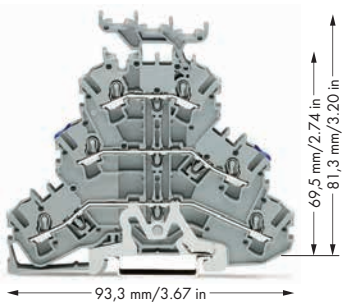
	Item No.	Pack. Unit
6-conductor through terminal block,		
with marker carrier, internal commoning, conductor entry		
position colored in violet,		
blue housing		
N	**2002-3239** ❹ ❺	50
6-conductor through terminal block,		
without marker carrier, internal commoning, conductor		
entry position colored in violet,		
blue housing		
N	**2002-3209** ❹ ❺	50

	Item No.	Pack. Unit
6-conductor ground terminal block,		
with marker carrier, internal commoning,		
green-yellow housing		
PE	**2002-3237** ❺	50
6-conductor ground terminal block,		
without marker carrier, internal commoning,		
green-yellow housing		
PE	**2002-3207** ❺	50

Certification organizations can be found in the overview on pages 622 and 623.

0.25 - 2.5 (4) mm² ❶	AWG 22 - 12
500 V/6 kV/3 ❷	300 V, 20 A
I_N 24 A (28 A)	600 V, 20 A

Terminal block width 5.2 mm / 0.205 in
10 - 12 mm / 0.43 in ❸



❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrules, 12 mm"

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ Suitable for Ex i applications

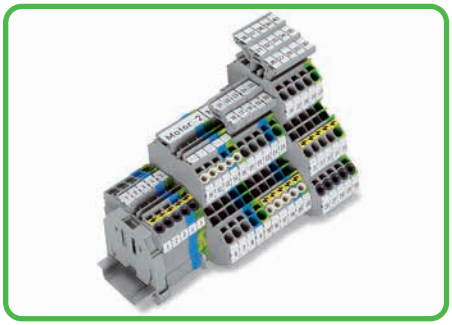
❺ Suitable for Ex e II applications
440 V, 19 A
Jumper 17 A
(see Section 14)

❻ See application notes for:
Colored push-in type jumper bars, page 101
Vertical jumper, page 105

	Item No.	Pack. Unit
Shield/through/through terminal block,		
with marker carrier,		
gray housing		
Shield/N/L	**2002-3248**	50
Shield/L/L	**2002-3258**	50
Shield/through/through terminal block,		
without marker carrier,		
gray housing		
Shield/N/L	**2002-3218**	50
Shield/L/L	**2002-3228**	50



Triple-deck terminal block assembly



Combination of multilevel terminal blocks

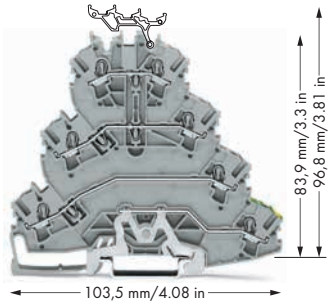
2002 Series Accessories

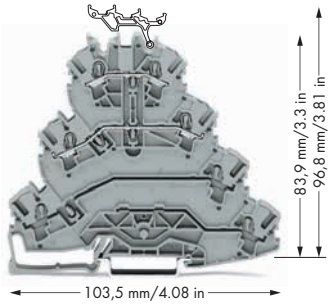
Appropriate marking systems: WMB/Marking strips/WMB Inline

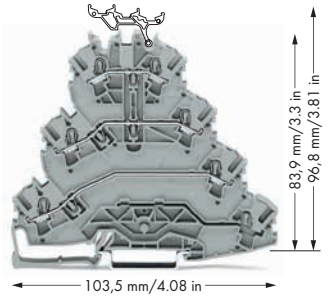
End and intermediate plate, 0.8 mm thick			
	orange	**2002-3292**	100 (4x25)
	gray	**2002-3291**	100 (4x25)
Triple-deck marker carrier,			
	pivoting		
	gray	**2002-131**	50 (2x25)
Insulation stop,			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**2002-171**	200 (8x25)
Insulation stop,			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**2002-172**	200 (8x25)
Push-in type jumper bar, insulated,			
❻ 	I_N 25 A,		
	light gray		
	2-way	**2002-402**	200 (8x25)
	3-way	**2002-403**	200 (8x25)
	4-way	**2002-404**	200 (8x25)
	5-way	**2002-405**	100 (4x25)
	6-way	**2002-406**	100 (4x25)
	7-way	**2002-407**	100 (4x25)
	8-way	**2002-408**	100 (4x25)
	9-way	**2002-409**	100 (4x25)
	10-way	**2002-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 25 A,		
	light gray		
	from 1 to 3	**2002-433**	200 (8x25)
	from 1 to 4	**2002-434**	200 (8x25)
	from 1 to 5	**2002-435**	100 (4x25)
	from 1 to 6	**2002-436**	100 (4x25)
	from 1 to 7	**2002-437**	100 (4x25)
	from 1 to 8	**2002-438**	100 (4x25)
	from 1 to 9	**2002-439**	100 (4x25)
	from 1 to 10	**2002-440**	100 (4x25)
Triple-deck vertical jumper, insulated,			
❻	I_N 24 A		
	light gray	**2002-493**	100 (4x25)
Double-deck vertical jumper, insulated,			
❻	I_N 24 A		
	light gray	**2002-492**	100 (4x25)
	orange	**2002-492/000-012**	

TOPJOB® S
Quadruple-Deck, Rail-Mounted Terminal Blocks or Rail-Mounted Terminal Blocks for Wiring of Electric Motors, 2002 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 **800 V/8 kV/3 ❷** **I_N 20 A (25 A)** **Terminal block width 5.2 mm / 0.205 in** **10 - 12 mm / 0.43 in ❸**	**0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12** **800 V/8 kV/3 ❷** **I_N 20 A (25 A)** **Terminal block width 5.2 mm / 0.205 in** **10 - 12 mm / 0.43 in ❸**	**0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12** **800 V/8 kV/3 ❷** **I_N 20 A (25 A)** **Terminal block width 5.2 mm / 0.205 in** **10 - 12 mm / 0.43 in ❸**







Item No.		Pack. Unit
Quadruple-deck, rail-mounted terminal block		
or		
Rail-mounted terminal block for wiring of electric motors,		
without marker carrier, gray		
L1 - L2 - L3 - PE	**2002-4127**	25
Quadruple-deck, rail-mounted terminal block		
or		
Rail-mounted terminal block for wiring of electric motors,		
with marker carrier, gray		
L1 - L2 - L3 - PE	**2002-4157**	25

Item No.		Pack. Unit
Quadruple-deck, rail-mounted terminal block		
or		
Rail-mounted terminal block for wiring of electric motors,		
without marker carrier, gray		
L1 - L2	**2002-4111**	25
Quadruple-deck, rail-mounted terminal block		
or		
Rail-mounted terminal block for wiring of electric motors,		
with marker carrier, gray		
L1 - L2	**2002-4141**	25

Item No.		Pack. Unit
Quadruple-deck, rail-mounted terminal block		
or		
Rail-mounted terminal block for wiring of electric motors,		
without marker carrier, gray		
L1 - L2 - L3	**2002-4101**	25
Quadruple-deck, rail-mounted terminal block		
or		
Rail-mounted terminal block for wiring of electric motors,		
with marker carrier, gray		
L1 - L2 - L3	**2002-4131**	25

2002 Series Accessories

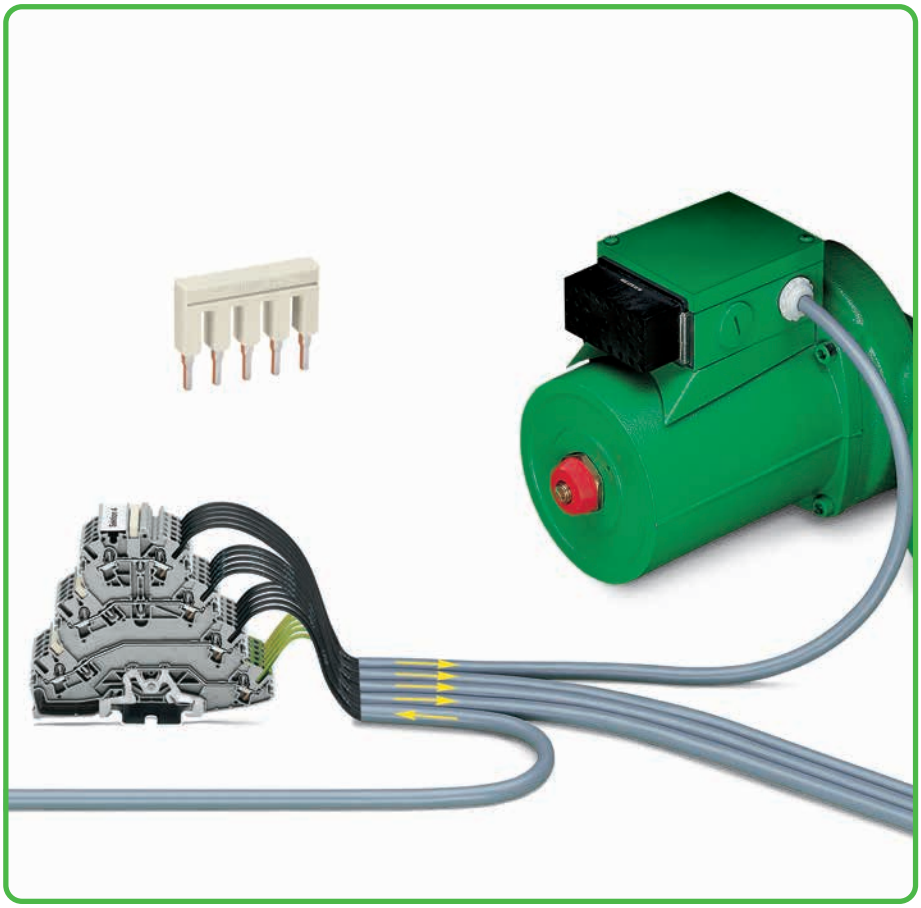
Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

End and intermediate plate, 1 mm thick			
orange	**2002-4192**	100 (4x25)	
gray	**2002-4191**	100 (4x25)	
Insulation stop,			
5 pcs/strip, 0.25 - 0.5 mm²			
light gray	**2002-171**	200 (8x25)	
Insulation stop,			
5 pcs/strip, 0.75 - 1 mm²			
dark gray	**2002-172**	200 (8x25)	
Push-in type jumper bar, insulated,			
❹ I_N 25 A, light gray			
2-way	**2002-402**	200 (8x25)	
3-way	**2002-403**	200 (8x25)	
4-way	**2002-404**	200 (8x25)	
5-way	**2002-405**	100 (4x25)	
6-way	**2002-406**	100 (4x25)	
7-way	**2002-407**	100 (4x25)	
8-way	**2002-408**	100 (4x25)	
9-way	**2002-409**	100 (4x25)	
10-way	**2002-410**	100 (4x25)	
Star point jumper, insulated,			
❹ I_N = I_N terminal block, light gray			
1-3-5	**2002-405/011-000**		
		100 (4x25)	
Delta jumper, insulated,			
❹ I_N = I_N terminal block, light gray			
1-2 3-4 5-6	**2002-406/020-000**		
		100 (4x25)	

Protective warning marker,			
with high-voltage symbol, black, for 5 terminal blocks			
yellow	**2002-115**	100 (4x25)	
Lockout cap,			
for conductor entry hole and operating slot			
orange	**2002-192**	25	
gray	**2002-191**	25	
blue	**2002-194**	25	
Push-in type jumper bar, insulated,			
I_N 25 A, light gray			
from 1 to 3	**2002-433**	200 (8x25)	
from 1 to 4	**2002-434**	200 (8x25)	
from 1 to 5	**2002-435**	100 (4x25)	
from 1 to 6	**2002-436**	100 (4x25)	
from 1 to 7	**2002-437**	100 (4x25)	
from 1 to 8	**2002-438**	100 (4x25)	
from 1 to 9	**2002-439**	100 (4x25)	
from 1 to 10	**2002-440**	100 (4x25)	
Adjacent jumper for continuous commoning, insulated,			
❹ I_N 25 A, light gray			
2-way	**2002-400**	100 (4x25)	
Triple-deck marker carrier,			
pivoting			
gray	**2002-131**	50 (2x25)	

Staggered jumper,			
❹ insulated, I_N 25 A, light gray			
2-way	**2002-472**	100 (4x25)	
3-way	**2002-473**	100 (4x25)	
4-way	**2002-474**	100 (4x25)	
5-way	**2002-475**	50 (2x25)	
6-way	**2002-476**	50 (2x25)	
7-way	**2002-477**	50 (2x25)	
8-way	**2002-478**	50 (2x25)	
9-way	**2002-479**	50 (2x25)	
10-way	**2002-480**	50 (2x25)	
11-way	**2002-481**	50 (2x25)	
12-way	**2002-482**	50 (2x25)	
Push-in type wire jumper,			
❹ insulated, I_N 18 A, wire size 1.5 mm²			
L = 60 mm	**2009-412**	100 (10x10)	
L = 110 mm	**2009-414**	100 (10x10)	
L = 250 mm	**2009-416**	100 (10x10)	
WMB Inline, plain,			
stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll			
white	**2009-115**	1	
Marking strip, plain,			
11 mm wide, 50 m roll			
white	**2009-110**	1	

Certification organizations can be found in the overview on pages 622 and 623.

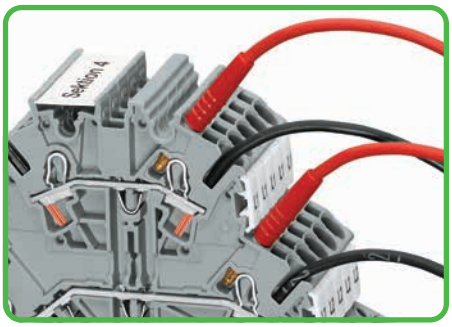


❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st";
Push-in conductor sizes: 0.75 mm² – 4 mm² "s"
and 0.75 mm² – 2.5 mm²
"insulated ferrule, 12 mm"

❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Colored push-in type jumper bars, page 101
Staggered jumper, page 104
Delta jumper, page 104
Star point jumper, page 101
Adjacent jumper for continuous commoning, page 101
Push-in type wire jumper, page 102
TOPJOB®S connector, page 96
TOPJOB®S L-type test plug module, page 100
Marker carrier, page 109



Testing with test plug 2 mm Ø.

In addition to rail-mounted terminal blocks for electric motor wiring, new versions are now available.

- Terminal block **without** ground contact and only 2 potentials.

Especially for additional functions such as engine brakes or temperature probes. Having the same shape, this type can be put next to the appropriate terminal block for electric motor wiring without using intermediate plates.
That makes the rail assembly clearer and wiring is easier. This also prevents wiring errors as no conductor entry is unused.

- Terminal block **without** ground contact and with only 3 potentials.

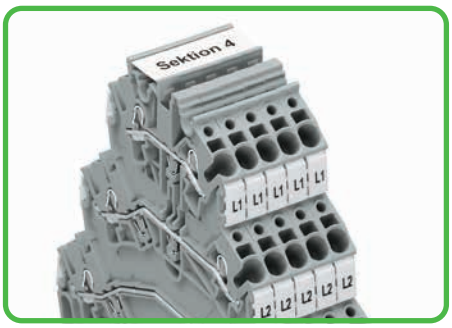
Clearly designated clamping units is the primary advantage to this terminal block design. When using devices with protective insulation for example, there are no open ground clamping units that could create confusion.



Lockout cap for conductor entry hole and operating slot
Locking out conductor entry holes and operating slots to create spacer housings for rail-mounted terminal blocks for electric motor wiring.



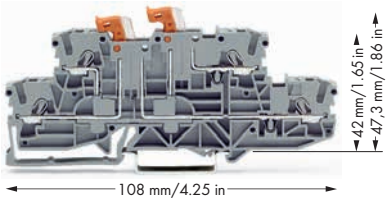
Compact design:
3 phases and ground conductor in one terminal block.

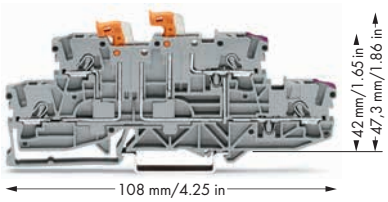


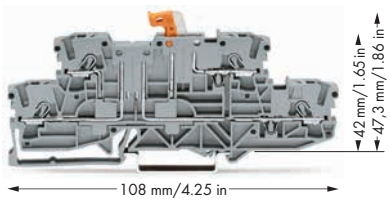
Marking clamping units with WMB Multi marking system.
Group marking with marking strips.

TOPJOB® S
Double-Deck Disconnect Terminal Blocks for Test and Measurement
2.5 (4) mm², 2002 Series

0.25 - 2.5 (4) mm² ❶ 400 V/6 kV/3 ❷ I_N 16 A	AWG 22 - 12 300 V, 15 A 300 V, 15 A	Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸
0.25 - 2.5 (4) mm² ❶ 400 V/6 kV/3 ❷ I_N 16 A	AWG 22 - 12 300 V, 15 A 300 V, 15 A	Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸
0.25 - 2.5 (4) mm² ❶ 400 V/6 kV/3 ❷ I_N 16 A	AWG 22 - 12 300 V, 15 A 300 V, 15 A	Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸







Item No.		Pack. Unit
Double-deck, double-disconnect terminal block, with 2 pivoting knife disconnects, gray housing		
L/L	**2002-2951**	50
N/L	**2002-2952**	50
Double-deck, double-disconnect terminal block, with 2 pivoting knife disconnects, blue housing		
N/N	**2002-2954**	50

Item No.		Pack. Unit
Double-deck, double-disconnect terminal block, with 2 pivoting knife disconnects, lower and upper decks internally commoned on right side and with violet marking, gray housing		
L/L	**2002-2958**	50
Double-deck, double-disconnect terminal block, with 2 pivoting knife disconnects, lower and upper decks internally commoned on right side and with violet marking, blue housing		
N/N	**2002-2959**	50

Item No.		Pack. Unit
Double-deck disconnect terminal block, with pivoting knife disconnect, same profile as double-deck, double-disconnect terminal block, gray housing		
L/L	**2002-2971**	50
N/L	**2002-2972**	50
Double-deck disconnect terminal block, with pivoting knife disconnect, same profile as double-deck, double-disconnect terminal block, blue housing		
N/N	**2002-2974**	50

2002 Series Accessories

Appropriate marking systems: WMB/Marking strips
(see Section 13)

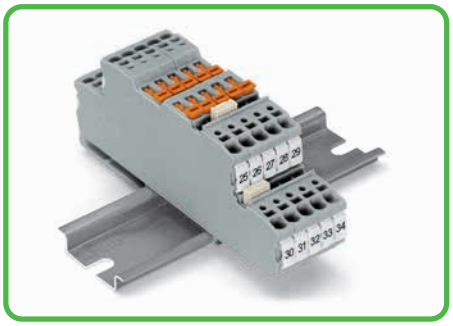
End and intermediate plate, 1 mm thick			
orange	**2002-2992**	100 (4x25)	
gray	**2002-2991**	100 (4x25)	
Insulation stop, 5 pcs/strip, 0.25 - 0.5 mm²			
light gray	**2002-171**	200 (8x25)	
Insulation stop, 5 pcs/strip, 0.75 - 1 mm²			
dark gray	**2002-172**	200 (8x25)	
Push-in type jumper bar, insulated, ❹ I_N 25 A, light gray			
2-way	**2002-402**	200 (8x25)	
3-way	**2002-403**	200 (8x25)	
4-way	**2002-404**	200 (8x25)	
5-way	**2002-405**	100 (4x25)	
6-way	**2002-406**	100 (4x25)	
7-way	**2002-407**	100 (4x25)	
8-way	**2002-408**	100 (4x25)	
9-way	**2002-409**	100 (4x25)	
10-way	**2002-410**	100 (4x25)	
Push-in type wire jumper, ❹ insulated, I_N 18 A, wire size 1.5 mm²			
L = 60 mm	**2009-412**	100 (10x10)	
L = 110 mm	**2009-414**	100 (10x10)	
L = 250 mm	**2009-416**	100 (10x10)	

Push-in type jumper bar, insulated, I_N 25 A, light gray			
from 1 to 3	**2002-433**	200 (8x25)	
from 1 to 4	**2002-434**	200 (8x25)	
from 1 to 5	**2002-435**	100 (4x25)	
from 1 to 6	**2002-436**	100 (4x25)	
from 1 to 7	**2002-437**	100 (4x25)	
from 1 to 8	**2002-438**	100 (4x25)	
from 1 to 9	**2002-439**	100 (4x25)	
from 1 to 10	**2002-440**	100 (4x25)	
Staggered jumper, ❹ insulated, I_N 25 A, light gray			
2-way	**2002-472**	100 (4x25)	
3-way	**2002-473**	100 (4x25)	
4-way	**2002-474**	100 (4x25)	
5-way	**2002-475**	50 (2x25)	
6-way	**2002-476**	50 (2x25)	
7-way	**2002-477**	50 (2x25)	
8-way	**2002-478**	50 (2x25)	
9-way	**2002-479**	50 (2x25)	
10-way	**2002-480**	50 (2x25)	
11-way	**2002-481**	50 (2x25)	
12-way	**2002-482**	50 (2x25)	
Adjacent jumper for continuous commoning, insulated, ❹ I_N 25 A, light gray			
2-way	**2002-400**	100 (4x25)	

Protective warning marker, with high-voltage symbol, black, for 5 terminal blocks			
yellow	**2002-115**	100 (4x25)	
Modular TOPJOB®S connector, ❹ can be snapped together, for jumper contact slot			
gray	**2002-511**	100 (4x25)	
Spacer module, can be snapped together, e.g., for bridging commoned terminal blocks			
gray	**2002-549**	100 (4x25)	
End plate, for modular TOPJOB®S connectors, 1.5 mm thick			
gray	**2002-541**	100 (4x25)	
Test plug, with 500 mm cable, 2 mm Ø			
red	**210-136**	50	
Test plug adapter, for 4 mm Ø test plug			
gray	**2009-174**	100 (4x25)	
Testing tap, for max. 2.5 mm²			
gray	**2009-182**	100 (4x25)	
Banana plug, for socket 4 mm Ø, color mixed			
	215-111	50	

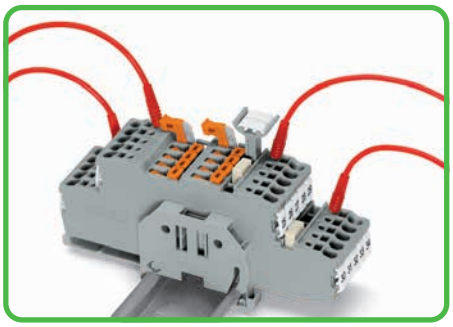
Certification organizations can be found in the overview on pages 622 and 623.

Double-Deck Disconnect Terminal Blocks with Pivoting Knife Disconnect

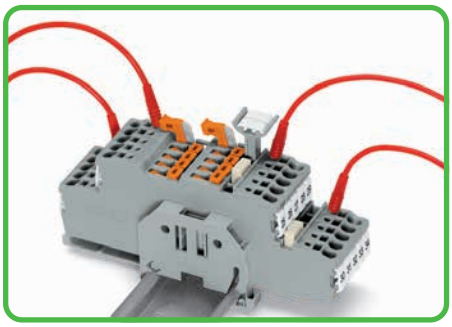


Terminal block assembly

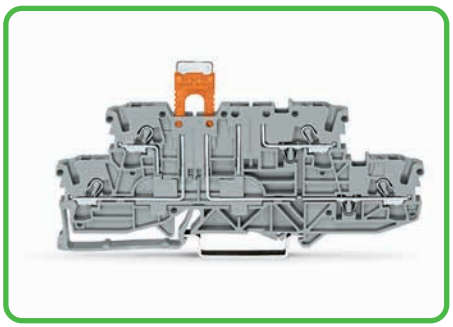
1. Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrules, 12 mm"
2. 400 V = rated voltage
   6 kV = rated surge voltage
   3 = pollution degree
   (see Section 14)
3. Strip length, see packaging or instructions.
4. See application notes for:
   Colored push-in type jumper bars, page 101
   Staggered jumper, page 104
   Delta jumper, page 104
   Star point jumper, page 101
   Adjacent jumper for continuous commoning, page 101
   Push-in type wire jumper, page 102
   TOPJOB®S connector, page 96
   TOPJOB®S L-type test plug module, page 100



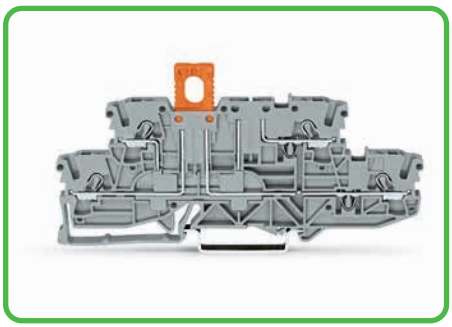
Testing with test plug 2 mm Ø.



Group marker carrier accommodated in jumper contact slot.



Carrier terminal block (2002-2941) with disconnect plug (2002-401) in parked position.



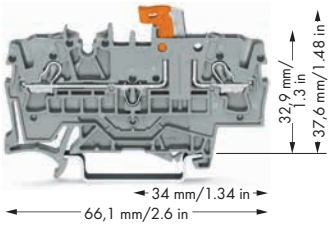
Carrier terminal block (2002-2941) with disconnect plug (2002-401) in operating position.

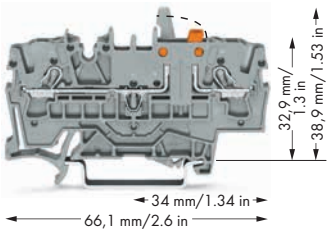
Accessories

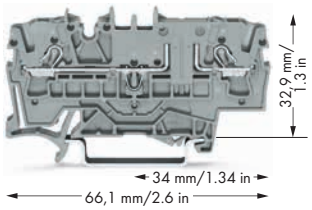
WMB Multi marking system,			
	10 strips with 10 markers per card, stretchable 5 - 5.2 mm		
	plain	**793-5501**	5
WMB Multi marking system, plain,			
	10 strips with 10 markers per card, stretchable 5 - 5.2 mm		
	yellow	**793-5501/000-002**	
	red	**793-5501/000-005**	
	blue	**793-5501/000-006**	
	gray	**793-5501/000-007**	
	orange	**793-5501/000-012**	
	light green	**793-5501/000-017**	
	green	**793-5501/000-023**	
	violet	**793-5501/000-024**	
			5
WMB Inline, plain,			
	stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll		
	white	**2009-115**	1
TOPJOB®S group marker carrier,			
	snap-on type for jumper slot, 5 mm wide		
	gray	**2009-191**	50 (2x25)
Screwless end stop,			
	for DIN 35 rail, 6 mm wide		
	gray	**249-116**	100 (4x25)
Screwless end stop,			
	for DIN 35 rail, 10 mm wide		
	gray	**249-117**	50 (2x25)

TOPJOB® S
Disconnect Terminal Blocks for Test and Measurement, Through Terminal Blocks of Same Profile 2.5 (4) mm², 2002 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 400 V/6 kV/3 ❷ | 300 V, 15 A I_N 16 A | 300 V, 10 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 400 V/6 kV/3 ❷ I_N 16 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 400 V/6 kV/3 ❷ | 300 V, 15 A I_N 16 A | 300 V, 10 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸







Item No.		Pack. Unit
2-conductor disconnect terminal block for test and measurement, with test point, orange disconnect link		
gray	**2002-1671**	50
blue	**2002-1674**	50
orange	**2002-1672**	50

Item No.		Pack. Unit
2-conductor disconnect terminal block for test and measurement with mechanical interlock, with test point, orange disconnect link		
gray	**2002-1671/401-000**	50
blue	**2002-1674/401-000**	50
orange	**2002-1672/401-000**	50

Item No.		Pack. Unit
2-conductor through terminal block, with test point, same profile as 2-conductor disconnect terminal block		
gray	**2002-1601**	50
blue	**2002-1604**	50
orange	**2002-1602**	50
Other terminal blocks with the same profile:		
Carrier	**2002-1661**	Page 76
Fuse	**2002-1681**	Page 50

2002 Series Accessories

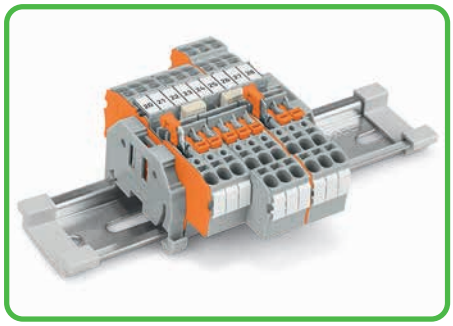
Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

End and intermediate plate, 1 mm thick			
	orange	**2002-1692**	100 (4x25)
	gray	**2002-1691**	100 (4x25)
Insulation stop,			
	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**2002-171**	200 (8x25)
Insulation stop,			
	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**2002-172**	200 (8x25)
Push-in type jumper bar, insulated,			
❹	I_N 25 A, light gray		
	2-way	**2002-402**	200 (8x25)
	3-way	**2002-403**	200 (8x25)
	4-way	**2002-404**	200 (8x25)
	5-way	**2002-405**	100 (4x25)
	6-way	**2002-406**	100 (4x25)
	7-way	**2002-407**	100 (4x25)
	8-way	**2002-408**	100 (4x25)
	9-way	**2002-409**	100 (4x25)
	10-way	**2002-410**	100 (4x25)
Push-in type wire jumper,			
❹	insulated, I_N 18 A, wire size 1.5 mm²		
	L = 60 mm	**2009-412**	100 (10x10)
	L = 110 mm	**2009-414**	100 (10x10)
	L = 250 mm	**2009-416**	100 (10x10)

Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**2002-115**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 25 A, light gray		
	from 1 to 3	**2002-433**	200 (8x25)
	from 1 to 4	**2002-434**	200 (8x25)
	from 1 to 5	**2002-435**	100 (4x25)
	from 1 to 6	**2002-436**	100 (4x25)
	from 1 to 7	**2002-437**	100 (4x25)
	from 1 to 8	**2002-438**	100 (4x25)
	from 1 to 9	**2002-439**	100 (4x25)
	from 1 to 10	**2002-440**	100 (4x25)
Staggered jumper,			
❹	insulated, I_N 25 A, light gray		
	2-way	**2002-472**	100 (4x25)
	3-way	**2002-473**	100 (4x25)
	4-way	**2002-474**	100 (4x25)
	5-way	**2002-475**	50 (2x25)
	6-way	**2002-476**	50 (2x25)
	7-way	**2002-477**	50 (2x25)
	8-way	**2002-478**	50 (2x25)
	9-way	**2002-479**	50 (2x25)
	10-way	**2002-480**	50 (2x25)
	11-way	**2002-481**	50 (2x25)
	12-way	**2002-482**	50 (2x25)

Customized staggered jumper,			
	insulated, I_N 25 A, light gray		
	1-3	**2002-473/011-000**	100 (4x25)
	1-3-5	**2002-475/011-000**	
	1-3-5-7	**2002-477/011-000**	
	1-3-5-7-9	**2002-479/011-000**	
	1-3-5-7-9-11	**2002-481/011-000**	50 (2x25)
Adjacent jumper for continuous commoning, insulated,			
❹	I_N 25 A, light gray		
	2-way	**2002-400**	100 (4x25)
Modular TOPJOB®S connector,			
❹	can be snapped together, for jumper contact slot		
	gray	**2002-511**	100 (4x25)
Spacer module, can be snapped together,			
	e.g., for bridging commoned terminal blocks		
	gray	**2002-549**	100 (4x25)
End plate,			
	for modular TOPJOB®S connectors, 1.5 mm thick		
	gray	**2002-541**	100 (4x25)
TOPJOB®S L-test plug module,			
❹	can be snapped together		
	gray	**2002-611**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.



One center and two side marker slots for WMB markers or marking strips. Dual jumper slots, in the same position as the 2002 Series terminal blocks. Commoning options in front of or behind the knife disconnect, depending on the power supply direction.

1 Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrules, 12 mm"

2 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

3 Strip length, see packaging or instructions.

4 See application notes for:
Colored push-in type jumper bars, page 101
Staggered jumper, page 104
Adjacent jumper for continuous commoning, page 101
Push-in type wire jumper, page 102
TOPJOB®S connector, page 96
TOPJOB®S L-type test plug module, page 100

Accessories

Test plug adapter,

for 4 mm Ø test plug
gray **2009-174** 100 (4x25)

Testing tap,

for max. 2.5 mm²
gray **2009-182** 100 (4x25)

Banana plug,

for socket 4 mm Ø,
color mixed
215-111 50

Double-deck marker carrier,

pivoting
gray **2002-121** 50 (2x25)

WMB Multi marking system,

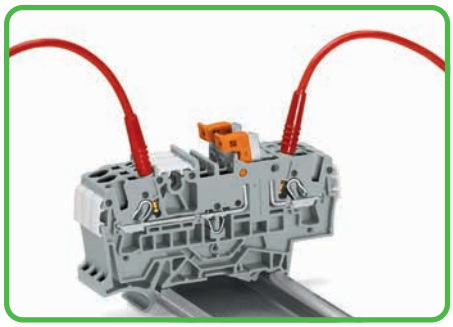
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

WMB Inline, plain,

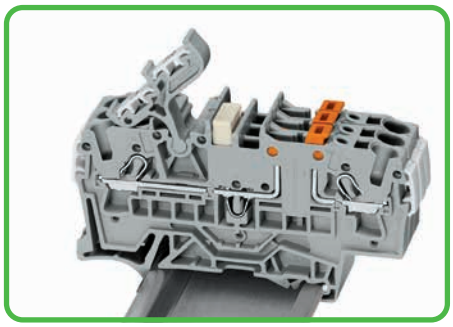
stretchable 5 - 5.2 mm,
1,500 WMB markers, 5 mm, on roll
white **2009-115** 1

Marking strip, plain,

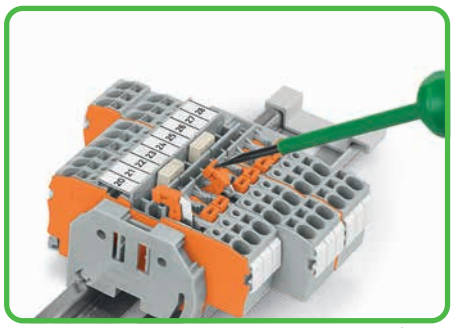
11 mm wide,
50 m roll
white **2009-110** 1



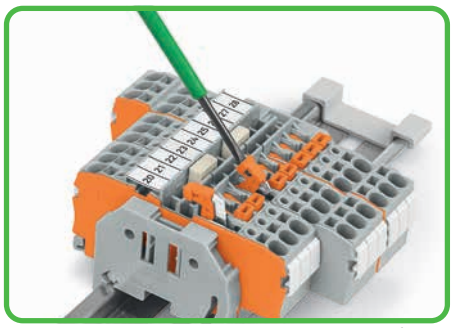
Testing with test plug 2 mm Ø



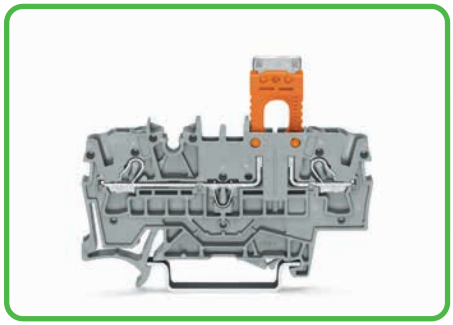
Additional marking option via pivoting marking adapter



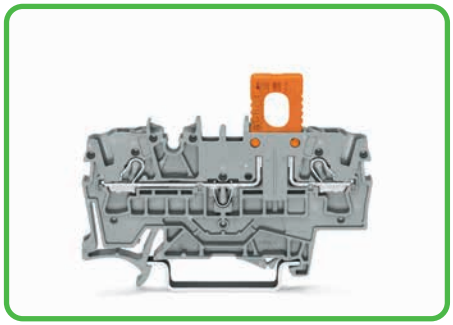
2- and 4-conductor disconnect terminal blocks for test und measurement
Opening the knife disconnect.



2- and 4-conductor disconnect terminal blocks for test and measurement
Closing the knife disconnect.



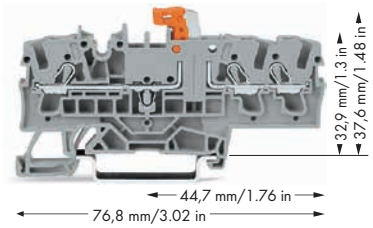
Carrier terminal block with disconnect plug in parked position.

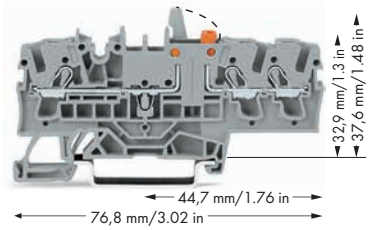


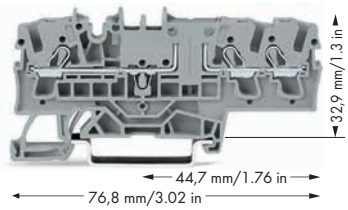
Carrier terminal block with disconnect plug in operating position.

TOPJOB® S
Disconnect Terminal Blocks for Test and Measurement, Through Terminal Blocks of Same Profile 2.5 (4) mm², 2002 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 400 V/6 kV/3 ❷ | 300 V, 15 A I_N 16 A | 300 V, 10 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 400 V/6 kV/3 ❷ I_N 16 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 400 V/6 kV/3 ❷ | 300 V, 15 A I_N 16 A | 300 V, 10 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸







	Item No.	Pack. Unit
3-conductor disconnect terminal block for test and measurement, with test point, orange disconnect link		
gray	**2002-1771**	50
blue	**2002-1774**	50
orange	**2002-1772**	50

	Item No.	Pack. Unit
3-conductor disconnect terminal block for test and measurement with mechanical interlock, with test point, orange disconnect link		
gray	**2002-1771/401-000**	50
blue	**2002-1774/401-000**	50
orange	**2002-1772/401-000**	50

	Item No.	Pack. Unit
3-conductor through terminal block, with test point, same profile as 3-conductor disconnect terminal block		
gray	**2002-1701**	50
blue	**2002-1704**	50
orange	**2002-1702**	50

Other terminal blocks with the same profile:

Carrier	**2002-1761**	Page 76
Fuse	**2002-1781**	Page 50

2002 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

End and intermediate plate, 1 mm thick



orange	**2002-1792**	100 (4x25)
gray	**2002-1791**	100 (4x25)

Insulation stop,



5 pcs/strip, 0.25 - 0.5 mm²

light gray	**2002-171**	200 (8x25)

Insulation stop,



5 pcs/strip, 0.75 - 1 mm²

dark gray	**2002-172**	200 (8x25)

Push-in type jumper bar, insulated, ❹



I_N 25 A, light gray

2-way	**2002-402**	200 (8x25)
3-way	**2002-403**	200 (8x25)
4-way	**2002-404**	200 (8x25)
5-way	**2002-405**	100 (4x25)
6-way	**2002-406**	100 (4x25)
7-way	**2002-407**	100 (4x25)
8-way	**2002-408**	100 (4x25)
9-way	**2002-409**	100 (4x25)
10-way	**2002-410**	100 (4x25)

Push-in type wire jumper, ❹



insulated, I_N 18 A, wire size 1.5 mm²

L = 60 mm	**2009-412**	100 (10x10)
L = 110 mm	**2009-414**	100 (10x10)
L = 250 mm	**2009-416**	100 (10x10)

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks

yellow	**2002-115**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 25 A, light gray

from 1 to 3	**2002-433**	200 (8x25)
from 1 to 4	**2002-434**	200 (8x25)
from 1 to 5	**2002-435**	100 (4x25)
from 1 to 6	**2002-436**	100 (4x25)
from 1 to 7	**2002-437**	100 (4x25)
from 1 to 8	**2002-438**	100 (4x25)
from 1 to 9	**2002-439**	100 (4x25)
from 1 to 10	**2002-440**	100 (4x25)

Staggered jumper,



❹ insulated, I_N 25 A, light gray

2-way	**2002-472**	100 (4x25)
3-way	**2002-473**	100 (4x25)
4-way	**2002-474**	100 (4x25)
5-way	**2002-475**	50 (2x25)
6-way	**2002-476**	50 (2x25)
7-way	**2002-477**	50 (2x25)
8-way	**2002-478**	50 (2x25)
9-way	**2002-479**	50 (2x25)
10-way	**2002-480**	50 (2x25)
11-way	**2002-481**	50 (2x25)
12-way	**2002-482**	50 (2x25)

Customized staggered jumper,



insulated, I_N 25 A, light gray

1-3	**2002-473/011-000**	100 (4x25)
1-3-5	**2002-475/011-000**	
1-3-5-7	**2002-477/011-000**	
1-3-5-7-9	**2002-479/011-000**	
1-3-5-7-9-11	**2002-481/011-000**	50 (2x25)

Adjacent jumper for continuous commoning, insulated, ❹



I_N 25 A, light gray

2-way	**2002-400**	100 (4x25)

Modular TOPJOB®S connector, ❹



can be snapped together, for jumper contact slot

gray	**2002-511**	100 (4x25)

Spacer module, can be snapped together,



e.g., for bridging commoned terminal blocks

gray	**2002-549**	100 (4x25)

End plate,



for modular TOPJOB®S connectors, 1.5 mm thick

gray	**2002-541**	100 (4x25)

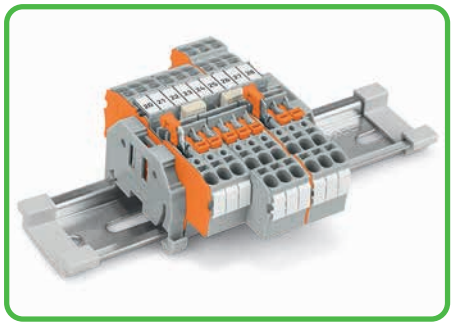
TOPJOB®S L-test plug module, ❹



can be snapped together

gray	**2002-611**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

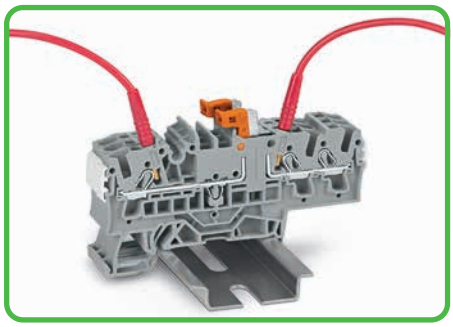


One center and two side marker slots for WMB markers or marking strips. Dual jumper slots, in the same position as the 2002 Series terminal blocks. Commoning options in front of or behind the knife disconnect, depending on the power supply direction.

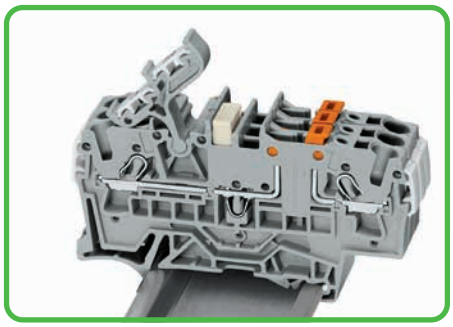
1. Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrules, 12 mm"
2. 400 V = rated voltage
   6 kV = rated surge voltage
   3 = pollution degree
   (see Section 14)
3. Strip length, see packaging or instructions.
4. See application notes for:
   Colored push-in type jumper bars, page 101
   Staggered jumper, page 104
   Adjacent jumper for continuous commoning, page 101
   Push-in type wire jumper, page 102
   TOPJOB®S connector, page 96
   TOPJOB®S L-type test plug module, page 100

Accessories

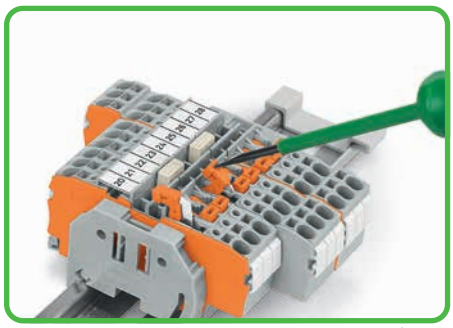
Test plug adapter,			
	for 4 mm Ø test plug		
	gray	**2009-174**	100 (4x25)
Testing tap,			
	for max. 2.5 mm²		
	gray	**2009-182**	100 (4x25)
Banana plug,			
	for socket 4 mm Ø,		
	color mixed		
		215-111	50
Double-deck marker carrier,			
	pivoting		
	gray	**2002-121**	50 (2x25)
WMB Multi marking system,			
	10 strips with 10 markers per card,		
	stretchable 5 - 5.2 mm		
	plain	**793-5501**	5
WMB Inline, plain,			
	stretchable 5 - 5.2 mm,		
	1,500 WMB markers, 5 mm, on roll		
	white	**2009-115**	1
Marking strip, plain,			
	11 mm wide,		
	50 m roll		
	white	**2009-110**	1



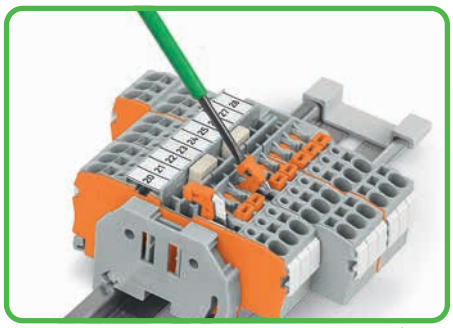
Testing with test plug 2 mm Ø



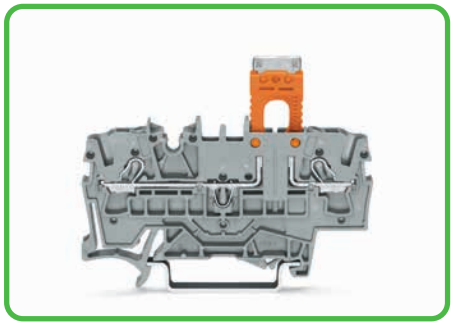
Additional marking option via pivoting marking adapter



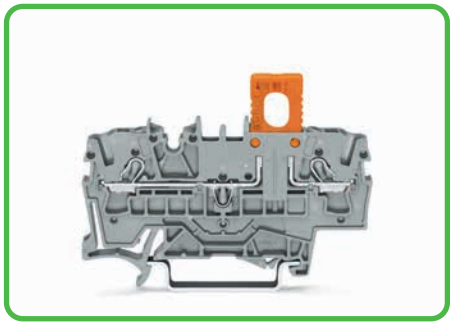
2- and 4-conductor disconnect terminal blocks for test und measurement
Opening the knife disconnect.



2- and 4-conductor disconnect terminal blocks for test and measurement
Closing the knife disconnect.



Carrier terminal block with disconnect plug in parked position.



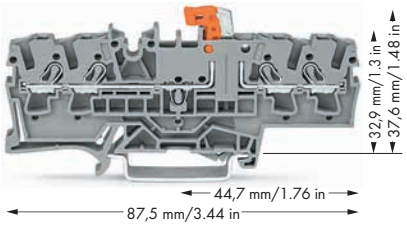
Carrier terminal block with disconnect plug in operating position.

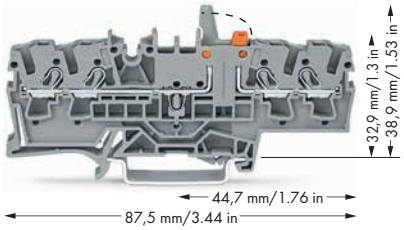
TOPJOB® S
Disconnect Terminal Blocks for Test and Measurement, Through Terminal Blocks of Same Profile 2.5 (4) mm², 2002 Series

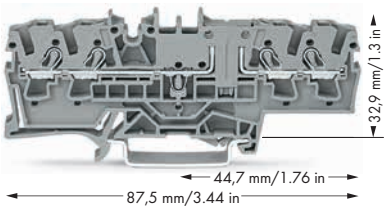
0.25 - 2.5 (4) mm² ❶	AWG 22 - 12	
400 V/6 kV/3 ❷	300 V, 15 A	
I_N 16 A	300 V, 15 A	
Terminal block width 5.2 mm / 0.205 in		
10 - 12 mm / 0.43 in ❸		

0.25 - 2.5 (4) mm² ❶	AWG 22 - 12	
400 V/6 kV/3 ❷		
I_N 16 A		
Terminal block width 5.2 mm / 0.205 in		
10 - 12 mm / 0.43 in ❸		

0.25 - 2.5 (4) mm² ❶	AWG 22 - 12	
400 V/6 kV/3 ❷	300 V, 15 A	
I_N 16 A	300 V, 15 A	
Terminal block width 5.2 mm / 0.205 in		
10 - 12 mm / 0.43 in ❸		







	Item No.	Pack. Unit
4-conductor disconnect terminal block for test and measurement, with test point, orange disconnect link		
gray	**2002-1871**	50
blue	**2002-1874**	50
orange	**2002-1872**	50

	Item No.	Pack. Unit
4-conductor disconnect terminal block for test and measurement with mechanical interlock, with test point, orange disconnect link		
gray	**2002-1871/401-000**	50
blue	**2002-1874/401-000**	50
orange	**2002-1872/401-000**	50

	Item No.	Pack. Unit
4-conductor through terminal block, with test point, same profile as 4-conductor disconnect terminal block		
gray	**2002-1801**	50
blue	**2002-1804**	50
orange	**2002-1802**	50

Other terminal blocks with the same profile:

Carrier	**2002-1861**	Page 76
Fuse	**2002-1881**	Page 50

2002 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

End and intermediate plate, 1 mm thick

orange	**2002-1892**	100 (4x25)
gray	**2002-1891**	100 (4x25)

Insulation stop,



5 pcs/strip, 0.25 - 0.5 mm²

light gray	**2002-171**	200 (8x25)

Insulation stop,



5 pcs/strip, 0.75 - 1 mm²

dark gray	**2002-172**	200 (8x25)

Push-in type jumper bar, insulated, ❹



I_N 25 A, light gray

2-way	**2002-402**	200 (8x25)
3-way	**2002-403**	200 (8x25)
4-way	**2002-404**	200 (8x25)
5-way	**2002-405**	100 (4x25)
6-way	**2002-406**	100 (4x25)
7-way	**2002-407**	100 (4x25)
8-way	**2002-408**	100 (4x25)
9-way	**2002-409**	100 (4x25)
10-way	**2002-410**	100 (4x25)

Push-in type wire jumper, ❹



insulated, I_N 18 A, wire size 1.5 mm²

L = 60 mm	**2009-412**	100 (10x10)
L = 110 mm	**2009-414**	100 (10x10)
L = 250 mm	**2009-416**	100 (10x10)

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks

yellow	**2002-115**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 25 A, light gray

from 1 to 3	**2002-433**	200 (8x25)
from 1 to 4	**2002-434**	200 (8x25)
from 1 to 5	**2002-435**	100 (4x25)
from 1 to 6	**2002-436**	100 (4x25)
from 1 to 7	**2002-437**	100 (4x25)
from 1 to 8	**2002-438**	100 (4x25)
from 1 to 9	**2002-439**	100 (4x25)
from 1 to 10	**2002-440**	100 (4x25)

Staggered jumper, ❹



insulated, I_N 25 A, light gray

2-way	**2002-472**	100 (4x25)
3-way	**2002-473**	100 (4x25)
4-way	**2002-474**	100 (4x25)
5-way	**2002-475**	50 (2x25)
6-way	**2002-476**	50 (2x25)
7-way	**2002-477**	50 (2x25)
8-way	**2002-478**	50 (2x25)
9-way	**2002-479**	50 (2x25)
10-way	**2002-480**	50 (2x25)
11-way	**2002-481**	50 (2x25)
12-way	**2002-482**	50 (2x25)

Customized staggered jumper,



insulated, I_N 25 A, light gray

1-3	**2002-473/011-000**	100 (4x25)
1-3-5	**2002-475/011-000**	
1-3-5-7	**2002-477/011-000**	
1-3-5-7-9	**2002-479/011-000**	
1-3-5-7-9-11	**2002-481/011-000**	50 (2x25)

Adjacent jumper for continuous commoning, insulated, ❹



I_N 25 A, light gray

2-way	**2002-400**	100 (4x25)

Modular TOPJOB®S connector, ❹



can be snapped together, for jumper contact slot

gray	**2002-511**	100 (4x25)

Spacer module, can be snapped together,



e.g., for bridging commoned terminal blocks

gray	**2002-549**	100 (4x25)

End plate,



for modular TOPJOB®S connectors, 1.5 mm thick

gray	**2002-541**	100 (4x25)

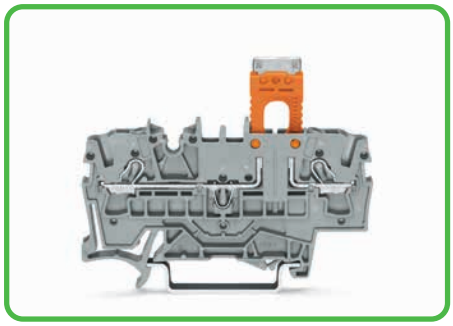
TOPJOB®S L-test plug module, ❹



can be snapped together

gray	**2002-611**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.



Carrier terminal block with disconnect plug in parked position.
Application example showing a 2-conductor carrier terminal block 2002-1661 with disconnect plug

1. Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrules, 12 mm"
2. 400 V = rated voltage
   6 kV = rated surge voltage
   3 = pollution degree
   (see Section 14)
3. Strip length, see packaging or instructions.
4. See application notes for:
   Colored push-in type jumper bars, page 101
   Staggered jumper, page 104
   Adjacent jumper for continuous commoning, page 101
   Push-in type wire jumper, page 102
   TOPJOB®S connector, page 96
   TOPJOB®S L-type test plug module, page 100

Accessories

Test plug adapter,



for 4 mm Ø test plug
gray **2009-174** 100 (4x25)

Testing tap,



for max. 2.5 mm²
gray **2009-182** 100 (4x25)

Banana plug,



for socket 4 mm Ø,
color mixed
215-111 50

Double-deck marker carrier,



pivoting
gray **2002-121** 50 (2x25)

WMB Multi marking system,

10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

WMB Inline, plain,

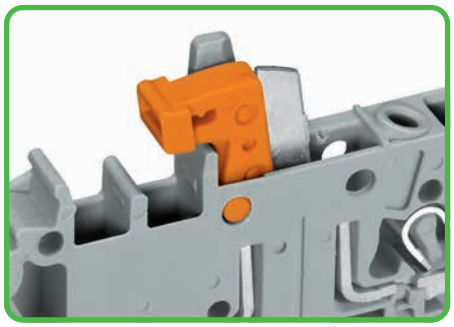


stretchable 5 - 5.2 mm,
1,500 WMB markers, 5 mm, on roll
white **2009-115** 1

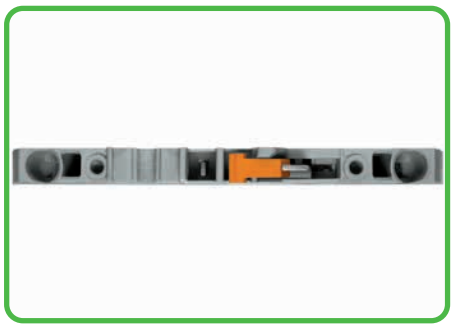
Marking strip, plain,



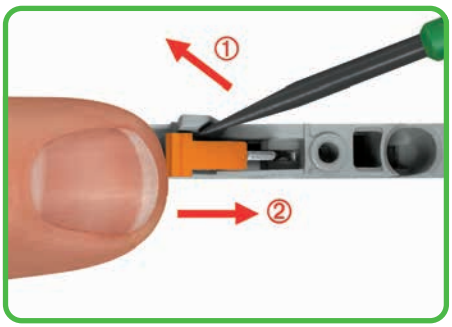
11 mm wide,
50 m roll
white **2009-110** 1



2-conductor disconnect terminal block for test and measurement, with knife disconnect and mechanical interlock
Open position



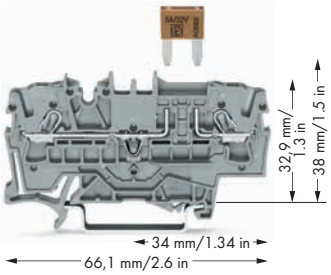
2-conductor disconnect terminal block for test and measurement, with knife disconnect and mechanical interlock
Top view

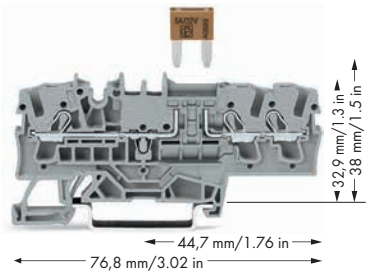


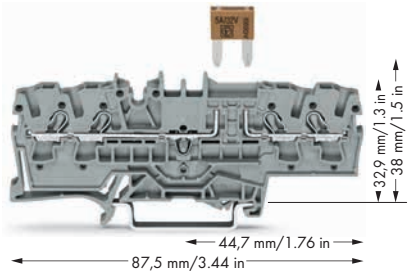
2-conductor disconnect terminal block for test and measurement, with knife disconnect and mechanical interlock
Closing of knife disconnect

TOPJOB® S
Fuse Terminal Blocks 2.5 (4) mm²
2002 Series

0.25 - 2.5 (4) mm² ❶ 400 V/6 kV/3 ❷ I_N 10 A ❸	AWG 22 - 12 300 V, 10 A 300 V, 10 A	Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹
0.25 - 2.5 (4) mm² 400 V/6 kV/3 I_N 10 A	AWG 22 - 12 300 V, 10 A 300 V, 10 A	Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in
0.25 - 2.5 (4) mm² ❶ 400 V/6 kV/3 ❷ I_N 10 A ❸	AWG 22 - 12 300 V, 10 A 300 V, 10 A	Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹







Item No.		Pack. Unit
2-conductor fuse terminal block,		
with test point,		
for blade-style fuses acc. to DIN 72581-3f, ISO 8820-3		
gray	**2002-1681**	50
Blade-style fuses are not offered by WAGO		
Other terminal blocks with the same profile:		
Through	**2002-1601**	Page 44

Item No.		Pack. Unit
3-conductor fuse terminal block,		
with test point,		
for blade-style fuses acc. to DIN 72581-3f, ISO 8820-3		
gray	**2002-1781**	50
Blade-style fuses are not offered by WAGO		
Other terminal blocks with the same profile:		
Through	**2002-1701**	Page 46

Item No.		Pack. Unit
4-conductor fuse terminal block,		
with test point,		
for blade-style fuses acc. to DIN 72581-3f, ISO 8820-3		
gray	**2002-1881**	50
Blade-style fuses are not offered by WAGO		
Other terminal blocks with the same profile:		
Through	**2002-1801**	Page 48

Item-Specific Accessories

End and intermediate plate, 1 mm thick

orange	**2002-1692**	100 (4x25)
gray	**2002-1691**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick

orange	**2002-1792**	100 (4x25)
gray	**2002-1791**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick

orange	**2002-1892**	100 (4x25)
gray	**2002-1891**	100 (4x25)

2002 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline
(see Section 13)

Insulation stop,
5 pcs/strip,
0.25 - 0.5 mm²

light gray	**2002-171**	200 (8x25)

Insulation stop,
5 pcs/strip,
0.75 - 1 mm²

dark gray	**2002-172**	200 (8x25)

Push-in type jumper bar, insulated, ❺
I_N 25 A,
light gray

2-way	**2002-402**	200 (8x25)
3-way	**2002-403**	200 (8x25)
4-way	**2002-404**	200 (8x25)
5-way	**2002-405**	100 (4x25)
6-way	**2002-406**	100 (4x25)
7-way	**2002-407**	100 (4x25)
8-way	**2002-408**	100 (4x25)
9-way	**2002-409**	100 (4x25)
10-way	**2002-410**	100 (4x25)

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks

yellow	**2002-115**	100 (4x25)

Double-deck marker carrier,
pivoting

gray	**2002-121**	50 (2x25)

Push-in type jumper bar, insulated,
I_N 25 A,
light gray

from 1 to 3	**2002-433**	200 (8x25)
from 1 to 4	**2002-434**	200 (8x25)
from 1 to 5	**2002-435**	100 (4x25)
from 1 to 6	**2002-436**	100 (4x25)
from 1 to 7	**2002-437**	100 (4x25)
from 1 to 8	**2002-438**	100 (4x25)
from 1 to 9	**2002-439**	100 (4x25)
from 1 to 10	**2002-440**	100 (4x25)

Push-in type wire jumper, ❺
insulated,
I_N 18 A,
wire size 1.5 mm²

L = 60 mm	**2009-412**	100 (10x10)
L = 110 mm	**2009-414**	100 (10x10)
L = 250 mm	**2009-416**	100 (10x10)

Test plug,
with 500 mm cable,
2 mm Ø

red	**210-136**	50

Banana plug,
for socket 4 mm Ø,
color mixed

	215-111	50

Staggered jumper, ❺
insulated,
I_N 25 A,
light gray

2-way	**2002-472**	100 (4x25)
3-way	**2002-473**	100 (4x25)
4-way	**2002-474**	100 (4x25)
5-way	**2002-475**	50 (2x25)
6-way	**2002-476**	50 (2x25)
7-way	**2002-477**	50 (2x25)
8-way	**2002-478**	50 (2x25)
9-way	**2002-479**	50 (2x25)
10-way	**2002-480**	50 (2x25)
11-way	**2002-481**	50 (2x25)
12-way	**2002-482**	50 (2x25)

Adjacent jumper for continuous commoning, insulated, ❺
I_N 25 A,
light gray

2-way	**2002-400**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st";
Push-in conductor sizes: 0.75 mm² – 4 mm² "s"
and 0.75 mm² – 2.5 mm²
"insulated ferrules, 12 mm"

❷ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ - Individual arrangement: 10 A
- Block arrangement: 5 A
Protection against direct contact must be observed for 42 V and higher voltages

❹ Strip length, see packaging or instructions.

❺ See application notes for:
Colored push-in type jumper bars, page 101
Staggered jumper, page 104
Adjacent jumper for continuous commoning, page 101
Push-in type wire jumper, page 102
TOPJOB®S connector, page 96
TOPJOB®S L-type test plug module, page 100

Accessories

Modular TOPJOB®S connector,

❺ 

can be snapped together,
for jumper contact slot
gray **2002-511** 100 (4x25)

Spacer module, can be snapped together,



e.g., for bridging commoned terminal blocks
gray **2002-549** 100 (4x25)

End plate,



for modular TOPJOB®S connectors,
1.5 mm thick
gray **2002-541** 100 (4x25)

TOPJOB®S L-test plug module,

❺ 

can be snapped together
gray **2002-611** 100 (4x25)

Test plug adapter,



for 4 mm Ø test plug
gray **2009-174** 100 (4x25)

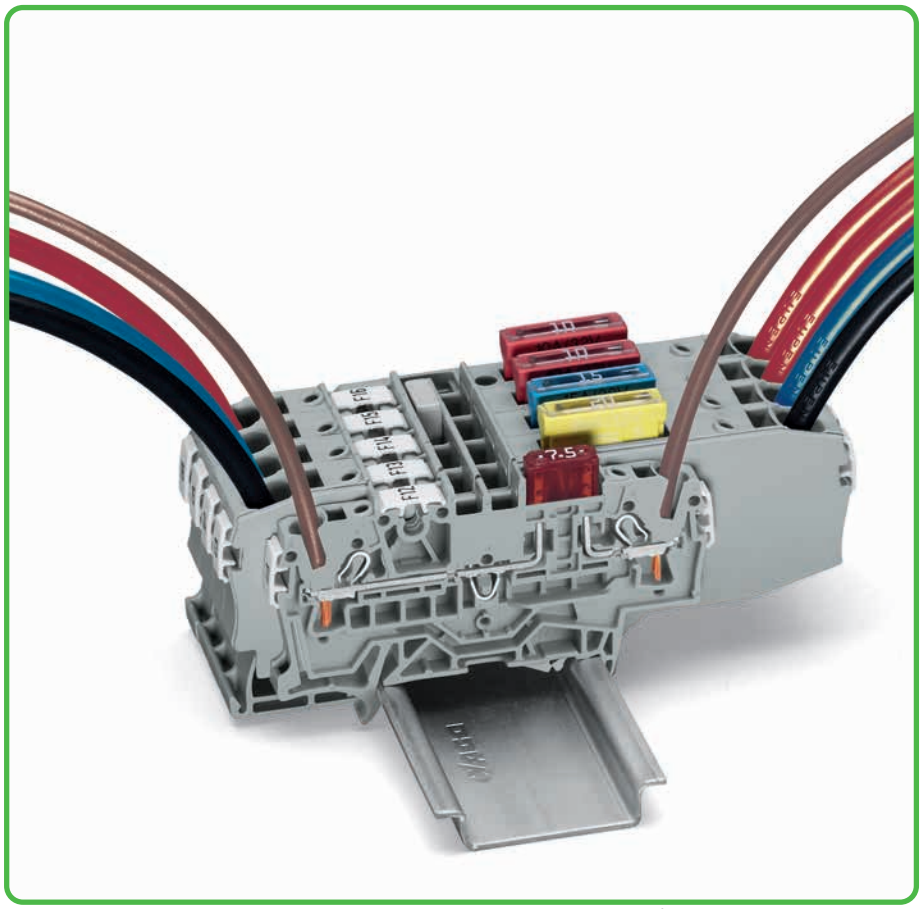
Testing tap,



for max. 2.5 mm²
gray **2009-182** 100 (4x25)

WMB Multi marking system,

10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5



Selecting the correct fuse cartridge is important for product safety within applications, as well as for fuse cartridge service life and reliability. Fuse cartrigdes can operate perfectly as protection (break-off point) if they are properly selected and used according to manufacturer specifications.

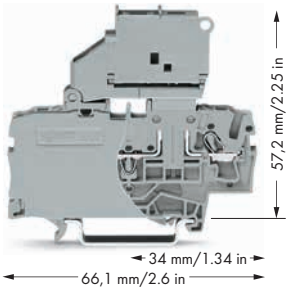
The rated currents of the fuse cartridges are defined differently in international standards.

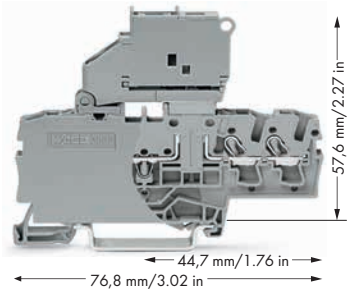
Due to different current rating definitions, the recommended current-carrying permanent capacity of the fuses is max. 80% of their rated current according to DIN 72581 part 3 (for an ambient operating temperature of 23 °C).

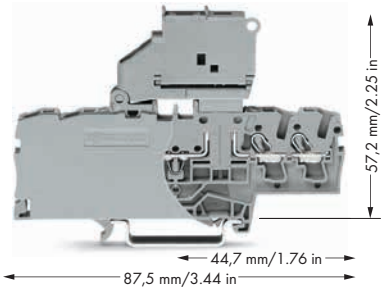
Regarding product safety, it is generally necessary to test fuse cartridges under normal conditions and operational failures within your application.

TOPJOB® S
Fuse Disconnect Terminal Blocks with Pivoting Fuse Holder 2.5 (4) mm² for Miniature Fuses 5 x 20 mm, 2002 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 250 V/6 kV/3 ❷ | 250 V, 6 A I_N 6.3 A | 250 V, 6 A Terminal block width 6.2 mm / 0.244 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 250 V/6 kV/3 ❷ I_N 6.3 A Terminal block width 6.2 mm / 0.244 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 250 V/6 kV/3 ❷ | 250 V, 6 A I_N 6.3 A | 250 V, 6 A Terminal block width 6.2 mm / 0.244 in 10 - 12 mm / 0.43 in ❸







	Item No.	Pack. Unit
2-conductor fuse disconnect terminal block with pivoting fuse holder, for miniature fuses 5 x 20 mm, without blown fuse indication. Both nominal voltage and current are given by the fuse.		
◯ gray	**2002-1611**	50
2-conductor fuse disconnect terminal block with pivoting fuse holder, for miniature fuses 5 x 20 mm, with blown fuse indication by LED, gray. Both nominal voltage and current are given by the LED or fuse. Leakage current in case of blown fuse: LED 2mA		
◯ 12 - 30 V	**2002-1611/1000-541**	50
◯ 30 - 65 V	**2002-1611/1000-542**	50
◯ 230 V	**2002-1611/1000-836**	50
◯ 120 V	**2002-1611/1000-867**	50

	Item No.	Pack. Unit
3-conductor fuse disconnect terminal block with pivoting fuse holder, for miniature fuses 5 x 20 mm, without blown fuse indication. Both nominal voltage and current are given by the fuse.		
◯ gray	**2002-1711**	50
3-conductor fuse disconnect terminal block with pivoting fuse holder, for miniature fuses 5 x 20 mm, with blown fuse indication by LED, gray. Both nominal voltage and current are given by the LED or fuse. Leakage current in case of blown fuse: LED 2mA		
◯ 12 - 30 V	**2002-1711/1000-541**	50
◯ 30 - 65 V	**2002-1711/1000-542**	50
◯ 230 V	**2002-1711/1000-836**	50
◯ 120 V	**2002-1711/1000-867**	50

	Item No.	Pack. Unit
4-conductor fuse disconnect terminal block with pivoting fuse holder, for miniature fuses 5 x 20 mm, without blown fuse indication. Both nominal voltage and current are given by the fuse.		
◯ gray	**2002-1811**	50
4-conductor fuse disconnect terminal block with pivoting fuse holder, for miniature fuses 5 x 20 mm, with blown fuse indication by LED, gray. Both nominal voltage and current are given by the LED or fuse. Leakage current in case of blown fuse: LED 2mA		
◯ 12 - 30 V	**2002-1811/1000-541**	50
◯ 30 - 65 V	**2002-1811/1000-542**	50
◯ 230 V	**2002-1811/1000-836**	50
◯ 120 V	**2002-1811/1000-867**	50

Accessories

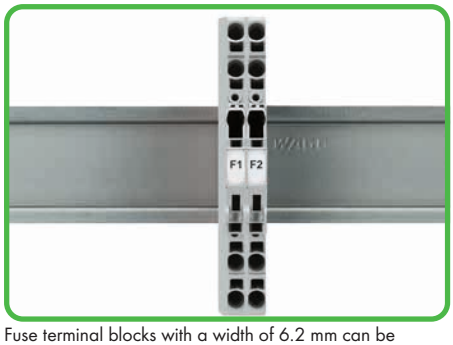
Appropriate marking systems: WMB/WMB Inline/Marking strips (see Section 13)

End plate for fuse terminal blocks, 2 mm thick			
orange	**2002-992**	100 (4x25)	
gray	**2002-991**	100 (4x25)	
Insulation stop, 5 pcs/strip, 0.25 - 0.5 mm²			
light gray	**2002-171**	200 (8x25)	
Insulation stop, 5 pcs/strip, 0.75 - 1 mm²			
dark gray	**2002-172**	200 (8x25)	
Push-in type wire jumper, ❹ insulated, I_N 18 A, wire size 1.5 mm²			
L = 60 mm	**2009-412**	100 (10x10)	
L = 110 mm	**2009-414**	100 (10x10)	
L = 250 mm	**2009-416**	100 (10x10)	

Push-in type jumper bar, insulated, I_N 32 A, light gray			
2-way	**2004-402**	200 (8x25)	
3-way	**2004-403**	200 (8x25)	
4-way	**2004-404**	100 (4x25)	
5-way	**2004-405**	100 (4x25)	
6-way	**2004-406**	100 (4x25)	
7-way	**2004-407**	100 (4x25)	
8-way	**2004-408**	100 (4x25)	
9-way	**2004-409**	100 (4x25)	
10-way	**2004-410**	100 (4x25)	
Protective warning marker, with high-voltage symbol, black, for 5 terminal blocks			
yellow	**2002-115**	100 (4x25)	

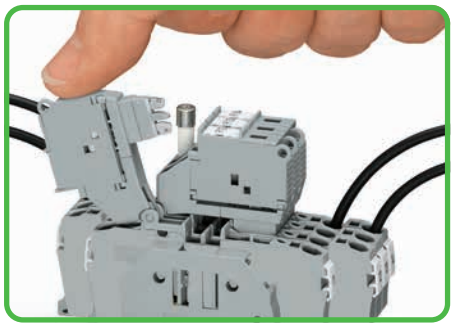
Push-in type jumper bar, insulated, I_N 32 A, light gray			
from 1 to 3	**2004-433**	200 (8x25)	
from 1 to 4	**2004-434**	200 (8x25)	
from 1 to 5	**2004-435**	100 (4x25)	
from 1 to 6	**2004-436**	100 (4x25)	
from 1 to 7	**2004-437**	100 (4x25)	
from 1 to 8	**2004-438**	100 (4x25)	
from 1 to 9	**2004-439**	100 (4x25)	
from 1 to 10	**2004-440**	100 (4x25)	

Certification organizations can be found in the overview on pages 622 and 623.



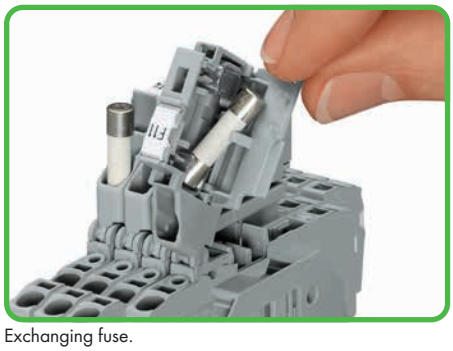
Fuse terminal blocks with a width of 6.2 mm can be assembled adjacently. If there is **no** adjacent fuse terminal block at the end of the assembly, an end plate must be used.

1. Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"
2. 250 V = rated voltage
   6 kV = rated surge voltage
   3 = pollution degree
   (see Section 14)
3. Strip length, see packaging or instructions.
4. See application notes for:
   Push-in type wire jumper, page 102



Pivoting the fuse holder in the locked open position.

When selecting miniature fuses, the maximum power loss listed below should not be exceeded. The power loss is determined according to IEC or EN 60947-7-3/VDE 0611-6 at 23 °C. The temperature rise of the terminal blocks must be checked according to their application and mounting. Higher ambient temperatures place additional strain on fuse cartridges. Therefore, in such applications, the rated current must be reduced if necessary. More details available from the manufacturer.



Exchanging fuse.

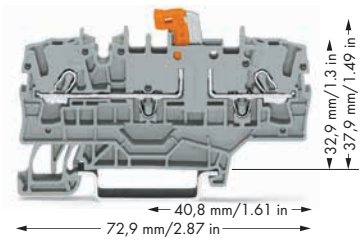
Miniature fuses 5 x 20

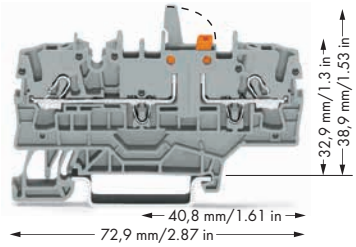
Series Item No.	Overload and short circuit protection		Short circuit protection only	
	Individual argmt.	Group argmt.	Individual argmt.	Group argmt.
	Fuse terminal blocks			
2002-1611 2002-1811	1.6 W	1.6 W	2.5 W	2.5 W
2002-1611/....-.... 2002-1811/....-....	1.6 W	1.6 W	2.5 W	2.5 W

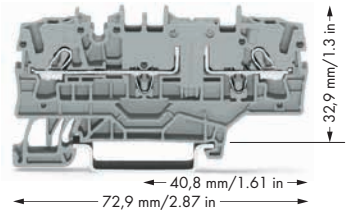
Protective warning marker and insulation stop must be applied individually. Due to the 6.2 mm width of the fuse terminal blocks with pivoting fuse holder, 2004 Series jumpers must be used.

TOPJOB® S
Disconnect Terminal Blocks for Test and Measurement without and with Mechanical Interlock with Additional Jumper Position 2.5 (4) mm², 2002 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 400 V/6 kV/3 ❷ I_N 16 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 400 V/6 kV/3 ❷ I_N 16 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 400 V/6 kV/3 ❷ I_N 16 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸







Item No.		Pack. Unit
2-conductor disconnect terminal block for test and measurement, with test point, orange disconnect link, with additional jumper position		
gray	**2002-1971**	50
blue	**2002-1974**	50
orange	**2002-1972**	50

Item No.		Pack. Unit
2-conductor disconnect terminal block for test and measurement with mechanical interlock, with test point, orange disconnect link, with additional jumper position		
gray	**2002-1971/401-000**	50
orange	**2002-1972/401-000**	50
blue	**2002-1974/401-000**	50

Item No.		Pack. Unit
2-conductor through terminal block, with test point, with additional jumper position, same profile as 2-conductor disconnect terminal block		
gray	**2002-1901**	50
blue	**2002-1904**	50
orange	**2002-1902**	50
2-conductor ground terminal block		
green-yellow	**2002-1907**	50
Other terminal blocks with the same profile:		
Carrier	**2002-1961**	Page 76
Fuse	**2002-1981**	Page 57

2002 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

End and intermediate plate, 1 mm thick



orange	**2002-1992**	100 (4x25)
gray	**2002-1991**	100 (4x25)

Insulation stop,



5 pcs/strip, 0.25 - 0.5 mm²

light gray	**2002-171**	200 (8x25)

Insulation stop,



5 pcs/strip, 0.75 - 1 mm²

dark gray	**2002-172**	200 (8x25)

Push-in type jumper bar, insulated, ❹



I_N 25 A, light gray

2-way	**2002-402**	200 (8x25)
3-way	**2002-403**	200 (8x25)
4-way	**2002-404**	200 (8x25)
5-way	**2002-405**	100 (4x25)
6-way	**2002-406**	100 (4x25)
7-way	**2002-407**	100 (4x25)
8-way	**2002-408**	100 (4x25)
9-way	**2002-409**	100 (4x25)
10-way	**2002-410**	100 (4x25)

Push-in type wire jumper, ❹



insulated, I_N 18 A, wire size 1.5 mm²

L = 60 mm	**2009-412**	100 (10x10)
L = 110 mm	**2009-414**	100 (10x10)
L = 250 mm	**2009-416**	100 (10x10)

Push-in type jumper bar, insulated,



I_N 25 A, light gray

from 1 to 3	**2002-433**	200 (8x25)
from 1 to 4	**2002-434**	200 (8x25)
from 1 to 5	**2002-435**	100 (4x25)
from 1 to 6	**2002-436**	100 (4x25)
from 1 to 7	**2002-437**	100 (4x25)
from 1 to 8	**2002-438**	100 (4x25)
from 1 to 9	**2002-439**	100 (4x25)
from 1 to 10	**2002-440**	100 (4x25)

Staggered jumper, ❹



insulated, I_N 25 A, light gray

2-way	**2002-472**	100 (4x25)
3-way	**2002-473**	100 (4x25)
4-way	**2002-474**	100 (4x25)
5-way	**2002-475**	50 (2x25)
6-way	**2002-476**	50 (2x25)
7-way	**2002-477**	50 (2x25)
8-way	**2002-478**	50 (2x25)
9-way	**2002-479**	50 (2x25)
10-way	**2002-480**	50 (2x25)
11-way	**2002-481**	50 (2x25)
12-way	**2002-482**	50 (2x25)

Adjacent jumper for continuous commoning, insulated, ❹



I_N 25 A, light gray

2-way	**2002-400**	100 (4x25)

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks

yellow	**2002-115**	100 (4x25)

Test plug adapter,



for 4 mm Ø test plug

gray	**2009-174**	100 (4x25)

Testing tap,



for max. 2.5 mm²

gray	**2009-182**	100 (4x25)

Modular TOPJOB®S connector, ❹



can be snapped together, for jumper contact slot

gray	**2002-511**	100 (4x25)

Spacer module, can be snapped together,



e.g., for bridging commoned terminal blocks

gray	**2002-549**	100 (4x25)

End plate,



for modular TOPJOB®S connectors, 1.5 mm thick

gray	**2002-541**	100 (4x25)

TOPJOB®S L-test plug module, ❹



can be snapped together

gray	**2002-611**	100 (4x25)

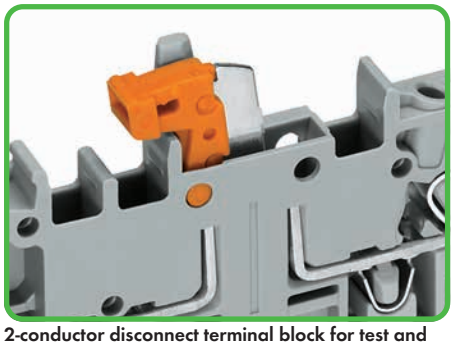
Test plug,



with 500 mm cable, 2 mm Ø

red	**210-136**	50

Certification organizations can be found in the overview on pages 622 and 623.



2-conductor disconnect terminal block for test and measurement, with knife disconnect and mechanical interlock
Open position

❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrules, 12 mm"

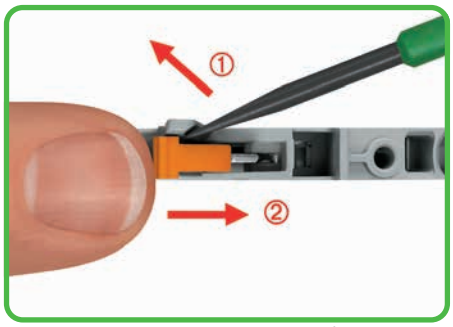
❷ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

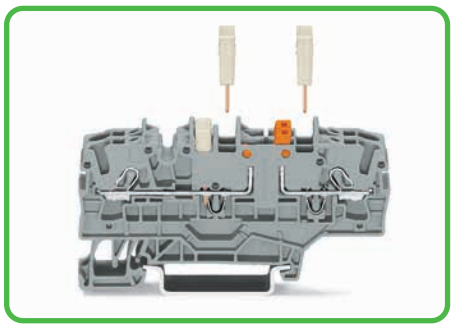
❹ See application notes for:
Colored push-in type jumper bars, page 101
Staggered jumper, page 104
Adjacent jumper for continuous commoning, page 101
Push-in type wire jumper, page 102
TOPJOB®S connector, page 96
TOPJOB®S L-type test plug module, page 100



2-conductor disconnect terminal block for test and measurement, with knife disconnect and mechanical interlock
Top view



2-conductor disconnect terminal block for test and measurement, with knife disconnect and mechanical interlock
Closing of knife disconnect



Three jumper slots available

Double-deck marker carrier,



pivoting
gray **2002-121** 50 (2x25)

WMB Multi marking system,

10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

WMB Inline, plain,



stretchable 5 - 5.2 mm,
1,500 WMB markers, 5 mm, on roll
white **2009-115** 1

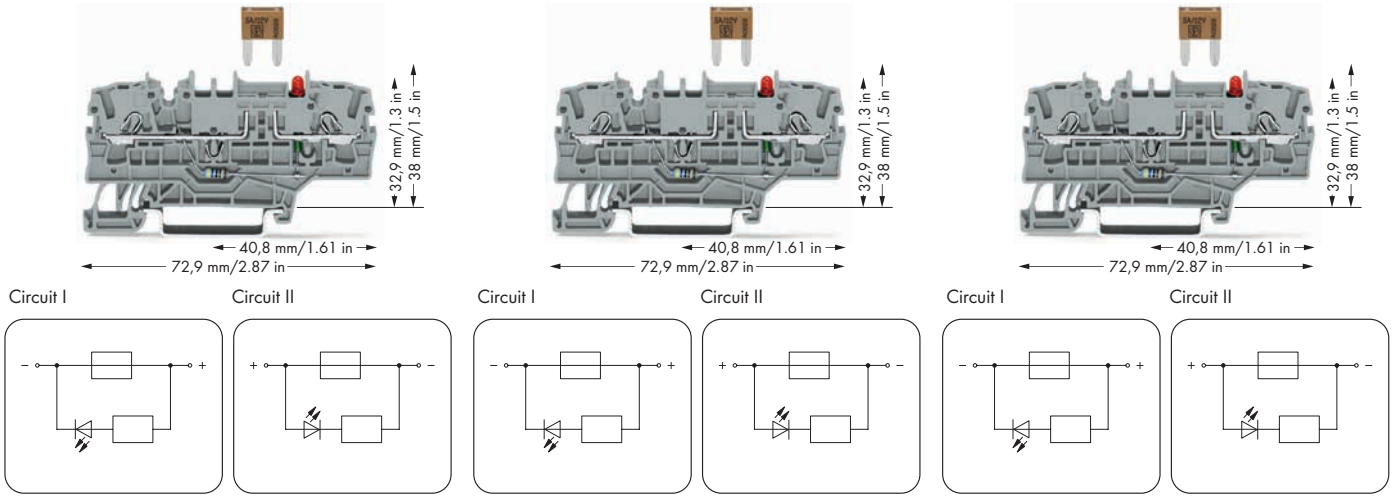
Marking strip, plain,



11 mm wide,
50 m roll
white **2009-110** 1

TOPJOB® S
Fuse Terminal Blocks 2.5 (4) mm²
2002 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 **400 V/6 kV/3 ❷** **I_N 10 A** **Terminal block width 5.2 mm / 0.205 in** **10 - 12 mm / 0.43 in ❸**	**0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12** **400 V/6 kV/3 ❷** **I_N 10 A** **Terminal block width 5.2 mm / 0.205 in** **10 - 12 mm / 0.43 in ❸**	**0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12** **400 V/6 kV/3 ❷** **I_N 10 A** **Terminal block width 5.2 mm / 0.205 in** **10 - 12 mm / 0.43 in ❸**



Item No.		Pack. Unit
2-conductor fuse terminal block for mini-automotive blade-style fuses,		
12V, with test point, with blown fuse indication by LED,		
LED power consumption: 4.8 mA, gray		
Both nominal voltage and current are given by the LED or fuse. Blade-style fuses, please note touchproof protection for 42V and higher.		
◯ Circuit I	**2002-1981/1000-429**	50
◯ Circuit II	**2002-1981/1000-449**	50
Other terminal blocks with the same profile:		
Through	**2002-1901**	Page 54

Item No.		Pack. Unit
2-conductor fuse terminal block for mini-automotive blade-style fuses,		
24 V, with test point, with blown fuse indication by LED,		
LED power consumption: 4.8 mA, gray		
Both nominal voltage and current are given by the LED or fuse. Blade-style fuses, please note touchproof protection for 42V and higher.		
◯ Circuit I	**2002-1981/1000-413**	50
◯ Circuit II	**2002-1981/1000-434**	50

Item No.		Pack. Unit
2-conductor fuse terminal block for mini-automotive blade-style fuses,		
48 V, with test point, with blown fuse indication by LED,		
LED power consumption: 4.8 mA, gray		
Both nominal voltage and current are given by the LED or fuse. Blade-style fuses, please note touchproof protection for 42V and higher.		
◯ Circuit I	**2002-1981/1000-414**	50
◯ Circuit II	**2002-1981/1000-435**	50

2002 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline
(see Section 13)

End and intermediate plate, 1 mm thick			
orange	**2002-1992**	100 (4x25)	
gray	**2002-1991**	100 (4x25)	
Insulation stop,			
5 pcs/strip,			
0.25 - 0.5 mm²			
light gray	**2002-171**	200 (8x25)	
Insulation stop,			
5 pcs/strip,			
0.75 - 1 mm²			
dark gray	**2002-172**	200 (8x25)	
Push-in type jumper bar, insulated,			
❹ I_N 25 A,			
light gray			
2-way	**2002-402**	200 (8x25)	
3-way	**2002-403**	200 (8x25)	
4-way	**2002-404**	200 (8x25)	
5-way	**2002-405**	100 (4x25)	
6-way	**2002-406**	100 (4x25)	
7-way	**2002-407**	100 (4x25)	
8-way	**2002-408**	100 (4x25)	
9-way	**2002-409**	100 (4x25)	
10-way	**2002-410**	100 (4x25)	

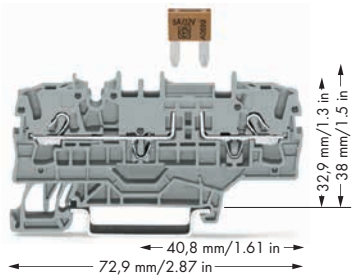
Push-in type wire jumper,			
❹ insulated,			
I_N 18 A,			
wire size 1.5 mm²			
L = 60 mm	**2009-412**	100 (10x10)	
L = 110 mm	**2009-414**	100 (10x10)	
L = 250 mm	**2009-416**	100 (10x10)	
Adjacent jumper for continuous commoning, insulated,			
❹ I_N 25 A,			
light gray			
2-way	**2002-400**	100 (4x25)	
Push-in type jumper bar, insulated,			
I_N 25 A,			
light gray			
from 1 to 3	**2002-433**	200 (8x25)	
from 1 to 4	**2002-434**	200 (8x25)	
from 1 to 5	**2002-435**	100 (4x25)	
from 1 to 6	**2002-436**	100 (4x25)	
from 1 to 7	**2002-437**	100 (4x25)	
from 1 to 8	**2002-438**	100 (4x25)	
from 1 to 9	**2002-439**	100 (4x25)	
from 1 to 10	**2002-440**	100 (4x25)	

Staggered jumper,			
❹ insulated,			
I_N 25 A,			
light gray			
2-way	**2002-472**	100 (4x25)	
3-way	**2002-473**	100 (4x25)	
4-way	**2002-474**	100 (4x25)	
5-way	**2002-475**	50 (2x25)	
6-way	**2002-476**	50 (2x25)	
7-way	**2002-477**	50 (2x25)	
8-way	**2002-478**	50 (2x25)	
9-way	**2002-479**	50 (2x25)	
10-way	**2002-480**	50 (2x25)	
11-way	**2002-481**	50 (2x25)	
12-way	**2002-482**	50 (2x25)	
Protective warning marker,			
with high-voltage symbol, black,			
for 5 terminal blocks			
yellow	**2002-115**	100 (4x25)	

Certification organizations can be found in the overview on pages 622 and 623.

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12
400 V/6 kV/3 ❷
I_N 10 A

Terminal block width 5.2 mm / 0.205 in
10 - 12 mm / 0.43 in ❸



❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrules, 12 mm"

❷ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

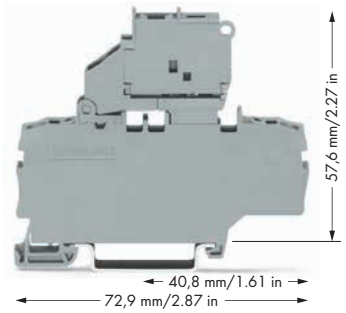
❹ See application notes for:
Colored push-in type jumper bars, page 101
Staggered jumper, page 104
Adjacent jumper for continuous commoning, page 101
Push-in type wire jumper, page 102
TOPJOB®S connector, page 96
TOPJOB®S L-type test plug module, page 100

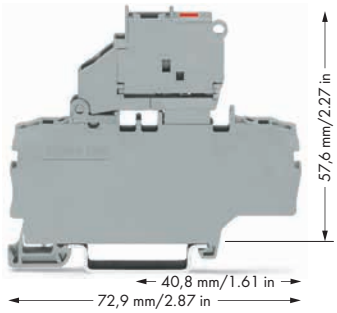
	Item No.	Pack. Unit
2-conductor fuse terminal block for mini-automotive blade-style fuses,		
with test point, with additional jumper position,		
without blown fuse indication		
Both nominal voltage and current are given by the fuse.		
Blade-style fuses, please note touchproof protection for 42V and higher.		
gray	**2002-1981**	50
Blade-style fuses are not offered by WAGO		
WMB Inline, plain,		
stretchable 5 - 5.2 mm,		
1,500 WMB markers, 5 mm, on roll		
white	**2009-115**	1
WMB Multi marking system,		
10 strips with 10 markers per card,		
stretchable 5 - 5.2 mm		
plain	**793-5501**	5
Double-deck marker carrier,		
pivoting		
gray	**2002-121**	50 (2x25)

TOPJOB® S
Fuse Disconnect Terminal Blocks with Pivoting Fuse Holder and Additional Jumper Position for Miniature Fuses 5 x 20 mm, 2002 Series

CAGE CLAMP®S

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 **250 V/6 kV/3 ❷** **I_N 6.3 A** **Terminal block width 6.2 mm / 0.244 in** **10 - 12 mm / 0.43 in ❸**	**0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12** **250 V/6 kV/3 ❷** **I_N 6.3 A** **Terminal block width 6.2 mm / 0.244 in** **10 - 12 mm / 0.43 in ❸**





❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 250 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Push-in type wire jumper, page 102

	Item No.	Pack. Unit
2-conductor fuse disconnect terminal block with pivoting fuse holder, with additional jumper position, for miniature fuses 5 x 20 mm, without blown fuse indication Both nominal voltage and current are given by the fuse.		
gray	**2002-1911**	50

	Item No.	Pack. Unit
2-conductor fuse disconnect terminal block with pivoting fuse holder, with additional jumper position, for miniature fuses 5 x 20 mm, with blown fuse indication by LED, gray Both nominal voltage and current are given by the LED or fuse. Leakage current in case of blown fuse: LED 2mA		
12 - 30 V	**2002-1911/1000-541**	50
30 - 65 V	**2002-1911/1000-542**	50
120 V	**2002-1911/1000-867**	50
230 V	**2002-1911/1000-836**	50

Miniature fuses 5 x 20

Series Item No.	Overload and short circuit protection		Short circuit protection only	
	Individual argmt.	Group argmt.	Individual argmt.	Group argmt.
	Fuse terminal blocks			
2002-1911	1.6 W	1.6 W	2.5 W	2.5 W
2002-1911/....-....	1.6 W	1.6 W	2.5 W	2.5 W

Protective warning marker and insulation stop must be applied individually. Due to the 6.2 mm width of the fuse terminal blocks with pivoting fuse holder, 2004 Series jumpers must be used.

When selecting miniature fuses, the maximum power loss listed below should not be exceeded. The power loss is determined according to IEC or EN 60947-7-3/VDE 0611-6 at 23 °C. The temperature rise of the terminal blocks must be checked according to their application and mounting. Higher ambient temperatures are an additional burden on fuse cartridges. Therefore, in such applications the rated current must be reduced if necessary. More details available from the manufacturer.

2002 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

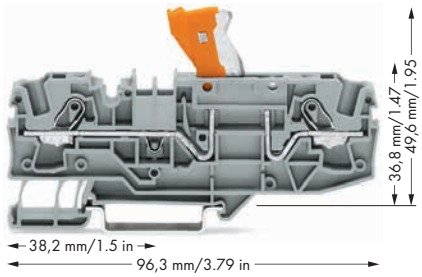
End plate for fuse terminal blocks,			
	2 mm thick		
	orange	**2002-992**	100 (4x25)
	gray	**2002-991**	100 (4x25)
Insulation stop,			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**2002-171**	200 (8x25)
Insulation stop,			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**2002-172**	200 (8x25)
Push-in type jumper bar, insulated,			
	I_N 32 A,		
	light gray		
	2-way	**2004-402**	200 (8x25)
	3-way	**2004-403**	200 (8x25)
	4-way	**2004-404**	100 (4x25)
	5-way	**2004-405**	100 (4x25)
	6-way	**2004-406**	100 (4x25)
	7-way	**2004-407**	100 (4x25)
	8-way	**2004-408**	100 (4x25)
	9-way	**2004-409**	100 (4x25)
	10-way	**2004-410**	100 (4x25)

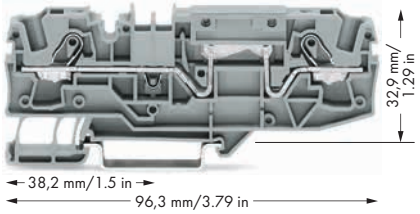
Push-in type jumper bar, insulated,			
	I_N 32 A,		
	light gray		
	from 1 to 3	**2004-433**	200 (8x25)
	from 1 to 4	**2004-434**	200 (8x25)
	from 1 to 5	**2004-435**	100 (4x25)
	from 1 to 6	**2004-436**	100 (4x25)
	from 1 to 7	**2004-437**	100 (4x25)
	from 1 to 8	**2004-438**	100 (4x25)
	from 1 to 9	**2004-439**	100 (4x25)
	from 1 to 10	**2004-440**	100 (4x25)
Push-in type wire jumper,			
	❹ insulated,		
	I_N 18 A,		
	wire size 1.5 mm²		
	L = 60 mm	**2009-412**	100 (10x10)
	L = 110 mm	**2009-414**	100 (10x10)
	L = 250 mm	**2009-416**	100 (10x10)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**2002-115**	100 (4x25)
Test plug,			
	with 500 mm cable,		
	2 mm Ø		
	red	**210-136**	50

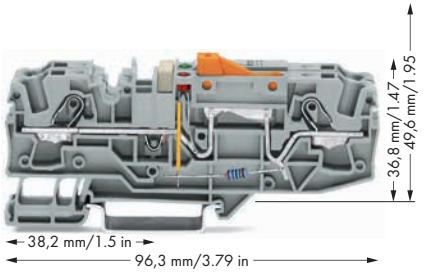
Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® S
Disconnect and Ground Conductor Disconnect Terminal Blocks
6 (10) mm² / 30 A and Through Terminal Blocks of Same Profile, 2006 Series

0.5 - 6 (10) mm² ❶ | AWG 20 - 8 **800 V/8 kV/3 ❷** **I_N 30 A** **Terminal block width 7.5 mm / 0.295 in** **13 - 15 mm / 0.55 in ❸**	**0.5 - 6 (10) mm² ❶ | AWG 20 - 8** **800 V/8 kV/3 ❷** **I_N 30 A** **Terminal block width 7.5 mm / 0.295 in** **13 - 15 mm / 0.55 in ❸**	**0.5 - 6 (10) mm² ❶ | AWG 20 - 8** **Terminal block width 15 mm / 0.591 in** **13 - 15 mm / 0.55 in ❸**







Item No.		Pack. Unit
2-conductor disconnect terminal block,		
with test point,		
orange disconnect link		
gray	**2006-1671**	25
blue	**2006-1674**	25
Other terminal blocks with the same profile:		
Through	**2006-1601**	Page 60

Item No.		Pack. Unit
2-conductor through terminal block,		
with test point,		
same profile as 2-conductor disconnect terminal block		
gray	**2006-1601**	25
blue	**2006-1604**	25
Other terminal blocks with the same profile:		
Carrier	**2006-1661**	Page 78
Fuse	**2006-1681**	Page 62

Item No.		Pack. Unit
Ground conductor disconnect terminal block,		
with test point,		
orange disconnect link, gray		
24 V	**2006-1671/1000-848**	12
48 V	**2006-1671/1000-849**	12
120 V	**2006-1671/1000-850**	12
230 V	**2006-1671/1000-851**	12
Other terminal blocks with the same profile:		
Through	**2006-1601**	Page 60

Item-Specific Accessories

Push-in type jumper bar, insulated,			
I_N 41 A,			
light gray			
2-way	**2006-402**	50 (2x25)	
3-way	**2006-403**	50 (2x25)	
4-way	**2006-404**	50 (2x25)	
5-way	**2006-405**	50 (2x25)	
Push-in type jumper bar, insulated,			
I_N 41 A,			
light gray			
from 1 to 3	**2006-433**	50 (2x25)	
from 1 to 4	**2006-434**	50 (2x25)	
from 1 to 5	**2006-435**	50 (2x25)	
Star point jumper, insulated,			
I_N = I_N terminal block, light gray			
1-3-5	**2006-405/011-000**	50 (2x25)	

Item-Specific Accessories

Push-in type jumper bar, insulated,			
I_N 41 A,			
light gray			
2-way	**2006-402**	50 (2x25)	
3-way	**2006-403**	50 (2x25)	
4-way	**2006-404**	50 (2x25)	
5-way	**2006-405**	50 (2x25)	
Push-in type jumper bar, insulated,			
I_N 41 A,			
light gray			
from 1 to 3	**2006-433**	50 (2x25)	
from 1 to 4	**2006-434**	50 (2x25)	
from 1 to 5	**2006-435**	50 (2x25)	
Star point jumper, insulated,			
I_N = I_N terminal block, light gray			
1-3-5	**2006-405/011-000**	50 (2x25)	

Item-Specific Accessories

Push-in type jumper bar, insulated,			
I_N 41 A,			
light gray			
2-way	**2006-402**	50 (2x25)	

2006 Series Accessories

Appropriate marking systems: WMB/Marking strips
(see Section 13)

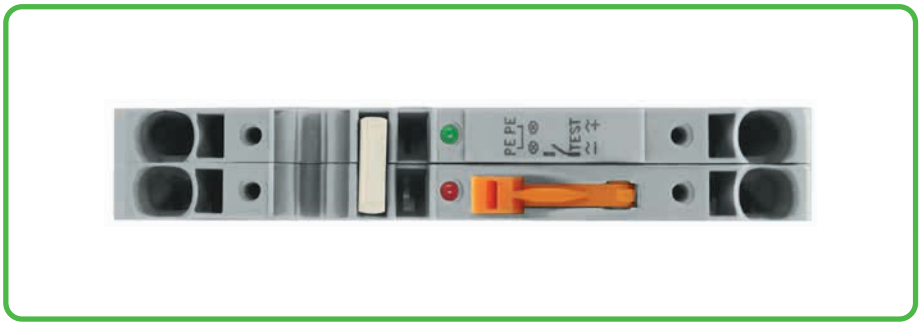
End and intermediate plate, 1 mm thick			
orange	**2006-1692**	100 (4x25)	
gray	**2006-1691**	100 (4x25)	
Protective warning marker,			
with high-voltage symbol, black,			
for 5 terminal blocks			
yellow	**2006-115**	100 (4x25)	

Double-deck marker carrier,			
pivoting			
gray	**2002-121**	50 (2x25)	
WMB Multi marking system,			
10 strips with 10 markers per card,			
stretchable 5 - 5.2 mm			
plain	**793-5501**	5	
Marking strip, plain,			
11 mm wide,			
50 m roll			
white	**2009-110**	1	

Screwless end stop,			
for DIN 35 rail,			
6 mm wide			
gray	**249-116**	100 (4x25)	
Screwless end stop,			
for DIN 35 rail,			
10 mm wide			
gray	**249-117**	50 (2x25)	

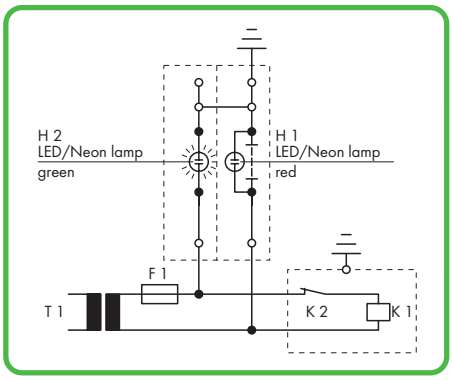
Certification organizations can be found in the overview on pages 622 and 623.

Disconnect and Ground Conductor Disconnect Terminal Blocks

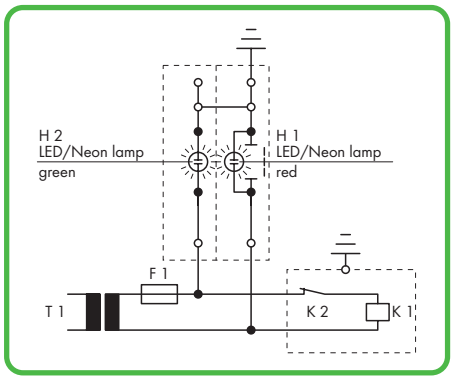


Ground conductor disconnect terminal block – top view

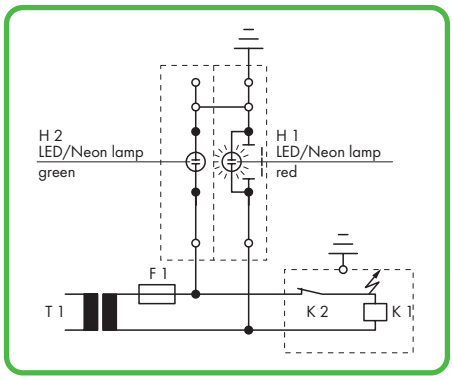
1. Conductor sizes: 0.5 mm² – 10 mm² "s + f-st"; Push-in conductor sizes: 1 mm² – 10 mm² "s" and 1.5 mm² – 6 mm² "insulated ferrule, 12 mm"
2. 800 V = rated voltage
   8 kV = rated surge voltage
   3 = pollution degree
   (see Section 14)
3. Strip length, see packaging or instructions.



Operating condition
Slide link closed, auxiliary circuit grounded, green lamp illuminates.



Test condition – no grounding
Slide link open, auxiliary circuit not grounded.



Test condition – grounding
Slide link open, auxiliary circuit not grounded, red lamp illuminates.



Terminal block assembly including:
Through terminal blocks
N-conductor disconnect terminal blocks
Fuse terminal blocks for mini-automotive fuses

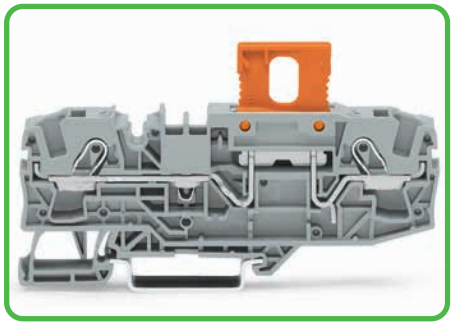
IEC 60204/DIN VDE 0113 "Electrical equipment of industrial machines, part 1: General requirements" 9.4.3.1:

Ground faults on control circuits shall not cause unintentional starting, hazardous movements or prevent stopping the machine.

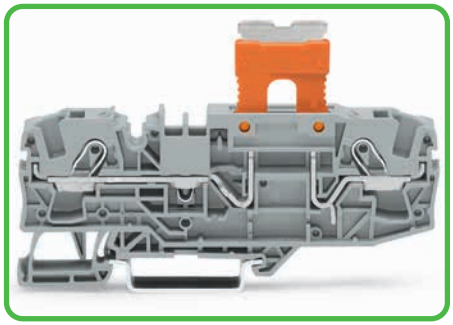
In order to fulfill this requirement, bonding to the protective bonding circuit shall be provided in accordance with 8.2 and the devices shall be connected as described in 9.1.4. Control circuits fed from a transformer and not connected to the protective bonding circuit shall be provided with an insulation monitoring device (e.g., residual current device), which either indicates an ground fault or interrupts the circuit automatically after an ground fault.

In the case of electronic circuits, the connection of one side of the control circuit to the protective bonding circuit in accordance with 9.1.4 can prevent unintentional operation. When this does not help, or if due to other reasons electronic circuits cannot be connected to the protective bonding circuit, other measures shall be taken to achieve the same level of safety.

Multipole control switches which interrupt all live conductors shall be used where the control circuit is directly connected between the phase conductors of the supply or between a phase conductor and a neutral conductor, which is either not grounded or grounded through a high impedance.
This is required for starting or stopping those machine functions, which can cause a hazardous situation including: damaging the machine or halting the work in progress, in the event of unintentional starting or failure to stop.



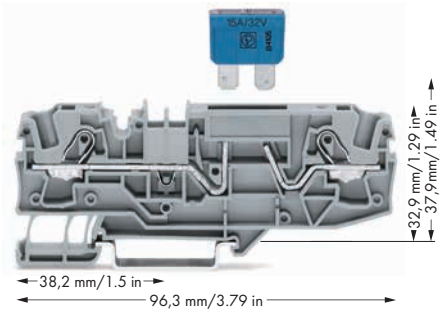
Carrier terminal block with disconnect plug in operating position.

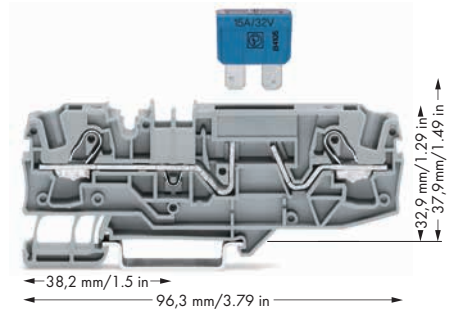


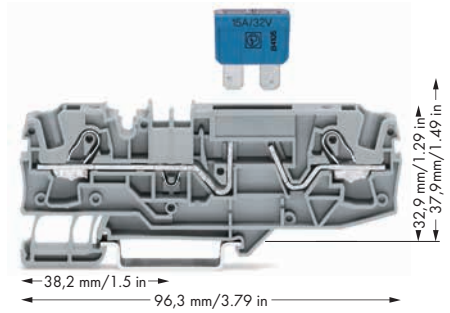
Carrier terminal block with disconnect plug in parked position.

TOPJOB® S
Fuse Terminal Blocks for Mini-Automotive Blade-Style Fuses 6 (10) mm²
2006 Series

0.5 - 6 (10) mm² ❶ | AWG 20 - 8 **500 V/8 kV/3 ❷** **I_N 25 A (30 A) ❸** **Terminal block width 7.5 mm / 0.295 in** **13 - 15 mm / 0.55 in ❹**	**0.5 - 6 (10) mm² ❶ | AWG 20 - 8** **500 V/8 kV/3 ❷** **I_N 25 A (30 A) ❸** **Terminal block width 7.5 mm / 0.295 in** **13 - 15 mm / 0.55 in ❹**	**0.5 - 6 (10) mm² ❶ | AWG 20 - 8** **500 V/8 kV/3 ❷** **I_N 25 A (30 A) ❸** **Terminal block width 7.5 mm / 0.295 in** **13 - 15 mm / 0.55 in ❹**







Item No.		Pack. Unit
2-conductor fuse terminal block for mini-automotive blade-style fuses,		
12V, with test point, with blown fuse indication by LED, LED power consumption: 4.8 mA, gray		
Both nominal voltage and current are given by the LED or fuse. Blade-style fuses, please note touchproof protection for 42V and higher.		
◯ Circuit I	**2006-1681/1000-429**	25
◯ Circuit II	**2006-1681/1000-449**	25
Other terminal blocks with the same profile:		
Through	**2006-1601**	Page 60

Item No.		Pack. Unit
2-conductor fuse terminal block for mini-automotive blade-style fuses,		
24V, with test point, with blown fuse indication by LED, LED power consumption: 4.8 mA, gray		
Both nominal voltage and current are given by the LED or fuse. Blade-style fuses, please note touchproof protection for 42V and higher.		
◯ Circuit I	**2006-1681/1000-413**	25
◯ Circuit II	**2006-1681/1000-434**	25

Item No.		Pack. Unit
2-conductor fuse terminal block for mini-automotive blade-style fuses,		
48V, with test point, with blown fuse indication by LED, LED power consumption: 4.8 mA, gray		
Both nominal voltage and current are given by the LED or fuse. Blade-style fuses, please note touchproof protection for 42V and higher.		
◯ Circuit I	**2006-1681/1000-414**	25
◯ Circuit II	**2006-1681/1000-435**	25

2006 Series Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

End and intermediate plate, 1 mm thick



orange	**2006-1692**	100 (4x25)
gray	**2006-1691**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 41 A, light gray

2-way	**2006-402**	50 (2x25)
3-way	**2006-403**	50 (2x25)
4-way	**2006-404**	50 (2x25)
5-way	**2006-405**	50 (2x25)

Push-in type jumper bar, insulated,



I_N 41 A, light gray

from 1 to 3	**2006-433**	50 (2x25)
from 1 to 4	**2006-434**	50 (2x25)
from 1 to 5	**2006-435**	50 (2x25)

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks

yellow	**2006-115**	100 (4x25)

WMB Multi marking system,

10 strips with 10 markers per card, stretchable 5 - 5.2 mm

plain	**793-5501**	5

Marking strip, plain,



11 mm wide, 50 m roll

white	**2009-110**	1

Double-deck marker carrier,

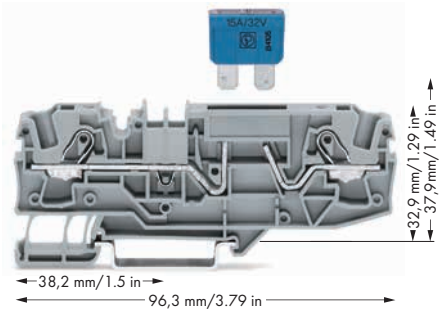


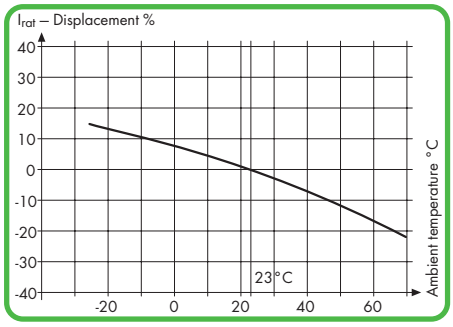
pivoting

gray	**2002-121**	50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.

0.5 - 6 (10) mm² ❶ | AWG 20 - 8
500 V/8 kV/3 ❷
I_N 25 A (30 A) ❸
Terminal block width 7.5 mm / 0.295 in
13 - 15 mm / 0.55 in ❹





❶ Conductor sizes: 0.5 mm² – 10 mm² "s + f-st"; Push-in conductor sizes: 1 mm² – 10 mm² "s" and 1.5 mm² – 6 mm² "insulated ferrule, 12 mm"

❷ 500 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ LED power consumption: 4.8 mA

❹ Strip length, see packaging or instructions.

	Item No.	Pack. Unit
2-conductor fuse terminal block for mini-automotive blade-style fuses,		
with test point,		
without blown fuse indication		
Both nominal voltage and current are given by the fuse.		
Blade-style fuses, please note touchproof protection for 42V and higher.		
gray	**2006-1681**	25
Blade-style fuses (not offered by WAGO)		
Excess-current circuit-breaker, thermal (not offered by WAGO)		
Recommended excess-current circuit-breakers from ETA		

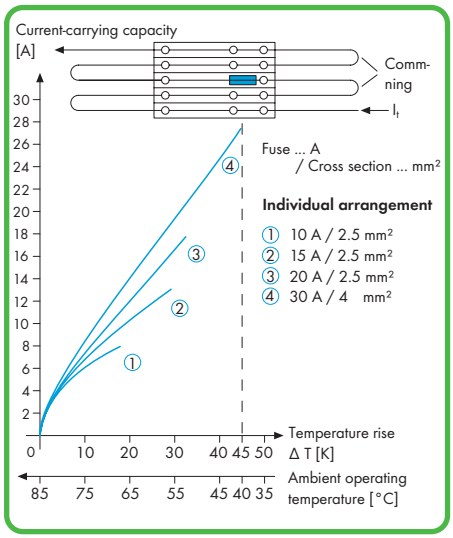


Diagram: Individual arrangement

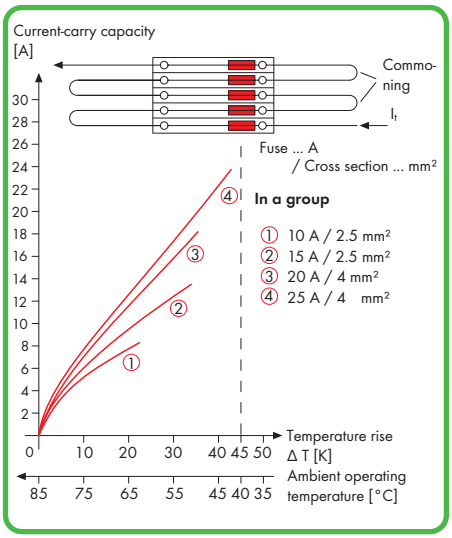


Diagram: Block arrangement

The rated currents of the fuse cartridges are defined differently in international standards. Due to the different current rating definitions, the recommended current-carrying permanent capacity of the fuses is max. 80% of their rated current according to DIN 72581 part 3 (for an ambient operating temperature of 23 °C).
Selecting the correct fuse cartridge is important for product safety within applications, as well as for fuse cartridge service life and reliability. Fuse cartridges may be used as protection (break-off point) if they are properly selected and used according to manufacturer specifications.

Information from the mini-automotive blade-type fuse manufacturers

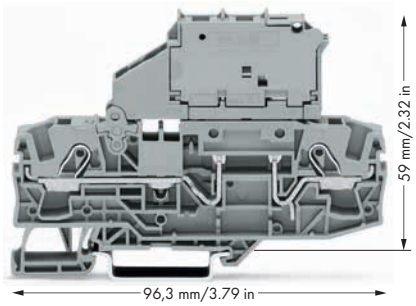
Derating T_{amb} /°C	%	F_T
- 25	14	0.877
- 20	13	0.885
- 15	12	0.893
- 10	11	0.901
- 5	10	0.909
0	9	0.917
5	8	0.926
10	6	0.943
15	4	0.962
20	2	0.980
23	0	1.000
30	- 2	1.020
35	- 4	1.042
40	- 6	1.064
45	- 8	1.087
50	- 10	1.111
55	- 13	1.149
60	- 16	1.190
65	- 19	1.235
70	- 22	1.282

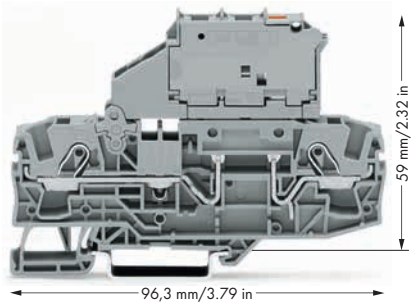
Regarding product safety, it is in generally necessary to test fuse cartridges under normal conditions and operational failures within your application.

TOPJOB® S
Fuse Disconnect Terminal Blocks with Pivoting Fuse Holder for Miniature Fuses 5 x 20 mm, 5 x 30 mm, ¼" x1¼", 2006 Series

CAGE CLAMP®S

0.5 - 6 (10) mm² ❶ | AWG 20 - 8 800 V/8 kV/3 ❷ | 600 V, 15 A I_N 10 A Terminal block width 7.5 mm / 0.295 in 13 - 15 mm / 0.55 in ❸	0.5 - 6 (10) mm² ❶ | AWG 20 - 8 800 V/8 kV/3 ❷ I_N 10 A Terminal block width 7.5 mm / 0.295 in 13 - 15 mm / 0.55 in ❸





❶ Conductor sizes: 0.5 mm² – 10 mm² "s + f-st"; Push-in conductor sizes: 1 mm² – 10 mm² "s" and 1.5 mm² – 6 mm² "insulated ferrule, 12 mm"

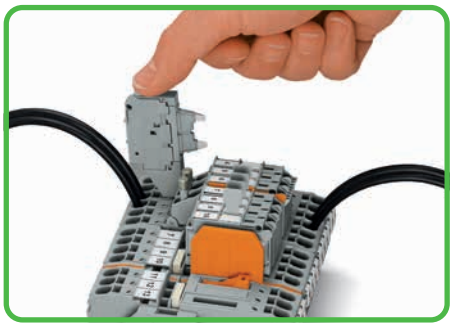
❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

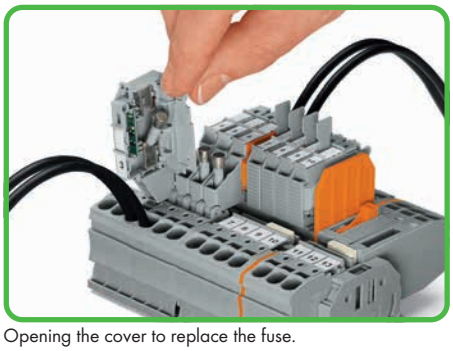
❸ Strip length, see packaging or instructions.

❹ See application notes for:
Star point jumper, page 103

	Item No.	Pack. Unit
2-conductor fuse disconnect terminal block with pivoting fuse holder,		
without blown fuse indication		
Both nominal voltage and current are given by the fuse.		
for miniature fuses 5 x 20 mm		
gray	**2006-1611**	25
for miniature fuses 5 x 30 mm		
gray	**2006-1621**	25
for miniature fuses 1/4" x 11/4"		
gray	**2006-1631**	25

	Item No.	Pack. Unit
2-conductor fuse disconnect terminal block with pivoting fuse holder, gray,		
with blown fuse indication by LED		
Both nominal voltage and current are given by the LED or fuse. Leakage current in case of blown fuse: LED 2mA,		
for miniature fuses 5 x 20 mm		
12 - 30 V	**2006-1611/1000-541**	25
30 - 65 V	**2006-1611/1000-542**	25
120 V	**2006-1611/1000-867**	25
230 V	**2006-1611/1000-836**	25
for miniature fuses 5 x 30 mm		
12 - 30 V	**2006-1621/1000-541**	25
30 - 65 V	**2006-1621/1000-542**	25
120 V	**2006-1621/1000-867**	25
230 V	**2006-1621/1000-836**	25
380 - 500 V	**2006-1621/1000-859**	25
for miniature fuses 1/4" x 11/4"		
12 - 30 V	**2006-1631/1000-541**	25
30 - 65 V	**2006-1631/1000-542**	25
120 V	**2006-1631/1000-867**	25
230 V	**2006-1631/1000-836**	25
380 - 500 V	**2006-1631/1000-859**	25


Pivoting the fuse holder in the locked open position.


Opening the cover to replace the fuse.

2006 Series Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

End and intermediate plate, 1 mm thick



orange	**2006-1692**	100 (4x25)
gray	**2006-1691**	100 (4x25)

End plate for fuse terminal blocks,



2 mm thick

orange	**2006-992**	100 (4x25)
gray	**2006-991**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 41 A,
light gray

2-way	**2006-402**	50 (2x25)
3-way	**2006-403**	50 (2x25)
4-way	**2006-404**	50 (2x25)
5-way	**2006-405**	50 (2x25)

Star point jumper, insulated, ❹



I_N = I_N terminal block, light gray

1-3-5	**2006-405/011-000**	50 (2x25)

Push-in type jumper bar, insulated,



I_N 41 A,
light gray

from 1 to 3	**2006-433**	50 (2x25)
from 1 to 4	**2006-434**	50 (2x25)
from 1 to 5	**2006-435**	50 (2x25)

Protective warning marker,



with high-voltage symbol, black,
for 5 terminal blocks

yellow	**2006-115**	100 (4x25)

Test plug,



with 500 mm cable,
2 mm Ø

red	**210-136**	50

WMB Multi marking system,

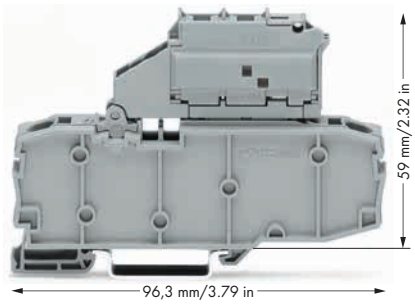
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm

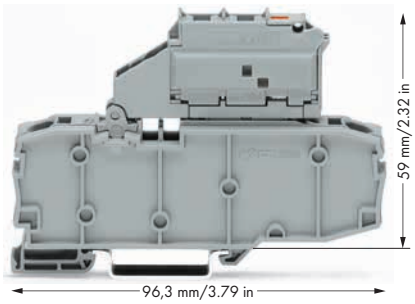
plain	**793-5501**	5

Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® S
Fuse Disconnect Terminal Blocks with Pivoting Fuse Holder for Miniature Fuses ¼" x 1¼", 2006 Series

0.5 - 6 (10) mm² ❶ | AWG 20 - 8 800 V/8 kV/3 ❷ | 600 V, 15 A I_N 10 A Terminal block width 10.4 mm / 0.409 in 13 - 15 mm / 0.55 in ❸	0.5 - 6 (10) mm² ❶ | AWG 20 - 8 800 V/8 kV/3 ❷ I_N 10 A Terminal block width 10.4 mm / 0.409 in 13 - 15 mm / 0.55 in ❸





❶ Conductor sizes: 0.5 mm² – 10 mm² "s + f-st"; Push-in conductor sizes: 1 mm² – 10 mm² "s" and 1.5 mm² – 6 mm² "insulated ferrule, 12 mm"

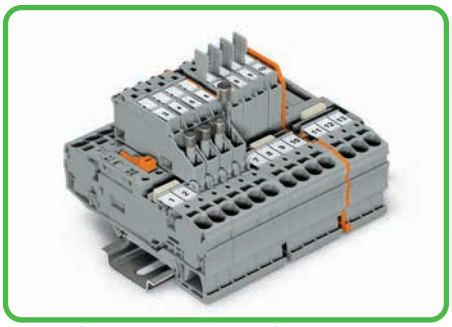
❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Star point jumper, page 103

Item No.		Pack. Unit
Fuse disconnect terminal block with pivoting fuse holder and end plate, without blown fuse indication Both nominal voltage and current are given by the fuse. for miniature fuses 1/4" x 11/4"		
gray	**2006-1631/099-000**	25

Item No.		Pack. Unit
Fuse disconnect terminal block with pivoting fuse holder and end plate, gray, with blown fuse indication by LED Both nominal voltage and current are given by the LED or fuse. Leakage current in case of blown fuse: LED 2mA, for miniature fuses 1/4" x 11/4"		
12 - 30 V	**2006-1631/1099-541**	25
30 - 65 V	**2006-1631/1099-542**	25
120 V	**2006-1631/1099-867**	25
230 V	**2006-1631/1099-836**	25
380 - 500 V	**2006-1631/1099-859**	25



Pivoting fuse holder with spare fuse holders

Protective warning markers must be applied individually. Due to the 10.4 mm width of the fuse terminal blocks with pivoting fuse holder, 2002 Series jumpers must be used.

2006 Series Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

End plate for fuse terminal blocks,			
	2 mm thick		
	orange	**2006-992**	100 (4x25)
	gray	**2006-991**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 25 A,		
	light gray		
	from 1 to 3	**2002-433**	200 (8x25)
	from 1 to 5	**2002-435**	100 (4x25)
	from 1 to 7	**2002-437**	100 (4x25)
	from 1 to 9	**2002-439**	100 (4x25)
Star point jumper, insulated, ❹			
	I_N = I_N terminal block, light gray		
	1-3-5	**2002-405/011-000**	100 (4x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**2006-115**	100 (4x25)
WMB Multi marking system,			
	10 strips with 10 markers per card,		
	stretchable 5 - 5.2 mm		
	plain	**793-5501**	5
Test plug,			
	with 500 mm cable,		
	2 mm Ø		
	red	**210-136**	50

Screwless end stop,			
	for DIN 35 rail,		
	6 mm wide		
	gray	**249-116**	100 (4x25)
Screwless end stop,			
	for DIN 35 rail,		
	10 mm wide		
	gray	**249-117**	50 (2x25)

Miniature fuses

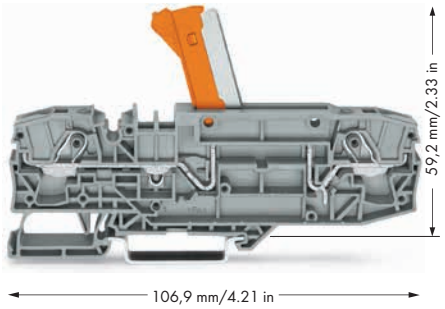
Series Item No.		Overload and short circuit protection		Short circuit protection only	
		Individual argmt.	Group argmt.	Individual argmt.	Group argmt.
		Fused disconnect terminal blocks			
2006-1611	7.5	1.6 W	1.6 W	2.5 W	2.5 W
2006-1621	7.5	1.6 W	1.6 W	2.5 W	2.5 W
2006-1631	7.5	1.6 W	1.6 W	2.5 W	2.5 W
2006-1631 /099-...	10.4	2.5 W	2.5 W	2.5 W	2.5 W
2006-1631 /1099-...	10.4	2.5 W	2.5 W	2.5 W	2.5 W

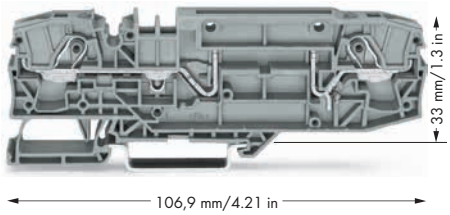
When selecting miniature fuses, the maximum power loss listed below should not be exceeded. The power loss is determined according to IEC or EN 60947-7-3/VDE 0611-6 at 23 °C. The temperature rise of the terminal blocks must be checked according to their application and mounting. Higher ambient temperatures represent an additional impact on miniature fuses. Therefore, in such applications the rated current must be reduced if necessary. More details are available from the fuse manufacturer.

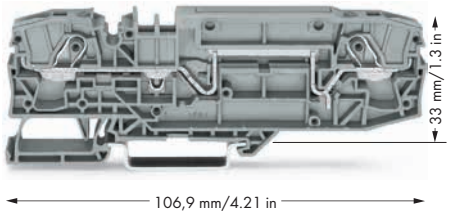
Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® S
Disconnect Terminal Blocks for Test and Measurement 1500 VDC, Carrier/ Through Terminal Blocks of Same Profile 6 (10) mm²/30 A, 2006 Series

0.5 - 6 (10) mm² ❶ | AWG 20 - 8 **AC/DC 1000 V/ DC 1500 V/12 kV/3 ❷** **I_N 30 A** **Terminal block width 15 mm / 0.591 in** **13 - 15 mm / 0.55 in ❸**	**0.5 - 6 (10) mm² ❶ | AWG 20 - 8** **AC/DC 1000 V/ DC 1500 V/12 kV/3 ❷** **I_N 30 A** **Terminal block width 15 mm / 0.591 in** **13 - 15 mm / 0.55 in ❸**	**0.5 - 6 (10) mm² ❶ | AWG 20 - 8** **AC/DC 1000 V/ DC 1500 V/12 kV/3 ❷** **I_N 30 A** **Terminal block width 15 mm / 0.591 in** **13 - 15 mm / 0.55 in ❸**







Item No.		Pack. Unit
2-conductor disconnect terminal block for test and measurement, with test point, orange disconnect link		
gray	**2006-8671**	12
blue	**2006-8674**	12

Item No.		Pack. Unit
2-conductor carrier terminal block, with test point		
gray	**2006-8661**	12
blue	**2006-8664**	12

Item No.		Pack. Unit
2-conductor through terminal block, with test point, same profile as 2-conductor disconnect terminal block		
gray	**2006-8601**	12
blue	**2006-8604**	12

Item-Specific Accessories

Disconnect plug for carrier terminal blocks, suited when using a carrier terminal block as disconnect terminal block



orange **2006-8401** 48 (4x12)

2006 Series Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

End and intermediate plate, 1 mm thick



orange	**2006-8692**	48 (4x12)
gray	**2006-8691**	48 (4x12)

Protective warning marker, ❹ with high-voltage symbol, black, for 5 terminal blocks



yellow	**2006-115**	100 (4x25)

Push-in type jumper bar, insulated, I_N 41 A, light gray



from 1 to 3	**2006-433**	50 (2x25)
from 1 to 5	**2006-435**	50 (2x25)

Lockout cap, for conductor entry hole and operating slot



gray	**2006-191**	25

WMB Multi marking system, 10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm

plain	**793-501**	5

WMB Multi marking system, plain, 10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm



yellow	**793-501/000-002**	
red	**793-501/000-005**	
blue	**793-501/000-006**	
gray	**793-501/000-007**	
orange	**793-501/000-012**	
light green	**793-501/000-017**	
green	**793-501/000-023**	
violet	**793-501/000-024**	
		5

Marking strip, plain, 11 mm wide, 50 m roll



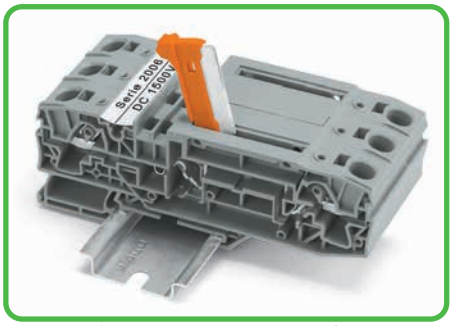
white	**2009-110**	1

WMB Inline, plain, stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll



white	**2009-115**	1

Certification organizations can be found in the overview on pages 622 and 623.



Disconnect/test terminal block with knife disconnect (2006-8671) in disconnect position

Both 2006-8671 and 2006-8661 TOPJOB® S disconnect terminal blocks have been specially designed for use in photovoltaic and wind power systems, where voltages exceeding 1,000 V (IEC) and 600 V (UL) are required (e.g., generator junction boxes).

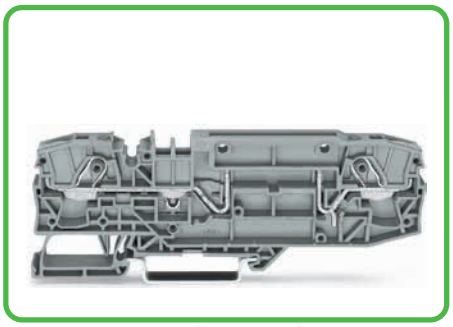
- Ideal for high voltages in renewable energy applications
- **Disconnect terminal blocks with two alternative disconnect options:**
  with orange knife disconnect (2006-8671)
  with orange disconnect plug (2006-8661)
- This 2006 Series terminal blocks are approved for 30 A/1,500 VDC (IEC) or 1,000 VDC (UL)
- With a terminal block width of 15 mm, the maximum cross-section for solid and fine-stranded conductors is 10 mm² (AWG 8) and 6 mm² (AWG 10) for ferruled conductors.
- Equipped with test slots
- Compatible with through terminal blocks of the same profile and all other TOPJOB® S terminal blocks

❶ Conductor sizes: 0.5 mm² – 10 mm² "s + f-st"; Push-in conductor sizes: 1 mm² – 10 mm² "s" and 1.5 mm² – 6 mm² "insulated ferrule, 12 mm"

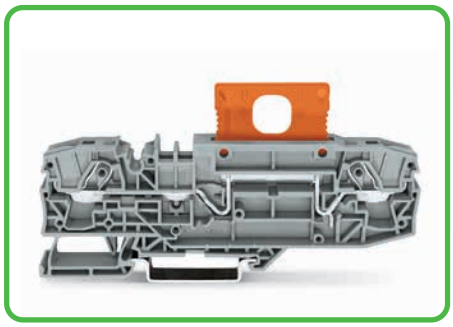
❷ AC/DC 1000 V = rated voltage
DC 1500 V
12 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

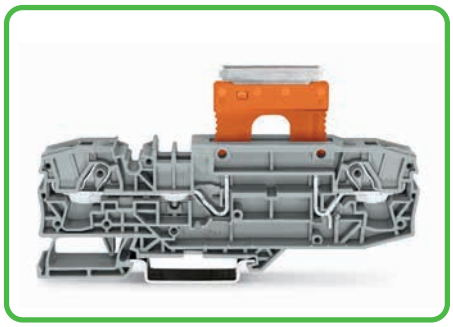
❹ Protective warning marker must be applied individually.



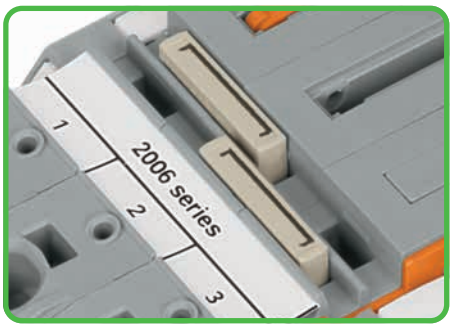
Carrier terminal block (2006-8661) with receptacle for orange disconnect plug



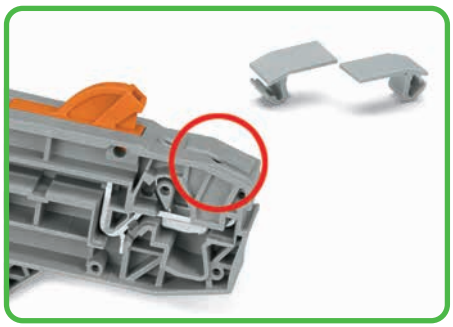
Orange disconnect plug (2006-8401) in operating position



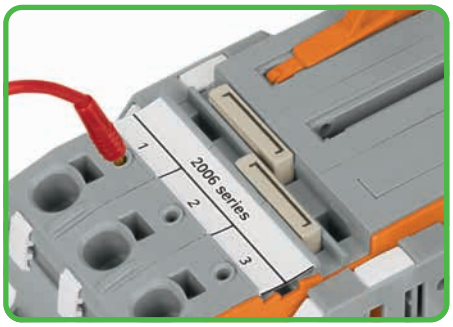
Orange disconnect plug (2006-8401) in parked position



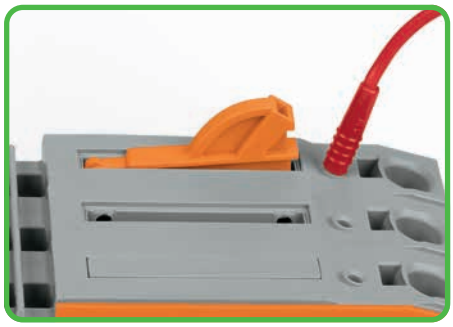
Commoning a 15 mm wide terminal block via push-in type jumper bars: 1 to 3 (2006-433) and 1 to 5 (2006-435).

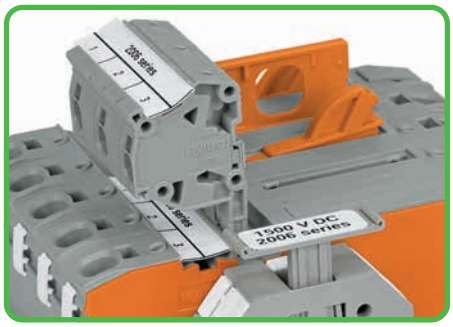


Cover seals unused conductor entry.



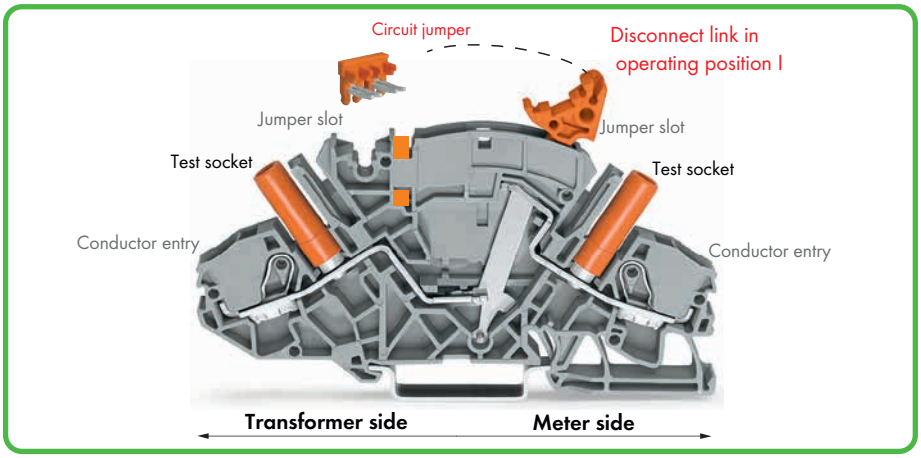
Test slots on both terminal block sides allow for direct measurement.

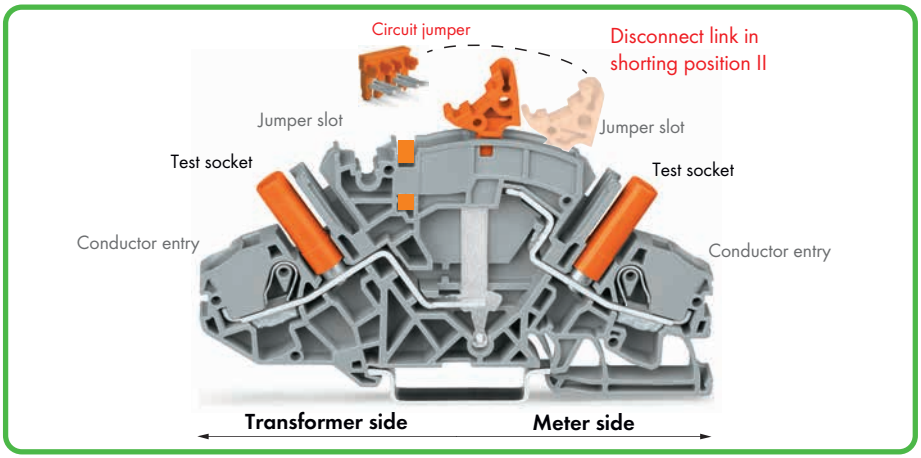


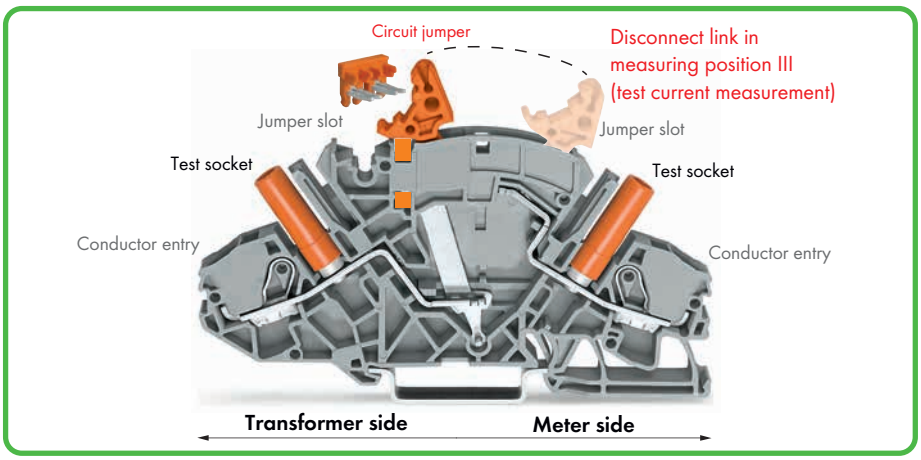


Alternatively, measurement can also be performed using TOPJOB® S connectors (2006-511) from terminal block 1 to 2. Spacer modules (2006-549) must be used to compensate for the 15 mm terminal block width.

TOPJOB® S
2007-8821 Current Transformer Terminal Blocks (Orange Disconnect Link)







The TOPJOB® S current transformer (disconnect/test) terminal block **(2007-8821)** has been specially designed for current and voltage transformer circuits to measure the current transformer's operability.

First, the current transformer is shorted via disconnect link and circuit jumper (insert jumper, move disconnect link from operation position I to shorting position II, activate shorting path). Connecting a measuring device via test socket on the meter side can only be performed once circuit disconnection is complete (disconnect link in measuring position III).

- Features top-of-unit circuit jumper slot for shorting path activation.
- Disconnect link provides intuitive and easy operation, as well as exact switching status indication.
- Combines high functionality with compact design (99.6 mm long and 8 mm wide).
- All 2007 Series terminal blocks are rated 30 A/500 V (IEC) and 300 V (UL).
- With a terminal block width of 8 mm, the maximum cross-section for solid and fine-stranded conductors is 10 mm² (AWG 8) and 6 mm² (AWG 10) for ferruled conductors.
- Touch-proof test sockets for 4 mm Ø test plugs on transformer and meter side.
- Compatible with through and ground conductor terminal blocks of same profile.







Preparing the shorting path for current transformer circuits
Inserting insulated, touch-proof circuit jumpers into jumper slot. Using locking covers or profiles for adjacent terminal blocks allows disconnect links to be operated simultanously.



CAGE CLAMP®S clamps the following copper conductors:*

solid



stranded

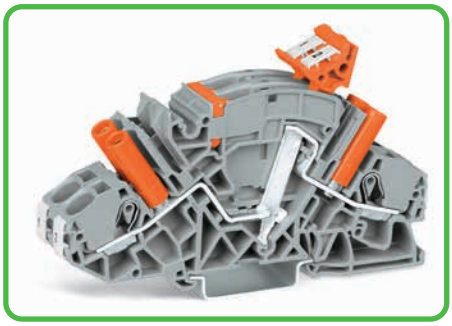


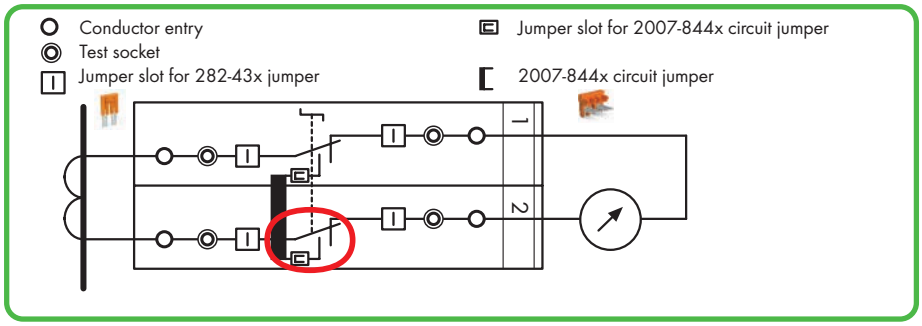
fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

TOPJOB® S
Implementing a Current and Voltage Transformer Circuit

Disconnect link in operating position I

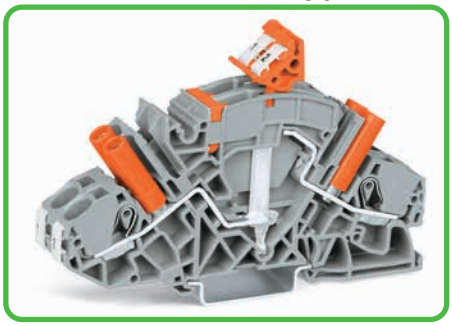


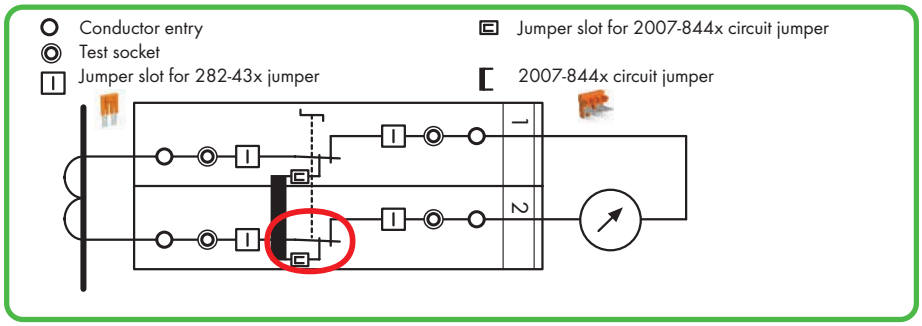


Terminal blocks required:
2 x disconnect/test terminal block 2007-8821
1 x circuit jumper, orange 2007-8442
optional with locking covers or interlocking links

In operating position, the measuring device is connected to the transformer, the circuit jumper is inserted and the disconnect link is in position I.

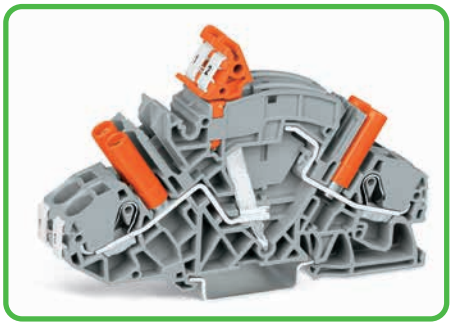
Disconnect link in shorting position II

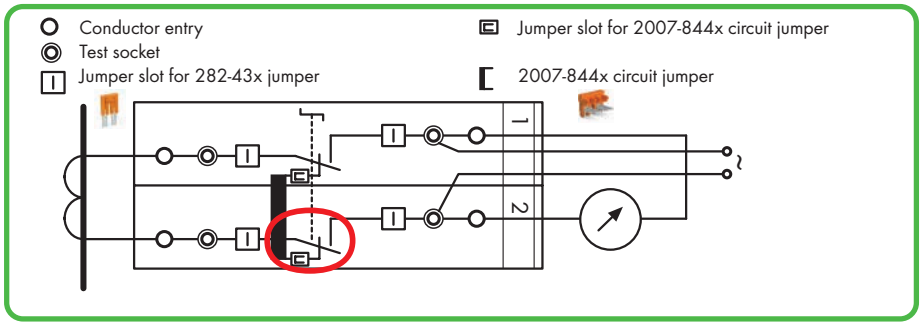




The transformer is **not** disconnected from the measuring device yet, the shorting path is activated by moving the disconnect link into shorting position II and the transformer is safely shorted.

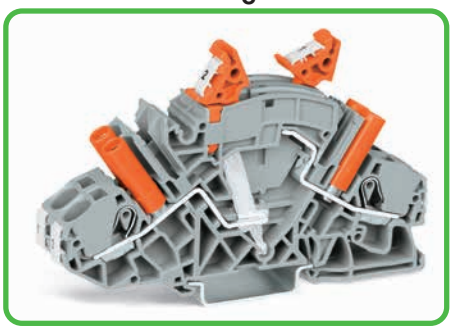
Measuring, disconnect link in measuring position III / test current measurement

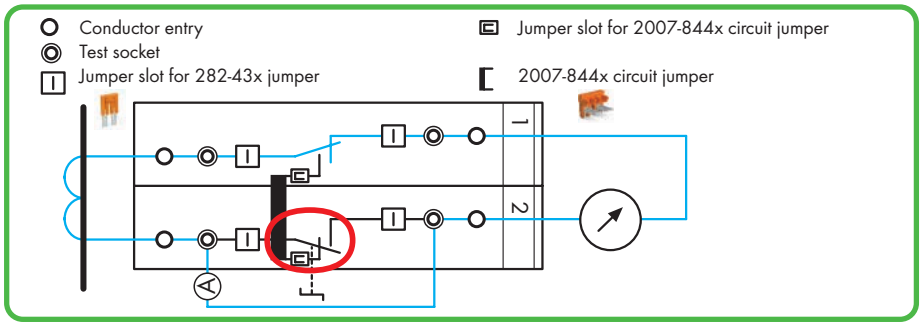




The measuring device/relay is electrically disconnected from the transformer. If required, an external voltage can be applied to the measuring device/relay via the test socket.

Measurement testing via both test sockets





Terminal block 1: Disconnect link in operating position I
Terminal block 2: Disconnect link in measuring position III

Measurement testing: First insert the reference current meter (A) into the test socket, then move the disconnect link into measurement position III (test current measurement).



fine-stranded,
tip-bonded



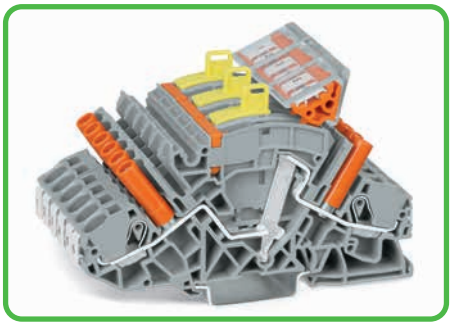
fine-stranded,
with ferrule
(gastight crimped)



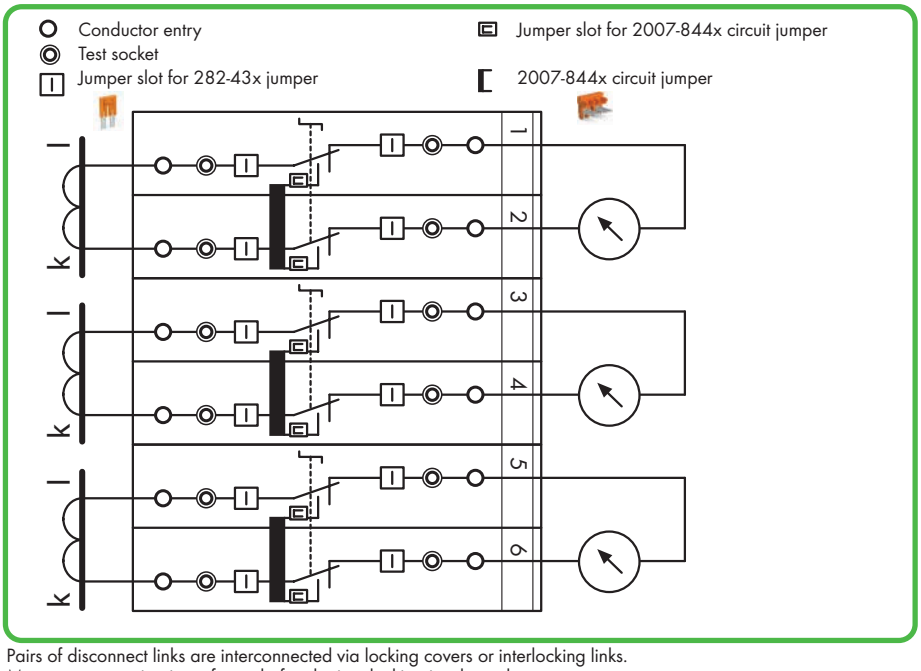
fine-stranded,
with pin terminal
(gastight crimped)

Examples for Current Transformer Circuits

Measuring set for a 3-phase current transformer



Terminal blocks required:
6 x disconnect/test terminal block 2007-8821
3 x circuit jumper, orange 2007-8442
In addition: interlocking links, locking covers, lock-outs

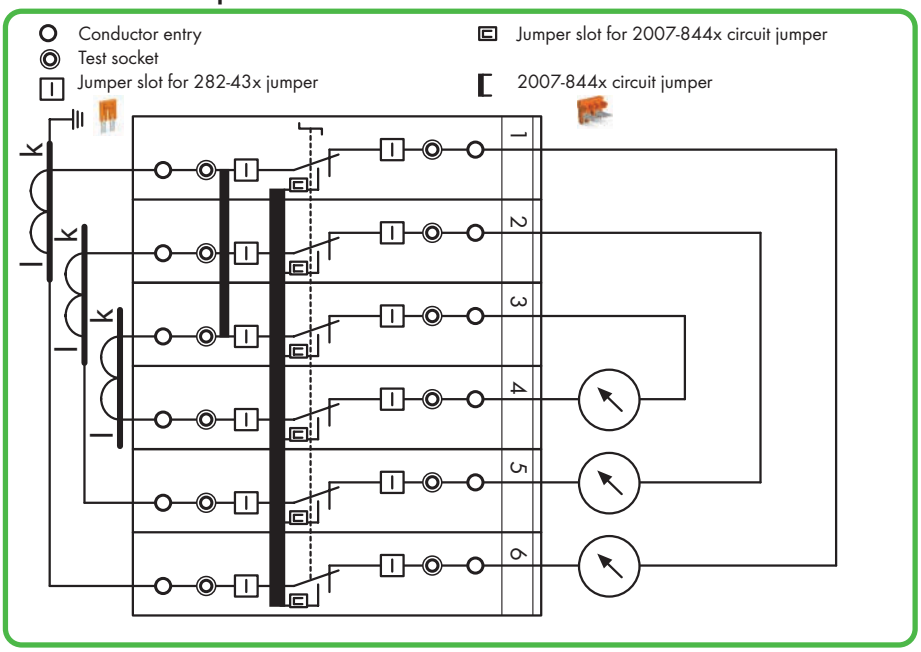


Pairs of disconnect links are interconnected via locking covers or interlocking links.
Measurement testing is performed after the interlocking is released.

Measuring set for a 3-phase current transformer with 'Y' point

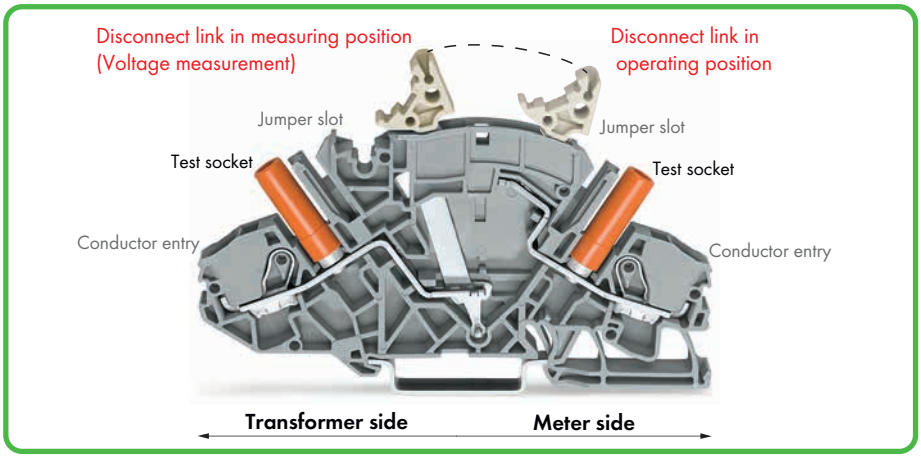


Terminal blocks required:
6 x disconnect/test terminal block 2007-8821
1 x circuit jumper, orange 2007-8446
1 x jumper, orange 282-433
In addition: interlocking links, locking covers, lock-outs



All 6 disconnect links are interconnected via via locking covers or interlocking links.

TOPJOB® S
2007-8811 Voltage Transformer Terminal Blocks (Light Gray Disconnect Link)

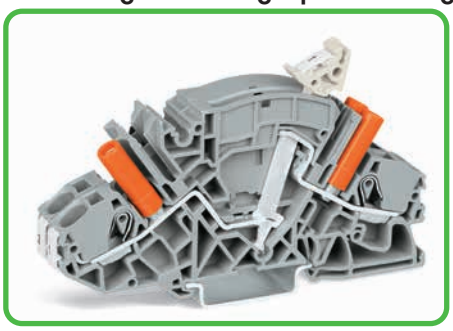


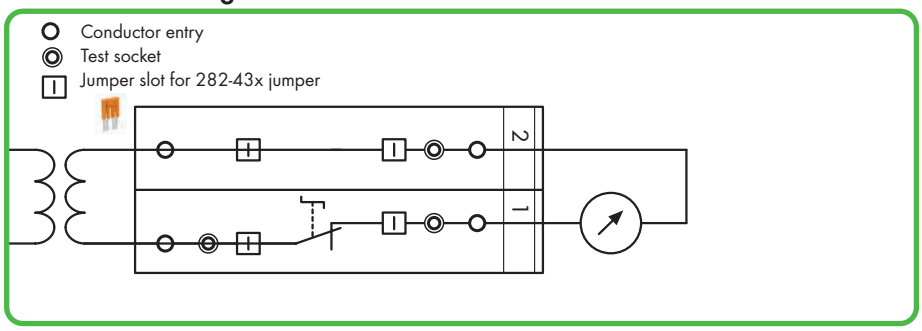
The TOPJOB® S voltage transformer (disconnect/test) terminal block **(2007-8811)** has been specially designed for voltage transformer circuits.

First, the voltage transformer must be disconnected from the circuit (from operating position to measurting position). Connecting a measuring device via test socket on the meter side can only be performed once circuit disconnection is completed (measuring position).

- For voltage transformer circuits (no circuit jumper slot required as for current transformer terminal block 2007-8821).
- Disconnect link provides intuitive and easy operation, as well as exact switching status indication.
- Combines high functionality with compact design (99.6 mm long and 8 mm wide).
- All 2007 Series terminal blocks are rated at 30 A/500 V (IEC) and 300 V (UL).
- With a terminal block width of 8 mm, the maximum cross-section for solid and fine-stranded conductors is 10 mm² (AWG 8) and 6 mm² (AWG 10) for ferruled conductors.
- Touch-proof test sockets for 4 mm ∅ test plugs on transformer and meter side.
- Compatible with through and ground conductor terminal blocks of same profile.

Example for voltage transformer testing
Measuring set for single-phase voltage transformer testing





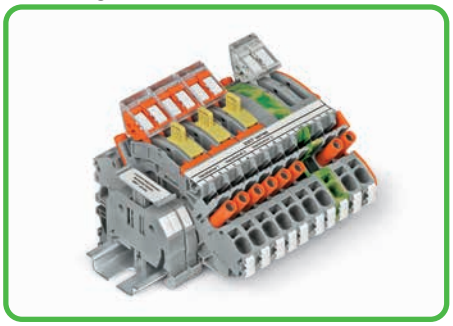
Terminal blocks required:

1 x disconnect/test terminal block	2007-8811
1 x through terminal block	2007-8801
1 x end plate, orange	2007-8892

In addition: locking cover, lock-out

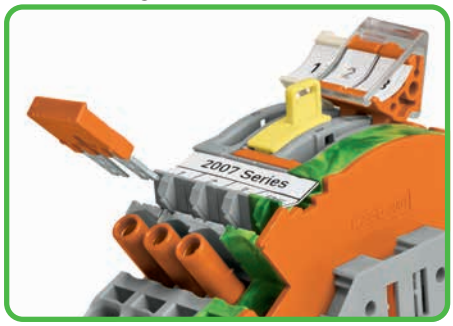
Disconnecting the voltage transformer from the circuit: Move disconnect link from operating position to measuring position.
Voltage measurement: Connecting a measuring device via test socket on the meter side can only be performed after disconnection is completed (measuring position).

Marking



Marking via WMB Multi markers or marking strips.

Commoning



Additional commoning option via circuit-related jumpers or testing via test plug adapters (209-170) on transformer side

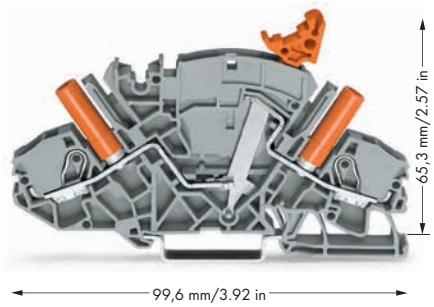
Locking cover for disconnect links

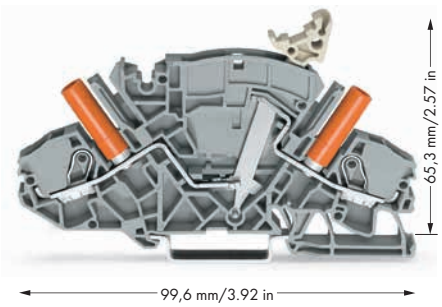


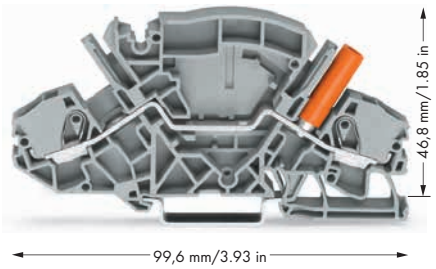
Multipole switching via snap-on type, transparent (locking) cover for disconnect links.

TOPJOB® S
Disconnect Terminal Blocks for Test and Measurement, 6 mm²/30 A, for Current and Voltage Transformer Circuits, 2007 Series

0.5 - 6 (10) mm² ❶ | AWG 20 - 8 500 V/6 kV/3 ❷ I_N 30 A Terminal block width 8 mm / 0.315 in 13 - 15 mm / 0.55 in ❸	0.5 - 6 (10) mm² ❶ | AWG 20 - 8 500 V/6 kV/3 ❷ I_N 30 A Terminal block width 8 mm / 0.315 in 13 - 15 mm / 0.55 in ❸	0.5 - 6 (10) mm² ❶ | AWG 20 - 8 500 V/6 kV/3 ❷ I_N 30 A Terminal block width 8 mm / 0.315 in 13 - 15 mm / 0.55 in ❸







Item No.		Pack. Unit
2-conductor disconnect terminal block for test and measurement, e.g., current transformer circuits, with receptacle for adjacent jumper with switch lever, with touch-proof test sockets, for 4 mm Ø test plug		
gray	**2007-8821**	20

Item No.		Pack. Unit
2-conductor disconnect terminal block for test and measurement, e.g., voltage transformer circuits, with touch-proof test sockets, for 4 mm Ø test plug		
gray	**2007-8811**	20

Item No.		Pack. Unit
2-conductor through terminal block, with touch-proof test socket, for 4 mm Ø test plug		
gray	**2007-8801**	20

Item-Specific Accessories

Adjacent jumper for switch lever, insulated, orange,



I_N 30 A		
2-way	**2007-8442**	50 (5x10)
3-way	**2007-8443**	50 (5x10)
4-way	**2007-8444**	50 (5x10)
5-way	**2007-8445**	50 (5x10)
6-way	**2007-8446**	50 (5x10)
7-way	**2007-8447**	50 (5x10)
8-way	**2007-8448**	50 (5x10)

2006 Series Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

End and separator plate, 1.5 mm thick,



without use of lock-out seal		
orange	**2007-8892**	50 (5x10)
gray	**2007-8891**	50 (5x10)

End and separator plate, 1.5 mm thick,



for use of lock-out seal		
orange	**2007-8894**	50 (5x10)
gray	**2007-8893**	50 (5x10)

Lock-out,



for disconnect link		
yellow	**2007-8899**	100 (5x20)

Locking cover, transparent,



mechanically locks multiple links		
1-pole	**282-881**	50 (5x10)
2-pole	**282-882**	50 (5x10)
3-pole	**282-883**	50 (5x10)
4-pole	**282-884**	50 (5x10)
5-pole	**282-885**	50 (5x10)
6-pole	**282-886**	50 (5x10)
7-pole	**282-887**	50 (5x10)
8-pole	**282-888**	50 (5x10)

Jumper, insulated,



I_N 30 A, orange		
2-way	**282-432**	50 (5x10)
3-way	**282-433**	50 (5x10)
4-way	**282-434**	50 (5x10)
5-way	**282-435**	50 (5x10)
6-way	**282-436**	50 (5x10)
7-way	**282-437**	50 (5x10)
8-way	**282-438**	50 (5x10)
9-way	**282-439**	50 (5x10)
10-way	**282-440**	50 (5x10)

Jumper with safety lid, insulated,



I_N 30 A, orange		
2-way	**282-432/100-000**	
3-way	**282-433/100-000**	
4-way	**282-434/100-000**	
		50 (5x10)

Interlocking link,



mechanically locks multiple links, 1 m/3'3" long		
transparent	**210-254**	1

Jumper, special design,



I_N 30 A, orange		
1-3-5	**282-435/011-000**	
1-2-4-6	**282-436/301-000**	
1-3-5-7	**282-437/011-000**	
1-4-7	**282-437/012-000**	
1-2-5-8	**282-438/300-000**	
1-4-7-8	**282-438/301-000**	
1-3-5-7-9	**282-439/011-000**	
		50 (5x10)

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks		
yellow	**2006-115**	100 (4x25)

WMB Multi marking system,

10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm		
plain	**793-501**	5

Marking strip, plain,

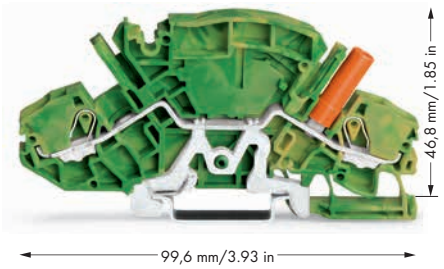


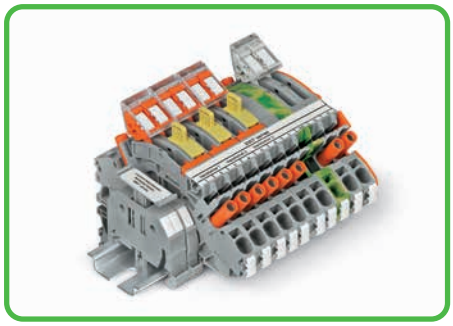
11 mm wide, 50 m roll		
white	**2009-110**	1

Certification organizations can be found in the overview on pages 622 and 623.

0.5 - 6 (10) mm² ❶ | AWG 20 - 8

Terminal block width 8 mm / 0.315 in
13 - 15 mm / 0.55 in ❸





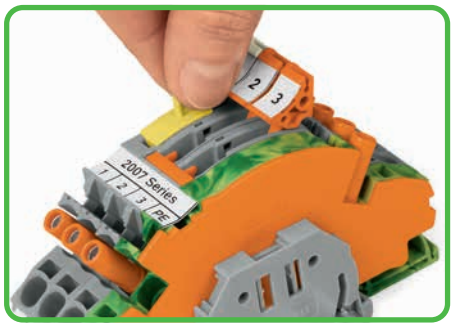
The terminal blocks feature integrated test sockets for touch-proof 4 mm Ø test plugs.

❶ Conductor sizes: 0.5 mm² – 10 mm² "s + f-st"; Push-in conductor sizes: 1 mm² – 10 mm² "s" and 1.5 mm² – 6 mm² "insulated ferrule, 12 mm"

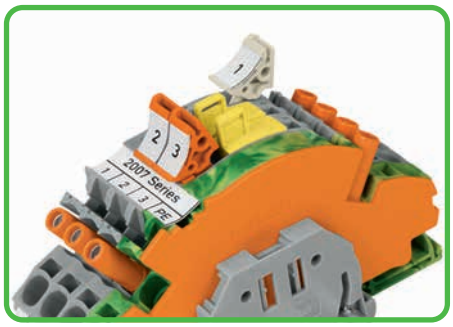
❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

	Item No.	Pack. Unit
2-conductor ground terminal block,		
with touch-proof test socket,		
for 4 mm Ø test plug		
green-yellow	**2007-8807**	20



Lock-out prevents accidental operation of disconnect link.



Lock-out snaps into one of two notched positions.

WMB Multi marking system,			
	10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm, yellow		
	k/l (50x)	**794-5553/000-002**	5
WMB Multi marking system,			
	10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm, blue		
	U/V (50x)	**794-5554/000-006**	5



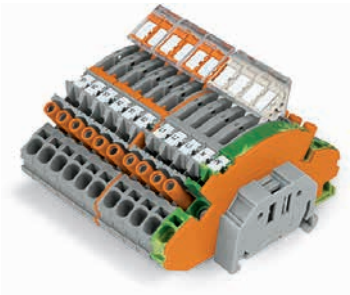
Interlocking link for mechanical interlocking of several links for multi-pole switching



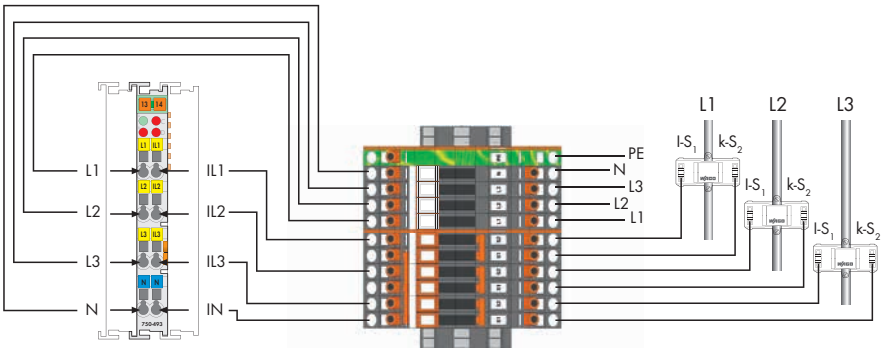
A lock-out seal can be used on the disconnect link in operating position I in connection with end and separator plate (2007-8893 or 2007-8894)

TOPJOB® S
Terminal Block Assemblies for Current and Voltage Transformers
2007 Series





Item No. for 2007-8873 Description	Quantity
249-117 Screwless end stop, 10 mm wide	2
282-882 Locking cover, mechanically locks multiple links, 2-pole	3
282-884 Locking cover, mechanically locks multiple links, 4-pole	1
2007-8442 Adjacent jumper for switch lever, insulated, 2-way	3
2007-8807 2-conductor ground terminal block, with touch-proof test socket, for 4 mm Ø test plug	1
2007-8811 2-conductor disconnect terminal block for test and measurement, with touch-proof test sockets, for 4 mm Ø test plug	4
2007-8821 2-conductor disconnect terminal block for test and measurement, with touch-proof test sockets, for 4 mm Ø test plug	6
2007-8892 End and separator plate, 1.5 mm thick, without use of lock-out seal	2
2009-135 WMB Inline, plain, stretchable 5 - 5.2 mm, 8,000 WMB markers, 5 mm, on roll	21 Markers
282-435/011-000 Jumper, insulated, 1-3-5	1
Assembly width incl. end stop 11.2 cm	



3-Phase Power Measurement Module 750 Series

Terminal Block Assembly for Current and Voltage Transformers 2007 Series

Current Transformers 855 Series



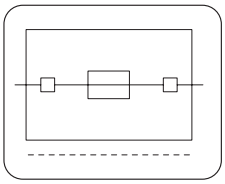


Item No. for 2007-8876 Description	Quantity
249-117 Screwless end stop, 10 mm wide	2
282-369 Collective carrier for jumpers, for DIN 35 rail, for jumpers for transverse switching terminal block (282-811) and longitudinal switching disconnect terminal block (282-821)	1
282-882 Locking cover, mechanically locks multiple links, 2-pole	3
2007-8442 Adjacent jumper for switch lever, insulated, 2-way	3
2007-8821 2-conductor disconnect terminal block for test and measurement, with touch-proof test sockets, for 4 mm Ø test plug	6
2007-8892 End and separator plate, 1.5 mm thick, without use of lock-out seal	1
2009-135 WMB Inline, plain, stretchable 5 - 5.2 mm, 8,000 WMB markers, 5 mm, on roll	12 Markers
282-435/011-000 Jumper, insulated, 1-3-5	1
Assembly width incl. end stop 8.5 cm	

TOPJOB® S
2004 Series Fuse Plugs
on 2002 Series Carrier Terminal Blocks

Fuse plug with pull-tab
for miniature fuses 5 x 20 mm
250 V / I_N 6.3 A
Plug width 6.1 mm / 0.24 in

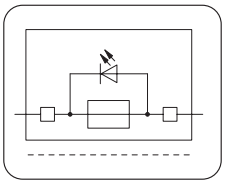




Item No.		Pack. Unit
Fuse plug with pull-tab,		
for miniature fuses 5 x 20 mm		
Both nominal voltage and current are given by the fuse.		
gray	**2004-911**	50

Fuse plug with pull-tab
for miniature fuses 5 x 20 mm
250 V / I_N 6.3 A
Plug width 6.1 mm / 0.24 in





Item No.		Pack. Unit
Fuse plug with pull-tab,		
for miniature fuses 5 x 20 mm,		
with indicator lamp, gray		
Both nominal voltage and current are given by the LED or fuse. Leakage current in case of blown fuse: LED 2mA		
12 - 30 V	**2004-911/1000-541**	50
30 - 65 V	**2004-911/1000-542**	50
120 V	**2004-911/1000-867**	50
230 V	**2004-911/1000-836**	50

Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

2-conductor carrier terminal block,
❶ 0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
gray **2002-1661** 50

End and intermediate plate, 1 mm thick
orange **2002-1692** 100 (4x25)
gray **2002-1691** 100 (4x25)

3-conductor carrier terminal block,
❷ 0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
gray **2002-1761** 50

End and intermediate plate, 1 mm thick
orange **2002-1792** 100 (4x25)
gray **2002-1791** 100 (4x25)

4-conductor carrier terminal block,
❸ 0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
gray **2002-1861** 50

End and intermediate plate, 1 mm thick
orange **2002-1892** 100 (4x25)
gray **2002-1891** 100 (4x25)

2-conductor carrier terminal block,
❹ 0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
gray **2002-1961** 50

End and intermediate plate, 1 mm thick
orange **2002-1992** 100 (4x25)
gray **2002-1991** 100 (4x25)

Double-deck carrier terminal block,
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
L/L **2002-2961** 50

Double-deck carrier terminal block,
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
L/N **2002-2963** 50

End and intermediate plate, 1 mm thick
orange **2002-2992** 100 (4x25)
gray **2002-2991** 100 (4x25)

End plate for fuse terminal blocks,
2 mm thick
orange **2002-992** 100 (4x25)
gray **2002-991** 100 (4x25)

Shorting link, 5 x 20 mm,
if the fuse plug is used as disconnect plug
I_N 6.3 A **281-503** 250 (10x25)

Accessories

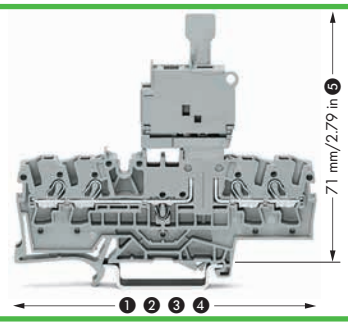
WMB Multi marking system,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

WMB Multi marking system, plain,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm

yellow	**793-5501/000-002**
red	**793-5501/000-005**
blue	**793-5501/000-006**
gray	**793-5501/000-007**
orange	**793-5501/000-012**
light green	**793-5501/000-017**
green	**793-5501/000-023**
violet	**793-5501/000-024**

5

Certification organizations can be found in the overview on pages 622 and 623.



Fuse plug dimensions:
1 66.5 mm/2.62 in for 2002-1661
2 76.8 mm/3.02 in for 2002-1761
3 87.5 mm/3.45 in for 2002-1861
3 72.9 mm/2.87 in for 2002-1961
4 with inserted fuse plug

Using pluggable fuse holders with rail-mount terminal blocks for control circuit protection is highly advantageous for the user since the function and the wiring are accomplished by two separate parts:

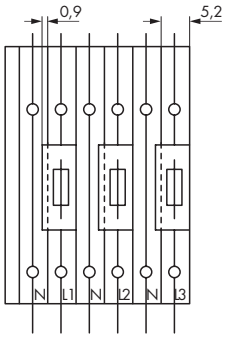
- No additional cost for assembly and wiring
- No risk of accidental contact with live parts during disconnection of fuse plug
- If exchanging a defective fuse, the fuse plug is completely separated from the carrier terminal block. This provides safe fuse changeout away from current carrying parts.
- The fuse plug can be removed by service personnel, avoiding unintentional reclosing of the circuit by another person.
- Quick replacement a fuse by using a prepared "stand-by plug."

The following fuse plug features provide quick and safe handling:

- Optional LED indicates blown fuse
- Marking slot on the fuse plug for clear coordination to the correct carrier terminal block
- Two touch-proof test slots
- High density with only 6.1 mm width of terminal block/ fuse plug
- Instead of a fuse, a shorting link may be used as a disconnect plug.

Miniature fuses 5 x 20

Series Item No.	Overload and short circuit protection		Short circuit protection only	
	Individual argmt.	Group argmt.	Individual argmt.	Group argmt.
	Fuse terminal blocks			
2004-911 **2004-911/....-....**	1.6 W	1.6 W	2.5 W	2.5 W



Open side of terminal block left

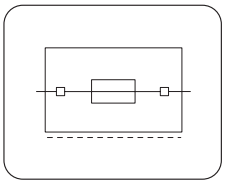
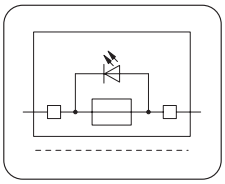
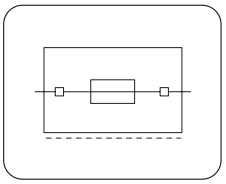
Please note:
The extra width of the plug (6.1 mm compared to 5.2 mm for carrier terminal blocks) must be compensated for by intermediate plates (1 mm) when building an assembly of carrier terminal blocks equipped with fuse plugs.

TOPJOB® S
Fuse Plugs on Carrier Terminal Blocks 6 (10) mm²
2006 Series

Fuse plug with pull-tab	Fuse plug with pull-tab	Fuse plug with pull-tab
800 V / I_N 10 A Plug width 7.4 mm / 0.291 in	800 V / I_N 10 A Plug width 7.4 mm / 0.291 in	800 V / I_N 10 A Plug width 10.4 mm / 0.409 in





Item No.		Pack. Unit
Fuse plug with pull-tab		
Both nominal voltage and current are given by the fuse.		
for miniature fuses 5 x 20 mm		
gray	**2006-911**	25
for miniature fuses 5 x 30 mm		
gray	**2006-921**	25
for miniature fuses 1/4" x 11/4"		
gray	**2006-931**	25

Item No.		Pack. Unit
Fuse plug with pull-tab, gray,		
with indicator lamp		
Both nominal voltage and current are given by the LED or fuse. Leakage current in case of blown fuse: LED 2mA,		
for miniature fuses 5 x 20 mm		
12 - 30 V	**2006-911/1000-541**	25
30 - 65 V	**2006-911/1000-542**	25
120 V	**2006-911/1000-867**	25
230 V	**2006-911/1000-836**	25
for miniature fuses 5 x 30 mm		
12 - 30 V	**2006-921/1000-541**	25
30 - 65 V	**2006-921/1000-542**	25
120 V	**2006-921/1000-867**	25
230 V	**2006-921/1000-836**	25
380 - 500 V	**2006-921/1000-859**	25
for miniature fuses 1/4" x 11/4"		
12 - 30 V	**2006-931/1000-541**	25
30 - 65 V	**2006-931/1000-542**	25
120 V	**2006-931/1000-867**	25
230 V	**2006-931/1000-836**	25
380 - 500 V	**2006-931/1000-859**	25

Item No.		Pack. Unit
Fuse plug with pull-tab		
Both nominal voltage and current are given by the fuse.		
for miniature fuses 1/4" x 11/4"		
gray	**2006-931/099-000**	25

Item-Specific Accessories

End and intermediate plate, 1 mm thick		
orange	**2006-1692**	100 (4x25)
gray	**2006-1691**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick		
orange	**2006-1692**	100 (4x25)
gray	**2006-1691**	100 (4x25)

Item-Specific Accessories

Intermediate plate, 2.9 mm thick		
orange	**2006-1696**	100 (4x25)
gray	**2006-1695**	100 (4x25)

Accessories fuse plugs

Appropriate marking systems: WMB/Marking strips
(see Section 13)

End plate for fuse terminal blocks,		
2 mm thick		
orange	**2006-992**	100 (4x25)
gray	**2006-991**	100 (4x25)

Shorting link, 5 x 20 mm,		
if the fuse plug is used as disconnect plug		
I_N 6.3 A	**281-503**	250 (10x25)

Screwless end stop,		
for DIN 35 rail,		
6 mm wide		
gray	**249-116**	100 (4x25)

2-conductor carrier terminal block,		
0.5 - 6 (10) mm² / AWG 20 - 8		
Terminal block width 7.5 mm / 0.295 in		
gray	**2006-1661**	25

WMB Multi marking system,		
10 strips with 10 markers per card,		
stretchable 5 - 5.2 mm		
plain	**793-5501**	5

Screwless end stop,		
for DIN 35 rail,		
10 mm wide		
gray	**249-117**	50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.

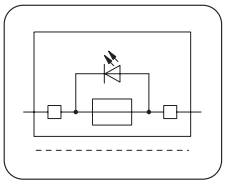
Fuse plug with pull-tab

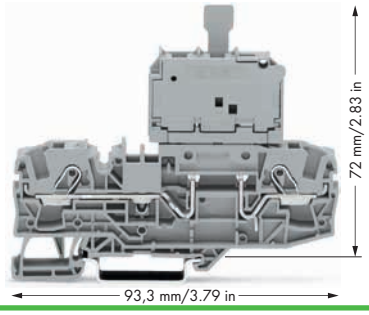
800 V / I_N 10 A
Plug width 10.4 mm / 0.409 in

Using pluggable fuse holders with rail-mounted terminal blocks for control circuit protection is highly advantageous for the user, as the function and the wiring are accomplished by two separate parts:
- No additional cost for assembly and wiring
- No risk of accidental contact with live parts during disconnection of fuse plug
- If exchanging a defective fuse, the fuse plug is completely separated from the carrier terminal block. This provides changeout away from current carrying parts.
- The fuse plug can be removed by service personnel, avoiding unintentional reclosing of the circuit by another person
- Quick replacement a fuse by using a prepared "stand-by plug."

The following features of the fuse plug ensure quick and safe use:
- Optional LED indicates blown fuse
- Markable fuse plug for clear coordination to the correct carrier terminal block
- Two touch-proof test slots
- High density with only 7.5 mm width of terminal block and fuse plug width 7.4 (10.4) mm
- Instead of a fuse, a shorting link may be used as a disconnect plug





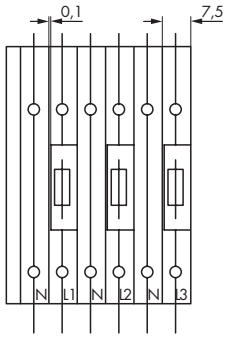


Fuse plug dimensions

Miniature fuses

Series Item No.		Overload and short circuit protection		Short circuit protection only	
		Individual argmt.	Group argmt.	Individual argmt.	Group argmt.
Fused disconnect terminal blocks					
2006-911	7.5	1.6 W	1.6 W	2.5 W	2.5 W
2006-921	7.5	1.6 W	1.6 W	2.5 W	2.5 W
2006-931	7.5	1.6 W	1.6 W	2.5 W	2.5 W
2006-931 /099-...	10.4	2.5 W	2.5 W	2.5 W	2.5 W
2006-931 /1099-...	10.4	2.5 W	2.5 W	2.5 W	2.5 W

	Item No.	Pack. Unit
Fuse plug with pull-tab, gray, with indicator lamp Both nominal voltage and current are given by the LED or fuse. Leakage current in case of blown fuse: LED 2mA, for miniature fuses 1/4" x 11/4"		
12 - 30 V	**2006-931/1099-541**	25
30 - 65 V	**2006-931/1099-542**	25
120 V	**2006-931/1099-867**	25
230 V	**2006-931/1099-836**	25
380 - 500 V	**2006-931/1099-859**	25



Open side of terminal block left

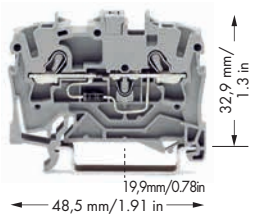
When using the 10.4 mm wide plug, please note:
The extra width of the plug (10.4 mm compared to 7.5 mm for carrier terminal blocks) must be compensated for by intermediate plates (2.9 mm) when building an assembly of carrier terminal blocks equipped with fuse plugs.

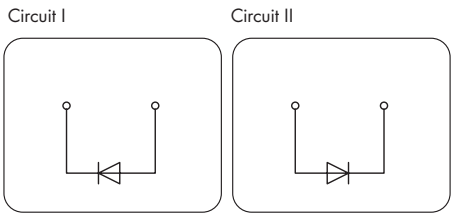
Item-Specific Accessories

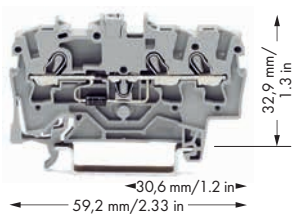
Intermediate plate, 2.9 mm thick			
	orange	**2006-1696**	100 (4x25)
	gray	**2006-1695**	100 (4x25)

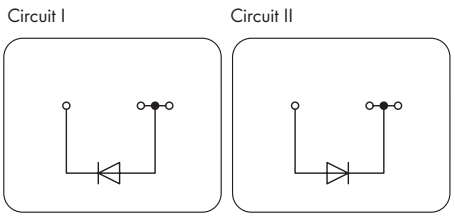
TOPJOB® S
Diode Terminal Blocks and LED Terminal Blocks 1.5 (2.5) mm²
2001 Series

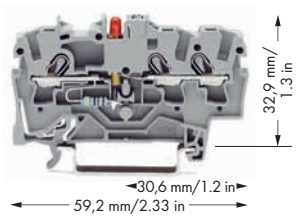
0.25 - 1.5 (2.5) mm² ❶ | AWG 22 - 14 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 4.2 mm / 0.165 in 9 - 11 mm / 0.39 in ❷	0.25 - 1.5 (2.5) mm² ❶ | AWG 22 - 14 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 4.2 mm / 0.165 in 9 - 11 mm / 0.39 in ❷	0.25 - 1.5 (2.5) mm² ❶ | AWG 22 - 14 24 VDC I_F 0.025 A max. Terminal block width 4.2 mm / 0.165 in 9 - 11 mm / 0.39 in ❷

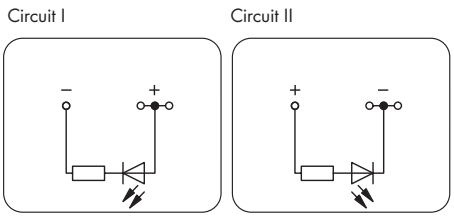








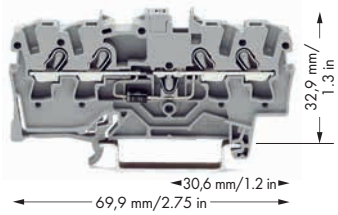


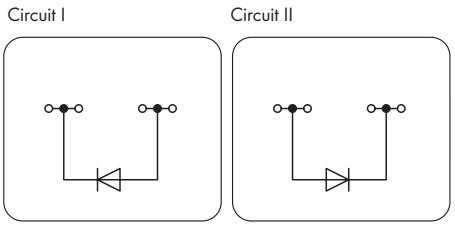


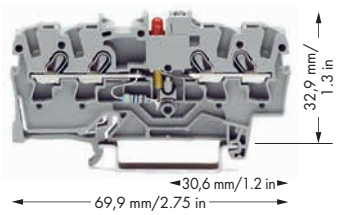
Item No.		Pack. Unit
2-conductor diode terminal block with 1N4007 diode, gray		
Circuit I	**2001-1211/1000-411**	100
Circuit II	**2001-1211/1000-410**	100

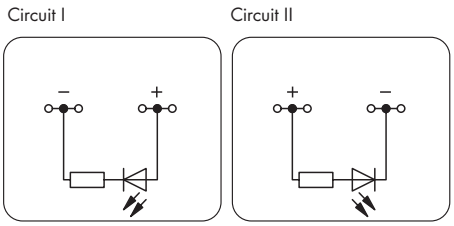
Item No.		Pack. Unit
3-conductor diode terminal block with 1N4007 diode, gray		
Circuit I	**2001-1311/1000-411**	100
Circuit II	**2001-1311/1000-410**	100

Item No.		Pack. Unit
3-conductor LED terminal block with red LED, 24 VDC, gray Notice: This LED terminal block cannot be commoned with push-in type jumper bars!		
Circuit I	**2001-1321/1000-413**	100
Circuit II	**2001-1321/1000-434**	100









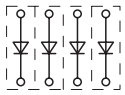
	Item No.	Pack. Unit
Through terminal blocks with same profile, see page 12		

Item No.		Pack. Unit
4-conductor diode terminal block with 1N4007 diode, gray		
Circuit I	**2001-1411/1000-411**	100
Circuit II	**2001-1411/1000-410**	100

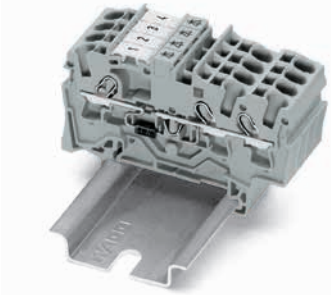
Item No.		Pack. Unit
4-conductor LED terminal block with red LED, 24 VDC, gray Notice: This LED terminal block cannot be commoned with push-in type jumper bars!		
Circuit I	**2001-1421/1000-413**	100
Circuit II	**2001-1421/1000-434**	100

Certification organizations can be found in the overview on pages 622 and 623.

Circuit Configuration Examples
Diode Terminal Blocks and LED Terminal Blocks



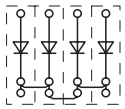
Open diode gates can be created using the following terminal blocks:
2001-1211/1000-410 or
2001-1211/1000-411



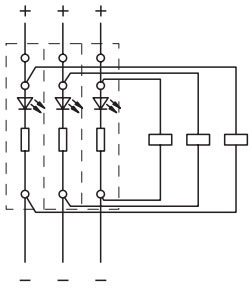
These diode terminal blocks have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits.
Using LED terminal blocks, monitoring units can be designed, e.g., for control and operating circuits.

❶ Conductor sizes: 0.25 mm² – 2.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 2.5 mm² "s" and 0.75 mm² – 1.5 mm² "insulated ferrules, 12 mm"

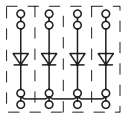
❷ Strip length, see packaging or instructions.



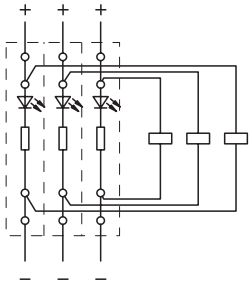
Polarized diode gates with common cathode can be created using the following terminal blocks:
2001-1311/1000-410 or
2001-1311/1000-411



Circuit-related voltage indications can be created using the following terminal blocks:
2001-1321/1000-434 or
2001-1321/1000-413



Polarized diode gates with common cathode can be created using the following terminal blocks:
2001-1411/1000-410 or
2001-1411/1000-411



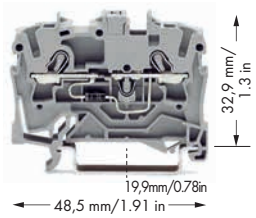
Circuit-related voltage indications can be created using the following terminal blocks:
2001-1421/1000-434 or
2001-1421/1000-413

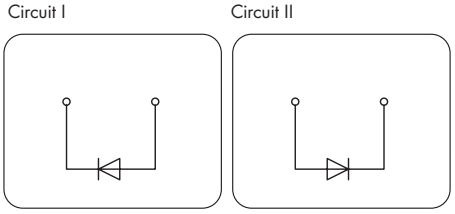
2001 Series Accessories

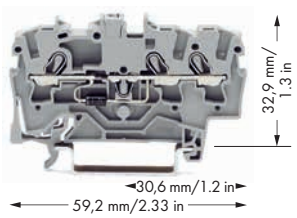
Insulation stop,			
	5 pcs/strip, 0.25 - 0.5 mm² light gray	**2001-171**	200 (8x25)
Push-in type jumper bar, insulated,			
	I_N 18 A, light gray		
	2-way	**2001-402**	200 (8x25)
	3-way	**2001-403**	200 (8x25)
	4-way	**2001-404**	200 (8x25)
	5-way	**2001-405**	100 (4x25)
	6-way	**2001-406**	100 (4x25)
	7-way	**2001-407**	100 (4x25)
	8-way	**2001-408**	100 (4x25)
	9-way	**2001-409**	100 (4x25)
	10-way	**2001-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 18 A, light gray		
	from 1 to 3	**2001-433**	200 (8x25)
	from 1 to 4	**2001-434**	200 (8x25)
	from 1 to 5	**2001-435**	100 (4x25)
	from 1 to 6	**2001-436**	100 (4x25)
	from 1 to 7	**2001-437**	100 (4x25)
	from 1 to 8	**2001-438**	100 (4x25)
	from 1 to 9	**2001-439**	100 (4x25)
	from 1 to 10	**2001-440**	100 (4x25)

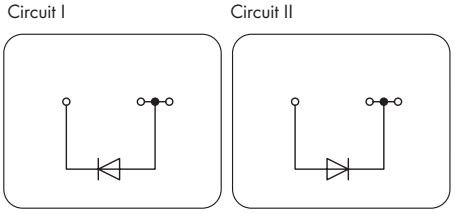
TOPJOB® S
Diode Terminal Blocks and LED Terminal Blocks 2.5 (4) mm²
2002 Series

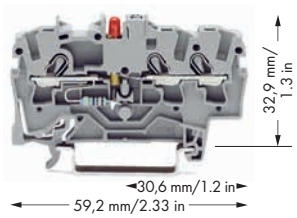
0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❷	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❷	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 24 VDC I_F 0.025 A max. Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❷

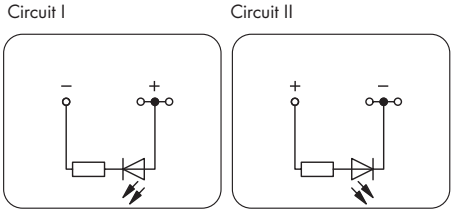








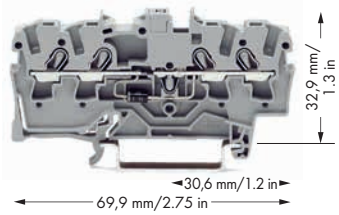


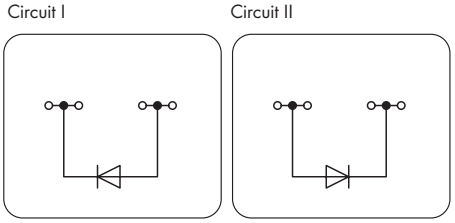


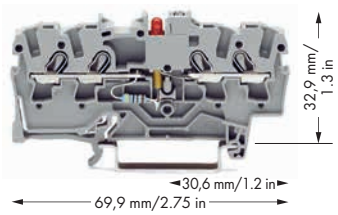
Item No.		Pack. Unit
2-conductor diode terminal block with 1N4007		
diode, gray		
Circuit I	**2002-1211/1000-411**	100
Circuit II	**2002-1211/1000-410**	100

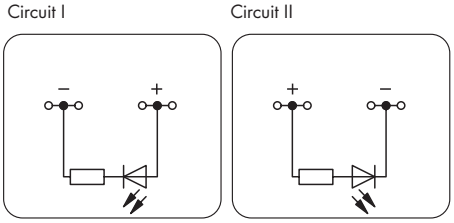
Item No.		Pack. Unit
3-conductor diode terminal block with 1N4007		
diode, gray		
Circuit I	**2002-1311/1000-411**	100
Circuit II	**2002-1311/1000-410**	100

Item No.		Pack. Unit
3-conductor LED terminal block with red LED,		
24 VDC, gray		
Notice: This LED terminal block cannot be commoned with push-in type jumper bars!		
Circuit I	**2002-1321/1000-413**	100
Circuit II	**2002-1321/1000-434**	100







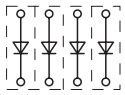


	Item No.		Pack. Unit
Through terminal blocks with same profile, see page 14	**4-conductor diode terminal block with 1N4007**		
	diode, gray		
	Circuit I	**2002-1411/1000-411**	100
	Circuit II	**2002-1411/1000-410**	100

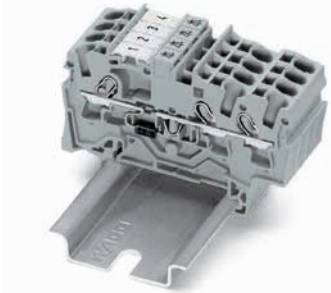
Item No.		Pack. Unit
4-conductor LED terminal block with red LED,		
24 VDC, gray		
Notice: This LED terminal block cannot be commoned with push-in type jumper bars!		
Circuit I	**2002-1421/1000-413**	100
Circuit II	**2002-1421/1000-434**	100

Certification organizations can be found in the overview on pages 622 and 623.

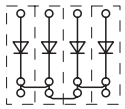
Circuit Configuration Examples
Diode Terminal Blocks and LED Terminal Blocks



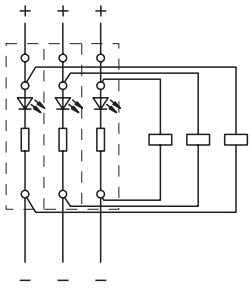
Open diode gates can be created using the following terminal blocks:
2002-1211/1000-410 or
2002-1211/1000-411



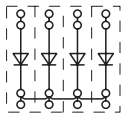
These diode terminal blocks have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits.



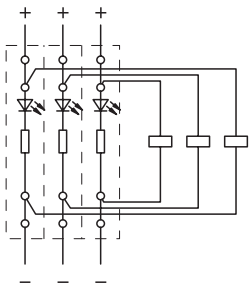
Polarized diode gates with common cathode can be created using the following terminal blocks:
2002-1311/1000-410 or
2002-1311/1000-411



Circuit-related voltage indications can be created using the following terminal blocks:
2002-1321/1000-434 or
2002-1321/1000-413



Polarized diode gates with common cathode can be created using the following terminal blocks:
2002-1411/1000-410 or
2002-1411/1000-411



Circuit-related voltage indications can be created using the following terminal blocks:
2002-1421/1000-434 or
2002-1421/1000-413

❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrules, 12 mm"

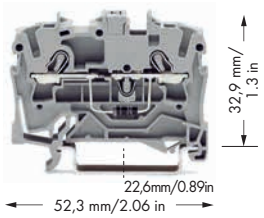
❷ Strip length, see packaging or instructions.

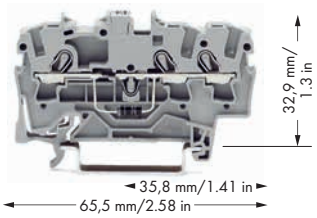
2002 Series Accessories

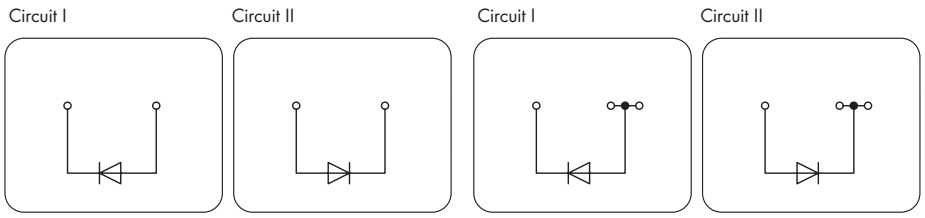
Insulation stop,			
	5 pcs/strip, 0.25 - 0.5 mm² light gray	**2002-171**	200 (8x25)
Insulation stop,			
	5 pcs/strip, 0.75 - 1 mm² dark gray	**2002-172**	200 (8x25)
Push-in type jumper bar, insulated,			
	I_N 25 A, light gray		
	2-way	**2002-402**	200 (8x25)
	3-way	**2002-403**	200 (8x25)
	4-way	**2002-404**	200 (8x25)
	5-way	**2002-405**	100 (4x25)
	6-way	**2002-406**	100 (4x25)
	7-way	**2002-407**	100 (4x25)
	8-way	**2002-408**	100 (4x25)
	9-way	**2002-409**	100 (4x25)
	10-way	**2002-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 25 A, light gray		
	from 1 to 3	**2002-433**	200 (8x25)
	from 1 to 4	**2002-434**	200 (8x25)
	from 1 to 5	**2002-435**	100 (4x25)
	from 1 to 6	**2002-436**	100 (4x25)
	from 1 to 7	**2002-437**	100 (4x25)
	from 1 to 8	**2002-438**	100 (4x25)
	from 1 to 9	**2002-439**	100 (4x25)
	from 1 to 10	**2002-440**	100 (4x25)

TOPJOB® S
Diode Terminal Blocks 4 (6) mm²
2004 Series

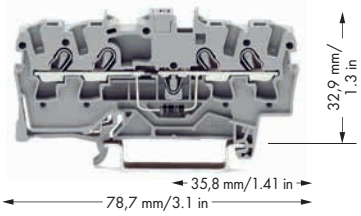
0.5 - 4 (6) mm² ❶ | AWG 20 - 10 **U_N 250 V, U_{RM} 1000 V** **1N5408 - 1.5 A continuous current** **Terminal block width 6.2 mm / 0.244 in** **11 - 13 mm / 0.47 in ❷**	**0.5 - 4 (6) mm² ❶ | AWG 20 - 10** **U_N 250 V, U_{RM} 1000 V** **1N5408 - 1.5 A continuous current** **Terminal block width 6.2 mm / 0.244 in** **11 - 13 mm / 0.47 in ❷**

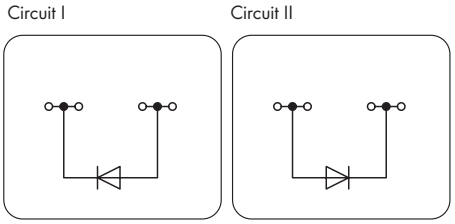






	Item No.	Pack. Unit		Item No.	Pack. Unit	
2-conductor diode terminal block with 1N5408			**3-conductor diode terminal block with 1N5408**			
diode, gray			**diode,** gray			
Circuit I	**2004-1211/1000-401**	50	Circuit I	**2004-1311/1000-401**	50	
Circuit II	**2004-1211/1000-400**	50	Circuit II	**2004-1311/1000-400**	50	

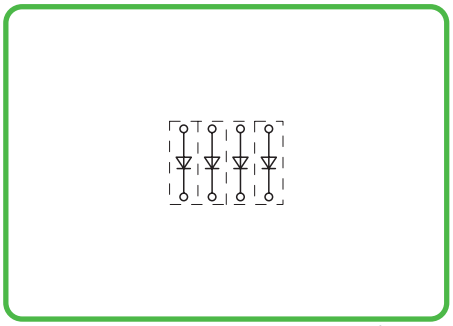




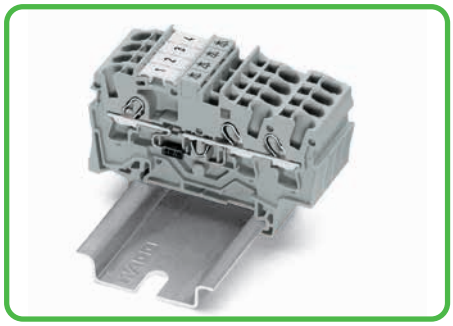
	Item No.	Pack. Unit	
Through terminal blocks with same profile,	**4-conductor diode terminal block with 1N5408**		
see page 18	**diode,** gray		
	Circuit I	**2004-1411/1000-401**	50
	Circuit II	**2004-1411/1000-400**	50

Certification organizations can be found in the overview on pages 622 and 623.

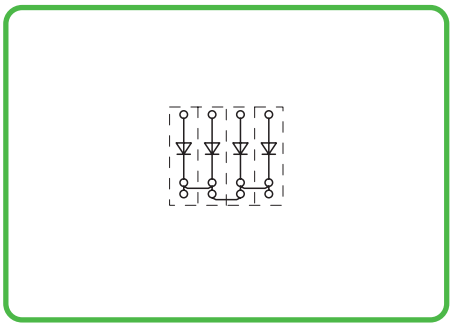
Circuit Configuration Examples
Diode Terminal Blocks



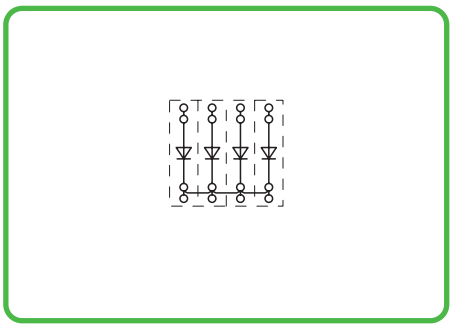
Open diode gates can be created using the following terminal blocks:
2004-1211/1000-400 or
2004-1211/1000-401



These diode terminal blocks have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits.



Polarized diode gates with common cathode can be created using the following terminal blocks:
2004-1311/1000-400 or
2004-1311/1000-401



Polarized diode gates with common cathode can be created using the following terminal blocks:
2004-1411/1000-400 or
2004-1411/1000-401

❶ Conductor sizes: 0.5 mm² – 6 mm² "s + f-st"; Push-in conductor sizes: 1 mm² – 6 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

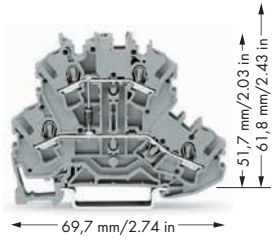
❷ Strip length, see packaging or instructions.

2004 Series Accessories

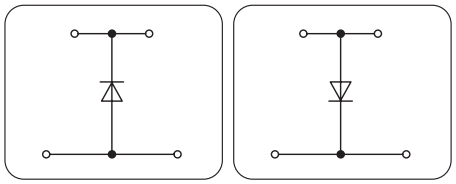
Insulation stop,			
	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**2004-171**	200 (8x25)
Insulation stop,			
	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**2004-172**	200 (8x25)
Push-in type jumper bar, insulated,			
	I_N 32 A, light gray		
	2-way	**2004-402**	200 (8x25)
	3-way	**2004-403**	200 (8x25)
	4-way	**2004-404**	100 (4x25)
	5-way	**2004-405**	100 (4x25)
	6-way	**2004-406**	100 (4x25)
	7-way	**2004-407**	100 (4x25)
	8-way	**2004-408**	100 (4x25)
	9-way	**2004-409**	100 (4x25)
	10-way	**2004-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 32 A, light gray		
	from 1 to 3	**2004-433**	200 (8x25)
	from 1 to 4	**2004-434**	200 (8x25)
	from 1 to 5	**2004-435**	100 (4x25)
	from 1 to 6	**2004-436**	100 (4x25)
	from 1 to 7	**2004-437**	100 (4x25)
	from 1 to 8	**2004-438**	100 (4x25)
	from 1 to 9	**2004-439**	100 (4x25)
	from 1 to 10	**2004-440**	100 (4x25)
Wire commoning chain, 50 connections,			
	insulated, I_N 8 A		
	black	**210-103**	1
Wire commoning chain, 50 connections,			
	insulated, I_N 8 A		
	blue	**210-123**	1

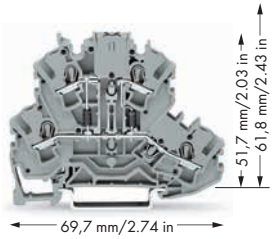
TOPJOB® S
Double-Deck Diode Terminal Blocks and LED Terminal Blocks 2.5 (4) mm²
2002 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 **U_N 250 V, U_{RM} 1000 V** **1N4007 - 0.5 A continuous current** **Terminal block width 5.2 mm / 0.205 in** **10 - 12 mm / 0.43 in ❷**	**0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12** **U_N 250 V, U_{RM} 1000 V** **1N4007 - 0.5 A continuous current** **Terminal block width 5.2 mm / 0.205 in** **10 - 12 mm / 0.43 in ❷**	**0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12** **24 VDC** **I_F 0.025 A max.** **Terminal block width 5.2 mm / 0.205 in** **10 - 12 mm / 0.43 in ❷**

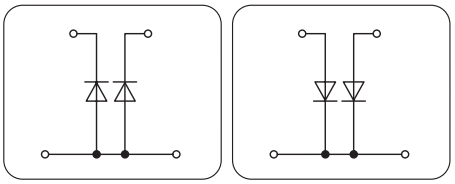


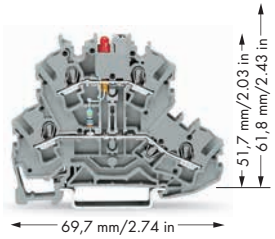
Circuit I Circuit II



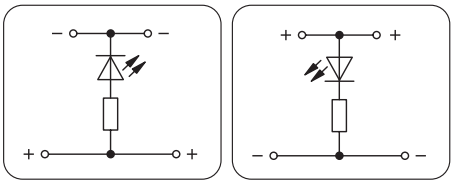


Circuit I Circuit II





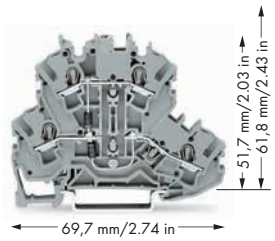
Circuit I Circuit II



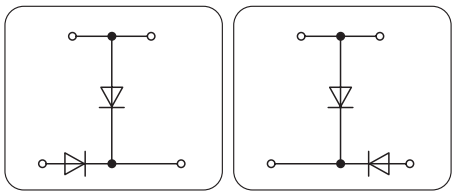
Item No.		Pack. Unit
Double-deck diode terminal block with 1N4007 diode, gray		
Circuit I	**2002-2211/1000-410**	50
Circuit II	**2002-2211/1000-411**	50

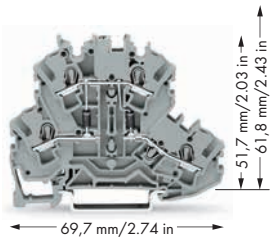
Item No.		Pack. Unit
Double-deck diode terminal block with 2 diodes 1N4007, gray		
Circuit I	**2002-2213/1000-487**	50
Circuit II	**2002-2213/1000-488**	50

Item No.		Pack. Unit
Double-deck LED terminal block with red LED, 24 VDC, gray		
Circuit I	**2002-2221/1000-434**	50
Circuit II	**2002-2221/1000-413**	50

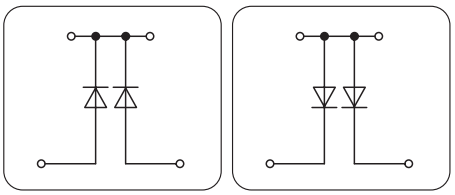


Circuit I Circuit II





Circuit I Circuit II



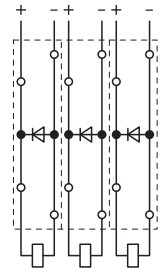
Item No.		Pack. Unit
Double-deck diode terminal block with 2 diodes 1N4007, gray		
Circuit I	**2002-2214/1000-492**	50
Circuit II	**2002-2214/1000-491**	50

Item No.		Pack. Unit
Double-deck diode terminal block with 2 diodes 1N4007, gray		
Circuit I	**2002-2214/1000-489**	50
Circuit II	**2002-2214/1000-490**	50

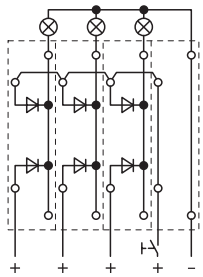
Through terminal blocks with same profile, see page 28

Certification organizations can be found in the overview on pages 622 and 623.

Circuit Configuration Examples
Double-Deck Diode and LED Terminal Blocks



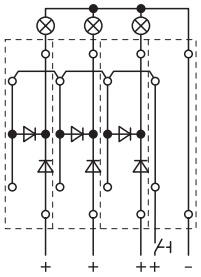
Recovery diodes can be created using the following terminal blocks:
2002-2211/1000-410 or
2002-2211/1000-411



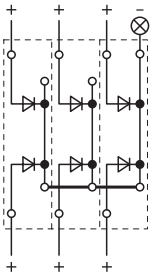
Lamp test circuits can be created using the following terminal blocks:
2002-2213/1000-487 or
2002-2213/1000-488

❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrules, 12 mm"

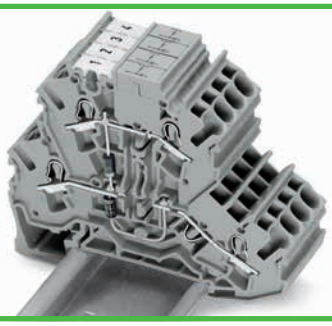
❷ Strip length, see packaging or instructions.



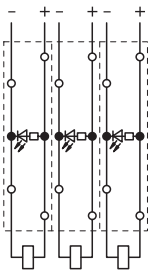
Lamp test circuits can be created using the following terminal blocks:
2002-2214/1000-492 or
2002-2214/1000-491



Collective fault signals can be created using the following terminal blocks:
2002-2214/1000-489 or
2002-2214/1000-490



Double-deck diode terminal blocks
have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits. Using LED terminal blocks, monitoring units can be designed, e.g., for control and operating circuits. The terminal blocks provide high-density wiring, while maintaining a width of only 5 mm. Push-in type jumper bars provide additional options for custom circuit design.



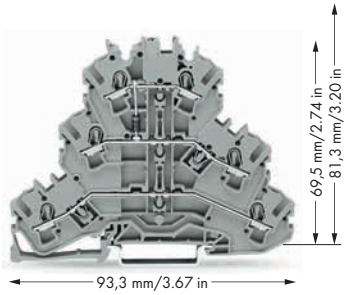
Circuit-related voltage indications can be created using the following terminal blocks:
2002-2221/1000-434 or
2002-2221/1000-413

2002 Series Accessories

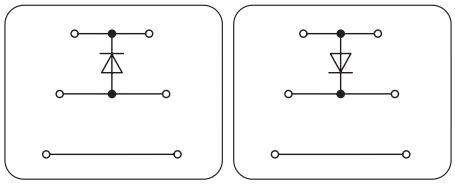
End and intermediate plate, 0.8 mm thick			
	orange	**2002-2292**	100 (4x25)
	gray	**2002-2291**	100 (4x25)
Double-deck marker carrier,			
	pivoting		
	gray	**2002-121**	50 (2x25)
Insulation stop,			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**2002-171**	200 (8x25)
Insulation stop,			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**2002-172**	200 (8x25)
Push-in type jumper bar, insulated,			
	I_N 25 A,		
	light gray		
	2-way	**2002-402**	200 (8x25)
	3-way	**2002-403**	200 (8x25)
	4-way	**2002-404**	200 (8x25)
	5-way	**2002-405**	100 (4x25)
	6-way	**2002-406**	100 (4x25)
	7-way	**2002-407**	100 (4x25)
	8-way	**2002-408**	100 (4x25)
	9-way	**2002-409**	100 (4x25)
	10-way	**2002-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 25 A,		
	light gray		
	from 1 to 3	**2002-433**	200 (8x25)
	from 1 to 4	**2002-434**	200 (8x25)
	from 1 to 5	**2002-435**	100 (4x25)
	from 1 to 6	**2002-436**	100 (4x25)
	from 1 to 7	**2002-437**	100 (4x25)
	from 1 to 8	**2002-438**	100 (4x25)
	from 1 to 9	**2002-439**	100 (4x25)
	from 1 to 10	**2002-440**	100 (4x25)

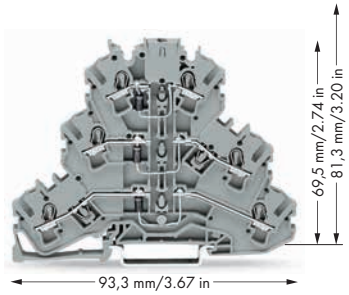
TOPJOB® S
Triple-Deck Diode Terminal Blocks and LED Terminal Blocks 2.5 (4) mm²
2002 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 **U_N 250 V, U_{RM} 1000 V** **1N4007 - 0.5 A continuous current** **Terminal block width 5.2 mm / 0.205 in** **10 - 12 mm / 0.43 in ❷**	**0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12** **U_N 250 V, U_{RM} 1000 V** **1N4007 - 0.5 A continuous current** **Terminal block width 5.2 mm / 0.205 in** **10 - 12 mm / 0.43 in ❷**	**0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12** **24 VDC** **I_F 0.025 A max.** **Terminal block width 5.2 mm / 0.205 in** **10 - 12 mm / 0.43 in ❷**

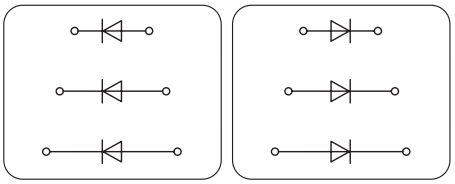


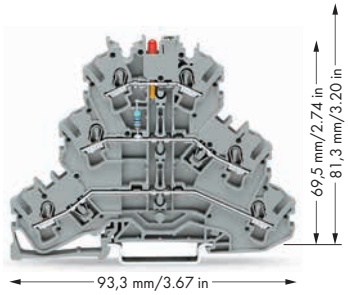
Circuit I Circuit II



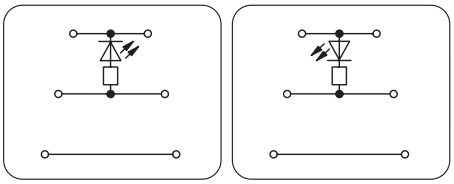


Circuit I Circuit II





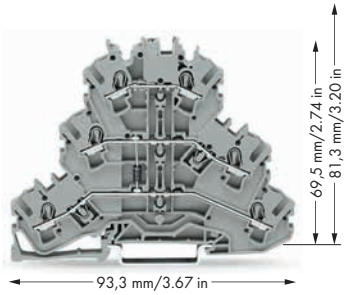
Circuit I Circuit II



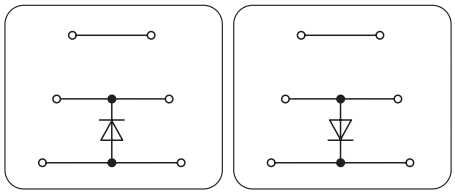
Item No.		Pack. Unit
Triple-deck diode terminal block with 1N4007 diode, gray		
Circuit I	**2002-3211/1000-410**	50
Circuit II	**2002-3211/1000-411**	50

Item No.		Pack. Unit
Triple-deck diode terminal block with 3 diodes 1N4007, gray		
Circuit I	**2002-3212/1000-673**	50
Circuit II	**2002-3212/1000-674**	50

Item No.		Pack. Unit
Triple-deck LED terminal block with red LED, 24 VDC, gray		
Circuit I	**2002-3221/1000-434**	50
Circuit II	**2002-3221/1000-413**	50



Circuit I Circuit II

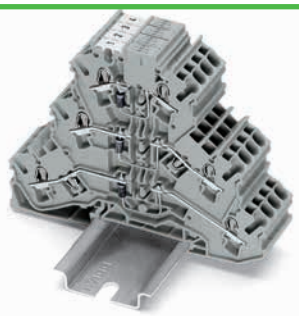


Item No.		Pack. Unit
Triple-deck diode terminal block with 1N4007 diode, gray		
Circuit I	**2002-3211/1000-675**	50
Circuit II	**2002-3211/1000-676**	50

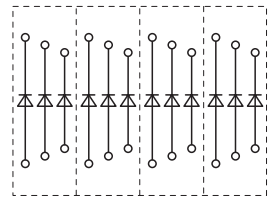
Through terminal blocks with same profile,
see page 38

Certification organizations can be found in the overview on pages 622 and 623.

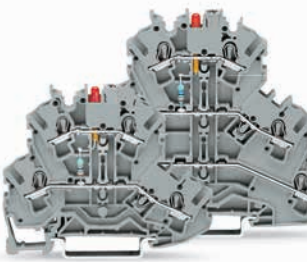
Circuit Configuration Example
Triple-Deck Diode Terminal Blocks



Triple-deck diode terminal blocks
have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits.
Using LED terminal blocks, monitoring units can be designed, e.g., for control and operating circuits. The terminal blocks provide high-density wiring, while maintaining a width of only 5.2 mm.
Push-in type jumper bars provide additional options for custom circuit design.



Open diode gates can be created, which can be connected individually using the following terminal blocks:
2002-3212/1000-673 or
2002-3212/1000-674
Using push-in type jumper bars, individual levels can be turned into polarized diode gates.



Double-deck and triple-deck LED terminal blocks

❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrules, 12 mm"

❷ Strip length, see packaging or instructions.

2002 Series Accessories

Appropriate marking systems: WMB/WMB Inline/Marking strips (see Section 13)

End and intermediate plate, 0.8 mm thick



orange	**2002-3292**	100 (4x25)
gray	**2002-3291**	100 (4x25)

Triple-deck marker carrier,



pivoting		
gray	**2002-131**	50 (2x25)

Insulation stop,



5 pcs/strip,		
0.25 - 0.5 mm²		
light gray	**2002-171**	200 (8x25)

Insulation stop,



5 pcs/strip,		
0.75 - 1 mm²		
dark gray	**2002-172**	200 (8x25)

Push-in type jumper bar, insulated,



I_N 25 A,		
light gray		
2-way	**2002-402**	200 (8x25)
3-way	**2002-403**	200 (8x25)
4-way	**2002-404**	200 (8x25)
5-way	**2002-405**	100 (4x25)
6-way	**2002-406**	100 (4x25)
7-way	**2002-407**	100 (4x25)
8-way	**2002-408**	100 (4x25)
9-way	**2002-409**	100 (4x25)
10-way	**2002-410**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 25 A,		
light gray		
from 1 to 3	**2002-433**	200 (8x25)
from 1 to 4	**2002-434**	200 (8x25)
from 1 to 5	**2002-435**	100 (4x25)
from 1 to 6	**2002-436**	100 (4x25)
from 1 to 7	**2002-437**	100 (4x25)
from 1 to 8	**2002-438**	100 (4x25)
from 1 to 9	**2002-439**	100 (4x25)
from 1 to 10	**2002-440**	100 (4x25)

Modular TOPJOB®S connector,



can be snapped together,		
for jumper contact slot		
gray	**2002-511**	100 (4x25)

Spacer module, can be snapped together,



e.g., for bridging commoned terminal blocks		
gray	**2002-549**	100 (4x25)

End plate,



for modular TOPJOB®S connectors,		
1.5 mm thick		
gray	**2002-541**	100 (4x25)

Test plug,



with 500 mm cable,		
2 mm Ø		
red	**210-136**	50

Test plug adapter,



for 4 mm Ø test plug		
gray	**2009-174**	100 (4x25)

Testing tap,



for max. 2.5 mm²		
gray	**2009-182**	100 (4x25)

Banana plug,



for socket 4 mm Ø,		
color mixed		
	215-111	50

WMB Multi marking system,

10 strips with 10 markers per card,		
stretchable 5 - 5.2 mm		
plain	**793-5501**	5

WMB Inline, plain,



stretchable 5 - 5.2 mm,		
1,500 WMB markers, 5 mm, on roll		
white	**2009-115**	1

Marking strip, plain,



11 mm wide,		
50 m roll		
white	**2009-110**	1

TOPJOB®S group marker carrier,



snap-on type for jumper slot,		
5 mm wide		
gray	**2009-191**	50 (2x25)

Screwless end stop,



for DIN 35 rail,		
6 mm wide		
gray	**249-116**	100 (4x25)

Screwless end stop,



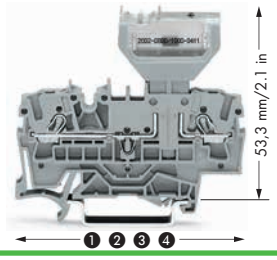
for DIN 35 rail,		
10 mm wide		
gray	**249-117**	50 (2x25)

TOPJOB® S
Pluggable Diode Modules on Carrier Terminal Blocks 2.5 (4) mm²
2002 Series

CAGE CLAMP®S

Diode module
with 1N4007 diode
U_N 250 V, U_{RM} 1000 V
I_N 1 A
Plug width 5.2 mm / 0.205 in

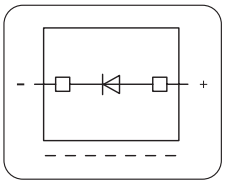




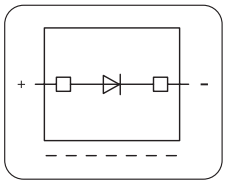
These diode have been designed for use in lamp test circuits or collective fault indicating systems, and offer the following advantages:
- Separation into functional and wiring level
- Polarized direction of switching
- Quick and easy exchange of modules
- High density with only 5.2 mm width of terminal block and module

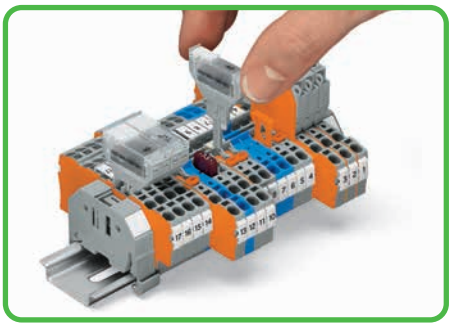
1. Length of 2002-1661: 66.5 mm / 2.62 in 2-conductor carrier terminal block
2. Length of 2002-1761: 76.8 mm / 3.02 in 3-conductor carrier terminal block
3. Length of 2002-1861: 87.5 mm / 3.45 in 4-conductor carrier terminal block
4. Length of 2002-1961: 72.9 mm / 2.87 in 2-conductor carrier terminal block with additional jumper position
5. See application notes for: Colored push-in type jumper bars, page 101 Staggered jumper, page 104 Push-in type wire jumper, page 102

Circuit I



Circuit II



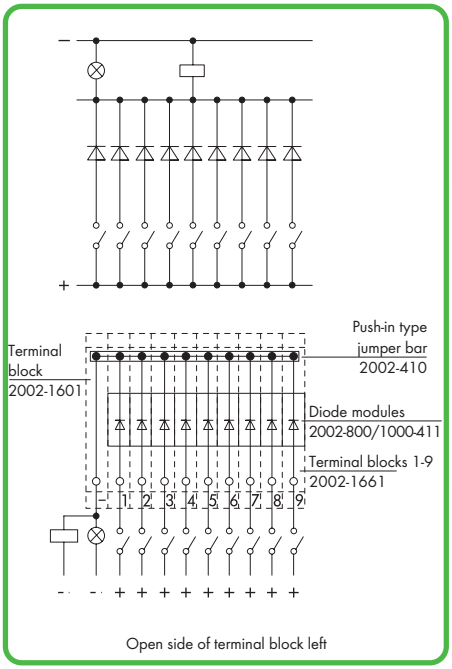


	Item No.	Pack. Unit
Diode module,		
with 1N4007 diode, max. operating temperature: 85 °C, gray,		
5.2 mm wide		
Circuit I	**2002-800/1000-411**	100
Circuit II	**2002-800/1000-410**	100

Carrier Term. Blocks and Accessories

Appropriate marking system:
WMB/Marking strips

2-conductor carrier terminal block,			
1	0.25 - 2.5 (4) mm² / AWG 22 - 12		
	Terminal block width 5.2 mm / 0.205 in		
	gray	**2002-1661**	50
End and intermediate plate, 1 mm thick			
	orange	**2002-1692**	100 (4x25)
	gray	**2002-1691**	100 (4x25)
3-conductor carrier terminal block,			
2	0.25 - 2.5 (4) mm² / AWG 22 - 12		
	Terminal block width 5.2 mm / 0.205 in		
	gray	**2002-1761**	50
End and intermediate plate, 1 mm thick			
	orange	**2002-1792**	100 (4x25)
	gray	**2002-1791**	100 (4x25)
4-conductor carrier terminal block,			
3	0.25 - 2.5 (4) mm² / AWG 22 - 12		
	Terminal block width 5.2 mm / 0.205 in		
	gray	**2002-1861**	50
End and intermediate plate, 1 mm thick			
	orange	**2002-1892**	100 (4x25)
	gray	**2002-1891**	100 (4x25)
2-conductor carrier terminal block,			
4	0.25 - 2.5 (4) mm² / AWG 22 - 12		
	Terminal block width 5.2 mm / 0.205 in		
	gray	**2002-1961**	50
End and intermediate plate, 1 mm thick			
	orange	**2002-1992**	100 (4x25)
	gray	**2002-1991**	100 (4x25)



Diode gate for collective fault indication

Accessories

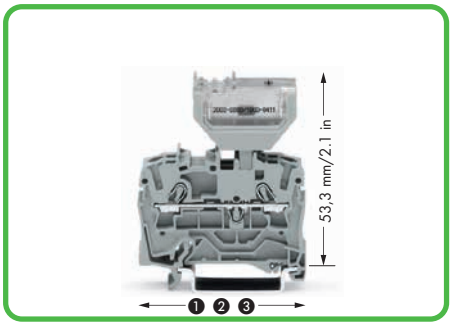
Push-in type wire jumper,			
5	insulated,		
	I_N 18 A,		
	wire size 1.5 mm²		
	L = 60 mm	**2009-412**	100 (10x10)
	L = 110 mm	**2009-414**	100 (10x10)
	L = 250 mm	**2009-416**	100 (10x10)
Push-in type jumper bar, insulated,			
5	I_N 25 A,		
	light gray		
	2-way	**2002-402**	200 (8x25)
	3-way	**2002-403**	200 (8x25)
	4-way	**2002-404**	200 (8x25)
	5-way	**2002-405**	100 (4x25)
	6-way	**2002-406**	100 (4x25)
	7-way	**2002-407**	100 (4x25)
	8-way	**2002-408**	100 (4x25)
	9-way	**2002-409**	100 (4x25)
	10-way	**2002-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 25 A,		
	light gray		
	from 1 to 3	**2002-433**	200 (8x25)
	from 1 to 4	**2002-434**	200 (8x25)
	from 1 to 5	**2002-435**	100 (4x25)
	from 1 to 6	**2002-436**	100 (4x25)
	from 1 to 7	**2002-437**	100 (4x25)
	from 1 to 8	**2002-438**	100 (4x25)
	from 1 to 9	**2002-439**	100 (4x25)
	from 1 to 10	**2002-440**	100 (4x25)
Staggered jumper,			
5	insulated,		
	I_N 25 A,		
	light gray		
	2-way	**2002-472**	100 (4x25)
	3-way	**2002-473**	100 (4x25)
	4-way	**2002-474**	100 (4x25)
	5-way	**2002-475**	50 (2x25)
	6-way	**2002-476**	50 (2x25)
	7-way	**2002-477**	50 (2x25)
	8-way	**2002-478**	50 (2x25)
	9-way	**2002-479**	50 (2x25)
	10-way	**2002-480**	50 (2x25)
	11-way	**2002-481**	50 (2x25)
	12-way	**2002-482**	50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® S
Pluggable Diode Modules and Empty Component Plug Housings on Through Terminal Blocks 2.5 (4) mm², 2002 Series

Diode module
with 1N4007 diode as free-wheeling diode
U_N 250 V, U_{RM} 1000 V
I_N 1 A
Plug width 10.4 mm / 0.409 in

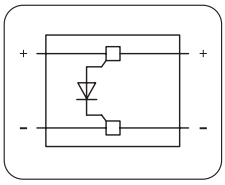


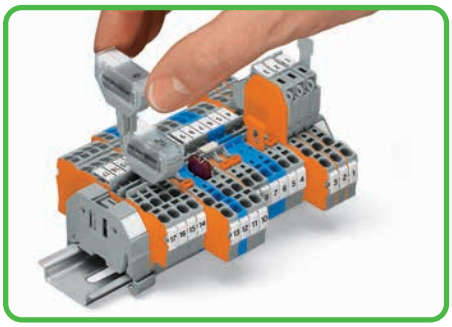


Similar to a push-in jumper, these diode modules are simply pushed into the contact slots of the current bars for two adjacent through terminal blocks.

This offers the following advantages:
- These modules are suitable for **all 2001 to 2006** Series through terminal blocks equipped with jumper slots (please note the module's width).
- Easily retrofit terminal blocks with diode modules.

1. Length of 2002-1201: 48.5 mm / 1.91 in 2-conductor carrier terminal block
2. Length of 2002-1301: 59.5 mm / 2.34 in 3-conductor carrier terminal block
3. Length of 2002-1401: 70 mm / 2.76 in 4-conductor carrier terminal block
4. See application notes for:
Colored push-in type jumper bars, page 101
Staggered jumper, page 104
Push-in type wire jumper, page 102





Plugging a diode module into a through terminal block.

Additional advantages:
- Separation into functional and wiring level
- Modules can be replaced quickly by other types of modules
- Solder-free assembly of diodes, resistors, etc.



Opening the cover via operating tool (blade width 2.5 mm).

	Item No.	Pack. Unit
Diode module,		
with 1N4007 diode as free-wheeling diode, max. operating temperature: 85 °C,		
10.4 mm wide		
gray	**2002-880/1000-411**	50
Empty component plug housing type 4,		
2-pole,		
10.4 mm wide		
gray	**2002-880**	50

Through Term. Blocks and Accessories

Appropriate marking system:
WMB/Marking strips

2-conductor through terminal block,			
1	0.25 - 2.5 (4) mm² / AWG 22 - 12		
	Terminal block width 5.2 mm / 0.205 in		
	gray	**2002-1201**	100
End and intermediate plate, 0.8 mm thick			
	orange	**2002-1292**	100 (4x25)
	gray	**2002-1291**	100 (4x25)
3-conductor through terminal block,			
2	0.25 - 2.5 (4) mm² / AWG 22 - 12		
	Terminal block width 5.2 mm / 0.205 in		
	gray	**2002-1301**	100
End and intermediate plate, 0.8 mm thick			
	orange	**2002-1392**	100 (4x25)
	gray	**2002-1391**	100 (4x25)
4-conductor through terminal block,			
3	0.25 - 2.5 (4) mm² / AWG 22 - 12		
	Terminal block width 5.2 mm / 0.205 in		
	gray	**2002-1401**	100
End and intermediate plate, 0.8 mm thick			
	orange	**2002-1492**	100 (4x25)
	gray	**2002-1491**	100 (4x25)
Insulation stop,			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**2002-171**	200 (8x25)

Accessories

Insulation stop,			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**2002-172**	200 (8x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**2002-115**	100 (4x25)
Push-in type wire jumper,			
4	insulated,		
	I_N 18 A,		
	wire size 1.5 mm²		
	L = 60 mm	**2009-412**	100 (10x10)
	L = 110 mm	**2009-414**	100 (10x10)
	L = 250 mm	**2009-416**	100 (10x10)
Push-in type jumper bar, insulated,			
4	I_N 25 A,		
	light gray		
	2-way	**2002-402**	200 (8x25)
	3-way	**2002-403**	200 (8x25)
	4-way	**2002-404**	200 (8x25)
	5-way	**2002-405**	100 (4x25)
	6-way	**2002-406**	100 (4x25)
	7-way	**2002-407**	100 (4x25)
	8-way	**2002-408**	100 (4x25)
	9-way	**2002-409**	100 (4x25)
	10-way	**2002-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 25 A,		
	light gray		
	from 1 to 3	**2002-433**	200 (8x25)
	from 1 to 4	**2002-434**	200 (8x25)
	from 1 to 5	**2002-435**	100 (4x25)
	from 1 to 6	**2002-436**	100 (4x25)
	from 1 to 7	**2002-437**	100 (4x25)
	from 1 to 8	**2002-438**	100 (4x25)
	from 1 to 9	**2002-439**	100 (4x25)
	from 1 to 10	**2002-440**	100 (4x25)
Staggered jumper,			
4	insulated,		
	I_N 25 A,		
	light gray		
	2-way	**2002-472**	100 (4x25)
	3-way	**2002-473**	100 (4x25)
	4-way	**2002-474**	100 (4x25)
	5-way	**2002-475**	50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.

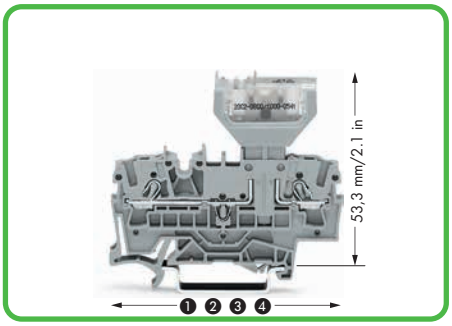
TOPJOB® S
Pluggable LED Modules on Carrier Terminal Blocks 2.5 (4) mm²
2002 Series

CAGE CLAMP®S

LED module
$I_N \leq 3$ mA

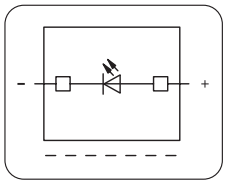
Plug width 5.2 mm / 0.205 in

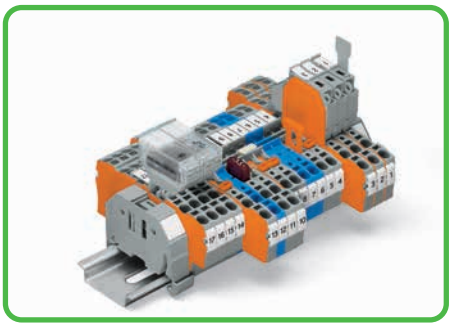




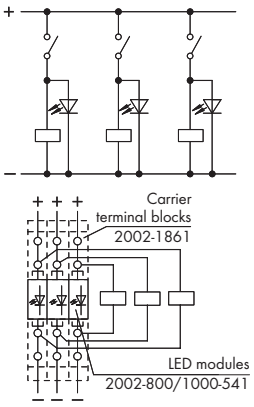
The monitoring of control and operating current circuits with LED modules on rail-mounted terminal blocks provides several advantages to the user:
- No additional cost for assembly and wiring
- Separation into functional and wiring level
- Modules can be replaced quickly and easily by other types of modules

1. Length of 2002-1661: 66.5 mm / 2.62 in 2-conductor carrier terminal block
2. Length of 2002-1761: 76.8 mm / 3.02 in 3-conductor carrier terminal block
3. Length of 2002-1861: 87.5 mm / 3.45 in 4-conductor carrier terminal block
4. Length of 2002-1961: 72.9 mm / 2.87 in 2-conductor carrier terminal block with additional jumper position
5. See application notes for:
Colored push-in type jumper bars, page 101
Staggered jumper, page 104
Push-in type wire jumper, page 102





Additional advantages:
- Polarized direction of switching
- High density with only 5.2 mm width of terminal block and module



Open side of terminal block right

Voltage control refers to current circuits

	Item No.		Pack. Unit
LED module,			
with red LED, max. operating temperature: 85 °C, 5.2 mm wide			
12 - 30 V	**2002-800/1000-541**		100
30 - 65 V	**2002-800/1000-542**		100
230 V	**2002-800/1000-836**		100

Carrier Term. Blocks and Accessories

Appropriate marking system:
WMB/Marking strips

2-conductor carrier terminal block,			
1	0.25 - 2.5 (4) mm² / AWG 22 - 12		
	Terminal block width 5.2 mm / 0.205 in		
	gray	**2002-1661**	50
End and intermediate plate, 1 mm thick			
	orange	**2002-1692**	100 (4x25)
	gray	**2002-1691**	100 (4x25)
32-conductor carrier terminal block,			
2	0.25 - 2.5 (4) mm² / AWG 22 - 12		
	Terminal block width 5.2 mm / 0.205 in		
	gray	**2002-1761**	50
End and intermediate plate, 1 mm thick			
	orange	**2002-1792**	100 (4x25)
	gray	**2002-1791**	100 (4x25)
4-conductor carrier terminal block,			
3	0.25 - 2.5 (4) mm² / AWG 22 - 12		
	Terminal block width 5.2 mm / 0.205 in		
	gray	**2002-1861**	50
End and intermediate plate, 1 mm thick			
	orange	**2002-1892**	100 (4x25)
	gray	**2002-1891**	100 (4x25)
2-conductor carrier terminal block,			
4	0.25 - 2.5 (4) mm² / AWG 22 - 12		
	Terminal block width 5.2 mm / 0.205 in		
	gray	**2002-1961**	50
End and intermediate plate, 1 mm thick			
	orange	**2002-1992**	100 (4x25)
	gray	**2002-1991**	100 (4x25)

Accessories

Push-in type wire jumper,			
5	insulated,		
	I_N 18 A,		
	wire size 1.5 mm²		
	L = 60 mm	**2009-412**	100 (10x10)
	L = 110 mm	**2009-414**	100 (10x10)
	L = 250 mm	**2009-416**	100 (10x10)
Push-in type jumper bar, insulated,			
5	I_N 25 A,		
	light gray		
	2-way	**2002-402**	200 (8x25)
	3-way	**2002-403**	200 (8x25)
	4-way	**2002-404**	200 (8x25)
	5-way	**2002-405**	100 (4x25)
	6-way	**2002-406**	100 (4x25)
	7-way	**2002-407**	100 (4x25)
	8-way	**2002-408**	100 (4x25)
	9-way	**2002-409**	100 (4x25)
	10-way	**2002-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 25 A,		
	light gray		
	from 1 to 3	**2002-433**	200 (8x25)
	from 1 to 4	**2002-434**	200 (8x25)
	from 1 to 5	**2002-435**	100 (4x25)
	from 1 to 6	**2002-436**	100 (4x25)
	from 1 to 7	**2002-437**	100 (4x25)
	from 1 to 8	**2002-438**	100 (4x25)
	from 1 to 9	**2002-439**	100 (4x25)
	from 1 to 10	**2002-440**	100 (4x25)
Staggered jumper,			
5	insulated,		
	I_N 25 A,		
	light gray		
	2-way	**2002-472**	100 (4x25)
	3-way	**2002-473**	100 (4x25)
	4-way	**2002-474**	100 (4x25)
	5-way	**2002-475**	50 (2x25)
	6-way	**2002-476**	50 (2x25)
	7-way	**2002-477**	50 (2x25)
	8-way	**2002-478**	50 (2x25)
	9-way	**2002-479**	50 (2x25)
	10-way	**2002-480**	50 (2x25)
	11-way	**2002-481**	50 (2x25)
	12-way	**2002-482**	50 (2x25)

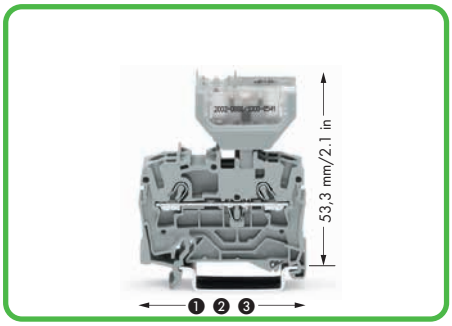
Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® S
Pluggable LED Modules on Through Terminal Blocks 2.5 (4) mm²
2002 Series

LED module
$I_N \leq 3$ mA

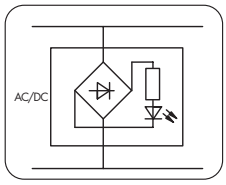
Plug width 10.4 mm / 0.409 in





Similar to a push-in jumper, these LED modules are inserted into the current bar contact slots of two adjacent through terminal blocks.
These modules are suitable for **all 2001 to 2006** Series through terminal blocks equipped with jumper slots (please note the module's width).
- Easily retrofit terminal blocks with diode modules.

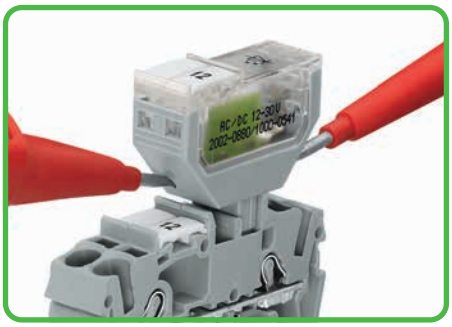
1 Length of 2002-1201: 48.5 mm / 1.91 in 2-conductor carrier terminal block
2 Length of 2002-1301: 59.5 mm / 2.34 in 3-conductor carrier terminal block
3 Length of 2002-1401: 70 mm / 2.76 in 4-conductor carrier terminal block





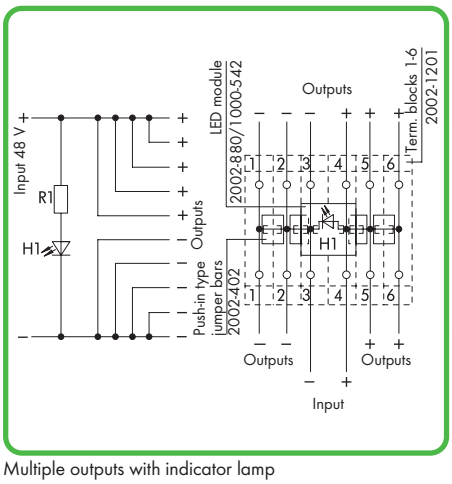
Marking using WMB Multi markers and marker strips.

Additional advantages:
- Separation into functional and wiring level
- Modules can be replaced quickly by other types of modules

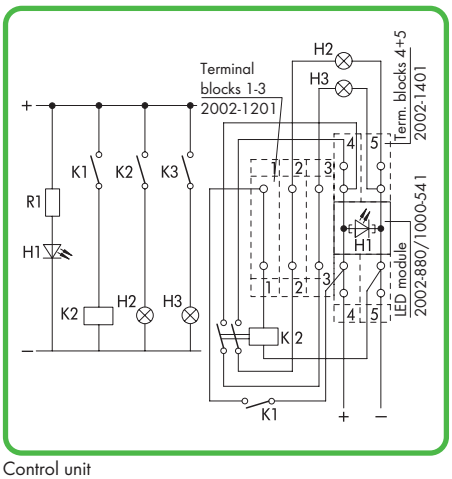


Testing
can also be performed using 2-pole test plugs.

	Item No.		Pack. Unit
LED module,			
with red LED, max. operating temperature: 85 °C,			
10.4 mm wide			
12 - 30 V	**2002-880/1000-541**		50
30 - 65 V	**2002-880/1000-542**		50
230 V	**2002-880/1000-836**		50
Through Term. Blocks and Accessories			
Appropriate marking system: WMB/Marking strips			
2-conductor through terminal block,			
1	0.25 - 2.5 (4) mm² / AWG 22 - 12		
	Terminal block width 5.2 mm / 0.205 in		
	gray	**2002-1201**	100
End and intermediate plate, 0.8 mm thick			
	orange	**2002-1292**	100 (4x25)
	gray	**2002-1291**	100 (4x25)
3-conductor through terminal block,			
2	0.25 - 2.5 (4) mm² / AWG 22 - 12		
	Terminal block width 5.2 mm / 0.205 in		
	gray	**2002-1301**	100
End and intermediate plate, 0.8 mm thick			
	orange	**2002-1392**	100 (4x25)
	gray	**2002-1391**	100 (4x25)
4-conductor through terminal block,			
3	0.25 - 2.5 (4) mm² / AWG 22 - 12		
	Terminal block width 5.2 mm / 0.205 in		
	gray	**2002-1401**	100
End and intermediate plate, 0.8 mm thick			
	orange	**2002-1492**	100 (4x25)
	gray	**2002-1491**	100 (4x25)
Insulation stop,			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**2002-171**	200 (8x25)
Insulation stop,			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**2002-172**	200 (8x25)



Multiple outputs with indicator lamp



Control unit

Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® S
Empty Component Plug Housings on Carrier Terminal Blocks 2.5 (4) mm²
2002 Series

CAGE CLAMP®S

Empty component plug housing	Empty component plug housing
Plug width 5.2 mm / 0.205 in	**Plug width 10.4 mm / 0.409 in**





❶ Length of 2002-1661: 66.5 mm / 2.62 in
2-conductor carrier terminal block

❷ Length of 2002-1761: 76.8 mm / 3.02 in
3-conductor carrier terminal block

❸ Length of 2002-1861: 87.5 mm / 3.45 in
4-conductor carrier terminal block

❹ Length of 2002-1961: 72.9 mm / 2.87 in
2-conductor carrier terminal block with additional jumper position

❺ See application notes for:
Colored push-in type jumper bars, page 101
Staggered jumper, page 104
Push-in type wire jumper, page 102

	Item No.	Pack. Unit
Empty component plug housing type 1,		
2-pole,		
5.2 mm wide		
gray	**2002-800**	100

	Item No.	Pack. Unit
Empty component plug housing type 2,		
2-pole,		
10.4 mm wide		
gray	**2002-810**	50
Empty component plug housing type 3,		
4-pole,		
10.4 mm wide		
gray	**2002-820**	50

Carrier Term. Blocks and Accessories

Appropriate marking system: WMB/Marking strips
(see Section 13)

2-conductor carrier terminal block, ❶
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
gray **2002-1661** 50

End and intermediate plate, 1 mm thick
orange **2002-1692** 100 (4x25)
gray **2002-1691** 100 (4x25)

3-conductor carrier terminal block, ❷
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
gray **2002-1761** 50

End and intermediate plate, 1 mm thick
orange **2002-1792** 100 (4x25)
gray **2002-1791** 100 (4x25)

4-conductor carrier terminal block, ❸
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
gray **2002-1861** 50

End and intermediate plate, 1 mm thick
orange **2002-1892** 100 (4x25)
gray **2002-1891** 100 (4x25)

2-conductor carrier terminal block, ❹
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
gray **2002-1961** 50

End and intermediate plate, 1 mm thick
orange **2002-1992** 100 (4x25)
gray **2002-1991** 100 (4x25)

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks
yellow **2002-115** 100 (4x25)

Push-in type wire jumper, ❺
insulated,
I_N 18 A,
wire size 1.5 mm²
L = 60 mm **2009-412** 100 (10x10)
L = 110 mm **2009-414** 100 (10x10)
L = 250 mm **2009-416** 100 (10x10)

Push-in type jumper bar, insulated, ❺
I_N 25 A,
light gray
2-way **2002-402** 200 (8x25)
3-way **2002-403** 200 (8x25)
4-way **2002-404** 200 (8x25)
5-way **2002-405** 100 (4x25)
6-way **2002-406** 100 (4x25)
7-way **2002-407** 100 (4x25)
8-way **2002-408** 100 (4x25)
9-way **2002-409** 100 (4x25)
10-way **2002-410** 100 (4x25)

Push-in type jumper bar, insulated,
I_N 25 A,
light gray
from 1 to 3 **2002-433** 200 (8x25)
from 1 to 4 **2002-434** 200 (8x25)
from 1 to 5 **2002-435** 100 (4x25)
from 1 to 6 **2002-436** 100 (4x25)
from 1 to 7 **2002-437** 100 (4x25)
from 1 to 8 **2002-438** 100 (4x25)
from 1 to 9 **2002-439** 100 (4x25)
from 1 to 10 **2002-440** 100 (4x25)

Multi-purpose operating tool,
for component plugs
2002-116 5

Accessories

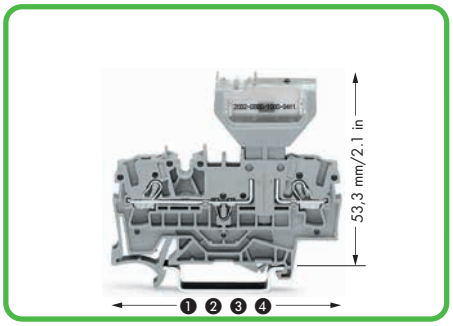
Staggered jumper, ❺
insulated,
I_N 25 A,
light gray
2-way **2002-472** 100 (4x25)
3-way **2002-473** 100 (4x25)
4-way **2002-474** 100 (4x25)
5-way **2002-475** 50 (2x25)
6-way **2002-476** 50 (2x25)
7-way **2002-477** 50 (2x25)
8-way **2002-478** 50 (2x25)
9-way **2002-479** 50 (2x25)
10-way **2002-480** 50 (2x25)
11-way **2002-481** 50 (2x25)
12-way **2002-482** 50 (2x25)

WMB Multi marking system,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

WMB Multi marking system, plain,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
yellow **793-5501/000-002**
red **793-5501/000-005**
blue **793-5501/000-006**
gray **793-5501/000-007**
orange **793-5501/000-012**
light green **793-5501/000-017**
green **793-5501/000-023**
violet **793-5501/000-024** 5

Certification organizations can be found in the overview on pages 622 and 623.

Technical Information



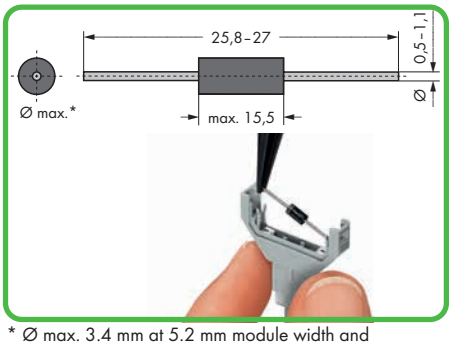
Application example showing a pluggable diode module.



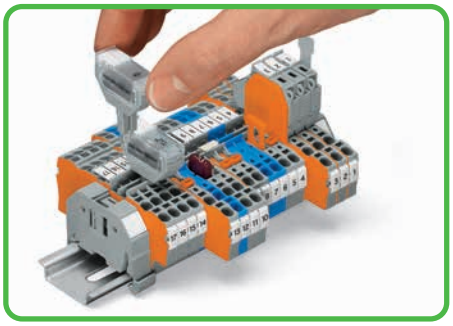
Opening the cover via multi-purpose operating tool for component plugs.



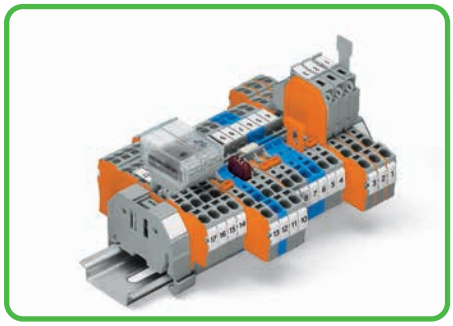
When closing the cover, please insert cover as shown in the illustration.



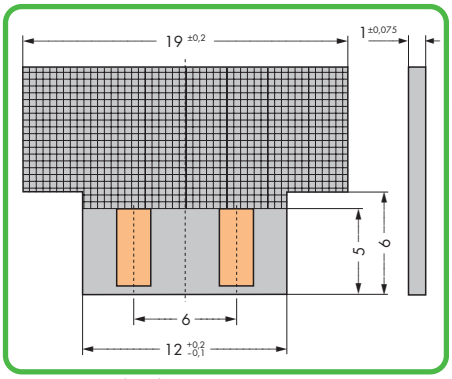
* Ø max. 3.4 mm at 5.2 mm module width and
* Ø max. 5.4 mm at 10.4 mm module width
Notice: Reconnection only possible with similar or larger wire diameter. Smaller wire diameters must be soldered.
Component plugs for building custom circuits.
Solder-free assembly of diodes, resistors, etc.
Picture shows 1N4007 diode.



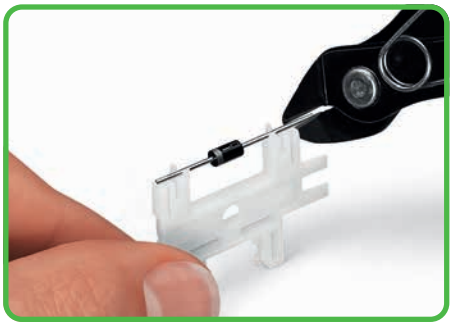
Plugging a diode module into a through terminal block.



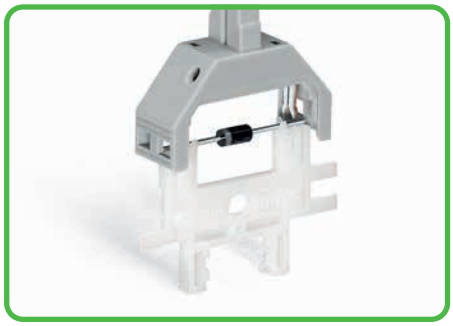
Diode module inserted in a through terminal block.



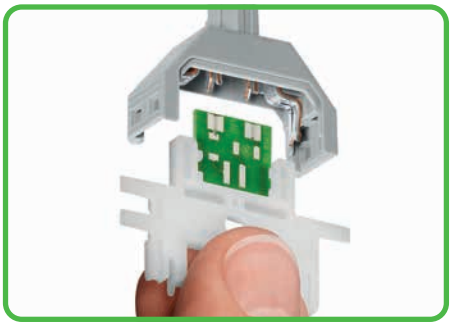
Dimensions of self-assembled PCBs
Module height 2 mm at 5.2 mm module width and module height 3.3 mm at 10.4 mm module width



Cutting component to the proper length.



Pressing component into plug contact via operating tool.



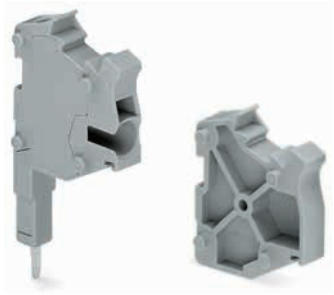
Pushing PCB into plug contact via operating tool.

TOPJOB® S
Connectors and Connector Strips
2001/2002 Series

0.25 - 1.5 (2.5) mm² ❶	AWG 22 - 14
500 V/6 kV/3 ❸	300 V, 15 A
I_N 18 A	
Terminal block width 4.2 mm / 0.165 in	
9 - 11 mm / 0.39 in ❹	

0.25 - 2.5 (4) mm² ❷	AWG 22 - 12
500 V/6 kV/3 ❸	300 V, 20 A
I_N 24 A	
Terminal block width 5.2 mm / 0.205 in	
10 - 12 mm / 0.43 in ❹	





	Item No.	Pack. Unit
Modular TOPJOB®S connector,		
for jumper contact slot,		
can be snapped together, gray		
1-pole	**2001-511**	100 (4x25)
Spacer module, can be snapped together,		
e.g., for bridging commoned terminal blocks		
gray	**2001-549**	100 (4x25)
TOPJOB®S connector strip,		
for jumper contact slot, gray		
2-pole	**2001-552**	25
3-pole	**2001-553**	25
4-pole	**2001-554**	25
5-pole	**2001-555**	10
6-pole	**2001-556**	10
7-pole	**2001-557**	10
8-pole	**2001-558**	10
9-pole	**2001-559**	10
10-pole	**2001-560**	10

Item-Specific Accessories

End plate,			
	for modular TOPJOB®S connectors,		
	1.5 mm thick		
	gray	**2002-541**	100 (4x25)
WMB Inline, plain,			
	stretchable 4 - 4.2 mm,		
	2,000 WMB markers, 4 mm, on roll		
	white	**2009-114**	1
WMB Multi marking system,			
	10 strips with 10 markers per card,		
	stretchable 4 - 4.2 mm		
	plain	**793-4501**	5
WMB Multi marking system, plain,			
	10 strips with 10 markers per card,		
	stretchable 4 - 4.2 mm		
	yellow	**793-4501/000-002**	
	red	**793-4501/000-005**	
	blue	**793-4501/000-006**	
	gray	**793-4501/000-007**	
	orange	**793-4501/000-012**	
	light green	**793-4501/000-017**	
	green	**793-4501/000-023**	
	violet	**793-4501/000-024**	
			5

	Item No.	Pack. Unit
Modular TOPJOB®S connector,		
for jumper contact slot,		
can be snapped together, gray		
1-pole	**2002-511**	100 (4x25)
Spacer module, can be snapped together,		
e.g., for bridging commoned terminal blocks		
gray	**2002-549**	100 (4x25)
TOPJOB®S connector strip,		
for jumper contact slot, gray		
2-pole	**2002-552**	25
3-pole	**2002-553**	25
4-pole	**2002-554**	25
5-pole	**2002-555**	10
6-pole	**2002-556**	10
7-pole	**2002-557**	10
8-pole	**2002-558**	10
9-pole	**2002-559**	10
10-pole	**2002-560**	10

Item-Specific Accessories

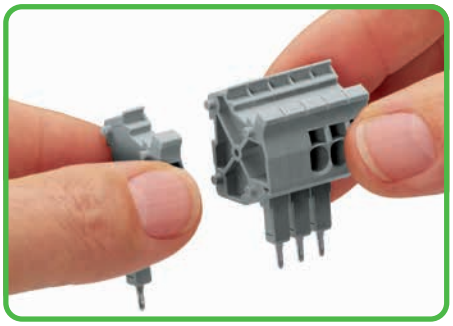
End plate,			
	for modular TOPJOB®S connectors,		
	1.5 mm thick		
	gray	**2002-541**	100 (4x25)
WMB Inline, plain,			
	stretchable 5 - 5.2 mm,		
	1,500 WMB markers, 5 mm, on roll		
	white	**2009-115**	1
WMB Multi marking system,			
	10 strips with 10 markers per card,		
	stretchable 5 - 5.2 mm		
	plain	**793-5501**	5
WMB Multi marking system, plain,			
	10 strips with 10 markers per card,		
	stretchable 5 - 5.2 mm		
	yellow	**793-5501/000-002**	
	red	**793-5501/000-005**	
	blue	**793-5501/000-006**	
	gray	**793-5501/000-007**	
	orange	**793-5501/000-012**	
	light green	**793-5501/000-017**	
	green	**793-5501/000-023**	
	violet	**793-5501/000-024**	
			5
Miniature WSB Quick marking system,			
	10 strips with 10 markers per card,		
	5 mm wide markers		
	plain	**248-501**	5

Accessories

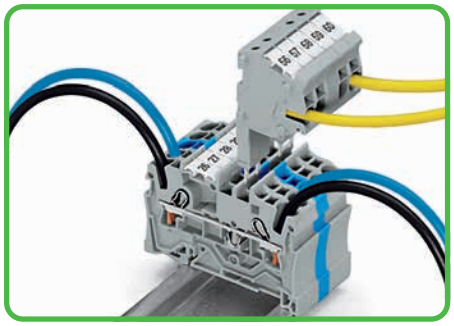
Appropriate marking systems: WMB/Marking

Test plug,			
	with 500 mm cable,		
	2.3 mm Ø		
	yellow	**210-137**	50
Test plug,			
	with 500 mm cable,		
	2 mm Ø		
	red	**210-136**	50
Strain relief plate, gray			
	35 mm width	**734-326**	100 (4x25)
	6 mm wide	**734-327**	100 (4x25)
	12.5 mm width	**734-328**	100 (4x25)
	25 mm wide	**734-329**	100 (4x25)
Marking strip, plain,			
	11 mm wide,		
	50 m roll		
	white	**2009-110**	1

Certification organizations can be found in the overview on pages 622 and 623.



Snapping connectors and spacer modules together to assemble a multipole connector.



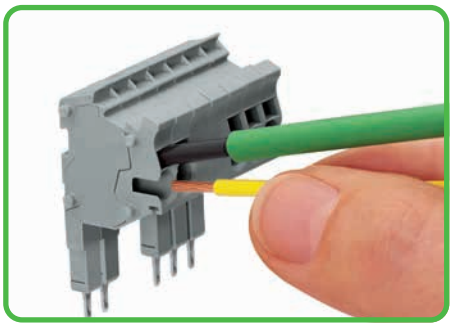
These modular connectors provide an additional connection option for conductors of the same cross section range as the terminal blocks being used.

❶ Conductor sizes: 0.25 mm² – 2.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 2.5 mm² "s" and 0.75 mm² – 1.5 mm² "insulated ferrule, 12 mm"

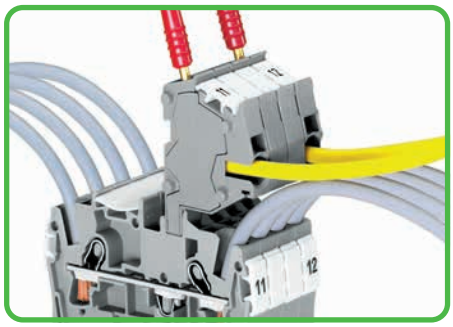
❷ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❸ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

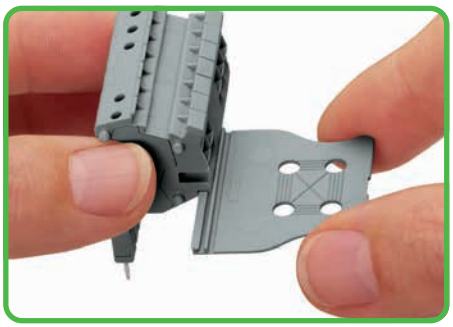
❹ Strip length, see packaging or instructions.



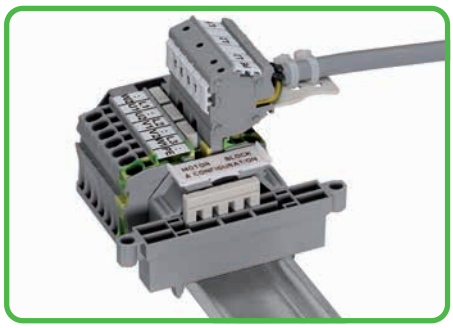
Conductor termination:
– Using an operating tool for unferruled, fine-stranded conductors
– Push-in connection of solid conductors



The connectors have a test socket for 2 mm Ø or 2.3 mm Ø test plugs.



Snapping on a strain relief plate.

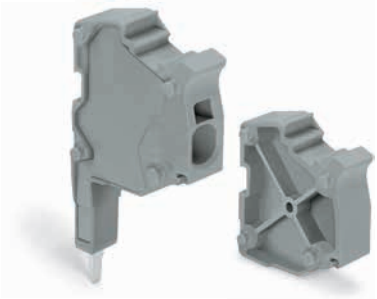


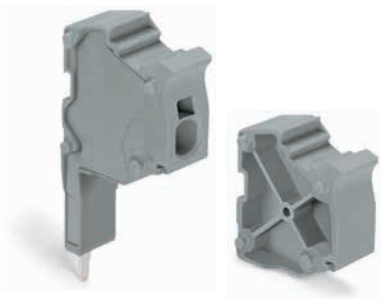
Rail-mounted terminal block assembly for electric motor wiring.

TOPJOB® S
Connectors 4 (6) mm²
2004/2006/2010/2016 Series

0.5 - 4 (6) mm² ❶ | AWG 20 - 10 500 V/6 kV/3 ❷ | 300 V, 30 A I_N 32 A Terminal block width 6.2 mm / 0.244 in 11 - 13 mm / 0.47 in ❸	0.5 - 4 (6) mm² ❶ | AWG 20 - 10 500 V/6 kV/3 ❷ I_N 32 A Terminal block width 7.5 mm / 0.295 in 11 - 13 mm / 0.47 in ❸	0.5 - 4 (6) mm² ❶ | AWG 20 - 10 500 V/6 kV/3 ❷ I_N 32 A Terminal block width 10 mm / 0.394 in 11 - 13 mm / 0.47 in ❸







Item No.		Pack. Unit
Modular TOPJOB®S connector,		
for jumper contact slot,		
can be snapped together, gray		
◯ 1-pole	**2004-511**	100 (4x25)
Spacer module, can be snapped together,		
e.g., for bridging commoned terminal blocks		
◯ gray	**2004-549**	100 (4x25)
TOPJOB®S connector strip,		
for jumper contact slot, gray		
◯ 2-pole	**2004-552**	25
◯ 3-pole	**2004-553**	25
◯ 4-pole	**2004-554**	25
◯ 5-pole	**2004-555**	10

Item No.		Pack. Unit
Modular TOPJOB®S connector,		
for jumper contact slot,		
can be snapped together, gray		
◯ 1-pole	**2006-511**	50 (2x25)
Spacer module, can be snapped together,		
e.g., for bridging commoned terminal blocks		
◯ gray	**2006-549**	50 (2x25)

Item No.		Pack. Unit
Modular TOPJOB®S connector,		
for jumper contact slot,		
can be snapped together, gray		
◯ 1-pole	**2010-511**	50 (2x25)
Spacer module, can be snapped together,		
e.g., for bridging commoned terminal blocks		
◯ gray	**2010-549**	50 (2x25)

Item-Specific Accessories

Test plug,



with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

Accessories

Appropriate marking systems: WMB/Marking strips
(see Section 13)

End plate,



for modular TOPJOB®S connectors,
1.5 mm thick
gray **2004-541** 100 (4x25)

Test plug,



with 500 mm cable,
2 mm Ø
red **210-136** 50

Strain relief plate, gray



35 mm width	**734-326**	100 (4x25)
6 mm wide	**734-327**	100 (4x25)
12.5 mm width	**734-328**	100 (4x25)
25 mm wide	**734-329**	100 (4x25)

Marking strip, plain,



11 mm wide,
50 m roll
white **2009-110** 1

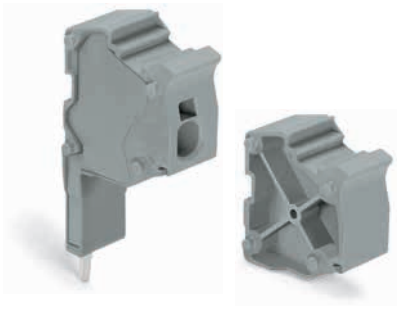
WMB Multi marking system,

10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

Certification organizations can be found in the overview on pages 622 and 623.

0.5 - 4 (6) mm² ❶ | AWG 20 - 10
500 V/6 kV/3 ❷
I_N 32 A

Terminal block width 12 mm / 0.472 in
11 - 13 mm / 0.47 in ❸



	Item No.	Pack. Unit
Modular TOPJOB®S connector,		
for jumper contact slot,		
can be snapped together, gray		
1-pole	**2016-511**	50 (2x25)
Spacer module, can be snapped together,		
e.g., for bridging commoned terminal blocks		
gray	**2016-549**	50 (2x25)

❶ Conductor sizes: 0.5 mm² – 6 mm² "s + f-st"; Push-in conductor sizes: 1 mm² – 6 mm² "s" and 0.75 mm² – 4 mm² "insulated ferrule, 12 mm"

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

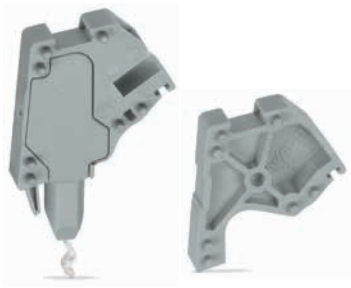
❸ Strip length, see packaging or instructions.

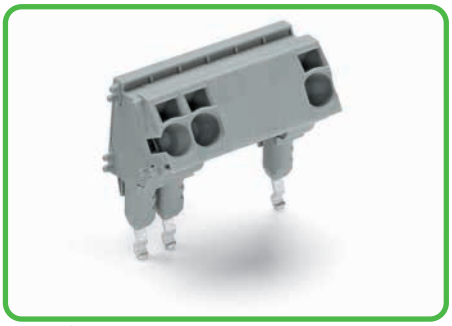
TOPJOB® S
L-Type Test Plug Modules for Testing Rail-Mounted Terminal Blocks
Terminal Block Width 5.2 mm via Conductor Wire Opening, 2002 Series

CAGE CLAMP®S

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12
500 V/6 kV/3 ❷
I_N 18 A

Terminal block width 5.2 mm / 0.205 in
10 - 12 mm / 0.43 in ❸





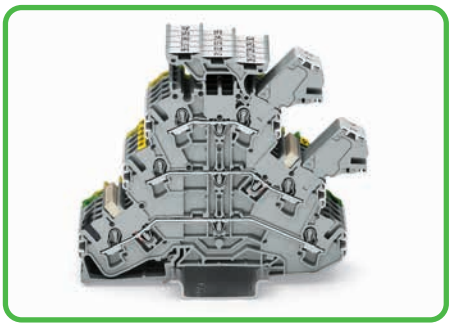
TOPJOB®S L-type test plug assembly consisting of:
L-test plug modules and spacer modules

❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st";
Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm²
"insulated ferrule, 12 mm"

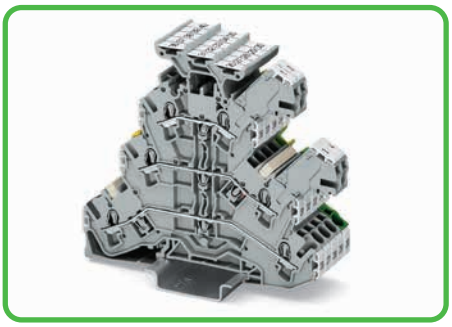
❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

	Item No.	Pack. Unit
TOPJOB®S L-test plug module, can be snapped together, gray		
According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
◯ 1-pole	**2002-611**	100 (4x25)
TOPJOB®S L-type spacer module,		
can be snapped together,		
e.g., for bridging commoned terminal blocks		
◯ gray	**2002-649**	100 (4x25)



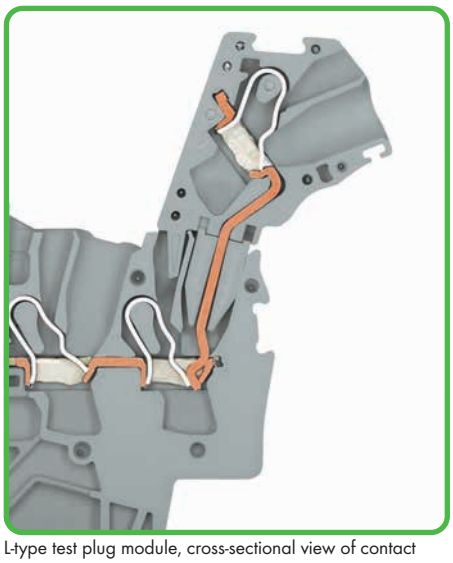
L-type test plug modules fitted in a triple-deck terminal block



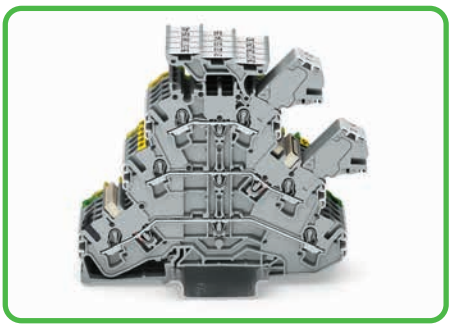
Accessories L-Type Test Plug Modules

Appropriate marking systems:
WMB/Marking strips/WMB Inline

End plate, for modular TOPJOB®S test plugs,			
	1.5 mm thick		
	gray	**2002-641**	100 (4x25)
Test plug,			
	with 500 mm cable,		
	2 mm Ø		
	red	**210-136**	50
Test plug,			
	with 500 mm cable,		
	2.3 mm Ø		
	yellow	**210-137**	50
Strain relief plate, gray			
	35 mm width	**734-326**	100 (4x25)
	6 mm wide	**734-327**	100 (4x25)
	12.5 mm width	**734-328**	100 (4x25)
	25 mm wide	**734-329**	100 (4x25)
WMB Inline, plain,			
	stretchable 5 - 5.2 mm,		
	1,500 WMB markers, 5 mm, on roll		
	white	**2009-115**	1
WMB Multi marking system,			
	10 strips with 10 markers per card,		
	stretchable 5 - 5.2 mm		
	plain	**793-5501**	5



L-type test plug module, cross-sectional view of contact



Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® S
Adjacent Jumpers for Continuous Commoning and Colored Push-In Type Jumper Bars, 2002 Series

Adjacent jumper for continuous commoning	Push-in type jumper bar	Push-in type jumper bar







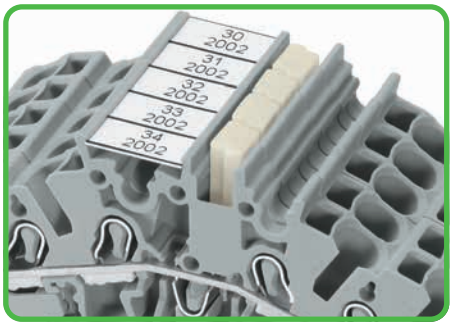




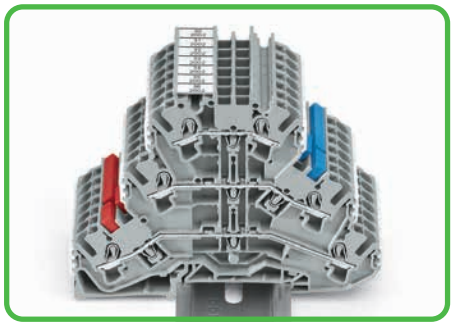
Item No.	Pack. Unit
Adjacent jumper for continuous commoning, insulated,	
I_N 25 A, light gray	
○ 2-way **2002-400**	100 (4x25)

Item No.	Pack. Unit
Push-in type jumper bar, insulated,	
I_N 25 A,	
red	
2-way **2002-402/000-005**	
3-way **2002-403/000-005**	
4-way **2002-404/000-005**	
	200 (8x25)
5-way **2002-405/000-005**	
6-way **2002-406/000-005**	
7-way **2002-407/000-005**	
8-way **2002-408/000-005**	
9-way **2002-409/000-005**	
10-way **2002-410/000-005**	
	100 (4x25)
Push-in type jumper bar, insulated,	
I_N 14 A,	
red	
2-way **2000-402/000-005**	
3-way **2000-403/000-005**	
4-way **2000-404/000-005**	
	200 (8x25)
5-way **2000-405/000-005**	
6-way **2000-406/000-005**	
7-way **2000-407/000-005**	
8-way **2000-408/000-005**	
9-way **2000-409/000-005**	
10-way **2000-410/000-005**	
	100 (4x25)

Item No.	Pack. Unit
Push-in type jumper bar, insulated,	
I_N 25 A,	
blue	
2-way **2002-402/000-006**	
3-way **2002-403/000-006**	
4-way **2002-404/000-006**	
	200 (8x25)
5-way **2002-405/000-006**	
6-way **2002-406/000-006**	
7-way **2002-407/000-006**	
8-way **2002-408/000-006**	
9-way **2002-409/000-006**	
10-way **2002-410/000-006**	
	100 (4x25)
Push-in type jumper bar, insulated,	
I_N 14 A,	
blue	
2-way **2000-402/000-006**	
3-way **2000-403/000-006**	
4-way **2000-404/000-006**	
	200 (8x25)
5-way **2000-405/000-006**	
6-way **2000-406/000-006**	
7-way **2000-407/000-006**	
8-way **2000-408/000-006**	
9-way **2000-409/000-006**	
10-way **2000-410/000-006**	
	100 (4x25)



Adjacent jumpers for continuous commoning



Colored push-in type jumper bars are used with sensor terminal blocks.

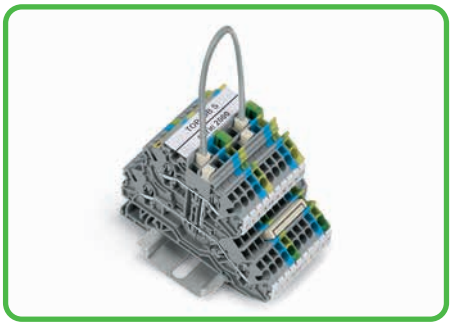
TOPJOB® S
Push-In Type Wire Jumpers

Push-in type wire jumper I_N 9 A Conductor size 0.75 mm²	Push-in type wire jumper I_N 18 A Conductor size 1.5 mm²

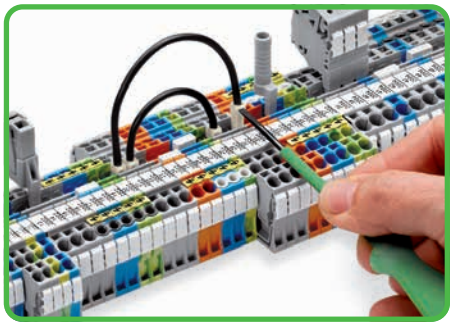




	Item No.	Pack. Unit		Item No.	Pack. Unit
Push-in type wire jumper, insulated, conductor cross section 0.75 mm², suitable for 2000 and 2020 Series rail-mounted terminal blocks			**Push-in type wire jumper,** insulated, conductor cross section 1.5 mm², suitable for 2001, 2002, 2003 and 2022 Series rail-mounted terminal blocks		
L = 60 mm	**2009-402**	100 (10x10)	L = 60 mm	**2009-412**	100 (10x10)
L = 110 mm	**2009-404**	100 (10x10)	L = 110 mm	**2009-414**	100 (10x10)
L = 250 mm	**2009-406**	100 (10x10)	L = 250 mm	**2009-416**	100 (10x10)



Push down the wire jumper until fully inserted.
Lift the jumper with an operating tool for rewiring.



Push down the wire jumper until fully inserted.
Lift the jumper with an operating tool for rewiring.

TOPJOB® S
Star Point Jumpers and Delta Jumpers

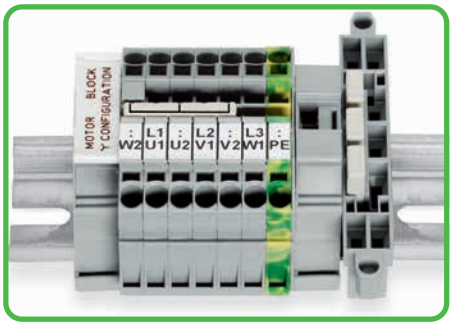
Star point jumper 800 V/8 kV/3 I_N = I_N terminal block	Delta jumper 800 V/8 kV/3 I_N = I_N terminal block



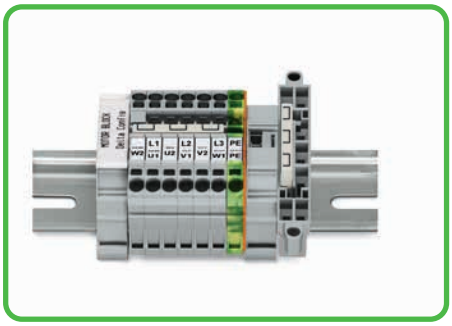


	Item No.	Pack. Unit
Star point jumper, insulated,		
1-3-5,		
light gray		
◯	**2000-405/011-000**	
◯	**2001-405/011-000**	
◯	**2002-405/011-000**	
◯	**2004-405/011-000**	
		100 (4x25)
◯	**2006-405/011-000**	
◯	**2010-405/011-000**	
◯	**2016-405/011-000**	
		50 (2x25)

	Item No.	Pack. Unit
Delta jumper, insulated,		
1-2 3-4 5-6,		
light gray		
◯	**2000-406/020-000**	
◯	**2001-406/020-000**	
◯	**2002-406/020-000**	
◯	**2004-406/020-000**	
		100 (4x25)



This jumper has been specially developed to create a "star point" and is used on motor terminal boards equipped with TOPJOB®S rail-mount terminal blocks.

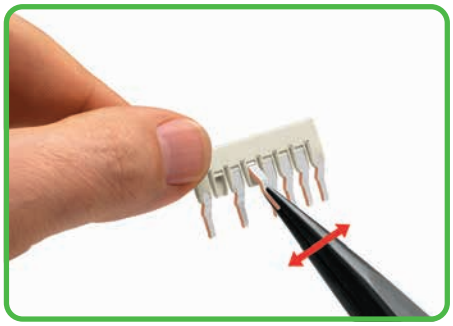


This jumper has been specially developed to create a "delta" configuration and is used on motor terminal boards equipped with TOPJOB®S rail-mounted terminal blocks.

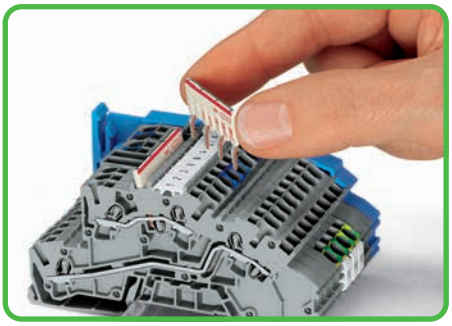
TOPJOB® S
Staggered Jumpers
2002 Series

Staggered jumper
400 V/6 kV/3
I_N 25 A





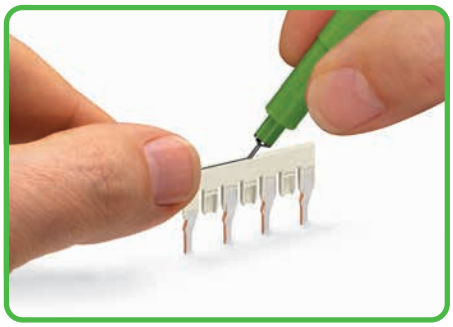
Staggered jumper with 7 contacts
Breaking off contact lugs – Individual jumper contacts can be broken off by bending them. The remaining piece of insulation will meet requirements for clearances and creepage distances.



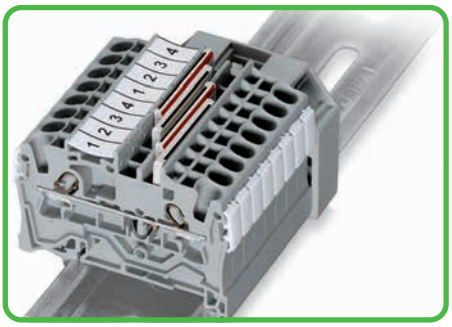
Insert staggered jumper
Push staggered jumper down until fully inserted.

	Item No.	Pack. Unit
Staggered jumper, insulated, suitable for 2002, 2003 and 2022 Series rail-mounted terminal blocks, light gray		
◯ 2-way	**2002-472**	100 (4x25)
◯ 3-way	**2002-473**	100 (4x25)
◯ 4-way	**2002-474**	100 (4x25)
◯ 5-way	**2002-475**	50 (2x25)
◯ 6-way	**2002-476**	50 (2x25)
◯ 7-way	**2002-477**	50 (2x25)
◯ 8-way	**2002-478**	50 (2x25)
◯ 9-way	**2002-479**	50 (2x25)
◯ 10-way	**2002-480**	50 (2x25)
◯ 11-way	**2002-481**	50 (2x25)
◯ 12-way	**2002-482**	50 (2x25)

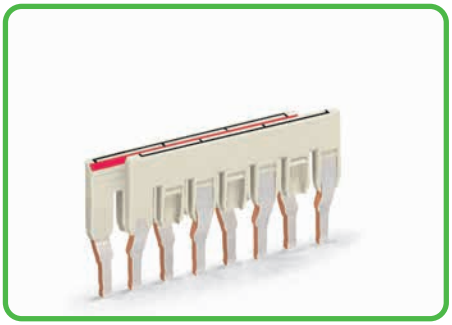
Commoning using staggered jumpers
Individual jumper contacts can be broken off by bending them. The remaining piece of insulation will meet the requirements for clearances and creepage distances.
This makes it possible to create custom staggered jumpers, e.g. for bridging over a terminal block with a different potential. When creating the jumpers, ensure only one contact lug is in contact with the terminal block.
The contact lugs of the customized staggered jumpers contact the terminal blocks via the gaps created in the second jumper. Insert and press jumper into the jumper slot until it hits the backstop.



Staggered jumper 1 – 3 – 5 – 7
Marking with a felt-tip pen.

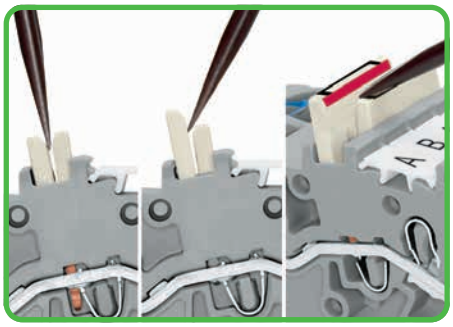


Locate red stripes of the staggered jumpers on the inside

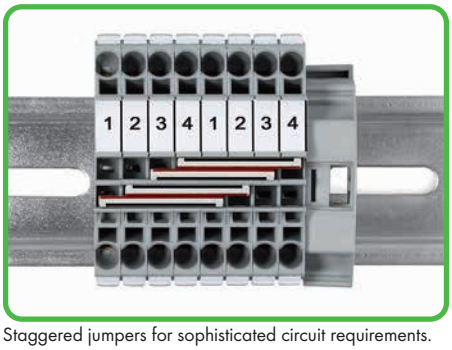


Jumpers staggered in a jumper slot
Custom staggered jumpers can be created, e.g., for bridging over a terminal block with a different potential. Make sure only one contact lug is in contact with the terminal block.

That way, staggered jumpers are created with contact lugs that will make contact to the terminal block in the gaps of the second jumper. Insert the ready-made jumper assembly into the jumper slot until it hits the stop.



Staggered jumper removal
Insert the operating tool between the jumpers and lift up the jumper.



Staggered jumpers for sophisticated circuit requirements.

TOPJOB® S
Vertical Jumpers
2000 and 2002 Series

Double-deck vertical jumper 500 V/6 kV/3 I_N 13.5 A	Double-deck vertical jumper 500 V/6 kV/3 I_N 24 A	Triple-deck vertical jumper 500 V/6 kV/3 I_N 24 A



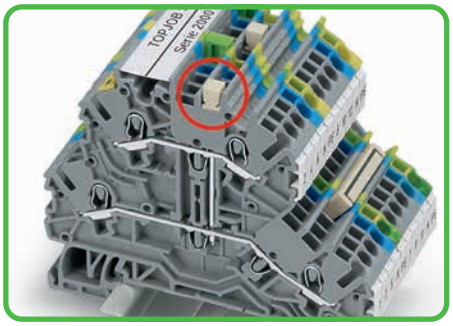




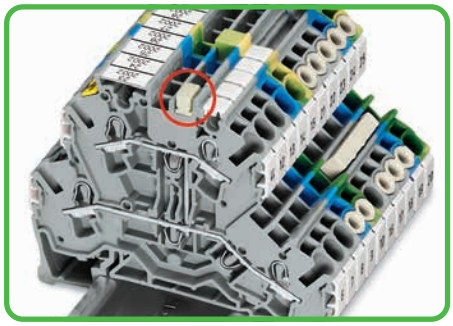
	Item No.	Pack. Unit
Double-deck vertical jumper, insulated		
light gray	**2000-492**	100 (4x25)

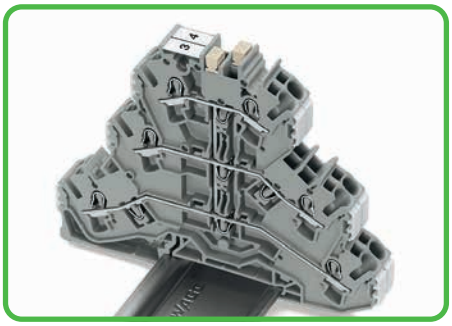
	Item No.	Pack. Unit
Double-deck vertical jumper, insulated		
light gray	**2002-492**	100 (4x25)
orange	**2002-492/000-012**	100 (4x25)

	Item No.	Pack. Unit
Triple-deck vertical jumper, insulated		
light gray	**2002-493**	100 (4x25)



Double-deck vertical jumper, inserted.


Double-deck vertical jumper, inserted.


Triple-deck vertical jumper, inserted.

TOPJOB® S
Disconnect Plugs for Carrier Terminal Blocks

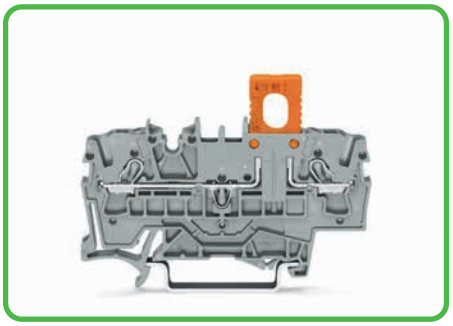
Disconnect plug for carrier terminal blocks 400 V/6 kV/3 I_N 10 A	Disconnect plug for carrier terminal blocks 800 V/8 kV/3 I_N 30 A



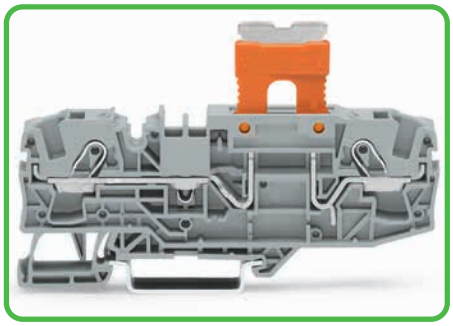


	Item No.	Pack. Unit
Disconnect plug for carrier terminal blocks, suited when using a carrier terminal block as disconnect terminal block		
orange	**2002-401**	100 (4x25)

	Item No.	Pack. Unit
Disconnect plug for carrier terminal blocks, suited when using a carrier terminal block as disconnect terminal block		
orange	**2006-401**	100 (4x25)



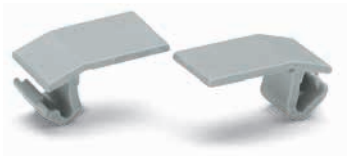
Carrier terminal block with disconnect plug in operating position.



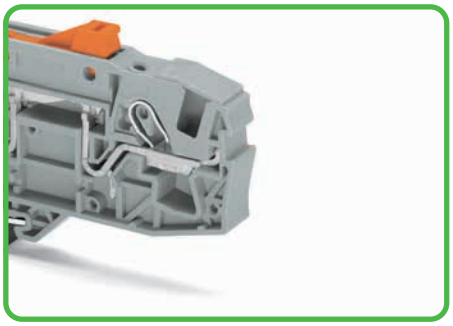
Carrier terminal block with disconnect plug in parked position.

TOPJOB® S
Lockout Caps

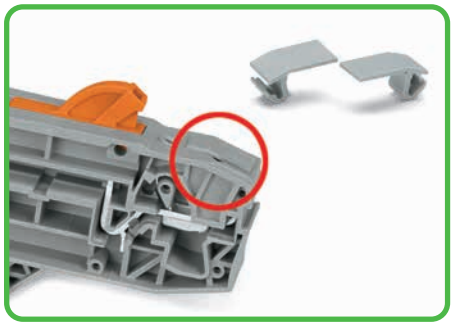
Lockout cap



	Item No.	Pack. Unit
Lockout cap, for conductor entry hole and operating slot		
gray	**2006-191**	25



Lockout cap for covering unused clamping units of 2006 Series TOPJOB®S terminal blocks.



Lockout cap for covering unused clamping units of 2006 Series TOPJOB®S terminal blocks.

TOPJOB® S
WMB Inline, Mini-WSB Inline and Marking Strips

WMB Inline	Mini-WSB Inline	Marking strip





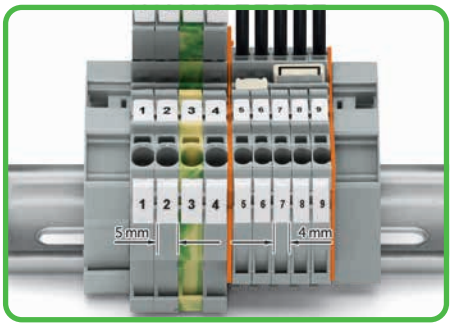
Similiar to picture



	Item No.	Pack. Unit
WMB Inline, plain, stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll		
◯ white	**2009-115**	1
WMB Inline, plain, stretchable 5 - 5.2 mm, 8,000 WMB markers, 5 mm, on roll		
◯ white	**2009-135**	1
WMB Inline, plain, stretchable 4 - 4.2 mm, 2,000 WMB markers, 4 mm, on roll		
◯ white	**2009-114**	1

	Item No.	Pack. Unit
Mini-WSB Inline, plain, stretchable 5 - 5.2 mm, 1,700 WMB markers, 5 mm, on roll		
◯ white	**2009-145**	1

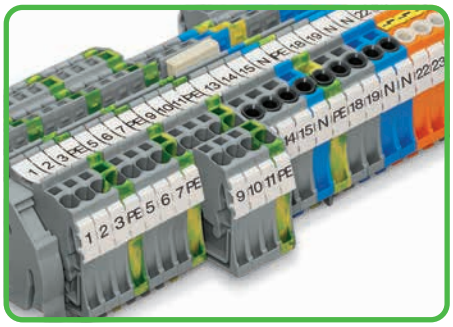
	Item No.	Pack. Unit
Marking strip, plain, 11 mm wide, white		
◯ 50 m roll	**2009-110**	1



WMB Inline
2009-115 markers for 5 - 5.2 mm wide terminal blocks compared to 2009-114 markers for 4 - 4.2 mm wide terminal blocks



WMB Inline
WMB markers on roll



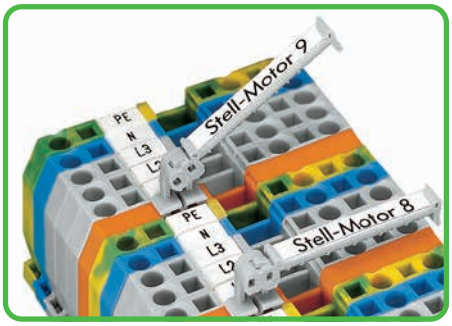
Marker strips for center marking

TOPJOB® S
Group Marker Carriers and Marker Carriers

Group marker carrier	Marker carrier







This pivoting group marker carrier has been developed for group marking of rail-mount terminal blocks to satisfy several customer requirements:

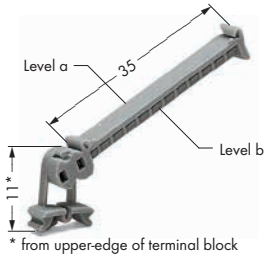
- Can be used in all multiprofile marker slots for rail-mount terminal bocks from 5 mm on or in spacer housings as shown above.
- Improves marking visibility due to difficult mounting conditions by pivoting into one of seven stable positions.

	Item No.	Pack. Unit
TOPJOB®S group marker carrier,		
snap-on type for jumper slot,		
gray		
◯ 5 mm wide	**2009-191**	50 (2x25)
◯ 10 mm wide	**2009-192**	50 (2x25)
◯ 15 mm wide	**2009-193**	50 (2x25)
TOPJOB®S group marker carrier,		
snap-on type for jumper slot,		
gray		
◯ 10 mm wide	**2009-196**	50 (2x25)

	Item No.	Pack. Unit
Marker carrier,		
for jumper slots 2002 Series,		
5 mm wide		
◯ gray	**2002-161**	100 (4x25)



Marking strip carriers
for use in jumper slots

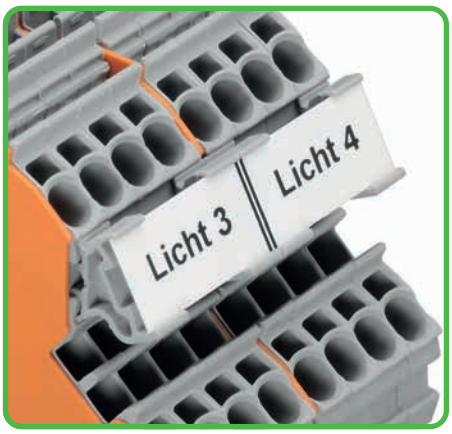


* from upper-edge of terminal block



	Item No.	Pack. Unit
Pivoting group marker carrier		
◯ gray	**249-105**	50 (2x25)
Marker card, 4 x 30 markers per sheet		
◯ white	**209-183**	1
Protection cover		
transparent	**209-184**	50

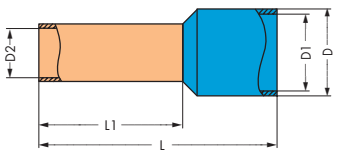
	Item No.	Pack. Unit
Marker carrier,		
for lateral marker receptacle,		
5 mm wide		
◯ gray	**2009-198**	200 (8x25)



Marking strip carriers
for use in lateral marker slots

TOPJOB® S
Ferrules for Rail-Mounted Terminal Blocks and Crimping Tools

Ferrule, insulated, tin-plated, electrolytic copper, gastight crimped	Variocrimp 4 crimping tool for insulated and uninsulated ferrules 0.25 mm² - 4 mm²/AWG 24 - 12	Variocrimp 16 crimping tool for insulated and uninsulated ferrules 6 mm² - 16 mm²/AWG 10 - 6







	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Ferrule, insulated, according to DIN 46228, part 4/09.90			**Variocrimp 4 crimping tool,** 0.25 mm² - 4 mm²/AWG 24 - 12		**Variocrimp 16 crimping tool,** 6 mm² - 16 mm²/AWG 10 - 6	
white	**216-241**	1000	**206-204**	1	**206-216**	1
gray	**216-242**	1000				
gray	**216-262**	1000				
red	**216-243**	1000				
red	**216-263**	1000				
black	**216-244**	1000				
black	**216-264**	1000				
black	**216-284**	1000				
blue	**216-246**	1000				
blue	**216-266**	1000				
blue	**216-286**	1000				
gray	**216-267**	1000				
gray	**216-287**	500				
yellow	**216-208**	100				
yellow	**216-288**	500				
blue	**216-289**	500				
blue	**216-210**	100				

Ferrules

Technical Data

Ferrule, insulated,	**Ferrule, insulated,**	**Ferrule, insulated,**
sleeve for 0.5 mm²/AWG 22,	sleeve for 1 mm²/AWG 18,	sleeve for 1.5 mm²/AWG 16,
12 mm strip length,	12 mm strip length,	14 mm strip length,
L: 16 mm, L1: 10 mm,	L: 16 mm, L1: 10 mm,	L: 18 mm, L1: 12 mm,
D: 3.1 mm, D1: 2.6 mm, D2: 1 mm	D: 3.5 mm, D1: 3 mm, D2: 1.4 mm	D: 4 mm, D1: 3.5 mm, D2: 1.7 mm
white **216-241**	red **216-243**	black **216-264**
Ferrule, insulated,	**Ferrule, insulated,**	**Ferrule, insulated,**
sleeve for 0.75 mm²/AWG 20,	sleeve for 1 mm²/AWG 18,	sleeve for 1.5 mm²/AWG 16,
12 mm strip length,	14 mm strip length,	20 mm strip length,
L: 16 mm, L1: 10 mm,	L: 18 mm, L1: 12 mm,	L: 24 mm, L1: 18 mm,
D: 3.3 mm, D1: 2.8 mm, D2: 1.2 mm	D: 3.5 mm, D1: 3 mm, D2: 1.4 mm	D: 4 mm, D1: 3.5 mm, D2: 1.7 mm
gray **216-242**	red **216-263**	black **216-284**
Ferrule, insulated,	**Ferrule, insulated,**	**Ferrule, insulated,**
sleeve for 0.75 mm²/AWG 20,	sleeve for 1.5 mm²/AWG 16,	sleeve for 2.5 mm²/AWG 14,
14 mm strip length,	12 mm strip length,	12 mm strip length,
L: 18 mm, L1: 12 mm,	L: 16 mm, L1: 10 mm,	L: 17 mm, L1: 10 mm,
D: 3.3 mm, D1: 2.8 mm, D2: 1.2 mm	D: 4 mm, D1: 3.5 mm, D2: 1.7 mm	D: 4.7 mm, D1: 4.2 mm, D2: 2.2 mm
gray **216-262**	black **216-244**	blue **216-246**



Insert ferruled conductor into crimping station.



Squeeze handles until ratchet mechanism is released.

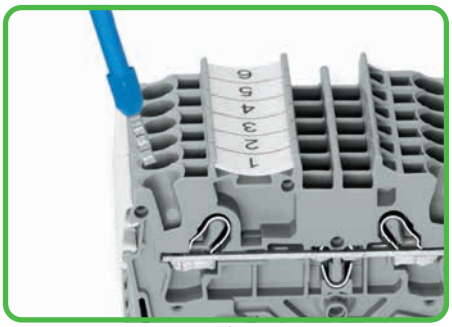
Application notes:

- With "Variocrimp 4," the built-in crimping pressure control automatically adjusts force to the conductor cross section used. With "Variocrimp 16," it is necessary to select the wire gauge on the tool before crimping.
- Only one crimping station is needed to handle the specified conductor size range.
- Uniform compact crimping from all four sides for high conductor retention.
- No need to center the conductor into the ferrule.
- Conductor and ferrule insertion possible from both sides (for left- and right-handers).
- Built-in ratchet mechanism ensures gastight crimp connection.
- Crimping tools open automatically after crimping operation is complete.
- Comfortable handles for operator.

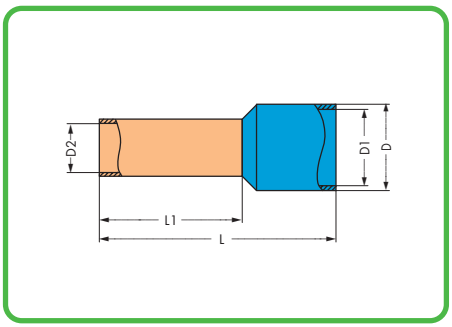
Ferrules

Technical Data

Ferrule, insulated,	**Ferrule, insulated,**
 Sleeve for 2.5 mm² / AWG 14, 14 mm strip length, L: 19 mm, L1: 12 mm, D: 4.7 mm, D1: 4.2 mm, D2: 2.2 mm blue **216-266**	 Sleeve for 10 mm² / AWG 8, 20 mm strip length, L: 28 mm, L1: 18 mm, D: 8.4 mm, D1: 7.6 mm, D2: 4.5 mm blue **216-289**
Ferrule, insulated,	**Ferrule, insulated,**
 Sleeve for 2.5 mm² / AWG 14, 20 mm strip length, L: 25 mm, L1: 18 mm, D: 4.7 mm, D1: 4.2 mm, D2: 2.2 mm blue **216-286**	 Sleeve for 16 mm² / AWG 6, 23 mm strip length, L: 29 mm, L1: 18 mm, D: 9.6 mm, D1: 8.8 mm, D2: 5.8 mm blue **216-210**
Ferrule, insulated,	
 Sleeve for 4 mm² / AWG 12, 14 mm strip length, L: 20 mm, L1: 12 mm, D: 5.4 mm, D1: 4.8 mm, D2: 2.8 mm gray **216-267**	
Ferrule, insulated,	
 Sleeve for 4 mm² / AWG 12, 20 mm strip length, L: 26 mm, L1: 18 mm, D: 5.4 mm, D1: 4.8 mm, D2: 2.8 mm gray **216-287**	
Ferrule, insulated,	
 Sleeve for 6 mm² / AWG 10, 14 mm strip length, L: 20 mm, L1: 12 mm, D: 6.8 mm, D1: 6.2 mm, D2: 3.5 mm yellow **216-208**	
Ferrule, insulated,	
 Sleeve for 6 mm² / AWG 10, 20 mm strip length, L: 26 mm, L1: 18 mm, D: 6.9 mm, D1: 6.3 mm, D2: 3.5 mm yellow **216-288**	



Stranded conductors with ferrules
from at least two sizes below the rated cross section up to the rated cross section can be simply pushed in – without tools.



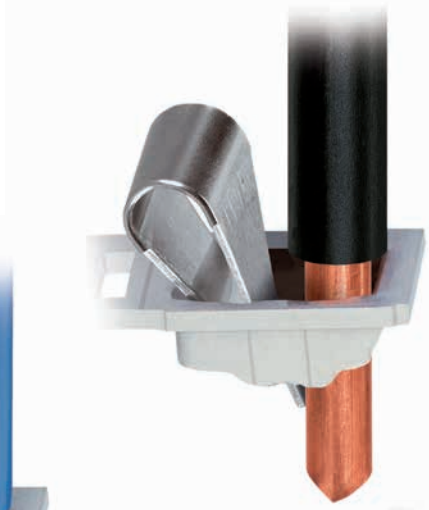
For dimensions of insulated ferrules, see technical data.

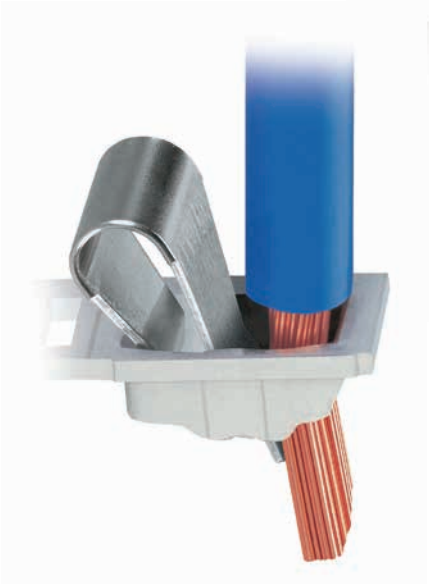
CAGE CLAMP®S

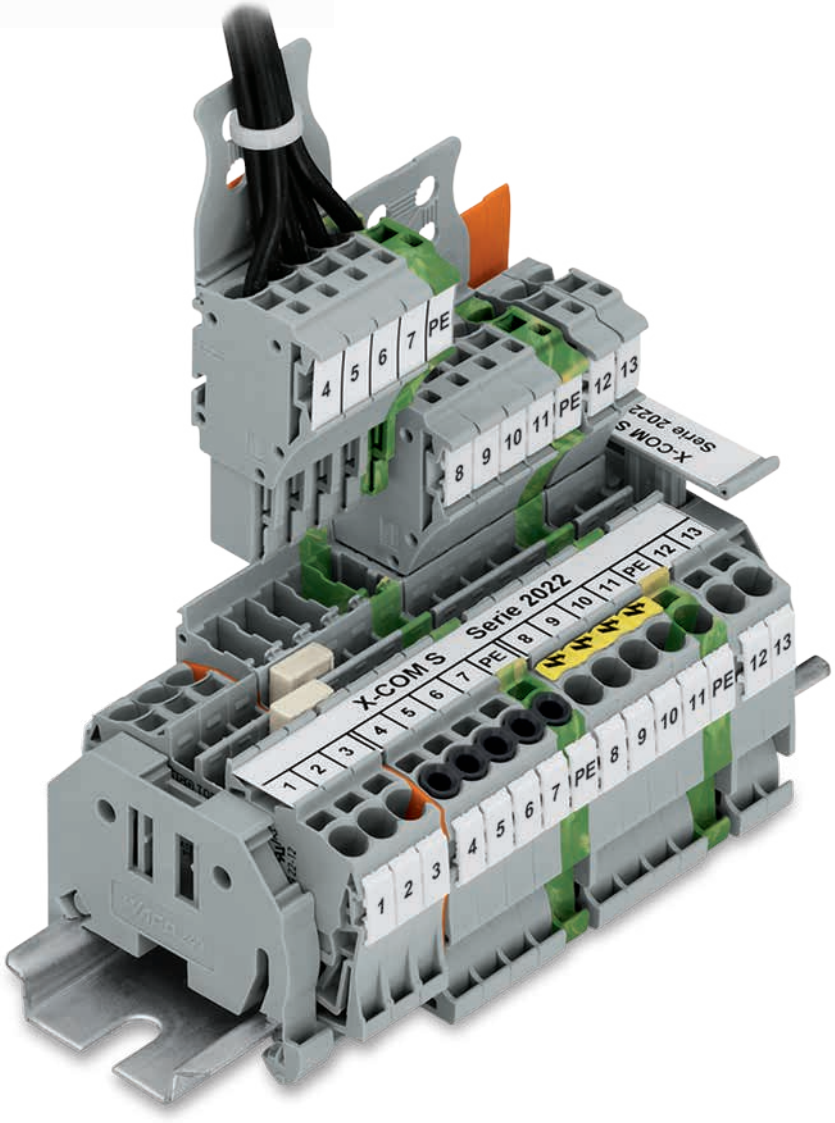
The universal connection with "SPECIAL"

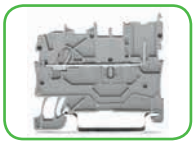
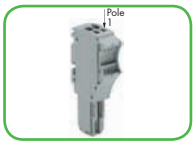
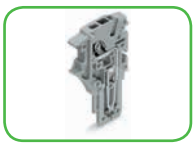
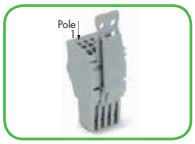
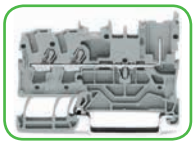
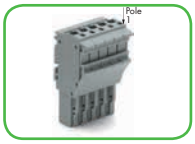
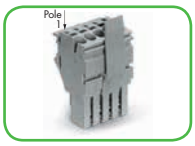
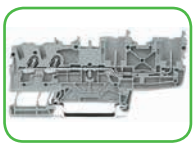
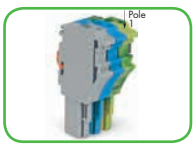
Handling:
- Open clamping unit
- Insert the conductor
- Release clamp – done!
- Terminate both solid and ferruled conductors by simply pushing them in – no operating tool needed.





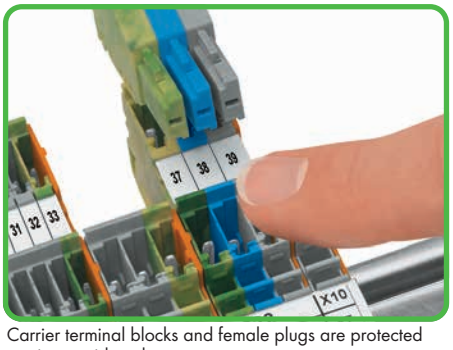




			Page
	**X-COM®S-SYSTEM-MINI** **Through and Ground Conductor Carrier Terminal Blocks** 0.14 to 1 (1.5) mm² (24–16 AWG)	**2020 Series**	115
	**Double-Deck Carrier Terminal Blocks** 0.14 to 1 (1.5) mm² (24–16 AWG)	2020 Series	116
	**1- and 2-Conductor Female Plugs** 0.14 to 1 (1.5) mm² (24–16 AWG)	2020 Series	118
	**Female Plugs for Self-Assembly** 0.14 to 1 (1.5) mm² (24–16 AWG)	2020 Series	120
	**1- and 2- Conductor Female Plugs with Locking Levers and Strain Relief Plates** 0.14 to 1 (1.5) mm² (24–16 AWG)	2020 Series	126
	**X-COM®S-SYSTEM** **Through and Ground Conductor Carrier Terminal Blocks** 0.25 mm² to 2.5 (4) mm² (22–12 AWG)	**2022 Series**	130
	**Double-Deck Carrier Terminal Blocks** 0.25 mm² to 2.5 (4) mm² (22–12 AWG)	2022 Series	134
	**1-Conductor Female Plugs** 0.25 mm² to 2.5 (4) mm² (22–12 AWG)	2022 Series	133
	**Female Plugs for Self-Assembly** 0.25 mm² to 2.5 (4) mm² (22–12 AWG)	2022 Series	136
	**1-Conductor Female Plugs with Locking Levers and Strain Relief Plates** 0.25 mm² to 2.5 (4) mm² (22–12 AWG)	2022 Series	140
	**X-COM®S-SYSTEM, for Ex Applications** **Through and Ground Conductor Carrier Terminal Blocks and Double-Deck Carrier Terminal Blocks** 0.25 mm² to 2.5 (4) mm² (22–12 AWG)	**2022 Series**	142
	**1-Conductor Female Plugs** 0.25 mm² to 2.5 (4) mm² (22–12 AWG)	2022 Series	146

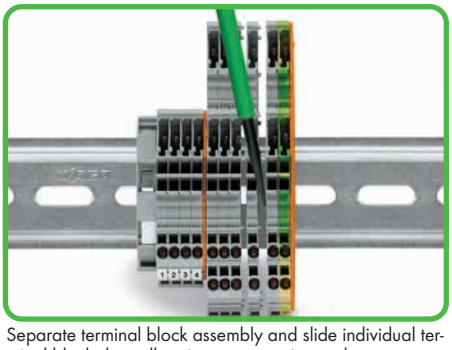
X-COM®S-SYSTEM-MINI – 2020 Series
X-COM®S-SYSTEM – 2022 Series

Touchproof protection



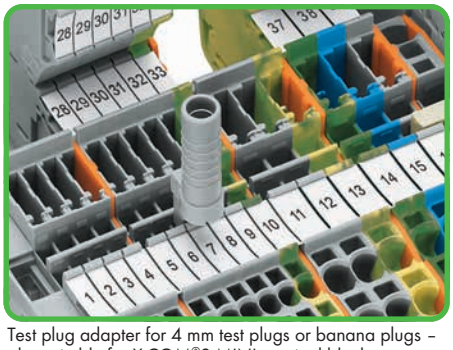
Carrier terminal blocks and female plugs are protected against accidental contact.

Removal



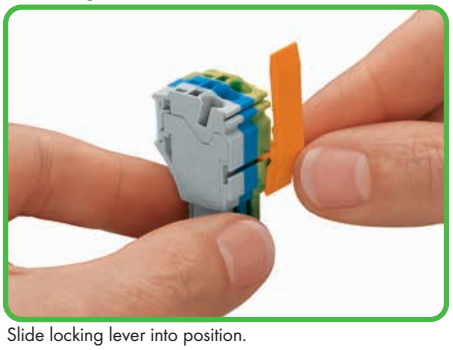
Separate terminal block assembly and slide individual terminal blocks laterally using an operating tool.

Testing

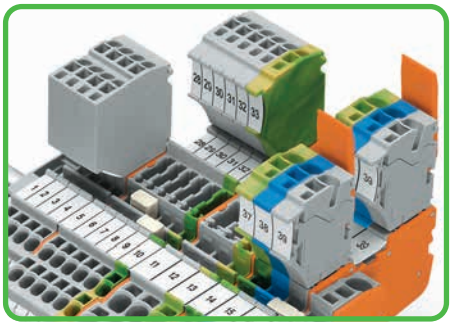


Test plug adapter for 4 mm test plugs or banana plugs – also suitable for X-COM®S MINI terminal blocks.

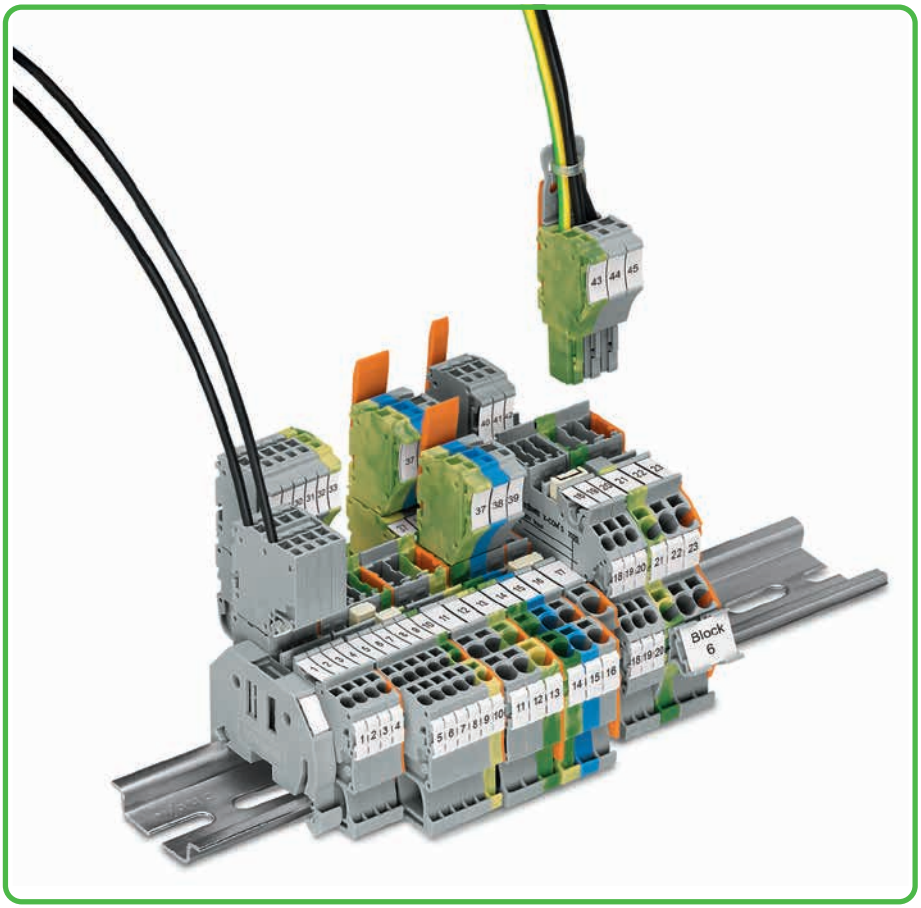
Locking lever



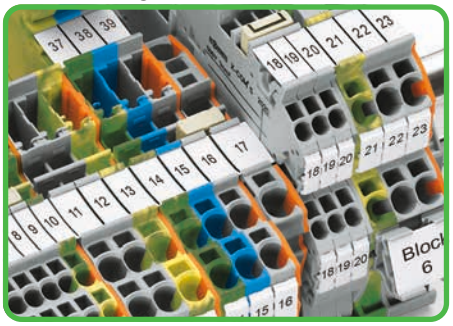
Slide locking lever into position.



Females plugs can be locked individually.

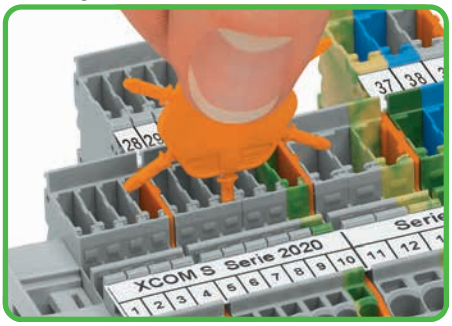


Commoning



X-COM®S terminal blocks can be commoned using jumpers for TOPJOB®S terminal blocks. An end plate provides connection to TOPJOB®S terminal blocks.
Combining 2020 Series with 2022 Series terminal blocks. Jumper slots are on the same level for both series.

Coding



Insert coding pin into the corresponding slot and twist it off.

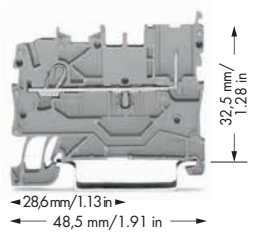
Coding

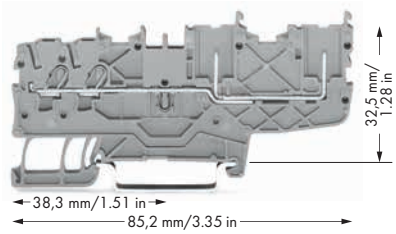


Remove coding finger with a cutting tool.

X-COM®S-SYSTEM-MINI
1-Conductor/1-Pin Carrier Terminal Blocks;
2-Conductor/2-Pin Carrier Terminal Blocks, 2020 Series

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 **500 V/6 kV/3 ❷** **I_N 13.5 A ❸** **Terminal block width 3.5 mm / 0.138 in** **9 - 11 mm / 0.39 in ❹**	**0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16** **500 V/6 kV/3 ❷** **I_N 13.5 A ❸** **Terminal block width 3.5 mm / 0.138 in** **9 - 11 mm / 0.39 in ❹**





❶ Conductor sizes: 0.14 mm² – 1.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 1.5 mm² "s" and 0.5 mm² – 0.75 mm² "insulated ferrule, 10 mm"

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Current-carrying capacity curves upon request

❹ Strip length, see packaging or instructions.

❺ See application notes for:
Colored push-in type jumper bars, page 101
Star point jumper, page 103
Delta jumper, page 103
Push-in type wire jumper, page 102

	Item No.	Pack. Unit
1-conductor/1-pin carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**2020-1201**	50
blue	**2020-1204**	50
1-conductor/1-pin ground carrier terminal block, for DIN 35 rail, acc. to EN 60715		
green-yellow	**2020-1207**	50
Notice: An end plate must be applied to the carrier terminal blocks after each female plug.		

Item-Specific Accessories

		Item No.	Pack. Unit
End and intermediate plate, 1 mm thick			
	orange	**2020-1292**	100 (4x25)
	gray	**2020-1291**	100 (4x25)

	Item No.	Pack. Unit
2-conductor/2-pin carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**2020-1401**	50
blue	**2020-1404**	50
2-conductor/2-pin ground carrier terminal block, for DIN 35 rail, acc. to EN 60715		
green-yellow	**2020-1407**	50
Notice: An end plate must be applied to the carrier terminal blocks after each female plug.		

Item-Specific Accessories

		Item No.	Pack. Unit
End and intermediate plate, 1 mm thick			
	orange	**2020-1492**	100 (4x25)
	gray	**2020-1491**	100 (4x25)

2020 Series Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

		Item No.	Pack. Unit
Push-in type jumper bar, insulated, ❺			
	I_N 14 A, light gray		
	2-way	**2000-402**	200 (8x25)
	3-way	**2000-403**	200 (8x25)
	4-way	**2000-404**	200 (8x25)
	5-way	**2000-405**	100 (4x25)
	6-way	**2000-406**	100 (4x25)
	7-way	**2000-407**	100 (4x25)
	8-way	**2000-408**	100 (4x25)
	9-way	**2000-409**	100 (4x25)
	10-way	**2000-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 14 A, light gray		
	from 1 to 3	**2000-433**	200 (8x25)
	from 1 to 4	**2000-434**	200 (8x25)
	from 1 to 5	**2000-435**	100 (4x25)
	from 1 to 6	**2000-436**	100 (4x25)
	from 1 to 7	**2000-437**	100 (4x25)
	from 1 to 8	**2000-438**	100 (4x25)
	from 1 to 9	**2000-439**	100 (4x25)
	from 1 to 10	**2000-440**	100 (4x25)
Delta jumper, insulated, ❺			
	I_N = I_N terminal block, light gray		
	1-2 3-4 5-6	**2000-406/020-000**	100 (4x25)

		Item No.	Pack. Unit
Star point jumper, insulated, ❺			
	I_N = I_N terminal block, light gray		
	1-3-5	**2000-405/011-000**	100 (4x25)
Push-in type wire jumper, ❺			
	insulated, I_N 16 A, wire size 1.5 mm²		
	L = 60 mm	**2009-402**	100 (10x10)
	L = 110 mm	**2009-404**	100 (10x10)
	L = 250 mm	**2009-406**	100 (10x10)
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**2000-115**	100 (4x25)
Carrier with 6 coding pins,			
	for coding female plugs		
	orange	**2020-100**	100 (4x25)
Test pin,			
	1 mm Ø	**859-500**	1

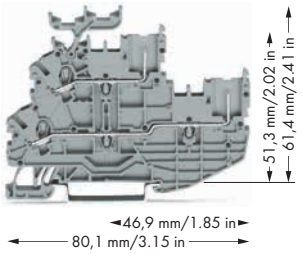
Accessories

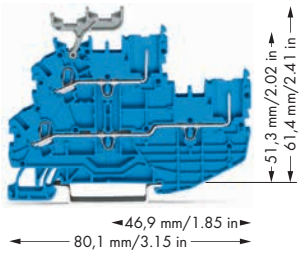
		Item No.	Pack. Unit
1-conductor female plug			
	gray	**2020-102**	100
2-conductor female plug			
	gray	**2020-202**	100
Test plug adapter,			
	for 4 mm Ø test plug		
	gray	**2009-174**	100 (4x25)
Banana plug,			
	for socket 4 mm Ø, color mixed	**215-111**	50
Testing tap,			
	for max. 2.5 mm²		
	gray	**2009-182**	100 (4x25)
Marking strip, plain,			
	11 mm wide, 50 m roll		
	white	**2009-110**	1
WMB Multi marking system,			
	10 strips with 10 markers per card, for 3.5 mm terminal block width		
	plain	**793-3501**	5
Screwless end stop,			
	for DIN 35 rail, 6 mm wide		
	gray	**249-116**	100 (4x25)
Screwless end stop,			
	for DIN 35 rail, 10 mm wide		
	gray	**249-117**	50 (2x25)

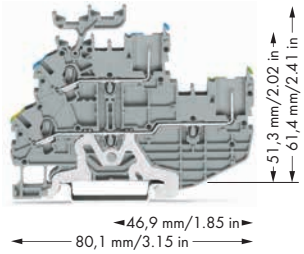
Certification organizations can be found in the overview on pages 622 and 623.

X-COM® -SYSTEM-MINI
1-Conductor/1-Pin Double-Deck Carrier Terminal Blocks
2020 Series

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Terminal block width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹	0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Terminal block width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹	0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Terminal block width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹



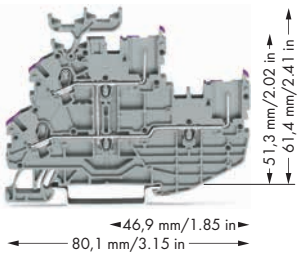


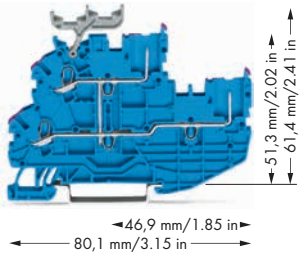


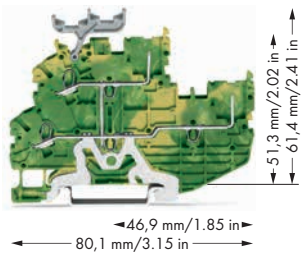
	Item No.	Pack. Unit
1-conductor/1-pin double-deck carrier terminal block, through/through terminal block, with marker carrier, gray housing		
L/L	**2020-2231**	50
N/L	**2020-2232**	50
L/N	**2020-2233**	50
1-conductor/1-pin double-deck carrier terminal block, through/through terminal block, without marker carrier, gray housing		
L/L	**2020-2201**	50
N/L	**2020-2202**	50
L/N	**2020-2203**	50

	Item No.	Pack. Unit
1-conductor/1-pin double-deck carrier terminal block, through/through terminal block, with marker carrier, blue housing		
N/N	**2020-2234**	50
1-conductor/1-pin double-deck carrier terminal block, through/through terminal block, without marker carrier, blue housing		
N/N	**2020-2204**	50

	Item No.	Pack. Unit
1-conductor/1-pin double-deck carrier terminal block, ground conductor/through terminal block, with marker carrier, gray housing		
PE/N	**2020-2247**	50
PE/L	**2020-2257**	50
1-conductor/1-pin double-deck carrier terminal block, ground conductor/through terminal block, without marker carrier, gray housing		
PE/N	**2020-2217**	50
PE/L	**2020-2227**	50







	Item No.	Pack. Unit
2-conductor/2-pin double-deck carrier terminal block, 2-conductor/2-pin through terminal block, with marker carrier, internal commoning, conductor entry with violet marking, gray housing		
L	**2020-2238**	50
2-conductor/2-pin double-deck carrier terminal block, 2-conductor/2-pin through terminal block, without marker carrier, internal commoning, conductor entry with violet marking, gray housing		
L	**2020-2208**	50

	Item No.	Pack. Unit
2-conductor/2-pin double-deck carrier terminal block, 2-conductor/2-pin through terminal block, with marker carrier, internal commoning, conductor entry with violet marking, blue housing		
N	**2020-2239**	50
2-conductor/2-pin double-deck carrier terminal block, 2-conductor/2-pin through terminal block, without marker carrier, internal commoning, conductor entry with violet marking, blue housing		
N	**2020-2209**	50

	Item No.	Pack. Unit
2-conductor/2-pin double-deck carrier terminal block, **2-conductor/2-pin ground conductor terminal block,** with marker carrier, internal commoning, green-yellow housing		
PE	**2020-2237**	50
2-conductor/2-pin double-deck carrier terminal block, **2-conductor/2-pin ground conductor terminal block,** without marker carrier, internal commoning, green-yellow housing		
PE	**2020-2207**	50

Certification organizations can be found in the overview on pages 622 and 623.

❶ Conductor sizes: 0.14 mm² – 1.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 1.5 mm² "s" and 0.5 mm² – 0.75 mm² "insulated ferrule, 10 mm"

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Current-carrying capacity curves upon request

❹ Strip length, see packaging or instructions.

❺ See application notes for:
Colored push-in type jumper bars, page 101
Vertical jumper, page 105

2020 Series Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

End and intermediate plate, 1 mm thick



orange	**2020-2292**	100 (4x25)
gray	**2020-2291**	100 (4x25)

Push-in type jumper bar, insulated, ❺



I_N 14 A, light gray

2-way	**2000-402**	200 (8x25)
3-way	**2000-403**	200 (8x25)
4-way	**2000-404**	200 (8x25)
5-way	**2000-405**	100 (4x25)
6-way	**2000-406**	100 (4x25)
7-way	**2000-407**	100 (4x25)
8-way	**2000-408**	100 (4x25)
9-way	**2000-409**	100 (4x25)
10-way	**2000-410**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 14 A, light gray

from 1 to 3	**2000-433**	200 (8x25)
from 1 to 4	**2000-434**	200 (8x25)
from 1 to 5	**2000-435**	100 (4x25)
from 1 to 6	**2000-436**	100 (4x25)
from 1 to 7	**2000-437**	100 (4x25)
from 1 to 8	**2000-438**	100 (4x25)
from 1 to 9	**2000-439**	100 (4x25)
from 1 to 10	**2000-440**	100 (4x25)

Double-deck vertical jumper, insulated, ❺

I_N 13.5 A, light gray | **2000-492** | 100 (4x25)

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks, yellow | **2000-115** | 100 (4x25)

Carrier with 6 coding pins,



for coding female plugs, orange | **2020-100** | 100 (4x25)

Test pin,



1 mm Ø | **859-500** | 1

1-conductor female plug



gray | **2020-102** | 100

2-conductor female plug



gray | **2020-202** | 100

Test plug adapter,



for 4 mm Ø test plug, gray | **2009-174** | 100 (4x25)

Banana plug,



for socket 4 mm Ø, color mixed | **215-111** | 50

Testing tap,



for max. 2.5 mm², gray | **2009-182** | 100 (4x25)

Test plug,



with 500 mm cable, 2 mm Ø, red | **210-136** | 50

Test plug,



with 500 mm cable, 2.3 mm Ø, yellow | **210-137** | 50

Double-deck marker carrier,



pivoting, gray | **2000-121** | 50 (2x25)

WMB Multi marking system,

10 strips with 10 markers per card, for 3.5 mm terminal block width, plain | **793-3501** | 5

Marking strip, plain,



11 mm wide, 50 m roll, white | **2009-110** | 1

X-COM®S-SYSTEM-MINI
1-Conductor Female Plugs; 2-Conductor Female Plugs
2020 Series

CAGE CLAMP®S

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Module width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹	0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Module width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹





❶ Conductor sizes: 0.14 mm² – 1.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 1.5 mm² "s" and 0.5 mm² – 0.75 mm² "insulated ferrule, 10 mm"

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

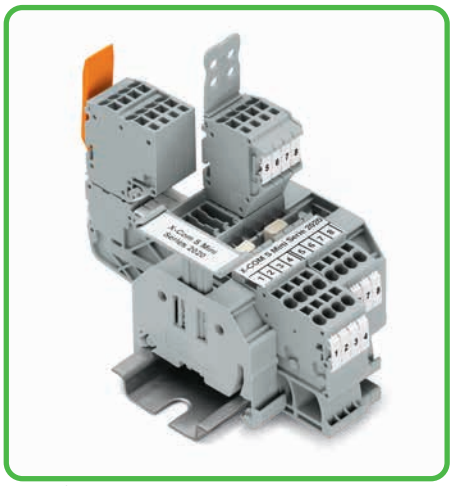
❸ Current-carrying capacity curves upon request

❹ Strip length, see packaging or instructions.

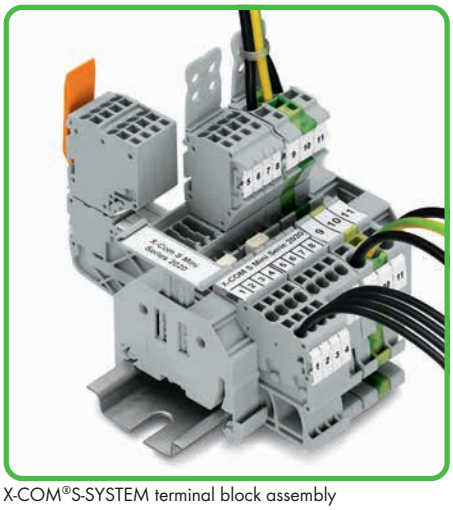
❺ Item-no. suffix
blue . . . /000-006
green-yellow . . . /000-016

Pole No.	Item No.	Pack. Unit
1-conductor female plug, for insertion into carrier terminal blocks, with coding fingers, gray		
According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
2	**2020-102**	100
3	**2020-103**	50
4	**2020-104**	50
5	**2020-105**	50
6	**2020-106**	50
7	**2020-107**	25
8	**2020-108**	25
9	**2020-109**	25
10	**2020-110**	25
11	**2020-111**	20
12	**2020-112**	20
13	**2020-113**	10
14	**2020-114**	10
15	**2020-115**	10
Notice:		
An end plate must be applied to the carrier terminal blocks after each female plug.		

Pole No.	Item No.	Pack. Unit
2-conductor female plug, for insertion into carrier terminal blocks, with coding fingers, gray		
According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
2	**2020-202**	100
3	**2020-203**	50
4	**2020-204**	50
5	**2020-205**	50
6	**2020-206**	25
7	**2020-207**	25
8	**2020-208**	25
9	**2020-209**	25
10	**2020-210**	25
11	**2020-211**	20
12	**2020-212**	20
13	**2020-213**	10
14	**2020-214**	10
15	**2020-215**	10
Notice:		
An end plate must be applied to the carrier terminal blocks after each female plug.		



X-COM®S-SYSTEM terminal block assembly



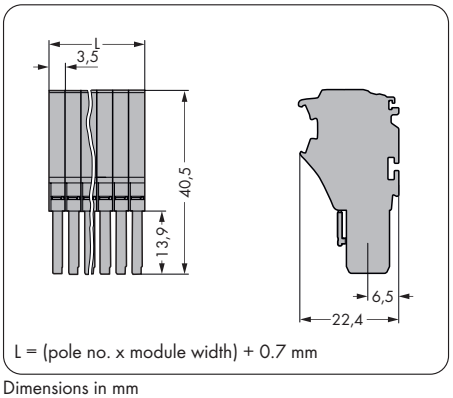
X-COM®S-SYSTEM terminal block assembly

Accessories Female Plugs

Appropriate marking systems: WMB/Marking strips
(see Section 13)

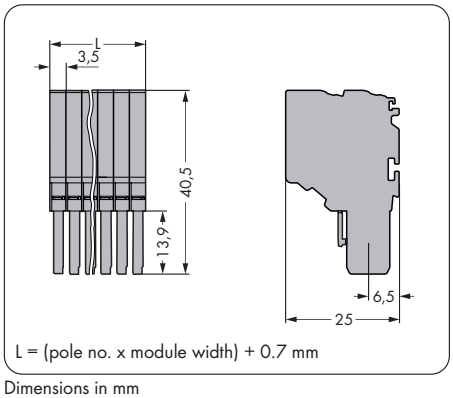
Locking lever,			
	4.8 mm wide		
	orange	**2022-142**	100 (4x25)
	gray	**2022-141**	100 (4x25)

Locking lever,			
	9.6 mm wide		
	orange	**2022-152**	100 (4x25)
	gray	**2022-151**	100 (4x25)



L = (pole no. x module width) + 0.7 mm

Dimensions in mm

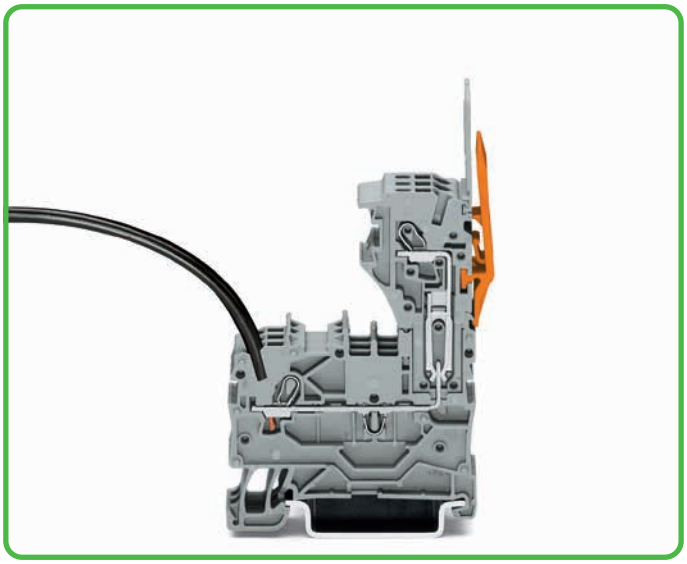


L = (pole no. x module width) + 0.7 mm

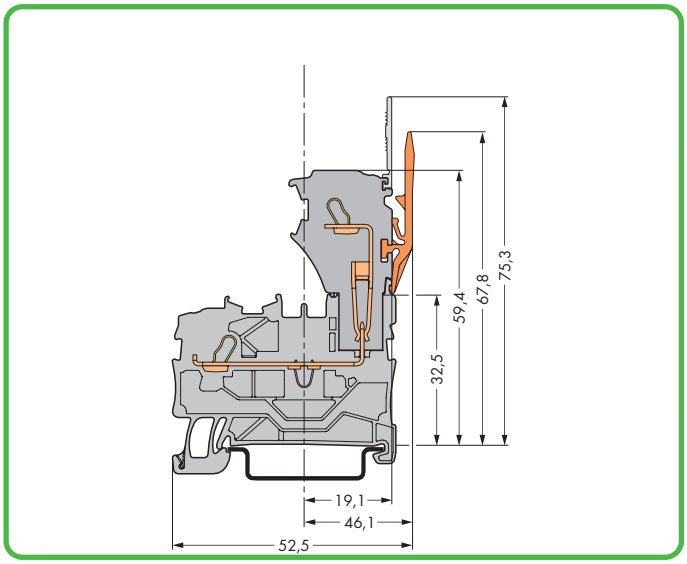
Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

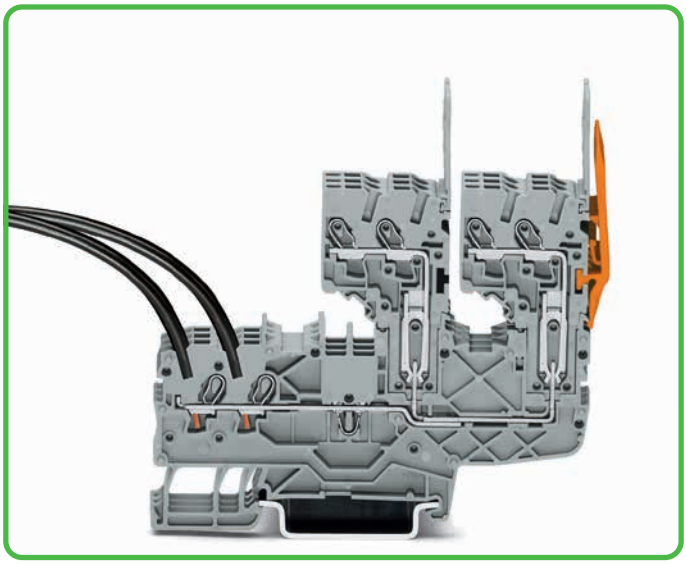
Types of Assembly
1-Conductor/1-Pin Carrier Terminal Blocks and 1-Conductor Female Plug



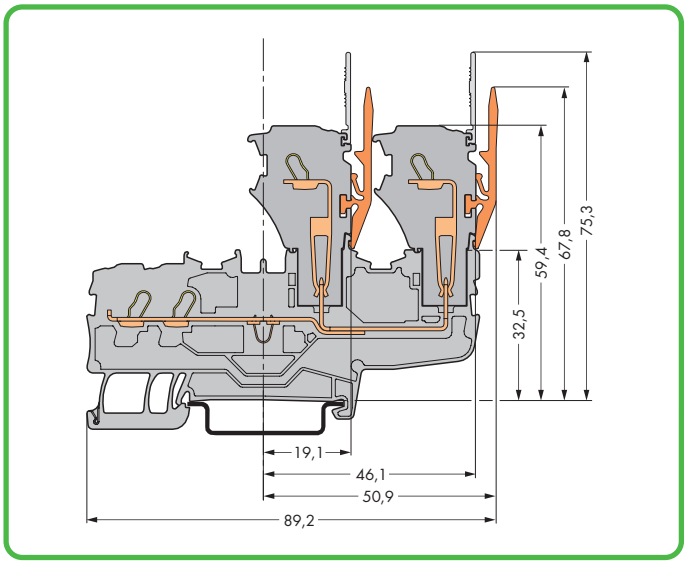
1-connector female plug
Commoning option of carrier terminal blocks with 2000 Series push-in type jumper bars and testing option with 859-500 test pin



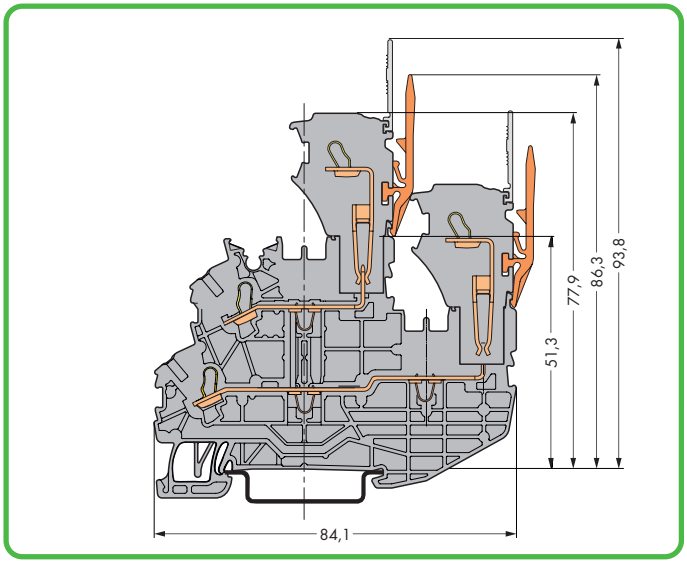
Carrier terminal block with 1-conductor female plug



2-connector female plug
Commoning option of carrier terminal blocks with 2000 Series push-in type jumper bars and testing option with 859-500 test pin



Carrier terminal block with two 1-conductor female plugs



Double deck carrier terminal block with two 1-conductor female plugs

X-COM® S-SYSTEM-MINI
Female Plugs for Self-Assembly
2020 Series

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 **500 V/6 kV/3 ❷** **I_N 13.5 A ❸** **Terminal block width 3.5 mm / 0.138 in** **9 - 11 mm / 0.39 in ❹**	**0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16** **500 V/6 kV/3 ❷** **I_N 13.5 A ❸** **Terminal block width 3.5 mm / 0.138 in** **9 - 11 mm / 0.39 in ❹**





	Item No.	Pack. Unit		Item No.	Pack. Unit
1-conductor end module,			**2-conductor end module,**		
with coding fingers			with coding fingers		
gray	**2020-181**	250	gray	**2020-281**	250
blue	**2020-184**	250	blue	**2020-284**	250
green-yellow	**2020-187**	250	green-yellow	**2020-287**	250
1-conductor base module with end plate,			**2-conductor base module with end plate,**		
with coding fingers			with coding fingers		
gray	**2020-161**	250	gray	**2020-261**	250
blue	**2020-164**	250	blue	**2020-264**	250
green-yellow	**2020-167**	250	green-yellow	**2020-267**	250

Accessories Female Plugs

Appropriate marking systems: WMB/Marking strips
(see Section 13)

Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**2000-115**	100 (4x25)
Vorhängeschloss,			
	9,6 mm breit		
	orange	**2022-152**	100 (4x25)
	gray	**2022-151**	100 (4x25)
Locking lever,			
	4.8 mm wide		
	orange	**2022-142**	100 (4x25)
	gray	**2022-141**	100 (4x25)
Strain relief plate, gray			
	35 mm width	**734-326**	100 (4x25)
	6 mm wide	**734-327**	100 (4x25)
	12.5 mm width	**734-328**	100 (4x25)
	25 mm wide	**734-329**	100 (4x25)
WMB Multi marking system,			
	10 strips with 10 markers per card,		
	for 3.5 mm terminal block width		
	plain	**793-3501**	5
Marking strip, plain,			
	11 mm wide,		
	50 m roll		
	white	**2009-110**	1

Certification organizations can be found in the overview on pages 622 and 623.

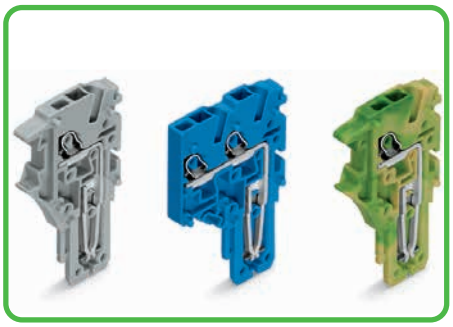
Self-Assembly of Individual Female Plugs
Using modular female plugs from the X-COM®S-SYSTEM, female plugs can be customized for applications requiring varying numbers of poles (e.g., when designing prototypes).

Modules and Pole Numbers
A self-assembled female plug consists of:
Base module with end plate
and **max. 14** end modules.

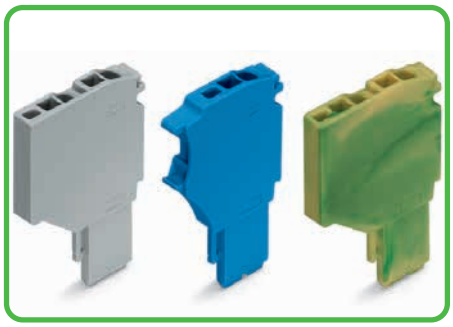
Intended Use
According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.

Assembly
The appropriate mounting tool shall be used to guarantee that the individual modules are properly attached to each other without damaging the locking latches.

1. Conductor sizes: 0.14 mm² – 1.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 1.5 mm² "s" and 0.5 mm² – 0.75 mm² "insulated ferrule, 10 mm"
2. 500 V = rated voltage
   6 kV = rated surge voltage
   3 = pollution degree
   (see Section 14)
3. Current-carrying capacity curves upon request
4. Strip length, see packaging or instructions.

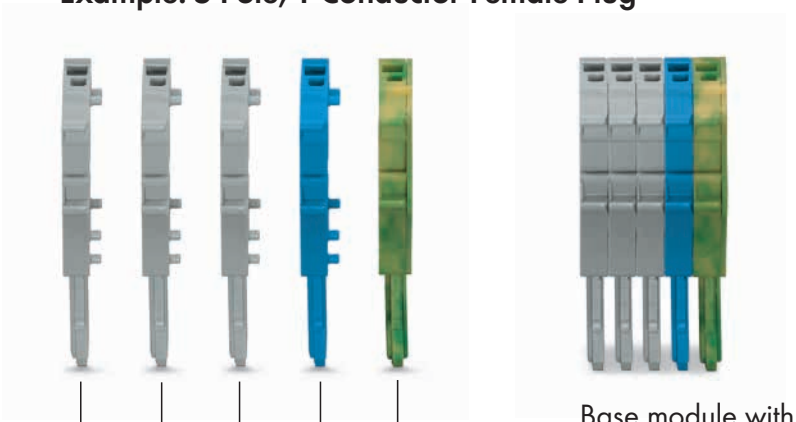


End Module



Base Module

Example: 5-Pole, 1-Conductor Female Plug



Base module with end plate
2020-167

End module
2020-184

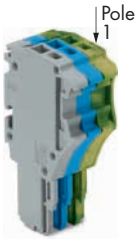
End modules
2020-181

X-COM® S-SYSTEM-MINI
Pre-Assembled Female Plugs
2020 Series

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Module width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹	0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Module width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹	0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Module width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹







Pole No.	Item No.	Pack. Unit
1-conductor female plug with ground base module (green-yellow), for insertion into carrier terminal blocks, with coding fingers		
3	**2020-103/000-036**	50
4	**2020-104/000-036**	50
5	**2020-105/000-036**	50
6	**2020-106/000-036**	50
7	**2020-107/000-036**	25
8	**2020-108/000-036**	25
9	**2020-109/000-036**	25
10	**2020-110/000-036**	25
11	**2020-111/000-036**	20
12	**2020-112/000-036**	20
13	**2020-113/000-036**	10
14	**2020-114/000-036**	10
15	**2020-115/000-036**	10

Pole No.	Item No.	Pack. Unit
1-conductor female plug with ground end module (green-yellow), for insertion into carrier terminal blocks, with coding fingers		
3	**2020-103/000-037**	50
4	**2020-104/000-037**	50
5	**2020-105/000-037**	50
6	**2020-106/000-037**	50
7	**2020-107/000-037**	25
8	**2020-108/000-037**	25
9	**2020-109/000-037**	25
10	**2020-110/000-037**	25
11	**2020-111/000-037**	20
12	**2020-112/000-037**	20
13	**2020-113/000-037**	10
14	**2020-114/000-037**	10
15	**2020-115/000-037**	10

Pole No.	Item No.	Pack. Unit
1-conductor female plug with ground base module (green-yellow), for insertion into carrier terminal blocks, with coding fingers		
3	**2020-103/000-038**	50
4	**2020-104/000-038**	50
5	**2020-105/000-038**	50
6	**2020-106/000-038**	50
7	**2020-107/000-038**	25
8	**2020-108/000-038**	25
9	**2020-109/000-038**	25
10	**2020-110/000-038**	25
11	**2020-111/000-038**	20
12	**2020-112/000-038**	20
13	**2020-113/000-038**	10
14	**2020-114/000-038**	10
15	**2020-115/000-038**	10

Accessories Female Plugs

Appropriate marking systems: WMB/Marking strips
(see Section 13)

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks
yellow **2000-115** 100 (4x25)

Locking lever,
9.6 mm wide
orange **2022-152** 100 (4x25)
gray **2022-151** 100 (4x25)

Locking lever,
4.8 mm wide
orange **2022-142** 100 (4x25)
gray **2022-141** 100 (4x25)

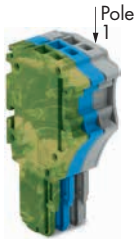
Strain relief plate, gray
35 mm width **734-326** 100 (4x25)
6 mm wide **734-327** 100 (4x25)
12.5 mm width **734-328** 100 (4x25)
25 mm wide **734-329** 100 (4x25)

WMB Multi marking system,
10 strips with 10 markers per card,
for 3.5 mm terminal block width
plain **793-3501** 5

Marking strip, plain,
11 mm wide,
50 m roll
white **2009-110** 1

Certification organizations can be found in the overview on pages 622 and 623.

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16
500 V/6 kV/3 ❷
I_N 13.5 A ❸
Module width 3.5 mm / 0.138 in
9 - 11 mm / 0.39 in ❹



Pole No.	Item No.	Pack. Unit
1-conductor female plug with ground end module (green-yellow),		
for insertion into carrier terminal blocks,		
with coding fingers		
3	**2020-103/000-039**	50
4	**2020-104/000-039**	50
5	**2020-105/000-039**	50
6	**2020-106/000-039**	50
7	**2020-107/000-039**	25
8	**2020-108/000-039**	25
9	**2020-109/000-039**	25
10	**2020-110/000-039**	25
11	**2020-111/000-039**	20
12	**2020-112/000-039**	20
13	**2020-113/000-039**	10
14	**2020-114/000-039**	10
15	**2020-115/000-039**	10

❶ Conductor sizes: 0.14 mm² – 1.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 1.5 mm² "s" and 0.5 mm² – 0.75 mm² "insulated ferrule, 10 mm"

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Current-carrying capacity curves upon request

❹ Strip length, see packaging or instructions.

X-COM® S-SYSTEM-MINI
Pre-Assembled Female Plugs
2020 Series

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Module width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹	0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Module width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹	0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Module width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹







Pole No.	Item No.	Pack. Unit
2-conductor female plug with ground base module (green-yellow), for insertion into carrier terminal blocks, with coding fingers		
3	**2020-203/000-036**	50
4	**2020-204/000-036**	50
5	**2020-205/000-036**	50
6	**2020-206/000-036**	25
7	**2020-207/000-036**	25
8	**2020-208/000-036**	25
9	**2020-209/000-036**	25
10	**2020-210/000-036**	25
11	**2020-211/000-036**	20
12	**2020-212/000-036**	20
13	**2020-213/000-036**	10
14	**2020-214/000-036**	10
15	**2020-215/000-036**	10

Pole No.	Item No.	Pack. Unit
2-conductor female plug with ground end module (green-yellow), for insertion into carrier terminal blocks, with coding fingers		
3	**2020-203/000-037**	50
4	**2020-204/000-037**	50
5	**2020-205/000-037**	50
6	**2020-206/000-037**	25
7	**2020-207/000-037**	25
8	**2020-208/000-037**	25
9	**2020-209/000-037**	25
10	**2020-210/000-037**	25
11	**2020-211/000-037**	20
12	**2020-212/000-037**	20
13	**2020-213/000-037**	10
14	**2020-214/000-037**	10
15	**2020-215/000-037**	10

Pole No.	Item No.	Pack. Unit
2-conductor female plug with ground base module (green-yellow), for insertion into carrier terminal blocks, with coding fingers		
3	**2020-203/000-038**	50
4	**2020-204/000-038**	50
5	**2020-205/000-038**	50
6	**2020-206/000-038**	25
7	**2020-207/000-038**	25
8	**2020-208/000-038**	25
9	**2020-209/000-038**	25
10	**2020-210/000-038**	25
11	**2020-211/000-038**	20
12	**2020-212/000-038**	20
13	**2020-213/000-038**	10
14	**2020-214/000-038**	10
15	**2020-215/000-038**	10

Accessories Female Plugs

Appropriate marking systems: WMB/Marking strips
(see Section 13)

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks

yellow	**2000-115**	100 (4x25)

Locking lever,



9.6 mm wide

orange	**2022-152**	100 (4x25)
gray	**2022-151**	100 (4x25)

Locking lever,



4.8 mm wide

orange	**2022-142**	100 (4x25)
gray	**2022-141**	100 (4x25)

Strain relief plate, gray



35 mm width	**734-326**	100 (4x25)
6 mm wide	**734-327**	100 (4x25)
12.5 mm width	**734-328**	100 (4x25)
25 mm wide	**734-329**	100 (4x25)

WMB Multi marking system,

10 strips with 10 markers per card, for 3.5 mm terminal block width

plain	**793-3501**	5

Marking strip, plain,



11 mm wide, 50 m roll

white	**2009-110**	1

Certification organizations can be found in the overview on pages 622 and 623.

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16
500 V/6 kV/3 ❷
I_N 13.5 A ❸
Module width 3.5 mm / 0.138 in
9 - 11 mm / 0.39 in ❹



Pole No.	Item No.	Pack. Unit
2-conductor female plug with ground end module (green-yellow),		
for insertion into carrier terminal blocks,		
with coding fingers		
3	**2020-203/000-039**	50
4	**2020-204/000-039**	50
5	**2020-205/000-039**	50
6	**2020-206/000-039**	25
7	**2020-207/000-039**	25
8	**2020-208/000-039**	25
9	**2020-209/000-039**	25
10	**2020-210/000-039**	25
11	**2020-211/000-039**	20
12	**2020-212/000-039**	20
13	**2020-213/000-039**	10
14	**2020-214/000-039**	10
15	**2020-215/000-039**	10

❶ Conductor sizes: 0.14 mm² – 1.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 1.5 mm² "s" and 0.5 mm² – 0.75 mm² "insulated ferrule, 10 mm"

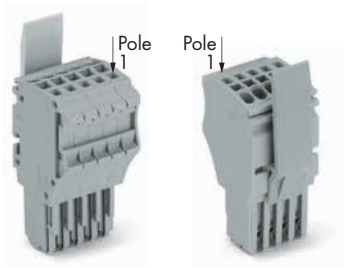
❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

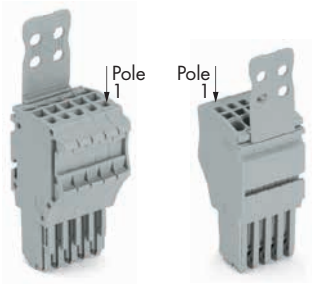
❸ Current-carrying capacity curves upon request

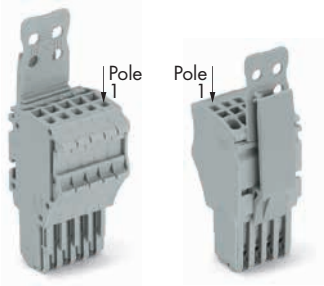
❹ Strip length, see packaging or instructions.

X-COM® S-SYSTEM-MINI
1-Conductor Female Plugs with Locking Levers and Strain Relief Plates
2020 Series

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Module width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹	0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Module width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹	0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Module width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹







Pole No.	Item No.	Pack. Unit
1-conductor female plug with locking lever, for insertion into carrier terminal blocks, with coding fingers, gray According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
2	**2020-102/122-000**	100
3	**2020-103/122-000**	50
4	**2020-104/124-000**	50
5	**2020-105/124-000**	50
6	**2020-106/124-000**	25
7	**2020-107/124-000**	25
8	**2020-108/124-000**	25
9	**2020-109/124-000**	25
10	**2020-110/125-000**	25
11	**2020-111/125-000**	20
12	**2020-112/125-000**	20
13	**2020-113/125-000**	10
14	**2020-114/125-000**	10
15	**2020-115/125-000**	10

Pole No.	Item No.	Pack. Unit
1-conductor female plug with strain relief plate, for insertion into carrier terminal blocks, with coding fingers, gray According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
2	**2020-102/132-000**	100
3	**2020-103/132-000**	50
4	**2020-104/133-000**	50
5	**2020-105/133-000**	50
6	**2020-106/133-000**	25
7	**2020-107/134-000**	25
8	**2020-108/134-000**	25
9	**2020-109/134-000**	25
10	**2020-110/135-000**	25
11	**2020-111/135-000**	20
12	**2020-112/135-000**	20
13	**2020-113/135-000**	10
14	**2020-114/135-000**	10
15	**2020-115/135-000**	10

Pole No.	Item No.	Pack. Unit
1-conductor female plug with strain relief plate and locking lever, for insertion into carrier terminal blocks, with coding fingers, gray According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
2	**2020-102/142-000**	100
3	**2020-103/142-000**	50
4	**2020-104/143-000**	50
5	**2020-105/143-000**	50
6	**2020-106/143-000**	25
7	**2020-107/144-000**	25
8	**2020-108/144-000**	25
9	**2020-109/144-000**	25
10	**2020-110/145-000**	25
11	**2020-111/145-000**	20
12	**2020-112/145-000**	20
13	**2020-113/145-000**	10
14	**2020-114/145-000**	10
15	**2020-115/145-000**	10

Accessories Female Plugs

Appropriate marking systems: WMB/Marking strips
(see Section 13)

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks



yellow	**2000-115**	100 (4x25)

Locking lever,
9.6 mm wide



orange	**2022-152**	100 (4x25)
gray	**2022-151**	100 (4x25)

Locking lever,
4.8 mm wide



orange	**2022-142**	100 (4x25)
gray	**2022-141**	100 (4x25)

Strain relief plate, gray



35 mm width	**734-326**	100 (4x25)
6 mm wide	**734-327**	100 (4x25)
12.5 mm width	**734-328**	100 (4x25)
25 mm wide	**734-329**	100 (4x25)

WMB Multi marking system,
10 strips with 10 markers per card,
for 3.5 mm terminal block width

plain	**793-3501**	5

Marking strip, plain,
11 mm wide,
50 m roll



white	**2009-110**	1

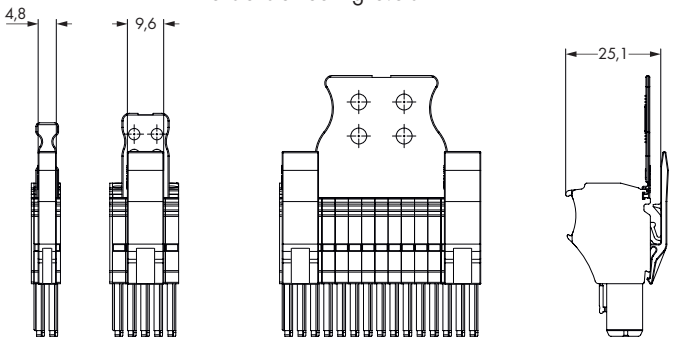
Certification organizations can be found in the overview on pages 622 and 623.

1. Conductor sizes: 0.14 mm² – 1.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 1.5 mm² "s" and 0.5 mm² – 0.75 mm² "insulated ferrule, 10 mm"
2. 500 V = rated voltage
   6 kV = rated surge voltage
   3 = pollution degree
   (see Section 14)
3. Current-carrying capacity curves upon request
4. Strip length, see packaging or instructions.

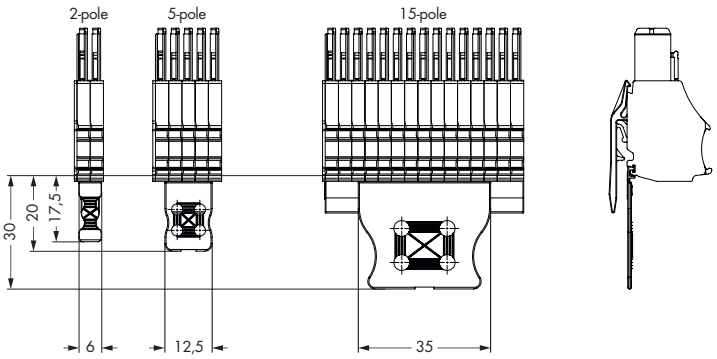
Strain Relief Plate (SRP), Gray			Assembled	Locking Levers (LL), Gray		Assembled		SRP and LL, Gray Assembled
SRP				Pole No.	Quantity	1-way	2-way	
			Item No. Suffix			Item No. Suffix		Item No. Suffix
Item No.	Color	Width						
734-327	gray	6mm	/132-0xx	2 to 3	1	/122-0xx	–	/142-0xx
734-328	gray	12.5mm	/133-0xx	4 to 6	1	–	/124-0xx	/143-0xx
734-329	gray	25mm	/134-0xx	7 to 9	1	–	/124-0xx	/144-0xx
734-326	gray	35mm	/135-0xx	10 to 15	2	–	/125-0xx	/145-0xx

For colored female plugs, the item number suffix "xx" must be replaced by the blue "-006" and the green-yellow "-016" color suffix.

Dimensions of locking levers



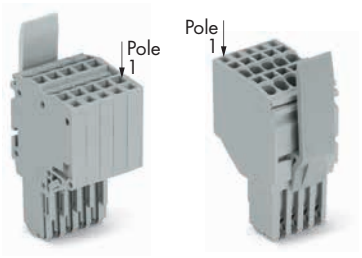
Description	Color	Item No.	Suffix No.
1-conductor female plug 2 to 15-pole	gray	2020-102	none
	blue	to	/000-006
	green-yellow	2020-115	/000-016

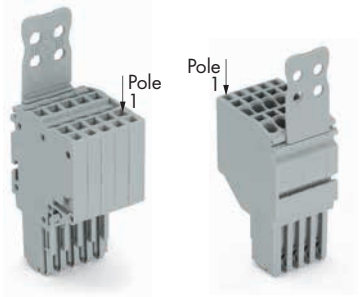


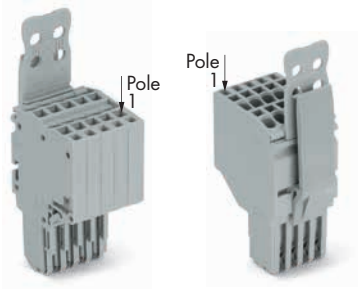
Dimensions of strain relief plates

X-COM® -SYSTEM-MINI
2-Conductor Female Plugs with Locking Levers and Strain Relief Plates
2020 Series

0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Module width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹	0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Module width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹	0.14 - 1 (1.5) mm² ❶ | AWG 24 - 16 500 V/6 kV/3 ❷ I_N 13.5 A ❸ Module width 3.5 mm / 0.138 in 9 - 11 mm / 0.39 in ❹







Pole No.	Item No.	Pack. Unit
2-conductor female plug with locking lever, for insertion into carrier terminal blocks, with coding fingers, gray According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
2	**2020-202/122-000**	100
3	**2020-203/122-000**	50
4	**2020-204/124-000**	50
5	**2020-205/124-000**	50
6	**2020-206/124-000**	25
7	**2020-207/124-000**	25
8	**2020-208/124-000**	25
9	**2020-209/124-000**	25
10	**2020-210/125-000**	25
11	**2020-211/125-000**	20
12	**2020-212/125-000**	20
13	**2020-213/125-000**	10
14	**2020-214/125-000**	10
15	**2020-215/125-000**	10

Pole No.	Item No.	Pack. Unit
2-conductor female plug with strain relief plate, for insertion into carrier terminal blocks, with coding fingers, gray According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
2	**2020-202/132-000**	100
3	**2020-203/132-000**	50
4	**2020-204/133-000**	50
5	**2020-205/133-000**	50
6	**2020-206/133-000**	25
7	**2020-207/134-000**	25
8	**2020-208/134-000**	25
9	**2020-209/134-000**	25
10	**2020-210/135-000**	25
11	**2020-211/135-000**	20
12	**2020-212/135-000**	20
13	**2020-213/135-000**	10
14	**2020-214/135-000**	10
15	**2020-215/135-000**	10

Pole No.	Item No.	Pack. Unit
2-conductor female plug with strain relief plate and locking lever, for insertion into carrier terminal blocks, with coding fingers, gray According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
2	**2020-202/142-000**	100
3	**2020-203/142-000**	50
4	**2020-204/143-000**	50
5	**2020-205/143-000**	50
6	**2020-206/143-000**	25
7	**2020-207/144-000**	25
8	**2020-208/144-000**	25
9	**2020-209/144-000**	25
10	**2020-210/145-000**	25
11	**2020-211/145-000**	20
12	**2020-212/145-000**	20
13	**2020-213/145-000**	10
14	**2020-214/145-000**	10
15	**2020-215/145-000**	10

Accessories Female Plugs

Appropriate marking systems: WMB/Marking strips (see Section 13)

Protective warning marker,
with high-voltage symbol, black, for 5 terminal blocks



yellow	**2000-115**	100 (4x25)

Locking lever,
9.6 mm wide



orange	**2022-152**	100 (4x25)
gray	**2022-151**	100 (4x25)

Locking lever,
4.8 mm wide



orange	**2022-142**	100 (4x25)
gray	**2022-141**	100 (4x25)

Strain relief plate, gray



35 mm width	**734-326**	100 (4x25)
25 mm wide	**734-329**	100 (4x25)
6 mm wide	**734-327**	100 (4x25)
12.5 mm width	**734-328**	100 (4x25)

WMB Multi marking system,
10 strips with 10 markers per card, for 3.5 mm terminal block width

plain	**793-3501**	5

Marking strip, plain,
11 mm wide, 50 m roll



white	**2009-110**	1

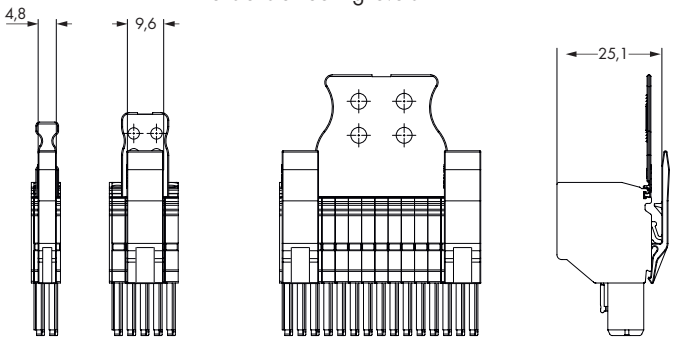
Certification organizations can be found in the overview on pages 622 and 623.

1. Conductor sizes: 0.14 mm² – 1.5 mm² "s + f-st"; Push-in conductor sizes: 0.5 mm² – 1.5 mm² "s" and 0.5 mm² – 0.75 mm² "insulated ferrule, 10 mm"
2. 500 V = rated voltage
   6 kV = rated surge voltage
   3 = pollution degree
   (see Section 14)
3. Current-carrying capacity curves upon request
4. Strip length, see packaging or instructions.

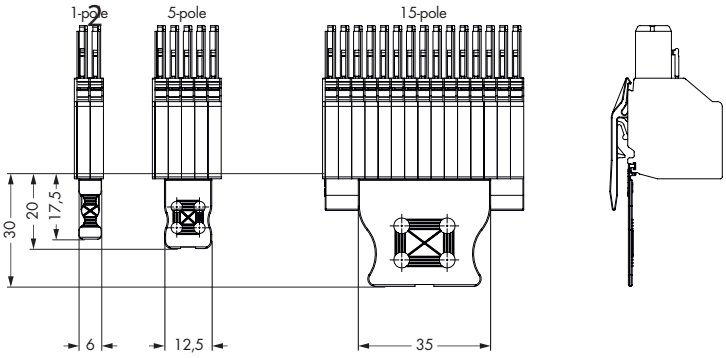
Strain Relief Plate (SRP), Gray			Assembled	Locking Levers (LL), Gray				SRP and LL, Gray Assembled
SRP				Pole No.	Quantity	1-way	2-way	
			Item No. Suffix			Item No. Suffix		Item No. Suffix
Item No.	Color	Width						
734-327	gray	6mm	/132-0xx	2 to 3	1	/122-0xx	–	/142-0xx
734-328	gray	12.5mm	/133-0xx	4 to 6	1	–	/124-0xx	/143-0xx
734-329	gray	25mm	/134-0xx	7 to 9	1	–	/124-0xx	/144-0xx
734-326	gray	35mm	/135-0xx	10 to 15	2	–	/125-0xx	/145-0xx

For colored female plugs, the item number suffix "xx" must be replaced by the blue "-006" and the green-yellow "-016" color suffix.

Dimensions of locking levers



Description	Color	Item No.	Suffix No.
2-conductor female plug 2 to 15-pole	gray	2020-202	none
	blue	to	/000-006
	green-yellow	2020-215	/000-016

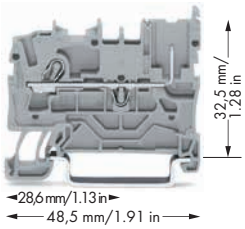


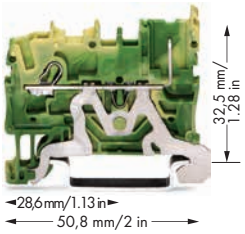
Dimensions of strain relief plates

X-COM® S-SYSTEM
1-Conductor/1-Pin Carrier Terminal Blocks
2022 Series

CAGE CLAMP® S

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12
690 V/6 kV/3 ❷	
I_N 24 A (32 A) ❸	
Terminal block width 5.2 mm / 0.205 in	Terminal block width 5.2 mm / 0.205 in
10 - 12 mm / 0.43 in ❹	10 - 12 mm / 0.43 in ❹





❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 690 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Current-carrying capacity curves upon request

❹ Strip length, see packaging or instructions.

❺ See application notes for:
Colored push-in type jumper bars, page 101
Staggered jumper, page 104
Delta jumper, page 103
Star point jumper, page 103
Adjacent jumper for continuous commoning, page 101
Push-in type wire jumper, page 102

	Item No.	Pack. Unit
1-conductor/1-pin carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**2022-1201**	100
blue	**2022-1204**	100
orange	**2022-1202**	100

	Item No.	Pack. Unit
1-conductor/1-pin ground carrier terminal block, for DIN 35 rail, acc. to EN 60715		
green-yellow	**2022-1207**	100

Item-Specific Accessories

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks
yellow **2002-115** 100 (4x25)

2022 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

End and intermediate plate, 1 mm thick

orange	**2022-1292**	100 (4x25)
gray	**2022-1291**	100 (4x25)

Insulation stop,
5 pcs/strip,
0.25 - 0.5 mm²
light gray **2002-171** 200 (8x25)

Insulation stop,
5 pcs/strip,
0.75 - 1 mm²
dark gray **2002-172** 200 (8x25)

Push-in type jumper bar, insulated, ❺
I_N 25 A,
light gray

2-way	**2002-402**	200 (8x25)
3-way	**2002-403**	200 (8x25)
4-way	**2002-404**	200 (8x25)
5-way	**2002-405**	100 (4x25)
6-way	**2002-406**	100 (4x25)
7-way	**2002-407**	100 (4x25)
8-way	**2002-408**	100 (4x25)
9-way	**2002-409**	100 (4x25)
10-way	**2002-410**	100 (4x25)

Delta jumper, insulated, ❺
I_N = I_N terminal block, light gray
1-2 3-4 5-6 **2002-406/020-000**
100 (4x25)

Star point jumper, insulated, ❺
I_N = I_N terminal block, light gray
1-3-5 **2002-405/011-000**
100 (4x25)

Push-in type jumper bar, insulated,
I_N 25 A,
light gray

from 1 to 3	**2002-433**	200 (8x25)
from 1 to 4	**2002-434**	200 (8x25)
from 1 to 5	**2002-435**	100 (4x25)
from 1 to 6	**2002-436**	100 (4x25)
from 1 to 7	**2002-437**	100 (4x25)
from 1 to 8	**2002-438**	100 (4x25)
from 1 to 9	**2002-439**	100 (4x25)
from 1 to 10	**2002-440**	100 (4x25)

Staggered jumper, ❺
insulated,
I_N 25 A,
light gray

2-way	**2002-472**	100 (4x25)
3-way	**2002-473**	100 (4x25)
4-way	**2002-474**	100 (4x25)
5-way	**2002-475**	50 (2x25)
6-way	**2002-476**	50 (2x25)
7-way	**2002-477**	50 (2x25)
8-way	**2002-478**	50 (2x25)
9-way	**2002-479**	50 (2x25)
10-way	**2002-480**	50 (2x25)
11-way	**2002-481**	50 (2x25)
12-way	**2002-482**	50 (2x25)

Adjacent jumper for continuous commoning, insulated, ❺
I_N 25 A,
light gray
2-way **2002-400** 100 (4x25)

Accessories

Push-in type wire jumper, ❺
insulated,
I_N 16 A,
wire size 1.5 mm²

L = 60 mm	**2009-412**	100 (10x10)
L = 110 mm	**2009-414**	100 (10x10)
L = 250 mm	**2009-416**	100 (10x10)

Carrier with 6 coding pins,
for coding female plugs
orange **2022-100** 100 (4x25)

Test pin,
1 mm Ø
859-500 1

1-conductor female plug
gray **2022-101** 200

WMB Multi marking system,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

WMB Multi marking system, plain,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm

yellow	**793-5501/000-002**
red	**793-5501/000-005**
blue	**793-5501/000-006**
gray	**793-5501/000-007**
orange	**793-5501/000-012**
light green	**793-5501/000-017**
green	**793-5501/000-023**
violet	**793-5501/000-024**

5

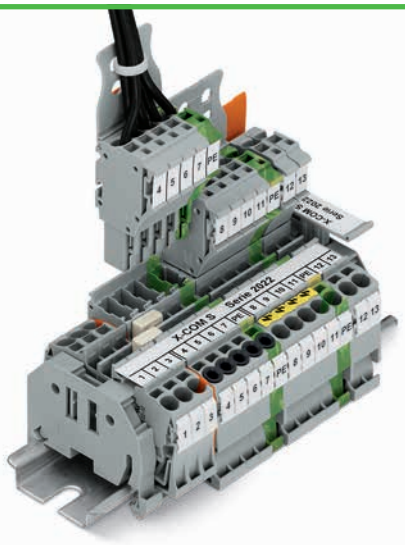
WMB Inline, plain,
stretchable 5 - 5.2 mm,
1,500 WMB markers, 5 mm, on roll
white **2009-115** 1

Marking strip, plain,
11 mm wide,
50 m roll
white **2009-110** 1

Screwless end stop,
for DIN 35 rail,
6 mm wide
gray **249-116** 100 (4x25)

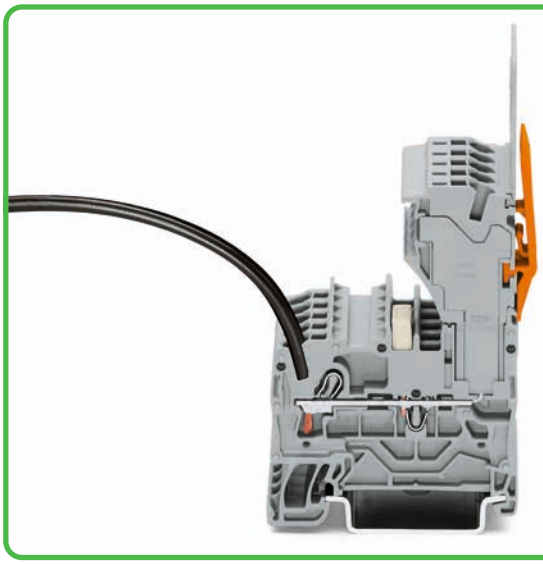
Certification organizations can be found in the overview on pages 622 and 623.

Types of Assembly
1-Conductor/1-Pin Carrier Terminal Blocks and 1-Conductor Female Plugs

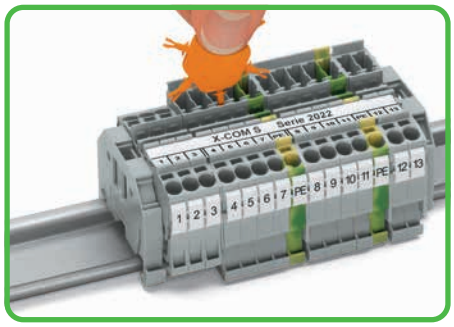


X-COM®S terminal block assembly

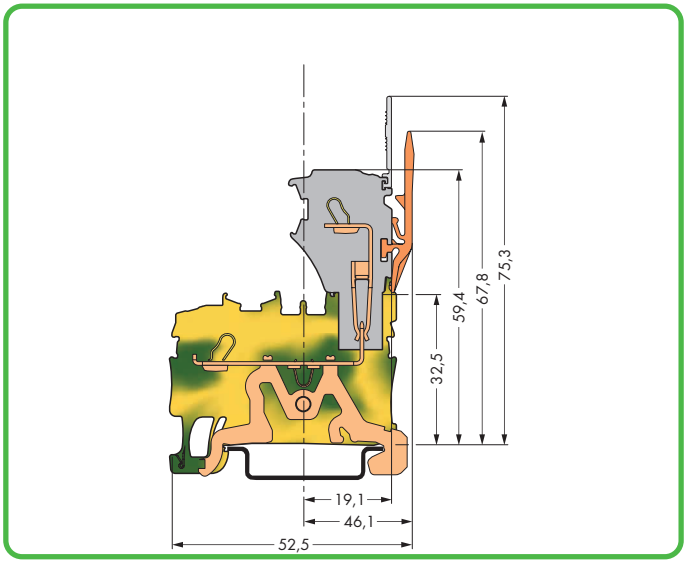




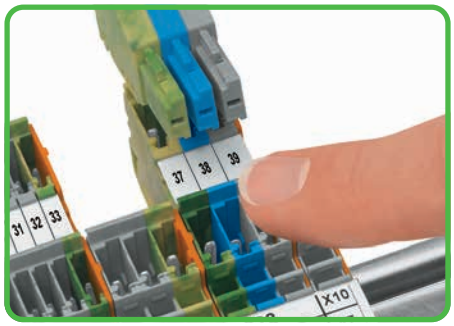
1-conductor female plug
Carrier terminal blocks can be commoned via 2002 Series push-in type jumper bars.



Insert coding pin into the corresponding slot and twist it off.



Ground carrier terminal block

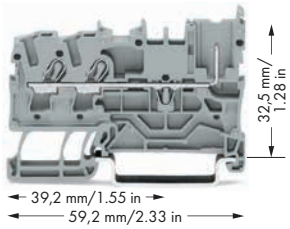


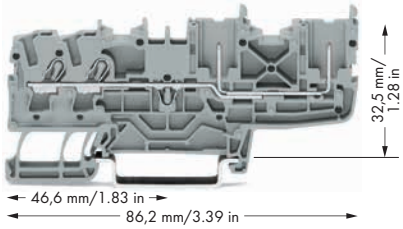
Carrier terminal blocks and female plugs are protected against accidental contact.

X-COM® S-SYSTEM
2-Conductor/1-Pin Carrier Terminal Blocks;
2-Conductor/2-Pin Carrier Terminal Blocks, 2022 Series

CAGE CLAMP® S

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 690 V/6 kV/3 ❷ I_N 24 A (32 A) ❸ Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 690 V/6 kV/3 ❷ I_N 24 A (28 A) ❸ Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹





❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 690 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Current-carrying capacity curves upon request

❹ Strip length, see packaging or instructions.

❺ See application notes for:
Colored push-in type jumper bars, page 101
Staggered jumper, page 104
Delta jumper, page 103
Star point jumper, page 103
Adjacent jumper for continuous commoning, page 101
Push-in type wire jumper, page 102

	Item No.	Pack. Unit
2-conductor/1-pin carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**2022-1301**	100
blue	**2022-1304**	100
orange	**2022-1302**	100
2-conductor/1-pin ground carrier terminal block, for DIN 35 rail, acc. to EN 60715		
green-yellow	**2022-1307**	100

	Item No.	Pack. Unit
2-conductor/2-pin carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**2022-1401**	50
blue	**2022-1404**	50
orange	**2022-1402**	50
2-conductor/2-pin ground carrier terminal block, for DIN 35 rail, acc. to EN 60715		
green-yellow	**2022-1407**	50

Item-Specific Accessories

End and intermediate plate, 1 mm thick



orange	**2022-1392**	100 (4x25)
gray	**2022-1391**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick



orange	**2022-1492**	100 (4x25)
gray	**2022-1491**	100 (4x25)

2022 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

Insulation stop,



5 pcs/strip,
0.25 - 0.5 mm²

light gray	**2002-171**	200 (8x25)

Insulation stop,



5 pcs/strip,
0.75 - 1 mm²

dark gray	**2002-172**	200 (8x25)

Push-in type jumper bar, insulated, ❺



I_N 25 A,
light gray

2-way	**2002-402**	200 (8x25)
3-way	**2002-403**	200 (8x25)
4-way	**2002-404**	200 (8x25)
5-way	**2002-405**	100 (4x25)
6-way	**2002-406**	100 (4x25)
7-way	**2002-407**	100 (4x25)
8-way	**2002-408**	100 (4x25)
9-way	**2002-409**	100 (4x25)
10-way	**2002-410**	100 (4x25)

Delta jumper, insulated, ❻



I_N = I_N terminal block, light gray
1-2 3-4 5-6 **2002-406/020-000**
100 (4x25)

Star point jumper, insulated, ❻



I_N = I_N terminal block, light gray
1-3-5 **2002-405/011-000**
100 (4x25)

Push-in type jumper bar, insulated,



I_N 25 A,
light gray

from 1 to 3	**2002-433**	200 (8x25)
from 1 to 4	**2002-434**	200 (8x25)
from 1 to 5	**2002-435**	100 (4x25)
from 1 to 6	**2002-436**	100 (4x25)
from 1 to 7	**2002-437**	100 (4x25)
from 1 to 8	**2002-438**	100 (4x25)
from 1 to 9	**2002-439**	100 (4x25)
from 1 to 10	**2002-440**	100 (4x25)

Staggered jumper, ❺



insulated,
I_N 25 A,
light gray

2-way	**2002-472**	100 (4x25)
3-way	**2002-473**	100 (4x25)
4-way	**2002-474**	100 (4x25)
5-way	**2002-475**	50 (2x25)
6-way	**2002-476**	50 (2x25)
7-way	**2002-477**	50 (2x25)
8-way	**2002-478**	50 (2x25)
9-way	**2002-479**	50 (2x25)
10-way	**2002-480**	50 (2x25)
11-way	**2002-481**	50 (2x25)
12-way	**2002-482**	50 (2x25)

Accessories

Adjacent jumper for continuous commoning, insulated, ❻



I_N 25 A,
light gray

2-way	**2002-400**	100 (4x25)

Push-in type wire jumper, ❺



insulated,
I_N 16 A,
wire size 1.5 mm²

L = 60 mm	**2009-412**	100 (10x10)
L = 110 mm	**2009-414**	100 (10x10)
L = 250 mm	**2009-416**	100 (10x10)

Carrier with 6 coding pins,



for coding female plugs

orange	**2022-100**	100 (4x25)

Test pin,



1 mm Ø

859-500	1

Protective warning marker,



with high-voltage symbol, black,
for 5 terminal blocks

yellow	**2002-115**	100 (4x25)

1-conductor female plug



gray	**2022-101**	200

WMB Multi marking system,

10 strips with 10 markers per card,
stretchable 5 - 5.2 mm

plain	**793-5501**	5

WMB Multi marking system, plain,



10 strips with 10 markers per card,
stretchable 5 - 5.2 mm

yellow	**793-5501/000-002**
red	**793-5501/000-005**
blue	**793-5501/000-006**
gray	**793-5501/000-007**
orange	**793-5501/000-012**
light green	**793-5501/000-017**
green	**793-5501/000-023**
violet	**793-5501/000-024**

5

WMB Inline, plain,



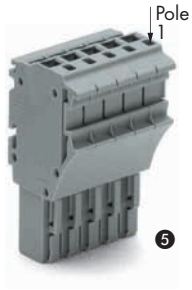
stretchable 5 - 5.2 mm,
1,500 WMB markers, 5 mm, on roll

white	**2009-115**	1

Certification organizations can be found in the overview on pages 622 and 623.

X-COM®S-SYSTEM
1-Conductor Female Plugs
2022 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12
690 V/6 kV/3 ❷
I_N 24 A (32 A) ❸
Module width 5.2 mm / 0.205 in
10 - 12 mm / 0.43 in ❹



❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 690 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Current-carrying capacity curves upon request

❹ Strip length, see packaging or instructions.

❺ Item-no. suffix
blue . . . /000-006
orange . . . /000-012

Pole No.	Item No.	Pack. Unit
1-conductor female plug, for insertion into carrier terminal blocks, with coding fingers, gray		
According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
1	**2022-101**	200
2	**2022-102**	200
3	**2022-103**	100
4	**2022-104**	100
5	**2022-105**	50
6	**2022-106**	50
7	**2022-107**	50
8	**2022-108**	50
9	**2022-109**	50
10	**2022-110**	25
11	**2022-111**	25
12	**2022-112**	25
13	**2022-113**	25
14	**2022-114**	25
15	**2022-115**	25
1-conductor female plug, for insertion into carrier terminal blocks, with coding fingers, green-yellow		
According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
1	**2022-101/000-016**	200
2	**2022-102/000-016**	200

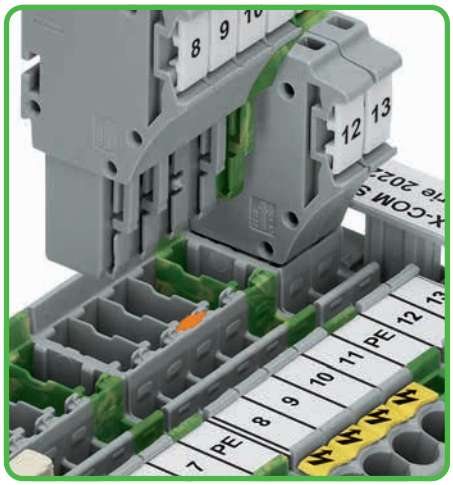
Accessories

Appropriate marking systems:
WMB/Marking strips/WMB Inline

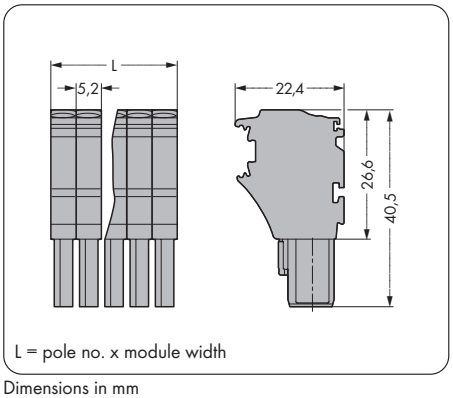
Insulation stop,	5 pcs/strip, 0.25 - 0.5 mm²			
	light gray	**2002-171**	200	(8x25)
Insulation stop,	5 pcs/strip, 0.75 - 1 mm²			
	dark gray	**2002-172**	200	(8x25)
Locking lever,	4.8 mm wide			
	orange	**2022-142**	100	(4x25)
	gray	**2022-141**	100	(4x25)
Locking lever,	9.6 mm wide			
	orange	**2022-152**	100	(4x25)
	gray	**2022-151**	100	(4x25)
Protective warning marker,	with high-voltage symbol, black, for 5 terminal blocks			
	yellow	**2002-115**	100	(4x25)
Carrier with 6 coding pins,	for coding female plugs			
	orange	**2022-100**	100	(4x25)
Strain relief plate, gray				
	35 mm width	**734-326**	100	(4x25)
	6 mm wide	**734-327**	100	(4x25)
	12.5 mm width	**734-328**	100	(4x25)
	25 mm wide	**734-329**	100	(4x25)
	55 mm width	**734-430**	50	(2x25)
	75 mm width	**734-431**	50	(2x25)
WMB Multi marking system,	10 strips with 10 markers per card, stretchable 5 - 5.2 mm			
	plain	**793-5501**	5	
WMB Inline, plain,	stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll			
	white	**2009-115**	1	
Marking strip, plain,	11 mm wide, 50 m roll			
	white	**2009-110**	1	



To code a female plug, remove the desired coding finger using a suitable tool.



Insert a 2022-100 coding pin into the corresponding location of the carrier terminal block.



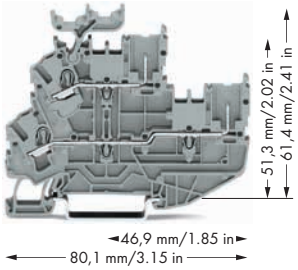
L = pole no. x module width

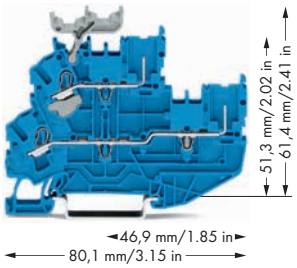
Dimensions in mm

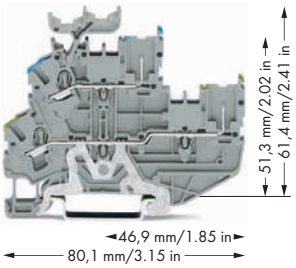
Certification organizations can be found in the overview on pages 622 and 623.

X-COM® -SYSTEM
1-Conductor/1-Pin Double-Deck Carrier Terminal Blocks
2022 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 690 V/6 kV/3 ❷ I_N 24 A (28 A) ❸ Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 690 V/6 kV/3 ❷ I_N 24 A (28 A) ❸ Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 690 V/6 kV/3 ❷ I_N 24 A (28 A) ❸ Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹



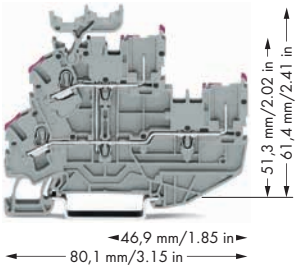


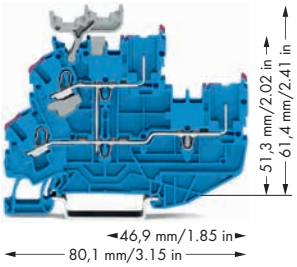


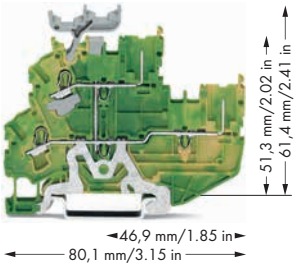
	Item No.	Pack. Unit
1-conductor/1-pin double-deck carrier terminal block, through/through terminal block,		
with marker carrier,		
gray housing		
L/L	**2022-2231**	50
N/L	**2022-2232**	50
L/N	**2022-2233**	50
1-conductor/1-pin double-deck carrier terminal block, through/through terminal block,		
without marker carrier,		
gray housing		
L/L	**2022-2201**	50
N/L	**2022-2202**	50
L/N	**2022-2203**	50

	Item No.	Pack. Unit
1-conductor/1-pin double-deck carrier terminal block, through/through terminal block,		
with marker carrier,		
blue housing		
N/N	**2022-2234**	50
1-conductor/1-pin double-deck carrier terminal block, through/through terminal block,		
without marker carrier,		
blue housing		
N/N	**2022-2204**	50

	Item No.	Pack. Unit
1-conductor/1-pin double-deck carrier terminal block, ground conductor/through terminal block,		
with marker carrier,		
gray housing		
PE/N	**2022-2247**	50
PE/L	**2022-2257**	50
1-conductor/1-pin double-deck carrier terminal block, ground conductor/through terminal block,		
without marker carrier,		
gray housing		
PE/N	**2022-2217**	50
PE/L	**2022-2227**	50







	Item No.	Pack. Unit
2-conductor/2-pin double-deck carrier terminal block, 2-conductor/2-pin through terminal block,		
with marker carrier, internal commoning, conductor entry with violet marking,		
gray housing		
L	**2022-2238**	50
2-conductor/2-pin double-deck carrier terminal block, 2-conductor/2-pin through terminal block,		
without marker carrier, internal commoning, conductor entry with violet marking,		
gray housing		
L	**2022-2208**	50

	Item No.	Pack. Unit
2-conductor/2-pin double-deck carrier terminal block, 2-conductor/2-pin through terminal block,		
with marker carrier, internal commoning, conductor entry with violet marking,		
blue housing		
N	**2022-2239**	50
2-conductor/2-pin double-deck carrier terminal block, 2-conductor/2-pin through terminal block,		
without marker carrier, internal commoning, conductor entry with violet marking,		
blue housing		
N	**2022-2209**	50

	Item No.	Pack. Unit
2-conductor/2-pin double-deck carrier terminal block,		
2-conductor/2-pin ground conductor terminal block,		
with marker carrier, internal commoning,		
green-yellow housing		
PE	**2022-2237**	50
2-conductor/2-pin double-deck carrier terminal block,		
2-conductor/2-pin ground conductor terminal block,		
without marker carrier, internal commoning,		
green-yellow housing		
PE	**2022-2207**	50

Certification organizations can be found in the overview on pages 622 and 623.

❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 690 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Current-carrying capacity curves upon request

❹ Strip length, see packaging or instructions.

❺ See application notes for:
Colored push-in type jumper bars, page 101
Vertical jumper, page 105

2022 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

End and intermediate plate, 1 mm thick



orange	**2022-2292**	100 (4x25)
gray	**2022-2291**	100 (4x25)

Insulation stop,



5 pcs/strip, 0.25 - 0.5 mm²		
light gray	**2002-171**	200 (8x25)

Insulation stop,



5 pcs/strip, 0.75 - 1 mm²		
dark gray	**2002-172**	200 (8x25)

Push-in type jumper bar, insulated, ❺



I_N 25 A, light gray		
2-way	**2002-402**	200 (8x25)
3-way	**2002-403**	200 (8x25)
4-way	**2002-404**	200 (8x25)
5-way	**2002-405**	100 (4x25)
6-way	**2002-406**	100 (4x25)
7-way	**2002-407**	100 (4x25)
8-way	**2002-408**	100 (4x25)
9-way	**2002-409**	100 (4x25)
10-way	**2002-410**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 25 A, light gray		
from 1 to 3	**2002-433**	200 (8x25)
from 1 to 4	**2002-434**	200 (8x25)
from 1 to 5	**2002-435**	100 (4x25)
from 1 to 6	**2002-436**	100 (4x25)
from 1 to 7	**2002-437**	100 (4x25)
from 1 to 8	**2002-438**	100 (4x25)
from 1 to 9	**2002-439**	100 (4x25)
from 1 to 10	**2002-440**	100 (4x25)

Double-deck vertical jumper, insulated, ❺

I_N 24 A		
light gray	**2002-492**	100 (4x25)
orange	**2002-492/000-012**	

Carrier with 6 coding pins,



for coding female plugs		
orange	**2022-100**	100 (4x25)

Test pin,



1 mm Ø		
	859-500	1

1-conductor female plug



gray	**2022-101**	200

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks		
yellow	**2002-115**	100 (4x25)

Double-deck marker carrier,



pivoting		
gray	**2002-121**	50 (2x25)

WMB Multi marking system,

10 strips with 10 markers per card, stretchable 5 - 5.2 mm		
plain	**793-5501**	5

WMB Multi marking system, plain,



10 strips with 10 markers per card, stretchable 5 - 5.2 mm		
yellow	**793-5501/000-002**	
red	**793-5501/000-005**	
blue	**793-5501/000-006**	
gray	**793-5501/000-007**	
orange	**793-5501/000-012**	
light green	**793-5501/000-017**	
green	**793-5501/000-023**	
violet	**793-5501/000-024**	
		5

WMB Inline, plain,

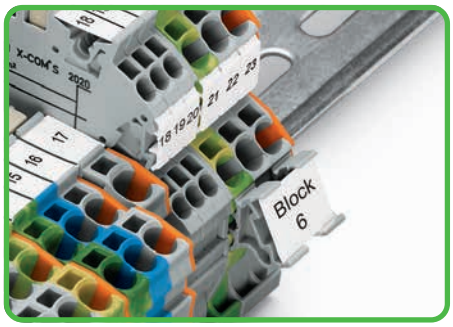


stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll		
white	**2009-115**	1

Marking strip, plain,



11 mm wide, 50 m roll		
white	**2009-110**	1



Marking
with marker strip 2009-198

X-COM® S-SYSTEM
Female Plugs for Self-Assembly
2022 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12
690 V/6 kV/3 ❷
I_N 24 A (32 A) ❸
Terminal block width 5.2 mm / 0.205 in
10 - 12 mm / 0.43 in ❹



	Item No.	Pack. Unit
1-conductor end module,		
with coding fingers		
gray	**2022-181**	250
blue	**2022-184**	250
orange	**2022-182**	250
green-yellow	**2022-187**	250
1-conductor center module,		
with coding fingers		
gray	**2022-171**	250
blue	**2022-174**	250
orange	**2022-172**	250
green-yellow	**2022-177**	250
1-conductor base module, with integrated end plate,		
with coding fingers		
gray	**2022-161**	250
blue	**2022-164**	250
orange	**2022-162**	250
green-yellow	**2022-167**	250

Accessories Female Plugs

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

Insulation stop,			
5 pcs/strip, 0.25 - 0.5 mm²			
light gray	**2002-171**	200 (8x25)	
Insulation stop,			
5 pcs/strip, 0.75 - 1 mm²			
dark gray	**2002-172**	200 (8x25)	
Locking lever,			
4.8 mm wide			
orange	**2022-142**	100 (4x25)	
gray	**2022-141**	100 (4x25)	
Locking lever,			
9.6 mm wide			
orange	**2022-152**	100 (4x25)	
gray	**2022-151**	100 (4x25)	
Strain relief plate, gray			
35 mm width	**734-326**	100 (4x25)	
6 mm wide	**734-327**	100 (4x25)	
12.5 mm width	**734-328**	100 (4x25)	
25 mm wide	**734-329**	100 (4x25)	
55 mm width	**734-430**	50 (2x25)	
75 mm width	**734-431**	50 (2x25)	
Protective warning marker,			
with high-voltage symbol, black, for 5 terminal blocks			
yellow	**2002-115**	100 (4x25)	
WMB Multi marking system,			
10 strips with 10 markers per card, stretchable 5 - 5.2 mm			
plain	**793-5501**		5
WMB Multi marking system, plain,			
10 strips with 10 markers per card, stretchable 5 - 5.2 mm			
yellow	**793-5501/000-002**		
red	**793-5501/000-005**		
blue	**793-5501/000-006**		
gray	**793-5501/000-007**		
orange	**793-5501/000-012**		
light green	**793-5501/000-017**		
green	**793-5501/000-023**		
violet	**793-5501/000-024**		
			5
WMB Inline, plain,			
stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll			
white	**2009-115**		1

Certification organizations can be found in the overview on pages 622 and 623.

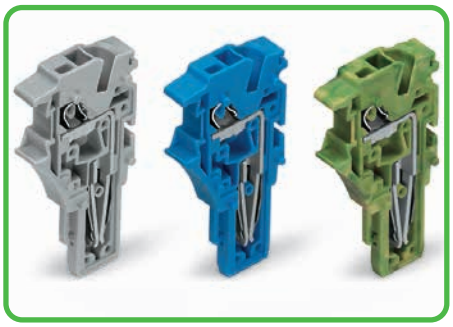
Self-Assembly of Individual Female Plugs
Using modular female plugs from the X-COM®S-SYSTEM, female plugs can be customized for applications requiring varying numbers of poles (e.g., when designing prototypes).

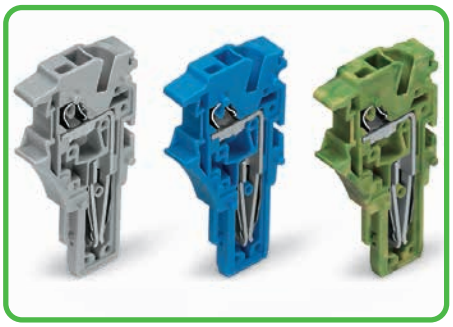
Modules and Pole Numbers
A self-assembled female plug consists of:
Base module with integrated end plate
up to 13 center modules (corresponding to a 15-pole female plug = maximum number of poles)
end module.

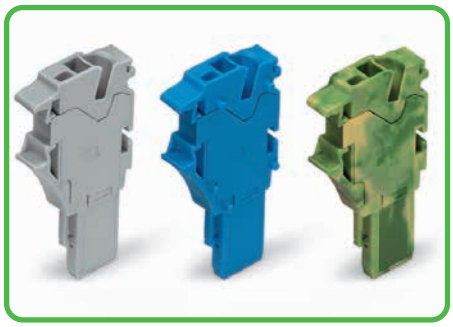
Intended Use
According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.

Assembly
The appropriate mounting tool shall be used to guarantee that the individual modules are properly attached to each other without damaging the locking latches.

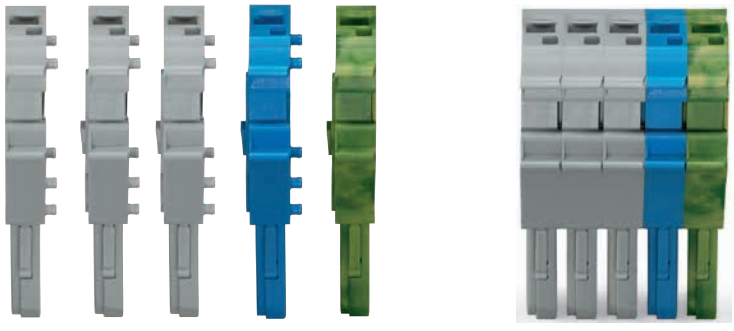
1. Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"
2. 690 V = rated voltage
   6 kV = rated surge voltage
   3 = pollution degree
   (see Section 14)
3. Current-carrying capacity curves upon request
4. Strip length, see packaging or instructions.


End Module


Center Module


Base Module

Example: 5-Pole, 1-Conductor Female Plug



Base module with integrated end plate
2022-167

Center module
2022-174

Center modules
2022-171

End module
2022-181

X-COM® S-SYSTEM
Pre-Assembled Female Plugs
2022 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 690 V/6 kV/3 ❷ I_N 24 A (32 A) ❸ Module width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 690 V/6 kV/3 ❷ I_N 24 A (32 A) ❸ Module width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 690 V/6 kV/3 ❷ I_N 24 A (32 A) ❸ Module width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹







Pole No.	Item No.	Pack. Unit
1-conductor female plug with ground base module (green-yellow), for insertion into carrier terminal blocks, with coding fingers		
3	**2022-103/000-036**	100
4	**2022-104/000-036**	100
5	**2022-105/000-036**	50
6	**2022-106/000-036**	50
7	**2022-107/000-036**	50
8	**2022-108/000-036**	50
9	**2022-109/000-036**	50
10	**2022-110/000-036**	25
11	**2022-111/000-036**	25
12	**2022-112/000-036**	25
13	**2022-113/000-036**	25
14	**2022-114/000-036**	25
15	**2022-115/000-036**	25

Pole No.	Item No.	Pack. Unit
1-conductor female plug with ground end module (green-yellow), for insertion into carrier terminal blocks, with coding fingers		
3	**2022-103/000-037**	100
4	**2022-104/000-037**	100
5	**2022-105/000-037**	50
6	**2022-106/000-037**	50
7	**2022-107/000-037**	50
8	**2022-108/000-037**	50
9	**2022-109/000-037**	50
10	**2022-110/000-037**	25
11	**2022-111/000-037**	25
12	**2022-112/000-037**	25
13	**2022-113/000-037**	25
14	**2022-114/000-037**	25
15	**2022-115/000-037**	25

Pole No.	Item No.	Pack. Unit
1-conductor female plug with ground base module (green-yellow), for insertion into carrier terminal blocks, with coding fingers		
3	**2022-103/000-038**	100
4	**2022-104/000-038**	100
5	**2022-105/000-038**	50
6	**2022-106/000-038**	50
7	**2022-107/000-038**	50
8	**2022-108/000-038**	50
9	**2022-109/000-038**	50
10	**2022-110/000-038**	25
11	**2022-111/000-038**	25
12	**2022-112/000-038**	25
13	**2022-113/000-038**	25
14	**2022-114/000-038**	25
15	**2022-115/000-038**	25

Accessories Female Plugs

Appropriate marking systems: WMB/Marking strips/WMB Inline
(see Section 13)

Insulation stop,
5 pcs/strip,
0.25 - 0.5 mm²
light gray **2002-171** 200 (8x25)

Insulation stop,
5 pcs/strip,
0.75 - 1 mm²
dark gray **2002-172** 200 (8x25)

Locking lever,
4.8 mm wide
orange **2022-142** 100 (4x25)
gray **2022-141** 100 (4x25)

Locking lever,
9.6 mm wide
orange **2022-152** 100 (4x25)
gray **2022-151** 100 (4x25)

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks
yellow **2002-115** 100 (4x25)

Strain relief plate, gray
35 mm width **734-326** 100 (4x25)
6 mm wide **734-327** 100 (4x25)
12.5 mm width **734-328** 100 (4x25)
25 mm wide **734-329** 100 (4x25)
55 mm width **734-430** 50 (2x25)
75 mm width **734-431** 50 (2x25)

WMB Multi marking system,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

WMB Inline, plain,
stretchable 5 - 5.2 mm,
1,500 WMB markers, 5 mm, on roll
white **2009-115** 1

Marking strip, plain,
11 mm wide,
50 m roll
white **2009-110** 1

Certification organizations can be found in the overview on pages 622 and 623.

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12
690 V/6 kV/3 ❷
I_N 24 A (32 A) ❸
Module width 5.2 mm / 0.205 in
10 - 12 mm / 0.43 in ❹



Pole No.	Item No.	Pack. Unit
1-conductor female plug with ground end module (green-yellow),		
for insertion into carrier terminal blocks,		
with coding fingers		
3	**2022-103/000-039**	100
4	**2022-104/000-039**	100
5	**2022-105/000-039**	50
6	**2022-106/000-039**	50
7	**2022-107/000-039**	50
8	**2022-108/000-039**	50
9	**2022-109/000-039**	50
10	**2022-110/000-039**	25
11	**2022-111/000-039**	25
12	**2022-112/000-039**	25
13	**2022-113/000-039**	25
14	**2022-114/000-039**	25
15	**2022-115/000-039**	25

❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

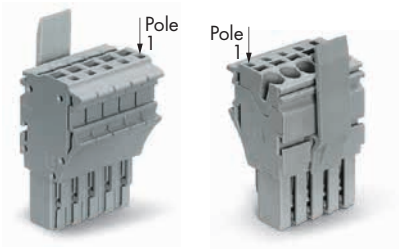
❷ 690 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

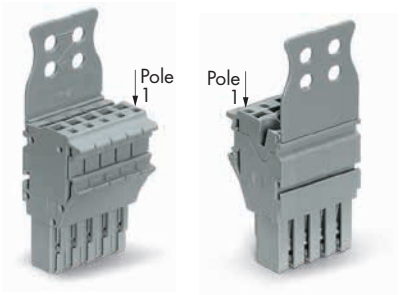
❸ Current-carrying capacity curves upon request

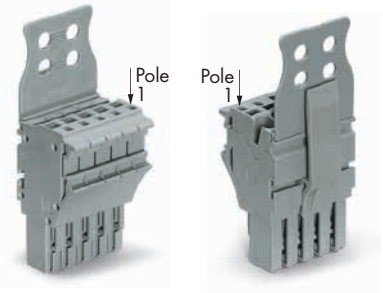
❹ Strip length, see packaging or instructions.

X-COM® S-SYSTEM
1-Conductor Female Plugs with Locking Levers and Strain Relief Plates
2022 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 690 V/6 kV/3 ❷ I_N 24 A (32 A) ❸ Module width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 690 V/6 kV/3 ❷ I_N 24 A (32 A) ❸ Module width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 690 V/6 kV/3 ❷ I_N 24 A (32 A) ❸ Module width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹







Pole No.	Item No.	Pack. Unit
1-conductor female plug with locking lever, for insertion into carrier terminal blocks, with coding fingers, gray According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
1	**2022-101/122-000**	200
2	**2022-102/122-000**	100
3	**2022-103/123-000**	100
4	**2022-104/123-000**	50
5	**2022-105/123-000**	50
6	**2022-106/123-000**	50
7	**2022-107/123-000**	25
8	**2022-108/123-000**	25
9	**2022-109/123-000**	25
10	**2022-110/123-000**	25
11	**2022-111/126-000**	25
12	**2022-112/126-000**	20
13	**2022-113/126-000**	20
14	**2022-114/126-000**	15
15	**2022-115/127-000**	15
1-conductor female plug with locking lever, for insertion into carrier terminal blocks, with coding fingers, According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
1 blue	**2022-101/122-006**	200
1 green-yellow	**2022-101/122-016**	200

Pole No.	Item No.	Pack. Unit
1-conductor female plug with strain relief plate, for insertion into carrier terminal blocks, with coding fingers, gray According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
1	**2022-101/132-000**	200
2	**2022-102/132-000**	100
3	**2022-103/133-000**	100
4	**2022-104/133-000**	50
5	**2022-105/134-000**	50
6	**2022-106/134-000**	50
7	**2022-107/135-000**	25
8	**2022-108/135-000**	25
9	**2022-109/135-000**	25
10	**2022-110/135-000**	25
11	**2022-111/136-000**	25
12	**2022-112/136-000**	20
13	**2022-113/136-000**	20
14	**2022-114/136-000**	15
15	**2022-115/137-000**	15
1-conductor female plug with strain relief plate, for insertion into carrier terminal blocks, with coding fingers, According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
1 blue	**2022-101/132-006**	200
1 green-yellow	**2022-101/132-016**	200

Pole No.	Item No.	Pack. Unit
1-conductor female plug with strain relief plate and locking lever, for insertion into carrier terminal blocks, with coding fingers, gray According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
1	**2022-101/142-000**	200
2	**2022-102/142-000**	100
3	**2022-103/143-000**	100
4	**2022-104/143-000**	50
5	**2022-105/144-000**	50
6	**2022-106/144-000**	50
7	**2022-107/145-000**	25
8	**2022-108/145-000**	25
9	**2022-109/145-000**	25
10	**2022-110/145-000**	25
11	**2022-111/146-000**	25
12	**2022-112/146-000**	20
13	**2022-113/146-000**	20
14	**2022-114/146-000**	15
15	**2022-115/147-000**	15
1-conductor female plug with strain relief plate and locking lever, for insertion into carrier terminal blocks, with coding fingers, According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
1 blue	**2022-101/142-006**	200
1 green-yellow	**2022-101/142-016**	200

Accessories Female Plugs

Appropriate marking systems: WMB/Marking strips/WMB Inline
(see Section 13)

Insulation stop,
5 pcs/strip,
0.25 - 0.5 mm²
light gray **2002-171** 200 (8x25)

Insulation stop,
5 pcs/strip,
0.75 - 1 mm²
dark gray **2002-172** 200 (8x25)

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks
yellow **2002-115** 100 (4x25)

WMB Multi marking system,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

WMB Multi marking system, plain,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
yellow **793-5501/000-002**
red **793-5501/000-005**
blue **793-5501/000-006**
gray **793-5501/000-007**
orange **793-5501/000-012**
light green **793-5501/000-017**
green **793-5501/000-023**
violet **793-5501/000-024**
5

WMB Inline, plain,
stretchable 5 - 5.2 mm,
1,500 WMB markers, 5 mm, on roll
white **2009-115** 1

Marking strip, plain,
11 mm wide,
50 m roll
white **2009-110** 1

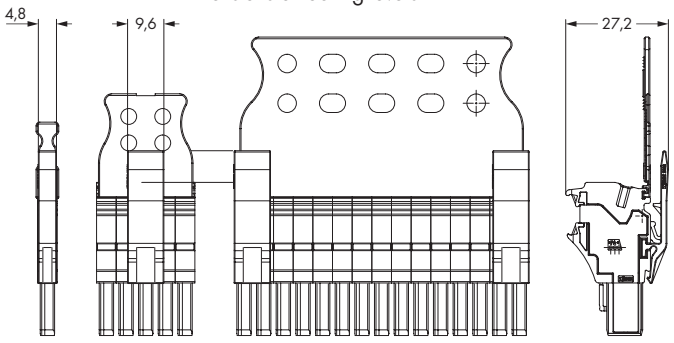
Certification organizations can be found in the overview on pages 622 and 623.

1. Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"
2. 690 V = rated voltage
   6 kV = rated surge voltage
   3 = pollution degree
   (see Section 14)
3. Current-carrying capacity curves upon request
4. Strip length, see packaging or instructions.

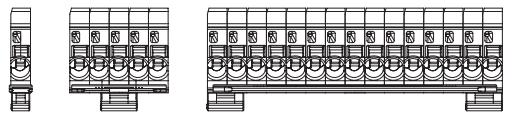
Strain Relief Plate (SRP), Gray			Assembled	Locking Levers (LL), Gray			Assembled	SRP and LL, Gray Assembled
SRP				Pole No.	Quantity	1-way	2-way	
			Item No. Suffix			Item No. Suffix		Item No. Suffix
Item No.	Color	Width						
734-327	gray	6mm	/132-0xx	1 to 2	1	/122-0xx	–	/142-0xx
734-328	gray	12.5mm	/133-0xx	3 to 4	1	–	/123-0xx	/143-0xx
734-329	gray	25mm	/134-0xx	5 to 6	1	–	/123-0xx	/144-0xx
734-326	gray	35mm	/135-0xx	7 to 10	1	–	/123-0xx	/145-0xx
734-430	gray	55mm	/136-0xx	11 to 14	2	–	/123-0xx	/144-0xx
734-431	gray	75mm	/137-0xx	15	2	–	/123-0xx	/145-0xx

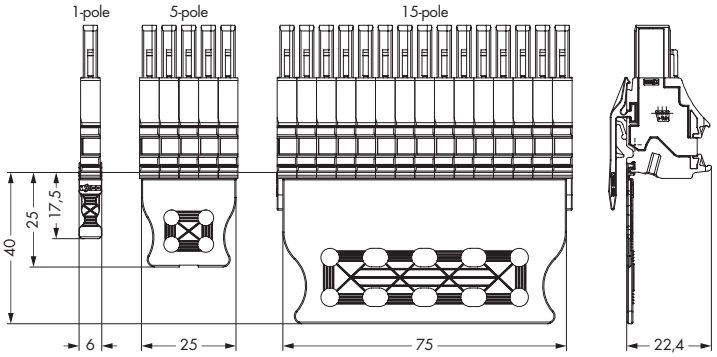
For colored female plugs, the item number suffix "xx" must be replaced by the blue "-006" and the green-yellow "-016" color suffix.

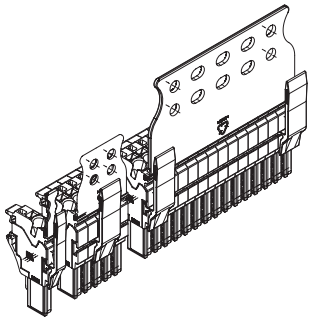
Dimensions of locking levers



Description	Color	Item No.	Suffix No.
1-conductor female plug 1 to 15-pole	gray	2022-101	none
	blue	to	/000-006
	green-yellow	2022-115	/000-016



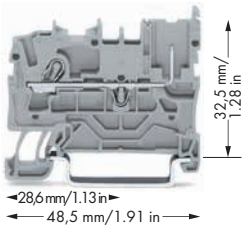


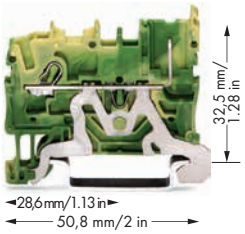


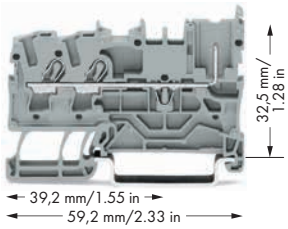
Dimensions of strain relief plates

X-COM®S-SYSTEM
2-Conductor/1-Pin; 2-Conductor/1-Pin and 2-Conductor/2-Pin Carrier Terminal Blocks for Ex nA Applications, 2022 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 630 V ❷ I_N 20 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 630 V ❷ I_N 20 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸







Item No.		Pack. Unit
1-conductor/1-pin carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**2022-1201/999-953**	100
blue	**2022-1204/999-953**	100

Item No.		Pack. Unit
1-conductor/1-pin ground carrier terminal block, for DIN 35 rail, acc. to EN 60715		
green-yellow	**2022-1207/999-953**	100

Item No.		Pack. Unit
2-conductor/1-pin carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**2022-1301/999-953**	100
blue	**2022-1304/999-953**	100
2-conductor/1-pin ground carrier terminal block, for DIN 35 rail, acc. to EN 60715		
green-yellow	**2022-1307/999-953**	100

Item-Specific Accessories

End and intermediate plate, 1 mm thick



orange	**2022-1292**	100 (4x25)
gray	**2022-1291**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick



orange	**2022-1292**	100 (4x25)
gray	**2022-1291**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick



orange	**2022-1392**	100 (4x25)
gray	**2022-1391**	100 (4x25)

2022 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

Insulation stop,



5 pcs/strip, 0.25 - 0.5 mm²

light gray	**2002-171**	200 (8x25)

Insulation stop,



5 pcs/strip, 0.75 - 1 mm²

dark gray	**2002-172**	200 (8x25)

Push-in type jumper bar, insulated, ❹



I_N 25 A, light gray

2-way	**2002-402**	200 (8x25)
3-way	**2002-403**	200 (8x25)
4-way	**2002-404**	200 (8x25)
5-way	**2002-405**	100 (4x25)
6-way	**2002-406**	100 (4x25)
7-way	**2002-407**	100 (4x25)
8-way	**2002-408**	100 (4x25)
9-way	**2002-409**	100 (4x25)
10-way	**2002-410**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 25 A, light gray

from 1 to 3	**2002-433**	200 (8x25)
from 1 to 4	**2002-434**	200 (8x25)
from 1 to 5	**2002-435**	100 (4x25)
from 1 to 6	**2002-436**	100 (4x25)
from 1 to 7	**2002-437**	100 (4x25)
from 1 to 8	**2002-438**	100 (4x25)
from 1 to 9	**2002-439**	100 (4x25)
from 1 to 10	**2002-440**	100 (4x25)

Staggered jumper, ❹



insulated, I_N 25 A, light gray

2-way	**2002-472**	100 (4x25)
3-way	**2002-473**	100 (4x25)
4-way	**2002-474**	100 (4x25)
5-way	**2002-475**	50 (2x25)
6-way	**2002-476**	50 (2x25)
7-way	**2002-477**	50 (2x25)
8-way	**2002-478**	50 (2x25)
9-way	**2002-479**	50 (2x25)
10-way	**2002-480**	50 (2x25)
11-way	**2002-481**	50 (2x25)
12-way	**2002-482**	50 (2x25)

Push-in type wire jumper,



❹ insulated, I_N 16 A, wire size 1.5 mm²

L = 60 mm	**2009-412**	100 (10x10)
L = 110 mm	**2009-414**	100 (10x10)
L = 250 mm	**2009-416**	100 (10x10)

Carrier with 6 coding pins,



for coding female plugs

orange	**2022-100**	100 (4x25)

Test pin,



1 mm Ø

	859-500	1

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks

yellow	**2002-115**	100 (4x25)

WMB Multi marking system,

10 strips with 10 markers per card, stretchable 5 - 5.2 mm

plain	**793-5501**	5

WMB Multi marking system, plain,



10 strips with 10 markers per card, stretchable 5 - 5.2 mm

yellow	**793-5501/000-002**	
red	**793-5501/000-005**	
blue	**793-5501/000-006**	
gray	**793-5501/000-007**	
orange	**793-5501/000-012**	
light green	**793-5501/000-017**	
green	**793-5501/000-023**	
violet	**793-5501/000-024**	
		5

WMB Inline, plain,



stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll

white	**2009-115**	1

Marking strip, plain,



11 mm wide, 50 m roll

white	**2009-110**	1

Screwless end stop,



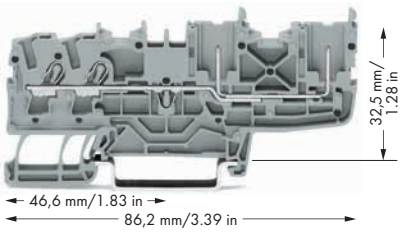
for DIN 35 rail, 6 mm wide

gray	**249-116**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12
630 V ❷
I_N 20 A

Terminal block width 5.2 mm / 0.205 in
10 - 12 mm / 0.43 in ❸



❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 630 V = rated voltage for Ex nA applications (see Section 14)

❸ Strip length, see packaging or instructions.

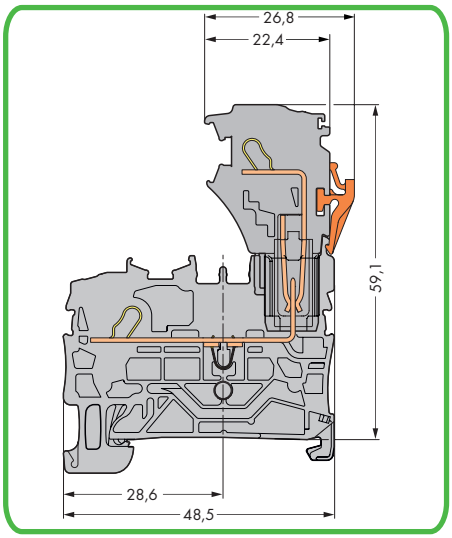
❹ See application notes for:
Colored push-in type jumper bars, page 101
Staggered jumper, page 104
Push-in type wire jumper, page 102

	Item No.	Pack. Unit
2-conductor/2-pin carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**2022-1401/999-953**	50
blue	**2022-1404/999-953**	50
2-conductor/2-pin ground carrier terminal block, for DIN 35 rail, acc. to EN 60715		
green-yellow	**2022-1407/999-953**	50

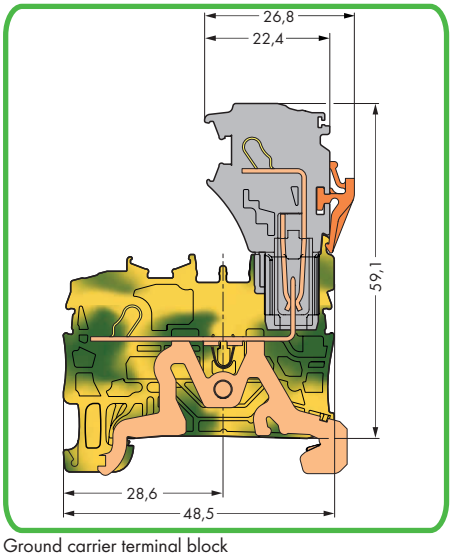
Item-Specific Accessories

End and intermediate plate, 1 mm thick

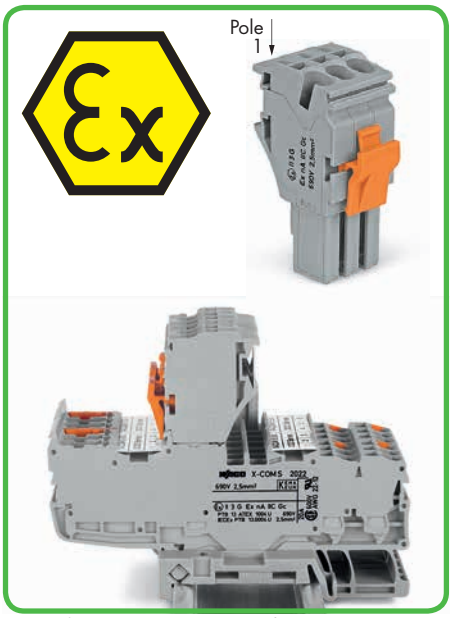
orange	**2022-1492**	100 (4x25)
gray	**2022-1491**	100 (4x25)



Carrier terminal block



Ground carrier terminal block



X-COM®S-SYSTEM is approved for ignition protection type "nA" and Zone 2 hazardous areas.

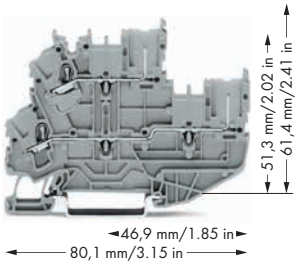
"n" refers to an ignition protection class in Zone 2:
This zone covers areas in which a dangerous, explosive atmosphere consisting of gases, vapors or dust is unlikely to manifest and will only persist for a short period if it does.

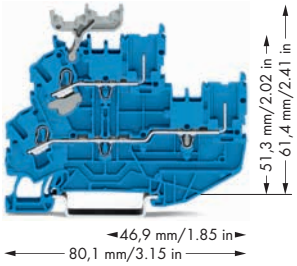
"A" means: non-sparking
(function modules without relays/switches)

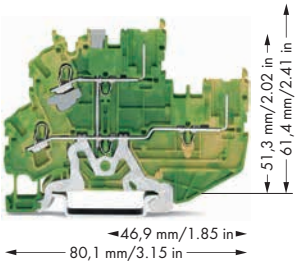
Ex marking
"Ex" sign and extended item number ".../999-953" are printed on the side of both carrier terminal blocks and female plugs with Ex approval.
Shorter locking lever (factory-mounted) makes accidental disconnection even more difficult.

X-COM® S-SYSTEM
1-Conductor/1-Pin Double-Deck Carrier Terminal Blocks for Ex nA Applications
2022 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 630 V ❷ I_N 20 A ❸ Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 630 V ❷ I_N 20 A ❸ Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❹







	Item No.	Pack. Unit
1-conductor/1-pin double-deck carrier terminal block, through/through terminal block, without marker carrier, gray housing		
L/L	**2022-2201/999-953**	50

	Item No.	Pack. Unit
1-conductor/1-pin double-deck carrier terminal block, through/through terminal block, with marker carrier, blue housing		
N/N	**2022-2234/999-953**	50

	Item No.	Pack. Unit
2-conductor/2-pin double-deck carrier terminal block, **2-conductor/2-pin ground conductor terminal block,** without marker carrier, internal commoning, green-yellow housing		
PE	**2022-2207/999-953**	50

Certification organizations can be found in the overview on pages 622 and 623.

❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ 630 V = rated voltage for Ex nA applications (see Section 14)

❸ with double-deck vertical jumper 19 A

❹ Strip length, see packaging or instructions.

❺ See application notes
Colored push-in type jumper bars, page 101
Vertical jumper, page 105

2022 Series Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

End and intermediate plate, 1 mm thick



orange	**2022-2292**	100 (4x25)
gray	**2022-2291**	100 (4x25)

Insulation stop,



5 pcs/strip, 0.25 - 0.5 mm²		
light gray	**2002-171**	200 (8x25)

Insulation stop,



5 pcs/strip, 0.75 - 1 mm²		
dark gray	**2002-172**	200 (8x25)

Push-in type jumper bar, insulated,

❺



I_N 25 A, light gray		
2-way	**2002-402**	200 (8x25)
3-way	**2002-403**	200 (8x25)
4-way	**2002-404**	200 (8x25)
5-way	**2002-405**	100 (4x25)
6-way	**2002-406**	100 (4x25)
7-way	**2002-407**	100 (4x25)
8-way	**2002-408**	100 (4x25)
9-way	**2002-409**	100 (4x25)
10-way	**2002-410**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 25 A, light gray		
from 1 to 3	**2002-433**	200 (8x25)
from 1 to 4	**2002-434**	200 (8x25)
from 1 to 5	**2002-435**	100 (4x25)
from 1 to 6	**2002-436**	100 (4x25)
from 1 to 7	**2002-437**	100 (4x25)
from 1 to 8	**2002-438**	100 (4x25)
from 1 to 9	**2002-439**	100 (4x25)
from 1 to 10	**2002-440**	100 (4x25)

Double-deck vertical jumper, insulated,

❺

I_N 24 A		
light gray	**2002-492**	100 (4x25)
orange	**2002-492/000-012**	

Carrier with 6 coding pins,



for coding female plugs		
orange	**2022-100**	100 (4x25)

Test pin,



1 mm Ø		
	859-500	1

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks		
yellow	**2002-115**	100 (4x25)

Double-deck marker carrier,



pivoting		
gray	**2002-121**	50 (2x25)

WMB Multi marking system,

10 strips with 10 markers per card, stretchable 5 - 5.2 mm		
plain	**793-5501**	5

WMB Multi marking system, plain,



10 strips with 10 markers per card, stretchable 5 - 5.2 mm		
yellow	**793-5501/000-002**	
red	**793-5501/000-005**	
blue	**793-5501/000-006**	
gray	**793-5501/000-007**	
orange	**793-5501/000-012**	
light green	**793-5501/000-017**	
green	**793-5501/000-023**	
violet	**793-5501/000-024**	
		5

WMB Inline, plain,

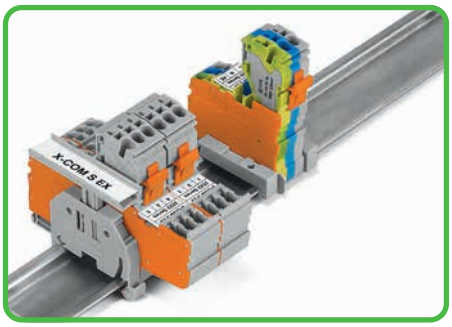


stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll		
white	**2009-115**	1

Marking strip, plain,



11 mm wide, 50 m roll		
white	**2009-110**	1

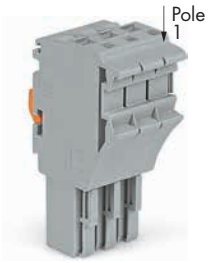


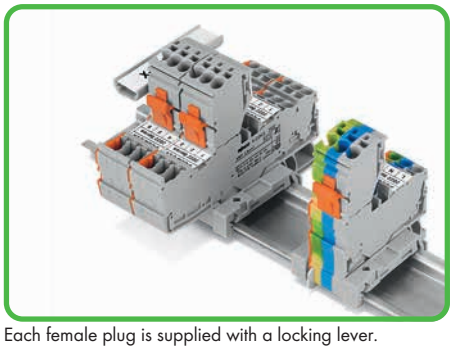
Group marking
with height-adjustable group marker carrier (2009-163)

X-COM® S-SYSTEM
1-Conductor Female Plugs for Ex nA Applications
2022 Series

CAGE CLAMP® S

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12
630 V ❷
I_N 20 A
Module width 5.2 mm / 0.205 in
10 - 12 mm / 0.43 in ❸





Each female plug is supplied with a locking lever.

❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"
❷ 630 V = rated voltage for Ex nA applications
❸ (see Section 14)
❹ Strip length, see packaging or instructions.

Pole No.	Item No.	Pack. Unit
1-conductor female plug with shorter locking lever, for insertion into carrier terminal blocks, with coding fingers, gray		
According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.		
2	**2022-102/999-953**	200
3	**2022-103/999-953**	100
4	**2022-104/999-953**	100
5	**2022-105/999-953**	50
6	**2022-106/999-953**	50
7	**2022-107/999-953**	50
8	**2022-108/999-953**	50

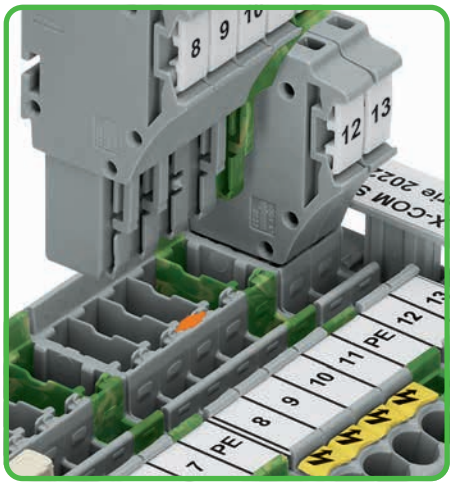
Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline

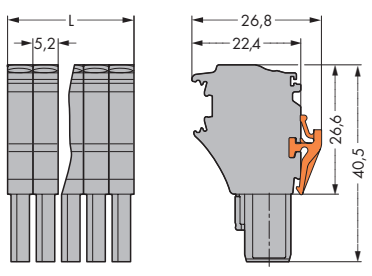
Insulation stop,	5 pcs/strip, 0.25 - 0.5 mm², light gray	**2002-171**	200 (8x25)
Insulation stop,	5 pcs/strip, 0.75 - 1 mm², dark gray	**2002-172**	200 (8x25)
Protective warning marker,	with high-voltage symbol, black, for 5 terminal blocks, yellow	**2002-115**	100 (4x25)
Carrier with 6 coding pins,	for coding female plugs, orange	**2022-100**	100 (4x25)
Strain relief plate, gray	35 mm width	**734-326**	100 (4x25)
	6 mm wide	**734-327**	100 (4x25)
	12.5 mm width	**734-328**	100 (4x25)
	25 mm wide	**734-329**	100 (4x25)
	55 mm width	**734-430**	50 (2x25)
	75 mm width	**734-431**	50 (2x25)
WMB Multi marking system,	10 strips with 10 markers per card, stretchable 5 - 5.2 mm, plain	**793-5501**	5
WMB Inline, plain,	stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll, white	**2009-115**	1
Marking strip, plain,	11 mm wide, 50 m roll, white	**2009-110**	1



To code a female plug, remove the desired coding finger using a suitable tool.



Insert a 2022-100 coding pin into the corresponding location of the carrier terminal block.



L = pole no. x module width

Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

X-COM®S-SYSTEM
Pre-Assembled Female Plugs for Ex nA Applications
2022 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 630 V ❷ I_N 20 A Module width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 630 V ❷ I_N 20 A Module width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❸





❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

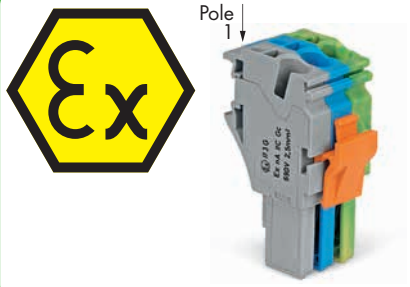
❷ 630 V = rated voltage for Ex nA applications

❸ (see Section 14)

❹ Strip length, see packaging or instructions.

Pole No.	Item No.	Pack. Unit
1-conductor female plug with shorter locking lever with ground base module (green-yellow), for insertion into carrier terminal blocks, with coding fingers		
3	**2022-103/000-038/999-953**	100
4	**2022-104/000-038/999-953**	100
5	**2022-105/000-038/999-953**	50
6	**2022-106/000-038/999-953**	50

Pole No.	Item No.	Pack. Unit
1-conductor female plug with shorter locking lever with ground end module (green-yellow), for insertion into carrier terminal blocks, with coding fingers		
3	**2022-103/000-039/999-953**	100
4	**2022-104/000-039/999-953**	100
5	**2022-105/000-039/999-953**	50
6	**2022-106/000-039/999-953**	50



Ex marking
"Ex" sign and extended item number ".../999-953" are printed on the side of both carrier terminal blocks and female plugs with Ex approval.
Shorter locking lever (factory-mounted) makes accidental disconnection even more difficult.

Accessories Female Plugs

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

Insulation stop,			
	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**2002-171**	200 (8x25)
Insulation stop,			
	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**2002-172**	200 (8x25)
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**2002-115**	100 (4x25)
Strain relief plate, gray			
	35 mm width	**734-326**	100 (4x25)
	6 mm wide	**734-327**	100 (4x25)
	12.5 mm width	**734-328**	100 (4x25)
	25 mm wide	**734-329**	100 (4x25)
	55 mm width	**734-430**	50 (2x25)
	75 mm width	**734-431**	50 (2x25)

WMB Multi marking system,			
	10 strips with 10 markers per card, stretchable 5 - 5.2 mm		
	plain	**793-5501**	5
WMB Inline, plain,			
	stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll		
	white	**2009-115**	1
Marking strip, plain,			
	11 mm wide, 50 m roll		
	white	**2009-110**	1

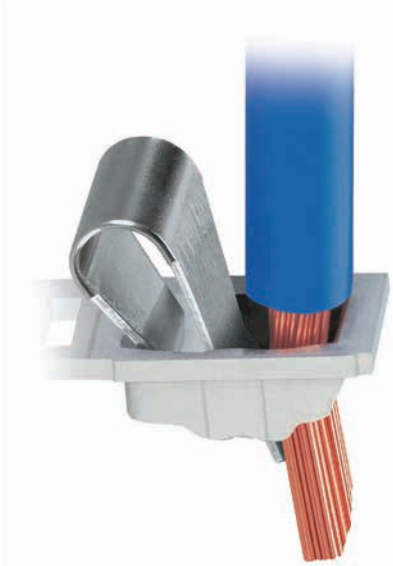
CAGE CLAMP®S

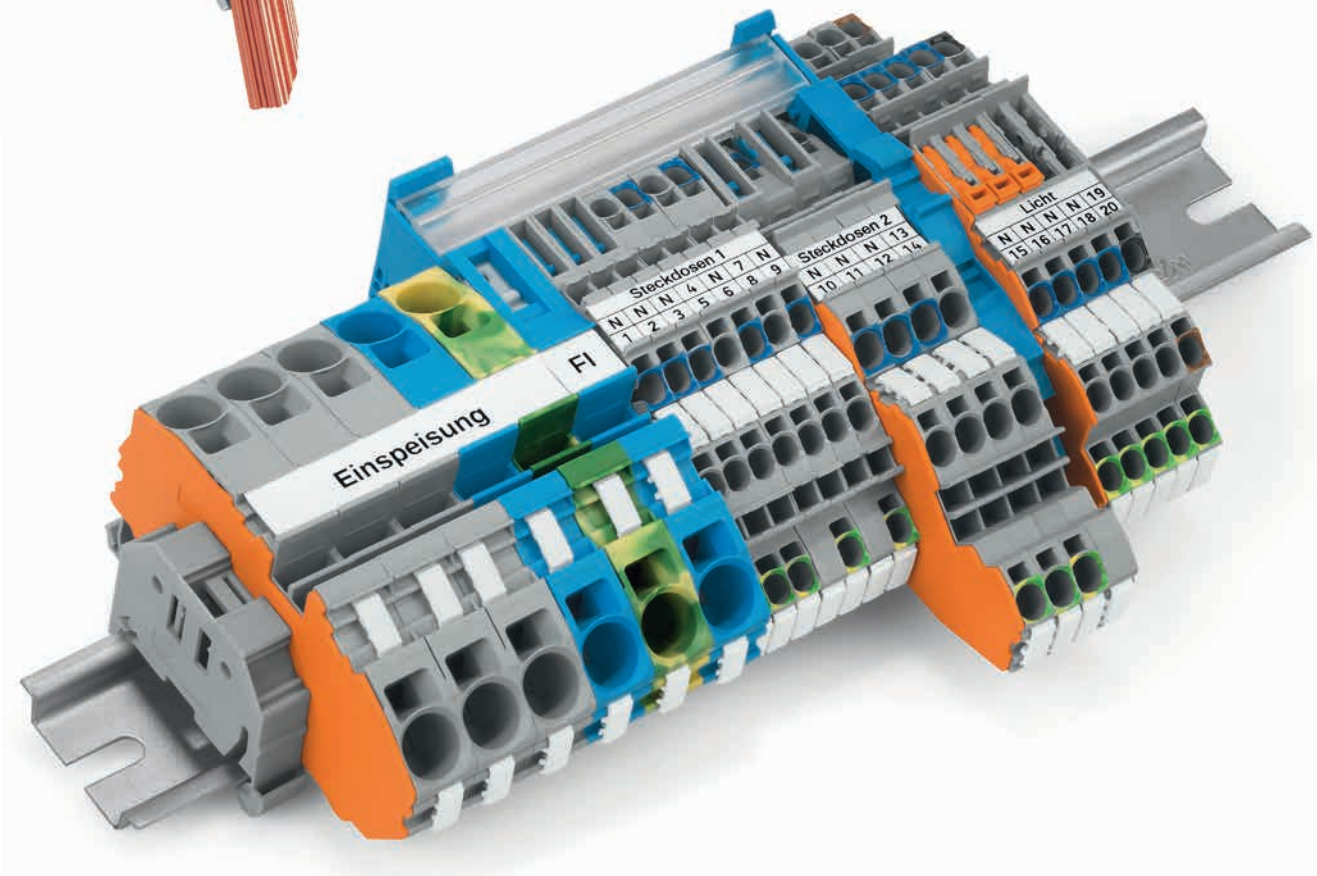
The universal connection with "SPECIAL"

Handling:
- Open clamping unit
- Insert the conductor
- Release clamp – done!
- Terminate both solid and ferruled conductors by simply pushing them in – no operating tool needed.



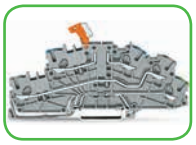
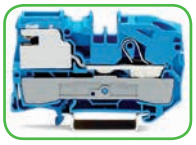
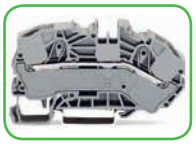




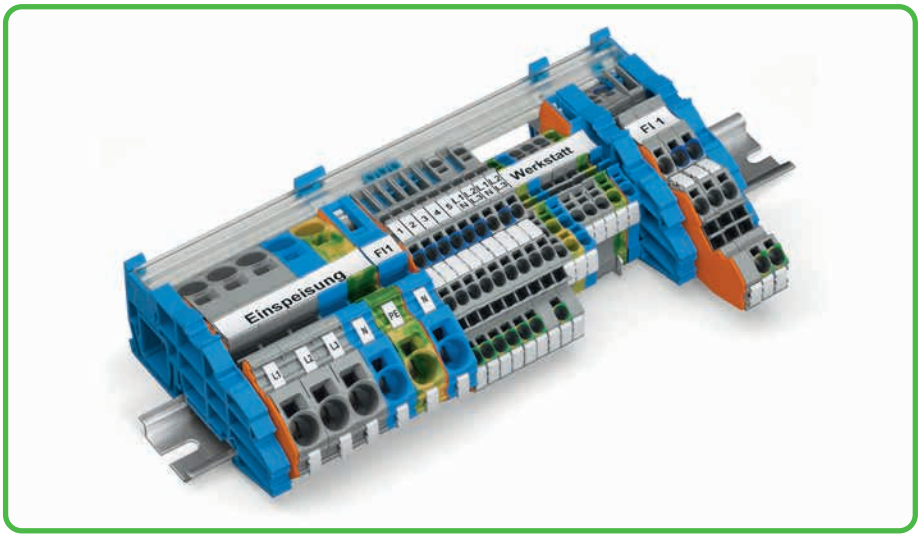


Installation Rail-Mounted Terminal Blocks, TOPJOB® S

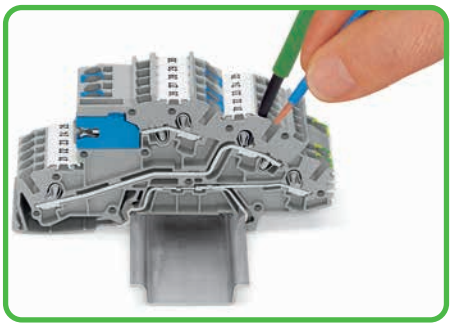
Front-Entry Wiring

			Page
	**Multilevel Installation Terminal Blocks with N-Disconnect Slide Link** 0.25 mm² to 2.5 (4) mm² (22–12 AWG)	2003 Series	152
	**Multilevel Installation Terminal Blocks with Movable Knife Disconnect** 0.25 mm² to 2.5 (4) mm² (22–12 AWG)	2003 Series	154
	**Multilevel Installation Terminal Blocks with N-Disconnect Slide Link** 0.5 mm² to 4 (6) mm² (20–10 AWG)	2005 Series	158
	**N-Conductor Disconnect Terminal Blocks and Power Distribution Disconnect Terminal Blocks** 0.25 mm² to 16 (25 "f-st") mm² (22–4 AWG)	2002/2006/2016 Series	160
	**Supply Terminal Block for Distribution Boxes** 0.5 mm² to 16 (25 "f-st") mm² (20–4 AWG)	2016 Series	162
	**Accessories for TOPJOB® S Rail-Mounted Terminal Blocks**		
	– Banana Plugs		292
	– Marking Accessories		108
	– Various Jumpers		101
	– Connectors and Connector Strips	2001 - 2016 Series	96

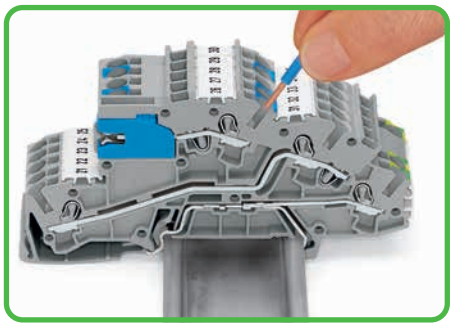
– Handling –
Multilevel Installation Terminal Blocks, N-Disconnect Slide Link and Busbar Carrier



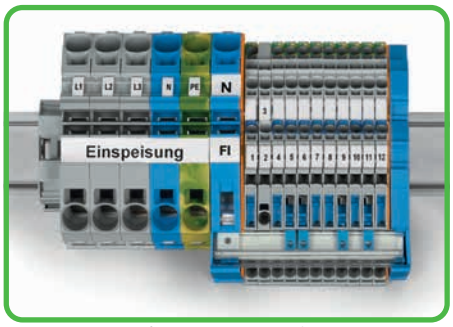
TOPJOB®S: Terminal blocks for every application.
- Push-in connection of solid conductors in small distribution boxes saves time and money.
- Operating errors can be prevented as all TOPJOB®S terminal blocks for building installation are equipped with push-in connection technology.
- Terminal blocks for building installation expand circuit design possibilities.
- The use of standard accessories reduces order-processing and stock-holding costs.
- Accessories, shared with all terminal blocks, enhance safety by reducing the amount of components and install techniques required.
- The position of the busbars is the same, making the new installation terminal blocks compatible with standard TOPJOB® installation terminal blocks.



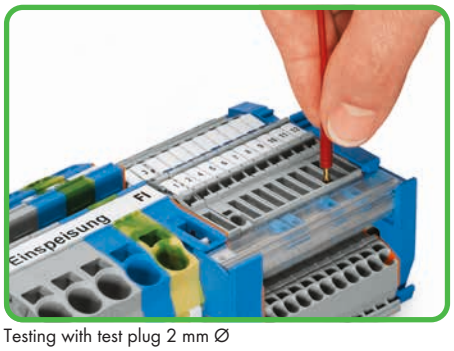
Conductor termination
Fine-stranded conductors are inserted using an operating tool.



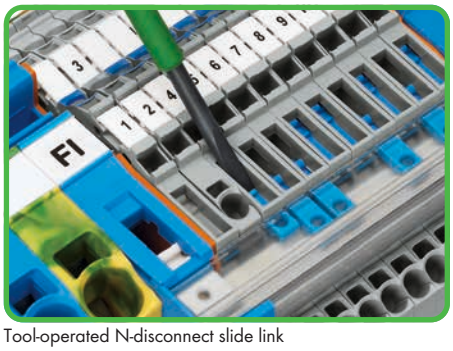
Conductor termination
Solid conductors are simply pushed in.



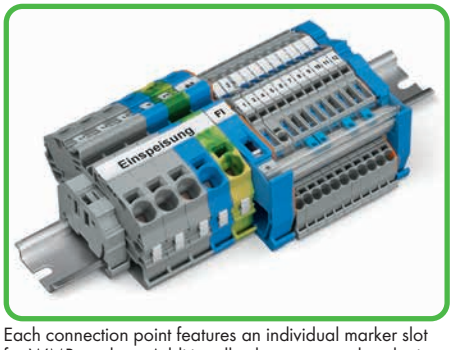
Environmentally friendly – TOPJOB®S rail-mounted terminal blocks are 100% lead-free.



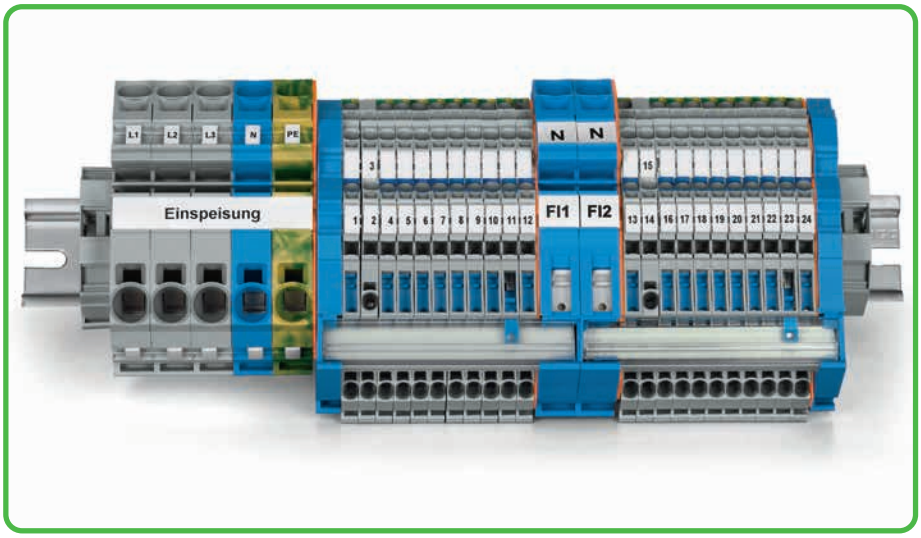
Testing with test plug 2 mm Ø



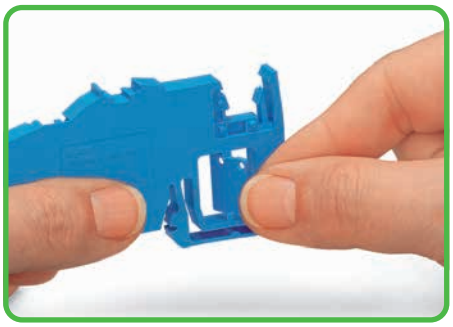
Tool-operated N-disconnect slide link



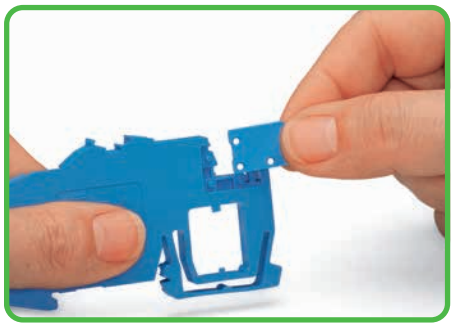
Each connection point features an individual marker slot for WMB markers. Additionally, the upper marker slot is suitable for marker strips that can be marked manually using a felt-tip pen or automatically via thermal transfer printer.



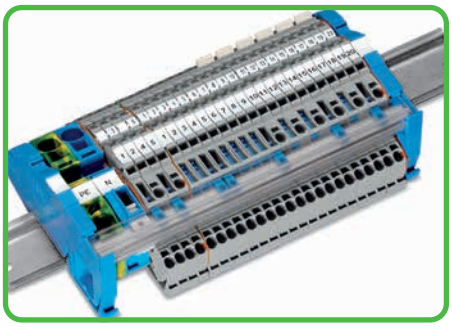
The busbar carrier integrated into the N-disconnect terminal block of the supply terminal blocks for distribution boxes makes any separate busbar carrier unnecessary, saving space and costs.



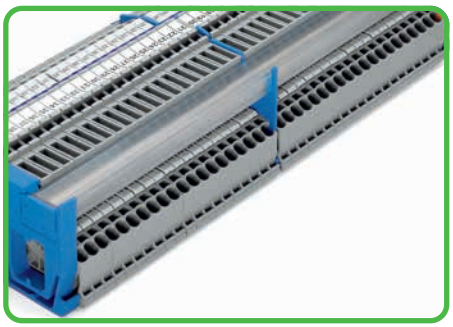
Removing the separator plate from the busbar carrier.



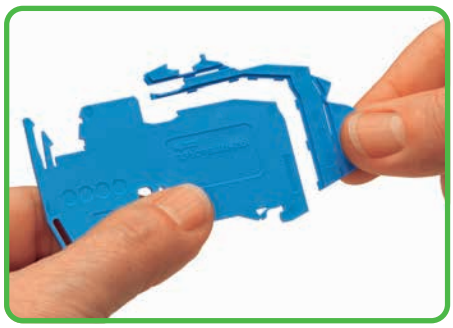
Inserting the separator plate to protect the N-busbar against accidental contact.



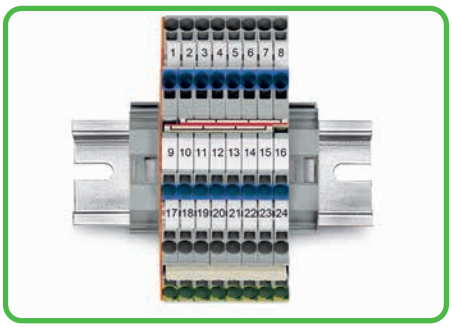
The optional busbar transparent cover (777-303) protects the busbar against accidental contact and makes it easy to see which terminal blocks are connected to the busbar.



The compact busbar carrier, which is placed every 200 mm/7.87 in, provides additional busbar support for longer assemblies.



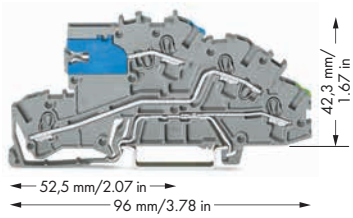
Perforations make it possible to fit the carrier to all TOPJOB®S installation terminal blocks using a single part.

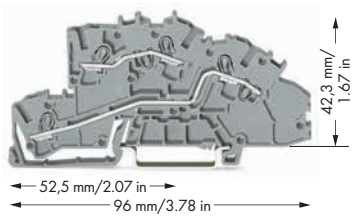


Conductor entries on multilevel installation terminal blocks are color marked, providing a clear arrangement of the terminals.

TOPJOB® S
Multilevel Installation Terminal Blocks with N-Disconnect Slide Link 2.5 (4) mm²
2003 Series

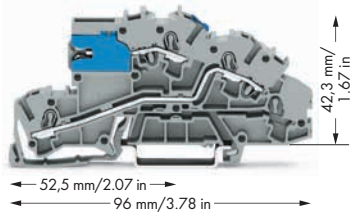
0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 250 V/4 kV/3; 32 A (32 A) ❷ ❸ 400 V/6 kV/3; 32 A (32 A) ❷ ❹ Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❺	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 400 V/6 kV/3 ❷ I_N 32 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❺

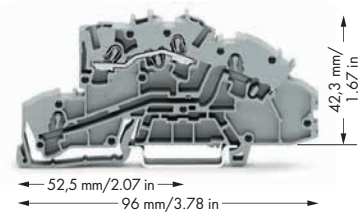




Item No.		Pack. Unit
Multilevel installation terminal block,		
with N-disconnect slide link, gray		
◯ NT/L/PE	**2003-7641**	50

Item No.		Pack. Unit
Multilevel installation terminal block,		
gray		
◯ L/L	**2003-7642**	50
◯ N/L	**2003-7649**	50





Item No.		Pack. Unit
Multilevel installation terminal block,		
with N-disconnect slide link, gray		
◯ NT/L	**2003-7640**	50
◯ LT/L	**2003-7659**	50
Multilevel installation terminal block,		
gray		
◯ N/L/PE	**2003-7646**	50
◯ L/L/PE	**2003-7645**	50

Item No.		Pack. Unit
Multilevel installation terminal block,		
gray		
◯ L	**2003-7650**	50
◯ N	**2003-7651**	50

2003 Series Accessories

Appropriate marking systems: WMB/WMB Inline/Marking strips (see Section 13)

Busbar carrier,
not suitable as end stop,
for DIN 35 rail,
1.5 mm thick
blue **2009-304** 100 (4x25)

Busbar carrier,
can replace end bracket, with detachable separator plate,
for DIN 35 rail,
7.5 mm thick
blue **2009-305** 25

End and intermediate plate, 0.8 mm thick
orange **2003-7692** 100 (4x25)

Cover for N-busbar,
transparent,
1000 mm long
777-303 1

Accessories

Busbar, tin-plated,
Cu 10 x 3 mm,
1000 mm long
I_N 140 A **210-133** 1

N-supply terminal block, I_N 76 A,
16 mm²,
12 mm wide
blue **2016-7714** 20

Ground supply terminal block,
16 mm²,
12 mm wide
green-yellow **2016-7607** 20

Connector,
for N-busbar,
with blue cover,
2.5 - 16 mm²
blue **210-281** 100 (2x50)

Connector,
for N-busbar,
2.5 - 35 mm²
unplated **209-105** 50

Lock-out, snap-on type,
prevents reclosing of slide link
orange **2003-7300** 100 (4x25)

Insulation stop,
5 pcs/strip,
0.25 - 0.5 mm²
light gray **2002-171** 200 (8x25)

Insulation stop,
5 pcs/strip,
0.75 - 1 mm²
dark gray **2002-172** 200 (8x25)

Test plug,
with 500 mm cable,
2 mm Ø
red **210-136** 50

Test plug,
with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

Certification organizations can be found in the overview on pages 622 and 623.

❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrules, 12 mm"

❷ 250 V/
400 V = rated voltage
4 kV/
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ 250 V/4 kV potential-ground

❹ 400 V/6 kV potential-potential

❺ Strip length, see packaging or instructions.

❻ See application notes for:
Colored push-in type jumper bars, page 101
Staggered jumper, page 104
Adjacent jumper for continuous commoning, page 101
Push-in type wire jumper, page 102

Accessories Multilevel Installation Terminal Block

Push-in type jumper bars and staggered jumpers, see 2002 Series

Push-in type jumper bar, insulated,

❻ 

I_N 25 A,
light gray

2-way	**2002-402**	200 (8x25)
3-way	**2002-403**	200 (8x25)
4-way	**2002-404**	200 (8x25)
5-way	**2002-405**	100 (4x25)
6-way	**2002-406**	100 (4x25)
7-way	**2002-407**	100 (4x25)
8-way	**2002-408**	100 (4x25)
9-way	**2002-409**	100 (4x25)
10-way	**2002-410**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 25 A,
light gray

from 1 to 3	**2002-433**	200 (8x25)
from 1 to 4	**2002-434**	200 (8x25)
from 1 to 5	**2002-435**	100 (4x25)
from 1 to 6	**2002-436**	100 (4x25)
from 1 to 7	**2002-437**	100 (4x25)
from 1 to 8	**2002-438**	100 (4x25)
from 1 to 9	**2002-439**	100 (4x25)
from 1 to 10	**2002-440**	100 (4x25)

Push-in type wire jumper,

❻ 

insulated,
I_N 16 A,
wire size 1.5 mm²

L = 60 mm	**2009-412**	100 (10x10)
L = 110 mm	**2009-414**	100 (10x10)
L = 250 mm	**2009-416**	100 (10x10)

Test plug adapter,



for 4 mm Ø test plug

gray	**2009-174**	100 (4x25)

Banana plug,



for socket 4 mm Ø,
color mixed

	215-111	50

Testing tap,



for max. 2.5 mm²

gray	**2009-182**	100 (4x25)

Operating tool,



3.5 mm and 5.5 mm blade,
for TOPJOB®S installation terminal blocks

2009-310	50

Staggered jumper,

❻ 

insulated,
I_N 25 A,
light gray

2-way	**2002-472**	100 (4x25)
3-way	**2002-473**	100 (4x25)
4-way	**2002-474**	100 (4x25)
5-way	**2002-475**	50 (2x25)
6-way	**2002-476**	50 (2x25)
7-way	**2002-477**	50 (2x25)
8-way	**2002-478**	50 (2x25)
9-way	**2002-479**	50 (2x25)
10-way	**2002-480**	50 (2x25)
11-way	**2002-481**	50 (2x25)
12-way	**2002-482**	50 (2x25)

Customized staggered jumper,



insulated,
I_N 25 A,
light gray

1-3	**2002-473/011-000**	
		100 (4x25)
1-3-5	**2002-475/011-000**	
1-3-5-7	**2002-477/011-000**	
1-3-5-7-9	**2002-479/011-000**	
1-3-5-7-9-11	**2002-481/011-000**	
		50 (2x25)

Adjacent jumper for continuous commoning, insulated,

❻ 

I_N 25 A,
light gray

2-way	**2002-400**	100 (4x25)

WMB Multi marking system,

10 strips with 10 markers per card,
stretchable 5 - 5.2 mm

plain	**793-5501**	5

WMB Inline, plain,



stretchable 5 - 5.2 mm,
1,500 WMB markers, 5 mm, on roll

white	**2009-115**	1

Marking strip, plain,



11 mm wide,
50 m roll

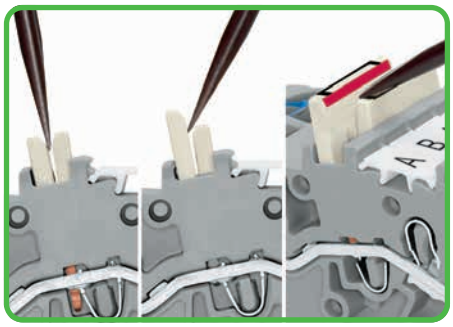
white	**2009-110**	1

Operating tool,



3.5 mm and 2.5 mm blade,
for TOPJOB®S installation terminal blocks

2009-309	50



Commoning perfomed via new staggered jumper system in one single jumper slot. The 2003 Series multilevel installation terminal blocks are ideal for use in very confined spaces.

Staggered jumper removal
Insert the operating tool between the jumpers and lift up the jumper.
For additional application notes, see page 104.

Application note:

N-disconnect slide links, used in installation terminal blocks, consist of switch contacts that are opened and then closed again as part of the regular circuit testing. To guarantee a reliable connection, a corrosion-resistant contact area is required on the N-busbar.

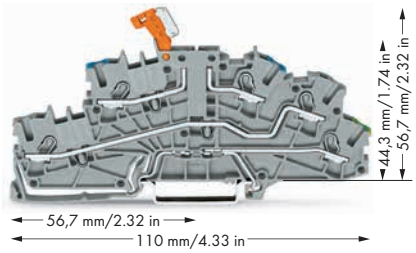
Historically, uninsulated copper busbars, that have been cleaned/stripped of any possible corrosion prior to install, can be used in dry, pollution-free locations.

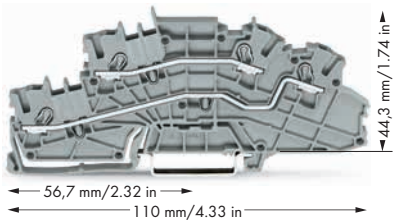
According to DIN VDE 0100-520 (VDE 0100 Part 520), installation equipment exposed to contamination or corrosive substances (e.g., water) that promote corrosion or deterioration, must be protected or be made of a corrosion- or wear- resistant material. In these cases, tinned copper busbars guarantee a reliable connection.

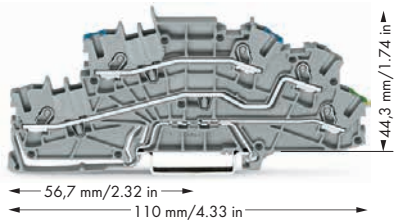
WAGO only offers tinned copper busbars.

TOPJOB® S
Multilevel Installation Terminal Blocks with Movable Knife Disconnect
2.5 (4) mm², 2003 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 250 V/4 kV/3; 20 A (25 A) ❷ ❸ 400 V/6 kV/3; 20 A (25 A) ❷ ❹ Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❺	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 400 V/6 kV/3 ❷ I_N 24 A (28 A) Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❺	0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 250 V/4 kV/3; 24 A (28 A) ❷ ❸ 400 V/6 kV/3; 24 A (28 A) ❷ ❹ Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❺



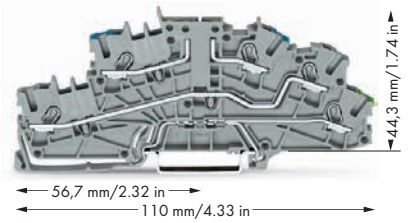


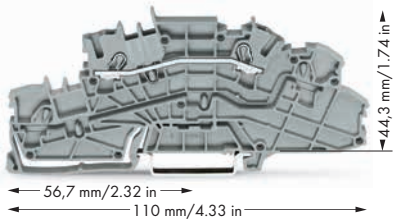


Item No.		Pack. Unit
Multilevel installation terminal block, with movable knife disconnect, gray		
◯ NTi/L/PE	**2003-6641**	50
◯ LTi/L/PE	**2003-6644**	50
Item-Specific Accessories		
Test plug adapter N/L, for vertical test slot, gray		
2-pole	**2003-499**	100 (4x25)
Test plug adapter N, for vertical test slot, gray		
1-pole	**2003-500**	100 (4x25)

Item No.		Pack. Unit
Multilevel installation terminal block, gray		
◯ L/L	**2003-6642**	50
◯ N/L	**2003-6649**	50

Item No.		Pack. Unit
Multilevel installation terminal block, gray		
◯ N/L/PE	**2003-6646**	50
◯ L/L/PE	**2003-6645**	50



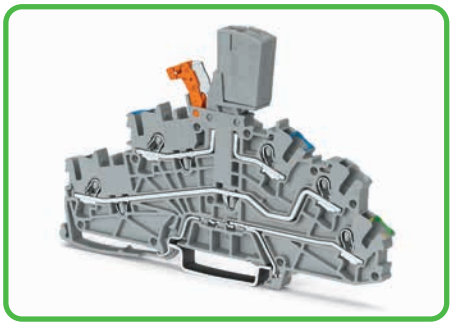


Item No.		Pack. Unit
Multilevel installation terminal block, I_N 10 A, carrier terminal block without knife disconnect, gray Maximum current depends on accessories used.		
◯ N/L/PE	**2003-6640**	50
Black upper-deck, brown middle-deck, green-yellow lower-deck printing		
◯ P2/P1/PE	**2003-6643**	50
Brown upper-deck, black middle-deck, green-yellow lower-deck printing		
◯ P1/P2/PE	**2003-6660**	50
Item-Specific Accessories		
Fuse plug with pull-tab, for miniature fuses 5 x 20 mm, nominal voltage and current are given by the fuse gray	**2004-911**	50
End and intermediate plate, only for use with fuse plugs, 1 mm thick orange	**2003-6693**	100 (4x25)

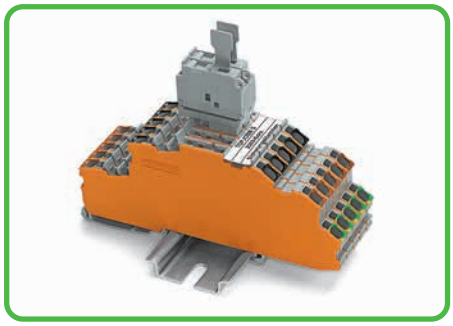
Item No.		Pack. Unit
Multilevel installation terminal block, gray		
◯ L	**2003-6650**	50
◯ N	**2003-6651**	50

Certification organizations can be found in the overview on pages 622 and 623.

Accessories for Multilevel Installation Terminal Blocks



Multilevel installation terminal block (2003-6641) with N/L test plug adapter (2003-499) for insulation resistance measurement with connected N and L potentials



In combination with the 1mm thick end and intermediate plate (2003-6693), the fuse plug (2004-911) can also be used with the carrier terminal blocks (2003-6640 and 2003-6643).

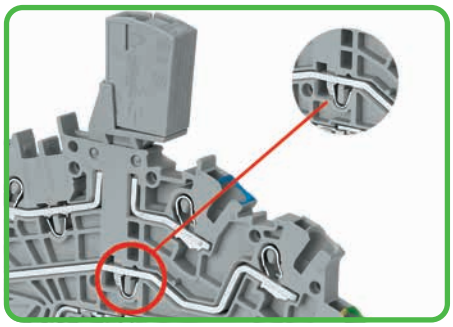
1. Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrules, 12 mm"
2. 250 V/ 400 V = rated voltage 4 kV/ 6 kV = rated surge voltage 3 = pollution degree (see Section 14)
3. 250 V/4 kV potential-ground
4. 400 V/6 kV potential-potential
5. Strip length, see packaging or instructions.
6. See application notes for: Colored push-in type jumper bars, page 101 Staggered jumper, page 104 Adjacent jumper for continuous commoning, page 101 Push-in type wire jumper, page 102

Accessories Multilevel Installation Terminal Block

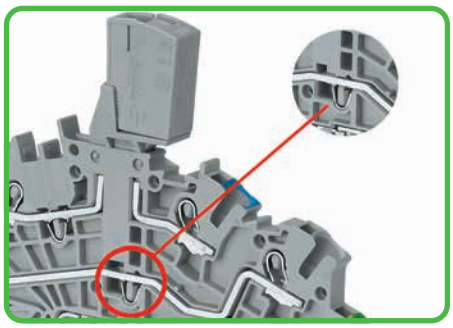
Push-in type jumper bars and staggered jumpers, see 2002 Series

End and intermediate plate,			
	for use without fuse plug,		
	0.8 mm thick		
	orange	**2003-6692**	100 (4x25)
Adjacent jumper for continuous commoning, insulated,			
6	I_N 25 A,		
	light gray		
	2-way	**2002-400**	100 (4x25)
Busbar carrier,			
	not suitable as end stop,		
	for DIN 35 rail,		
	1.5 mm thick		
	blue	**2009-304**	100 (4x25)
Busbar carrier,			
	can replace end bracket, with detachable		
	separator plate,		
	for DIN 35 rail,		
	7.5 mm thick		
	blue	**2009-305**	25
Push-in type jumper bar, insulated,			
6	I_N 25 A,		
	light gray		
	2-way	**2002-402**	200 (8x25)
	3-way	**2002-403**	200 (8x25)
	4-way	**2002-404**	200 (8x25)
	5-way	**2002-405**	100 (4x25)
	6-way	**2002-406**	100 (4x25)
	7-way	**2002-407**	100 (4x25)
	8-way	**2002-408**	100 (4x25)
	9-way	**2002-409**	100 (4x25)
	10-way	**2002-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 25 A,		
	light gray		
	from 1 to 3	**2002-433**	200 (8x25)
	from 1 to 4	**2002-434**	200 (8x25)
	from 1 to 5	**2002-435**	100 (4x25)
	from 1 to 6	**2002-436**	100 (4x25)
	from 1 to 7	**2002-437**	100 (4x25)
	from 1 to 8	**2002-438**	100 (4x25)
	from 1 to 9	**2002-439**	100 (4x25)
	from 1 to 10	**2002-440**	100 (4x25)
Operating tool,			
	3.5 mm and 2.5 mm blade,		
	for TOPJOB®S installation terminal blocks		
		2009-309	50

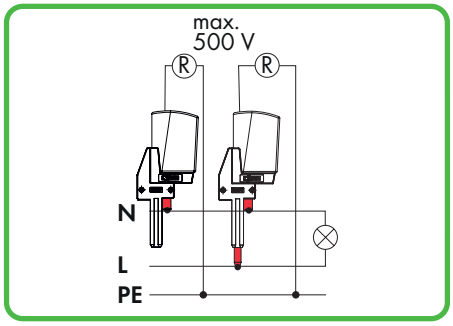
Insulation stop,			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**2002-171**	200 (8x25)
Insulation stop,			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**2002-172**	200 (8x25)
Staggered jumper,			
6	insulated,		
	I_N 25 A,		
	light gray		
	2-way	**2002-472**	100 (4x25)
	3-way	**2002-473**	100 (4x25)
	4-way	**2002-474**	100 (4x25)
	5-way	**2002-475**	50 (2x25)
	6-way	**2002-476**	50 (2x25)
	7-way	**2002-477**	50 (2x25)
	8-way	**2002-478**	50 (2x25)
	9-way	**2002-479**	50 (2x25)
	10-way	**2002-480**	50 (2x25)
	11-way	**2002-481**	50 (2x25)
	12-way	**2002-482**	50 (2x25)
Push-in type wire jumper,			
6	insulated,		
	I_N 16 A,		
	wire size 1.5 mm²		
	L = 60 mm	**2009-412**	100 (10x10)
	L = 110 mm	**2009-414**	100 (10x10)
	L = 250 mm	**2009-416**	100 (10x10)
WMB Multi marking system,			
	10 strips with 10 markers per card,		
	stretchable 5 - 5.2 mm		
	plain	**793-5501**	5
WMB Inline, plain,			
	stretchable 5 - 5.2 mm,		
	1,500 WMB markers, 5 mm, on roll		
	white	**2009-115**	1
Marking strip, plain,			
	11 mm wide,		
	50 m roll		
	white	**2009-110**	1
Operating tool,			
	3.5 mm and 5.5 mm blade,		
	for TOPJOB®S installation terminal blocks		
		2009-310	50



Multilevel installation terminal block (2003-6640) with N/L test plug adapter (2003-499) for insulation resistance measurement with connected N and L potentials



Multilevel installation terminal block (2003-6640) with N test plug adapter (2003-500) for insulation resistance measurement of N potential



TOPJOB® S
2003 Series Double Fuse Plugs on 2002 and 2003 Series Carrier Terminal Blocks

Double fuse plug for miniature fuses 5 x 20 mm 250 V / I_N 6 A Plug width 10.4 mm / 0.409 in	Double fuse plug for miniature fuses 5 x 20 mm 250 V / I_N 6 A Plug width 10.4 mm / 0.409 in





❶ Length of 2002-1661: 66.5 mm / 2.62 in
2-conductor carrier terminal block

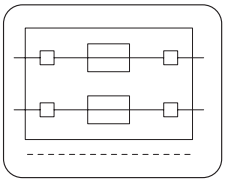
❷ Length of 2002-1761: 76.8 mm / 3.02 in
3-conductor carrier terminal block

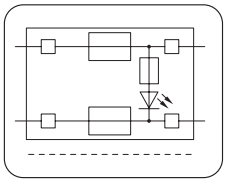
❸ Length of 2002-1861: 87.5 mm / 3.45 in
4-conductor carrier terminal block

❹ Length of 2002-1961: 72.9 mm / 2.87 in
2-conductor carrier terminal block with additional jumper position

❺ Length of 2002-2961: – 108 mm / 4.25 in
Double-deck carrier terminal block

❻ Length of 2003-6640: – 110 mm / 4.33 in
Multilevel installation terminal block





	Item No.	Pack. Unit
Double fuse plug,		
for miniature fuses 5 x 20 mm		
Both nominal voltage and current are given by the fuse.		
◯ gray	**2003-911**	25

	Item No.	Pack. Unit
Double fuse plug,		
for miniature fuses 5 x 20 mm,		
with indicator lamp, gray		
Both nominal voltage and current are given by the fuse.		
LED 0.25mA		
◯ 230 V	**2003-911/1000-923**	25

Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

2-conductor carrier terminal block, ❶
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
gray **2002-1661** 50

End and intermediate plate, 1 mm thick
orange **2002-1692** 100 (4x25)
gray **2002-1691** 100 (4x25)

3-conductor carrier terminal block, ❷
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
gray **2002-1761** 50

End and intermediate plate, 1 mm thick
orange **2002-1792** 100 (4x25)
gray **2002-1791** 100 (4x25)

4-conductor carrier terminal block, ❸
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
gray **2002-1861** 50

End and intermediate plate, 1 mm thick
orange **2002-1892** 100 (4x25)
gray **2002-1891** 100 (4x25)

2-conductor carrier terminal block, ❹
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
gray **2002-1961** 50

End and intermediate plate, 1 mm thick
orange **2002-1992** 100 (4x25)
gray **2002-1991** 100 (4x25)

Double-deck carrier terminal block, ❺
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
L/L **2002-2961** 50

Double-deck carrier terminal block,
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
L/N **2002-2963** 50

Double-deck carrier terminal block,
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
L/L **2002-2941** 50

End and intermediate plate, 1 mm thick
orange **2002-2992** 100 (4x25)
gray **2002-2991** 100 (4x25)

Accessories

Multilevel installation terminal block, gray ❻
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
N/L/PE **2003-6640** 50

Multilevel installation terminal block, gray
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
P2/P1/PE **2003-6643** 50

Multilevel installation terminal block, gray
0.25 - 2.5 (4) mm² / AWG 22 - 12
Terminal block width 5.2 mm / 0.205 in
P1/P2/PE **2003-6660** 50

End and intermediate plate,
1 mm thick
orange **2003-6692** 100 (4x25)

End plate for fuse terminal blocks,
2 mm thick
orange **2002-992** 100 (4x25)
gray **2002-991** 100 (4x25)

Shorting link, 5 x 20 mm,
if the fuse plug is used as disconnect plug
I_N 6.3 A **281-503** 250 (10x25)

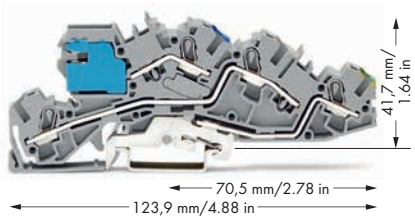
WMB Multi marking system,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

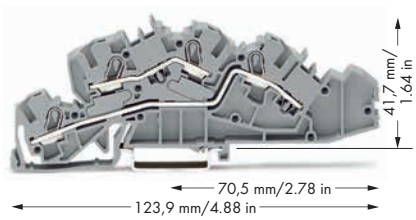
WMB Multi marking system, plain,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
yellow **793-5501/000-002**
red **793-5501/000-005**
blue **793-5501/000-006**
gray **793-5501/000-007**
orange **793-5501/000-012**
light green **793-5501/000-017**
green **793-5501/000-023**
violet **793-5501/000-024**
5

Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® S
Multilevel Installation Terminal Blocks with N-Disconnect Slide Link 4 (6) mm²
2005 Series

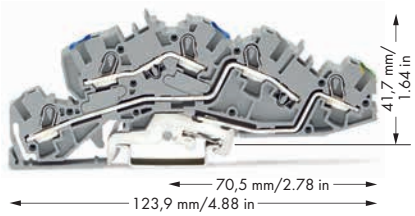
0.5 - 4 (6) mm² ❶ | AWG 20 - 10 **250 V/4 kV/3; 36 A (36 A) ❷ ❸** **400 V/6 kV/3; 36 A (36 A) ❷ ❹** **Terminal block width 6.2 mm / 0.244 in** **11 - 13 mm / 0.47 in ❺**	**0.5 - 4 (6) mm² ❶ | AWG 20 - 10** **400 V/6 kV/3 ❷** **I_N 36 A** **Terminal block width 6.2 mm / 0.244 in** **11 - 13 mm / 0.47 in ❺**





	Item No.	Pack. Unit
Multilevel installation terminal block,		
with N-disconnect slide link, gray		
◯ NT/L/PE	**2005-7641**	50

	Item No.	Pack. Unit
Multilevel installation terminal block,		
gray		
◯ L/L	**2005-7642**	50
◯ N/L	**2005-7649**	50



	Item No.	Pack. Unit
Multilevel installation terminal block,		
gray		
◯ N/L/PE	**2005-7646**	50
Multilevel installation terminal block,		
gray		
◯ L/L/PE	**2005-7645**	50

2005 Series Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

End and intermediate plate, 1 mm thick
orange **2005-7692** 100 (4x25)

Busbar, tin-plated,
Cu 10 x 3 mm,
1000 mm long
I_N 140 A **210-133** 1

Cover for N-busbar,
transparent,
1000 mm long
777-303 1

Busbar carrier,
not suitable as end stop,
for DIN 35 rail,
1.5 mm thick
blue **2009-304** 100 (4x25)

Busbar carrier,
can replace end bracket, with detachable separator plate,
for DIN 35 rail,
7.5 mm thick
blue **2009-305** 25

Accessories

N-supply terminal block, I_N 76 A,
16 mm²,
12 mm wide
blue **2016-7714** 20

Ground supply terminal block,
16 mm²,
12 mm wide
green-yellow **2016-7607** 20

Connector,
for N-busbar,
with blue cover,
2.5 - 16 mm²
blue **210-281** 100 (2x50)

Connector,
for N-busbar,
2.5 - 35 mm²
unplated **209-105** 50

Lock-out, snap-on type,
prevents reclosing of slide link
orange **2005-7300** 100 (4x25)

Insulation stop,
5 pcs/strip,
0.25 - 0.5 mm²
light gray **2004-171** 200 (8x25)

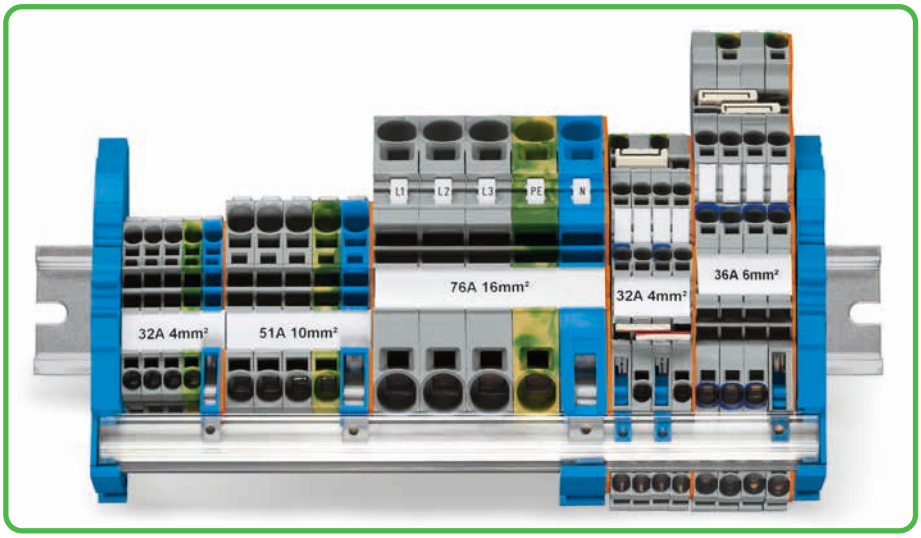
Insulation stop,
5 pcs/strip,
0.75 - 1 mm²
dark gray **2004-172** 200 (8x25)

Push-in type jumper bar, insulated,
I_N 32 A,
light gray

2-way	**2004-402**	200 (8x25)
3-way	**2004-403**	200 (8x25)
4-way	**2004-404**	100 (4x25)
5-way	**2004-405**	100 (4x25)
6-way	**2004-406**	100 (4x25)
7-way	**2004-407**	100 (4x25)
8-way	**2004-408**	100 (4x25)
9-way	**2004-409**	100 (4x25)
10-way	**2004-410**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

Accessories for Multilevel Installation Terminal Blocks



1. Conductor sizes: 0.5 mm² – 6 mm² "s + f-st"; Push-in conductor sizes: 1 mm² – 6 mm² "s" and 0.75 mm² – 4 mm² "insulated ferrules, 12 mm"
2. 250 V/ 400 V = rated voltage 4 kV/ 6 kV = rated surge voltage 3 = pollution degree (see Section 14)
3. 250 V/4 kV potential-ground
4. 400 V/6 kV potential-potential
5. Strip length, see packaging or instructions.

Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

Push-in type jumper bar, insulated,



I_N 32 A, light gray

from 1 to 3	**2004-433**	200	(8x25)
from 1 to 4	**2004-434**	200	(8x25)
from 1 to 5	**2004-435**	100	(4x25)
from 1 to 6	**2004-436**	100	(4x25)
from 1 to 7	**2004-437**	100	(4x25)
from 1 to 8	**2004-438**	100	(4x25)
from 1 to 9	**2004-439**	100	(4x25)
from 1 to 10	**2004-440**	100	(4x25)

Push-in type wire jumper,



insulated, I_N 18 A, wire size 1.5 mm²

L = 60 mm	**2009-412**	100	(10x10)
L = 110 mm	**2009-414**	100	(10x10)
L = 250 mm	**2009-416**	100	(10x10)

Test plug adapter,



for 4 mm Ø test plug, gray **2009-174** 100 (4x25)

Banana plug,



for socket 4 mm Ø, color mixed **215-111** 50

Testing tap,



for max. 2.5 mm², gray **2009-182** 100 (4x25)

Test plug,



with 500 mm cable, 2 mm Ø, red **210-136** 50

Test plug,



with 500 mm cable, 2.3 mm Ø, yellow **210-137** 50

WMB Multi marking system,

10 strips with 10 markers per card, stretchable 5 - 5.2 mm, plain **793-5501** 5

Marking strip, plain,



11 mm wide, 50 m roll, white **2009-110** 1

TOPJOB®S group marker carrier,



snap-on type for jumper slot, 5 mm wide, gray **2009-191** 50 (2x25)

Screwless end stop,



for DIN 35 rail, 6 mm wide, gray **249-116** 100 (4x25)

Screwless end stop,



for DIN 35 rail, 10 mm wide, gray **249-117** 50 (2x25)

Operating tool,



3.5 mm and 5.5 mm blade, for TOPJOB®S installation terminal blocks **2009-310** 50

Operating tool,



3.5 mm and 2.5 mm blade, for TOPJOB®S installation terminal blocks **2009-309** 50

Application note:

N-disconnect slide links, used in installation terminal blocks, consist of switch contacts that are opened and then closed again as part of the regular circuit testing. To guarantee a reliable connection, a corrosion-resistant contact area is required on the N-busbar.

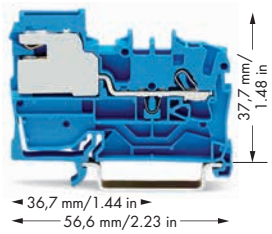
Historically, uninsulated copper busbars, that have been cleaned/stripped of any possible corrosion prior to install, can be used in dry, pollution-free locations.

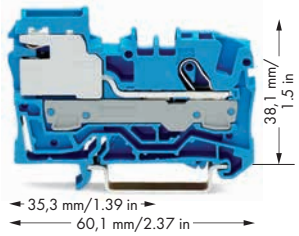
According to DIN VDE 0100-520 (VDE 0100 Part 520), installation equipment exposed to contamination or corrosive substances (e.g., water) that promote corrosion or deterioration, must be protected or made of a corrosion- or wear- resistant material. In these cases, tinned copper busbars guarantee a reliable connection.

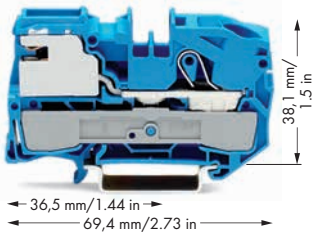
WAGO only offers tinned copper busbars.

TOPJOB® S
N-Conductor Disconnect and Power Distribution Disconnect Terminal Blocks
2002 / 2006 / 2016 Series

0.25 - 2.5 (4) mm² ❶ | AWG 22 - 12 250 V/4 kV/3 ❹ I_N 32 A Terminal block width 5.2 mm / 0.205 in 10 - 12 mm / 0.43 in ❺	0.5 - 6 (10) mm² ❷ | AWG 20 - 8 250 V/4 kV/3 ❹ I_N 51 A Terminal block width 7.5 mm / 0.295 in 13 - 15 mm / 0.55 in ❺	0.5 - 16 (25"f-st")mm² ❸ | AWG 20 - 4 250 V/4 kV/3 ❹ I_N 76 A Terminal block width 12 mm / 0.472 in 18 - 20 mm / 0.75 in ❺







Item No.		Pack. Unit
1-conductor N-disconnect terminal block		
blue	**2002-7114** ❻	50
1-conductor power distribution disconnect terminal block		
gray	**2002-7111** ❼	50
Appropriate through and ground conductor terminal blocks,		
see page 14		

Item No.		Pack. Unit
1-conductor N-disconnect terminal block		
blue	**2006-7114** ❻	50
1-conductor power distribution disconnect terminal block		
gray	**2006-7111** ❼	50
Appropriate through and ground conductor terminal blocks,		
see page 20		

Item No.		Pack. Unit
1-conductor N-disconnect terminal block		
blue	**2016-7114** ❻	25
1-conductor power distribution disconnect terminal block		
gray	**2016-7111** ❼	25
Appropriate through and ground conductor terminal blocks,		
see page 22		

Item-Specific Accessories

End and intermediate plate, 0.8 mm thick



orange **2002-7192** 100 (4x25)

Lock-out, snap-on type,



prevents reclosing of slide link
orange **2005-7300** 100 (4x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick



orange **2006-7192** 100 (4x25)

Lock-out, snap-on type,



prevents reclosing of slide link
orange **2006-7300** 100 (4x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick

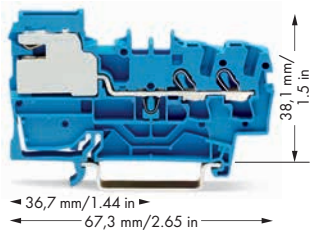


orange **2016-7192** 100 (4x25)

Lock-out, snap-on type,



prevents reclosing of slide link
orange **2006-7300** 100 (4x25)



Item No.		Pack. Unit
2-conductor N-disconnect terminal block		
blue	**2002-7214** ❻	50
2-conductor power distribution disconnect terminal block		
gray	**2002-7211** ❼	50

Item-Specific Accessories

End and intermediate plate, 0.8 mm thick



orange **2002-7292** 100 (4x25)

Accessories for N-Conductor and Power Distribution Disconnect Terminal Blocks

Appropriate marking systems: WMB/Marking strips
(see Section 13)

Busbar carrier,



not suitable as end stop,
for DIN 35 rail,
1.5 mm thick
blue **2009-304** 100 (4x25)

Busbar carrier,



can replace end bracket, with detachable separator plate,
for DIN 35 rail,
7.5 mm thick
blue **2009-305** 25

Busbar, tin-plated,



Cu 10 x 3 mm,
1000 mm long
I_N 140 A **210-133** 1

Cover for N-busbar,



transparent,
1000 mm long
777-303 1

Connector,



for N-busbar,
2.5 - 35 mm²
unplated **209-105** 50

Connector,



for N-busbar,
with blue cover,
2.5 - 16 mm²
blue **210-281** 100 (2x50)

Test plug,



with 500 mm cable,
2 mm Ø
red **210-136** 50

Test plug,



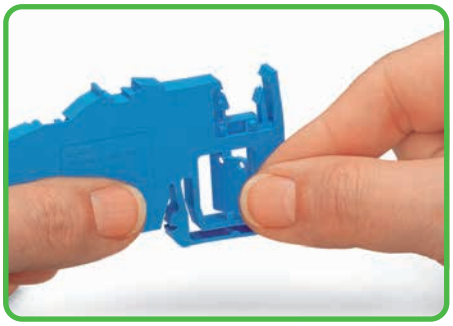
with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

WMB Multi marking system,

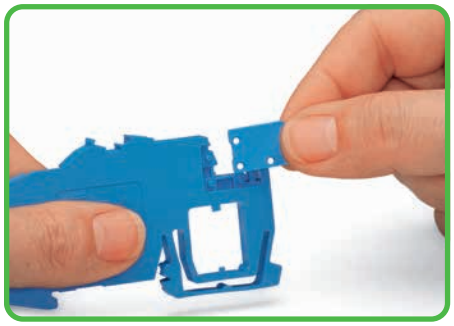
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

Certification organizations can be found in the overview on pages 622 and 623.

– Handling –
N-Disconnect Slide Link and Busbar Carrier



Removing the separator plate from the busbar carrier.



Inserting the separator plate to protect the N-busbar against accidental contact.

❶ Conductor sizes: 0.25 mm² – 4 mm² "s + f-st"; Push-in conductor sizes: 0.75 mm² – 4 mm² "s" and 0.75 mm² – 2.5 mm² "insulated ferrule, 12 mm"

❷ Conductor sizes: 0.5 mm² – 10 mm² "s + f-st"; Push-in conductor sizes: 1.5 mm² – 10 mm² "s" and 1.5 mm² – 6 mm² "insulated ferrule, 12 mm"

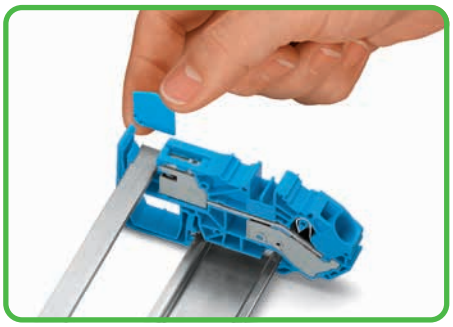
❸ Conductor sizes: 0.5 mm² – 16 mm² "s + f-st", 25 mm² "f-st"; Push-in conductor sizes: 2.5 mm² – 16 mm² "s" and 2.5 mm² – 16 mm² "insulated ferrule, 18 mm"

❹ 250 V = rated voltage
4 kV = rated surge voltage
3 = pollution degree
(see Section 14)

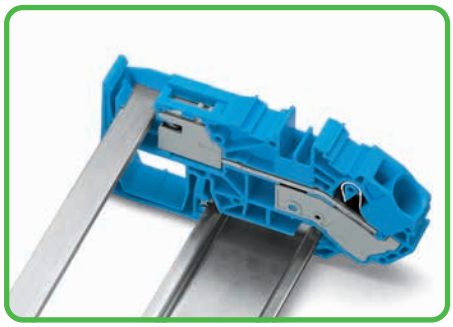
❺ Strip length, see packaging or instructions.

❻ See column 4

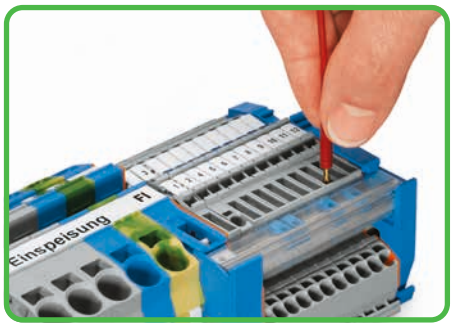
❼ See column 5



Inserting the separator plate.



Separator plate is inserted.



Testing with test plug 2 mm Ø

❻ For the construction and operation of power installations in fire hazardous locations or public buildings – such as conference centers, stores, hospitals, schools, theaters, hotels. – the DIN VDE 0100-710 or DIN VDE 0100-718 standards shall be observed. DIN VDE 0100-482 shall be observed for fire hazardous locations. These VDE mandate determine that every neutral conductor must be provided with a disconnection device so, e.g., insulation testing is possible for every circuit without disconnecting the N-conductor.

WAGO N-disconnect terminal blocks meet this requirement.

❼ According to DIN VDE 0100-710 "Requirements for operating facilities, rooms and special installations = medical facilities", equipotential bonding conductors shall be run on a potential equalization busbar. The potential equalization busbar and the protective ground conductor busbar must be accommodated in a common housing and be connected by means of a disconnectable connection using a copper conductor with a minimum cross section of 16 mm²/AWG 6. Furthermore, all equipotential bonding conductors must be connected to the potential equalization busbar and clearly arranged so they can be disconnected individually and accessed at any time. Depending on their function, they must be provided with captive marking.

WAGO power distribution disconnect terminal blocks meet these requirements.

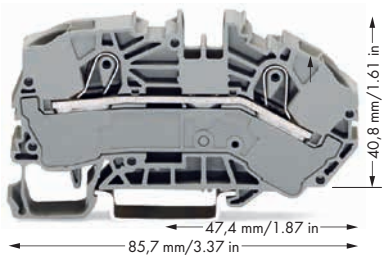


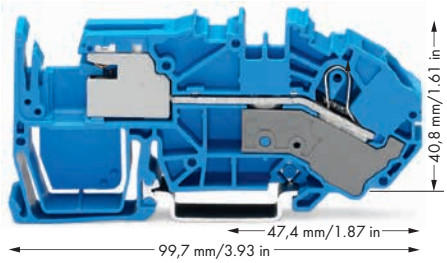
Tool-operated N-disconnect slide link

TOPJOB® S
Supply Terminal Blocks for Distribution Boxes, N-Conductor Disconnect and Power Distribution Disconnect Terminal Blocks 16 (25 “f-st”) mm², 2016 Series

0.5 - 16 (25“f-st“)mm²❶ AWG 20 - 4
800 V/8 kV/3 ❷
I_N 76 A
Terminal block width 12 mm / 0.472 in
18 - 20 mm / 0.75 in ❹

0.5 - 16 (25“f-st“)mm²❶ AWG 20 - 4
250 V/4 kV/3 ❸
I_N 76 A
Terminal block width 12 mm / 0.472 in
18 - 20 mm / 0.75 in ❹





❶ Conductor sizes: 0.5 mm² – 16 mm² “s + f-st”, 25 mm² “f-st”;
Push-in conductor sizes: 2.5 mm² – 16 mm² “s” and 0.25 mm² – 16 mm² “insulated ferrule, 18 mm”

❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ 250 V = rated voltage
4 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❹ Strip length, see packaging or instructions.

	Item No.	Pack. Unit
2-conductor supply terminal blocks for distribution boxes		
gray	**2016-7601**	20
blue	**2016-7604**	20
2-conductor ground conductor terminal block, 15mm-high DIN 35 rails shall be used for a current load higher than 76A!		
green-yellow	**2016-7607**	20

	Item No.	Pack. Unit
1-conductor N-disconnect terminal block		
blue	**2016-7714**	20
1-conductor power distribution disconnect terminal block		
gray	**2016-7711**	20

Accessories

Banana plug,

for socket 4 mm Ø, color mixed — **215-111** — 50

WMB Multi marking system,

10 strips with 10 markers per card, stretchable 5 - 5.2 mm
plain — **793-5501** — 5

Marking strip, plain,

11 mm wide, 50 m roll
white — **2009-110** — 1

Item-Specific Accessories

End and intermediate plate, 1 mm thick

orange — **2016-7692** — 100 (4x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick

orange — **2016-7792** — 100 (4x25)

Lock-out, snap-on type,

prevents reclosing of slide link
orange — **2006-7300** — 100 (4x25)

2016 Series Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

Push-in type jumper bar, insulated,

I_N 76 A, light gray

2-way	**2016-402**	50 (2x25)
3-way	**2016-403**	50 (2x25)
4-way	**2016-404**	50 (2x25)
5-way	**2016-405**	50 (2x25)

Push-in type jumper bar, insulated,

I_N 76 A, light gray

from 1 to 3	**2016-433**	50 (2x25)
from 1 to 4	**2016-434**	50 (2x25)
from 1 to 5	**2016-435**	50 (2x25)

Protective warning marker,

with high-voltage symbol, black, for 5 terminal blocks
yellow — **2016-115** — 50 (2x25)

Finger guard,

touchproof cover protects unused conductor entries
yellow — **2016-100** — 100 (4x25)

Busbar, tin-plated,

Cu 10 x 3 mm, 1000 mm long
I_N 140 A — **210-133** — 1

Cover for N-busbar,

transparent, 1000 mm long
777-303 — 1

Testing tap,

for max. 2.5 mm²
gray — **2009-182** — 100 (4x25)

Test plug,

with 500 mm cable, 2 mm Ø
red — **210-136** — 50

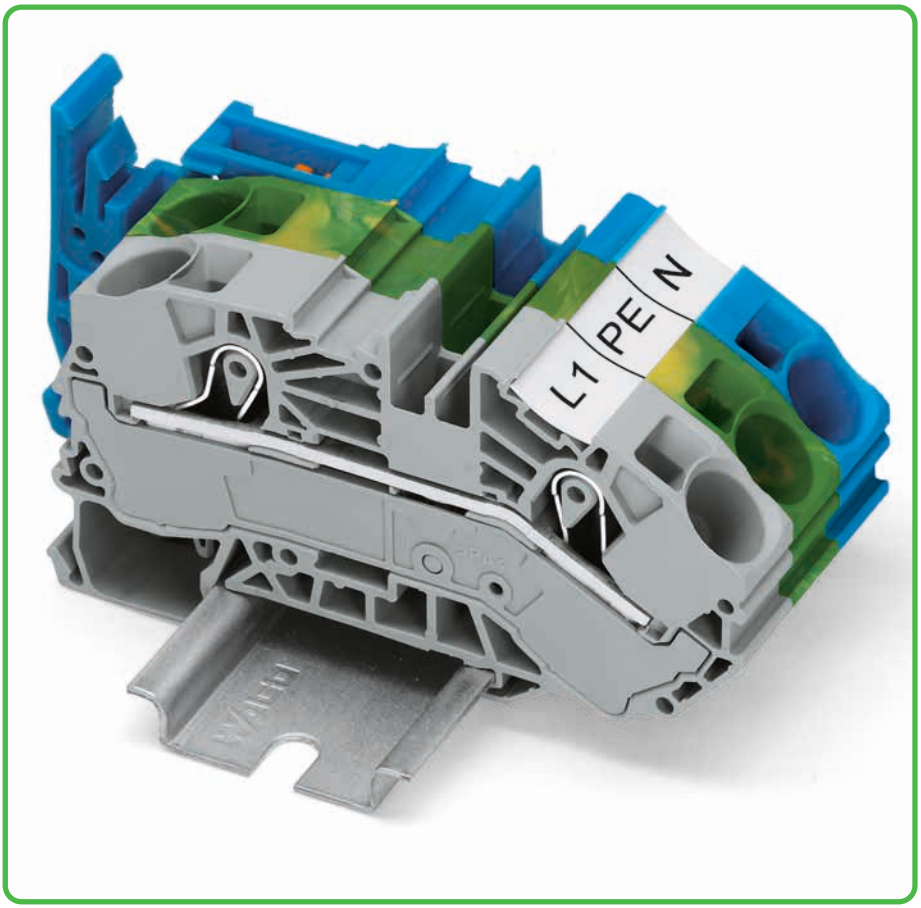
Test plug,

with 500 mm cable, 2.3 mm Ø
yellow — **210-137** — 50

Test plug adapter,

for 4 mm Ø test plug
gray — **2009-174** — 100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

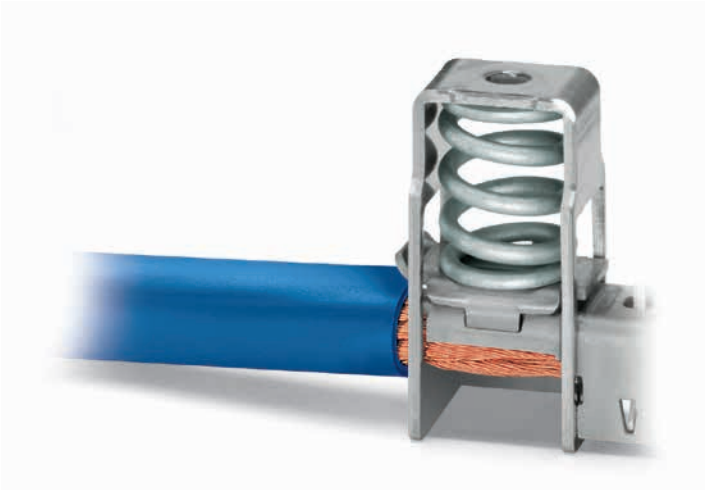


With an angled conductor entry, the 2016 Series supply terminal blocks simplify the wiring of solid conductors in distribution boxes. Solid conductors of the largest cross section can be connected easily, enabling the cover of the distribution box to fit without interfering with the conductors.

POWER CAGE CLAMP®

The universal connection for conductors larger than 2 AWG (35 mm²)

Handling:
- Open clamp by turning an Allen wrench counter-clockwise.
- Press integrated latch to open clamping unit for hands-free wiring.
- Insert conductor.
- A small counter-clockwise rotation closes the clamp, securing conductor.

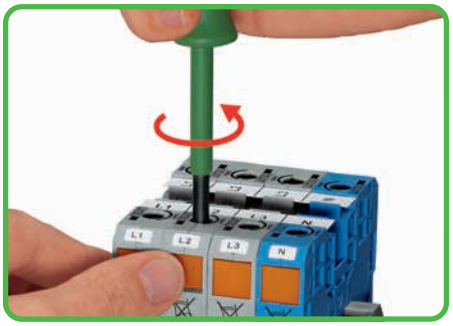




			Page
	**Through Terminal Blocks and Ground Conductor Terminal Blocks** 6 mm² to 35 mm² (10–2 AWG)	285 Series	168
	**Power Tap for 35 mm² (2 AWG) Terminal Blocks** 0.2 mm² to 6 mm² (24–10 AWG)	285 Series	168
	**Through Terminal Blocks and Ground Conductor Terminal Blocks** 10 mm² to 50 mm² (70 mm²) / 8–1/0 AWG	285 Series	169
	**Power Tap for 50 mm² (1 AWG) Terminal Blocks** 0.2 mm² to 6 mm² (24–10 AWG)	285 Series	169
	**Through Terminal Blocks and Ground Conductor Terminal Blocks** 25 mm² to 95 mm² (4–4/0 AWG)	285 Series	172
	**Power Tap for 95 mm² (4/0 AWG) Terminal Blocks** 0.2 mm² to 10 mm² (24–8 AWG)	285 Series	172
	**Through Terminal Blocks and Ground Conductor Terminal Blocks** 50 mm² to 185 mm² (1/0 AWG – 350 kcmil)	285 Series	173
	**Male and Female Connectors** 6 mm² to 35 mm² (8–2 AWG)	834 Series	175

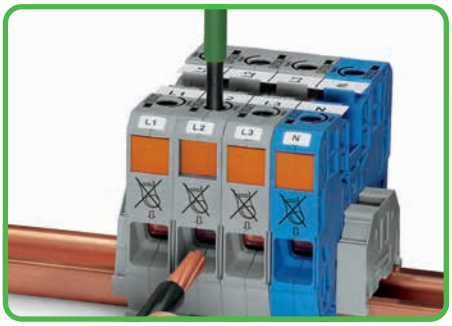
High-Current, Rail-Mounted Terminal Blocks 35 mm²
285 Series

Conductor termination – Step 1



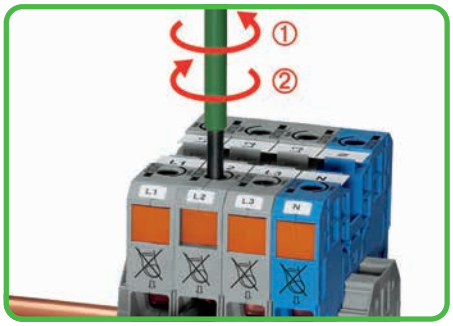
Insert operating tool and turn counterclockwise. Then push in orange locking tab for handsfree wiring.

Conductor termination – Step 2



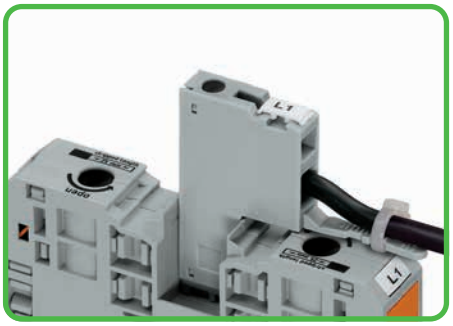
Insert stripped conductor into the clamping unit until it hits backstop; hold conductor in position.

Conductor termination – Step 3

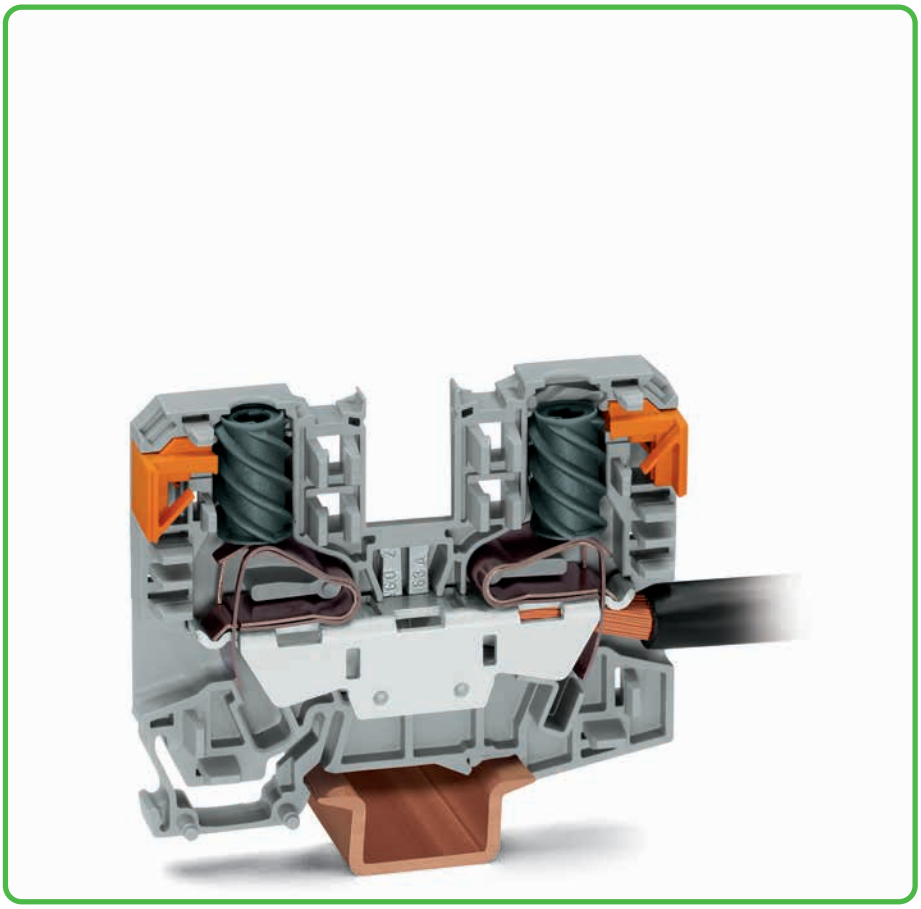


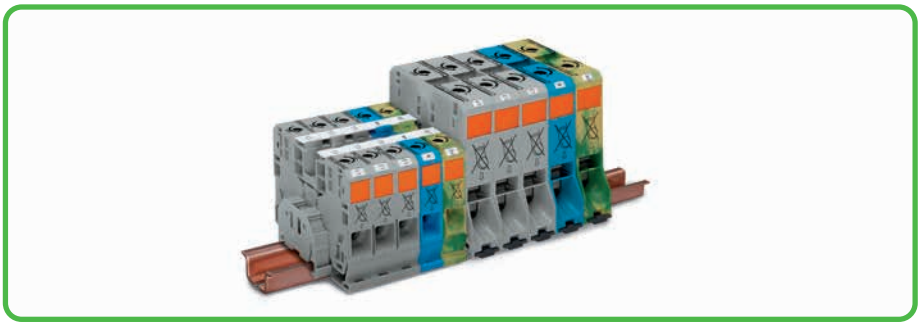
Unlock the locking tab with a short conterclockwise turn of the operating tool ①, when unlocked allow operating tool to rotate clockwise ② to securely terminate the conductor.

Voltage tap



The voltage tap is inserted into the jumper contact slot. It can be fitted with a strain relief plate.





Rail-mounted, high-current terminal blocks 35 mm²/AWG 2 and 50 mm²/AWG 1



POWER CAGE CLAMP clamps the following copper conductors:* solid



stranded



fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

– Description and Handling –

Commoning



Commoning adjacent terminal blocks using centrally positioned adjacent jumpers.

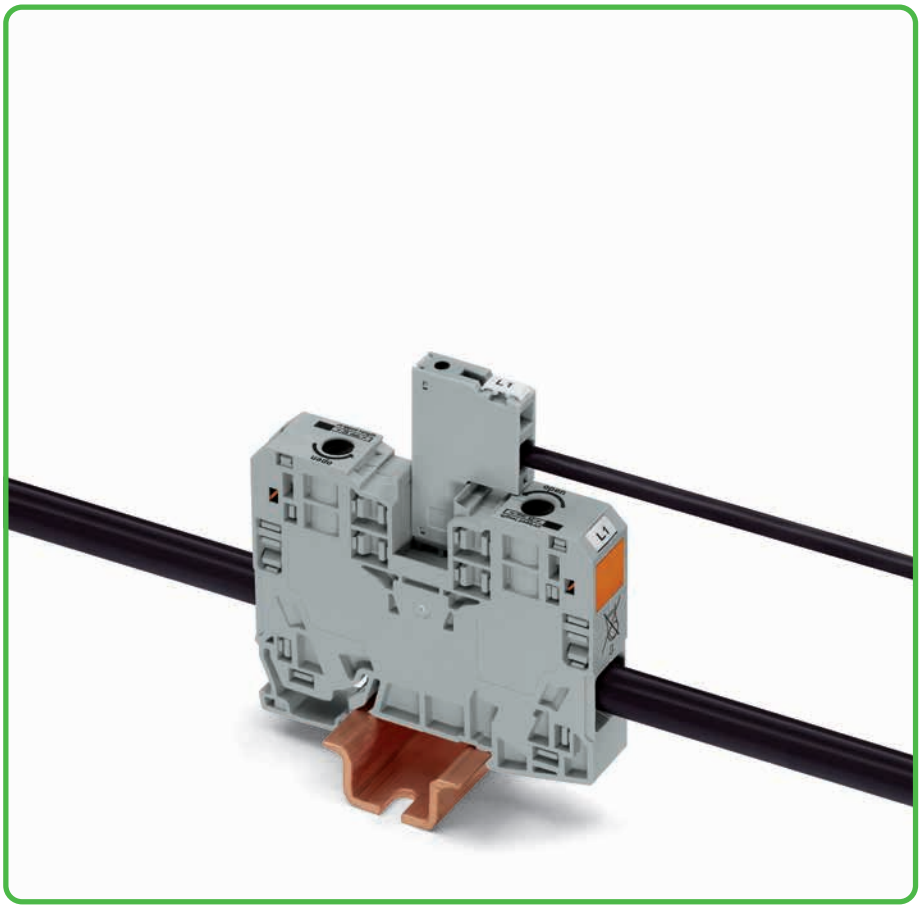


Slide the marking strip laterally to remove the jumper.

Commoning with step-down jumpers



Commoning from 35 mm²/AWG 2
POWER CAGE CLAMP terminal blocks to 10/16 mm² (AWG 8/10) TOPJOB®S terminal blocks (2010 and 2016 Series)



Step-down jumpers may common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point.

Step-down jumpers are simply pushed down for full insertion, similar to adjacent jumpers. Commoning may be made in either direction using the special thin end plate to cover the open side. Further terminal blocks of the smaller cross section may be commoned using standard adjacent jumpers.

In this case, pay attention that:
The total current flowing does not exceed the rating of the step-down jumper.



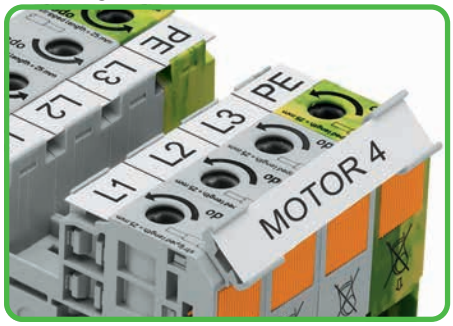
Side-entry wiring means that even larger conductors, which offer limited flexibility, can be easily connected.

Marking



In addition to the WMB marking system, custom marking strips can also be used.

Marking



Adapter for marking strips or 2 x WMB



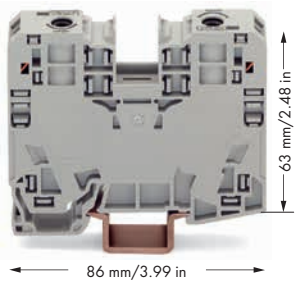
fine-stranded,
with ferrule
(gastight crimped)

High-Current, Through and Ground Conductor Terminal Blocks 35 mm²
285 Series

POWER CAGE CLAMP®

6 - 35 mm²	AWG 10 - 2
1000 V/8 kV/3 ❶	600 V, 115 A
I_N 125 A	600 V, 115 A
Terminal block width 16 mm / 0.63 in	
25 mm / 0.98 in ❸	

0.2 - 6 mm²	AWG 24 - 10
800 V/8 kV/3 ❷	600 V, 30 A
I_N 32 A	600 V, 32 A
Module width 8 mm / 0.315 in	
12 - 13 mm / 0.49 in ❸	





❶ 1000 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❷ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Step-down jumper, page 167

	Item No.	Pack. Unit
2-conductor through terminal block, to be used exclusively on DIN 35 x 15 rail		
gray	**285-135**	15
blue	**285-134**	15
2-conductor ground terminal block, to be used exclusively on DIN 35 x 15 rail; 2.3 mm thick		
green-yellow	**285-137**	15

Item-Specific Accessories

Adjacent jumper, insulated,

I_N 85 A
gray **285-435** 50 (2x25)

Step-down jumper, insulated, ❹

I_N 90 A
gray **285-430** 50 (2x25)

Protective warning marker,

with high-voltage symbol, black
yellow **285-420** 100 (4x25)

Finger guard,

touchproof cover protects unused conductor entries
yellow **285-421** 100 (4x25)

Test plug adapter, 11.6 mm wide,

for 1.5 - 16 mm² terminal blocks, for 4 mm Ø test plug
gray **283-404** 25

Operating tool with partially insulated shaft,

type 3, (5.5 x 0.8) mm blade
210-721 1

Three-phase set,

with 35mm² high-current terminal blocks
285-139 1

Voltage tap, I_N 24 A, with 500 mm cable, for terminal blocks 16 mm² (283/783 Series) and 35 mm² (285/785 Series)

gray **283-407** 25

Marking strip, plain,

11 mm wide,
50 m roll
white **2009-110** 1

Copper carrier rail, acc. to EN 60715,

35 x 15 mm, 2.3 mm,
2 m/6'6" long
unslotted **210-198** 10

	Item No.	Pack. Unit
Voltage tap, for 35 mm² high-current terminal blocks		
gray	**285-427**	5

Item-Specific Accessories

Strain relief plate, gray

1-pole **769-410** 100 (4x25)

Test plug,

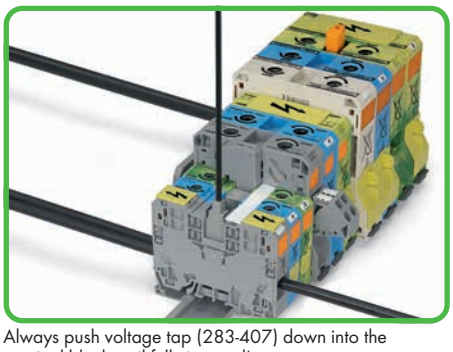
with 500 mm cable,
2 mm Ø
red **210-136** 50

WMB Multi marking system,

10 strips with 10 markers per card,
for terminal widths 5 - 17.5 mm
plain **793-501** 5

WMB Multi marking system,

10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

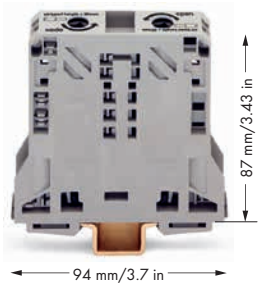

Always push voltage tap (283-407) down into the terminal block until fully inserted!

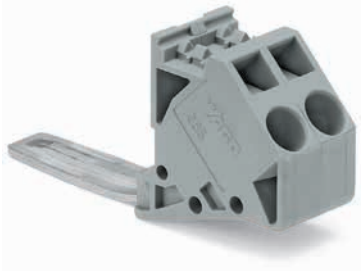
Certification organizations can be found in the overview on pages 622 and 623.

High-Current, Through and Ground Conductor Terminal Blocks 50 (70 "f-st") mm²
285 Series

10 - 50 (70 "f-st") mm²	AWG 8 - 1/0
1000 V/8 kV/3 ❶	600 V, 150 A
I_N 150 A	600 V, 150 A
Terminal block width 20 mm / 0.787 in	
30 mm / 1.18 in ❷	

0.2 - 6 mm²	AWG 24 - 10
1000 V/8 kV/3 ❶	600 V, 30 A
I_N 41 A	600 V, 41 A
Module width 16 mm / 0.63 in	
12 - 13 mm / 0.49 in ❷	





❶ 1000 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❷ Strip length, see packaging or instructions.

❸ Jumper can only be removed or inserted when the clamp is in closed position.

	Item No.	Pack. Unit
2-conductor through terminal block, to be used exclusively on DIN 35 x 15 rail		
gray	**285-150**	5
blue	**285-154**	5
2-conductor ground terminal block, to be used exclusively on DIN 35 x 15 rail; 2.3 mm thick, copper		
green-yellow	**285-157**	5

	Item No.	Pack. Unit
Voltage tap, for 50 mm² high-current terminal blocks		
gray	**285-447**	5

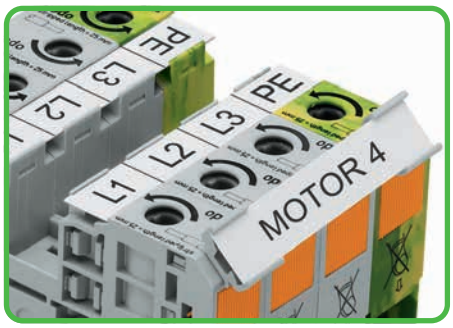
Item-Specific Accessories

Adjacent jumper, insulated, ❸		
 I_N 150 A for 1 jumper, I_N 130 A for 2 - 4 jumpers		
gray	**285-450**	100 (4x25)
Protective warning marker,		
 with high-voltage symbol, black		
yellow	**285-440**	50 (2x25)
Finger guard,		
 touchproof cover protects unused conductor entries and jumper slots		
yellow	**285-441**	100 (4x25)
Allen wrench with partially insulated shaft		
	**285-172**	1
Three-phase set,		
 with 50 mm² high-current terminal blocks		
	285-159	1
WMB Multi marking system,		
10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm		
plain	**793-501**	5
WMB Multi marking system,		
10 strips with 10 markers per card, stretchable 5 - 5.2 mm		
plain	**793-5501**	5
Marking strip, plain,		
 11 mm wide, 50 m roll		
white	**2009-110**	1
Marker carrier, for POWER CAGE CLAMP		
 35/50/95 mm², 10.4 mm wide		
gray	**285-442**	25
Copper carrier rail, acc. to EN 60715,		
 35 x 15 mm, 2.3 mm, 2 m/6'6" long		
unslotted	**210-198**	10

Item-Specific Accessories

Protective warning marker,		
 with high-voltage symbol, black, for 5 terminal blocks		
yellow	**282-415**	50 (2x25)
WMB Multi marking system,		
10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm		
plain	**793-501**	5
WMB Multi marking system,		
10 strips with 10 markers per card, stretchable 5 - 5.2 mm		
plain	**793-5501**	5

Description and handling see pages 170 and 171



Adapter for marking strips or 2 x WMB

Certification organizations can be found in the overview on pages 622 and 623.

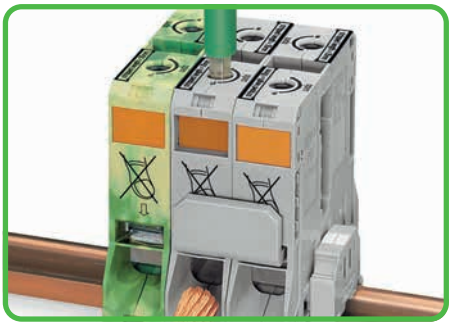
High-Current, Rail-Mounted Terminal Blocks 50 mm² to 185 mm²
285 Series

Conductor termination – Step 1



Rotate Allen wrench counterclockwise to the stop ①. Then, push in orange locking tab for hands-free wiring.

Conductor termination – Step 2



Insert stripped conductor until it hits backstop; hold this in position.

Conductor termination – Step 3



Unlock the locking tab with a short counter-clockwise turn ② of the Allen wrench to securely terminate the conductor.

Safety notes



For an optimum clamping force:
1. Bend conductor
2. Cut conductor to length (Conductor end must be straight!)
3. Strip conductor



Always observe the printed strip length!

Grounding foot

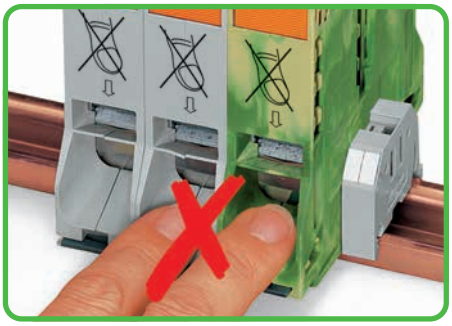


Ground conductor terminal blocks (limited to max. 120 mm²/250 MCM acc. to EN 60947-7-2) must be snapped onto a 2.3 mm thick copper carrier rail.

Safety notes

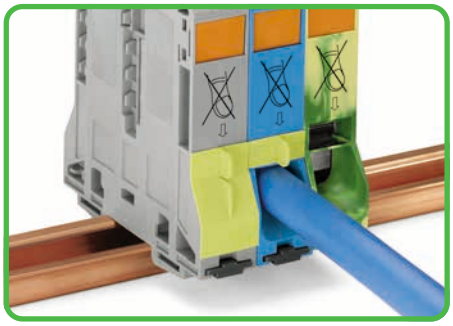


Protective warning marker may indicate:
Caution! Power is still on even after switching off the main switch!

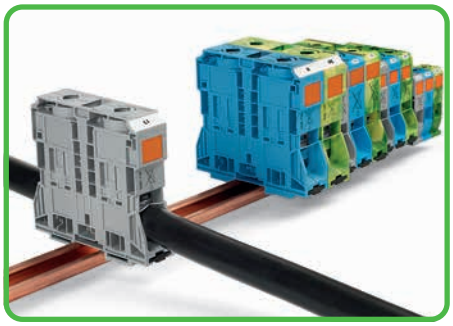


Caution! Health hazard!
Keep your fingers out of the conductor entry hole!

Touchproof protection



Yellow, detachable covers provide touchproof safety by shielding jumper contact slots and/or unused conductor entries.



Rail-mounted, high-current terminal blocks 35 mm²/AWG 2, 50 mm²/AWG 1, 95 mm²/AWG 4/0 and 185 mm²/350 kcmil



POWER CAGE CLAMP clamps the following copper conductors:*
solid



stranded

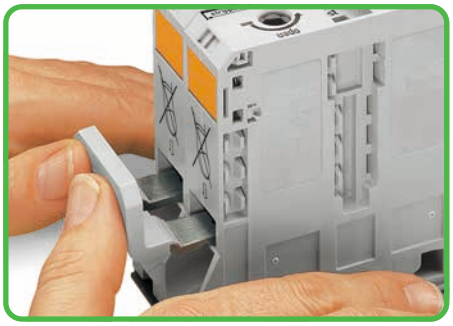


fine-stranded, also with tinned single strands

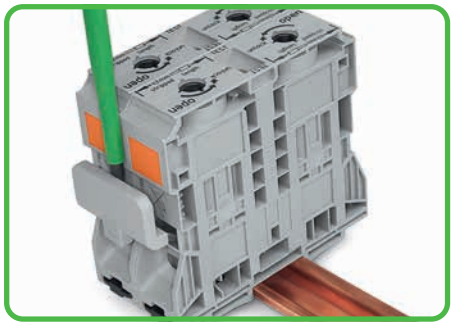
* For aluminum conductors, see notes in Section 14.

– Description and Handling –

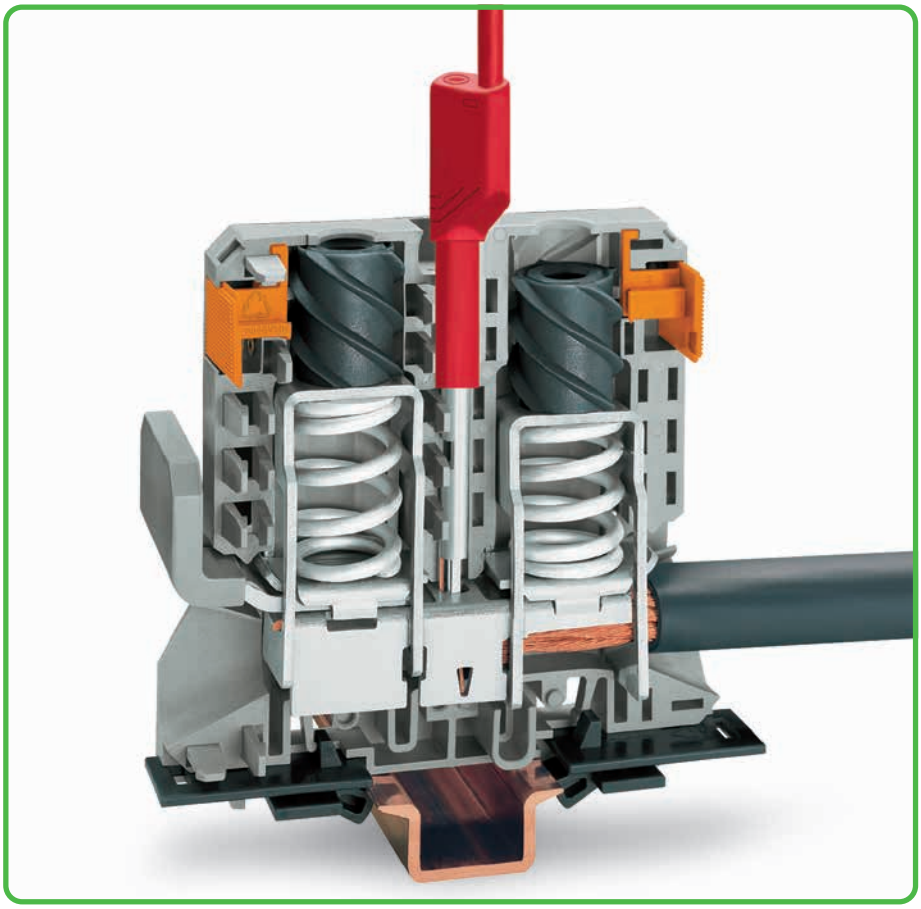
Commoning



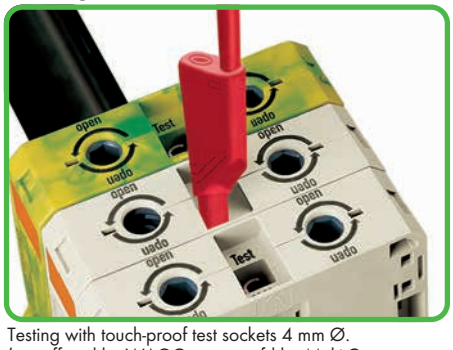
Commoning with adjacent jumper: Inserting the jumper above the conductor entry hole – prior to conductor termination. The nominal cross section remains unchanged.



Removing jumper via operating tool.

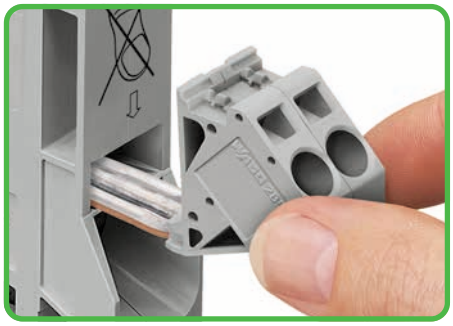


Testing



Testing with touch-proof test sockets 4 mm Ø.
(not offered by WAGO – e.g., mfd by Multi-Contact Deutschland GmbH)

Voltage tap

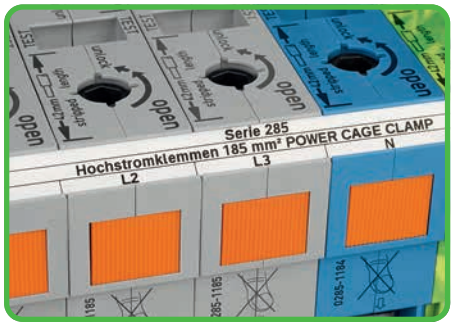


Reliably and easily tap directly onto the power supply. Insert the unwired tap before opening the pressure spring.

Marking



WMB markers or self-adhesive, printable marking strips can be accommodated on 35, 50 and 95 mm² high-current terminal blocks.



Besides WMB markers, marking strips can also be directly accommodated on the 185 mm² (350 MCM) terminal block.



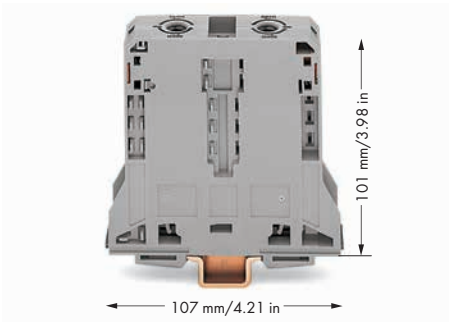
fine-stranded,
with ferrule
(gastight crimped)

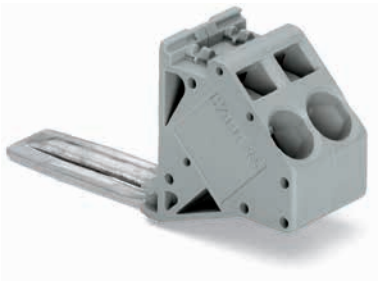
High-Current Through/Ground Conductor and Ex Terminal Blocks 95 mm²
285 Series

POWER CAGE CLAMP®

25 - 95 mm²	AWG 4 - 4/0
1000 V/8 kV/3 ❷	600 V, 200 A
I_N 232 A	600 V, 210 A
Terminal block width 25 mm / 0.984 in	
35 mm / 1.38 in ❸	

0.2 - 10 mm² ❶	AWG 24 - 8
1000 V/8 kV/3 ❷	
I_N 57 A	
Module width 20 mm / 0.787 in	
12 - 13 mm / 0.49 in ❸	





❶ Max. connector size: 16 mm²

❷ 1000 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❸ Strip length, see packaging or instructions.

❹ Suitable for Ex e II applications
25 - 95 mm²/AWG 4 - 4/0
880 V, 211 A
1 jumper 211 A
2 - 4 jumpers 175 A
35 - 70 mm²/AWG 2 - 2/0
for ground conductor terminal blocks
(see Section 14)

	Item No.	Pack. Unit
2-conductor through terminal block, to be used exclusively on DIN 35 x 15 rail		
gray	**285-195**	5
blue	**285-194**	5
light gray Ex	**285-995** ❹	5
2-conductor ground terminal block, to be used exclusively on DIN 35 x 15 rail; 2.3 mm thick, copper		
green-yellow	**285-197**	5
green-yellow Ex	**285-197/999-950** ❹	5

	Item No.	Pack. Unit
Voltage tap, for 95 mm² high-current terminal blocks		
gray	**285-407**	5

Item-Specific Accessories

Adjacent jumper, insulated,
I_N 232 A for 1 jumper,
I_N 130 A for 2 - 4 jumpers
gray **285-495** 25

Protective warning marker,
with high-voltage symbol, black
yellow **285-170** 50 (2x25)

Finger guard,
touchproof cover protects unused conductor entries and jumper slots
yellow **285-169** 25

Allen wrench with partially insulated shaft
285-172 1

Three-phase set,
with 95mm² high-current terminal blocks
285-199 1

Steel carrier rail, acc. to EN 60715,
35 x 15 mm, 2.3 mm,
2 m/6'6" long
unslotted **210-118** 10

Copper carrier rail, acc. to EN 60715,
35 x 15 mm, 2.3 mm,
2 m/6'6" long
unslotted **210-198** 10

WMB Multi marking system,
10 strips with 10 markers per card,
for terminal widths 5 - 17.5 mm
plain **793-501** 5

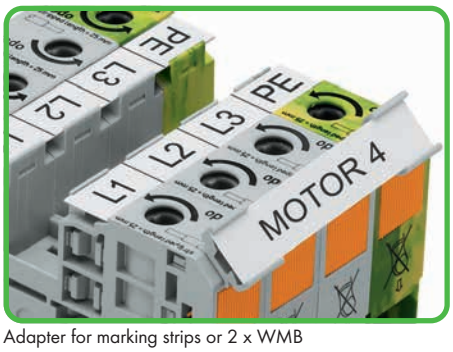
Marker carrier, for POWER CAGE CLAMP
35/50/95 mm²,
10.4 mm wide
gray **285-442** 25

Item-Specific Accessories

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks
yellow **284-415** 50 (2x25)

WMB Multi marking system,
10 strips with 10 markers per card,
for terminal widths 5 - 17.5 mm
plain **793-501** 5

WMB Multi marking system,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

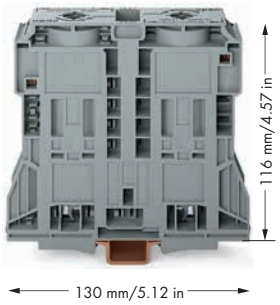


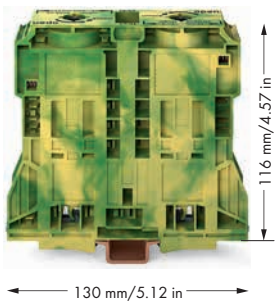
Adapter for marking strips or 2 x WMB

Certification organizations can be found in the overview on pages 622 and 623.

High-Current Through and Ground Conductor Terminal Blocks
185 mm²
285 Series

50 - 185 mm² | AWG 1/0 - 350 kcmil	50 - 120 mm² | AWG 1/0 - 250 kcmil
1000 V AC/DC/1500 VDC/12 kV/3 ❶ I_N 353 A	
Terminal block width 32 mm / 1.26 in 45 - 47 mm / 1.77 - 1.85 in ❷	Terminal block width 32 mm / 1.26 in 45 - 47 mm / 1.77 - 1.85 in ❷





❶ AC/DC up to 1000 V = rated voltage
DC up to 1500 V
12 kV = rated surge voltage
3 = pollution degree
(see Section 14)

❷ Strip length, see packaging or instructions.

	Item No.	Pack. Unit
2-conductor through terminal block, to be used exclusively on DIN 35 x 15 rail		
gray	**285-1185**	5
blue	**285-1184**	5

	Item No.	Pack. Unit
2-conductor ground terminal block, to be used exclusively on DIN 35 x 15 rail; 2.3 mm thick, copper		
green-yellow	**285-1187**	5

Item-Specific Accessories

	Item No.	Pack. Unit
Steel carrier rail, acc. to EN 60715, 35 x 15 mm, 2.3 mm, 2 m/6'6" long, unslotted	**210-118**	10
Copper carrier rail, acc. to EN 60715, 35 x 15 mm, 2.3 mm, 2 m/6'6" long, unslotted	**210-198**	10

Item-Specific Accessories

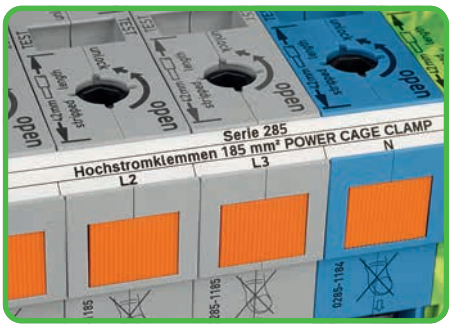
	Item No.	Pack. Unit
Copper carrier rail, acc. to EN 60715, 35 x 15 mm, 2.3 mm, 2 m/6'6" long, unslotted	**210-198**	10

Accessories

Appropriate marking systems: WMB/Marking strips/WMB Inline (see Section 13)

	Item No.	Pack. Unit
Adjacent jumper, insulated, I_N 309 A for 1 jumper, gray	**285-1171**	25
Protective warning marker, with high-voltage symbol, black, yellow	**285-1177**	50 (2x25)
Finger guard, touchproof cover protects unused conductor entries and jumper slots, yellow	**285-1178**	25
Allen wrench with partially insulated shaft	**285-172**	1
Three-phase set, with 35mm² high-current terminal blocks	**285-1169**	1
Screwless end stop, for DIN 35 rail, 14 mm wide, gray	**249-197**	10

	Item No.	Pack. Unit
WMB Inline, plain, stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll, white	**2009-115**	1
Marking strip, plain, 11 mm wide, 50 m roll, white	**2009-110**	1
WMB Multi marking system, 10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm, plain	**793-501**	5
WMB Multi marking system, 10 strips with 10 markers per card, stretchable 5 - 5.2 mm, plain	**793-5501**	5

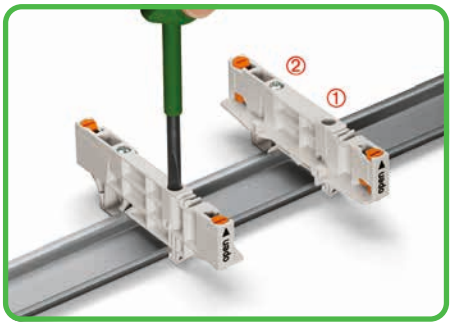


Besides WMB markers, marking strips can also be directly accommodated on the 185 mm² (350 MCM) terminal block.

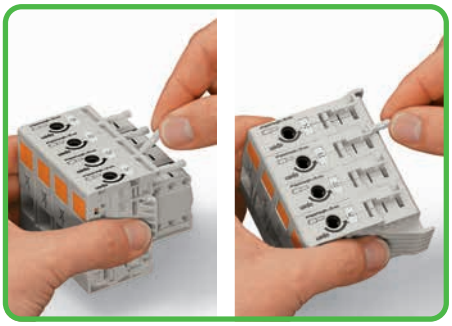
Certification organizations can be found in the overview on pages 622 and 623.

High-Current Connectors 35 mm², 834 Series
– Description and Handling –

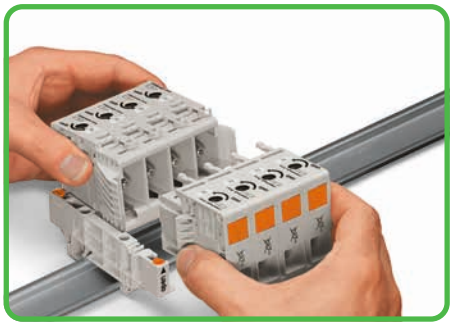
POWER CAGE CLAMP®



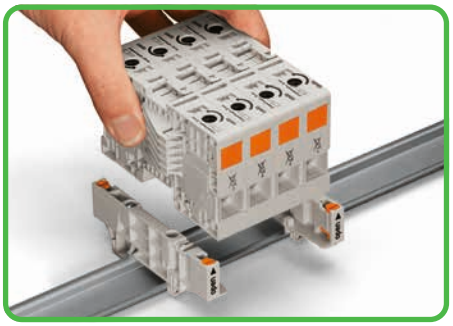
Position the mounting adapter and secure it using locking screw ①.
Screw down locking device ② to the stop.



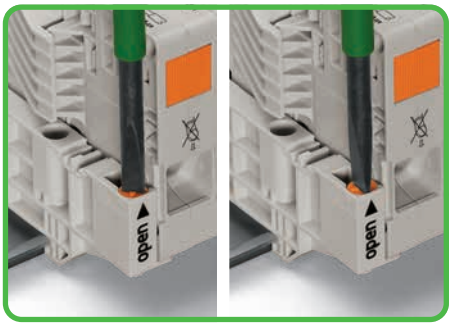
Coding male and female connectors:
Coding pins removed from the female connector can be used to code the male connector.



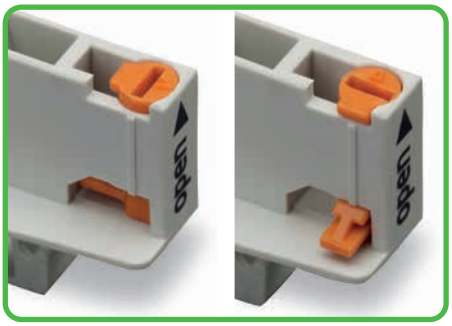
Connecting:
Secure the male connector to the mounting adapters.
Tilt the male connector to plug the female connector.



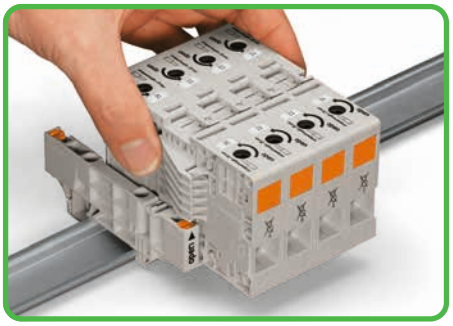
Mounting a male and female connector assembly:
Fit the assembly between the mounting adapters.



Fixing the assembly:
Turn the latch on the mounting adapters from the **open** to the **closed** position using an operating tool.



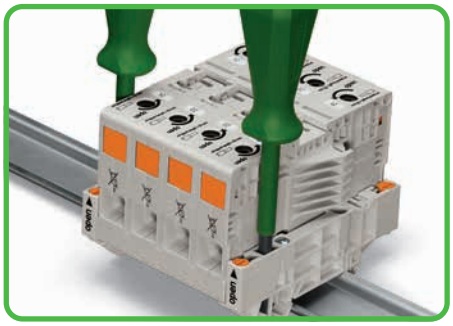
Latch in **open** position (left)
Latch in **closed** position (right)

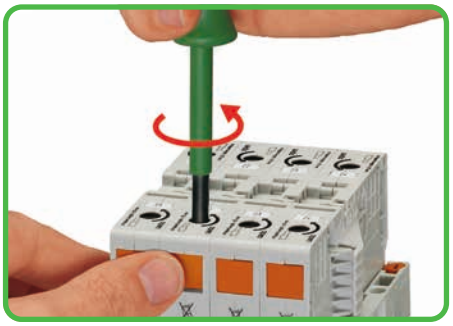


Removing the assembly:
Turn the mounting adapter latches to the **open** position.
Lift the assembly between the mounting adapters and remove it.



Removing the assembly:
Insert two operating tools into the separator slots between male and female connectors and unlatch the assembly.

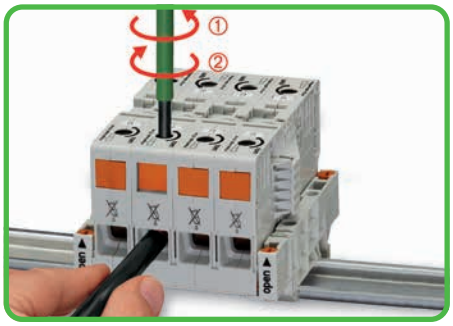




Insert operating tool and turn counterclockwise. Then push in orange locking tab for handsfree wiring.



Conductor termination:
Insert stripped conductor until it hits backstop; hold this in position.



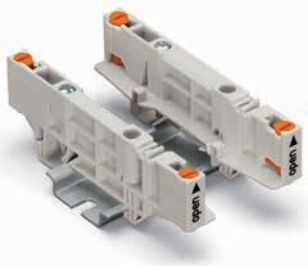
Unlock the locking tab with a short conterclockwise turn of the operating tool ①, when unlocked allow operating tool to rotate clockwise ② to securely terminate the conductor.

Male and Female Connectors 35 mm², 100% Protected Against Mismating 834 Series

Pin spacing 17.5 mm / 0.689 in, light gray	Pin spacing 17.5 mm / 0.689 in, light gray	Mounting adapter
6 - 35 mm² | AWG 8 - 2	6 - 35 mm² | AWG 8 - 2	
1000 V/8 kV/3	1000 V/8 kV/3	
I_N 125 A	I_N 125 A	
25 mm / 0.98 in	25 mm / 0.98 in	







Pole No.	Item No.	Pack. Unit
Male connector,		
100% protected against mismating,		
light gray		
2	**834-1202**	10
3	**834-1203**	5
4	**834-1204**	5
5	**834-1205**	5
6	**834-1206**	5
7	**834-1207**	4
8	**834-1208**	4

Pole No.	Item No.	Pack. Unit
Female connector,		
100% protected against mismating,		
with coding fingers, light gray		
2	**834-1102**	10
3	**834-1103**	5
4	**834-1104**	5
5	**834-1105**	5
6	**834-1106**	5
7	**834-1107**	4
8	**834-1108**	4

	Item No.	Pack. Unit
Mounting adapter,		
for DIN 35 rail		
light gray	**834-137**	10

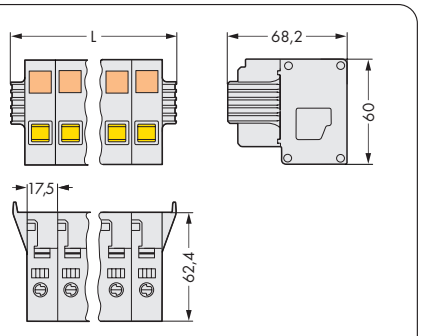
834 Series Accessories

Appropriate marking system: WMB
(see Section 13)

Operating tool with partially insulated shaft,

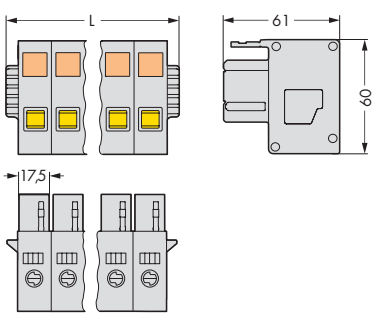


type 3, (5.5 x 0.8) mm blade
210-721 1



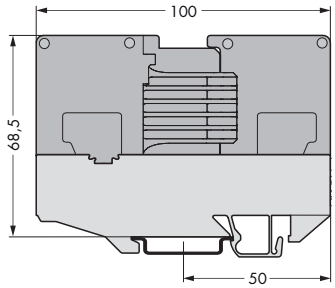
L = (pole no. x pin spacing) + 16 mm

Dimensions in mm



L = (pole no. x pin spacing) + 11 mm

Dimensions in mm



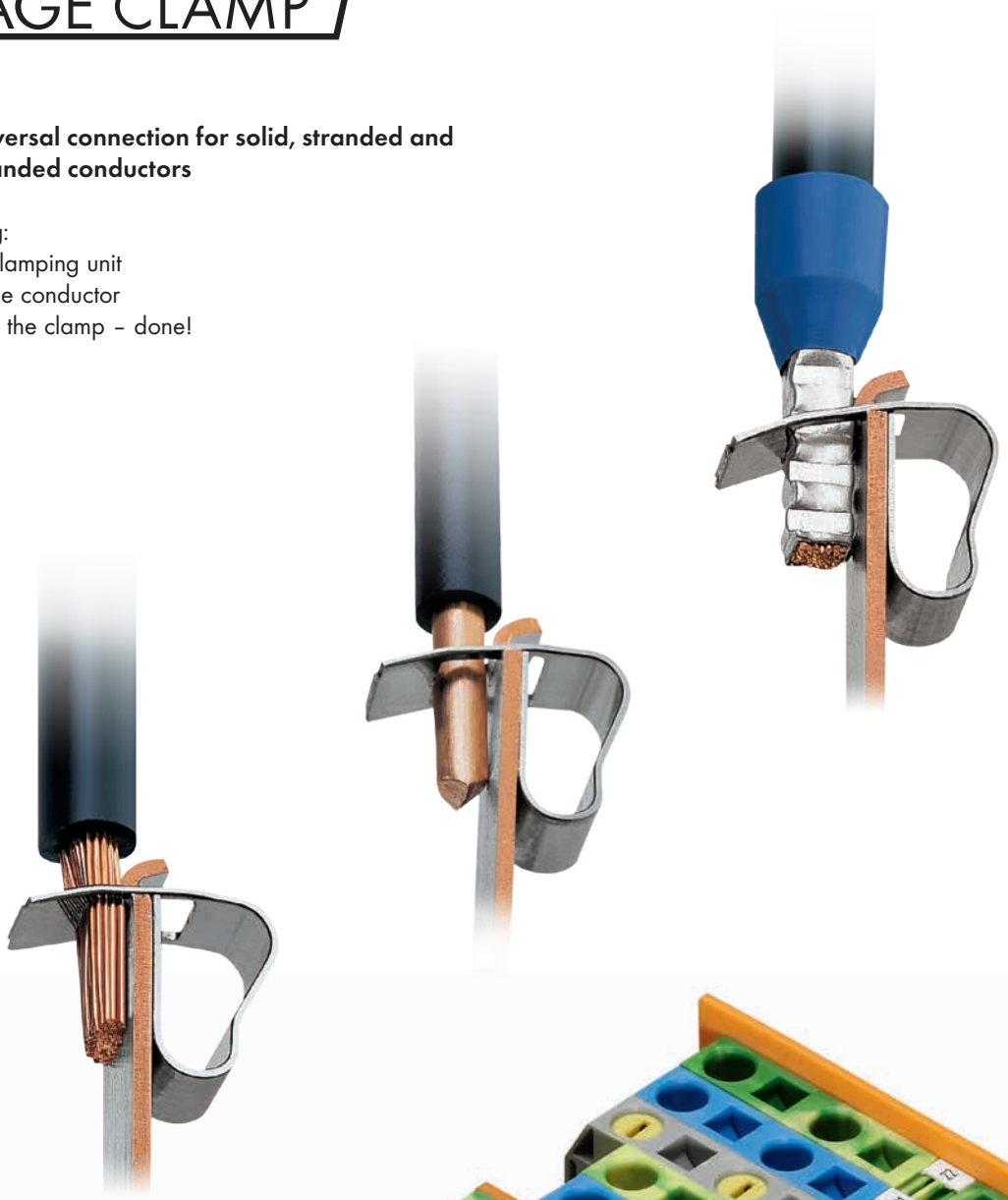
Dimensions in mm

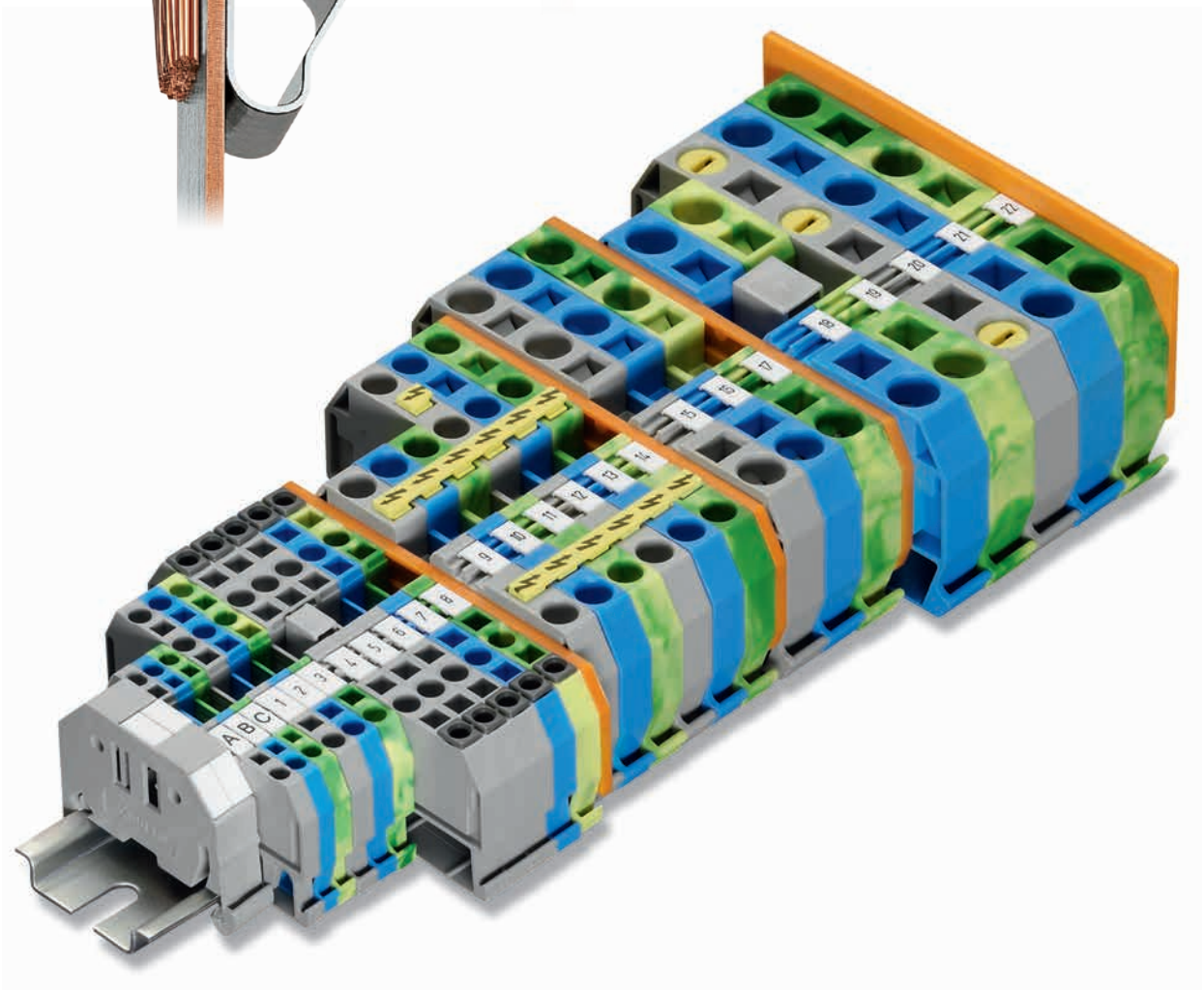
Certification organizations can be found in the overview on pages 622 and 623.

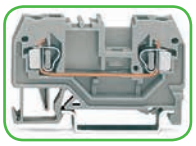
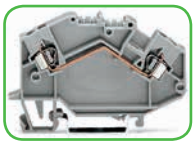
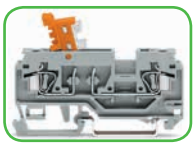
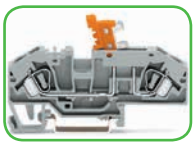
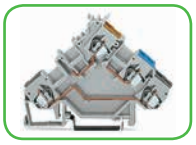
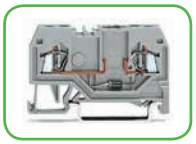
CAGE CLAMP®

The universal connection for solid, stranded and fine-stranded conductors

Handling:
- Open clamping unit
- Insert the conductor
- Release the clamp – done!

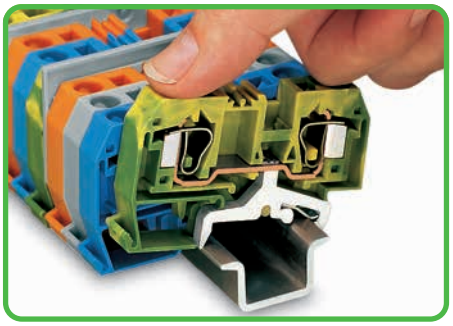




			Page
	**Through, Ground Conductor, Shield and Ex Terminal Blocks** 0.08 mm² to 35 mm² (28–2 AWG) **Distribution Terminal Blocks** 10 mm² (8 AWG) / 35 mm² (2 AWG)	279 – 285/880 and 284 Series	180
	**Multilevel Rail-Mounted Terminal Blocks** 1.5/2.5/4 mm² (16/12 AWG)	279/280/281 Series	198
	**TOPJOB®, Classic** **Through, Ground Conductor, Shield and Ex Terminal Blocks** 0.08 mm² to 35 mm² (28–2 AWG)	780 – 785 Series	213
	**Disconnect Terminal Blocks for Test and Measurement** 0.08 mm² to 4 mm² (28–12 AWG) **Disconnect/Test Terminal Blocks for Current and Voltage Transformer Circuits** 0.2 mm² to 6 mm² (24–10 AWG)	280/281/282 Series	222
	**Disconnect, Ground Conductor Disconnect Terminal Blocks and Fuse Terminal Blocks** 0.2 mm² to 6 mm² (24–10 AWG)	282 Series	238
	**Fuse Disconnect Terminal Blocks with Pivoting Fuse Holder** 0.08 mm² to 4 mm² (28–12 AWG)	281 Series	244
	**Fuse Plugs on Carrier Terminal Blocks**	281/280 Series	248
	**Sensor and Actuator Terminal Blocks** 0.08 mm² to 2.5 mm² (28–12 AWG)	280 Series	258
	**Diode and LED Terminal Blocks** 0.08 mm² to 4 mm² (28–12 AWG)	279 – 281 Series	274
	**Multilevel Diode and LED Terminal Blocks** 0.08 mm² to 4 mm² (28–12 AWG)	280/281 Series	280
	**Diode and LED Modules**	280 Series	284
	**Accessories for Rail-Mounted Terminal Blocks** – Banana Plugs – Various Jumpers – Step-Down Jumpers for Through Terminal Blocks – Test Plugs Modules		 292 294 196 288

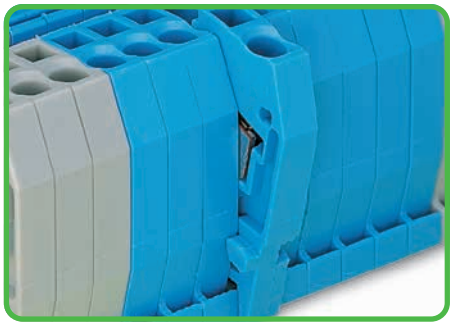
Rail-Mounted Terminal Blocks
279 to 285 Series and 880 Series

Assembly



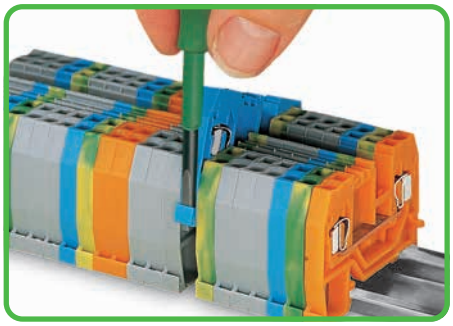
By snapping a ground conductor terminal block onto the carrier rail, a direct electrical connection is automatically made to the rail.

Assembly



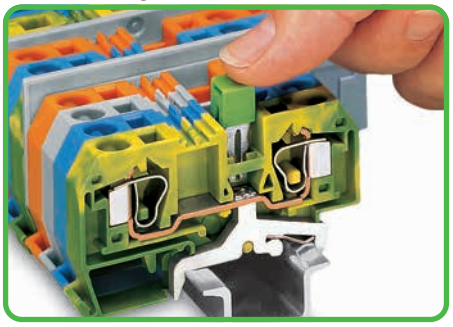
Quick assembly keys prevent reverse mounting.

Removal



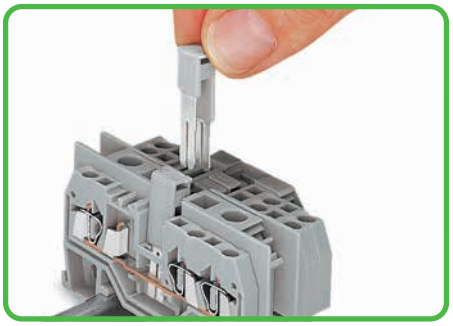
Removing a terminal block from the assembly.

Commoning



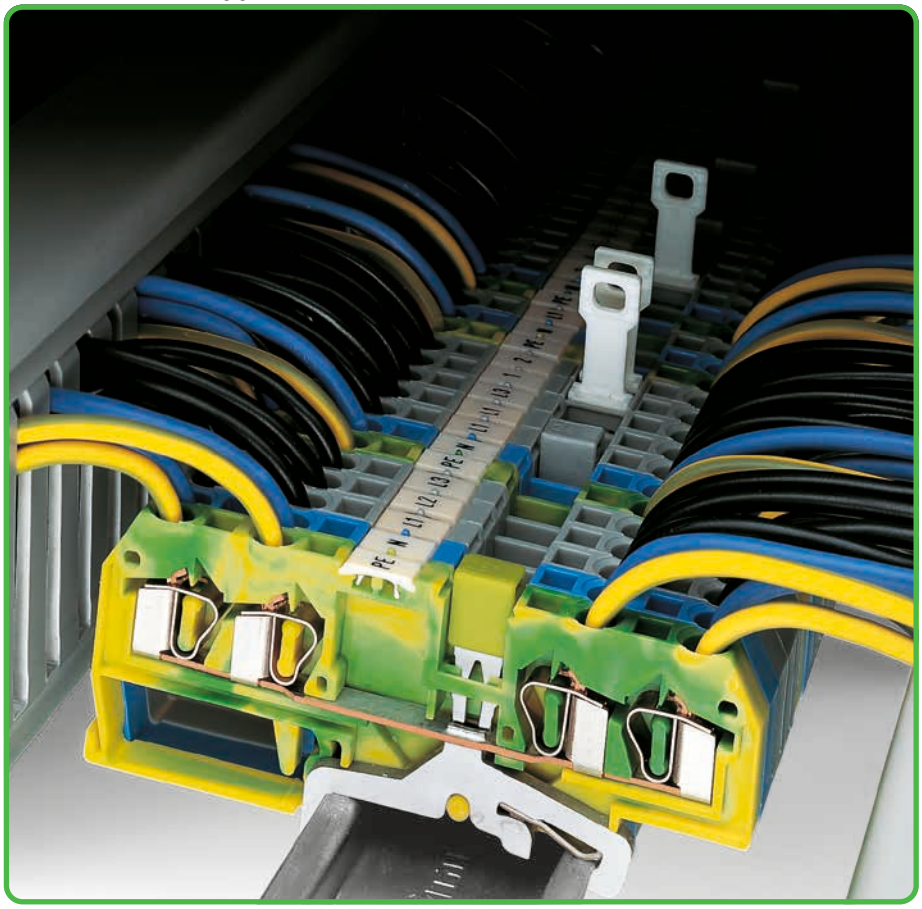
Commoning ground conductor terminal blocks with through terminal blocks is possible in one direction only (via rear side of terminal block) using adjacent jumpers. In addition to the required marking of these blocks, use yellow-green adjacent jumpers.

Commoning with step-down jumpers

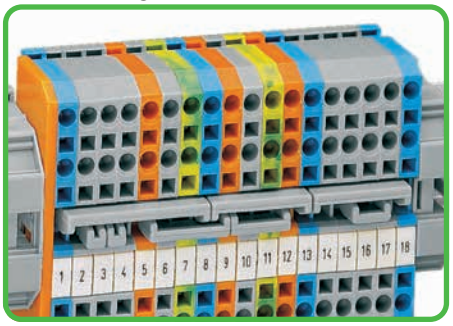


Commoning terminal blocks of different sizes – step down.
For application notes, see page 196.

According to EN 60947-7-2 (VDE 0611, part 3), steel carrier rails shall not be used for PEN applications

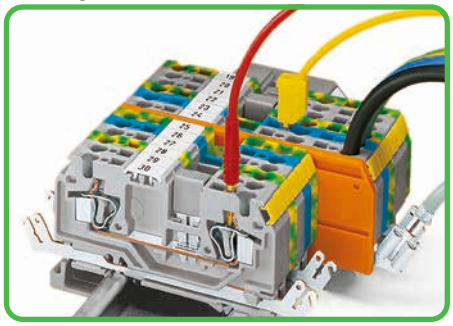


Commoning



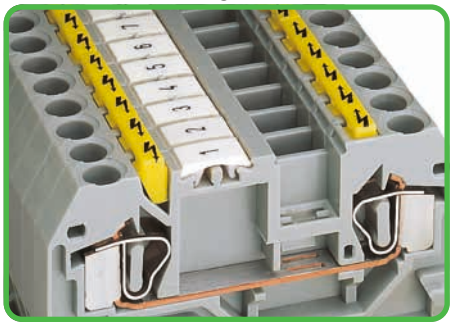
Staggered jumpers for sophisticated circuit requirements. Push jumpers down firmly until fully inserted.
For additional notes, see page 295.

Testing - 880 Series



880 Series terminal blocks have an additional test slot for 2 mm Ø or 2.3 mm Ø test plugs.

Protective warning marker



Protective warning markers inserted into the operating slots.



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded

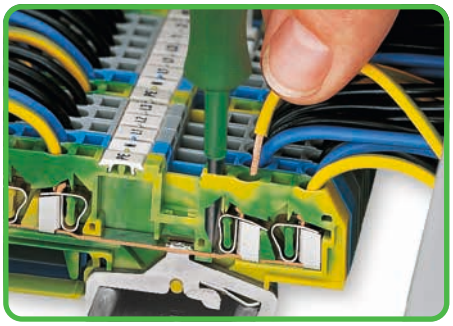


fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

– Description and Handling –

CAGE CLAMP® connection



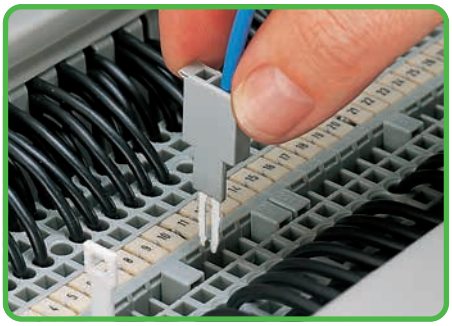
Conductor termination

CAGE CLAMP® connection

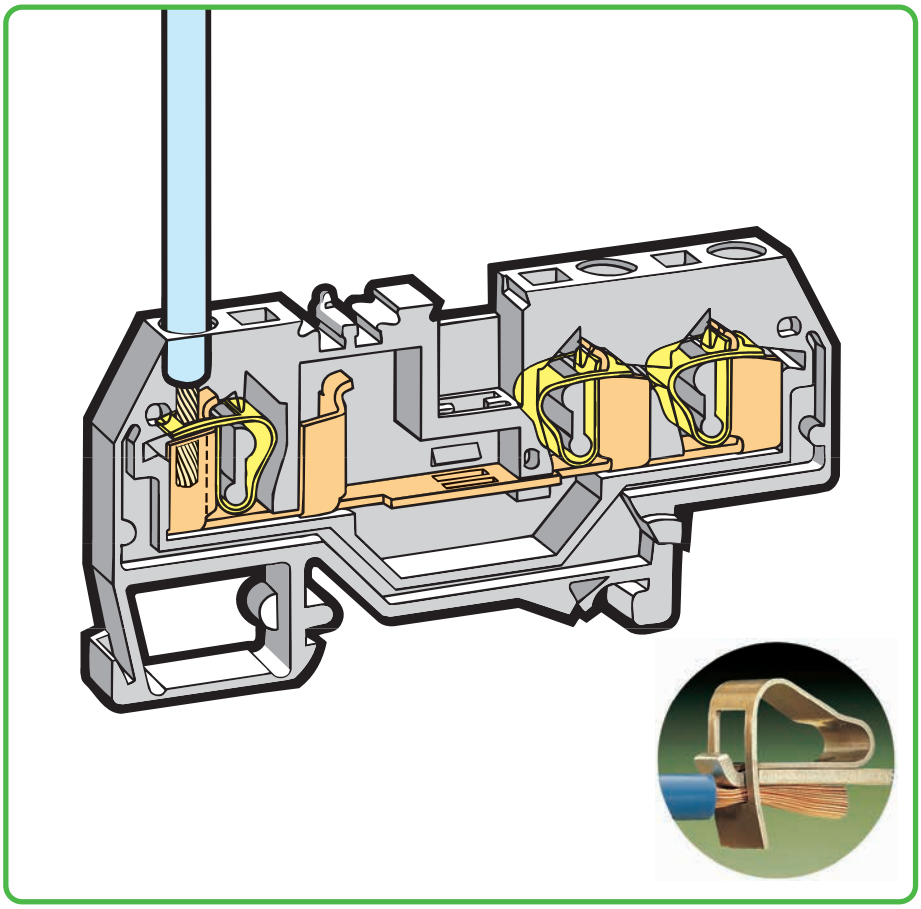


Conductor termination
❶ When using ferruled conductors, it is necessary to use a terminal block one size larger than the nominal cross section of the wire.

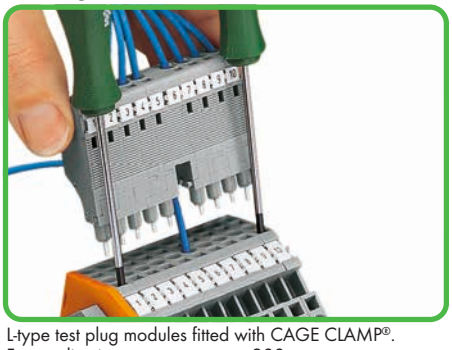
Testing



Testing with test plug.
Test plug fitted with CAGE CLAMP®.

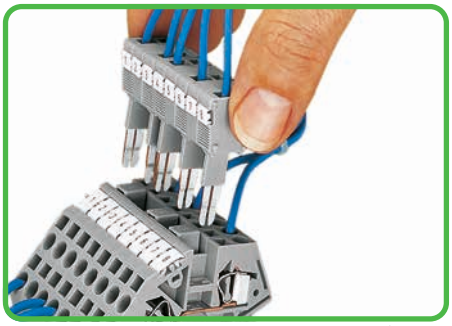


Testing



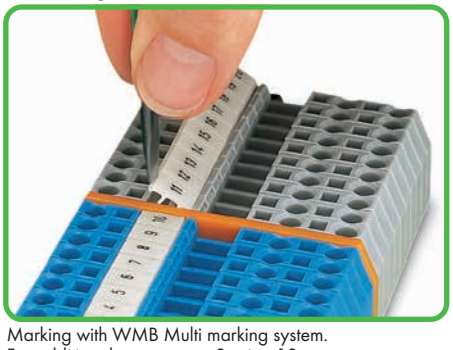
L-type test plug modules fitted with CAGE CLAMP®.
For application notes, see page 288.

Testing



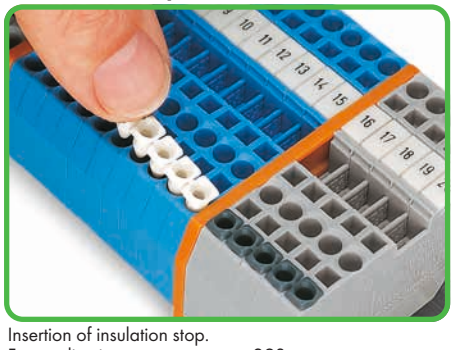
B-type test plug modules fitted with CAGE CLAMP®.
For application notes, see page 289.

Marking



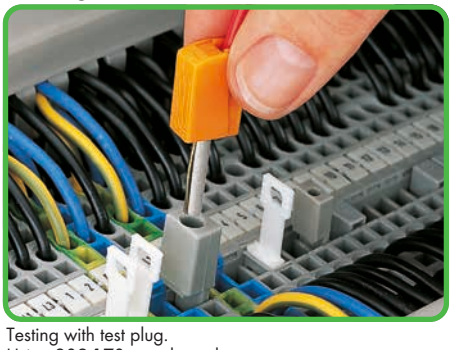
Marking with WMB Multi marking system.
For additional systems, see Section 13.

Insulation stop



Insertion of insulation stop.
For application notes, see page 293.

Testing



Testing with test plug.
Using 209-170 test plug adapter.



fine-stranded,
tip-bonded



fine-stranded,
with ferrule ❶
(gastight crimped)

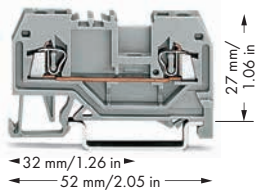


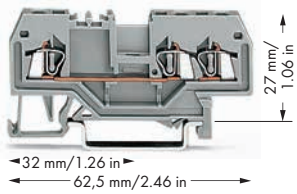
fine-stranded,
with pin terminal
(gastight crimped)

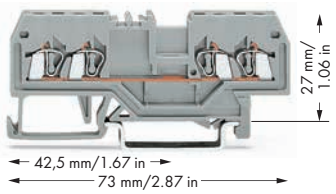
Through/Ground Conductor/Shield and Ex Terminal Blocks 1.5 mm²
279 Series

0.08 - 1.5 mm²	AWG 28 - 16
800 V/8 kV/3 ❶	600 V, 10 A
I_N 18 A	600 V, 10 A

Terminal block width 4 mm / 0.157 in
8 - 9 mm / 0.33 in ❷







	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**279-901**	100
blue	**279-904** ❸	100
orange	**279-902**	100
red	**279-903**	100
black	**279-905**	100
yellow	**279-906**	100
light gray Ex	**279-992** ❹	100
2-conductor ground terminal block		
green-yellow	**279-907**	100
green-yellow Ex	**279-907/999-950** ❹	100
Other terminal blocks with the same profile:		
Diode	**279-915/281-410**	Page 274

	Item No.	Pack. Unit
3-conductor through terminal block		
gray	**279-681**	100
blue	**279-684** ❸	100
orange	**279-682**	100
red	**279-683**	100
black	**279-685**	100
yellow	**279-686**	100
light gray Ex	**279-993** ❹	100
3-conductor ground terminal block		
green-yellow	**279-687**	100
green-yellow Ex	**279-687/999-950** ❹	100
Other terminal blocks with the same profile:		
Diode	**279-673/281-410**	Page 274
LED	**279-674/281-434**	Page 274

	Item No.	Pack. Unit
4-conductor through terminal block		
gray	**279-831**	100
blue	**279-834** ❸	100
orange	**279-832**	100
red	**279-833**	100
black	**279-835**	100
yellow	**279-836**	100
light gray Ex	**279-994** ❹	100
4-conductor ground terminal block		
green-yellow	**279-837**	100
green-yellow Ex	**279-837/999-950** ❹	100
4-conductor shield terminal block		
white	**279-838**	100
Other terminal blocks with the same profile:		
Diode	**279-815/281-410**	Page 274
LED	**279-809/281-434**	Page 274
Double-potential	**279-826**	Page 181

Item-Specific Accessories

End and intermediate plate, 2 mm thick



orange	**279-328**	100 (4x25)
gray	**279-325**	100 (4x25)
light gray	**279-330**	100 (4x25)

Separator, oversized, 2 mm thick



orange	**279-329**	100 (4x25)
gray	**279-326**	100 (4x25)
light gray	**279-331**	100 (4x25)

Ex e/Ex i separator, orange,



3 mm thick		
90 mm	**209-190**	50 (2x25)
120 mm	**209-191**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 2 mm thick



orange	**279-339**	100 (4x25)
gray	**279-308**	100 (4x25)
light gray	**279-341**	100 (4x25)

Separator, oversized, 2 mm thick



orange	**279-340**	100 (4x25)
gray	**279-309**	100 (4x25)
light gray	**279-342**	100 (4x25)

Ex e/Ex i separator, orange,



3 mm thick		
120 mm	**209-191**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 2 mm thick



orange	**279-346**	100 (4x25)
gray	**279-344**	100 (4x25)
light gray	**279-348**	100 (4x25)

Separator, oversized, 2 mm thick



orange	**279-347**	100 (4x25)
gray	**279-345**	100 (4x25)
light gray	**279-349**	100 (4x25)

Ex e/Ex i separator, orange,



3 mm thick		
120 mm	**209-191**	50 (2x25)

Cover plate,



1 mm thick		
gray	**284-336**	100
orange	**284-346**	100

279 Series Accessories

Appropriate marking systems: WMB/WMB Inline/WFB
(see Section 13)

Insulation stop, ❺



5 pcs/strip,		
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
white	**279-470**	200 (8x25)

Insulation stop, ❺



5 pcs/strip,		
0.25 mm²		
dark gray	**279-471**	200 (8x25)

Adjacent jumper, insulated,



I_N 15 A		
gray	**279-402**	200 (8x25)
yellow-green	**279-422**	200 (8x25)

Alternate jumper, insulated,



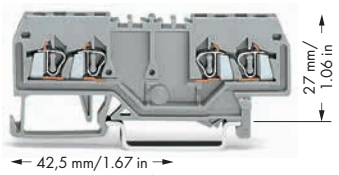
I_N 15 A		
gray	**279-409**	100 (4x25)

Push-in type wire jumper, ❺



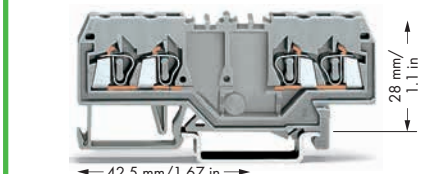
insulated,		
I_N 9 A,		
wire size 0.75 mm²		
L = 60 mm	**249-125**	10
L = 110 mm	**249-126**	10
L = 250 mm	**249-127**	10

Certification organizations can be found in the overview on pages 622 and 623.



Double-potential terminal blocks
with double marker slot centered on terminal block
gray 279-826
light gray 279-995
Packing unit: 100 pcs

Notice: These double-potential terminal blocks cannot be commoned with adjacent jumpers!
For technical data and accessories,
see www.wagocatalog.com



Double-potential terminal blocks
with double marker slot centered on terminal block
gray 280-826
light gray 280-995
Packing unit: 100 pcs

Notice: These double-potential terminal blocks cannot be commoned with adjacent jumpers!
For technical data and accessories,
see www.wagocatalog.com

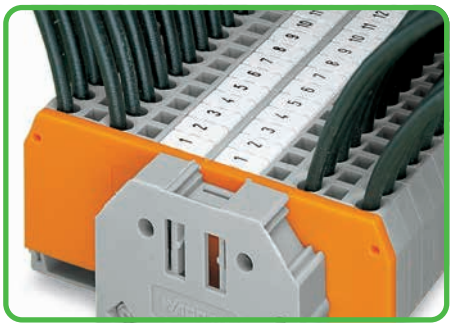
❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

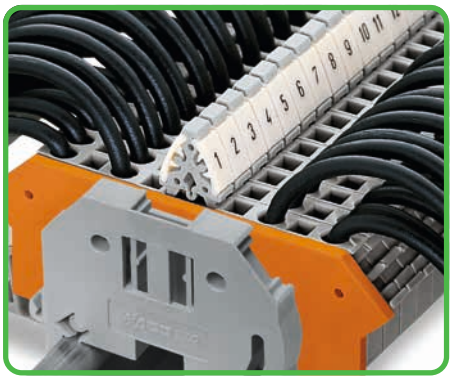
❸ Suitable for Ex i applications

❹ Suitable for Ex e II applications
0.2 mm² - 1.5 mm²/AWG 24 - 16
550 V, 15 A
(also see Section 14)

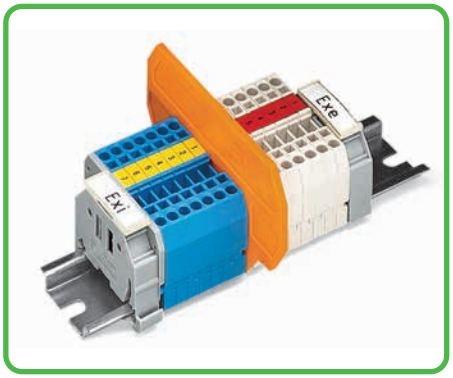
❺ See application notes for:
Insulation stop, page 293
Push-in type wire jumper, page 295
Step-down jumper, pages 196 – 197
Banana plug, page 292
Comb-style jumper bar, page 294
Operating tool, page 294



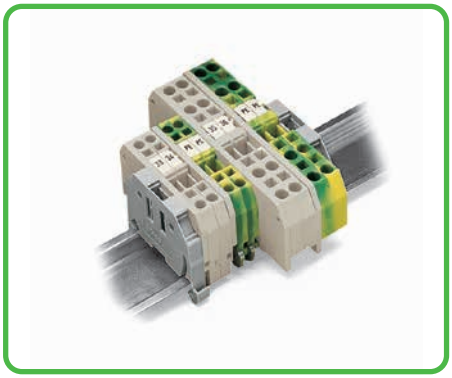
WMB markers provide marking directly on terminal block.
For WMB Multi marking system, see Section 13.



Terminal block marking with double marker carriers
Item No. 209-128
For terminal blocks with side marking,
see online catalog at www.wagocatalog.com



Separator for Ex e/Ex i applications
According to EN 50020, a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. The use of Ex e/Ex i separators is a space-saving solution when Ex e and Ex i terminal blocks are mounted on a common carrier rail.
Suitable for 279 to 282 Series terminal blocks.
209-190 for 2-conductor terminal blocks.
209-191 for 2-, 3-, 4-conductor terminal blocks.



End and intermediate plate
In order to meet creepage and clearance requirements for Ex e applications, it is necessary to insert an end or intermediate plate between a through and a ground conductor terminal block.

279 Series Accessories

Step-down jumper, insulated, ❺			
	I_N 15 A		
	gray	**284-414**	50 (2x25)
Cover plate,			
	1 mm thick		
	gray	**284-334**	100
	orange	**284-344**	100
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**279-415**	100 (4x25)
Test plug adapter, 8.3 mm wide,			
	for terminal blocks 1.5 - 10 mm²,		
	for 4 mm Ø test plug		
	gray	**209-170**	50 (2x25)
Banana plug,			
❺	for socket 4 mm Ø,		
	color mixed		
		215-111	50
Test plug adapter, 5 mm wide,			
	for terminal blocks 1.5 - 4 mm²,		
	for 210-137 test plug 2.3 mm Ø		
	gray	**280-404**	100 (4x25)
Test plug,			
	with 500 mm cable,		
	2.3 mm Ø		
	yellow	**210-137**	50
Comb-style jumper bar, insulated,			
❺	I_N = I_N terminal block		
	2-way	**279-482**	200 (8x25)
	3-way	**279-483**	200 (8x25)
Comb-style jumper bar, insulated,			
	I_N = I_N terminal block		
	10-way	**279-490**	50 (2x25)
Alternate comb-style jumper bar,			
	insulated,		
	I_N = I_N terminal block		
	2-way	**279-492**	200 (8x25)
Operating tool, of insulating material			
	2-way	**279-432**	1
	3-way	**279-433**	1
Operating tool, of insulating material			
	10-way	**279-440**	1

Through/Ground Conductor/Shield and Ex Terminal Blocks 2.5 mm²
280 Series

0.08 - 2.5 mm²	AWG 28 - 12 *
800 V/8 kV/3 ❶	600 V, 20 A
I_N 24 A	600 V, 25 A

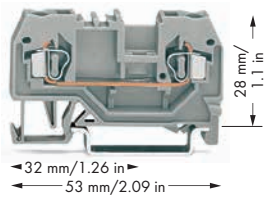
Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❷

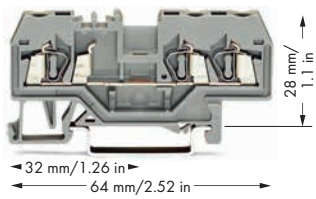
0.08 - 2.5 mm²	AWG 28 - 12 *
800 V/8 kV/3 ❶	600 V, 20 A
I_N 24 A	600 V, 15 A

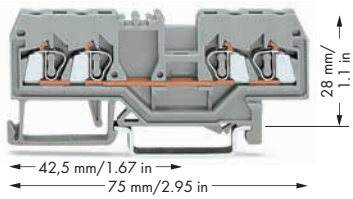
Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❷

0.08 - 2.5 mm²	AWG 28 - 12 *
800 V/8 kV/3 ❶	600 V, 20 A
I_N 20 A	600 V, 25 A

Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❷







	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**280-901**	100
blue	**280-904** ❸	100
orange	**280-902**	100
red	**280-903**	100
black	**280-905**	100
yellow	**280-906**	100
light gray Ex	**280-992** ❹	100
2-conductor ground terminal block		
green-yellow	**280-907**	100
green-yellow Ex	**280-907/999-950** ❹	100

Other terminal blocks with the same profile:

Diode	**280-915/281-410**	Page 276
Disconnect	**280-912**	Page 224
Carrier	**280-916**	Page 250

	Item No.	Pack. Unit
3-conductor through terminal block		
gray	**280-681**	100
blue	**280-684** ❸	100
orange	**280-650**	100
red	**280-653**	100
black	**280-671**	100
yellow	**280-672**	100
light gray Ex	**280-993** ❹	100
3-conductor ground terminal block		
green-yellow	**280-687**	100
green-yellow Ex	**280-687/999-950** ❹	100

Other terminal blocks with the same profile:

Diode	**280-673/281-410**	Page 276
Disconnect	**280-683**	Page 224
Carrier	**280-610**	Page 250

	Item No.	Pack. Unit
4-conductor through terminal block		
gray	**280-833**	100
blue	**280-834** ❸	100
orange	**280-835**	100
red	**280-830**	100
black	**280-831**	100
yellow	**280-832**	100
light gray Ex	**280-994** ❹	100
4-conductor ground terminal block		
green-yellow	**280-837**	100
green-yellow Ex	**280-837/999-950** ❹	100
4-conductor shield terminal block		
white	**280-838**	100

Other terminal blocks with the same profile:

Diode	**280-815/281-410**	Page 276
LED	**280-809/281-434**	Page 276
Disconnect	**280-836**	Page 224
Disc., test & meas.	**280-829**	Page 224
Carrier	**280-816**	Page 250
Double-potential	**280-826**	Page 181

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick



orange	**280-309**	100 (4x25)
gray	**280-308**	100 (4x25)
light gray	**280-356**	100 (4x25)

Separator, oversized, 2 mm thick



orange	**280-311**	100 (4x25)
gray	**280-310**	100 (4x25)
light gray	**280-357**	100 (4x25)

Ex e/Ex i separator, orange,



3 mm thick		
90 mm	**209-190**	50 (2x25)
120 mm	**209-191**	50 (2x25)

Spacer of same shape,



5 mm thick		
orange	**280-902/056-000**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick



orange	**280-326**	100 (4x25)
gray	**280-324**	100 (4x25)
light gray	**280-358**	100 (4x25)

Separator, oversized, 2 mm thick



orange	**280-346**	100 (4x25)
gray	**280-344**	100 (4x25)
light gray	**280-359**	100 (4x25)

Ex e/Ex i separator, orange,



3 mm thick		
120 mm	**209-191**	50 (2x25)

Spacer of same shape,



5 mm thick		
orange	**280-650/056-000**	100

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick



orange	**280-315**	100 (4x25)
gray	**280-314**	100 (4x25)
light gray	**280-352**	100 (4x25)

Separator, oversized, 2 mm thick



orange	**280-335**	100 (4x25)
gray	**280-334**	100 (4x25)
light gray	**280-353**	100 (4x25)

Ex e/Ex i separator, orange,



3 mm thick		
120 mm	**209-191**	50 (2x25)

Spacer of same shape,



5 mm thick		
orange	**280-835/056-000**	100 (4x25)

Cover plate,



1 mm thick		
gray	**284-336**	100
orange	**284-346**	100

Certification organizations can be found in the overview on pages 622 and 623.

Accessories for 280 Series

* AWG 12: THHN, THWN

❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ Suitable for Ex e II applications
0.2 mm² - 2.5 mm²/AWG 24 - 12*
550 V
23 A for 2-conductor terminal blocks
22 A for 3-conductor terminal blocks
20 A for 4-conductor terminal blocks
(also see Section 14)
Using staggered jumpers reduces the maximum rated voltage to 275 V.

❺ See application notes for:
Test plug modules, pages 288 – 290
Banana plug, page 292
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294
Staggered jumper, page 295
Push-in type wire jumper, page 295
Step-down jumper, pages 196 – 197

280 Series Accessories

Appropriate marking systems: WMB/WMB Inline/WFB
(see Section 13)

Insulation stop, ❺

5 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **280-470** 200 (8x25)

Insulation stop, ❺

5 pcs/strip,
0.25 - 0.5 mm²
light gray **280-471** 200 (8x25)

Insulation stop, ❺

5 pcs/strip,
0.75 - 1 mm²
dark gray **280-472** 200 (8x25)

Adjacent jumper, insulated,

$I_N = I_N$ terminal block
gray **280-402** 200 (8x25)
yellow-green **280-422** 200 (8x25)

Alternate jumper, insulated,

$I_N = I_N$ terminal block
gray **280-409** 100 (4x25)

Staggered jumper, ❺

insulated,
Spacing: 5 mm,
I_N 24 A
from 1 to 2 **780-452** 100 (4x25)
from 1 to 3 **780-453** 100 (4x25)
from 1 to 4 **780-454** 100 (4x25)
from 1 to 5 **780-455** 50 (2x25)
from 1 to 6 **780-456** 50 (2x25)
from 1 to 7 **780-457** 50 (2x25)
from 1 to 8 **780-458** 50 (2x25)

Push-in type wire jumper, ❺

insulated,
I_N 9 A,
wire size 0.75 mm²
L = 60 mm **249-125** 10
L = 110 mm **249-126** 10
L = 250 mm **249-127** 10

Comb-style jumper bar, insulated, ❺

$I_N = I_N$ terminal block
2-way **280-482** 200 (8x25)
3-way **280-483** 200 (8x25)

Comb-style jumper bar, insulated,

$I_N = I_N$ terminal block
10-way **280-490** 50 (2x25)

Alternate comb-style jumper bar,

insulated,
$I_N = I_N$ terminal block
2-way **280-492** 200 (8x25)

Operating tool, of insulating material

2-way **280-432** 1
3-way **280-433** 1

Operating tool, of insulating material

10-way **280-440** 1

Step-down jumper, insulated, ❺

I_N 15 A
gray **284-414** 50 (2x25)

Cover plate,

1 mm thick
gray **284-334** 100
orange **284-344** 100

Protective warning marker,

with high-voltage symbol, black,
for 5 terminal blocks
yellow **280-415** 100 (4x25)

Test plug module, ❺

can be snapped together,
5 mm wide
gray **280-418** 100 (4x25)

Spacer module,

can be snapped together,
5 mm wide
gray **280-419** 100 (4x25)

Test plug,

with 500 mm cable,
2 mm Ø
red **210-136** 50

Test plug,

with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

Test plug adapter, 5 mm wide,

for terminal blocks 1.5 - 4 mm²,
for 210-137 test plug 2.3 mm Ø
gray **280-404** 100 (4x25)

Test plug adapter, 8.3 mm wide,

for terminal blocks 1.5 - 10 mm²,
for 4 mm Ø test plug
gray **209-170** 50 (2x25)

Banana plug, ❺

for socket 4 mm Ø,
color mixed
215-111 50

Test plug adapter, 6 mm wide,

with CAGE CLAMP®,
for 0.08 - 2.5 mm²
I_N 24 A **281-407** 100 (4x25)

WMB Inline, plain,

stretchable 5 - 5.2 mm,
1,500 WMB markers, 5 mm, on roll
white **2009-115** 1

WMB Multi marking system,

10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

WMB Multi marking system, plain,

10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
yellow **793-5501/000-002**
red **793-5501/000-005**
blue **793-5501/000-006**
gray **793-5501/000-007**
orange **793-5501/000-012**
light green **793-5501/000-017**
green **793-5501/000-023**
violet **793-5501/000-024**
5

Screwless end stop,

for DIN 35 rail,
6 mm wide
gray **249-116** 100 (4x25)

Screwless end stop,

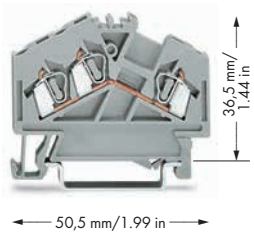
for DIN 35 rail,
10 mm wide
gray **249-117** 50 (2x25)

Through/Ground Conductor/Shield and Ex Terminal Blocks 2.5 mm²
280 Series

CAGE CLAMP®

0.08 - 2.5 mm² | **AWG 28 - 12 ***
800 V/8 kV/3 ❶ | **600 V, 20 A**
I_N 24 A

Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❷



* AWG 12: THHN, THWN

❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ Suitable for Ex e II applications
0.2 mm² - 2.5 mm²/AWG 24 - 12*
550 V, 23 A
(also see Section 14)
Using staggered jumpers reduces the maximum rated voltage to 275 V.

❺ See application notes for:
Test plug modules, pages 288 – 290
Banana plug, page 292
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294
Staggered jumper, page 295
Push-in type wire jumper, page 295

	Item No.	Pack. Unit
3-conductor through terminal block		
gray	**280-641**	100
blue	**280-651** ❸	100
orange	**280-654**	100
light gray Ex	**280-998** ❹	100
3-conductor ground terminal block		
green-yellow	**280-637**	100
green-yellow Ex	**280-637/999-950** ❹	100
3-conductor shield terminal block		
white	**280-640**	100

280 Series Accessories

End and intermediate plate, 2.5 mm thick



orange	**280-313**	100 (4x25)
gray	**280-312**	100 (4x25)
light gray	**280-354**	100 (4x25)

Separator, oversized, 2.5 mm thick



orange	**280-318**	100 (4x25)
gray	**280-348**	100 (4x25)
light gray	**280-355**	100 (4x25)

Ex e/Ex i separator, orange,



3 mm thick		
120 mm	**209-191**	50 (2x25)

Spacer of same shape,



5 mm thick		
orange	**280-654/056-000**	100 (4x25)

Insulation stop, ❺



5 pcs/strip,		
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
white	**280-470**	200 (8x25)

Insulation stop, ❺



5 pcs/strip,		
0.25 - 0.5 mm²		
light gray	**280-471**	200 (8x25)

Insulation stop, ❺



5 pcs/strip,		
0.75 - 1 mm²		
dark gray	**280-472**	200 (8x25)

Adjacent jumper, insulated,



I_N = I_N terminal block		
gray	**280-402**	200 (8x25)

280 Series Accessories

Appropriate marking systems: WMB/WMB Inline/WFB (see Section 13)

Alternate jumper, insulated,



I_N = I_N terminal block		
gray	**280-409**	100 (4x25)

Staggered jumper, ❺



insulated,		
Spacing: 5 mm,		
I_N 24 A		
from 1 to 2	**780-452**	100 (4x25)
from 1 to 3	**780-453**	100 (4x25)
from 1 to 4	**780-454**	100 (4x25)
from 1 to 5	**780-455**	50 (2x25)
from 1 to 6	**780-456**	50 (2x25)
from 1 to 7	**780-457**	50 (2x25)
from 1 to 8	**780-458**	50 (2x25)

Push-in type wire jumper, ❺



insulated,		
I_N 9 A,		
wire size 0.75 mm²		
L = 60 mm	**249-125**	10
L = 110 mm	**249-126**	10
L = 250 mm	**249-127**	10

Comb-style jumper bar, insulated, ❺



I_N = I_N terminal block		
2-way	**280-482**	200 (8x25)
3-way	**280-483**	200 (8x25)

Alternate comb-style jumper bar,



insulated,		
I_N = I_N terminal block		
2-way	**280-492**	200 (8x25)

Operating tool, of insulating material



2-way	**280-432**	1
3-way	**280-433**	1

Protective warning marker,



with high-voltage symbol, black,		
for 5 terminal blocks		
yellow	**280-415**	100 (4x25)

Test plug module, ❺



can be snapped together,		
5 mm wide		
gray	**280-418**	100 (4x25)

Spacer module,



can be snapped together,		
5 mm wide		
gray	**280-419**	100 (4x25)

Test plug,



with 500 mm cable,		
2 mm Ø		
red	**210-136**	50

Test plug,



with 500 mm cable,		
2.3 mm Ø		
yellow	**210-137**	50

Test plug adapter, 5 mm wide,



for terminal blocks 1.5 - 4 mm²,		
for 210-137 test plug 2.3 mm Ø		
gray	**280-404**	100 (4x25)

Test plug adapter, 8.3 mm wide,



for terminal blocks 1.5 - 10 mm²,		
for 4 mm Ø test plug		
gray	**209-170**	50 (2x25)

Banana plug, ❺



for socket 4 mm Ø,		
color mixed		
	215-111	50

Test plug adapter, 6 mm wide,



with CAGE CLAMP®,		
for 0.08 - 2.5 mm²		
I_N 24 A	**281-407**	100 (4x25)

WMB Multi marking system,

10 strips with 10 markers per card,		
stretchable 5 - 5.2 mm		
plain	**793-5501**	5

WMB Multi marking system, plain,



10 strips with 10 markers per card,		
stretchable 5 - 5.2 mm		
yellow	**793-5501/000-002**	
red	**793-5501/000-005**	
blue	**793-5501/000-006**	
gray	**793-5501/000-007**	
orange	**793-5501/000-012**	
light green	**793-5501/000-017**	
green	**793-5501/000-023**	
violet	**793-5501/000-024**	
		5

Screwless end stop,



for DIN 35 rail,		
6 mm wide		
gray	**249-116**	100 (4x25)

Screwless end stop,



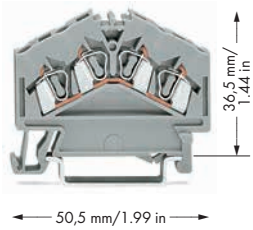
for DIN 35 rail,		
10 mm wide		
gray	**249-117**	50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.

Through and Ex Terminal Blocks 2.5 mm²
280 Series

0.08 - 2.5 mm²	AWG 28 - 12 *
800 V/8 kV/3 ❶	600 V, 20 A
I_N 24 A	600 V, 25 A

Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❷



* AWG 12: THHN,THWN

❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ Suitable for Ex e II applications
0.2 mm² - 2.5 mm²/AWG 24 - 12*
550 V, 23 A
(also see Section 14)

❺ See application notes for:
Test plug module, page 288
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294

	Item No.	Pack. Unit
4-conductor through terminal block		
gray	**280-646**	100
blue	**280-656** ❸	100
orange	**280-946**	100
light gray	**280-996** ❹	100

Notice:
These terminal blocks cannot be commoned using adjacent jumpers

280 Series Accessories

End and intermediate plate, 2.5 mm thick



orange	**280-313**	100 (4x25)
gray	**280-312**	100 (4x25)
light gray	**280-354**	100 (4x25)

Separator, oversized, 2.5 mm thick



orange	**280-318**	100 (4x25)
gray	**280-348**	100 (4x25)
light gray	**280-355**	100 (4x25)

Ex e/Ex i separator, orange,



3 mm thick		
120 mm	**209-191**	50 (2x25)

Spacer of same shape,



5 mm thick		
orange	**280-654/056-000**	
		100 (4x25)

Insulation stop, ❺



5 pcs/strip,		
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
white	**280-470**	200 (8x25)

Insulation stop, ❺



5 pcs/strip,		
0.25 - 0.5 mm²		
light gray	**280-471**	200 (8x25)

Insulation stop, ❺



5 pcs/strip,		
0.75 - 1 mm²		
dark gray	**280-472**	200 (8x25)

Comb-style jumper bar, insulated, ❺

I_N = I_N terminal block		
2-way	**280-482**	200 (8x25)
3-way	**280-483**	200 (8x25)

Comb-style jumper bar, insulated,



I_N = I_N terminal block		
10-way	**280-490**	50 (2x25)

280 Series Accessories

Appropriate marking systems
(see Section 13)

Alternate comb-style jumper bar,



insulated,		
I_N = I_N terminal block		
2-way	**280-492**	200 (8x25)

Operating tool, of insulating material



2-way	**280-432**	1
3-way	**280-433**	1

Operating tool, of insulating material



10-way	**280-440**	1

Protective warning marker,



with high-voltage symbol, black,		
for 5 terminal blocks		
yellow	**280-415**	100 (4x25)

L-type test plug module,



can be snapped together,		
5 mm wide		
gray	**249-141**	100 (4x25)

WMB Inline, plain,



stretchable 5 - 5.2 mm,		
1,500 WMB markers, 5 mm, on roll		
white	**2009-115**	1

WMB Multi marking system,

10 strips with 10 markers per card,		
stretchable 5 - 5.2 mm		
plain	**793-5501**	5

WMB Multi marking system, plain,



10 strips with 10 markers per card,		
stretchable 5 - 5.2 mm		
yellow	**793-5501/000-002**	
red	**793-5501/000-005**	
blue	**793-5501/000-006**	
gray	**793-5501/000-007**	
orange	**793-5501/000-012**	
light green	**793-5501/000-017**	
green	**793-5501/000-023**	
violet	**793-5501/000-024**	
		5

Screwless end stop,

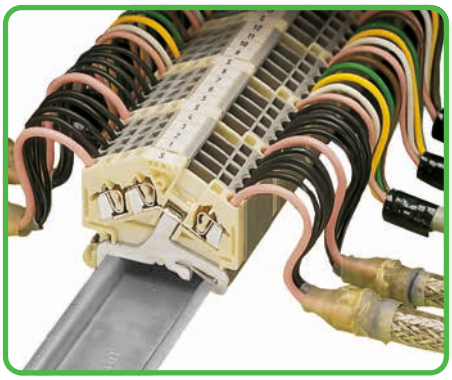


for DIN 35 rail,		
6 mm wide		
gray	**249-116**	100 (4x25)

Screwless end stop,



for DIN 35 rail,		
10 mm wide		
gray	**249-117**	50 (2x25)



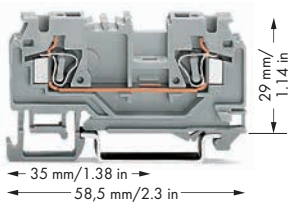
Application example for shield terminal blocks

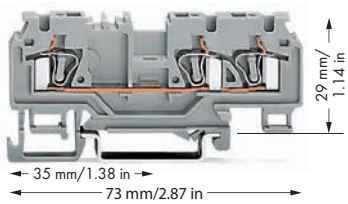
Shielded control cables are becoming an increasingly common solution to external signal interference. Shield terminal blocks for front-entry are suitable for connecting braided cables. Like ground conductor terminal blocks for front-entry, they are equipped with a grounding foot for direct electrical connection to the rail, however they differ significantly by their white insulated housing. Shield terminal blocks for front-entry can be directly mounted beside signal-conductor terminal blocks, providing excellent deflection of interfering signals.

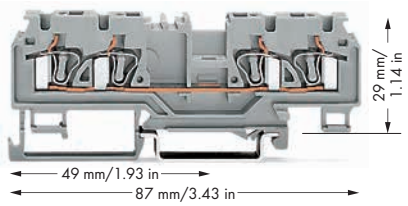
Certification organizations can be found in the overview on pages 622 and 623.

Through and Ground Conductor Terminal Blocks 4 mm², Terminal Block Width 5 mm
Suited for Specialty Conductors AWG 12 with 216-206 Ferrule, 880 Series

0.08 - 4 mm² | AWG 28 - 12 800 V/8 kV/3 ❶ | 600 V, 20 A I_N 25 A Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❷	0.08 - 4 mm² | AWG 28 - 12 800 V/8 kV/3 ❶ | 600 V, 20 A I_N 25 A Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❷	0.08 - 4 mm² | AWG 28 - 12 800 V/8 kV/3 ❶ I_N 20 A Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❷







Item No.		Pack. Unit
2-conductor through terminal block		
without shield contact		
gray	**880-901/999-940**	100
blue	**880-904/999-940** ❸	100
orange	**880-902/999-940**	100
2-conductor through terminal block		
with shield contact		
on request		
2-conductor ground terminal block		
green-yellow	**880-907/999-940**	100

Item No.		Pack. Unit
3-conductor through terminal block		
without shield contact		
gray	**880-681/999-940**	100
blue	**880-684/999-940** ❸	100
orange	**880-682/999-940**	100
3-conductor through terminal block		
with shield contact		
on request		
3-conductor ground terminal block		
green-yellow	**880-687/999-940**	100

Item No.		Pack. Unit
4-conductor through terminal block		
without shield contact		
gray	**880-831/999-940**	50
blue	**880-834/999-940** ❸	50
orange	**880-832/999-940**	50
4-conductor ground terminal block		
green-yellow	**880-837/999-940**	50

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick			
	orange	**880-328**	100 (4x25)
	gray	**880-325**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**880-329**	100 (4x25)
	gray	**880-326**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick			
	orange	**880-339**	100 (4x25)
	gray	**880-308**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**880-340**	100 (4x25)
	gray	**880-309**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick			
	orange	**880-346**	100 (4x25)
	gray	**880-344**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**880-347**	100 (4x25)
	gray	**880-345**	100 (4x25)

880 Series Accessories

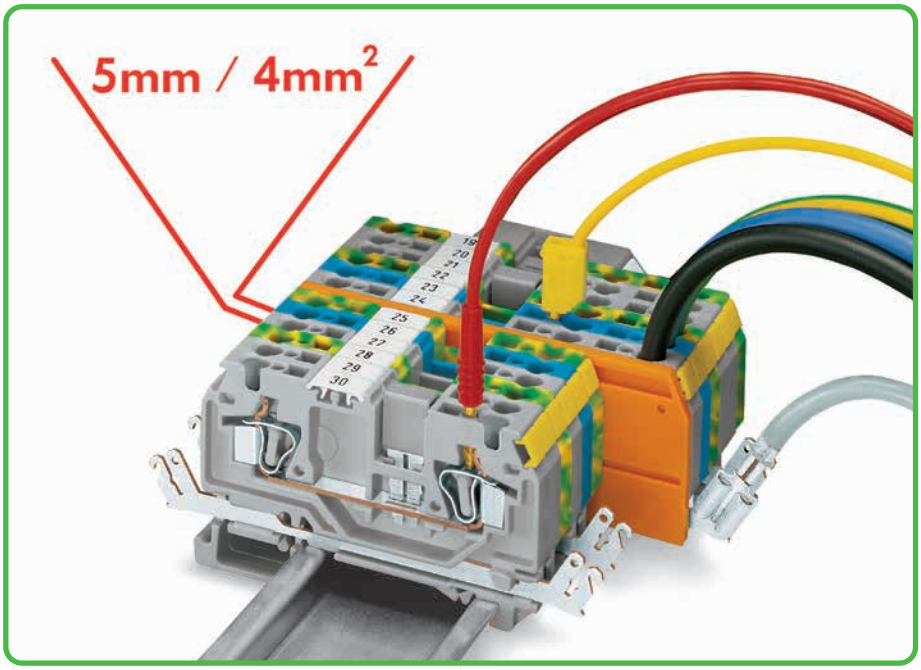
Appropriate marking systems: WMB/WMB Inline/Miniature WSB/Miniature WSB Inline/WFB (see Section 13)

Insulation stop, ❹			
	5 pcs/strip,		
	0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop, ❹			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop, ❹			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)
Adjacent jumper, insulated,			
	I_N = I_N terminal block		
	gray	**280-402**	200 (8x25)
	yellow-green	**280-422**	200 (8x25)
Alternate jumper, insulated,			
	I_N = I_N terminal block		
	gray	**280-409**	100 (4x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**280-415**	100 (4x25)

Staggered jumper, ❹			
	insulated,		
	Spacing: 5 mm,		
	I_N 24 A		
	from 1 to 2	**780-452**	100 (4x25)
	from 1 to 3	**780-453**	100 (4x25)
	from 1 to 4	**780-454**	100 (4x25)
	from 1 to 5	**780-455**	50 (2x25)
	from 1 to 6	**780-456**	50 (2x25)
	from 1 to 7	**780-457**	50 (2x25)
	from 1 to 8	**780-458**	50 (2x25)
Push-in type wire jumper, ❹			
	insulated,		
	I_N 9 A,		
	wire size 0.75 mm²		
	L = 60 mm	**249-125**	10
	L = 110 mm	**249-126**	10
	L = 250 mm	**249-127**	10
Comb-style jumper bar, insulated, ❹			
	I_N = I_N terminal block		
	2-way	**280-482**	200 (8x25)
	3-way	**280-483**	200 (8x25)

Comb-style jumper bar, insulated,			
	I_N = I_N terminal block		
	10-way	**280-490**	50 (2x25)
Alternate comb-style jumper bar,			
	insulated,		
	I_N = I_N terminal block		
	2-way	**280-492**	200 (8x25)
Operating tool, of insulating material			
	2-way	**280-432**	1
	3-way	**280-433**	1
Operating tool, of insulating material			
	10-way	**280-440**	1
Test plug module, ❹			
	can be snapped together,		
	5 mm wide		
	gray	**280-418**	100 (4x25)
Spacer module,			
	can be snapped together,		
	5 mm wide		
	gray	**280-419**	100 (4x25)

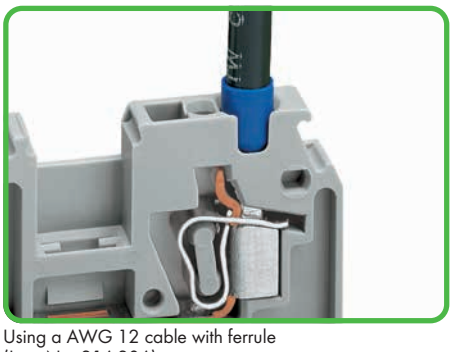
Certification organizations can be found in the overview on pages 622 and 623.



With/without shield contact

Features

- 2-, 3- and 4-conductor terminal blocks, only 5 mm wide
- Conductor cross section up to 4 mm² (per VDE 0281), or
  * AWG 12 with ferrule (Item No. 216-206)
  * 2.5 mm²/AWG 14 with rubber-insulated conductors having a diameter up to 4.4 mm (0.173 in)
- Shield contact, solder contact /quick-connect contact 6.3 (2 x 2.8) mm
- Test plug, red, 2 mm Ø
- Test plug, yellow, 2.3 mm Ø
- WMB marking
- Miniature WSB marking, on both sides
- Commoning with standard WAGO jumper system



Using a AWG 12 cable with ferrule
(Item No. 216-206)

❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree

cULus 600 V/20 A
with shield contact
400 V/6 kV/3
cULus 300 V/10 A
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

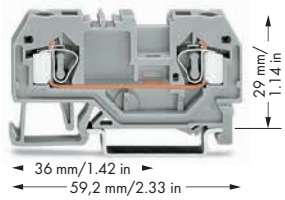
❹ See application notes for:
Test plug modules, pages 288 – 290
Banana plug, page 292
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294
Staggered jumper, page 295
Push-in type wire jumper, page 295

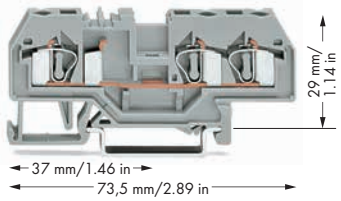
880 Series Accessories

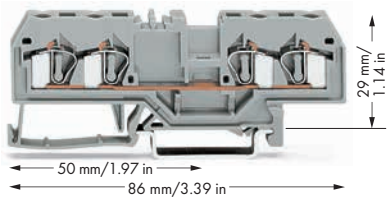
Test plug,			
	with 500 mm cable, 2.3 mm Ø, yellow	**210-137**	50
Test plug,			
	with 500 mm cable, 2 mm Ø, red	**210-136**	50
Test plug adapter, 5 mm wide,			
	for terminal blocks 1.5 - 4 mm², for 210-137 test plug 2.3 mm Ø, gray	**280-404**	100 (4x25)
Test plug adapter, 8.3 mm wide,			
	for terminal blocks 1.5 - 10 mm², for 4 mm Ø test plug, gray	**209-170**	50 (2x25)
Banana plug,			
❹ 	for socket 4 mm Ø, color mixed	**215-111**	50
Test plug adapter, 6 mm wide,			
	with CAGE CLAMP®, for 0.08 - 2.5 mm², I_N 24 A	**281-407**	100 (4x25)
WMB Inline, plain,			
	stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll, white	**2009-115**	1
WMB Multi marking system,			
	10 strips with 10 markers per card, stretchable 5 - 5.2 mm, plain	**793-5501**	5
Miniature WSB Quick marking system,			
	10 strips with 10 markers per card, 5 mm wide markers, plain	**248-501**	5
Screwless end stop,			
	for DIN 35 rail, 6 mm wide, gray	**249-116**	100 (4x25)
Screwless end stop,			
	for DIN 35 rail, 10 mm wide, gray	**249-117**	50 (2x25)

Through/Ground Conductor/Shield and Ex Terminal Blocks 4 mm² 281 Series

0.08 - 4 mm² 800 V/8 kV/3 ❶ I_N 32 A	AWG 28 - 12 600 V, 20 A 600 V, 25 A	Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in ❷
0.08 - 4 mm² 800 V/8 kV/3 ❶ I_N 32 A	AWG 28 - 12 600 V, 20 A 600 V, 25 A	Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in ❷
0.08 - 4 mm² 800 V/8 kV/3 ❶ I_N 26 A	AWG 28 - 12 600 V, 20 A 600 V, 25 A	Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in ❷







Item No.		Pack. Unit
2-conductor through terminal block		
gray	**281-901**	50
blue	**281-904** ❸	50
orange	**281-902**	50
red	**281-903**	50
black	**281-905**	50
yellow	**281-906**	50
light gray Ex	**281-992** ❹	50
2-conductor ground terminal block		
green-yellow	**281-907**	50
green-yellow Ex	**281-907/999-950** ❹	50
Other terminal blocks with the same profile:		
Diode	**281-915/281-410**	Page 278
Disconnect	**281-912**	Page 226
Carrier	**281-916**	Page 248

Item No.		Pack. Unit
3-conductor through terminal block		
gray	**281-681**	50
blue	**281-684** ❸	50
orange	**281-678**	50
red	**281-679**	50
black	**281-685**	50
yellow	**281-686**	50
light gray Ex	**281-993** ❹	50
3-conductor ground terminal block		
green-yellow	**281-687**	50
green-yellow Ex	**281-687/999-950** ❹	50
Other terminal blocks with the same profile:		
Diode	**281-673/281-410**	Page 278
Disconnect	**281-683**	Page 226
Carrier	**281-610**	Page 248

Item No.		Pack. Unit
4-conductor through terminal block		
gray	**281-652**	50
blue	**281-654** ❸	50
orange	**281-653**	50
red	**281-663**	50
black	**281-664**	50
yellow	**281-668**	50
light gray Ex	**281-994** ❹	50
4-conductor ground terminal block		
green-yellow	**281-657**	50
green-yellow Ex	**281-657/999-950** ❹	50
4-conductor shield terminal block		
white	**281-658**	50
Other terminal blocks with the same profile:		
Diode	**281-665/281-410**	Page 278
Disconnect	**281-659**	Page 226
Disc., test & meas.	**281-666**	Page 226
Carrier	**281-656**	Page 248

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick			
	orange	**281-329**	100 (4x25)
	gray	**281-328**	100 (4x25)
	light gray	**281-349**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**281-331**	100 (4x25)
	gray	**281-330**	100 (4x25)
	light gray	**281-350**	100 (4x25)
Ex e/Ex i separator, orange,			
	3 mm thick		
	120 mm	**209-191**	50 (2x25)
	90 mm	**209-190**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick			
	orange	**281-326**	100 (4x25)
	gray	**281-324**	100 (4x25)
	light gray	**281-355**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**281-346**	100 (4x25)
	gray	**281-344**	100 (4x25)
	light gray	**281-356**	100 (4x25)
Ex e/Ex i separator, orange,			
	3 mm thick		
	120 mm	**209-191**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick			
	orange	**281-335**	100 (4x25)
	gray	**281-334**	100 (4x25)
	light gray	**281-345**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**281-339**	100 (4x25)
	gray	**281-338**	100 (4x25)
	light gray	**281-347**	100 (4x25)
Ex e/Ex i separator, orange,			
	3 mm thick		
	120 mm	**209-191**	50 (2x25)
Cover plate,			
	1 mm thick		
	gray	**284-336**	100
	orange	**284-346**	100

281 Series Accessories

Appropriate marking systems: WMB/WFB
(see Section 13)

Insulation stop,			
❺	5 pcs/strip,		
	0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**281-470**	200 (8x25)

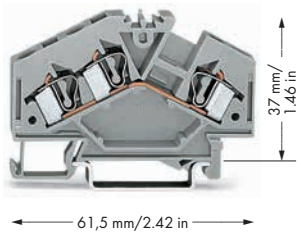
Insulation stop,			
❺	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**281-471**	200 (8x25)

Insulation stop,			
❺	5 pcs/strip,		
	0.25 - 1.5 mm²		
	dark gray	**281-472**	200 (8x25)

Certification organizations can be found in the overview on pages 622 and 623.

0.08 - 4 mm²	AWG 28 - 12
800 V/8 kV/3 ❶	600 V, 20 A
I_N 32 A	600 V, 25 A

Terminal block width 6 mm / 0.236 in
9 - 10 mm / 0.37 in ❷



❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ Suitable for Ex e II applications
0.2 mm² - 4 mm²/AWG 24 - 12
550 V, 30 A
(also see Section 14)
Using staggered jumpers reduces the maximum rated voltage to 275 V.

❺ See application notes for:
Test plug modules, pages 288 – 290
Banana plug, page 292
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294
Staggered jumper, page 295
Push-in type wire jumper, page 295
Step-down jumper, pages 196 – 197

	Item No.	Pack. Unit
3-conductor through terminal block		
gray	**281-631**	100
blue	**281-651** ❸	100
light gray Ex	**281-998** ❹	100
3-conductor ground terminal block		
green-yellow	**281-637**	100
green-yellow Ex	**281-637/999-950** ❹	100

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick



orange	**281-313**	100 (4x25)
gray	**281-312**	100 (4x25)
light gray	**281-357**	100 (4x25)

Separator, oversized, 2 mm thick



gray	**281-318**	100 (4x25)
gray	**281-348**	100 (4x25)
light gray	**281-358**	100 (4x25)

Ex e/Ex i separator, orange, 3 mm thick



120 mm	**209-191**	50 (2x25)

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks

yellow	**281-415**	100 (4x25)

281 Series Accessories

Appropriate marking systems: WMB/WFB (see Section 13)

Adjacent jumper, insulated,



I_N = I_N terminal block

gray	**281-402**	200 (8x25)
yellow-green	**281-422**	200 (8x25)

Alternate jumper, insulated,



I_N = I_N terminal block

gray	**281-409**	100 (4x25)

Push-in type wire jumper, ❺



insulated,
I_N 9 A,
wire size 0.75 mm²

L = 60 mm	**249-125**	10
L = 110 mm	**249-126**	10
L = 250 mm	**249-127**	10

Staggered jumper, ❺



insulated,
Spacing: 6 mm,
I_N 32 A

from 1 to 2	**781-452**	100 (4x25)
from 1 to 3	**781-453**	100 (4x25)
from 1 to 4	**781-454**	100 (4x25)
from 1 to 5	**781-455**	50 (2x25)
from 1 to 6	**781-456**	50 (2x25)

Comb-style jumper bar, insulated, ❺



I_N = I_N terminal block

2-way	**281-482**	100 (4x25)
3-way	**281-483**	100 (4x25)
5-way	**281-485**	100 (4x25)
10-way	**281-490**	50 (2x25)

Alternate comb-style jumper bar,



insulated,
I_N = I_N terminal block

2-way	**281-492**	100 (4x25)

Operating tool, of insulating material



2-way	**280-432**	1
3-way	**280-433**	1
5-way	**281-440**	1

Step-down jumper, insulated, ❺



I_N 15 A

gray	**284-414**	50 (2x25)

Step-down jumper, insulated,



I_N 30 A

gray	**284-413**	50 (2x25)

Cover plate,



1 mm thick

gray	**284-334**	100
orange	**284-344**	100

Test plug module, ❺



can be snapped together,
6 mm wide

gray	**281-418**	100 (4x25)

Spacer module,



can be snapped together,
6 mm wide

gray	**281-419**	100 (4x25)

Test plug,



with 500 mm cable,
2 mm Ø

red	**210-136**	50

Test plug,



with 500 mm cable,
2.3 mm Ø

yellow	**210-137**	50

Test plug adapter, 5 mm wide,



for terminal blocks 1.5 - 4 mm²,
for 210-137 test plug 2.3 mm Ø

gray	**280-404**	100 (4x25)

Test plug adapter, 8.3 mm wide,



for terminal blocks 1.5 - 10 mm²,
for 4 mm Ø test plug

gray	**209-170**	50 (2x25)

Banana plug, ❺



for socket 4 mm Ø,
color mixed

215-111	50

Test plug adapter, 6 mm wide,



with CAGE CLAMP®,
for 0.08 - 2.5 mm²

I_N 24 A	**281-407**	100 (4x25)

Screwless end stop,



for DIN 35 rail,
6 mm wide

gray	**249-116**	100 (4x25)

Screwless end stop,



for DIN 35 rail,
10 mm wide

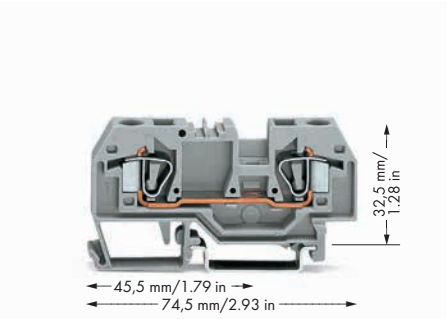
gray	**249-117**	50 (2x25)

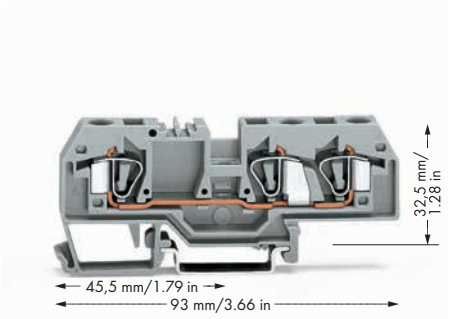
Through/Ground Conductor and Ex Terminal Blocks 6 mm²
282 Series

CAGE CLAMP®

0.2 - 6 mm²	AWG 24 - 10
800 V/8 kV/3 ❶	600 V, 30 A
I_N 41 A	600 V, 40 A
Terminal block width 8 mm / 0.315 in	
12 - 13 mm / 0.49 in ❷	

0.2 - 6 mm²	AWG 24 - 10
800 V/8 kV/3 ❶	600 V, 30 A
I_N 41 A	600 V, 40 A
Terminal block width 8 mm / 0.315 in	
12 - 13 mm / 0.49 in ❷	





❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

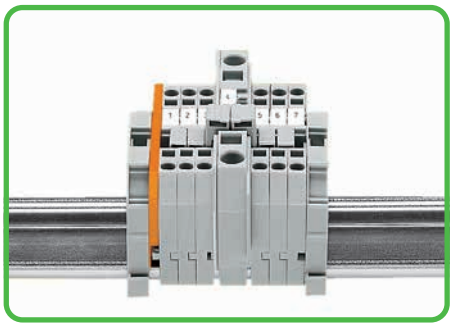
❸ Suitable for Ex i applications

❹ Suitable for Ex e II applications
0.5 mm² - 6 mm²/AWG 20 - 10
550 V, 39 A
Jumper 35 A
(also see Section 14)

❺ See application notes for:
Test plug module, page 291
Banana plug, page 292
Step-down jumper, pages 196 – 197

	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**282-901**	50
blue	**282-904** ❸	50
orange	**282-902**	50
light gray Ex	**282-992** ❹	50
2-conductor ground terminal block		
green-yellow	**282-907**	50
green-yellow Ex	**282-907/999-950** ❹	50

	Item No.	Pack. Unit
3-conductor through terminal block		
gray	**282-681**	25
blue	**282-684** ❸	25
orange	**282-682**	25
light gray Ex	**282-993** ❹	50
3-conductor ground terminal block		
green-yellow	**282-687**	25
green-yellow Ex	**282-687/999-950** ❹	50



Commoning with step-down jumpers
A step-down cover plate must be inserted between terminal blocks to be jumpered. Step-down jumper 284-414 commons 10/6 mm²/AWG 8/10 terminal blocks with 4/2.5/1.5 mm²/AWG 12/14/16 terminal blocks.

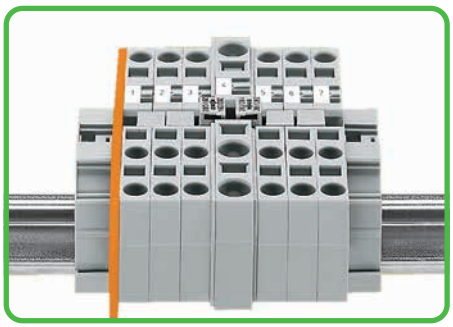
Step-down jumpers are simply pushed down for full insertion, similar to adjacent jumpers.

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick			
	orange	**282-328**	100 (4x25)
	gray	**282-325**	100 (4x25)
	light gray	**282-330**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**282-329**	100 (4x25)
	gray	**282-326**	100 (4x25)
	light gray	**282-331**	100 (4x25)
Cover plate,			
	1 mm thick		
	gray	**282-357**	25
	orange	**282-367**	25

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick			
	orange	**282-339**	100 (4x25)
	gray	**282-308**	100 (4x25)
	light gray	**282-341**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**282-340**	100 (4x25)
	gray	**282-309**	100 (4x25)
	light gray	**282-342**	100 (4x25)
Cover plate,			
	1 mm thick		
	gray	**282-358**	25
	orange	**282-368**	25



Commoning with step-down jumpers
A step-down cover plate must be inserted between terminal blocks to be jumpered. Step-down jumper 284-413 commons 10/6 mm²/AWG 8/10 terminal blocks with 6/4 mm²/AWG 10/12 terminal blocks.

Step-down jumpers are simply pushed down for full insertion, similar to adjacent jumpers.

Note:
The total current flowing shall not exceed the rating of the step-down jumper.

282 Series Accessories

Appropriate marking systems: WMB/WFB
(see Section 13)

Ex e/Ex i separator, orange,			
	3 mm thick		
	120 mm	**209-191**	50 (2x25)
Adjacent jumper, insulated,			
	I_N 41 A		
	gray	**282-402**	100 (4x25)
	yellow-green	**282-422**	100 (4x25)
Alternate jumper, insulated,			
	I_N 41 A		
	gray	**282-409**	100 (4x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**282-415**	100 (4x25)
Step-down jumper, insulated, ❺			
	I_N 15 A		
	gray	**284-414**	50 (2x25)

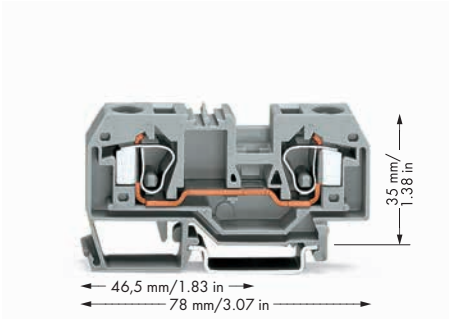
Step-down jumper, insulated,			
	I_N 30 A		
	gray	**284-413**	50 (2x25)
Test plug adapter, 8.3 mm wide,			
	for terminal blocks 1.5 - 10 mm²,		
	for 4 mm Ø test plug		
	gray	**209-170**	50 (2x25)
Banana plug, ❺			
	for socket 4 mm Ø,		
	color mixed		
		215-111	50
B-type test plug module, ❺			
	can be snapped together,		
	8 mm wide		
	gray	**709-310**	100 (4x25)
B-type spacer module,			
	can be snapped together,		
	8 mm wide		
	gray	**709-311**	100 (4x25)

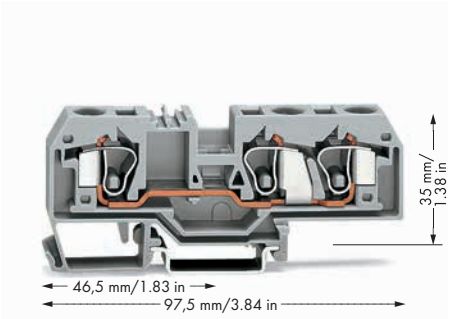
Certification organizations can be found in the overview on pages 622 and 623.

Through/Ground Conductor and Ex Terminal Blocks 10 mm²
284 Series

0.2 - 10 mm²	AWG 24 - 8
800 V/8 kV/3 ❶	600 V, 50 A
I_N 57 A	600 V, 54 A
Terminal block width 10 mm / 0.394 in	
12 - 13 mm / 0.49 in ❷	

0.2 - 10 mm²	AWG 24 - 8
800 V/8 kV/3 ❶	600 V, 50 A
I_N 57 A	600 V, 54 A
Terminal block width 10 mm / 0.394 in	
12 - 13 mm / 0.49 in ❷	





❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

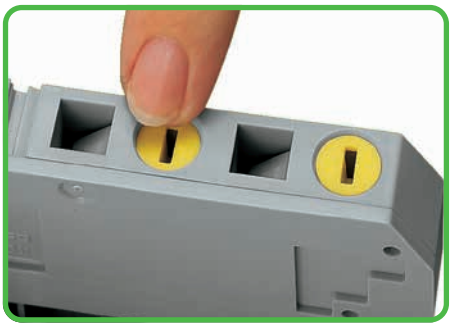
❷ Strip length, see packaging or instructions.

❸ Suitable for Ex e II applications
0.5 mm² - 10 mm²/AWG 20 - 8
550 V, 53 A
(also see Section 14)

❹ See application notes for:
Test plug module, page 291
Banana plug, page 292
Step-down jumper, pages 196 – 197

	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**284-901**	25
blue	**284-904**	25
orange	**284-902**	25
light gray Ex	**284-992** ❸	25
2-conductor ground terminal block		
green-yellow	**284-907**	25
green-yellow Ex	**284-907/999-950** ❸	25

	Item No.	Pack. Unit
3-conductor through terminal block		
gray	**284-681**	25
blue	**284-684**	25
orange	**284-682**	25
light gray Ex	**284-993** ❸	25
3-conductor ground terminal block		
green-yellow	**284-687**	25
green-yellow Ex	**284-687/999-950** ❸	25



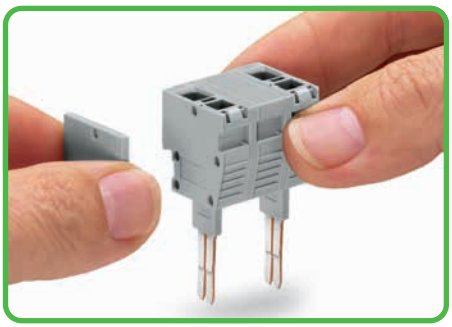
Inserting a finger guard seals unused conductor entries.

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick			
	orange	**284-328**	100 (4x25)
	gray	**284-325**	100 (4x25)
	light gray	**284-330**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**284-329**	100 (4x25)
	gray	**284-326**	100 (4x25)
	light gray	**284-331**	100 (4x25)
Cover plate,			
	1 mm thick		
	gray	**284-357**	25
	orange	**284-367**	25

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick			
	orange	**284-339**	100 (4x25)
	gray	**284-308**	100 (4x25)
	light gray	**284-341**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**284-340**	100 (4x25)
	gray	**284-309**	100 (4x25)
	light gray	**284-342**	100 (4x25)
Cover plate,			
	1 mm thick		
	gray	**284-358**	25
	orange	**284-368**	25



Snapping together test plug and spacer modules with spacer plates to assemble a multipole test plug module (max. 10 poles).

284 Series Accessories

Appropriate marking systems: WMB/WFB
(see Section 13)

Adjacent jumper, insulated,			
	I_N 57 A		
	gray	**284-402**	100 (4x25)
	yellow-green	**284-422**	100 (4x25)
Alternate jumper, insulated,			
	I_N 57 A		
	gray	**284-409**	50 (2x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**284-415**	50 (2x25)
Finger guard,			
	touchproof cover protects unused conductor entries		
	yellow	**284-400**	100 (4x25)
Step-down jumper, insulated,			
❹ 	I_N 15 A		
	gray	**284-414**	50 (2x25)

Step-down jumper, insulated,			
	I_N 30 A		
	gray	**284-413**	50 (2x25)
Test plug adapter, 8.3 mm wide,			
	for terminal blocks 1.5 - 10 mm²,		
	for 4 mm Ø test plug		
	gray	**209-170**	50 (2x25)
Banana plug,			
❹ 	for socket 4 mm Ø,		
	color mixed		
		215-111	50
B-type test plug module,			
❹ 	can be snapped together,		
	8 mm wide		
	gray	**709-310**	100 (4x25)
B-type spacer plate,			
	can be snapped together,		
	2 mm wide		
	gray	**709-312**	100 (4x25)

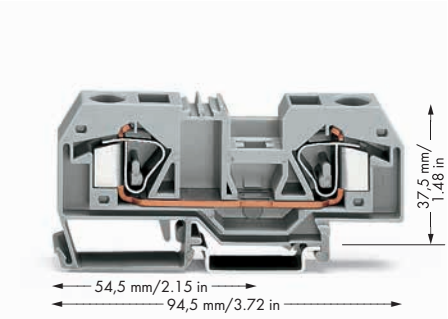
Certification organizations can be found in the overview on pages 622 and 623.

Through/Ground Conductor and Ex Terminal Blocks 16 mm²
283 Series

CAGE CLAMP®

0.2 - 16 mm²	AWG 24 - 6
800 V/8 kV/3 ❶	600 V, 65 A
I_N 76 A	600 V, 70 A

Terminal block width 12 mm / 0.472 in
16 - 17 mm / 0.65 in ❷



❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex e II applications
0.5 mm² - 16 mm²/AWG 20 - 6
550 V, 68 A
Jumper 63 A
(also see Section 14)

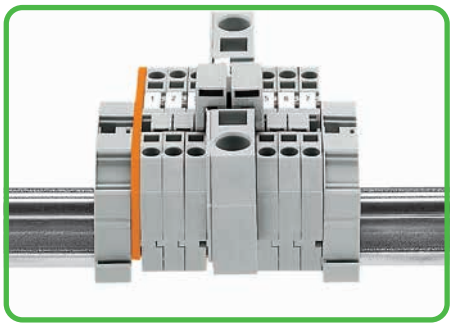
❹ See application notes for:
Banana plug, page 292
Step-down jumper, pages 196 – 197

	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**283-901**	20
blue	**283-904**	20
orange	**283-902**	20
light gray Ex	**283-992** ❸	20
2-conductor ground terminal block		
green-yellow	**283-907**	20
green-yellow Ex	**283-907/999-950** ❸	20

283 Series Accessories

Appropriate marking systems (see Section 13)

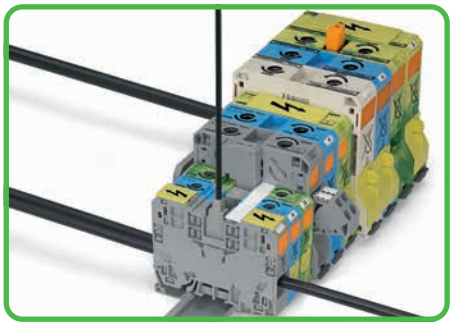
End and intermediate plate, 2.5 mm thick			
	orange	**283-328**	50 (2x25)
	gray	**283-325**	50 (2x25)
	light gray	**283-330**	50 (2x25)
Separator, oversized, 2 mm thick			
	orange	**283-329**	50 (2x25)
	gray	**283-326**	50 (2x25)
	light gray	**283-331**	50 (2x25)
Adjacent jumper, insulated,			
	I_N 70 A		
	gray	**283-402**	50 (2x25)
	yellow-green	**283-422**	50 (2x25)
Alternate jumper, insulated,			
	I_N 76 A		
	gray	**283-409**	50 (2x25)
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**283-415**	50 (2x25)
Finger guard,			
	touchproof cover protects unused conductor entries		
	yellow	**283-400**	100 (4x25)
Step-down jumper, insulated, ❹			
	I_N 32 A		
	gray	**283-414**	50 (2x25)
Cover plate,			
	1 mm thick		
	gray	**283-357**	25
	orange	**283-367**	25
Test plug adapter, 11.6 mm wide,			
	for 1.5 - 16 mm² terminal blocks, for 4 mm Ø test plug		
	gray	**283-404**	25
Banana plug, ❹			
	for socket 4 mm Ø, color mixed		
		215-111	50
Voltage tap, I_N 24 A, with 500 mm cable, for terminal			
	blocks 16 mm² (283/783 Series) and 35 mm² (285/785 Series)		
	gray	**283-407**	25
Screwless end stop,			
	for DIN 35 rail, 6 mm wide		
	gray	**249-116**	100 (4x25)



Commoning with step-down jumpers
A step-down cover plate must be inserted between terminal blocks to be jumpered. Step-down jumper 284-414 commons 16 mm²/AWG 6 terminal blocks with 4 mm²/AWG 12 terminal blocks.

Step-down jumpers are simply pushed down for full insertion, similar to adjacent jumpers.

Note:
The total current flowing shall not exceed the rating of the step-down jumper.



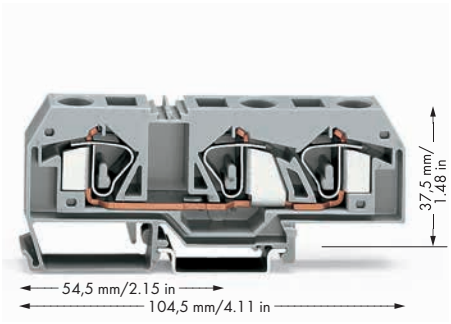
Always push voltage tap (283-407) down into the terminal block until fully inserted!

Certification organizations can be found in the overview on pages 622 and 623.

Through/Ground Conductor and Ex Terminal Blocks 16 mm²
283 Series

0.2 - 16 mm²	AWG 24 - 6
800 V/8 kV/3 ❶	600 V, 65 A
I_N 76 A	600 V, 70 A

Terminal block width 12 mm / 0.472 in
16 - 17 mm / 0.65 in ❷



❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

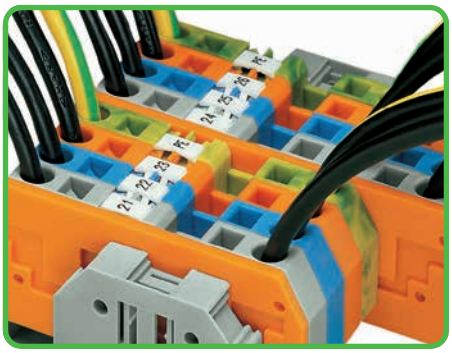
❸ Suitable for Ex e II applications
0.5 mm² - 16 mm²/AWG 20 - 6
550 V, 68 A
(also see Section 14)

	Item No.	Pack. Unit
3-conductor through terminal block		
gray	**283-671**	20
blue	**283-674**	20
orange	**283-672**	20
light gray Ex	**283-998** ❸	20
3-conductor ground terminal block		
green-yellow	**283-677**	20
green-yellow Ex	**283-677/999-950** ❸	20
Notice:		
These terminal blocks cannot be commoned using adjacent jumpers		

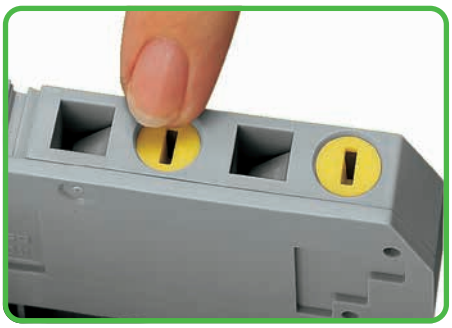
283 Series Accessories

Appropriate marking systems (see Section 13)

End and intermediate plate, 2.5 mm thick			
	orange	**283-352**	50 (2x25)
	gray	**283-350**	50 (2x25)
	light gray	**283-354**	50 (2x25)
Separator, oversized, 2 mm thick			
	orange	**283-353**	50 (2x25)
	gray	**283-351**	50 (2x25)
	light gray	**283-355**	50 (2x25)
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**283-415**	50 (2x25)
Finger guard,			
	touchproof cover protects unused conductor entries		
	yellow	**283-400**	100 (4x25)
Screwless end stop,			
	for DIN 35 rail, 6 mm wide		
	gray	**249-116**	100 (4x25)
Screwless end stop,			
	for DIN 35 rail, 10 mm wide		
	gray	**249-117**	50 (2x25)



The markers are not covered by the wiring when marking terminal blocks in center position.



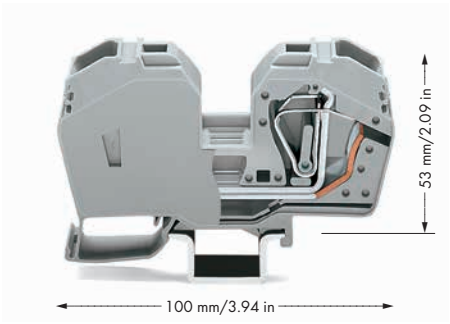
Inserting a finger guard seals unused conductor entries.

Through/Ground Conductor and Ex Terminal Blocks 35 mm²
285 Series

CAGE CLAMP®

6 - 35 mm²	AWG 8 - 2
1000 V/8 kV/3 ❶	600 V, 115 A
I_N 125 A	600 V, 120 A

Terminal block width 16 mm / 0.63 in
23 mm / 0.91 in ❷



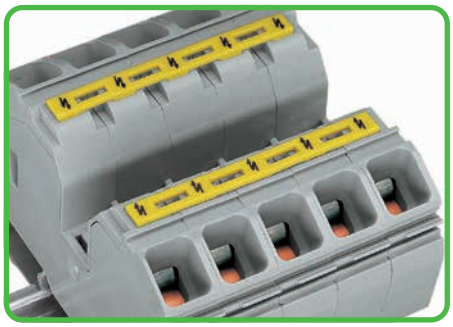

Terminating a 35 mm²/AWG 2 conductor.

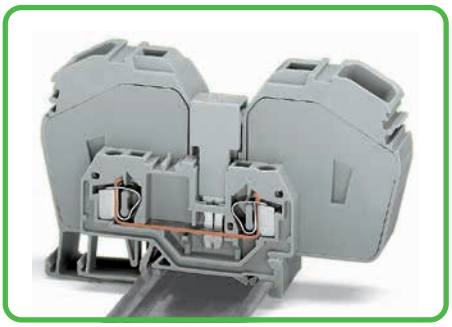
❶ 1000 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex e II applications
6 mm² - 35 mm²/AWG 8 - 2
880 V, 85 A
6 mm² - 25 mm²/AWG 8 - 4
for ground conductor terminal blocks
(also see Section 14)

	Item No.	Pack. Unit
2-conductor through terminal block,		
with integrated end plate,		
to be used exclusively on DIN 35 x 15 rail		
gray	**285-635**	15
blue	**285-634**	15
light gray Ex	**285-992** ❸	15
2-conductor ground terminal block,		
with integrated end plate,		
to be used exclusively on DIN 35 x 15 rail		
green-yellow	**285-637**	15
green-yellow Ex	**285-637/999-950** ❸	15

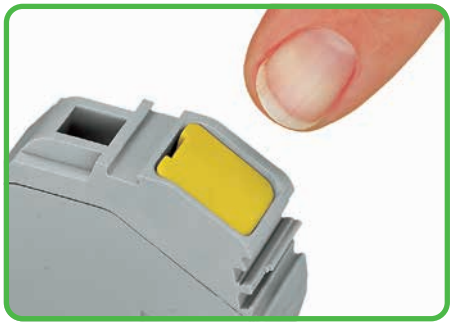

Protective warning markers inserted into the operating slots.

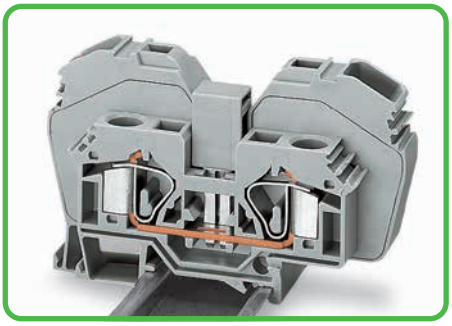

Commoning a 285 Series terminal block (35 mm²/AWG 2) with a 281 Series terminal block (4 mm²/AWG 12) using a 283-414 step-down jumper.
Step-down jumpers are simply pushed down for full insertion, similar to adjacent jumpers.
Note:
The total current flowing shall not exceed the rating of the step-down jumper.

285 Series Accessories

Appropriate marking systems:
WMB/Miniature WSB/WFB

Adjacent jumper, insulated,			
	I_N 85 A		
	gray	**285-435**	50 (2x25)
Step-down jumper, insulated,			
	I_N 32 A		
	gray	**283-414**	50 (2x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**285-416**	50 (2x25)
Finger guard,			
	touchproof cover protects unused conductor entries		
	yellow	**285-401**	100
Voltage tap, I_N 24 A, with 500 mm cable, for terminal			
	blocks 16 mm² (283/783 Series) and		
	35 mm² (285/785 Series)		
	gray	**283-407**	25
Screwless end stop,			
	for DIN 35 rail,		
	6 mm wide		
	gray	**249-116**	100 (4x25)
Screwless end stop,			
	for DIN 35 rail,		
	10 mm wide		
	gray	**249-117**	50 (2x25)


Inserting a finger guard seals unused conductor entries.


285 Series terminal blocks can be commoned with 283 Series terminal blocks: 285-635 or 285-634 with 283-601 or 283-604
(for terminal blocks with side marking, see www.wagocatalog.com).
Jumper required: 285-435.

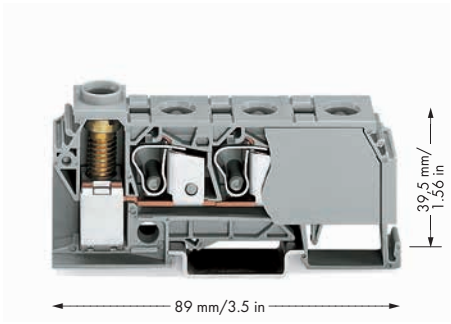
Please note that the nominal current of adjacent jumper shall not exceed 63A.

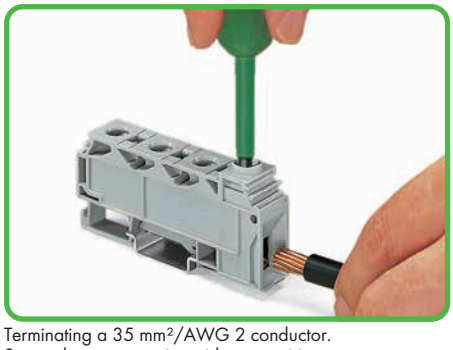
Certification organizations can be found in the overview on pages 622 and 623.

Distribution Terminal blocks 3 x 10 mm² CAGE CLAMP® Connection and 1 x 35 mm² Screw-Clamp Connection 284 Series

0.2 - 10 mm² ❶	AWG 24 - 8
6 - 35 mm² ❷	AWG 10 - 2

800 V/8 kV/3 ❸
I_N 125 A
Terminal block width 17.5 mm / 0.689 in
12 - 14 mm / 0.51 in ❹





Terminating a 35 mm²/AWG 2 conductor.
Screw-clamp connection, side-entry wiring.

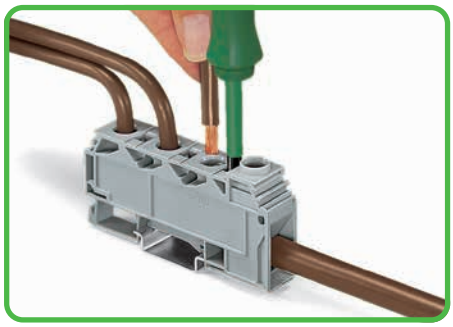
❶ CAGE CLAMP® connection
❷ Screw-clamp connection
❸ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)
❹ Strip length, see packaging or instructions.
❺ Individual arrangement: 125 A
Two jumpers combined in one clamping unit: 100 A

	Item No.	Pack. Unit
Distribution terminal block, with 3 x CAGE CLAMP® connection 10 mm² and 1 x screw-clamp connection 35 mm², Screw torque: 3.5 Nm		
gray	**284-621**	15
blue	**284-624**	15

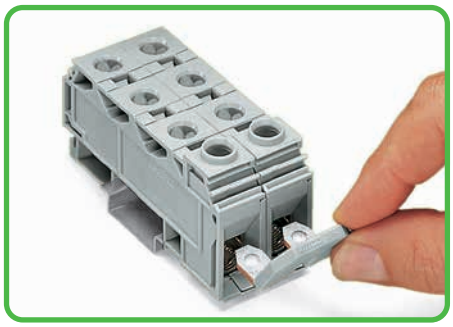
Accessories for Distribution Terminal Blocks

Appropriate marking system: WMB

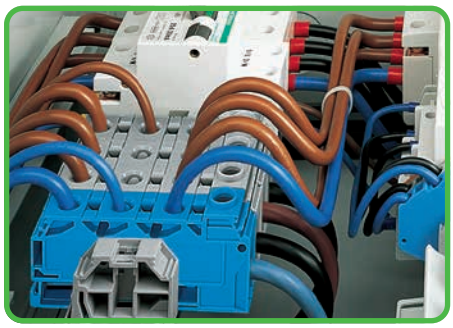
Comb-style jumper bar, insulated, ❺ I_N 125 A for 1 jumper, I_N 100 A for 2 jumpers		
gray	**284-412**	100 (4x25)
Screwless end stop, for DIN 35 rail, 6 mm wide		
gray	**249-116**	100 (4x25)
Screwless end stop, for DIN 35 rail, 10 mm wide		
gray	**249-117**	50 (2x25)



Terminating a 10 mm²/AWG 8 conductor
CAGE CLAMP® connection, front-entry wiring.



Commoning with comb-style jumper bar.

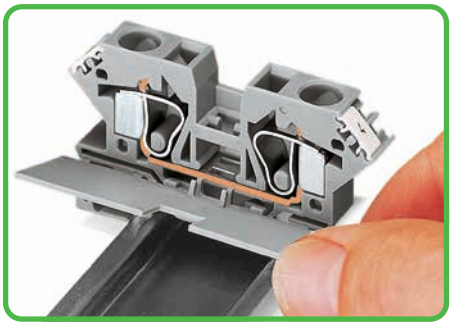


Rail-mounted distribution terminal block with 35 mm²/AWG 2 screw-clamp connection (front-entry) and 3 x 10 mm²/AWG 8 front-entry CAGE CLAMP® connection.
Snaps onto DIN 35 carrier rails per EN 60675. The terminal block enclosed on both sides, an end or intermediate plate is not necessary.

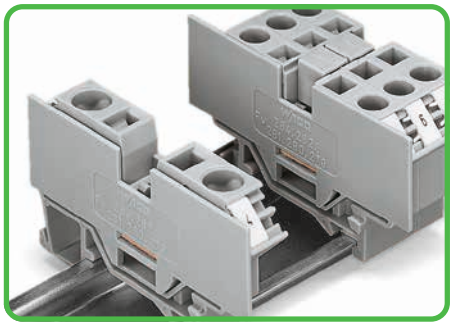
In case of maximum wiring with 3 x 10 mm²/AWG 8 on the distribution side the nominal current of 125A shall not be exceeded.

Certification organizations can be found in the overview on pages 622 and 623.

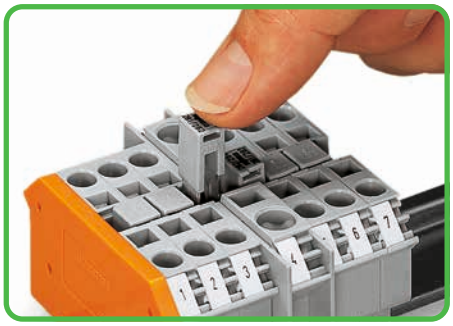
Step-Down Jumpers for Front-Entry Through Terminal Blocks up to 16 mm²
Front-entry terminal blocks cannot be commoned with side-entry terminal blocks



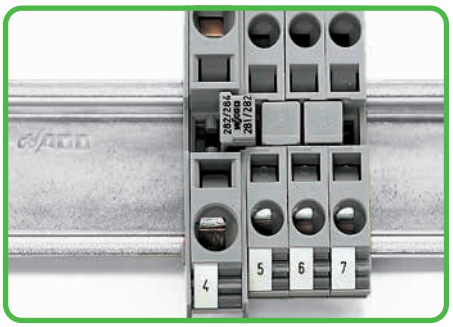
Cover plate snapped onto open side of terminal block.



Always use a cover plate also on the other side of the larger terminal block.



Commoning terminal blocks of different sizes – step down.
Push down the step-down jumper until fully inserted.



Note: Jumpers are marked with suitable terminal block sizes for correct installation.

Step-down jumpers may common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point.

Step-down jumpers are simply pushed down for full insertion, similar to adjacent jumpers. Commoning may be made in either direction using the special thin end plate to cover the open side. Further terminal blocks of the smaller cross section may be commoned using standard adjacent jumpers.

In this case, pay attention that:
1. The total current flowing does not exceed the rating of the step-down jumper.
2. The standard or special thin cover plate is installed on the open side of the larger block.



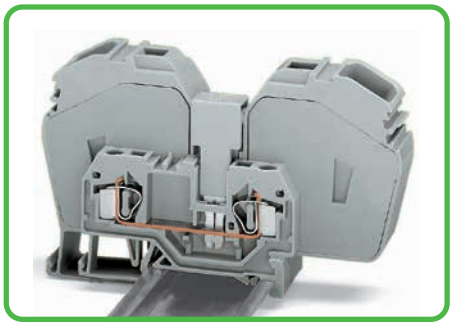
Step-down jumper commoning from 10/6 mm² (AWG 8/10) to with 4/2.5/1.5 mm² (AWG 12/14/16) terminal blocks.
I_N 15 A **284-414**



Step-down jumper commoning from 10/6 mm² (AWG 8/10) to 6/4 mm² (AWG 10/12) terminal blocks.
I_N 30 A **284-413**

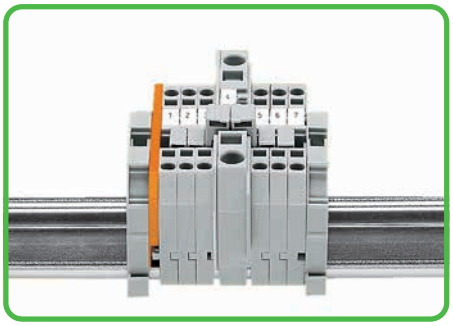


Step-down jumper commoning from 16 mm² (AWG 6) to 4 mm² (AWG 12) terminal blocks.
I_N 32 A **283-414**

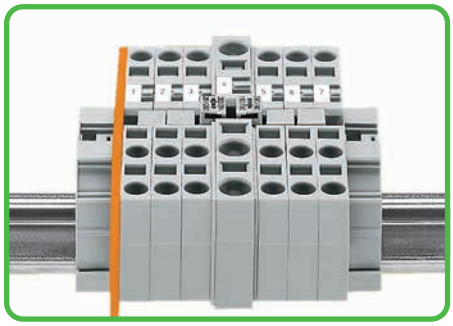


The **283-414** step-down jumper can even common 35 mm² (AWG 2) **285-635** through terminal blocks with 4 mm² (AWG 12) **281-901** through terminal blocks.
For 35 mm²/AWG 12 through terminal blocks,
see page 194.

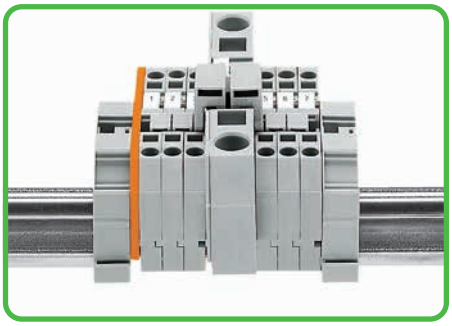
Examples of Assembly



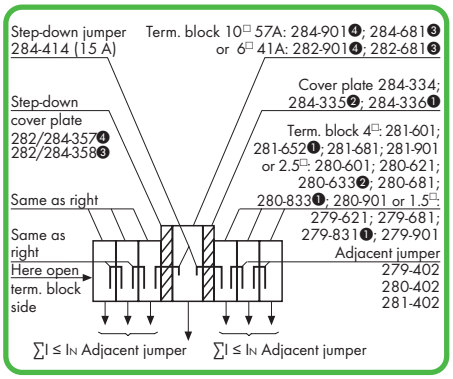
Commoning from 6 mm²/AWG 10 (282 Series) to 1.5 mm²/AWG 16 (279 Series) rail-mount terminal blocks.



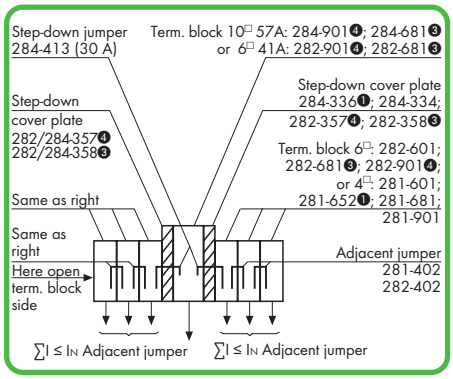
Commoning from 10 mm²/AWG 8 (284 Series) to 6 mm²/AWG 10 (282 Series) rail-mount terminal blocks.



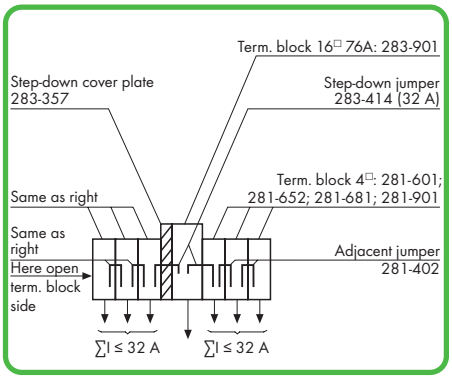
Commoning from 16 mm²/AWG 6 (283 Series) to 4 mm²/AWG 12 (281 Series) rail-mount terminal blocks.



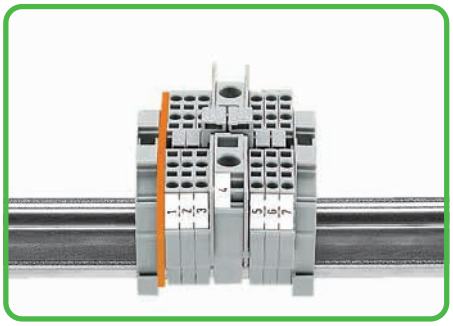
Example of assembly: "Commoning from 10/6 mm² (AWG 8/10) to 4/2.5/1.5 mm² (AWG 12/14/16) rail-mount terminal blocks with 284-414 step-down jumper."



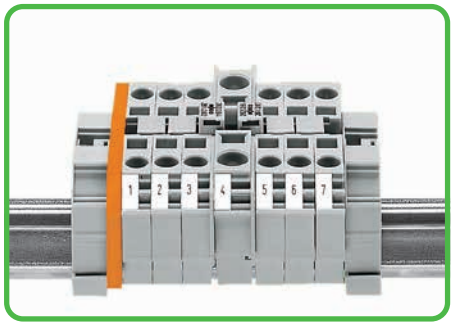
Example of assembly: "Commoning from 10/6 mm² (AWG 8/10) to 6 mm² (AWG 10) rail-mount terminal blocks with 284-413 step-down jumper."



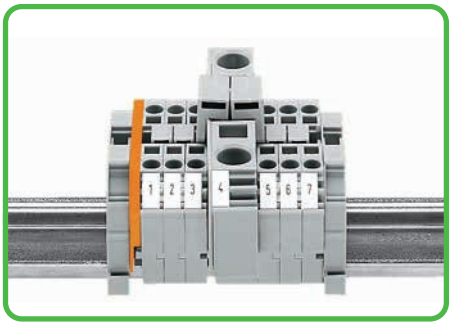
Example of assembly: "Commoning from 16 mm² (AWG 6) to 4 mm² (AWG 12) rail-mount terminal blocks with 283-414 step-down jumper."



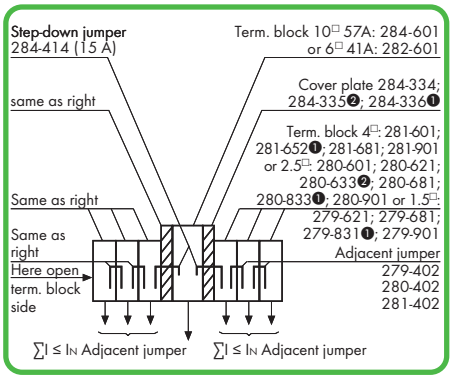
Commoning from 6 mm²/AWG 10 (282 Series) to 1.5 mm²/AWG 16 (279 Series) rail-mount terminal blocks.



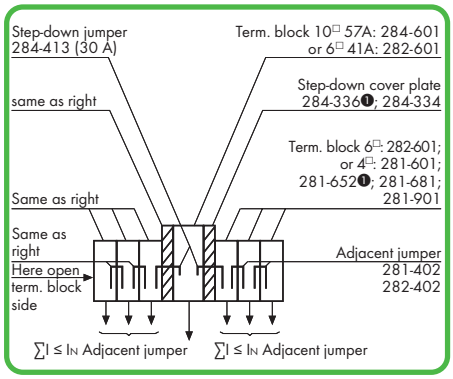
Commoning from 10 mm²/AWG 8 (284 Series) to 6 mm²/AWG 10 (282 Series) rail-mount terminal blocks.



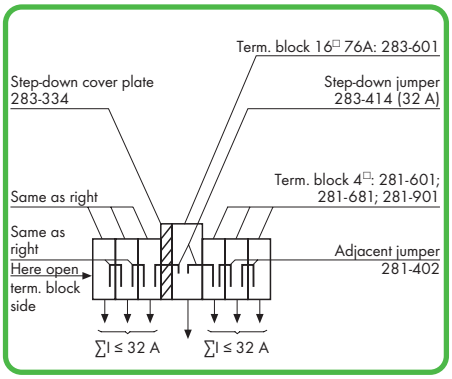
Commoning from 16 mm²/AWG 6 (283 Series) to 4 mm²/AWG 12 (281 Series) rail-mount terminal blocks.



Example of assembly: "Commoning from 10/6 mm² (AWG 8/10) to 4/2.5/1.5 mm² (AWG 12/14/16) rail-mount terminal blocks with 284-414 step-down jumper."



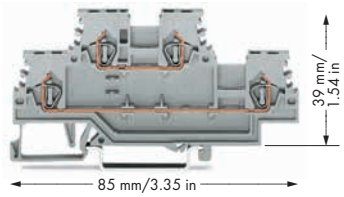
Example of assembly: "Commoning from 10/6 mm² (AWG 8/10) to 6 mm² (AWG 10) rail-mount terminal blocks with 284-413 step-down jumper."

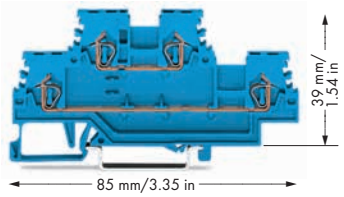


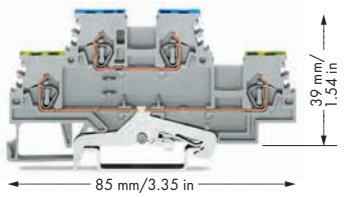
Example of assembly: "Commoning from 16 mm² (AWG 6) to 4 mm² (AWG 12) rail-mount terminal blocks with 283-414 step-down jumper."

Double-Deck Terminal Blocks 1.5 mm²
279 Series

0.08 - 1.5 mm² | AWG 28 - 16 500 V/6 kV/3 ❶ | 300 V, 10 A I_N 18 A Terminal block width 4 mm / 0.157 in 8 - 9 mm / 0.33 in ❷	0.08 - 1.5 mm² | AWG 28 - 16 500 V/6 kV/3 ❶ | 300 V, 10 A I_N 18 A Terminal block width 4 mm / 0.157 in 8 - 9 mm / 0.33 in ❷	0.08 - 1.5 mm² | AWG 28 - 16 500 V/6 kV/3 ❶ I_N 18 A Terminal block width 4 mm / 0.157 in 8 - 9 mm / 0.33 in ❷



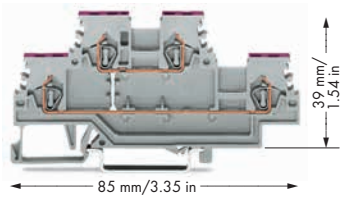


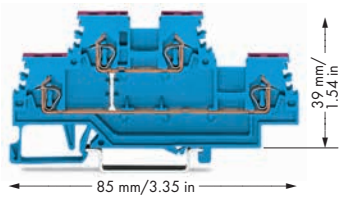


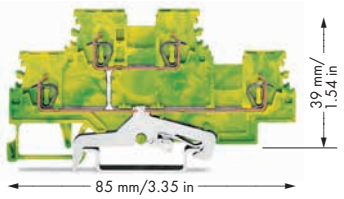
Item No.		Pack. Unit
Through/through terminal block,		
gray housing		
L/L	**279-501**	50
N/L	**279-512**	50
L/N	**279-513**	50

Item No.		Pack. Unit
Through/through terminal block,		
blue housing		
N/N	**279-504** ❸	50

Item No.		Pack. Unit
Ground conductor/through terminal block,		
gray housing		
PE/N	**279-517**	50
PE/L	**279-527**	50







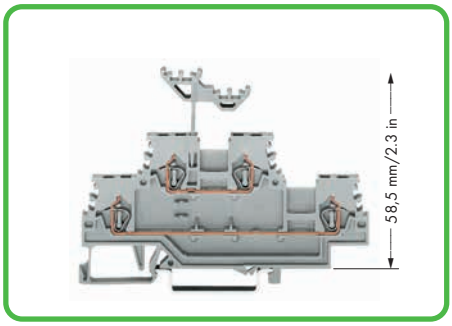
Item No.		Pack. Unit
4-conductor through terminal block,		
internal commoning,		
conductor entry position colored in violet,		
gray housing		
L	**279-508**	50

Item No.		Pack. Unit
4-conductor through terminal block,		
internal commoning,		
conductor entry position colored in violet,		
blue housing		
N	**279-509** ❸	50

Item No.		Pack. Unit
4-conductor ground terminal block,		
internal commoning,		
green-yellow housing		
PE	**279-507**	50

Certification organizations can be found in the overview on pages 622 and 623.

Accessories
Double-Deck Terminal Blocks



Double-deck marker carrier
Height including WSB double-deck marker carrier

❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ See application notes for:
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294

279 Series Accessories

Appropriate marking systems: WMB/WMB Inline
(see Section 13)

End and intermediate plate, 2 mm thick



orange	**279-519**	100 (4x25)
gray	**279-518**	100 (4x25)

Insulation stop,

❹ 

5 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")

white	**279-470**	200 (8x25)

Insulation stop,

❹ 

5 pcs/strip,
0.25 mm²

dark gray	**279-471**	200 (8x25)

Adjacent jumper, insulated,



I_N 15 A

gray	**279-402**	200 (8x25)

Alternate jumper, insulated,



I_N 15 A

gray	**279-409**	100 (4x25)

Double-deck marker carrier



gray	**279-529**	50 (2x25)

Comb-style jumper bar, insulated,

❹ 

I_N = I_N terminal block

2-way	**279-482**	200 (8x25)
3-way	**279-483**	200 (8x25)

Comb-style jumper bar, insulated,



I_N = I_N terminal block

10-way	**279-490**	50 (2x25)

Alternate comb-style jumper bar,



insulated,
I_N = I_N terminal block

2-way	**279-492**	200 (8x25)

Operating tool, of insulating material



2-way	**279-432**	1
3-way	**279-433**	1

Operating tool, of insulating material



10-way	**279-440**	1

WMB Inline, plain,



stretchable 4 - 4.2 mm,
2,000 WMB markers, 4 mm, on roll

white	**2009-114**	1

WMB Multi marking system,

10 strips with 10 markers per card,
stretchable 4 - 4.2 mm

plain	**793-4501**	5

WMB Multi marking system, plain,



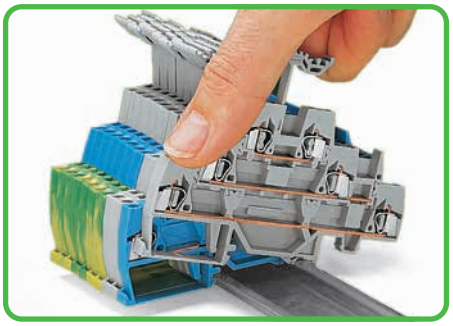
10 strips with 10 markers per card,
stretchable 4 - 4.2 mm

yellow	**793-4501/000-002**	
red	**793-4501/000-005**	
blue	**793-4501/000-006**	
gray	**793-4501/000-007**	
orange	**793-4501/000-012**	
light green	**793-4501/000-017**	
green	**793-4501/000-023**	
violet	**793-4501/000-024**	

5

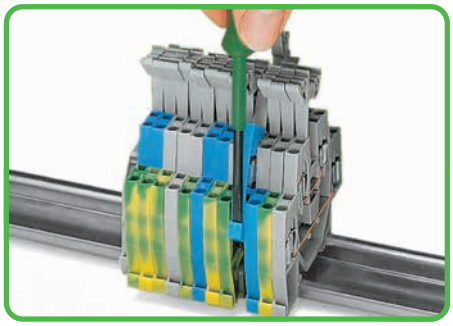
Double- and Triple-Deck Terminal Blocks, 280 and 281 Series
– Description and Handling –

Assembly



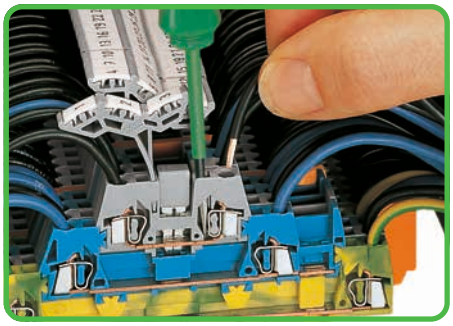
Snapping a terminal block onto the carrier rail.

Removal



Removing a terminal block from the assembly.

Conductor termination



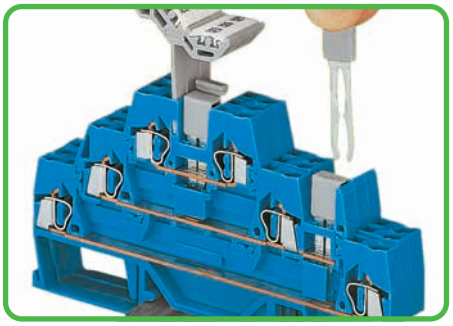
Conductor termination

Commoning

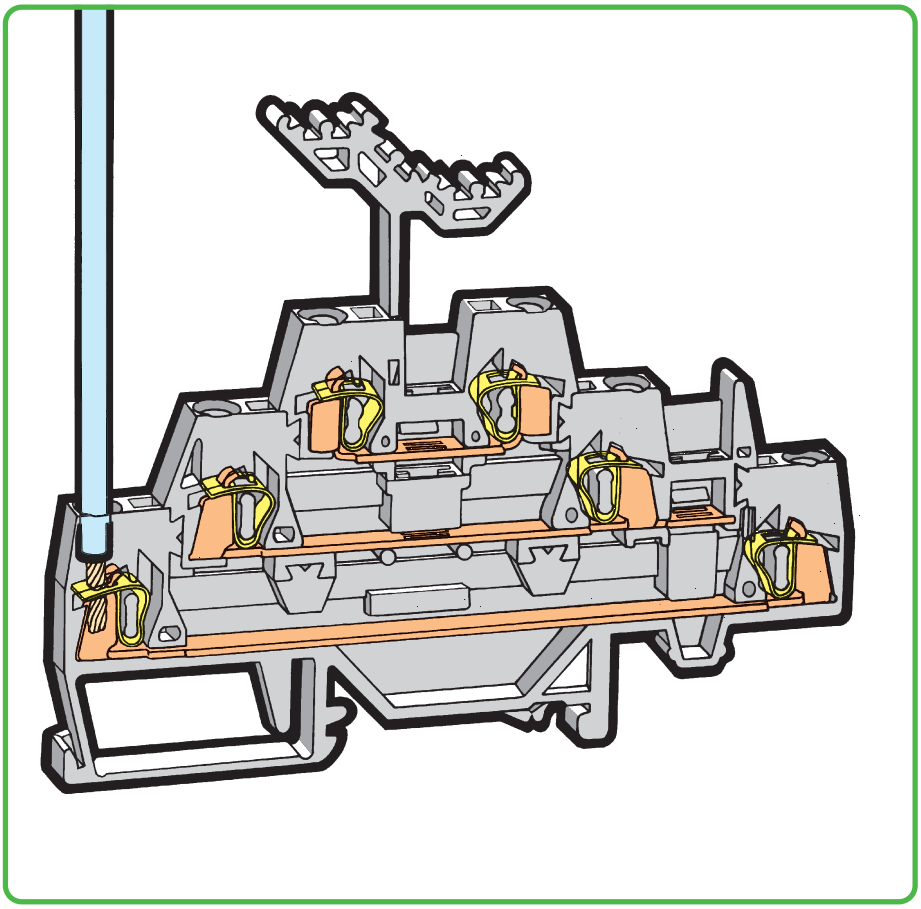


Commoning with 280-402 adjacent jumpers.
Push down the adjacent jumper until fully inserted.

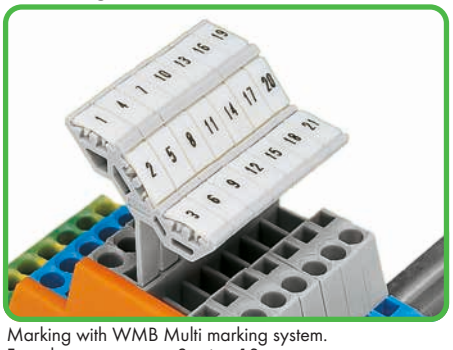
Commoning



Commoning with vertical and adjacent jumpers.

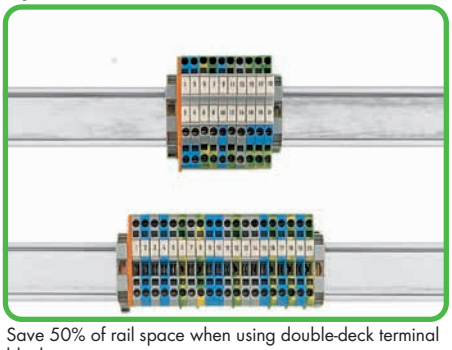


Marking



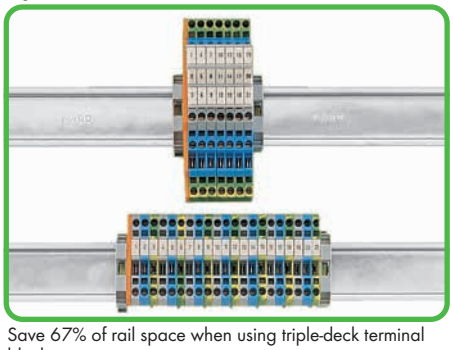
Marking with WMB Multi marking system.
For other systems, see Section 13.

Space saver



Save 50% of rail space when using double-deck terminal blocks.

Space saver



Save 67% of rail space when using triple-deck terminal blocks.

CAGE CLAMP® clamps the following copper conductors:*

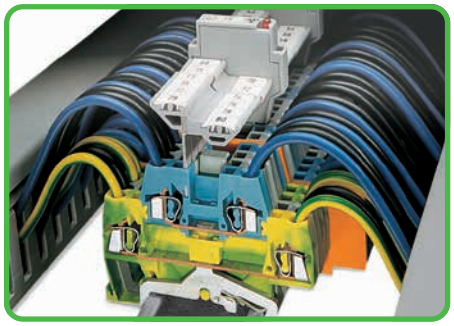
solid	stranded	fine-stranded, also with tinned single strands	fine-stranded, tip-bonded	fine-stranded, with ferrule ❶ (gastight crimped)	fine-stranded, with pin terminal (gastight crimped)

* For aluminum conductors, see notes in Section 14.

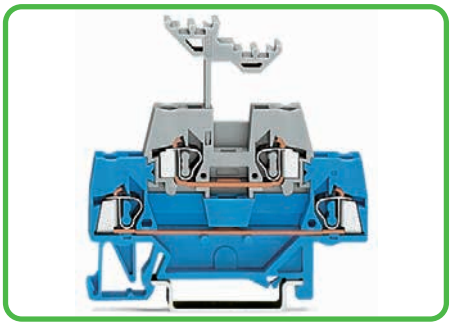
❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.



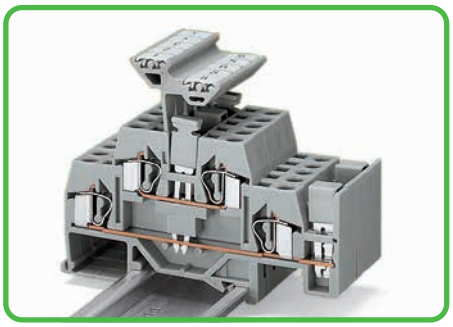
The flexible marker carrier, which is placed above the wiring level, can be pushed aside during wiring or commoning. The marker carrier has two levels for two different markers relating to double-deck terminal blocks.



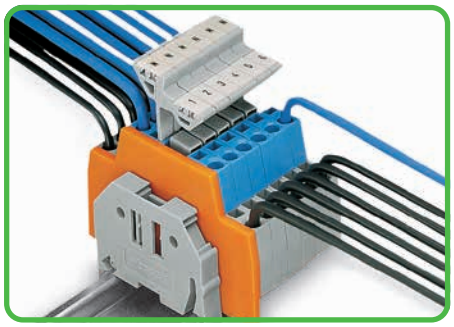
Example of a mixed assembly with double-deck terminal blocks.
The 280 Series double-deck terminal blocks, are available with decks of same or different color according to the function. This is an additional visual aid during wiring or possible service/maintenance.



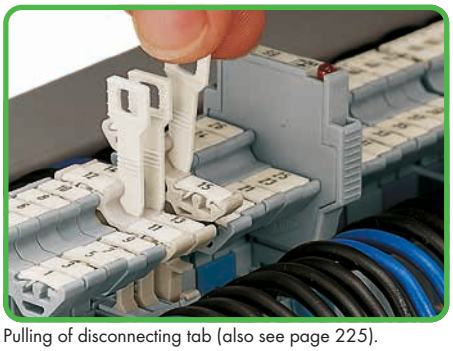
Double-deck terminal blocks accommodate two circuits of different potentials in one 2-level terminal block; different circuits can be differentiated by color coding either level for the 280 Series. The lower deck is wider than the upper, for ease of wiring.



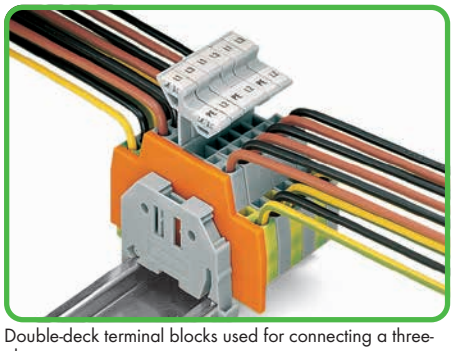
Standard insulated push-in jumpers can be used for commoning. A vertical jumper allows commoning of upper and lower level, providing a 4-conductor feedthrough terminal block in one housing. Two adjacent terminals may be commoned together on the same level using a push-in adjacent jumper.



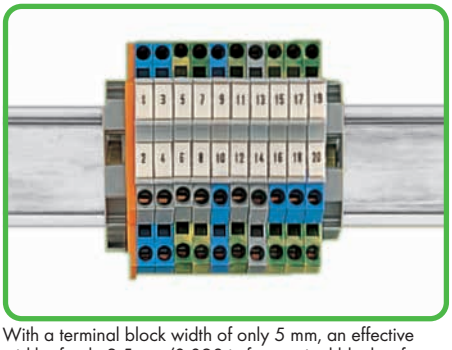
Double-deck terminal blocks used as control wire terminals; e.g., for magnetic valves. Upper deck commoned.



Pulling of disconnecting tab (also see page 225).



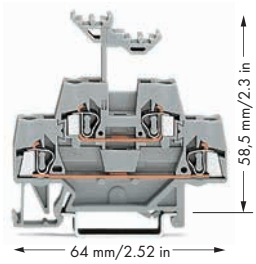
Double-deck terminal blocks used for connecting a three-phase motor.



With a terminal block width of only 5 mm, an effective width of only 2.5 mm/0.098 in for terminal blocks of same or different potential can be realized at a cross sectional area of 0.08 mm² to 2.5 mm² (AWG 28 - 14)!

Double-Deck Terminal Blocks 2.5 mm²
280 Series

0.08 - 2.5 mm²	AWG 28 - 12 *	
500 V/6 kV/3 ❶	300 V, 15 A	
I_N 20 A	300 V, 20 A	
Terminal block width 5 mm / 0.197 in		
8 - 9 mm / 0.33 in ❷		



Item No.		Pack. Unit
Through/through terminal block		
gray	**280-519**	50
blue	**280-529** ❸	50
Other terminal blocks with the same profile:		
Diode	**280-940/281-410**	Page 280
LED	**280-943/281-434**	Page 280

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick

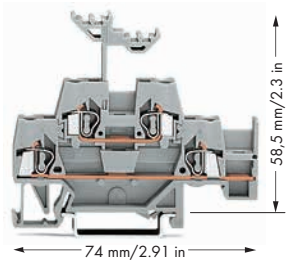
orange	**280-341**	100 (4x25)
gray	**280-340**	100 (4x25)

Intermediate plate,

1.1 mm thick

orange	**280-366**	100 (4x25)

0.08 - 2.5 mm²	AWG 28 - 12 *	
500 V/6 kV/3 ❶	300 V, 15 A	
I_N 20 A	300 V, 20 A	
Terminal block width 5 mm / 0.197 in		
8 - 9 mm / 0.33 in ❷		



Item No.		Pack. Unit
Through/through terminal block with horizontal jumpering on lower level		
gray	**280-520**	50
blue	**280-530** ❸	50

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick

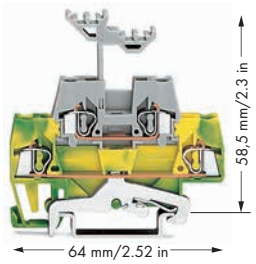
orange	**280-343**	100 (4x25)
gray	**280-342**	100 (4x25)

Intermediate plate,

1.1 mm thick

orange	**280-369**	100 (4x25)

0.08 - 2.5 mm²	AWG 28 - 12 *	
500 V/6 kV/3 ❶		
I_N 20 A	300 V, 20 A	
Terminal block width 5 mm / 0.197 in		
8 - 9 mm / 0.33 in ❷		



Item No.		Pack. Unit
Ground conductor/through terminal block		
green-yellow/gray	**280-527**	50
green-yellow/blue	**280-537**	50

Item-Specific Accessories

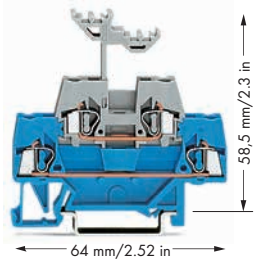
End and intermediate plate, 2.5 mm thick

orange	**280-341**	100 (4x25)
gray	**280-340**	100 (4x25)

Intermediate plate,

1.1 mm thick

orange	**280-366**	100 (4x25)



Item No.		Pack. Unit
Through/through terminal block		
blue/gray	**280-523**	50
gray/blue	**280-533**	50

Item-Specific Accessories

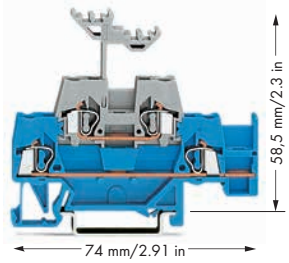
End and intermediate plate, 2.5 mm thick

orange	**280-341**	100 (4x25)
gray	**280-340**	100 (4x25)

Intermediate plate,

1.1 mm thick

orange	**280-366**	100 (4x25)



Item No.		Pack. Unit
Through/through terminal block with horizontal jumpering on lower level		
blue/gray	**280-524**	50
gray/blue	**280-534**	50

Item-Specific Accessories

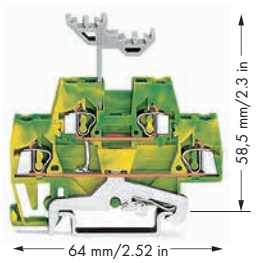
End and intermediate plate, 2.5 mm thick

orange	**280-343**	100 (4x25)
gray	**280-342**	100 (4x25)

Intermediate plate,

1.1 mm thick

orange	**280-369**	100 (4x25)



Item No.		Pack. Unit
4-conductor ground terminal block, internal commoning		
green-yellow	**280-517**	50

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick

orange	**280-341**	100 (4x25)
gray	**280-340**	100 (4x25)

Intermediate plate,

1.1 mm thick

orange	**280-366**	100 (4x25)

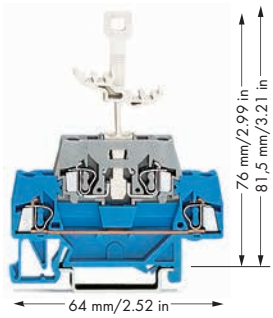
Certification organizations can be found in the overview on pages 622 and 623.

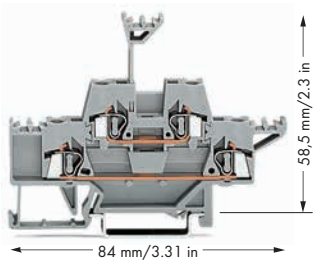
0.08 - 2.5 mm²	AWG 28 - 12 *
400 V/6 kV/3 ❶	300 V, 15 A
I_N 10 A	300 V, 20 A

Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❷

0.08 - 2.5 mm²	AWG 28 - 12 *
500 V/6 kV/3 ❶	300 V, 15 A
I_N 20 A	300 V, 20 A

Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❷





* AWG 12: THHN, THWN

❶ 500 V/400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ See application notes for:
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294

	Item No.	Pack. Unit
Through/disconnect terminal block		
blue/gray	**280-525**	50
gray/gray	**280-521**	50

	Item No.	Pack. Unit
Through/through terminal block with additional marking options on both sides of the terminal block		
gray	**280-513**	50

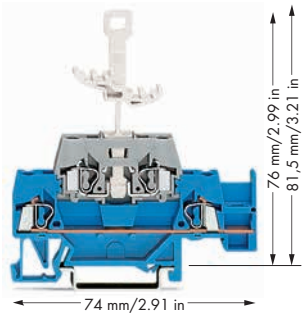
Item-Specific Accessories

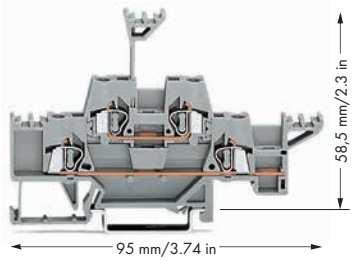
End and intermediate plate, 2.5 mm thick

	Item No.	Pack. Unit
orange	**280-341**	100 (4x25)
gray	**280-340**	100 (4x25)

Intermediate plate,
1.1 mm thick

	Item No.	Pack. Unit
orange	**280-366**	100 (4x25)





	Item No.	Pack. Unit
Through/disconnect terminal block with horizontal jumpering on lower level		
blue/gray	**280-526**	50
gray/gray	**280-522**	50

	Item No.	Pack. Unit
Through/through terminal block with horizontal jumpering on lower level		
gray	**280-543**	50

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick

	Item No.	Pack. Unit
orange	**280-343**	100 (4x25)
gray	**280-342**	100 (4x25)

Intermediate plate,
1.1 mm thick

	Item No.	Pack. Unit
orange	**280-369**	100 (4x25)

280 Series Accessories

Appropriate marking systems (see Section 13)

Insulation stop, ❹
5 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **280-470** 200 (8x25)

Insulation stop, ❹
5 pcs/strip,
0.25 - 0.5 mm²
light gray **280-471** 200 (8x25)

Insulation stop, ❹
5 pcs/strip,
0.75 - 1 mm²
dark gray **280-472** 200 (8x25)

Adjacent jumper, insulated,
I_N = I_N terminal block
gray **280-402** 200 (8x25)
yellow-green **280-422** 200 (8x25)

Alternate jumper, insulated,
I_N = I_N terminal block
gray **280-409** 100 (4x25)

Vertical jumper, insulated,
I_N 24 A
gray **281-421** 200 (8x25)

Comb-style jumper bar, insulated, ❹
I_N = I_N terminal block
2-way **280-482** 200 (8x25)
3-way **280-483** 200 (8x25)

Comb-style jumper bar, insulated,
I_N = I_N terminal block
10-way **280-490** 50 (2x25)

Alternate comb-style jumper bar,
insulated,
I_N = I_N terminal block
2-way **280-492** 200 (8x25)

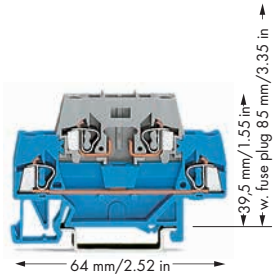
Operating tool, of insulating material
2-way **280-432** 1
3-way **280-433** 1

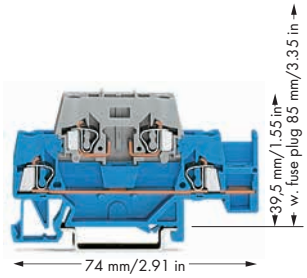
Operating tool, of insulating material
10-way **280-440** 1

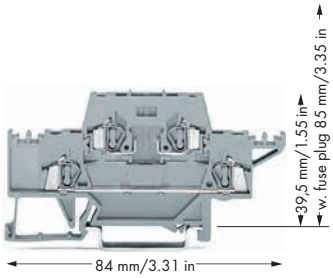
Screwless end stop,
for DIN 35 rail,
6 mm wide
gray **249-116** 100 (4x25)

Carrier Double- and Triple-Deck Terminal Blocks for Fuse Plugs 2.5 mm² 280 Series

0.08 - 2.5 mm²	AWG 28 - 12 *	0.08 - 2.5 mm²	AWG 28 - 12 *	0.08 - 2.5 mm²	AWG 28 - 12 *
400 V/6 kV/3 ❶ ❷	300 V, 15 A	400 V/6 kV/3 ❶ ❷	300 V, 15 A	400 V/6 kV/3 ❶ ❷	
I_N 10 A (20 A)	300 V, 20 A	I_N 10 A (20 A)	300 V, 20 A	I_N 10 A (10 A)	
Terminal block width 5 mm / 0.197 in		Terminal block width 5 mm / 0.197 in		Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❸		8 - 9 mm / 0.33 in ❸		8 - 9 mm / 0.33 in ❸	







	Item No.	Pack. Unit
Through/carrier terminal block for pluggable fuse modules		
blue/gray	**280-531**	50
gray/gray	**280-514**	50

	Item No.	Pack. Unit
Through/carrier terminal block for pluggable fuse modules with horizontal jumpering on lower level		
blue/gray	**280-532**	50
gray/gray	**280-891**	50

	Item No.	Pack. Unit
Through/carrier terminal block for pluggable fuse modules		
gray/gray	**280-528**	50

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick



orange	**280-341**	100 (4x25)
gray	**280-340**	100 (4x25)

Intermediate plate,



1.1 mm thick

orange	**280-366**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick



orange	**280-343**	100 (4x25)
gray	**280-342**	100 (4x25)

Intermediate plate,



1.1 mm thick

orange	**280-369**	100 (4x25)

Adjacent jumper, insulated,



$I_N = I_N$ terminal block

gray	**280-402**	200 (8x25)

Alternate jumper, insulated,



$I_N = I_N$ terminal block

gray	**280-409**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick



orange	**280-341**	100 (4x25)
gray	**280-340**	100 (4x25)

Intermediate plate,



1.1 mm thick

orange	**280-366**	100 (4x25)

Accessories

Appropriate marking system for fuse plugs
WSB Quick marking system

Insulation stop,

❹ 

5 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")

white	**280-470**	200 (8x25)

Insulation stop,

❹ 

5 pcs/strip,
0.25 - 0.5 mm²

light gray	**280-471**	200 (8x25)

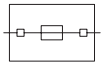
Insulation stop,

❹ 

5 pcs/strip,
0.75 - 1 mm²

dark gray	**280-472**	200 (8x25)

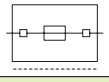
Fuse plug with pull-tab,



6 mm wide

281-511	50

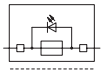
Fuse plug with pull-tab,



6 mm wide

281-512	50

Fuse plug with pull-tab, 24 V AC/DC,



with LED indicator, 6 mm wide

281-512/281-501	50

Comb-style jumper bar, insulated,

❹ 

$I_N = I_N$ terminal block

2-way	**280-482**	200 (8x25)
3-way	**280-483**	200 (8x25)

Alternate comb-style jumper bar,



insulated,
$I_N = I_N$ terminal block

2-way	**280-492**	200 (8x25)

Operating tool, of insulating material



2-way	**280-432**	1
3-way	**280-433**	1

WSB Quick marking system,



for fuse plug 281-5..,
WSB Markers 4 mm wide

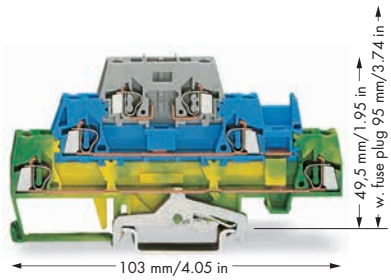
F1, ..., F10 (10x)	**209-787**	5
F11, ..., F20 (10x)	**209-700/209-124**	
F21, ..., F30 (10x)	**209-700/209-125**	
F31, ..., F40 (10x)	**209-700/209-126**	
F41, ..., F50 (10x)	**209-700/209-127**	

5

Certification organizations can be found in the overview on pages 622 and 623.

0.08 - 2.5 mm²	AWG 28 - 12 *
400 V/6 kV/3 ❶ ❷	300 V, 15 A
I_N 20 A (20 A)	600 V, 20 A

Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❸



* AWG 12: THHN, THWN

❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Electrical ratings are given by the fuse or nominal voltage of the LED (also see pages 254 – 255).

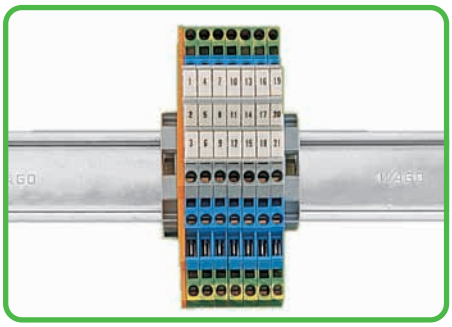
❸ Strip length, see packaging or instructions.

❹ See application notes for:
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294

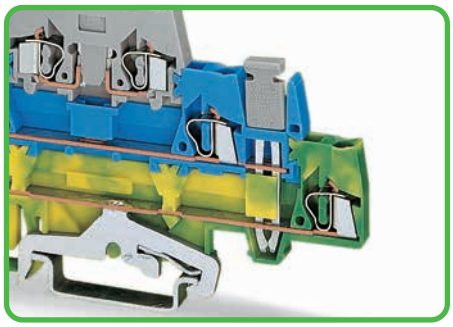
	Item No.	Pack. Unit
Ground conductor/through/carrier terminal block for fuse plugs		
green-yellow/blue/gray	**280-510**	50
Through/through/carrier terminal block for fuse plugs		
gray/gray/gray	**280-889**	50

Item-Specific Accessories

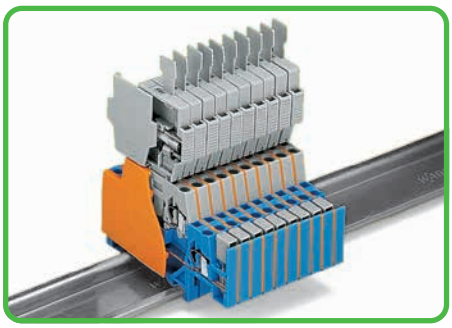
End and intermediate plate, 2.5 mm thick		
orange	**280-304**	50 (2x25)
gray	**280-303**	50 (2x25)
Intermediate plate, 1.1 mm thick		
orange	**280-336**	50 (2x25)
Adjacent jumper, insulated, I_N = I_N terminal block		
gray	**280-402**	200 (8x25)
Alternate jumper, insulated, I_N = I_N terminal block		
gray	**280-409**	100 (4x25)
Vertical jumper, insulated, I_N 24 A		
gray	**281-421**	200 (8x25)
WSB Quick marking system, 10 strips with 10 markers per card, WSB Markers 4 mm wide		
plain	**209-701**	5
WSB Quick marking system, plain, 10 strips with 10 markers per card, WSB Markers 4 mm wide		
yellow	**209-701/000-002**	
red	**209-701/000-005**	
blue	**209-701/000-006**	
gray	**209-701/000-007**	
orange	**209-701/000-012**	
light green	**209-701/000-017**	
green	**209-701/000-023**	
violet	**209-701/000-024**	
		5



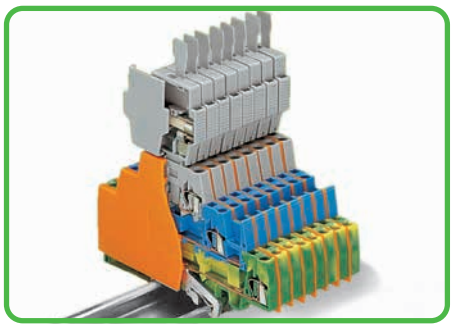
Double- (triple-) deck terminal blocks accommodate two (three) circuits of different potentials in one 2-(3-) level terminal block; different circuits can be differentiated by color coding either level for the 280 Series. The lower deck is wider than the upper, for ease of wiring.



Grounding to carrier rail.
Connecting N-level to ground level via vertical jumper



When double-deck terminal blocks are used with a fuse plug (width 6 mm) in the receptacle (top) level, the extra width can be compensated for the 280 Series (width 5 mm) via an intermediate plate (thickness 1.1 mm).
If required, this special intermediate plate still allows jumpering on the lower level via push-in adjacent jumpers (280-402).



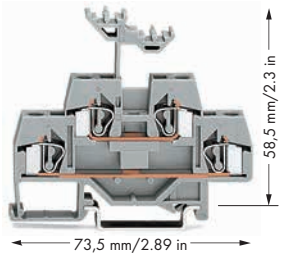
When triple-deck terminal blocks are used with a fuse plug (width 6 mm) in the receptacle (top) level, the extra width can be compensated for the 280 Series (width 5 mm) via an intermediate plate (thickness 1.1 mm).

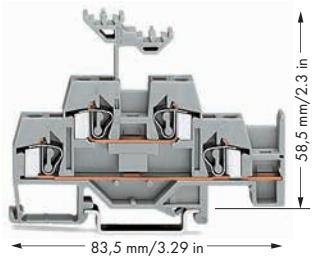
Double-Deck Terminal Blocks 4 mm²
281 Series

CAGE CLAMP®

0.08 - 4 mm²	AWG 28 - 12
500 V/6 kV/3 ❶	600 V, 20 A
I_N 26 A	600 V, 25 A
Terminal block width 6 mm / 0.236 in	
9 - 10 mm / 0.37 in ❷	

0.08 - 4 mm²	AWG 28 - 12
500 V/6 kV/3 ❶	600 V, 20 A
I_N 26 A	600 V, 25 A
Terminal block width 6 mm / 0.236 in	
9 - 10 mm / 0.37 in ❷	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ See application notes for:
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294

	Item No.	Pack. Unit
Through/through terminal block		
gray	**281-619**	50
blue	**281-629** ❸	50
Other terminal blocks with the same profile:		
Diode	**281-633/281-410**	Page 282
LED	**281-634/281-434**	Page 282

	Item No.	Pack. Unit
Through/through terminal block with horizontal jumpering on lower level		
gray	**281-620**	50
blue	**281-630** ❸	50

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick			
	orange	**281-341**	100 (4x25)
	gray	**281-340**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick			
	orange	**281-343**	100 (4x25)
	gray	**281-342**	100 (4x25)

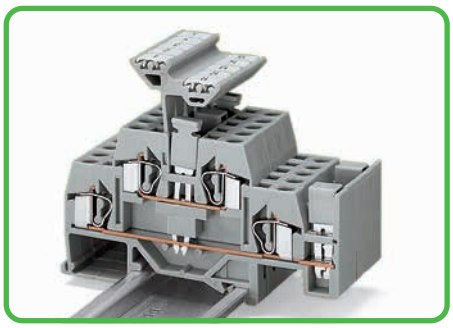

Wiring

281 Series Accessories

Appropriate marking system: WMB
(see Section 13)

Insulation stop, ❹			
	5 pcs/strip,		
	0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**281-470**	200 (8x25)
Insulation stop, ❹			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**281-471**	200 (8x25)
Insulation stop, ❹			
	5 pcs/strip,		
	0.25 - 1.5 mm²		
	dark gray	**281-472**	200 (8x25)
Adjacent jumper, insulated,			
	I_N = I_N terminal block		
	gray	**281-402**	200 (8x25)
Alternate jumper, insulated,			
	I_N = I_N terminal block		
	gray	**281-409**	100 (4x25)
Vertical jumper, insulated,			
	I_N 24 A		
	gray	**281-421**	200 (8x25)
Comb-style jumper bar, insulated, ❹			
	I_N = I_N terminal block		
	2-way	**281-482**	100 (4x25)
	3-way	**281-483**	100 (4x25)
Comb-style jumper bar, insulated,			
	I_N = I_N terminal block		
	5-way	**281-485**	100 (4x25)

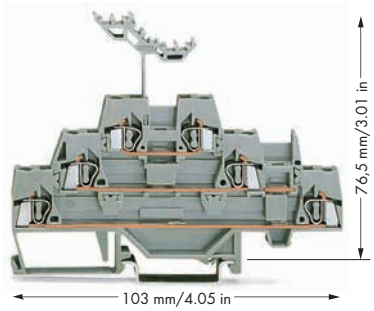
Alternate comb-style jumper bar,			
	insulated,		
	I_N = I_N terminal block		
	2-way	**281-492**	100 (4x25)
Operating tool, of insulating material ❹			
	2-way	**280-432**	1
	3-way	**280-433**	1
Operating tool, of insulating material			
	5-way	**281-440**	1
Screwless end stop,			
	for DIN 35 rail,		
	6 mm wide		
	gray	**249-116**	100 (4x25)
Screwless end stop,			
	for DIN 35 rail,		
	10 mm wide		
	gray	**249-117**	50 (2x25)


Commoning double-deck terminal blocks

Certification organizations can be found in the overview on pages 622 and 623.

Triple-Deck Terminal Blocks 2.5 mm²
280 Series

0.08 - 2.5 mm²	AWG 28 - 12 *	
500 V/6 kV/3 ❶	300 V, 15 A	
I_N 20 A	300 V, 20 A	
Terminal block width 5 mm / 0.197 in		
8 - 9 mm / 0.33 in ❷		



Item No.		Pack. Unit
Through/through/through terminal block		
gray	**280-549**	40
blue	**280-551**	40

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick

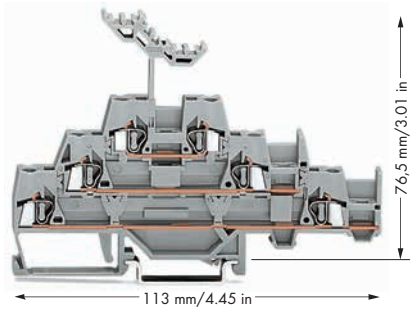
orange	**280-304**	50 (2x25)
gray	**280-303**	50 (2x25)

Intermediate plate,

1.1 mm thick

orange	**280-336**	50 (2x25)

0.08 - 2.5 mm²	AWG 28 - 12 *	
500 V/6 kV/3 ❶	300 V, 15 A	
I_N 20 A	300 V, 20 A	
Terminal block width 5 mm / 0.197 in		
8 - 9 mm / 0.33 in ❷		



Item No.		Pack. Unit
Through/through/through terminal block with horizontal jumpering on lower level		
gray	**280-550**	40

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick

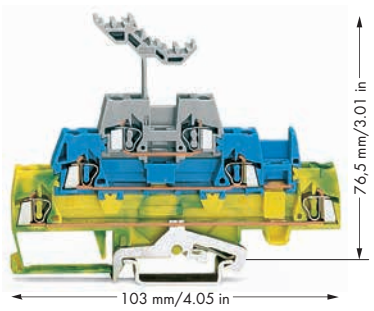
orange	**280-306**	50 (2x25)
gray	**280-305**	50 (2x25)

Intermediate plate,

1.1 mm thick

orange	**280-339**	50 (2x25)

0.08 - 2.5 mm²	AWG 28 - 12 *	
500 V/6 kV/3 ❶		
I_N 20 A	300 V, 20 A	
Terminal block width 5 mm / 0.197 in		
8 - 9 mm / 0.33 in ❷		



Item No.		Pack. Unit
Ground conductor/through/through terminal block		
green-yellow/blue/gray	**280-547**	40
green-yellow/gray/gray	**280-557**	40

Item-Specific Accessories

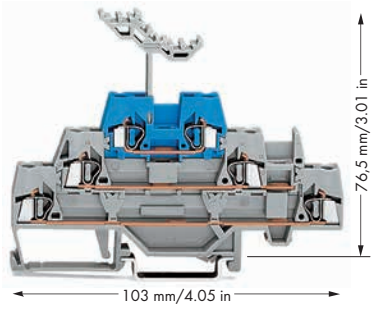
End and intermediate plate, 2.5 mm thick

orange	**280-304**	50 (2x25)
gray	**280-303**	50 (2x25)

Intermediate plate,

1.1 mm thick

orange	**280-336**	50 (2x25)



Item No.		Pack. Unit
Through/through/through terminal block		
gray/gray/blue	**280-552**	40

Item-Specific Accessories

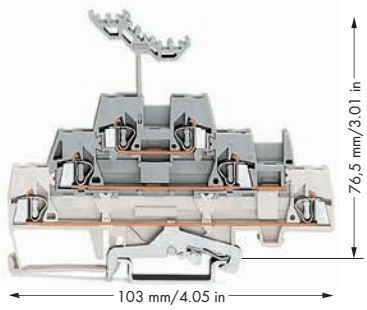
End and intermediate plate, 2.5 mm thick

orange	**280-304**	50 (2x25)
gray	**280-303**	50 (2x25)

Intermediate plate,

1.1 mm thick

orange	**280-336**	50 (2x25)



Item No.		Pack. Unit
Shield/through/through terminal block		
white/gray/gray	**280-548**	40
white/blue/gray	**280-558**	40

Item-Specific Accessories

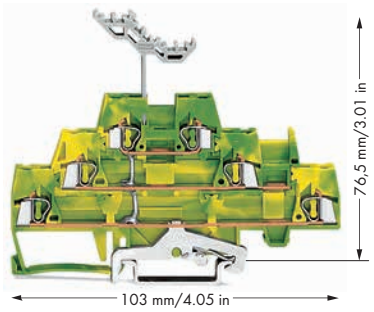
End and intermediate plate, 2.5 mm thick

orange	**280-304**	50 (2x25)
gray	**280-303**	50 (2x25)

Intermediate plate,

1.1 mm thick

orange	**280-336**	50 (2x25)



Item No.		Pack. Unit
6-conductor ground terminal block, internal commoning		
green-yellow	**280-597**	40

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick

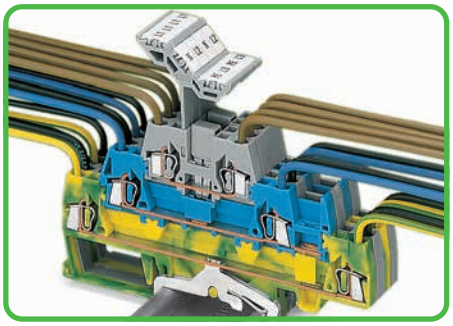
orange	**280-304**	50 (2x25)
gray	**280-303**	50 (2x25)

Intermediate plate,

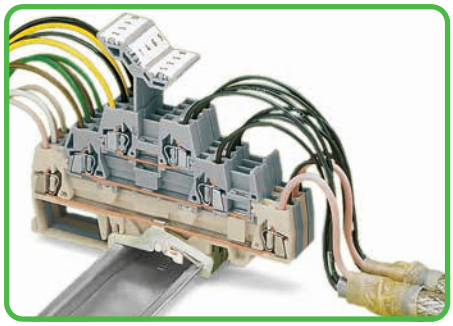
1.1 mm thick

orange	**280-336**	50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.



3-conductor power circuit with additional branch circuit tapping.



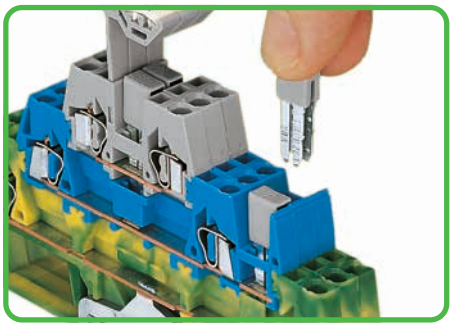
Shielded twisted pair cable.

* AWG 12: THHN, THWN

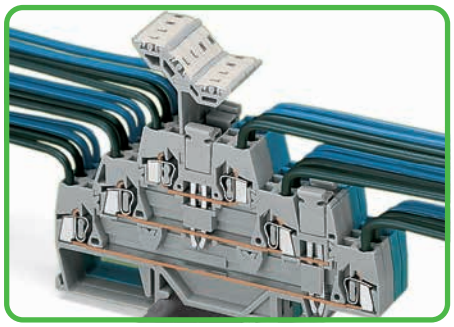
❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

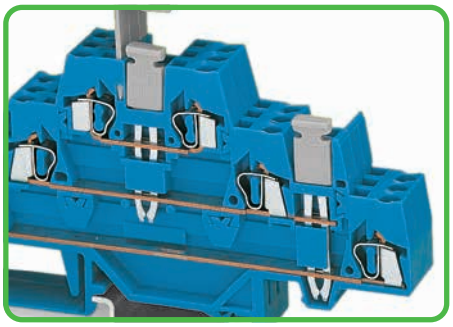
❸ See application notes for:
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294



Triple-deck terminal blocks accommodate three circuits of different potentials in one 3-level terminal block; different circuits can be differentiated by color coding either level for the 280 Series.



Commoning with vertical and adjacent jumpers.



Standard insulated push-in jumpers can be used for commoning. A vertical jumper allows commoning of upper and lower level, providing a 6-conductor feedthrough terminal block in one housing. Two adjacent terminals may be commoned together on the same level using a push-in adjacent jumper.



The ground conductor or shield terminal blocks have a contact foot in the bottom level, automatically establishing direct contact to the carrier rail.
The flexible marker carrier, which is placed above the wiring levels, can be pushed aside during wiring or commoning. The marker carrier has three levels for three different WMB markers relating to the three decks of the terminal blocks.
With a terminal block width of only 5 mm an effective width of only 1.67 mm/0.066 in for terminal blocks of same or different potentials can be realized for wire sizes 0.08 mm² – 2.5 mm² (AWG 28 – 14).

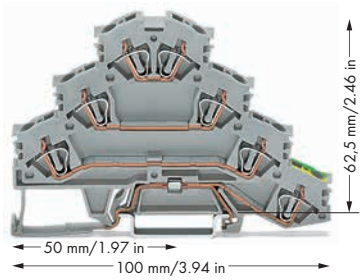
280 Series Accessories

Appropriate marking systems (see Section 13)

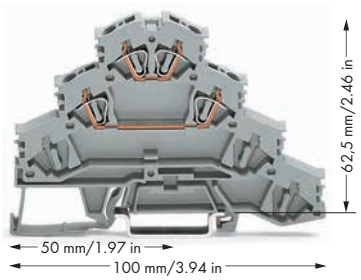
Insulation stop, ❸	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop, ❸	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop, ❸	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)
Adjacent jumper, insulated,	I_N = I_N terminal block		
	gray	**280-402**	200 (8x25)
	yellow-green	**280-422**	200 (8x25)
Alternate jumper, insulated,	I_N = I_N terminal block		
	gray	**280-409**	100 (4x25)
Vertical jumper, insulated,	I_N 24 A		
	gray	**281-421**	200 (8x25)
Comb-style jumper bar, insulated, ❸	I_N = I_N terminal block		
	2-way	**280-482**	200 (8x25)
	3-way	**280-483**	200 (8x25)
Comb-style jumper bar, insulated,	I_N = I_N terminal block		
	10-way	**280-490**	50 (2x25)
Alternate comb-style jumper bar,	insulated, I_N = I_N terminal block		
	2-way	**280-492**	200 (8x25)
Operating tool, of insulating material	2-way	**280-432**	1
	3-way	**280-433**	1
Operating tool, of insulating material	10-way	**280-440**	1
Screwless end stop,	for DIN 35 rail, 6 mm wide		
	gray	**249-116**	100 (4x25)

Quadruple-Deck, Rail-Mounted Terminal Blocks or Rail-Mounted Terminal Blocks for Wiring of Electric Motors 4 mm²
281 Series

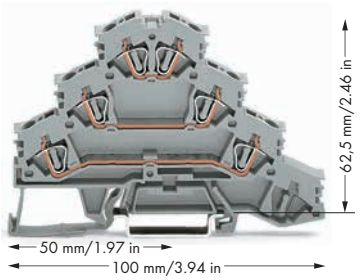
0.08 - 4 mm²	AWG 28 - 12	
400 V/6 kV/3 ❶	600 V, 20 A	
I_N 20 A (2.5 mm²)	300 V, 25 A	
I_N 25 A (4 mm²)		
Terminal block width 6 mm / 0.236 in		
8 - 9 mm / 0.33 in ❷		



Item No.		Pack. Unit
Quadruple-deck, rail-mounted terminal block		
or		
Rail-mounted terminal block for wiring of electric motors, gray		
L1 - L2 - L3 - PE	**281-530**	50



Item No.		Pack. Unit
Quadruple-deck, rail-mounted terminal block		
or		
Rail-mounted terminal block for wiring of electric motors, gray		
L1 - L2	**281-531**	50



Item No.		Pack. Unit
Quadruple-deck, rail-mounted terminal block		
or		
Rail-mounted terminal block for wiring of electric motors, gray		
L1 - L2 - L3	**281-532**	50

281 Series Accessories

Appropriate marking systems: WMB/Marking strips (see Section 13)

End and intermediate plate, 1 mm thick



orange	**281-366**	100 (4x25)
gray	**281-365**	100 (4x25)

Insulation stop, ❸



5 pcs/strip,		
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
white	**281-470**	200 (8x25)

Insulation stop, ❸



5 pcs/strip,		
0.25 - 0.5 mm²		
light gray	**281-471**	200 (8x25)

Insulation stop, ❸



5 pcs/strip,		
0.25 - 1.5 mm²		
dark gray	**281-472**	200 (8x25)

Comb-style jumper bar, insulated, ❸



I_N = I_N terminal block		
2-way	**281-482**	100 (4x25)
3-way	**281-483**	100 (4x25)
5-way	**281-485**	100 (4x25)
10-way	**281-490**	50 (2x25)

Alternate comb-style jumper bar,



insulated,		
I_N = I_N terminal block		
2-way	**281-492**	100 (4x25)

Operating tool, of insulating material



2-way	**280-432**	1
3-way	**280-433**	1
5-way	**281-440**	1

Test plug,



with 500 mm cable,		
2 mm Ø		
red	**210-136**	50

Test plug,



with 500 mm cable,		
2.3 mm Ø		
yellow	**210-137**	50

WMB Multi marking system,

10 strips with 10 markers per card,		
stretchable 5 - 5.2 mm		
plain	**793-5501**	5

WMB Multi marking system, plain,



10 strips with 10 markers per card,		
stretchable 5 - 5.2 mm		
yellow	**793-5501/000-002**	
red	**793-5501/000-005**	
blue	**793-5501/000-006**	
gray	**793-5501/000-007**	
orange	**793-5501/000-012**	
light green	**793-5501/000-017**	
green	**793-5501/000-023**	
violet	**793-5501/000-024**	
		5

Marking strip, plain,



7.5 mm wide,		
50 m roll		
translucent	**709-177**	1

Screwless end stop,



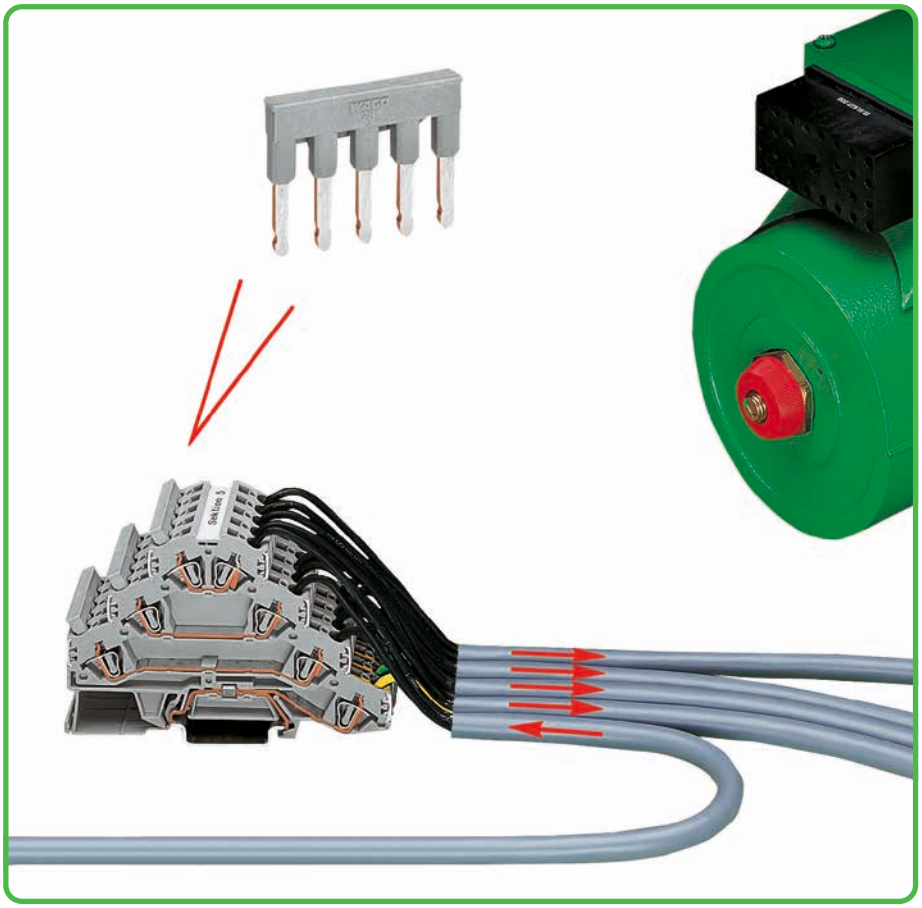
for DIN 35 rail,		
6 mm wide		
gray	**249-116**	100 (4x25)

Screwless end stop,



for DIN 35 rail,		
10 mm wide		
gray	**249-117**	50 (2x25)

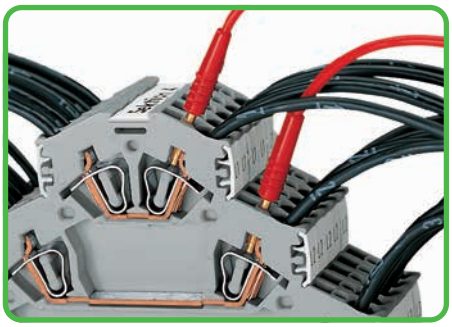
Certification organizations can be found in the overview on pages 622 and 623.



❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ See application notes for:
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294



Testing with test plug 2 mm Ø.

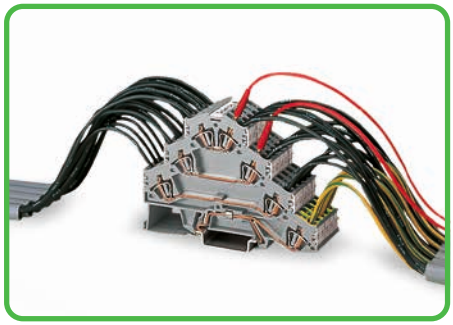
In addition to rail-mounted terminal blocks for electric motor wiring, special versions are also available.

- Terminal block **without** ground contact and only 2 potentials.

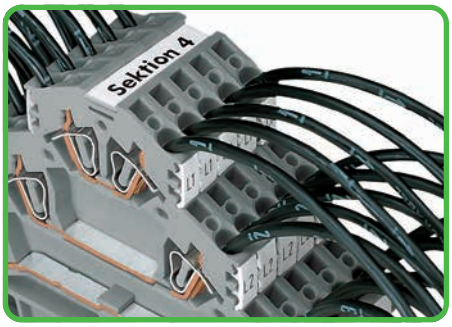
Especially designed for additional functions such as engine brakes or temperature probes. Having the same shape, this type can be put next to the appropriate terminal block for electric motor wiring without using separator plates. That makes the rail assembly clearer and wiring is easier. This also prevents wiring errors as no conductor entry is unused.

- Terminal block **without** ground contact and with 3 potentials.

Clearly designated clamping units is the primary advantage to this terminal block design. When using devices with protective insulation for example, there are no open ground clamping units that could create confusion.



Compact design: 3 phases and ground conductor in one terminal block.

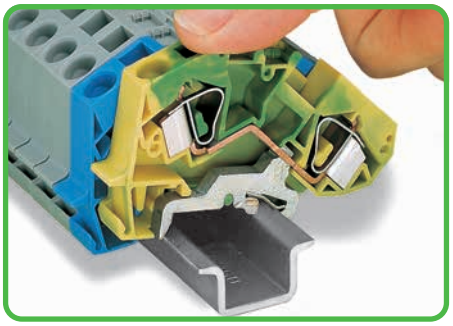


Marking clamping units with WMB Multi marking system (see Section 13). Group marking with 709-177 marker strips.

TOPJOB® Classic Rail-Mounted Terminal Blocks, 780 to 785 Series – Description and Handling –

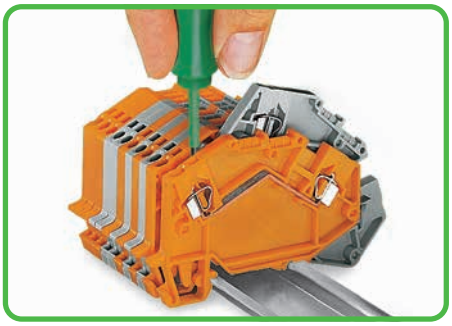
CAGE CLAMP®

Assembly



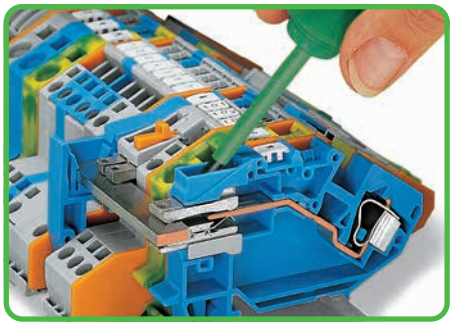
By snapping a ground conductor terminal block onto the carrier rail, a direct electrical connection is automatically made to the rail.

Removal



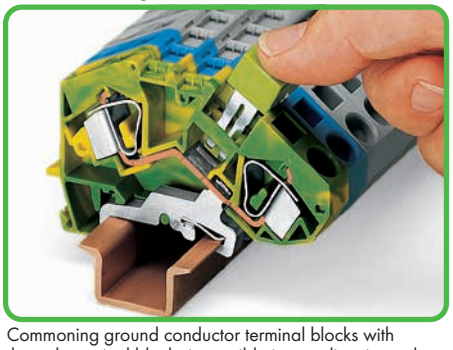
Removing a terminal block from the assembly.

Screwless disconnect slide link



Operating an N-disconnect slide link.

Commoning

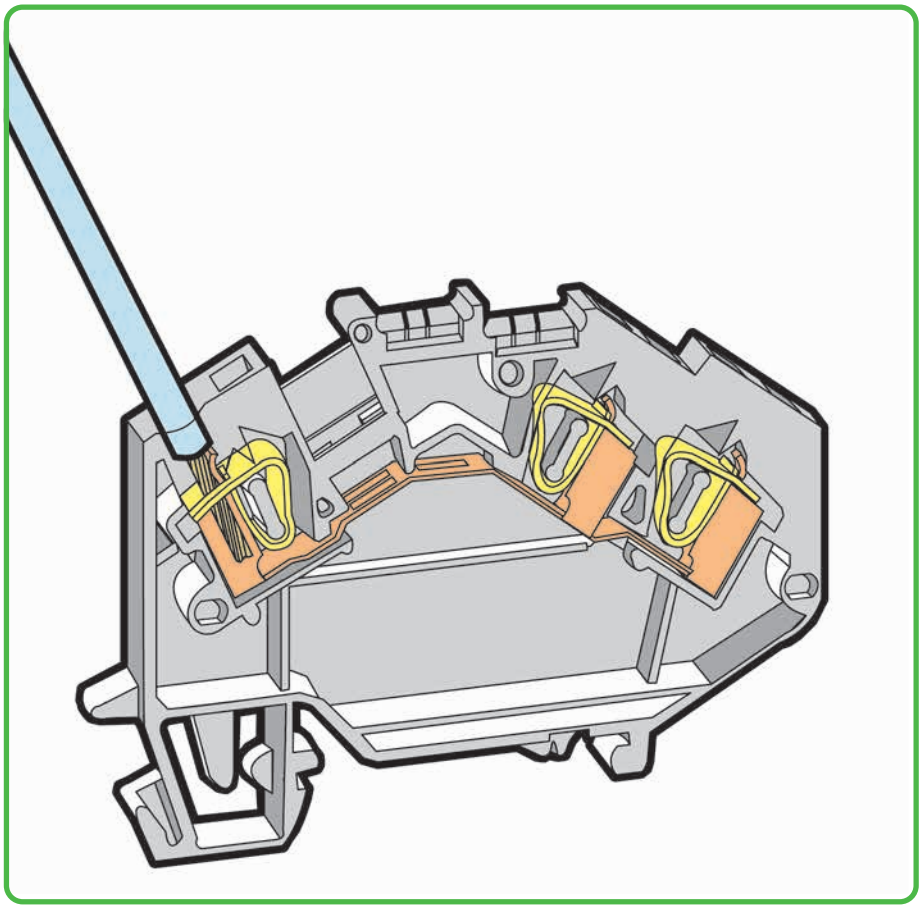


Commoning ground conductor terminal blocks with through terminal blocks is possible in one direction only (via rear side of terminal block) using adjacent jumpers. In addition to the required marking of these blocks, use yellow-green adjacent jumpers.

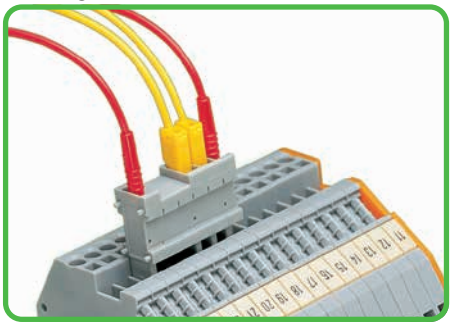
Commoning



Staggered jumpers for sophisticated circuit requirements. Push jumpers down firmly until fully inserted.
For additional notes, see page 295.

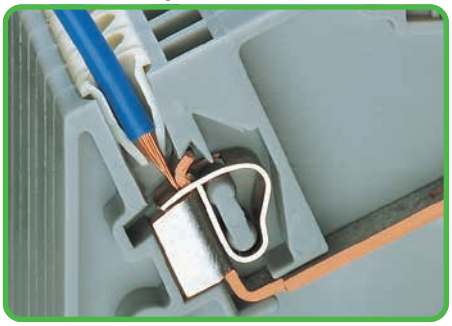


Testing



Test plug module assembly. Combining test plug and spacer modules.

Insulation stop



Prevents conductor insulation from being pushed into the clamping unit.
Available for terminal blocks up to 4 mm²/AWG 12.

Marking



Marking via WMB Multi markers and WFB continuous marking strips (see Section 13).

CAGE CLAMP® clamps the following copper conductors:*

solid	stranded	fine-stranded, also with tinned single strands	fine-stranded, tip-bonded	fine-stranded, with ferrule ❶ (gastight crimped)	fine-stranded, with pin terminal (gastight crimped)

* For aluminum conductors, see notes in Section 14.

❶ When using ferruled conductors, it is necessary to use a terminal block one size larger than the nominal cross section of the wire.

TOPJOB® Classic
Through/Ground Conductor/Shield and Ex Terminal Blocks 2.5 mm²
780 Series

CAGE CLAMP®

0.08 - 2.5 mm²	AWG 28 - 12 *
1000 V/8 kV/3 ❶	600 V, 20 A
I_N 24 A	600 V, 20 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷	

0.08 - 2.5 mm²	AWG 28 - 12 *
1000 V/8 kV/3 ❶	600 V, 20 A
I_N 24 A	600 V, 25 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷	

* AWG 12: THHN, THWN

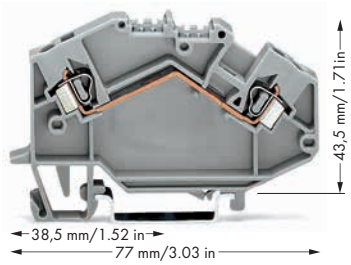
❶ 1000 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

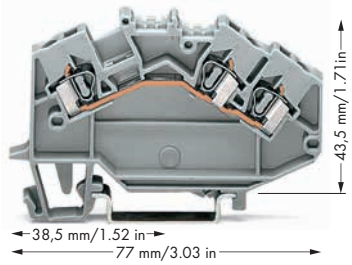
❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ Suitable for Ex e II applications
0.2 mm² - 2.5 mm²/AWG 24 - 12*
690 V, 23 A
(also see Section 14)
Using staggered jumpers reduces the maximum rated voltage to 275 V.

❺ See application notes for:
Test plug modules, pages 288 – 290
Banana plug, page 292
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294
Staggered jumper, page 295
Push-in type wire jumper, page 295





	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**780-601**	50
blue	**780-604** ❸	50
orange	**780-602**	50
light gray Ex	**780-992** ❹	50
2-conductor ground terminal block		
green-yellow	**780-607**	50
green-yellow Ex	**780-607/999-950** ❹	50
Other terminal blocks with the same profile:		
N-disconnect	**780-613**	Page 217

	Item No.	Pack. Unit
3-conductor through terminal block		
gray	**780-631**	50
blue	**780-651** ❸	50
orange	**780-654**	50
light gray Ex	**780-993** ❹	50
3-conductor ground terminal block		
green-yellow	**780-637**	50
green-yellow Ex	**780-637/999-950** ❹	50
3-conductor shield terminal block		
white	**780-640**	50

780 Series Accessories

Appropriate marking systems: WMB/WFB
(see Section 13)

End and intermediate plate, 1.5 mm thick
orange **780-317** 100 (4x25)

Ex e/Ex i separator, orange,
3 mm thick
125.5 mm **209-192** 50 (2x25)

Insulation stop, ❺
5 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **280-470** 200 (8x25)

Insulation stop, ❺
5 pcs/strip,
0.25 - 0.5 mm²
light gray **280-471** 200 (8x25)

Insulation stop, ❺
5 pcs/strip,
0.75 - 1 mm²
dark gray **280-472** 200 (8x25)

Adjacent jumper, insulated,
I_N = I_N terminal block
gray **280-402** 200 (8x25)
yellow-green **280-422** 200 (8x25)

Alternate jumper, insulated,
I_N = I_N terminal block
gray **280-409** 100 (4x25)

Staggered jumper, ❺
insulated,
Spacing: 5 mm,
I_N 24 A
from 1 to 2 **780-452** 100 (4x25)
from 1 to 3 **780-453** 100 (4x25)
from 1 to 4 **780-454** 100 (4x25)
from 1 to 5 **780-455** 50 (2x25)
from 1 to 6 **780-456** 50 (2x25)
from 1 to 7 **780-457** 50 (2x25)
from 1 to 8 **780-458** 50 (2x25)

Push-in type wire jumper, ❺
insulated,
I_N 9 A,
wire size 0.75 mm²
L = 60 mm **249-125** 10
L = 110 mm **249-126** 10
L = 250 mm **249-127** 10

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks
yellow **280-415** 100 (4x25)

Comb-style jumper bar, insulated, ❺
I_N = I_N terminal block
2-way **280-482** 200 (8x25)
3-way **280-483** 200 (8x25)

Accessories

Alternate comb-style jumper bar,
insulated,
I_N = I_N terminal block
2-way **280-492** 200 (8x25)

Operating tool, of insulating material ❺
2-way **280-432** 1
3-way **280-433** 1

Test plug module, ❺
can be snapped together,
5 mm wide
gray **280-418** 100 (4x25)

Spacer module,
can be snapped together,
5 mm wide
gray **280-419** 100 (4x25)

Test plug adapter, 5 mm wide,
for terminal blocks 1.5 - 4 mm²,
for 210-137 test plug 2.3 mm Ø
gray **280-404** 100 (4x25)

Test plug,
with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

Test plug adapter, 8.3 mm wide,
for terminal blocks 1.5 - 10 mm²,
for 4 mm Ø test plug
gray **209-170** 50 (2x25)

Test plug adapter, 6 mm wide,
with CAGE CLAMP®,
for 0.08 - 2.5 mm²
I_N 24 A **281-407** 100 (4x25)

Banana plug, ❺
for socket 4 mm Ø,
color mixed
215-111 50

TOPJOB® tool, specially designed blade,
suitable for all TOPJOB® terminal blocks
777-310 1

Screwless end stop,
for DIN 35 rail,
10 mm wide
gray **249-117** 50 (2x25)

Screwless end stop,
for DIN 35 rail,
6 mm wide
gray **249-116** 100 (4x25)

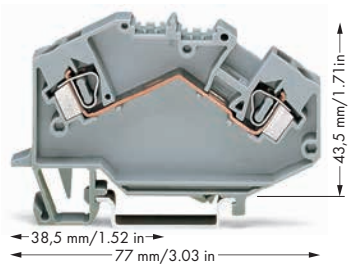
Certification organizations can be found in the overview on pages 622 and 623.

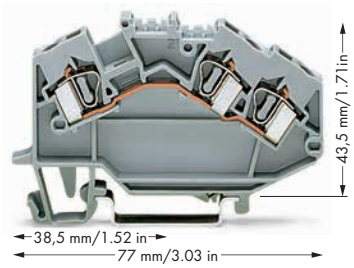
TOPJOB® Classic
Through/Ground Conductor and Ex Terminal Blocks 4 mm²
781 Series

CAGE CLAMP®

0.08 - 4 mm²	AWG 28 - 12
1000 V/8 kV/3 ❶	600 V, 20 A
I_N 32 A	600 V, 20 A

Terminal block width 6 mm / 0.236 in
9 - 10 mm / 0.37 in ❷





❶ 1000 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ Suitable for Ex e II applications
0.2 mm² - 4 mm²/AWG 24 - 12
690 V
30 A for 2-conductor terminal blocks
27 A for 3-conductor terminal blocks
(also see Section 14)
Using staggered jumpers reduces the maximum rated voltage to 275 V.

❺ See application notes for:
Test plug modules, pages 288 – 290
Banana plug, page 292
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294
Staggered jumper, page 295
Push-in type wire jumper, page 295

	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**781-601**	50
blue	**781-604** ❸	50
light gray Ex	**781-992** ❹	50
2-conductor ground terminal block		
green-yellow	**781-607**	50
green-yellow Ex	**781-607/999-950** ❹	50
Other terminal blocks with the same profile:		
N-disconnect	**781-613**	Page 217
Potential	**781-623**	Page 217

	Item No.	Pack. Unit
3-conductor through terminal block		
gray	**781-631**	50
blue	**781-651** ❸	50
light gray Ex	**781-993** ❹	50
3-conductor ground terminal block		
green-yellow	**781-637**	50
green-yellow Ex	**781-637/999-950** ❹	50
Other terminal blocks with the same profile:		
N-disconnect	**781-643**	Page 217
Potential	**781-653**	Page 217

781 Series Accessories

Appropriate marking systems: WMB/WFB
(see Section 13)

End and intermediate plate, 1.5 mm thick
orange **780-317** 100 (4x25)

Ex e/Ex i separator, orange,
3 mm thick
125.5 mm **209-192** 50 (2x25)

Insulation stop, ❺
5 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **281-470** 200 (8x25)

Insulation stop, ❺
5 pcs/strip,
0.25 - 0.5 mm²
light gray **281-471** 200 (8x25)

Insulation stop, ❺
5 pcs/strip,
0.25 - 1.5 mm²
dark gray **281-472** 200 (8x25)

Adjacent jumper, insulated,
I_N = I_N terminal block
gray **281-402** 200 (8x25)
yellow-green **281-422** 200 (8x25)

Alternate jumper, insulated,
I_N = I_N terminal block
gray **281-409** 100 (4x25)

Staggered jumper, ❺
insulated,
Spacing: 6 mm,
I_N 32 A
from 1 to 2 **781-452** 100 (4x25)
from 1 to 3 **781-453** 100 (4x25)
from 1 to 4 **781-454** 100 (4x25)
from 1 to 5 **781-455** 50 (2x25)
from 1 to 6 **781-456** 50 (2x25)

Push-in type wire jumper, ❺
insulated,
I_N 9 A,
wire size 0.75 mm²
L = 60 mm **249-125** 10
L = 110 mm **249-126** 10
L = 250 mm **249-127** 10

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks
yellow **281-415** 100 (4x25)

Comb-style jumper bar, insulated, ❺
I_N = I_N terminal block
2-way **281-482** 100 (4x25)
3-way **281-483** 100 (4x25)

Alternate comb-style jumper bar,
insulated,
I_N = I_N terminal block
2-way **281-492** 100 (4x25)

Accessories

Operating tool, of insulating material ❺
2-way **280-432** 1
3-way **280-433** 1

Test plug module, ❺
can be snapped together,
6 mm wide
gray **281-418** 100 (4x25)

Spacer module,
can be snapped together,
6 mm wide
gray **281-419** 100 (4x25)

Test plug adapter, 5 mm wide,
for terminal blocks 1.5 - 4 mm²,
for 210-137 test plug 2.3 mm Ø
gray **280-404** 100 (4x25)

Test plug,
with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

Test plug adapter, 8.3 mm wide,
for terminal blocks 1.5 - 10 mm²,
for 4 mm Ø test plug
gray **209-170** 50 (2x25)

Test plug adapter, 5 mm wide,
with CAGE CLAMP® Anschluss,
for 0,08 mm² - 2,5 mm²
I_N 24 A **281-407** 100 (4x25)

Banana plug, ❺
for socket 4 mm Ø,
color mixed
215-111 50

TOPJOB® tool, specially designed blade,
suitable for all TOPJOB® terminal blocks
777-310 1

Screwless end stop,
for DIN 35 rail,
6 mm wide
gray **249-116** 100 (4x25)

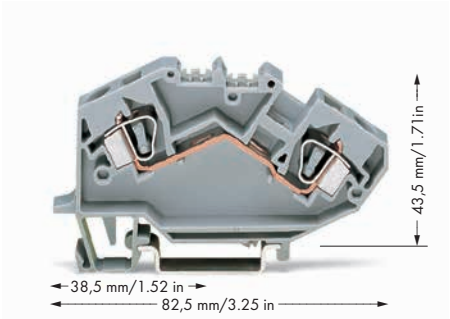
Screwless end stop,
for DIN 35 rail,
10 mm wide
gray **249-117** 50 (2x25)

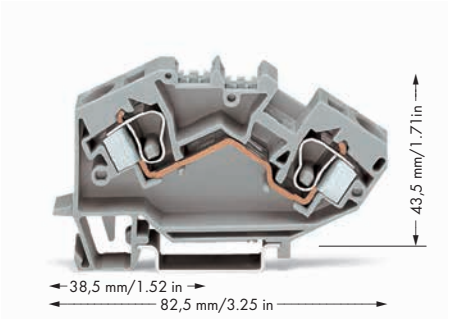
Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® Classic
Through/Ground Conductor and Ex Terminal Blocks 6 mm² and 10 mm²
782 and 784 Series

0.2 - 6 mm²	AWG 24 - 10
1000 V/8 kV/3 ❷	600 V, 30 A
I_N 41 A	600 V, 25 A
Terminal block width 8 mm / 0.315 in	
12 - 13 mm / 0.49 in ❸	

0.2 - 10 (16) mm² ❶	AWG 24 - 6
1000 V/8 kV/3 ❷	600 V, 50 A
I_N 57 A	600 V, 35 A
Terminal block width 10 mm / 0.394 in	
12 - 13 mm / 0.49 in ❸	





❶ Max. connector size: 16 mm²
❷ 1000 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)
❸ Strip length, see packaging or instructions.
❹ Suitable for Ex i applications
❺ Suitable for Ex e II applications
0.2 mm² - 6 mm²/AWG 24 - 10
690 V, 39 A
(also see Section 14)
❻ Suitable for Ex e II applications
0.2 mm² - 10 mm²/AWG 24 - 8
690 V, 53 A
(also see Section 14)
❼ See application notes for:
Test plug module, page 291
Banana plug, page 292

	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**782-601**	25
blue	**782-604** ❹	25
light gray	**782-992** ❺	50
2-conductor ground terminal block		
green-yellow	**782-607**	25
green-yellow	**782-607/999-950** ❺	25
Other terminal blocks with the same profile:		
N-disconnect	**782-613**	Page 218
Potential	**782-623**	Page 218

Item-Specific Accessories

Adjacent jumper, insulated,
I_N 41 A
gray **282-402** 100 (4x25)
yellow-green **282-422** 100 (4x25)

Alternate jumper, insulated,
I_N 41 A
gray **282-409** 100 (4x25)

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks
yellow **282-415** 100 (4x25)

B-type test plug module, ❼
can be snapped together,
8 mm wide
gray **709-310** 100 (4x25)

B-type spacer module,
can be snapped together,
8 mm wide
gray **709-311** 100 (4x25)

	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**784-601**	25
blue	**784-604** ❹	25
light gray	**784-992** ❻	25
2-conductor ground terminal block		
green-yellow	**784-607**	25
green-yellow	**784-607/999-950** ❻	25
Other terminal blocks with the same profile:		
N-disconnect	**784-613**	Page 218
Potential	**784-623**	Page 218

Item-Specific Accessories

Adjacent jumper, insulated,
I_N 57 A
gray **284-402** 100 (4x25)
yellow-green **284-422** 100 (4x25)

Alternate jumper, insulated,
I_N 57 A
gray **284-409** 50 (2x25)

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks
yellow **284-415** 50 (2x25)

B-type test plug module, ❼
can be snapped together,
8 mm wide
gray **709-310** 100 (4x25)

B-type spacer module,
can be snapped together,
8 mm wide
gray **709-311** 100 (4x25)

B-type spacer plate,
can be snapped together,
2 mm wide
gray **709-312** 100 (4x25)

Finger guard,
touchproof cover protects unused conductor entries
yellow **284-400** 100 (4x25)

Accessories

WMB/WFB
(see Section 13)

End and intermediate plate, 1.5 mm thick
orange **782-317** 100 (4x25)

Ex e/Ex i separator, orange,
3 mm thick
125.5 mm **209-192** 50 (2x25)

Test plug adapter, 8.3 mm wide,
for terminal blocks 1.5 - 10 mm²,
for 4 mm Ø test plug
gray **209-170** 50 (2x25)

Banana plug, ❼
for socket 4 mm Ø,
color mixed
215-111 50

Busbar carrier,
with end stop function and detachable separator plate,
for DIN 35 rail,
8 mm thick
blue **777-305** 25

WFB continuous marking strip,
1000 mm long
transparent **210-612** 10

Carrier for WFB continuous marking strip,
to be snapped into the marker slot
209-185 200 (8x25)

TOPJOB® tool, specially designed blade,
suitable for all TOPJOB® terminal blocks
777-310 1

Screwless end stop,
for DIN 35 rail,
6 mm wide
gray **249-116** 100 (4x25)

Screwless end stop,
for DIN 35 rail,
10 mm wide
gray **249-117** 50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® Classic
Through/Ground Conductor and Ex Terminal Blocks 16 mm² and 35 mm²
784 and 785 Series

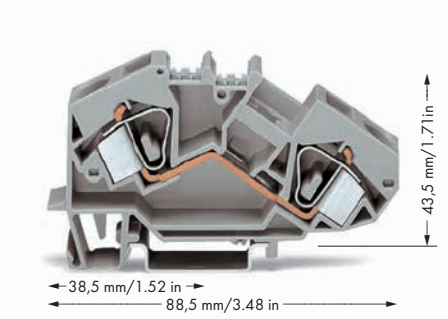
CAGE CLAMP®

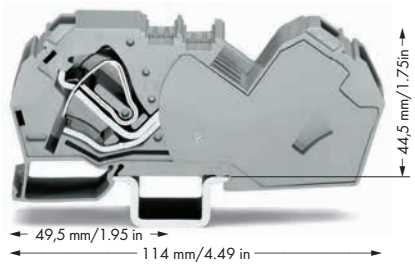
0.2 - 16 mm²	AWG 24 - 6
1000 V/8 kV/3 ❶	600 V, 65 A
I_N 76 A	600 V, 50 A

Terminal block width 12 mm / 0.472 in
16 - 17 mm / 0.65 in ❷

6 - 35 mm²	AWG 8 - 2
1000 V/8 kV/3 ❶	600 V, 115 A
I_N 125 A	600 V, 125 A

Terminal block width 16 mm / 0.63 in
23 mm / 0.91 in ❷





❶ 1000 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ Suitable for Ex e II applications
0.2 mm² - 16 mm²/AWG 24 - 6
690 V, 68 A
0.2 mm² - 10 mm²/AWG 24 - 8
for ground conductor terminal blocks
(also see Section 14)

	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**783-601**	25
blue	**783-604** ❸	25
light gray Ex	**783-992** ❹	25
2-conductor ground terminal block		
green-yellow	**783-607**	25
green-yellow Ex	**783-607/999-950** ❹	25
Other terminal blocks with the same profile:		
N-disconnect	**783-613**	Page 218
Potential	**783-623**	Page 218

Item-Specific Accessories

End and intermediate plate, 1.5 mm thick
orange **783-317** 100 (4x25)

Adjacent jumper, insulated,
I_N 70 A
gray **283-402** 50 (2x25)
yellow-green **283-422** 50 (2x25)

Alternate jumper, insulated,
I_N 76 A
gray **283-409** 50 (2x25)

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks
yellow **283-415** 50 (2x25)

Finger guard,
touchproof cover protects unused conductor entries
yellow **283-400** 100 (4x25)

Voltage tap, I_N 24 A, with 500 mm cable, for terminal blocks 16 mm² (283/783 Series) and 35 mm² (285/785 Series)
gray **283-407** 25

	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**785-601**	15
blue	**785-604** ❸	15
2-conductor ground terminal block		
green-yellow	**785-607**	15
Other terminal blocks with the same profile:		
N-disconnect	**785-613**	Page 219
Potential	**785-623**	Page 219

Item-Specific Accessories

Adjacent jumper, insulated,
I_N 85 A
gray **285-435** 50 (2x25)

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks
yellow **285-416** 50 (2x25)

Finger guard,
touchproof cover protects unused conductor entries
yellow **285-401** 100

Voltage tap, I_N 24 A, with 500 mm cable, for terminal blocks 16 mm² (283/783 Series) and 35 mm² (285/785 Series)
gray **283-407** 25

Accessories

WMB/WFB
(see Section 13)

Test plug adapter, 11.6 mm wide,
for 1.5 - 16 mm² terminal blocks, for 4 mm Ø test plug
gray **283-404** 25

Banana plug,
for socket 4 mm Ø,
color mixed
215-111 50

Busbar carrier,
with end stop function and detachable separator plate,
for DIN 35 rail,
8 mm thick
blue **777-305** 25

WFB continuous marking strip,
1000 mm long
transparent **210-612** 10

Carrier for WFB continuous marking strip,
to be snapped into the marker slot
209-185

TOPJOB® tool, specially designed blade,
suitable for all TOPJOB® terminal blocks
777-310 1

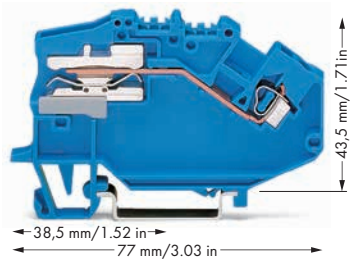
Screwless end stop,
for DIN 35 rail,
6 mm wide
gray **249-116** 100 (4x25)

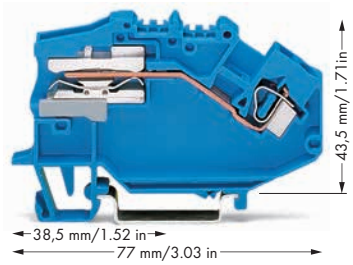
Screwless end stop,
for DIN 35 rail,
10 mm wide
gray **249-117** 50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® Classic
N-Conductor Disconnect Terminal Blocks and Power Distribution Disconnect Terminal Blocks 2.5 mm² and 4 mm², 780 and 781 Series

0.08 - 2.5 mm² | AWG 28 - 12 *	0.08 - 4 mm² | AWG 28 - 12
400 V/6 kV/3 ❶ | 600 V, 20 A	400 V/6 kV/3 ❶ | 600 V, 20 A
I_N 24 A	I_N 32 A
Terminal block width 5 mm / 0.197 in	Terminal block width 6 mm / 0.236 in
8 - 9 mm / 0.33 in ❷	9 - 10 mm / 0.37 in ❷





* AWG 12: THHN, THWN

❶ 400 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

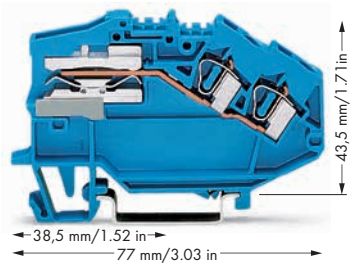
❷ Strip length, see packaging or instructions.

❸ See page 219

❹ See page 219

	Item No.	Pack. Unit
1-conductor N-disconnect terminal block		
blue	**780-613** ❸	50
Other terminal blocks with the same profile:		
Through	**780-601**	Page 213

	Item No.	Pack. Unit
1-conductor N-disconnect terminal block		
blue	**781-613** ❸	50
1-conductor power distribution disconnect terminal block		
gray	**781-623** ❹	50
Other terminal blocks with the same profile:		
Through	**781-601**	Page 214



	Item No.	Pack. Unit
2-conductor N-disconnect terminal block		
blue	**781-643** ❸	50
2-conductor power distribution disconnect terminal block		
gray	**781-653** ❹	50
Other terminal blocks with the same profile:		
Through	**781-631**	Page 214

Accessories

WMB/WFB
(see Section 13)

End and intermediate plate, 1.5 mm thick
orange **780-317** 100 (4x25)

Busbar carrier,
not suitable as end stop,
for DIN 35 rail,
1.5 mm thick
blue **780-321** 100 (4x25)

Busbar carrier,
with end stop function and detachable separator plate,
for DIN 35 rail,
8 mm thick
blue **777-305** 25

Busbar, tin-plated,
Cu 10 x 3 mm,
1000 mm long
I_N 140 A **210-133** 1

Cover for N-busbar,
transparent,
1000 mm long
777-303 1

Connector,
for N-busbar,
with blue cover,
2.5 - 16 mm²
blue **210-281** 100 (2x50)

Connector,
for N-busbar,
2.5 - 35 mm²
unplated **209-105** 50

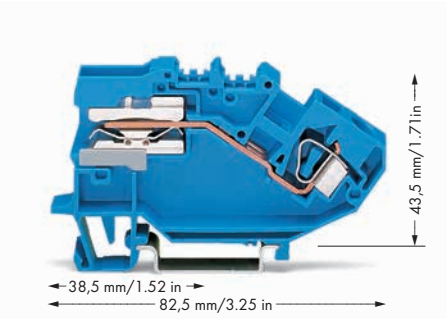
Lock-out, snap-on type,
prevents reclosing of slide link
orange **777-300** 100 (4x25)

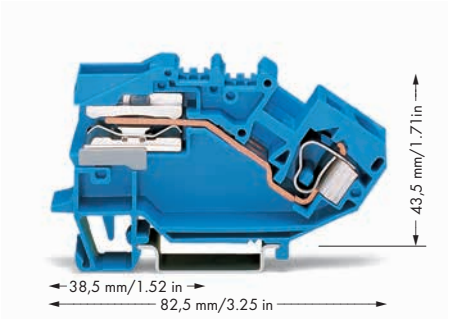
Step-down test plug,
from 4 mm socket to 2 mm plug
red **210-297** 100 (4x25)

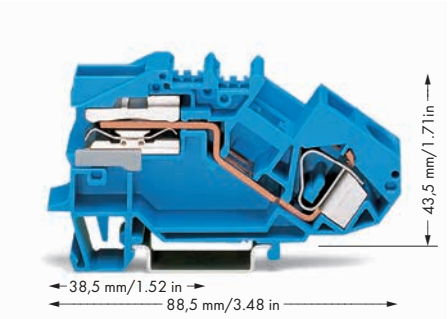
Certification organizations can be found in the overview on pages 622 and 623.

TOPJOB® Classic
N-Conductor Disconnect and Power Distribution Disconnect Terminal Blocks
6 mm², 10 mm², 16 mm² and 35 mm², 782, 784, 783 and 785 Series

0.2 - 6 mm² | AWG 24 - 10 400 V/6 kV/3 ❷ | 600 V, 30 A I_N 41 A Terminal block width 8 mm / 0.315 in 12 - 13 mm / 0.49 in ❸	0.2 - 10 (16) mm² ❶ | AWG 24 - 6 400 V/6 kV/3 ❷ I_N 57 A Terminal block width 10 mm / 0.394 in 12 - 13 mm / 0.49 in ❸	0.2 - 16 mm² | AWG 24 - 6 400 V/6 kV/3 ❷ | 600 V, 65 A I_N 68 A Terminal block width 12 mm / 0.472 in 16 - 17 mm / 0.65 in ❸







Item No.		Pack. Unit
1-conductor N-disconnect terminal block		
blue	**782-613** ❹	25
1-conductor power distribution disconnect terminal block		
gray	**782-623** ❺	25
Other terminal blocks with the same profile:		
Through	**782-601**	Page 215

Item No.		Pack. Unit
1-conductor N-disconnect terminal block		
blue	**784-613** ❹	25
1-conductor power distribution disconnect terminal block		
gray	**784-623** ❺	25
Other terminal blocks with the same profile:		
Through	**784-601**	Page 215

Item No.		Pack. Unit
1-conductor N-disconnect terminal block		
blue	**783-613** ❹	25
1-conductor power distribution disconnect terminal block		
gray	**783-623** ❺	25
Other terminal blocks with the same profile:		
Through	**783-601**	Page 216

Item-Specific Accessories

Busbar carrier,
not suitable as end stop,
for DIN 35 rail,
1.5 mm thick
blue **782-321** 100 (4x25)

Item-Specific Accessories

Busbar carrier,
not suitable as end stop,
for DIN 35 rail,
1.5 mm thick
blue **782-321** 100 (4x25)

Item-Specific Accessories

Busbar carrier,
not suitable as end stop,
for DIN 35 rail,
1.5 mm thick
blue **783-321** 100 (4x25)

Accessories

Appropriate marking systems: WMB/WFB
(see Section 13)

Busbar carrier,
with end stop function and detachable
separator plate,
for DIN 35 rail,
8 mm thick
blue **777-305** 25

Busbar, tin-plated,
Cu 10 x 3 mm,
1000 mm long
I_N 140 A **210-133** 1

Cover for N-busbar,
transparent,
1000 mm long
777-303 1

Connector,
for N-busbar,
with blue cover,
2.5 - 16 mm²
blue **210-281** 100 (2x50)

Connector,
for N-busbar,
2.5 - 35 mm²
unplated **209-105** 50

Lock-out, snap-on type,
prevents reclosing of slide link
orange **782-300** 100 (4x25)

Test plug,
with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

Step-down test plug,
from 4 mm socket to 2 mm plug
red **210-297** 100 (4x25)

WMB Multi marking system,
10 strips with 10 markers per card,
for terminal widths 5 - 17.5 mm
plain **793-501** 5

WMB Multi marking system,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

WFB continuous marking strip,
1000 mm long
transparent **210-612** 10

Carrier for WFB continuous marking strip,
to be snapped into the marker slot
209-185 200 (8x25)

TOPJOB® tool, specially designed blade,
suitable for all TOPJOB® terminal blocks
777-310 1

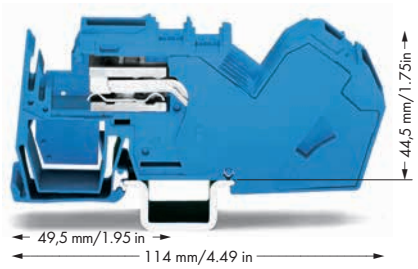
Screwless end stop,
for DIN 35 rail,
6 mm wide
gray **249-116** 100 (4x25)

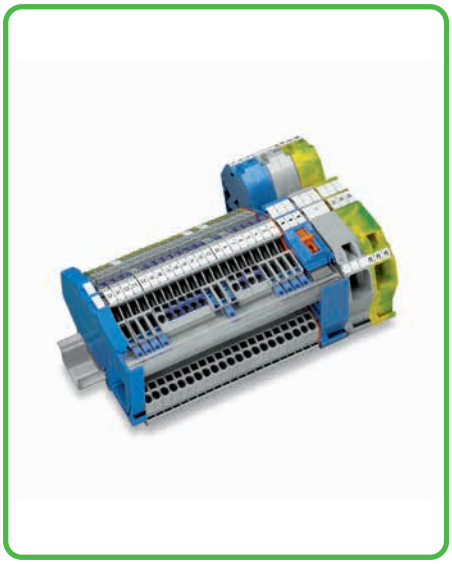
Screwless end stop,
for DIN 35 rail,
10 mm wide
gray **249-117** 50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.

6 - 35 mm²	AWG 8 - 2
400 V/6 kV/3 ❷	
I_N 125 A	600 V, 125 A

Terminal block width 16 mm / 0.63 in
23 mm / 0.91 in ❸





The new 35 mm²/AWG 2 terminal blocks are the latest addition to WAGO TOPJOB®, the professional range of rail-mounted terminal blocks for building installation. These terminal blocks, which include an end plate, are only 16 mm wide. Their compact design allows them to fit into standard distribution box. The lower conductor entry makes it much easier to terminate 35 mm²/AWG 2 conductors.
Furthermore, the N-busbar holder is integrated in the terminal block, making any separate holder redundant.

❶ Max. connector size: 16 mm²
❷ 400 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)
❸ Strip length, see packaging or instructions.
❹ See bottom of column 5
❺ See bottom of column 6

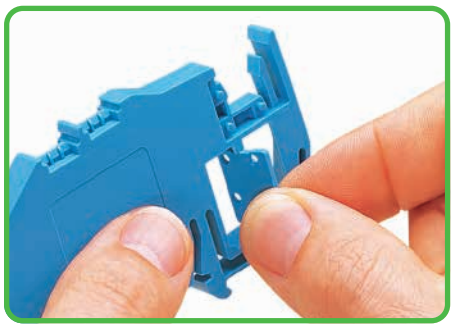
	Item No.	Pack. Unit
1-conductor N-disconnect terminal block		
blue	**785-613** ❹	15
1-conductor power distribution disconnect terminal block		
gray	**785-623** ❺	15
Other terminal blocks with the same profile:		
Through	**785-601**	Page 216

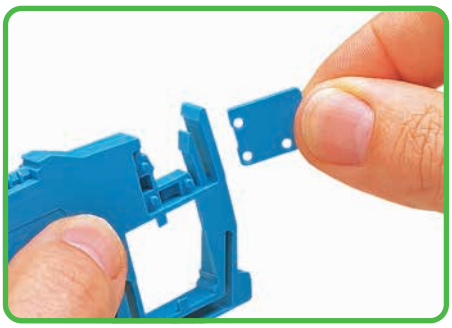
Item-Specific Accessories

Busbar carrier,



not suitable as end stop,
for DIN 35 rail,
1.5 mm thick
blue **783-321** 100 (4x25)





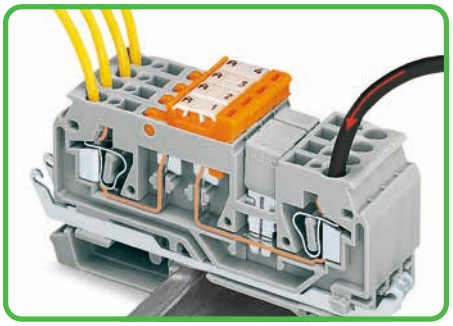
❹ For the construction and operation of power installations in fire hazardous locations or public buildings – such as conference centers, stores, hospitals, schools, theaters, hotels. – the DIN VDE 0100-710 or DIN VDE 0100-718 standards shall be observed. DIN VDE 0100-482 shall be observed for fire hazardous locations. These VDE mandate determine that every neutral conductor must be provided with a disconnection device so, e.g., insulation testing is possible for every circuit without disconnecting the N-conductor.

WAGO N-disconnect terminal blocks meet this requirement.

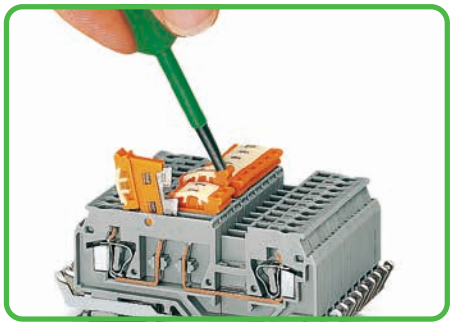
❺ According to DIN VDE 0100-710 "Requirements for operating facilities, rooms and special installations = medical facilities", equipotential bonding conductors shall be run on a potential equalization busbar. The potential equalization busbar and the protective ground conductor busbar must be accommodated in a common housing and be connected by means of a disconnectable connection using a copper conductor with a minimum cross section of 16 mm²/AWG 6. Furthermore, all equipotential bonding conductors must be connected to the potential equalization busbar and clearly arranged so they can be disconnected individually and accessed at any time. Depending on their function, they must be provided with captive marking.

WAGO power distribution disconnect terminal blocks meet these requirements.

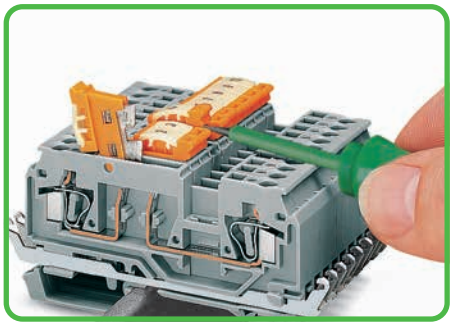
Disconnect Terminal Blocks for Test and Measurement with Pivoting Knife Disconnect, 280 Series



Power distribution using adjacent jumper.
Knife disconnects used to disconnect individual outputs.



Pivoting knife disconnect



Pivoting knife disconnect clearly indicates circuit state by defined, notched positions "ON" <–> "OFF"

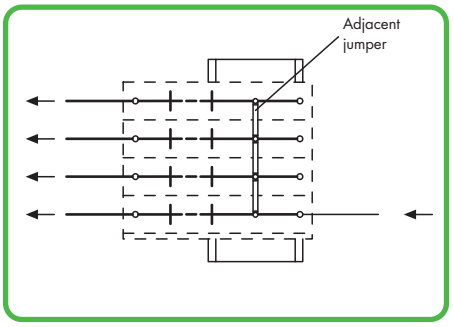
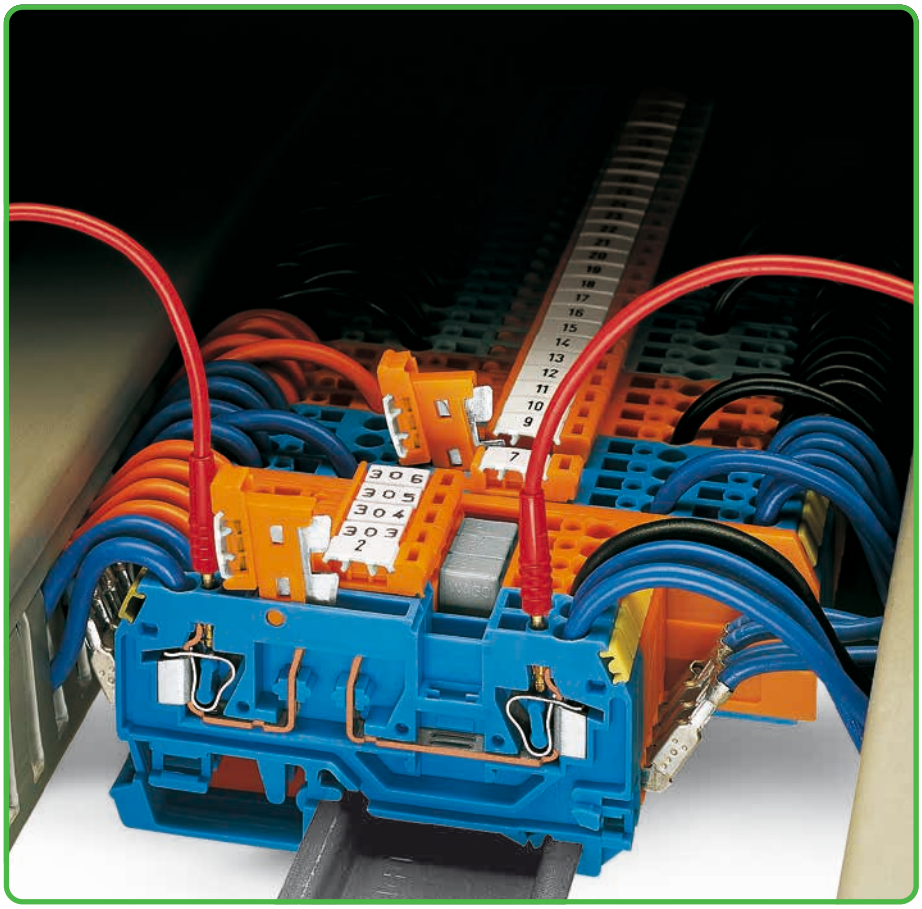
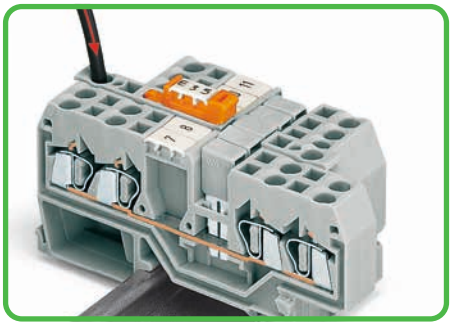


Diagram of the assembly as shown in the above picture.





Power distribution using knife disconnect in supply line, disconnection of all outputs.

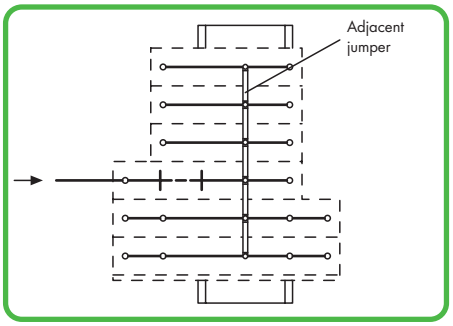
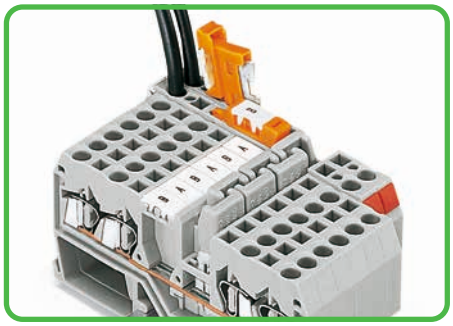


Diagram of the assembly as shown in the above picture.



Staggered jumpers for sophisticated circuit requirements.
Push jumpers down firmly until fully inserted.

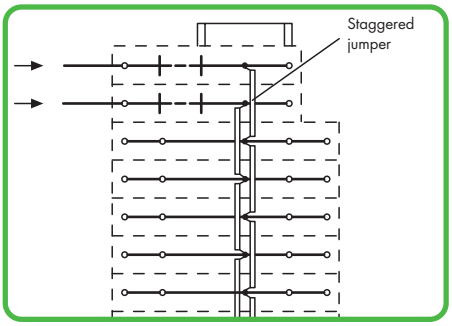


Diagram of the assembly as shown in the picture on the left.



CAGE CLAMP® clamps the following copper conductors:*

solid



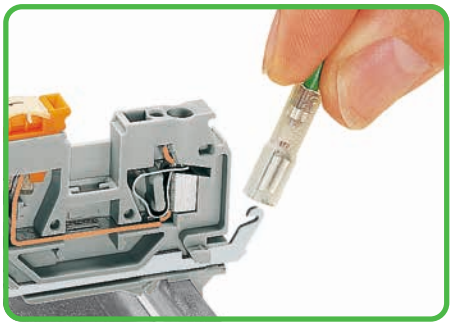
stranded



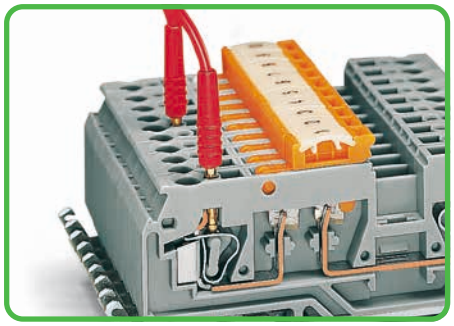
fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

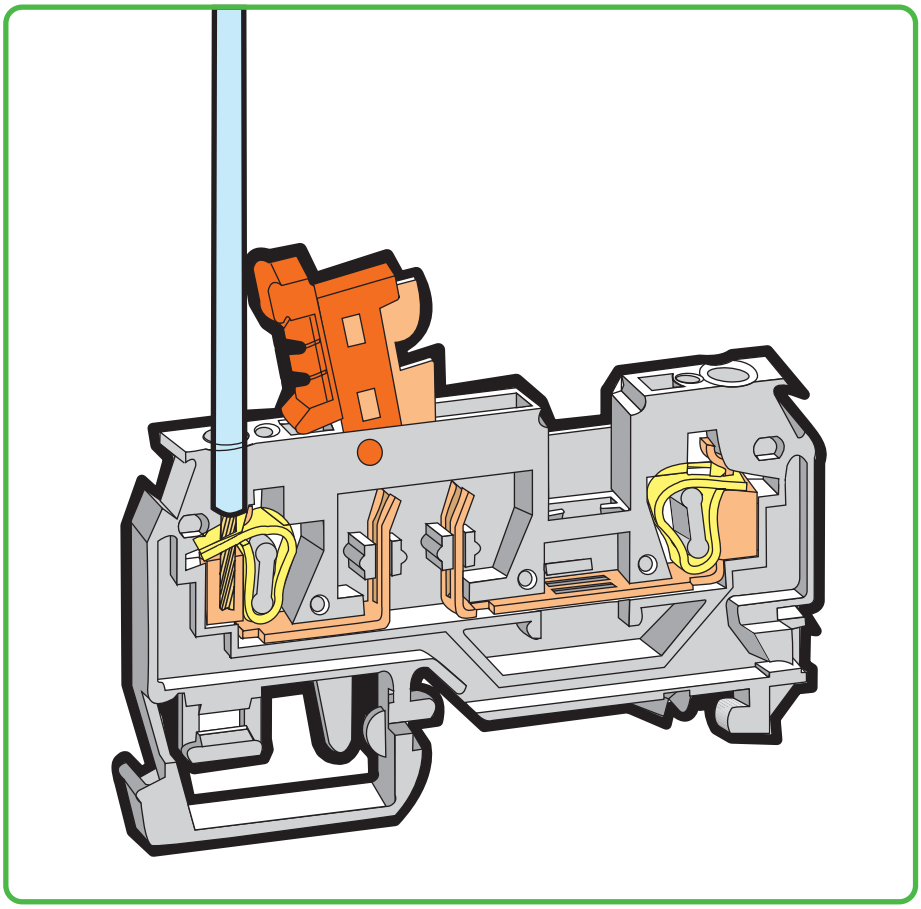
– Description and Handling –



Shield contact:
with solder/crimp quick disconnect terminal
(2.5 x 0.8) mm.



Test slot:
for test plug 2 mm Ø or 2.3 mm Ø – with direct contact
to the current bar.





Terminal block marking:
with WMB (center position) and miniature WSB markers
(on the sides) – also see Section 13.



fine-stranded,
tip-bonded



fine-stranded,
with ferrule ❶
(gastight crimped)



fine-stranded,
with pin terminal
(gastight crimped)

❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

2-Conductor Disconnect Terminal Blocks for Test and Measurement
280 Series

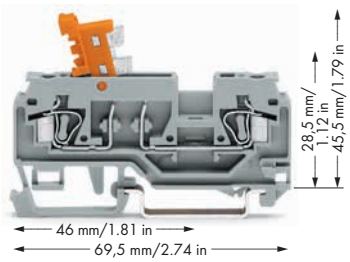
CAGE CLAMP®

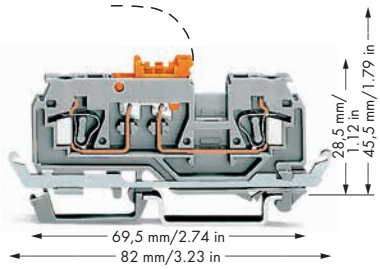
0.08 - 2.5 mm²	AWG 28 - 12 *
400 V/6 kV/3 ❶	600 V, 15 A
I_N 16 A	300 V, 15 A

Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❷

0.08 - 2.5 mm²	AWG 28 - 12 *
250 V/4 kV/3 ❶	600 V, 15 A
I_N 16 A	300 V, 15 A

Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❷





* AWG 12: THHN, THWN

❶ 400 V/250 V = rated voltage
6 kV/4 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ See application notes for:
Test plug modules, pages 288 – 290
Banana plug, page 292
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294
Staggered jumper, page 295
Push-in type wire jumper, page 295

Item No.		Pack. Unit
2-conductor disconnect terminal block for test and measurement with test slot for test plug 2 mm Ø and 2.3 mm Ø,		
gray terminal block housing, orange disconnect link	**280-870**	100
gray terminal block housing, gray disconnect link	**280-868**	100
blue terminal block housing, orange disconnect link	**280-876** ❸	100
orange terminal block housing, orange disconnect link	**280-879**	100

Item No.		Pack. Unit
2-conductor disconnect terminal block for test and measurement with shield contact and with test slot for test plug 2 mm Ø and 2.3 mm Ø,		
gray terminal block housing, orange disconnect link	**280-871**	50
gray terminal block housing, gray disconnect link	**280-869**	50
orange terminal block housing, orange disconnect link	**280-880**	50

Accessories

Appropriate marking systems: WMB/WMB Inline/Miniature WSB (see Section 13)

End and intermediate plate, 2.5 mm thick



orange	**280-371**	100 (4x25)
gray	**280-374**	100 (4x25)

Insulation stop, ❹



5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **280-470** 200 (8x25)

Insulation stop, ❹



5 pcs/strip, 0.25 - 0.5 mm²
light gray **280-471** 200 (8x25)

Insulation stop, ❹



5 pcs/strip, 0.75 - 1 mm²
dark gray **280-472**

Adjacent jumper, insulated,



I_N = I_N terminal block

gray	**280-402**	200 (8x25)
yellow-green	**280-422**	200 (8x25)

Alternate jumper, insulated,



I_N = I_N terminal block
gray **280-409** 100 (4x25)

Comb-style jumper bar, insulated, ❹



I_N = I_N terminal block

2-way	**280-482**	200 (8x25)
3-way	**280-483**	200 (8x25)

Staggered jumper, ❹



insulated,
Spacing: 5 mm,
I_N 24 A

from 1 to 2	**780-452**	100 (4x25)
from 1 to 3	**780-453**	100 (4x25)
from 1 to 4	**780-454**	100 (4x25)
from 1 to 5	**780-455**	50 (2x25)
from 1 to 6	**780-456**	50 (2x25)
from 1 to 7	**780-457**	50 (2x25)
from 1 to 8	**780-458**	50 (2x25)

Push-in type wire jumper, ❹



insulated,
I_N 9 A,
wire size 0.75 mm²

L = 60 mm	**249-125**	10
L = 110 mm	**249-126**	10
L = 250 mm	**249-127**	10

Alternate comb-style jumper bar,



insulated,
I_N = I_N terminal block

2-way	**280-492**	200 (8x25)

Operating tool, of insulating material



2-way	**280-432**	1
3-way	**280-433**	1

Accessories

Comb-style jumper bar, insulated,



I_N = I_N terminal block
10-way **280-490** 50 (2x25)

Operating tool, of insulating material



10-way **280-440** 1

Protective warning marker,



with high-voltage symbol, black,
for 5 terminal blocks
yellow **280-415** 100 (4x25)

Test plug module, ❹



can be snapped together,
5 mm wide
gray **280-418** 100 (4x25)

Spacer module,



can be snapped together,
5 mm wide
gray **280-419** 100 (4x25)

Test plug,



with 500 mm cable,
2 mm Ø
red **210-136** 50

Test plug,



with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

Test plug adapter, 5 mm wide,



for terminal blocks 1.5 - 4 mm²,
for 210-137 test plug 2.3 mm Ø
gray **280-404** 100 (4x25)

Test plug adapter, 8.3 mm wide,



for terminal blocks 1.5 - 10 mm²,
for 4 mm Ø test plug
gray **209-170** 50 (2x25)

Banana plug, ❹



for socket 4 mm Ø,
color mixed
215-111 50

WMB Multi marking system,

10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

Miniature WSB Quick marking system,

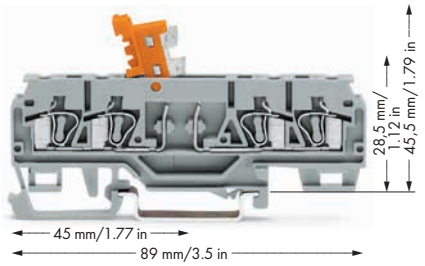


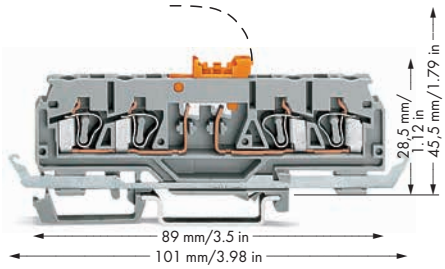
10 strips with 10 markers per card,
5 mm wide markers
plain **248-501** 5

Certification organizations can be found in the overview on pages 622 and 623.

4-Conductor Disconnect Terminal Blocks for Test and Measurement 2.5 mm²
280 Series

0.08 - 2.5 mm² / 400 V/6 kV/3 ❶ / I_N 16 A	AWG 28 - 12 * / 600 V, 15 A / 300 V, 15 A
Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❷	
0.08 - 2.5 mm² / 250 V/4 kV/3 ❶ / I_N 16 A	AWG 28 - 12 * / 600 V, 15 A / 300 V, 15 A
Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❷	





* AWG 12: THHN, THWN

❶ 400 V/250 V = rated voltage
6 kV/4 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ See application notes for:
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294

Item No.	Pack. Unit
4-conductor disconnect terminal block for test and measurement with test slot for test plug 2 mm Ø and 2.3 mm Ø,	
gray terminal block housing, orange disconnect link	
280-874	50
gray terminal block housing, gray disconnect link	
280-881	50
blue terminal block housing, orange disconnect link	
280-885 ❸	50
orange terminal block housing, orange disconnect link	
280-883	50

Item No.	Pack. Unit
4-conductor disconnect terminal block for test and measurement with shield contact and with test slot for test plug 2 mm Ø and 2.3 mm Ø,	
gray terminal block housing, orange disconnect link	
280-875	50
gray terminal block housing, gray disconnect link	
280-882	50
orange terminal block housing, orange disconnect link	
280-884	50

Accessories

Appropriate marking systems: WMB/WMB Inline/Miniature WSB (see Section 13)

End and intermediate plate, 2.5 mm thick



orange	**280-373**	100 (4x25)
gray	**280-376**	100 (4x25)

Insulation stop, ❹



5 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **280-470** 200 (8x25)

Insulation stop, ❹



5 pcs/strip,
0.25 - 0.5 mm²
light gray **280-471** 200 (8x25)

Insulation stop, ❹



5 pcs/strip,
0.75 - 1 mm²
dark gray **280-472** 200 (8x25)

Comb-style jumper bar, insulated, ❹



I_N = I_N terminal block

2-way	**280-482**	200 (8x25)
3-way	**280-483**	200 (8x25)

Comb-style jumper bar, insulated,



I_N = I_N terminal block

10-way	**280-490**	50 (2x25)

Alternate comb-style jumper bar,



insulated,
I_N = I_N terminal block

2-way	**280-492**	200 (8x25)

Operating tool, of insulating material



2-way	**280-432**	1
3-way	**280-433**	1

Operating tool, of insulating material



10-way **280-440** 1

Protective warning marker,



with high-voltage symbol, black,
for 5 terminal blocks
yellow **280-415** 100 (4x25)

Test plug,



with 500 mm cable,
2 mm Ø
red **210-136** 50

Test plug,



with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

Screwless end stop,



for DIN 35 rail,
6 mm wide
gray **249-116** 100 (4x25)

Screwless end stop,

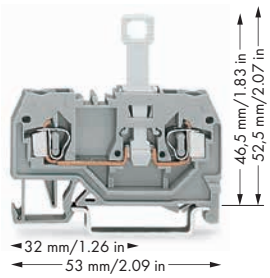


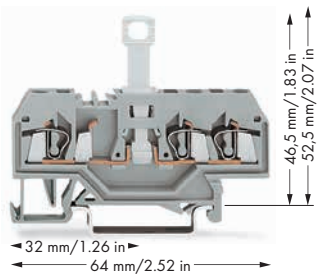
for DIN 35 rail,
10 mm wide
gray **249-117** 50 (2x25)

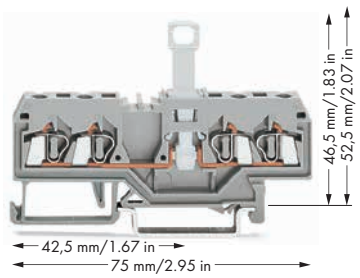
Certification organizations can be found in the overview on pages 622 and 623.

Disconnect Terminal Blocks for Test and Measurement 2.5 mm² 280 Series

0.08 - 2.5 mm²	AWG 28 - 12 *	0.08 - 2.5 mm²	AWG 28 - 12 *	0.08 - 2.5 mm²	AWG 28 - 12 *
400 V/6 kV/3 ❶	300 V, 15 A	400 V/6 kV/3 ❶	300 V, 15 A	400 V/6 kV/3 ❶	300 V, 15 A
I_N 10 A	300 V, 15 A	I_N 10 A	600 V, 15 A	I_N 10 A	600 V, 15 A
Terminal block width 5 mm / 0.197 in		Terminal block width 5 mm / 0.197 in		Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷		8 - 9 mm / 0.33 in ❷		8 - 9 mm / 0.33 in ❷	







	Item No.	Pack. Unit
2-conductor disconnect terminal block		
gray	**280-912**	50
blue	**280-914**	50
orange	**280-913**	50
Other terminal blocks with the same profile:		
Through	**280-901**	Page 182

	Item No.	Pack. Unit
3-conductor disconnect terminal block		
gray	**280-683**	50
Other terminal blocks with the same profile:		
Through	**280-681**	Page 182

	Item No.	Pack. Unit
4-conductor disconnect terminal block		
gray	**280-836**	50
blue	**280-839**	50
orange	**280-805**	50
Other terminal blocks with the same profile:		
Through	**280-833**	Page 182

Item-Specific Accessories

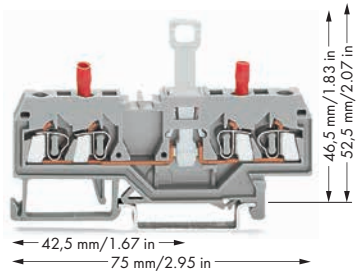
	Item No.	Pack. Unit
End and intermediate plate, 2.5 mm thick		
orange	**280-309**	100 (4x25)
gray	**280-308**	100 (4x25)
light gray	**280-356**	100 (4x25)
Separator, oversized, 2 mm thick		
orange	**280-311**	100 (4x25)
gray	**280-310**	100 (4x25)
light gray	**280-357**	100 (4x25)

Item-Specific Accessories

	Item No.	Pack. Unit
End and intermediate plate, 2.5 mm thick		
orange	**280-326**	100 (4x25)
gray	**280-324**	100 (4x25)
light gray	**280-358**	100 (4x25)
Separator, oversized, 2 mm thick		
orange	**280-346**	100 (4x25)
gray	**280-344**	100 (4x25)
light gray	**280-359**	100 (4x25)

Item-Specific Accessories

	Item No.	Pack. Unit
End and intermediate plate, 2.5 mm thick		
orange	**280-315**	100 (4x25)
gray	**280-314**	100 (4x25)
light gray	**280-352**	100 (4x25)
Separator, oversized, 2 mm thick		
orange	**280-335**	100 (4x25)
gray	**280-334**	100 (4x25)
light gray	**280-353**	100 (4x25)

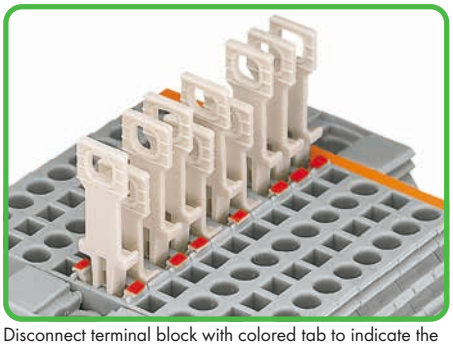


	Item No.	Pack. Unit
2-conductor disconnect terminal block for test and measurement with integrated test sockets		
gray	**280-829**	50

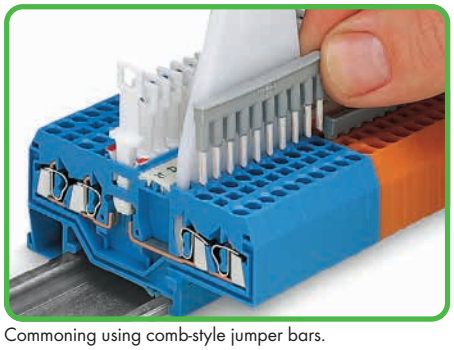
Item-Specific Accessories

	Item No.	Pack. Unit
End and intermediate plate, 2.5 mm thick		
orange	**280-315**	100 (4x25)
gray	**280-314**	100 (4x25)
light gray	**280-352**	100 (4x25)
Separator, oversized, 2 mm thick		
orange	**280-335**	100 (4x25)
gray	**280-334**	100 (4x25)
light gray	**280-353**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.



Disconnect terminal block with colored tab to indicate the switching condition (red = disconnected).

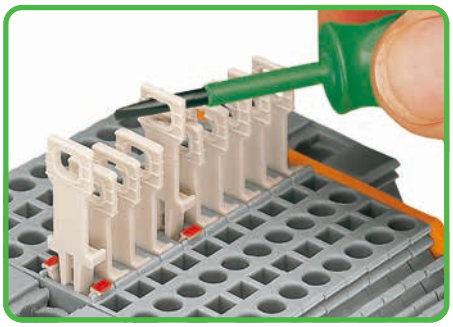


Commoning using comb-style jumper bars.

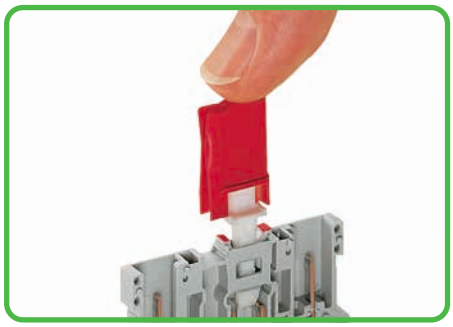
❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ See application notes for:
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294



Pulling the disconnect tab with operating tool.



The lock is put on the disconnect tab of the disconnect terminal block (the picture shows a 769 Series 2-pin disconnect carrier terminal block).



Pulling the disconnect tab by hand.

280 Series Accessories

Appropriate marking systems (see Section 13)

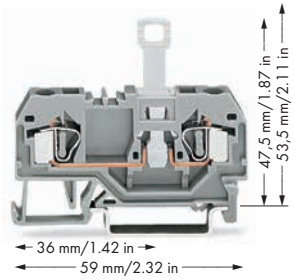
Insulation stop, ❸	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop, ❸	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop, ❸	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)
Comb-style jumper bar, insulated, ❸	I_N = I_N terminal block		
	2-way	**280-482**	200 (8x25)
	3-way	**280-483**	200 (8x25)
Alternate comb-style jumper bar,	insulated, I_N = I_N terminal block		
	2-way	**280-492**	200 (8x25)
Operating tool, of insulating material			
	2-way	**280-432**	1
	3-way	**280-433**	1
Protective warning marker,	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**280-415**	100 (4x25)
Disconnect lock,	for disconnect tab used on 280/281 and 769 Series disconnect terminal blocks		
	red	**709-170**	200 (8x25)
Test socket,	insulated, 2 mm Ø		
	red	**209-107**	100 (2x50)
Test socket,	insulated, 2.3 mm Ø		
	yellow	**209-108**	100 (2x50)
Test plug,	with 500 mm cable, 2 mm Ø		
	red	**210-136**	50
Test plug,	with 500 mm cable, 2.3 mm Ø		
	yellow	**210-137**	50

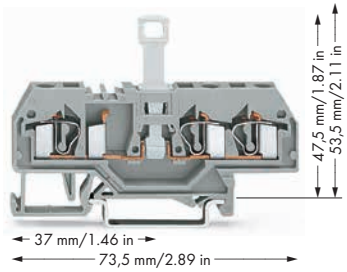
Disconnect Terminal Blocks for Test and Measurement 4 mm²
281 Series

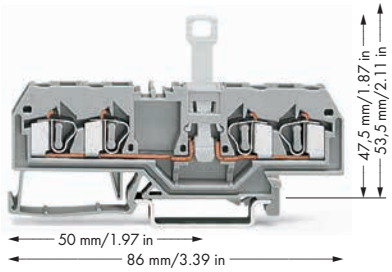
0.08 - 4 mm²	AWG 28 - 12	
400 V/6 kV/3 ❶	300 V, 15 A	
I_N 10 A	300 V, 15 A	
Terminal block width 6 mm / 0.236 in		
9 - 10 mm / 0.37 in ❷		

0.08 - 4 mm²	AWG 28 - 12	
400 V/6 kV/3 ❶	300 V, 15 A	
I_N 10 A	600 V, 15 A	
Terminal block width 6 mm / 0.236 in		
9 - 10 mm / 0.37 in ❷		

0.08 - 4 mm²	AWG 28 - 12	
400 V/6 kV/3 ❶	300 V, 15 A	
I_N 10 A	600 V, 15 A	
Terminal block width 6 mm / 0.236 in		
9 - 10 mm / 0.37 in ❷		







	Item No.	Pack. Unit
2-conductor disconnect terminal block		
gray	**281-912**	50
Other terminal blocks with the same profile:		
Through	**281-901**	Page 188

	Item No.	Pack. Unit
3-conductor disconnect terminal block		
gray	**281-683**	50
Other terminal blocks with the same profile:		
Through	**281-681**	Page 188

	Item No.	Pack. Unit
4-conductor disconnect terminal block		
gray	**281-659**	50
blue	**281-660**	50
Other terminal blocks with the same profile:		
Through	**281-652**	Page 188

Item-Specific Accessories

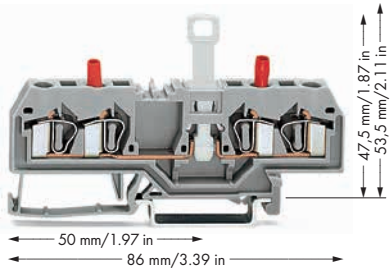
	Item No.	Pack. Unit
End and intermediate plate, 2.5 mm thick		
orange	**281-329**	100 (4x25)
gray	**281-328**	100 (4x25)
light gray	**281-349**	100 (4x25)
Separator, oversized, 2 mm thick		
orange	**281-331**	100 (4x25)
gray	**281-330**	100 (4x25)
light gray	**281-350**	100 (4x25)

Item-Specific Accessories

	Item No.	Pack. Unit
End and intermediate plate, 2.5 mm thick		
orange	**281-326**	100 (4x25)
gray	**281-324**	100 (4x25)
light gray	**281-355**	100 (4x25)
Separator, oversized, 2 mm thick		
orange	**281-346**	100 (4x25)
gray	**281-344**	100 (4x25)
light gray	**281-356**	100 (4x25)

Item-Specific Accessories

	Item No.	Pack. Unit
End and intermediate plate, 2.5 mm thick		
orange	**281-335**	100 (4x25)
gray	**281-334**	100 (4x25)
light gray	**281-345**	100 (4x25)
Separator, oversized, 2 mm thick		
orange	**281-339**	100 (4x25)
gray	**281-338**	100 (4x25)
light gray	**281-347**	100 (4x25)



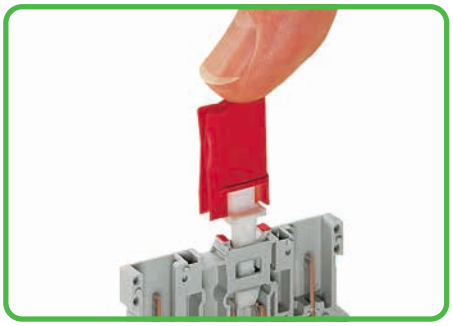
	Item No.	Pack. Unit
2-conductor disconnect terminal block for test and measurement with integrated test sockets		
gray	**281-666**	50

Item-Specific Accessories

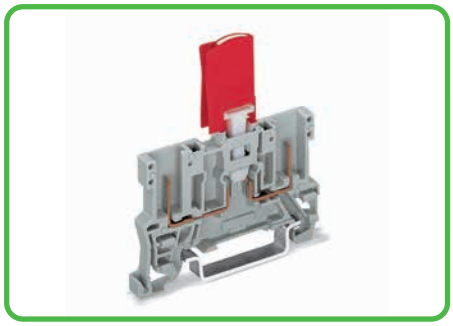
	Item No.	Pack. Unit
End and intermediate plate, 2.5 mm thick		
orange	**281-335**	100 (4x25)
gray	**281-334**	100 (4x25)
light gray	**281-345**	100 (4x25)
Separator, oversized, 2 mm thick		
orange	**281-339**	100 (4x25)
gray	**281-338**	100 (4x25)
light gray	**281-347**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

– Handling –
Disconnect Lock



The lock is put on the disconnect tab of the disconnect terminal block (the picture shows a 769 Series 2-pin disconnect carrier terminal block)

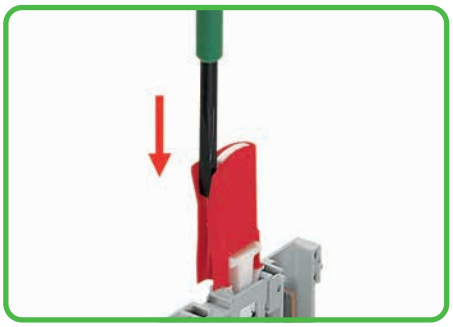


The disconnect lock is in position.

❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ See application notes for:
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294



Unlocking of disconnect lock.



Removing of disconnect lock.

Double safety
The disconnect tab has been designed for maximum operational safety.

As soon as the disconnecting tab is in the disconnect position, it can be protected against unintentional reconnection by using the disconnect lock.
Only through dedicated effort and use of a tool, can the disconnect lock be removed, and the circuit reconnected.

Features/Benefits:
- Easy handling
- The disconnect lock can be easily installed
- Clear identification of disconnect tab position
- Increases safety
- Dedicated effort is required to reconnect the circuit

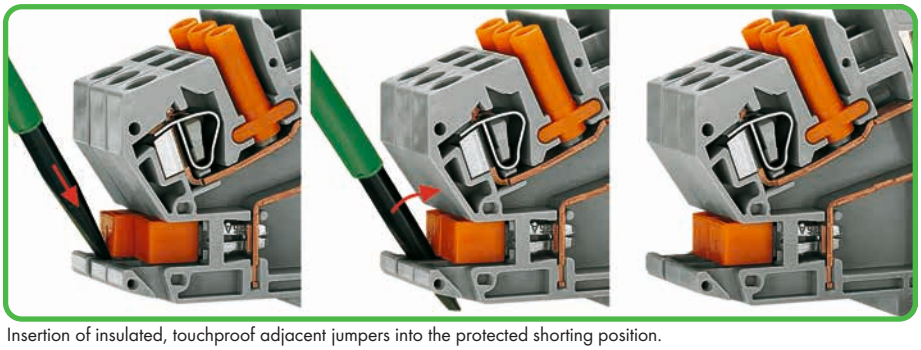
281 Series Accessories

Appropriate marking systems
(see Section 13)

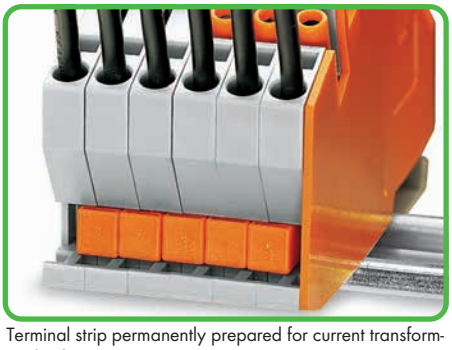
Insulation stop,			
❸	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**281-470**	200 (8x25)
Insulation stop,			
❸	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**281-471**	200 (8x25)
Insulation stop,			
❸	5 pcs/strip, 0.25 - 1.5 mm²		
	dark gray	**281-472**	200 (8x25)
Comb-style jumper bar, insulated,			
❸	I_N = I_N terminal block		
	2-way	**281-482**	100 (4x25)
	3-way	**281-483**	100 (4x25)
Alternate comb-style jumper bar,			
	insulated, I_N = I_N terminal block		
	2-way	**281-492**	100 (4x25)
Operating tool, of insulating material			
	2-way	**280-432**	1
	3-way	**280-433**	1
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**281-415**	100 (4x25)
Disconnect lock,			
	for disconnect tab used on 280/281 and 769 Series disconnect terminal blocks		
	red	**709-170**	200 (8x25)
Test socket,			
	insulated, 2 mm Ø		
	red	**209-107**	100 (2x50)
Test socket,			
	insulated, 2.3 mm Ø		
	yellow	**209-108**	100 (2x50)
Test plug,			
	with 500 mm cable, 2 mm Ø		
	red	**210-136**	50
Test plug,			
	with 500 mm cable, 2.3 mm Ø		
	yellow	**210-137**	50

Disconnect Terminal Blocks for Test and Measurement of Transformer Circuits, 282 Series

Preparing the shorting path for the current transformer

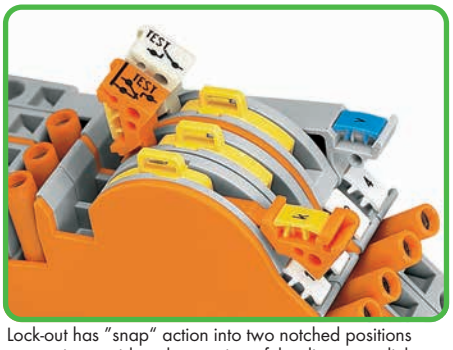


Insertion of insulated, touchproof adjacent jumpers into the protected shorting position.

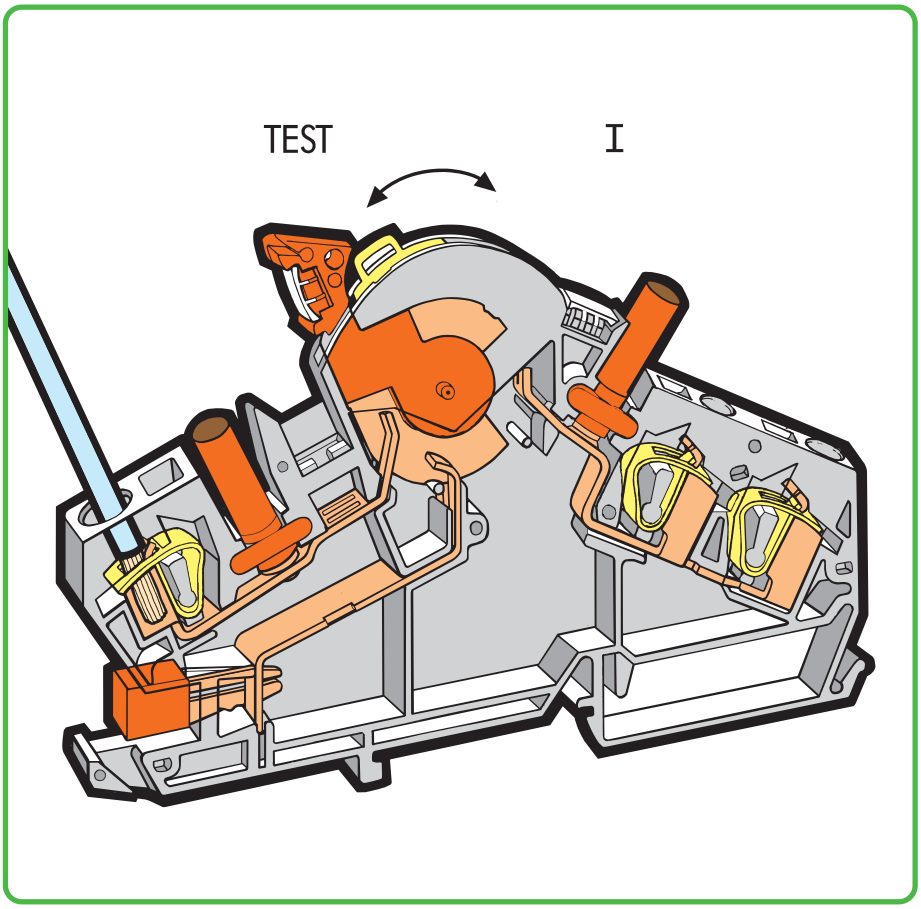


Terminal strip permanently prepared for current transformer circuits.

Lock-out



Lock-out has "snap" action into two notched positions preventing accidental operation of the disconnect link.



Locking cover for disconnect links



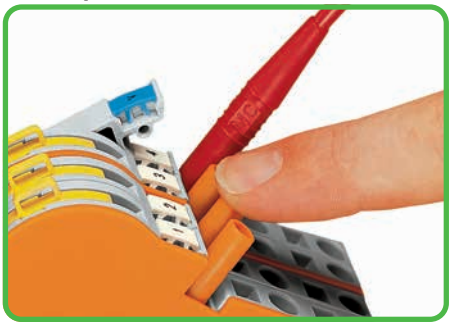
Transparent locking cover for 1 – 8 disconnect links can be snapped on
a) for mechanical interlocking for multipole switching
b) for protecting markers.

Interlocking link



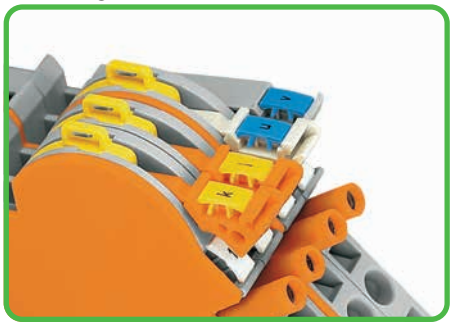
Interlocking link for mechanical interlocking of several links for multipole switching.

Touch-proof test sockets



For touch-proof test sockets 4 mm Ø, for example mfd by Multi-Contact (not offered by WAGO).

Marking



Marking with WMB Multi marking system.
For other systems, see Section 13.



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded

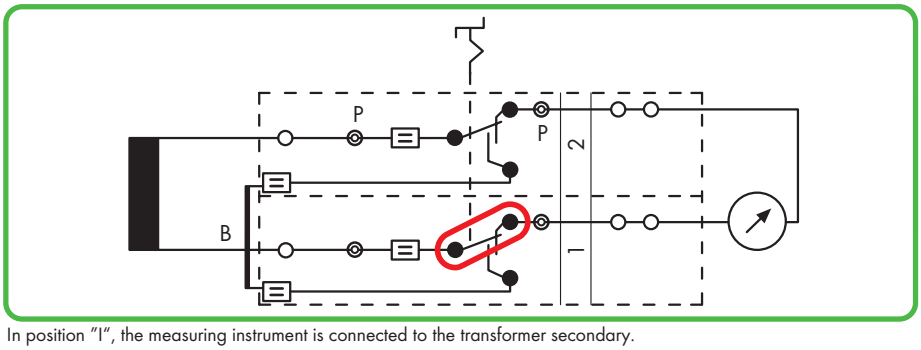


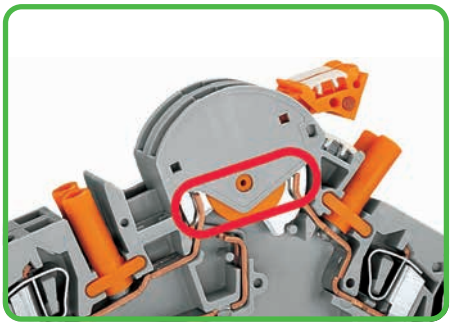
fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

– Description and Handling –

Disconnect link in notched position "I"

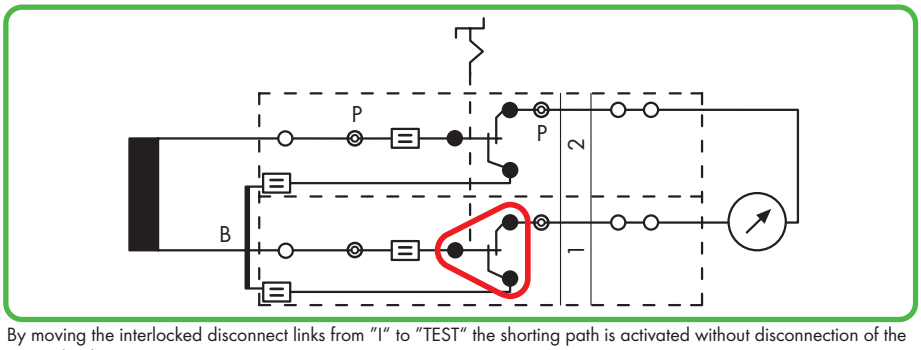


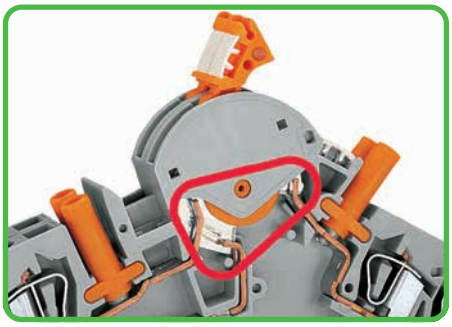


In position "I", the measuring instrument is connected to the transformer secondary.

B = shorting jumper, P = test socket

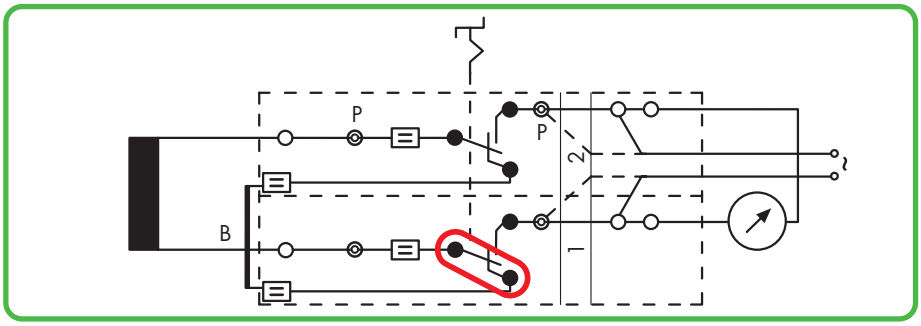
Disconnect link in transition from "I" –> "TEST" (terminal blocks 1 + 2)

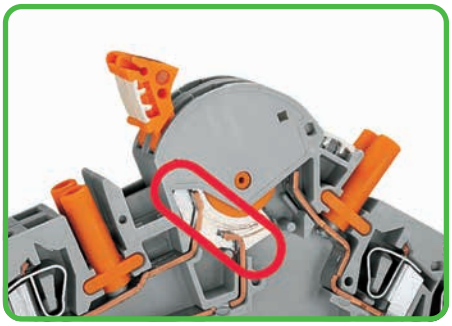




By moving the interlocked disconnect links from "I" to "TEST" the shorting path is activated without disconnection of the measuring instrument yet.

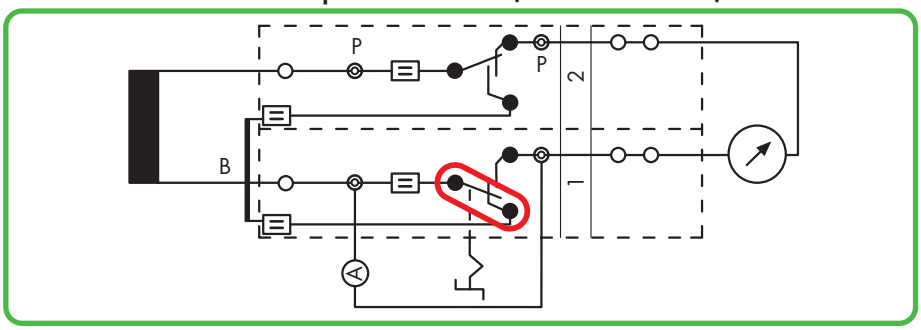
Disconnect link in notched position "TEST" (terminal blocks 1 + 2)

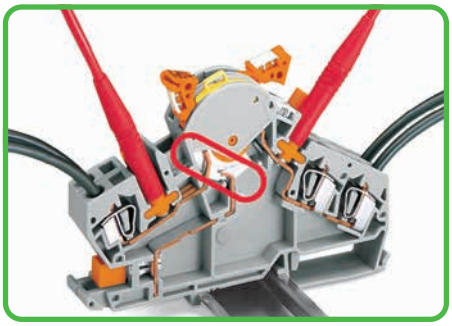




The measuring instrument is electrically disconnected from the transformer. In this position, if necessary, external voltage can be applied via sockets, or the 2nd CAGE CLAMP® connection for relay testing in transformer protection circuits.

Disconnect link in notched position "I" (terminal block 2)
Disconnect link in notched position "TEST" (terminal block 1)





Measurement testing. Before moving the disconnect link of terminal block 1 into the notched position "TEST", the reference current meter must be inserted into the test socket of terminal block 1.



fine-stranded, tip-bonded



fine-stranded, with ferrule ❶ (gastight crimped)

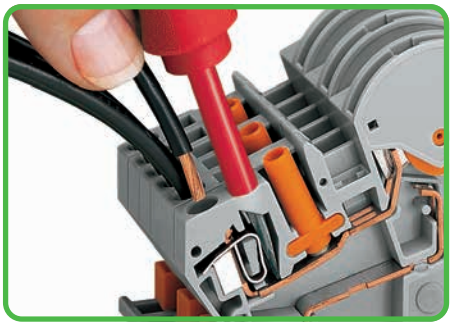


fine-stranded, with pin terminal (gastight crimped)

❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

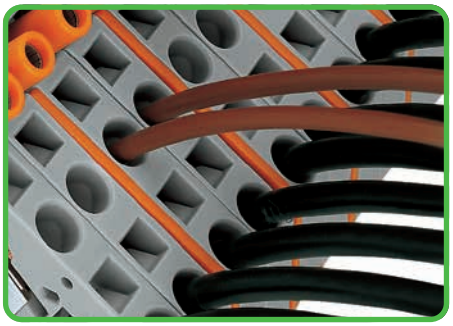
Circuit Configuration Examples

CAGE CLAMP® connection



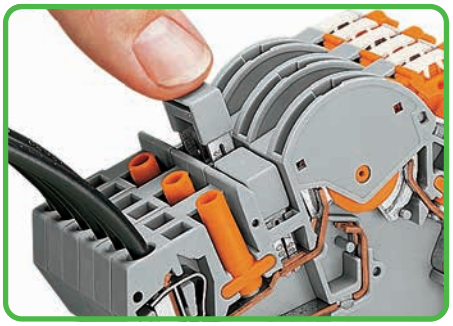
Conductor termination with operating tool (5.5 x 0.8) mm

Additional CAGE CLAMP®-connection



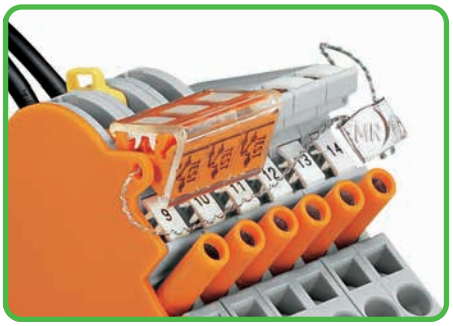
Additional CAGE CLAMP® connection on the side of the measuring instrument. For example: connecting wire commoning chains or applying an external voltage.

Commoning



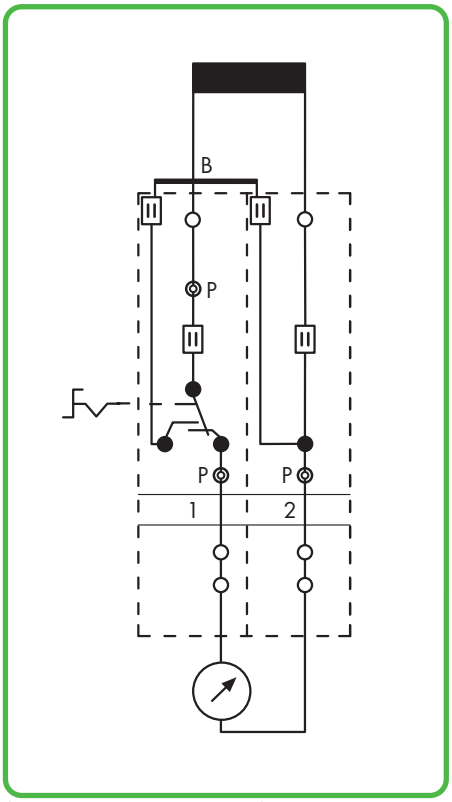
Additional commoning possible with adjacent jumper or testing option via 209-170 test plug adapter on transformer side.

Lock-out seal

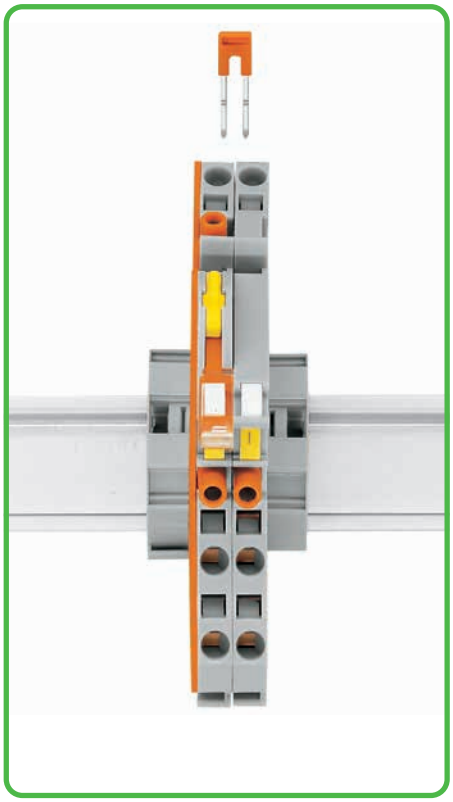


A lock-out seal can be used on the disconnect link in notched position "I".

Measuring set for a single-phase current transformer



(without measurement testing)

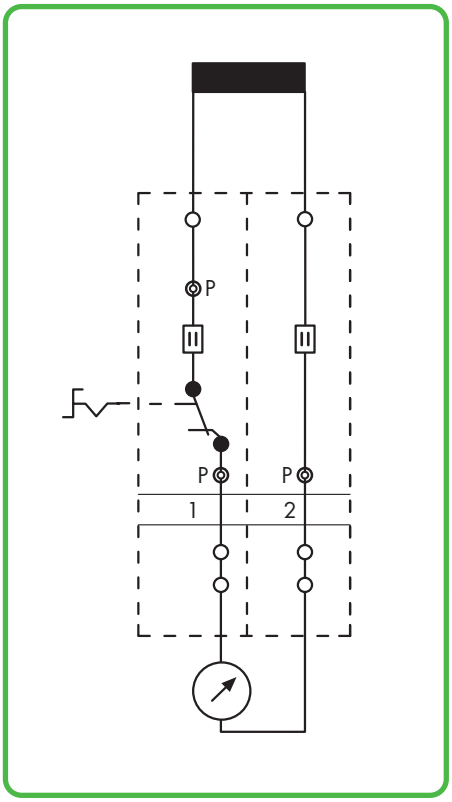


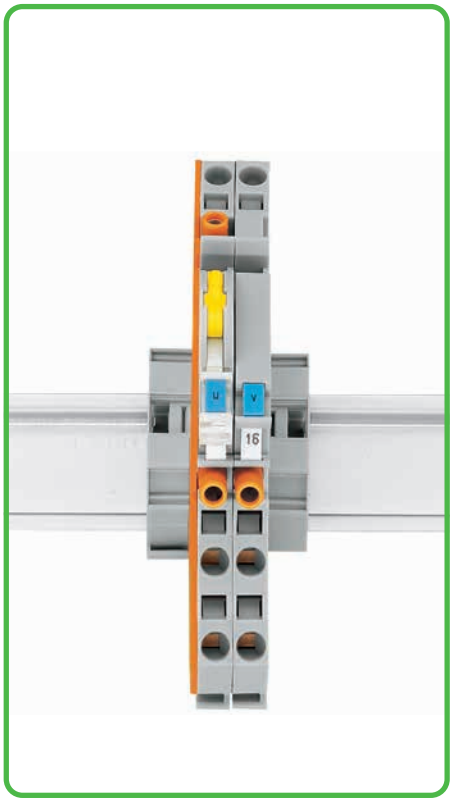
Terminal blocks required:

1 x disconnect/test terminal block	282-870
1 x through terminal block	282-865
1 x jumper, orange	282-424
1 x end plate, orange	282-386

in addition locking cover, lock-out

Measuring set for a single-phase voltage transformer



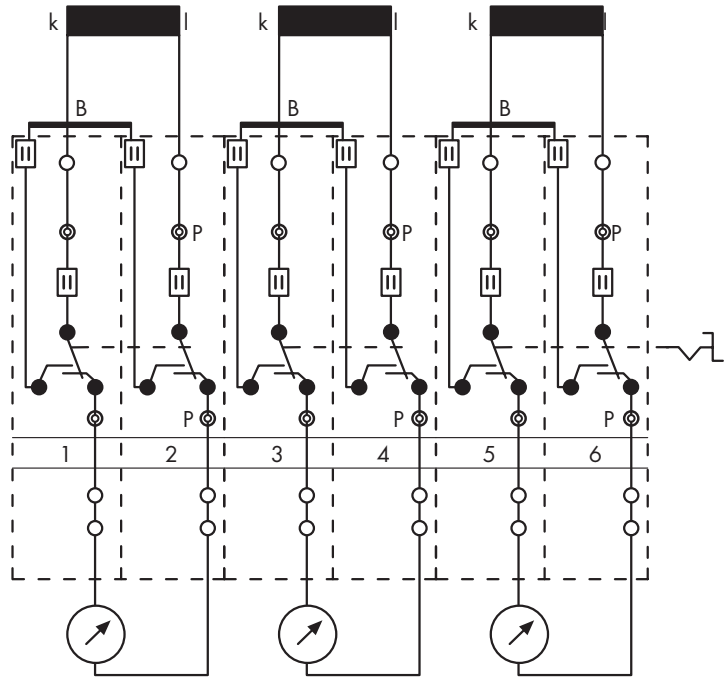


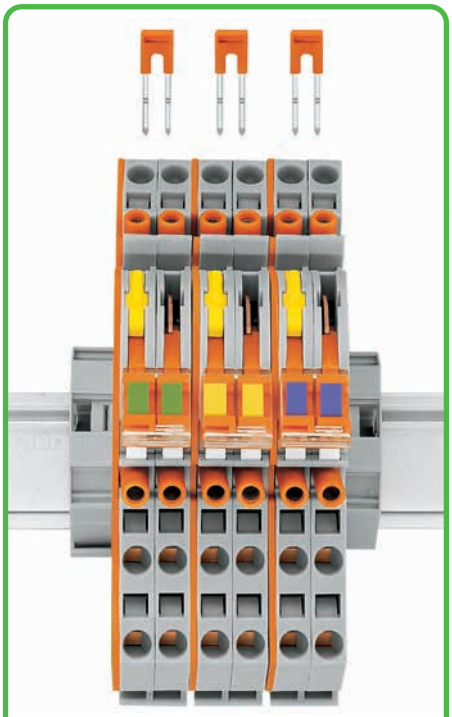
Terminal blocks required:

1 x disconnect/test terminal block	282-860
1 x through terminal block	282-866
1 x jumper, orange	282-424
1 x end plate, orange	282-386

in addition locking cover, lock-out

Measuring set for a 3-phase current transformer





Pairs of disconnect links are interlocked by locking covers.
After the interlocking has been released, testing of the measured value is also possible.

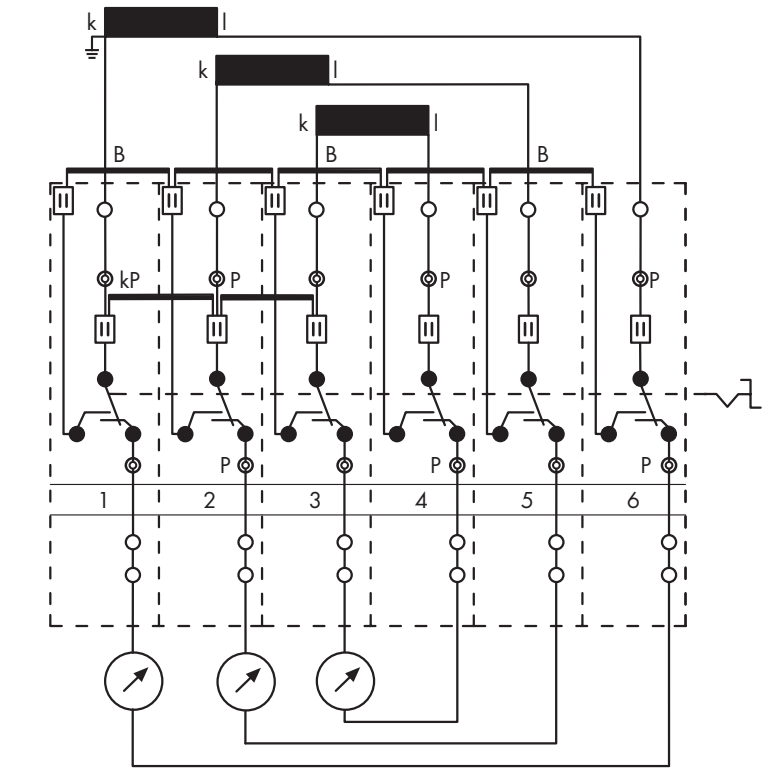
B = shorting jumper, P = test socket

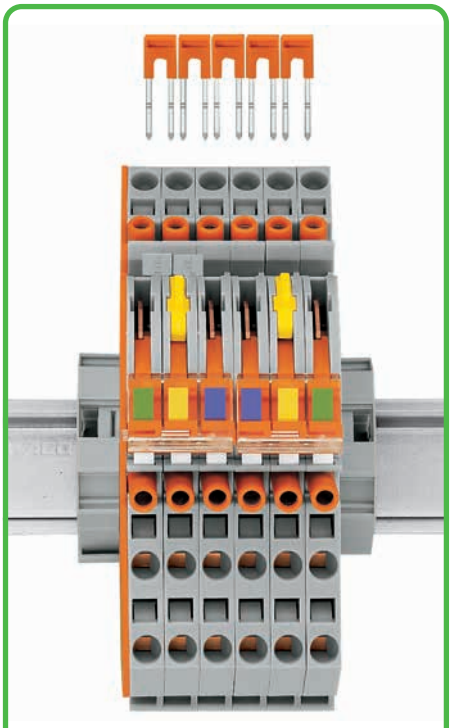
Terminal blocks required:

6 x disconnect/test terminal block	282-870
3 x jumper, orange	282-424
3 x end plate, orange	282-386

in addition locking links, locking covers, lock-outs

Measuring set for a 3-phase current transformer with 'Y' point





All 6 disconnect links are interlocked by the interlocking link.

kP = 'Y' point jumpers

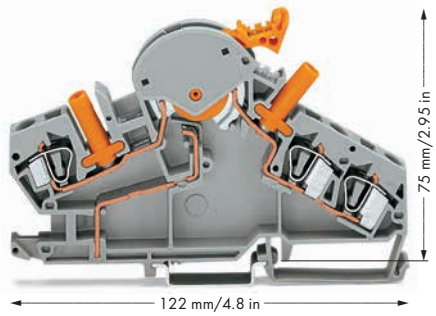
Terminal blocks required:

6 x disconnect/test terminal block	282-870
5 x jumper, orange	282-424
2 x jumper, gray	282-402
1 x end plate, orange	282-386

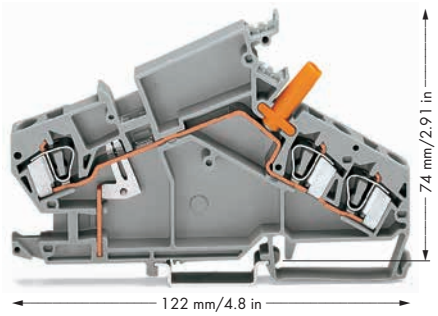
in addition locking links, locking covers, lock-outs

Disconnect Terminal Blocks for Test and Measurement, 6 mm²/30 A, Through Terminal Blocks for Current and Voltage Transformer Circuits 282 Series

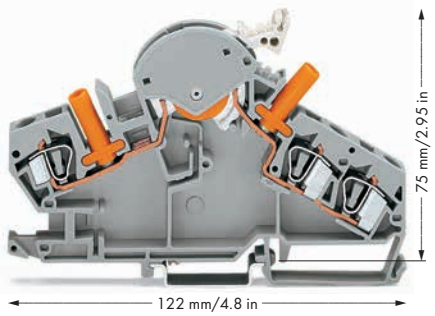
0.2 - 6 mm²	AWG 24 - 10	
500 V/6 kV/3 ❶	600 V, 30 A	
I_N 30 A	300 V, 5 A	
Terminal block width 8 mm / 0.315 in		
12 - 13 mm / 0.49 in ❷		



0.2 - 6 mm²	AWG 24 - 10	
500 V/6 kV/3 ❶	600 V, 30 A	
I_N 30 A	300 V, 5 A	
Terminal block width 8 mm / 0.315 in		
12 - 13 mm / 0.49 in ❷		



0.2 - 6 mm²	AWG 24 - 10	
500 V/6 kV/3 ❶	600 V, 30 A	
I_N 30 A	300 V, 5 A	
Terminal block width 8 mm / 0.315 in		
12 - 13 mm / 0.49 in ❷		



	Item No.	Pack. Unit
Disconnect terminal block for test and measurement, e.g., current transformer circuits, with touch-proof test sockets, orange disconnect link		
gray	**282-870** ❸ ❹	20

	Item No.	Pack. Unit
Through terminal block, e.g., current transformer circuits, with touch-proof test socket		
gray	**282-865** ❹	20

	Item No.	Pack. Unit
Disconnect terminal block for test and measurement, e.g., voltage transformer circuits, with touch-proof test sockets, light gray disconnect link		
gray	**282-860** ❸ ❹	20

Item-Specific Accessories

End and separator plate, 1.5 mm thick, without use of lock-out seal			
orange	**282-386**	50 (5x10)	
gray	**282-391**	50 (5x10)	
End and separator plate, 1.5 mm thick, for use of lock-out seal			
orange	**282-387**	50 (5x10)	
gray	**282-392**	50 (5x10)	
Lock-out, for disconnect link			
yellow	**282-384**	100 (5x20)	
Locking cover, transparent, mechanically locks multiple links			
1-pole	**282-881**	50 (5x10)	
2-pole	**282-882**	50 (5x10)	
3-pole	**282-883**	50 (5x10)	
4-pole	**282-884**	50 (5x10)	
5-pole	**282-885**	50 (5x10)	
6-pole	**282-886**	50 (5x10)	
7-pole	**282-887**	50 (5x10)	
8-pole	**282-888**	50 (5x10)	
Interlocking link, mechanically locks multiple links, 1 m/3'3" long			
transparent	**210-254**	1	
Adjacent jumper, insulated, I_N 41 A			
orange	**282-424**	100 (4x25)	
WMB Multi marking system, 10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm, yellow			
k/l (50x)	**794-5553/000-002**	5	

Item-Specific Accessories

End and separator plate, 1.5 mm thick			
orange	**282-385**	50 (5x10)	
gray	**282-390**	50 (5x10)	
WMB Multi marking system, 10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm, yellow			
k/l (50x)	**794-5553/000-002**	5	

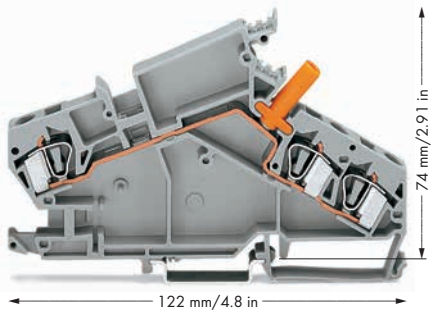
Item-Specific Accessories

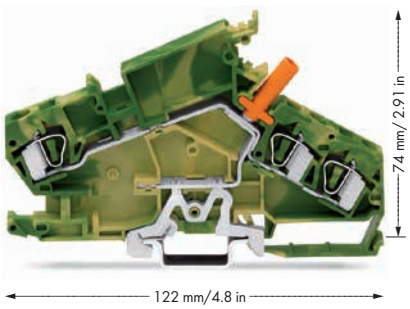
End and separator plate, 1.5 mm thick, without use of lock-out seal			
orange	**282-386**	50 (5x10)	
gray	**282-391**	50 (5x10)	
End and separator plate, 1.5 mm thick, for use of lock-out seal			
orange	**282-387**	50 (5x10)	
gray	**282-392**	50 (5x10)	
Lock-out, for disconnect link			
yellow	**282-384**	100 (5x20)	
Locking cover, transparent, mechanically locks multiple links			
1-pole	**282-881**	50 (5x10)	
2-pole	**282-882**	50 (5x10)	
3-pole	**282-883**	50 (5x10)	
4-pole	**282-884**	50 (5x10)	
5-pole	**282-885**	50 (5x10)	
6-pole	**282-886**	50 (5x10)	
7-pole	**282-887**	50 (5x10)	
8-pole	**282-888**	50 (5x10)	
Interlocking link, mechanically locks multiple links, 1 m/3'3" long			
transparent	**210-254**	1	
WMB Multi marking system, 10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm, blue			
U/V (50x)	**794-5554/000-006**	5	

Certification organizations can be found in the overview on pages 622 and 623.

0.2 - 6 mm²	AWG 24 - 10
500 V/6 kV/3 ❶	600 V, 30 A
I_N 30 A	300 V, 5 A
Terminal block width 8 mm / 0.315 in	
12 - 13 mm / 0.49 in ❷	

0.2 - 6 mm²	AWG 24 - 10
Terminal block width 8 mm / 0.315 in	
12 - 13 mm / 0.49 in ❷	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Max. height when rotating the disconnect link (incl. locking cover): 92 mm/3.62 in

❹ For operating stickers, please refer to our online catalog:
for 282-870: Item No. 210-412
for 282-865: Item No. 210-415
for 282-860: Item No. 210-414
for 282-866: Item No. 210-413

	Item No.	Pack. Unit
Through terminal block,		
e.g., voltage transformer circuits,		
with touch-proof test socket		
gray	**282-866** ❹	20

	Item No.	Pack. Unit
Ground terminal block,		
e.g., voltage transformer circuits,		
with touch-proof test socket		
green-yellow	**282-868** ❹	20

Item-Specific Accessories

End and separator plate,



1.5 mm thick		
orange	**282-385**	50 (5x10)
gray	**282-390**	50 (5x10)

WMB Multi marking system,



10 strips with 10 markers per card,		
for terminal widths 5 - 17.5 mm,		
blue		
U/V (50x)	**794-5554/000-006**	
		5

Item-Specific Accessories

End and separator plate,



1.5 mm thick		
orange	**282-385**	50 (5x10)
gray	**282-390**	50 (5x10)

282 Series Accessories

Appropriate marking systems (see Section 13)

Adjacent jumper, insulated,



I_N 41 A		
gray	**282-402**	100 (4x25)

Alternate jumper, insulated,



I_N 41 A		
gray	**282-409**	100 (4x25)

Protective warning marker,



with high-voltage symbol, black,		
for 5 terminal blocks		
yellow	**282-415**	100 (4x25)

Wire commoning chain, 4 connections,



3 x 110 mm,		
insulated, I_N 24 A		
black	**709-110**	1

Wire commoning chain, 3 connections,



2 x 120 mm,		
insulated, I_N 24 A		
black	**709-111**	1

Wire commoning chain, 3 connections,



2 x 170 mm,		
insulated, I_N 24 A		
black	**709-112**	1

Group marker carrier,



e.g., for 282 Series transformer terminal blocks, angled		
gray	**209-144**	50 (2x25)

WMB Multi marking system,

10 strips with 10 markers per card,		
for terminal widths 5 - 17.5 mm		
plain	**793-501**	5

WMB Multi marking system, plain,



10 strips with 10 markers per card,		
for terminal widths 5 - 17.5 mm		
yellow	**793-501/000-002**	
red	**793-501/000-005**	
blue	**793-501/000-006**	
gray	**793-501/000-007**	
orange	**793-501/000-012**	
light green	**793-501/000-017**	
green	**793-501/000-023**	
violet	**793-501/000-024**	
		5

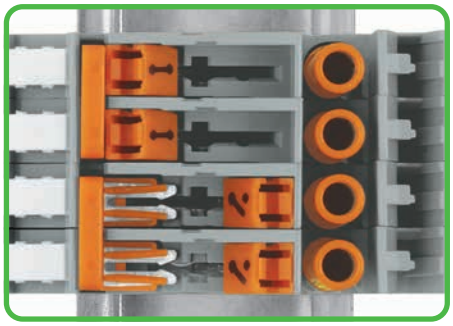
Transverse Switching Terminal Blocks and Longitudinal Switching Disconnect Terminal Blocks, 282 Series – Description and Handling –

Commoning



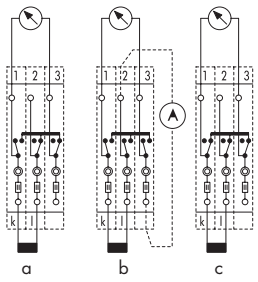
Transverse switching terminal blocks
Left: Adjacent jumper for commoning of switch lever
Right: Commoning with orange jumper

Switch positions



Left: closed
Right: open

Current transformer circuit

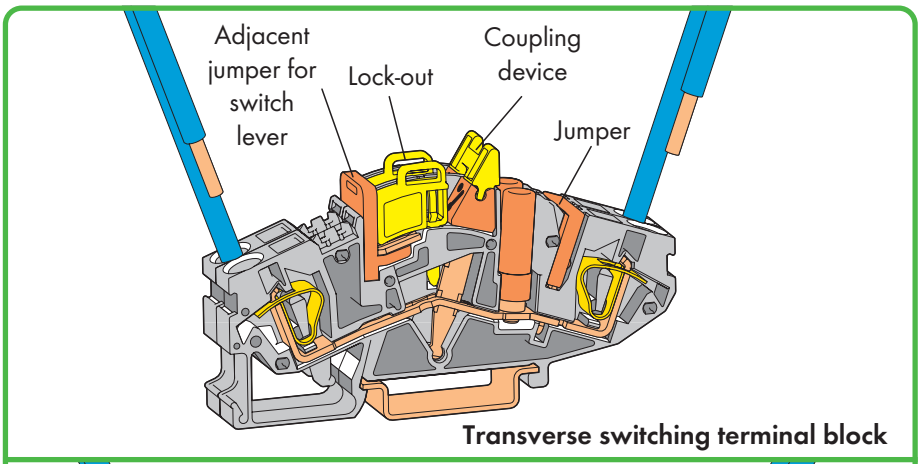


via transverse switching terminal blocks
a = Normal operation **b** = Measurement testing
c = Transformer short-circuit

Testing

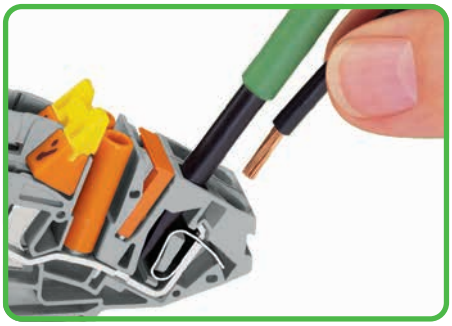


Testing with touch-proof test sockets 4 mm Ø.
(not offered by WAGO)
e.g., mfd by Multi-Contact Deutschland GmbH

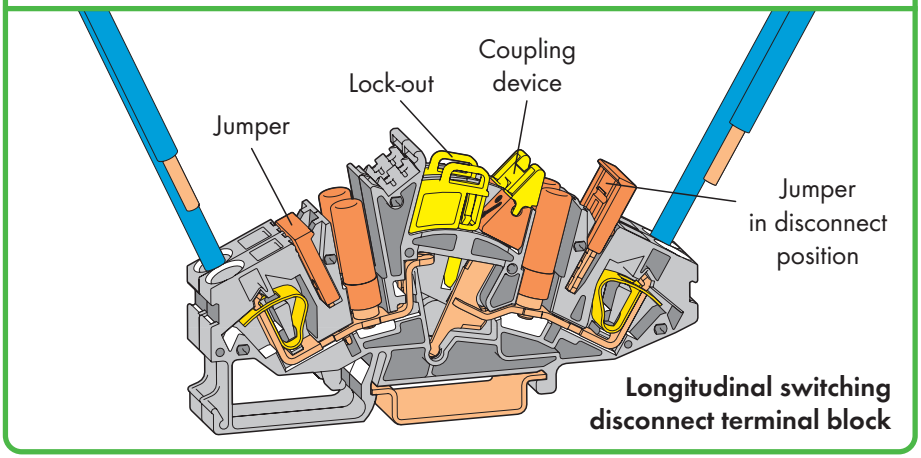


Transverse switching terminal block

CAGE CLAMP® connection



Conductor termination



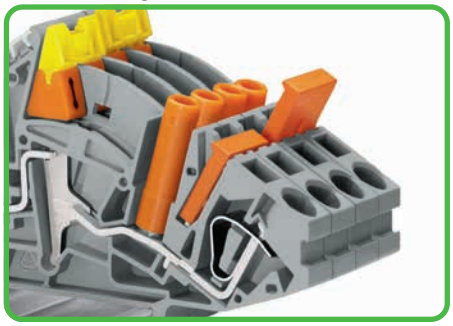
Longitudinal switching disconnect terminal block

Lock-out



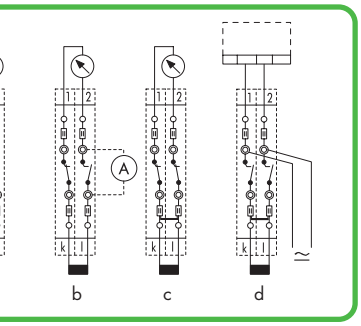
Inserting lock-out.

Commoning



Longitudinal switching disconnect terminal blocks

Current transformer circuit



via longitudinal switching disconnect terminal blocks
a = Normal operation **b** = Measurement testing
c = Transformer short-circuit **d** = Relay test

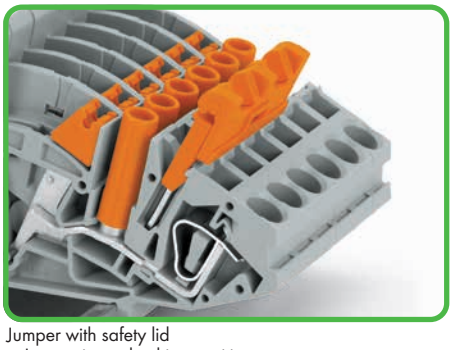
CAGE CLAMP® clamps the following copper conductors:*

solid	stranded	fine-stranded, also with tinned single strands	fine-stranded, tip-bonded	fine-stranded, with ferrule ❶ (gastight crimped)	fine-stranded, with pin terminal (gastight crimped)

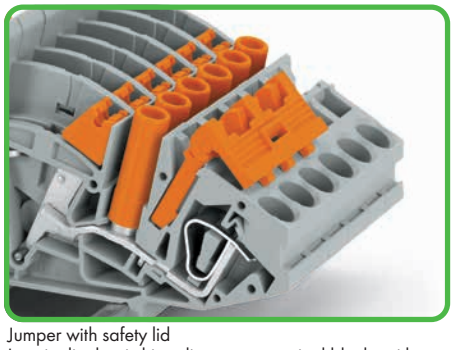
* For aluminum conductors, see notes in Section 14.

❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

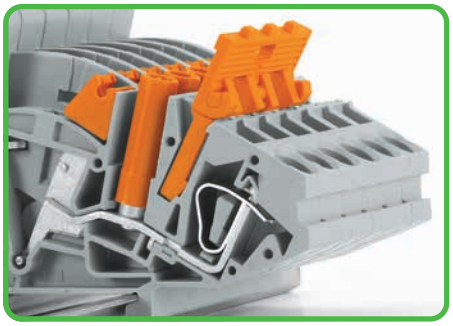
Jumpers with Safety Lid for Longitudinal Switching Disconnect Terminal Blocks Series 282



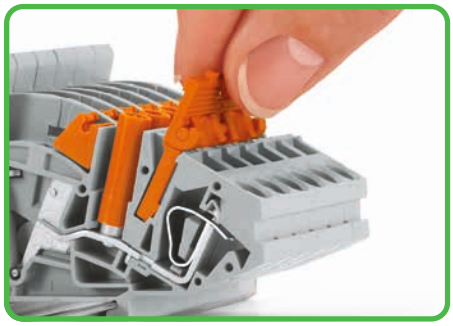
Jumper with safety lid
– Jumper in pre-latching position



Jumper with safety lid
Longitudinal switching disconnect terminal blocks with inserted jumper, including safety lid



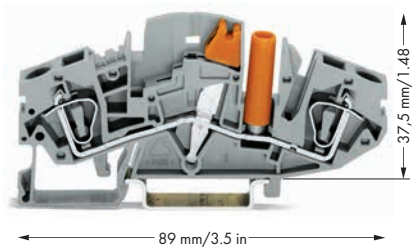
Jumper with safety lid
– Jumper with raised safety lid

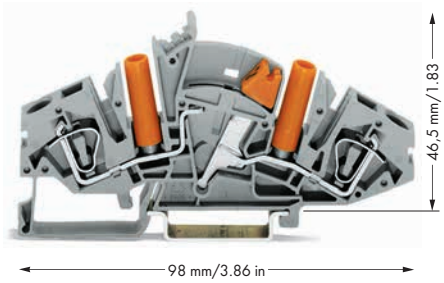


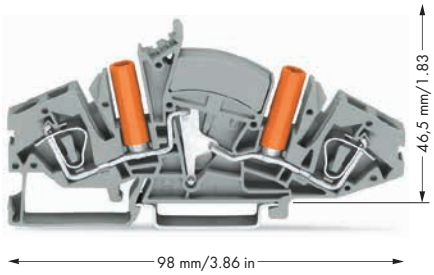
Jumper with safety lid
– Removing jumper via safety lid

Transverse Switching Terminal Blocks and Longitudinal Switching Disconnect Terminal Blocks 6 mm², e.g., Current Transformer Circuits, 282 Series

0.2 - 6 mm² | AWG 24 - 10 500 V/6 kV/3 ❶ | 600 V, 30 A I_N 30 A | 300 V, 36 A	0.2 - 6 mm² | AWG 24 - 10 500 V/6 kV/3 ❶ | 600 V, 30 A I_N 30 A | 300 V, 36 A	0.2 - 6 mm² | AWG 24 - 10 500 V/6 kV/3 ❶ I_N 30 A
Terminal block width 8 mm / 0.315 in 12 - 13 mm / 0.49 in ❷	Terminal block width 8 mm / 0.315 in 12 - 13 mm / 0.49 in ❷	Terminal block width 8 mm / 0.315 in 12 - 13 mm / 0.49 in ❷







	Item No.	Pack. Unit
2-conductor transverse switching terminal block, with touch-proof test socket, for 4 mm Ø test plug		
gray	**282-811** ❸	20

	Item No.	Pack. Unit
2-conductor longitudinal switching disconnect terminal block, with touch-proof test sockets, for 4 mm Ø test plug		
gray	**282-821** ❸	20

	Item No.	Pack. Unit
2-conductor through terminal block, with touch-proof test sockets, for 4 mm Ø test plug		
gray	**282-841**	20

Item-Specific Accessories

End and separator plate, 1.5 mm thick



	Item No.	Pack. Unit
orange	**282-366**	50 (5x10)
gray	**282-361**	50 (5x10)

Adjacent jumper for switch lever, insulated, orange, I_N 30 A



	Item No.	Pack. Unit
2-way	**282-442**	50 (5x10)
3-way	**282-443**	50 (5x10)
4-way	**282-444**	50 (5x10)
5-way	**282-445**	50 (5x10)
6-way	**282-446**	50 (5x10)

Item-Specific Accessories

End and separator plate, 1.5 mm thick



	Item No.	Pack. Unit
orange	**282-365**	50 (5x10)
gray	**282-360**	50 (5x10)

Item-Specific Accessories

End and separator plate, 1.5 mm thick



	Item No.	Pack. Unit
orange	**282-365**	50 (5x10)
gray	**282-360**	50 (5x10)

Accessories

Appropriate marking systems: WMB/Miniature WSB (see Section 13)

Lock-out, for disconnect link



	Item No.	Pack. Unit
yellow	**282-370**	100 (4x25)

Coupling device, mechanically locks multiple links, yellow



	Item No.	Pack. Unit
2-way	**282-372**	50 (5x10)
3-way	**282-373**	50 (5x10)
4-way	**282-374**	50 (5x10)

Jumper, insulated, I_N 30 A, orange



	Item No.	Pack. Unit
2-way	**282-432**	50 (5x10)
3-way	**282-433**	50 (5x10)
4-way	**282-434**	50 (5x10)
5-way	**282-435**	50 (5x10)
6-way	**282-436**	50 (5x10)
7-way	**282-437**	50 (5x10)
8-way	**282-438**	50 (5x10)
9-way	**282-439**	50 (5x10)
10-way	**282-440**	50 (5x10)

Protective warning marker, with high-voltage symbol, black, for 5 terminal blocks



	Item No.	Pack. Unit
yellow	**282-415**	100 (4x25)

Jumper, special design, I_N 30 A, orange



	Item No.	Pack. Unit
1-3-5	**282-435/011-000**	
1-2-4-6	**282-436/301-000**	
1-3-5-7	**282-437/011-000**	
1-4-7	**282-437/012-000**	
1-2-5-8	**282-438/300-000**	
1-4-7-8	**282-438/301-000**	
1-3-5-7-9	**282-439/011-000**	
		50 (5x10)

Jumper with safety lid, insulated, I_N 30 A, orange



	Item No.	Pack. Unit
2-way	**282-432/100-000**	
3-way	**282-433/100-000**	
4-way	**282-434/100-000**	
		50 (5x10)

Collective carrier for jumpers, for jumpers for transverse switching terminal block (282-811) and longitudinal switching disconnect terminal block (282-821)



	Item No.	Pack. Unit
gray	**282-369**	25

WMB Multi marking system, 10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm

	Item No.	Pack. Unit
plain	**793-501**	5

WMB Multi marking system, plain, 10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm

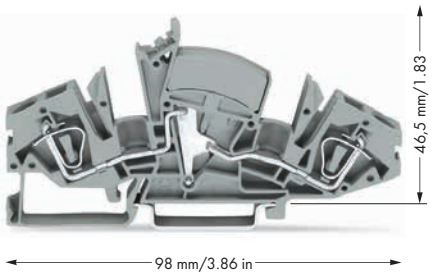


	Item No.	Pack. Unit
yellow	**793-501/000-002**	
red	**793-501/000-005**	
blue	**793-501/000-006**	
gray	**793-501/000-007**	
orange	**793-501/000-012**	
light green	**793-501/000-017**	
green	**793-501/000-023**	
violet	**793-501/000-024**	
		5

Certification organizations can be found in the overview on pages 622 and 623.

0.2 - 6 mm² | **AWG 24 - 10**
500 V/6 kV/3 ❶
I_N 30 A

Terminal block width 8 mm / 0.315 in
12 - 13 mm / 0.49 in ❷



	Item No.	Pack. Unit
2-conductor through terminal block,		
without test sockets		
gray	**282-841/049-000**	20

Item-Specific Accessories

End and separator plate,



1.5 mm thick

orange	**282-365**	50 (5x10)
gray	**282-360**	50 (5x10)

WMB Multi marking system,



10 strips with 10 markers per card,
for terminal widths 5 - 17.5 mm,
yellow
k/l (50x) **794-5553/000-002**
5

WMB Multi marking system,



10 strips with 10 markers per card,
for terminal widths 5 - 17.5 mm,
blue
U/V (50x) **794-5554/000-006**
5

Screwless end stop,



for DIN 35 rail,
6 mm wide
gray **249-116** 100 (4x25)

Screwless end stop,



for DIN 35 rail,
10 mm wide
gray **249-117** 50 (2x25)

❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

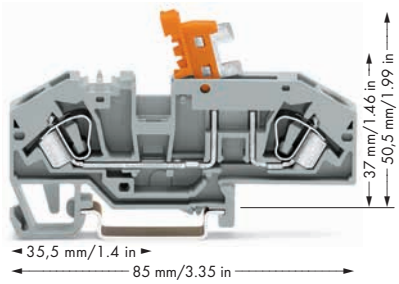
❸ Max. height when rotating the disconnect link (incl. locking cover): 45 mm/1.77 in
For operating stickers, please refer to our online catalog:
for 282-811: Item No. 210-424
for 282-821: Item No. 210-423

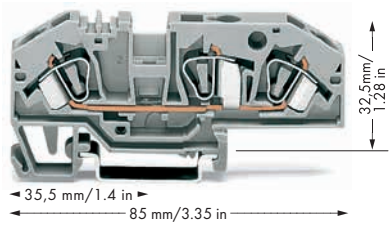
Disconnect and Ground Conductor Disconnect Terminal Blocks 6 mm²/30 A and Through Terminal Blocks of Same Profile 282 Series

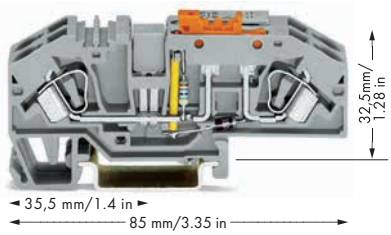
0.2 - 6 mm²	AWG 24 - 10	
400 V/6 kV/3 ❶	600 V, 30 A	
I_N 30 A	300 V, 36 A	
Terminal block width 8 mm / 0.315 in		
12 - 13 mm / 0.49 in ❷		

0.2 - 6 mm²	AWG 24 - 10	
800 V/8 kV/3 ❶	600 V, 30 A	
I_N 41 A	600 V, 40 A	
Terminal block width 8 mm / 0.315 in		
12 - 13 mm / 0.49 in ❷		

0.2 - 6 mm²	AWG 24 - 10
Terminal block width 16 mm / 0.63 in	
12 - 13 mm / 0.49 in ❷	







Item No.		Pack. Unit
2-conductor disconnect terminal block,		
with test point,		
orange disconnect link		
gray	**282-697**	25
blue	**282-695**	25
Other terminal blocks with the same profile:		
Through	**282-699**	Page 238

Item No.		Pack. Unit
3-conductor through terminal block,		
with test point,		
same profile as disconnect terminal blocks		
gray	**282-699**	25
blue	**282-694**	25
Other terminal blocks with the same profile:		
Disconnect	**282-697**	Page 238
Ground cond. disc.	**282-640**	Page 238
Fuse	**282-696**	Page 240

Item No.		Pack. Unit
Ground conductor disconnect terminal block,		
with test point,		
orange disconnect link, gray		
24 V	**282-640**	12
48 V	**282-641**	12
120 V	**282-638**	12
230 V	**282-639**	12
Other terminal blocks with the same profile:		
Through	**282-699**	Page 238

Item-Specific Accessories

Adjacent jumper, insulated,		
I_N 41 A		
gray	**282-402**	100 (4x25)
Alternate jumper, insulated,		
I_N 41 A		
gray	**282-409**	100 (4x25)
Test plug adapter, 8.3 mm wide,		
for terminal blocks 1.5 - 10 mm²,		
for 4 mm Ø test plug		
gray	**209-170**	50 (2x25)

Item-Specific Accessories

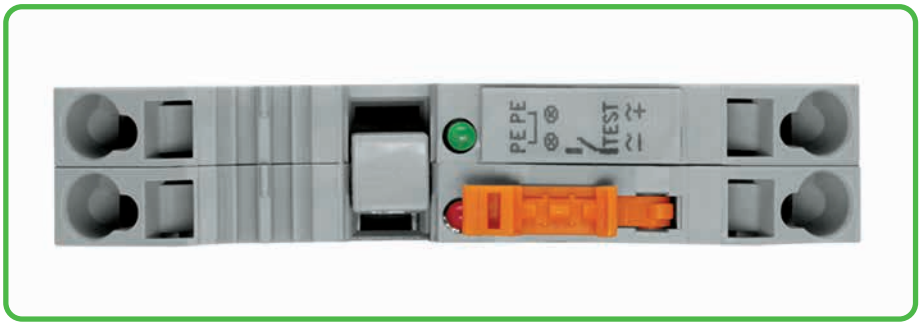
Adjacent jumper, insulated,		
I_N 41 A		
gray	**282-402**	100 (4x25)
Alternate jumper, insulated,		
I_N 41 A		
gray	**282-409**	100 (4x25)
Test plug adapter, 8.3 mm wide,		
for terminal blocks 1.5 - 10 mm²,		
for 4 mm Ø test plug		
gray	**209-170**	50 (2x25)

Accessories

Appropriate marking system: WMB
(see Section 13)

End plate, 2 mm thick		
orange	**282-333**	100 (4x25)
gray	**282-334**	100 (4x25)
Protective warning marker,		
with high-voltage symbol, black,		
for 5 terminal blocks		
yellow	**282-405**	100 (4x25)
Screwless end stop,		
for DIN 35 rail,		
6 mm wide		
gray	**249-116**	100 (4x25)
Screwless end stop,		
for DIN 35 rail,		
10 mm wide		
gray	**249-117**	50 (2x25)

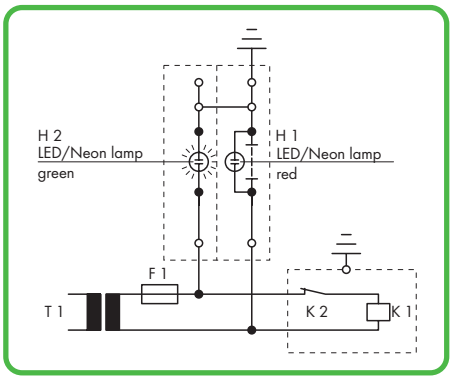
Certification organizations can be found in the overview on pages 622 and 623.



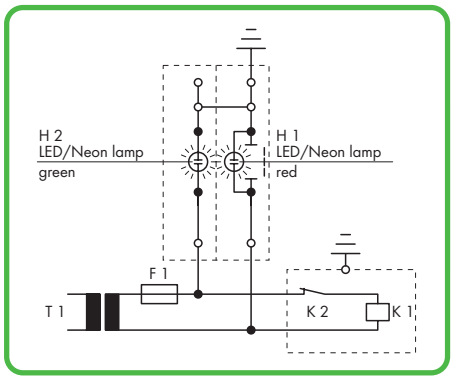
Ground conductor disconnect terminal block – top view

❶ 400 V/800 V = rated voltage
6 kV/8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

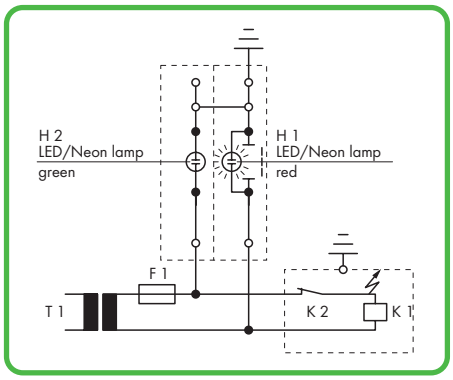
❷ Strip length, see packaging or instructions.



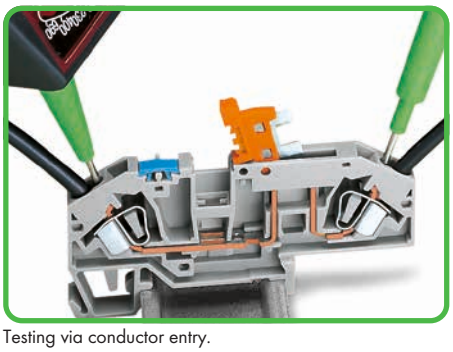
Operating condition
Slide link closed, auxiliary circuit grounded, green lamp illuminates.



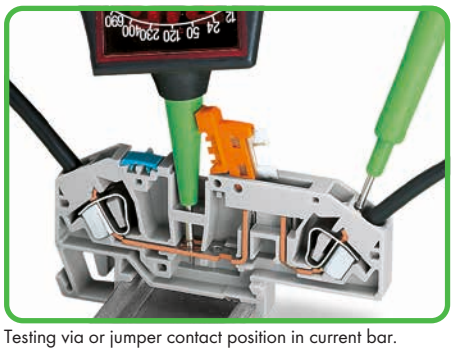
Test condition – no grounding
Slide link open, auxiliary circuit not grounded.



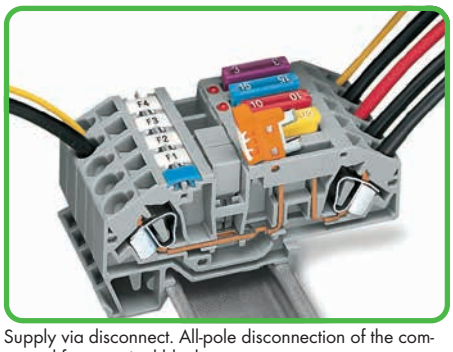
Test condition – grounding
Slide link open, auxiliary circuit not grounded, red lamp illuminates.



Testing via conductor entry.



Testing via or jumper contact position in current bar.



Supply via disconnect. All-pole disconnection of the commoned fuse terminal blocks.

IEC 60204/DIN VDE 0113 "Electrical equipment of industrial machines, part 1: General requirements" 9.4.3.1:

Ground faults on control circuits shall not cause unintentional starting, hazardous movements, or prevent stopping of the machine.
In order to fulfill this requirement, bonding to the protective bonding circuit shall be provided in accordance with 8.2 and the devices shall be connected as described in 9.1.4. Control circuits fed from a transformer and not connected to the protective bonding circuit shall be provided with an insulation monitoring device (e.g., residual current device) which either indicates an ground fault or interrupts the circuit automatically after an ground fault.

In the case of electronic circuits, the connection of one side of the control circuit to the protective bonding circuit in accordance with 9.1.4 can prevent unintentional operation. When this does not help, or if due to other reasons electronic circuits cannot be connected to the protective bonding circuit, other measures shall be taken to achieve the same level of safety.

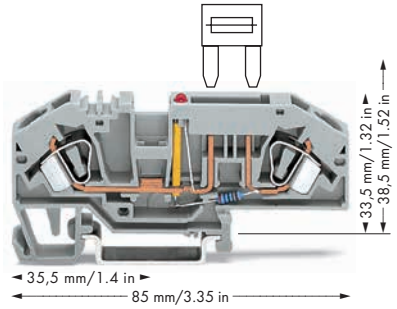
Where the control circuit is directly connected between the phase conductors of the supply or between a phase conductor and a neutral conductor, which is either not grounded or grounded through a high impedance, multipole control switches which interrupt all live conductors shall be used for start or stop of those machine functions, which can cause a hazardous condition or damage to the machine or to the work in progress, in the event of unintentional starting or failure to stop.

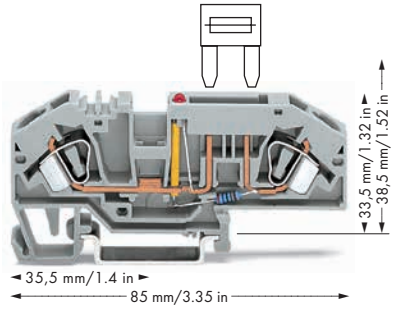
Fuse Terminal Blocks for Mini-Automotive Blade-Style Fuses 6 mm²
282 Series

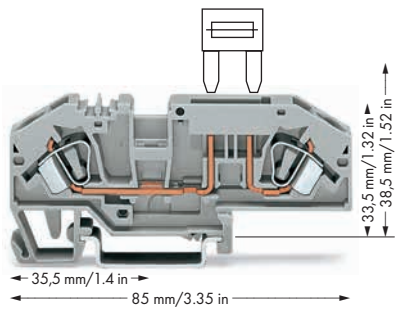
0.2 - 6 mm²	AWG 24 - 10	
400 V/6 kV/3 ❶ ❷	12 V, 30 A	
I_N 25 A (30 A)	24 V, 12 A	
Terminal block width 8 mm / 0.315 in		
12 - 13 mm / 0.49 in ❸		

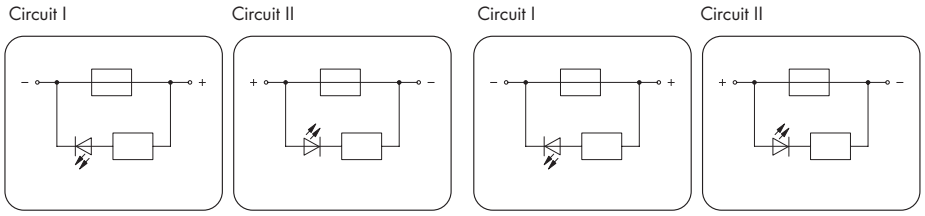
0.2 - 6 mm²	AWG 24 - 10	
400 V/6 kV/3 ❶ ❷	24 V, 30 A	
I_N 25 A (30 A)		
Terminal block width 8 mm / 0.315 in		
12 - 13 mm / 0.49 in ❸		

0.2 - 6 mm²	AWG 24 - 10	
400 V/6 kV/3 ❶ ❷	600 V, 30 A	
I_N 25 A (30 A)	24 V, 30 A	
Terminal block width 8 mm / 0.315 in		
12 - 13 mm / 0.49 in ❸		









Item No.		Pack. Unit
2-conductor fuse terminal block for mini-automotive blade-style fuses,		
12V, with test point, with blown fuse indication by LED,		
LED power consumption: 4.8 mA, gray		
Nominal voltage and current are given by the LED or fuse. Blade-style fuses, please note touchproof protection for 42V and higher.		
◯ Circuit I	**282-698/281-429**	25
◯ Circuit II	**282-698/281-449**	25
Other terminal blocks with the same profile:		
Through	**282-699**	Page 238
Blade-style fuses (not offered by WAGO)		
Excess-current circuit-breaker, thermal (not offered by WAGO)		
Recommended excess-current circuit-breakers from ETA		

Item No.		Pack. Unit
2-conductor fuse terminal block for mini-automotive blade-style fuses,		
24V, with test point, with blown fuse indication by LED,		
LED power consumption: 4.8 mA, gray		
Nominal voltage and current are given by the LED or fuse. Blade-style fuses, please note touchproof protection for 42V and higher.		
◯ Circuit I	**282-698/281-413**	25
◯ Circuit II	**282-698/281-434**	25
Other terminal blocks with the same profile:		
Through	**282-699**	Page 238

Item No.		Pack. Unit
2-conductor fuse terminal block for mini-automotive blade-style fuses,		
with test point,		
without blown fuse indication,		
Nominal voltage and current are given by the fuse. Blade-style fuses, please note touchproof protection for 42V and higher.		
◯ gray	**282-696**	25
Other terminal blocks with the same profile:		
Through	**282-699**	Page 238

Accessories for Fuse Terminal Blocks

Appropriate marking system: WMB
(see Section 13)

End plate, 2 mm thick



orange	**282-333**	100 (4x25)
gray	**282-334**	100 (4x25)

Adjacent jumper, insulated,



I_N 41 A

gray	**282-402**	100 (4x25)

Alternate jumper, insulated,



I_N 41 A

gray	**282-409**	100 (4x25)

Test plug adapter, 8.3 mm wide,



for terminal blocks 1.5 - 10 mm²,
for 4 mm Ø test plug

gray	**209-170**	50 (2x25)

Screwless end stop,



for DIN 35 rail,
6 mm wide

gray	**249-116**	100 (4x25)

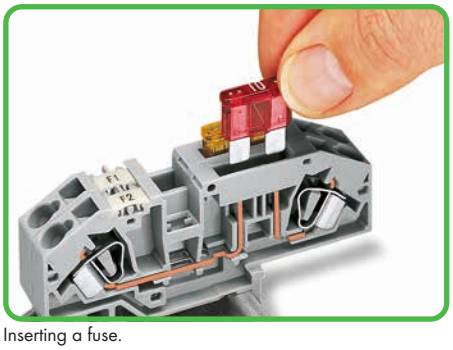
Screwless end stop,



for DIN 35 rail,
10 mm wide

gray	**249-117**	50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.



Inserting a fuse.

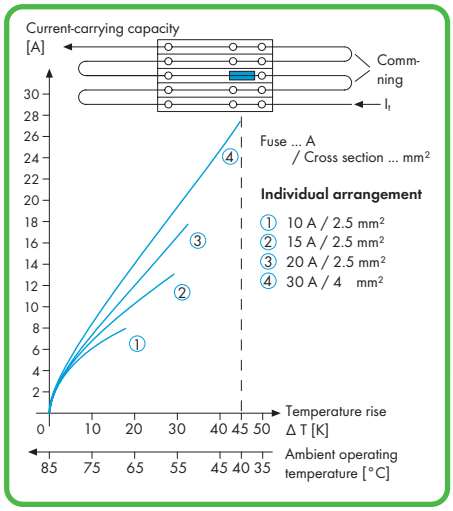


Diagram: Individual arrangement

❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Electrical ratings are given by the fuse (also see pages 254 – 255).

❸ Strip length, see packaging or instructions.



Blown fuse indication by LED.

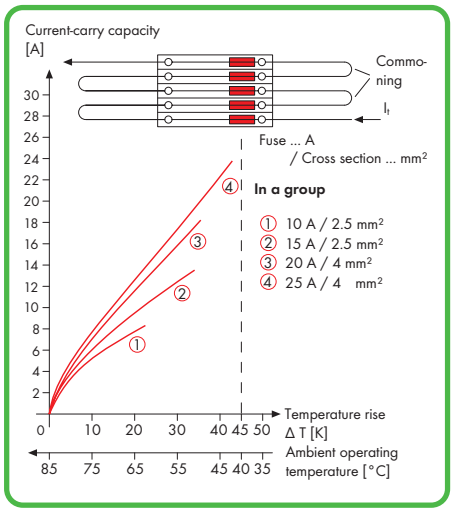
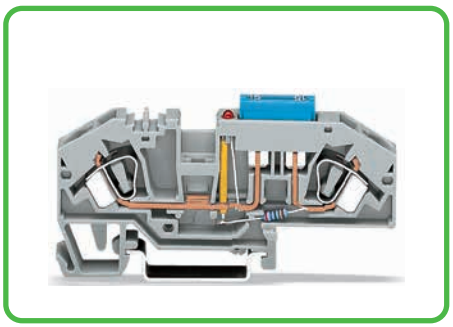


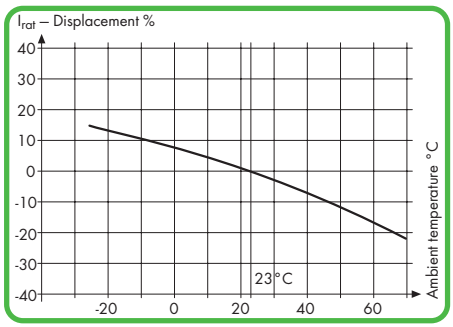
Diagram: Block arrangement

Information from the mini-automotive blade-type fuse manufacturers

Derating T_{amb} / °C	%	F_T
– 25	14	0.877
– 20	13	0.885
– 15	12	0.893
– 10	11	0.901
– 5	10	0.909
0	9	0.917
5	8	0.926
10	6	0.943
15	4	0.962
20	2	0.980
23	0	1.000
30	– 2	1.020
35	– 4	1.042
40	– 6	1.064
45	– 8	1.087
50	– 10	1.111
55	– 13	1.149
60	– 16	1.190
65	– 19	1.235
70	– 22	1.282



2-conductor fuse terminal block with mini-automotive blade-style fuse.



The rated currents of the fuse cartridges are defined differently in international standards.
Due to the different current rating definitions, the recommended current-carrying permanent capacity of the fuses is max. 80% of their rated current according to DIN 72581 part 3 (for an ambient operating temperature of 23 °C).
Selecting the correct fuse cartridge is important for product safety within applications, as well as for fuse cartridge service life and operational reliability of the fuse cartridges.
Fuse cartridges can operate perfectly as protection (break-off point) if they are properly selected and are used in accordance with manufacturer specifications.

With regard to the product safety, it is in general necessary to test fuse cartridges under normal conditions and operational failures within your application.

Fuse Disconnect Terminal Blocks with Pivoting Fuse Holder, for Miniature Fuses, 281 Series

Blown fuse indication

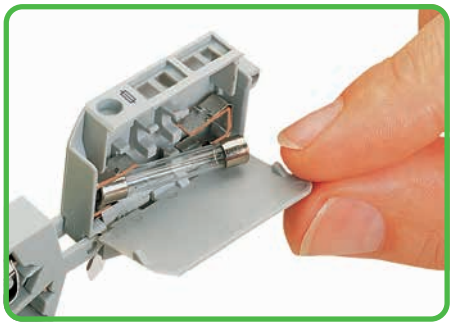


Blown fuse indication by LED or neon lamp.

Fuse replacement

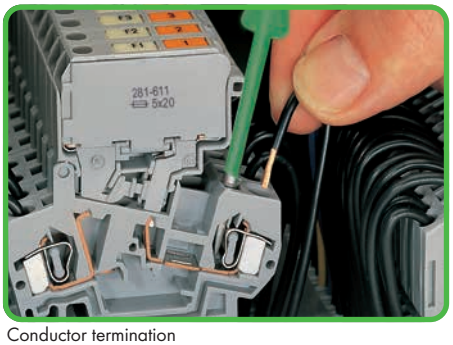


Before replacing the fuse, pivot the fuse holder in the locked open position.

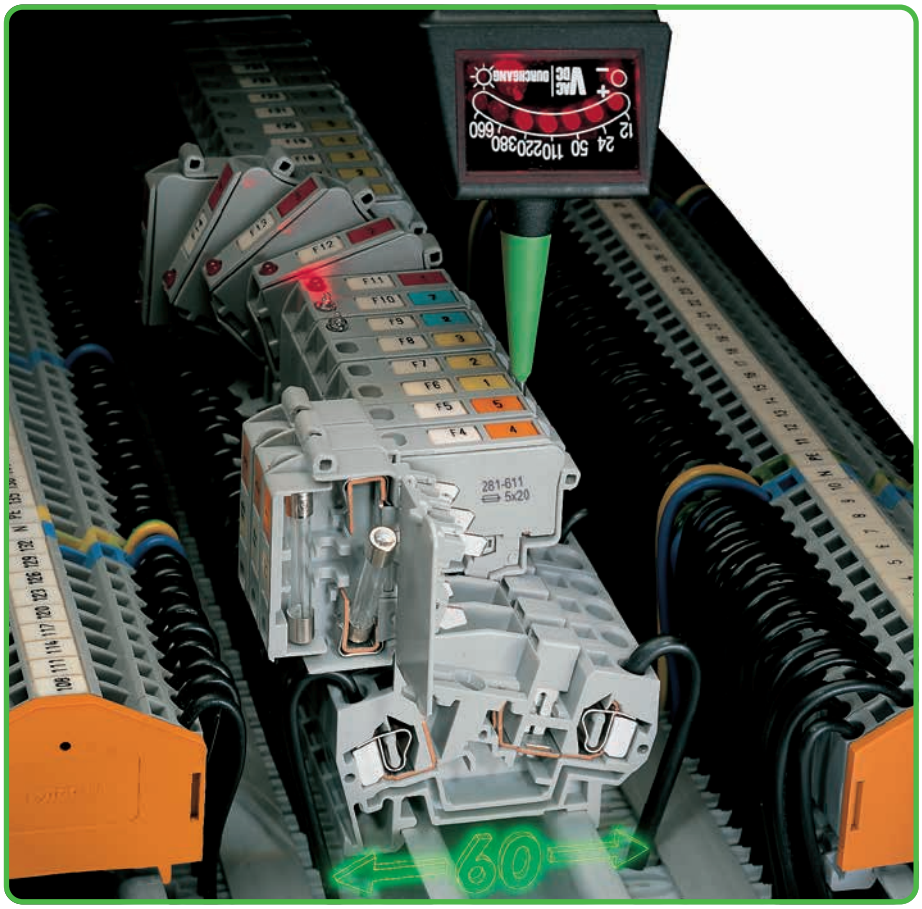


One end of the fuse is automatically ejected from the holder when opening the cover.

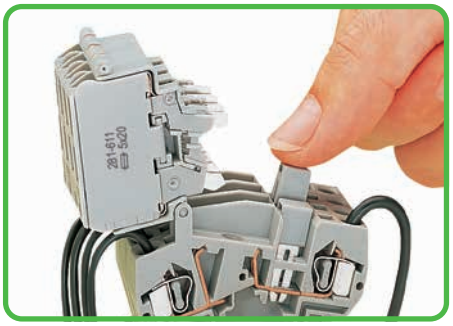
CAGE CLAMP® connection



Conductor termination

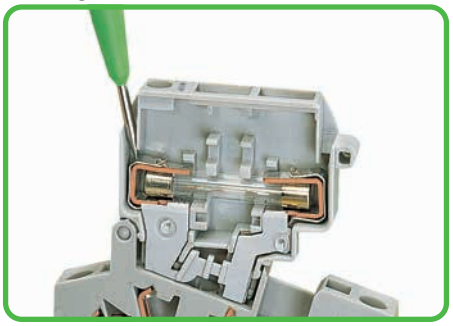


Commoning

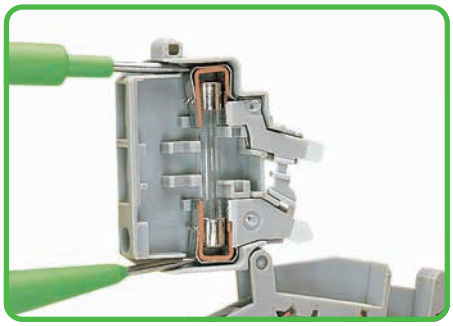


Distribution of current to several fuse-protected circuits via insulated touchproof jumpers.

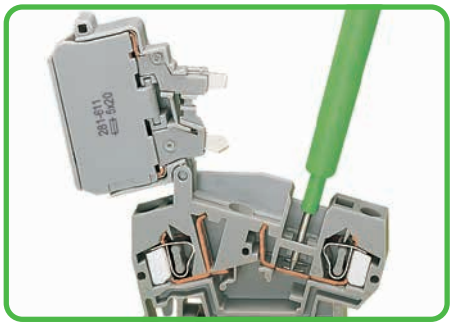
Testing



Voltage test, either at input or output with fuse holder in closed position (live).



Through test with fuse holder in open position (no voltage).



Voltage test at input in the test slot of the current bar.



CAGE CLAMP® clamps the following copper conductors:*

solid



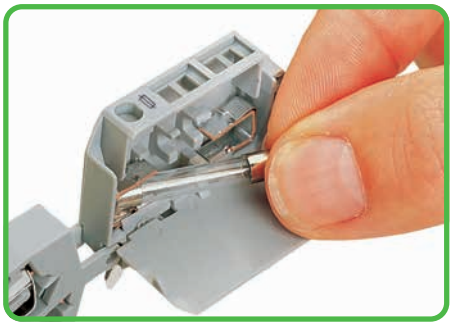
stranded



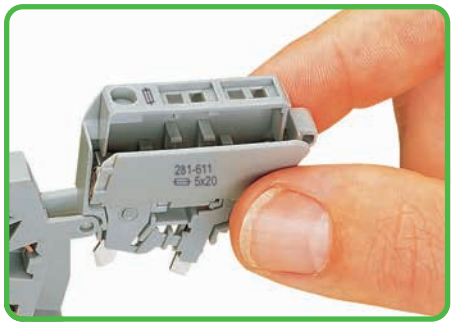
fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

Fuse replacement (continued)

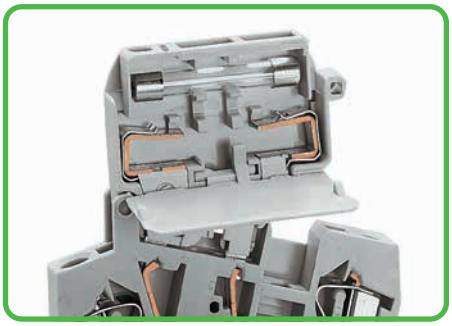


The fuse can be easily removed by hand.

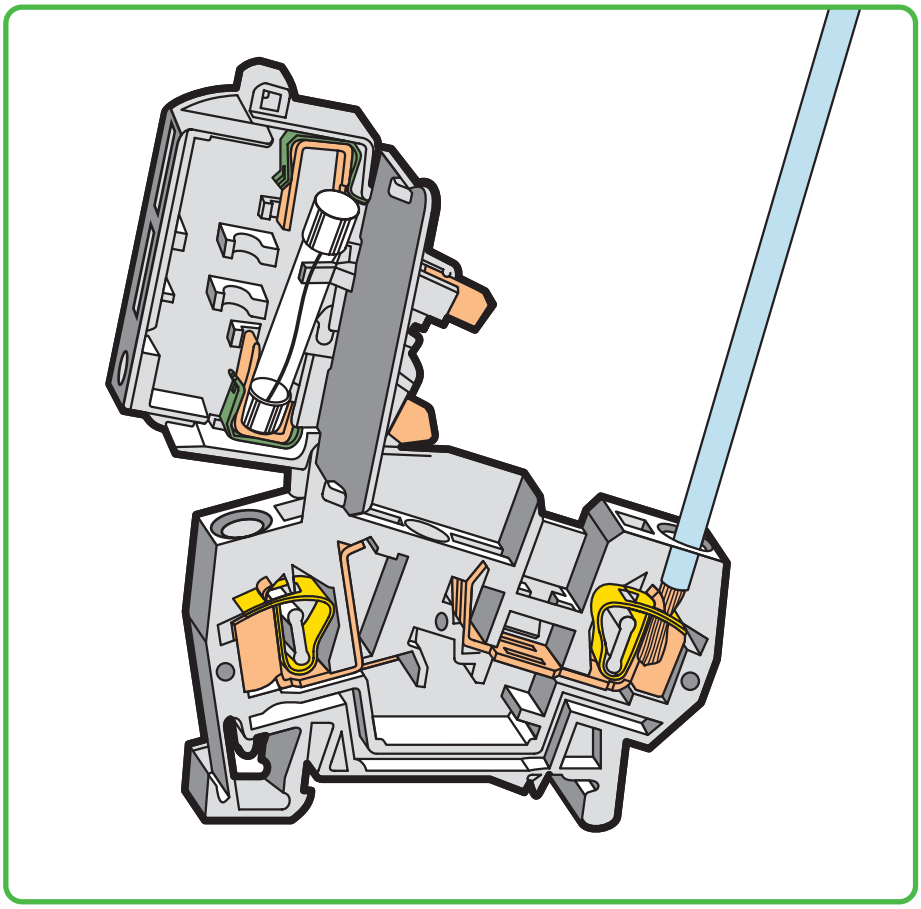


Insert new fuse snap the cover closed.

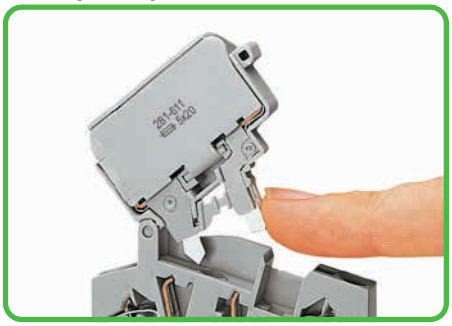
Spare fuse



Storage of spare fuse (fuse holder without blown fuse indication).

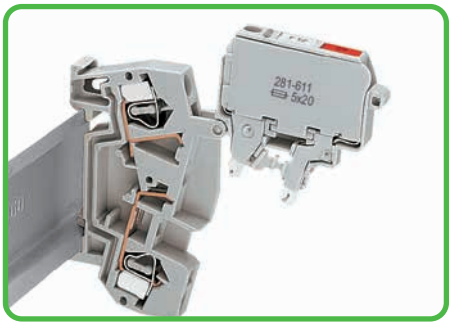


Touchproof protection



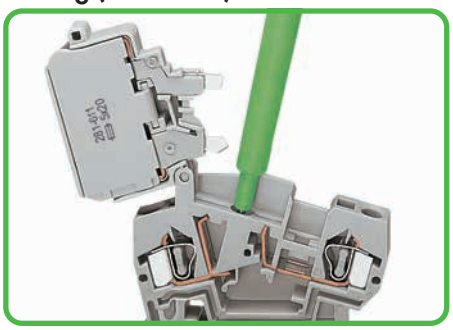
"Touchproof" protection in all positions of the fuse holder.

Locked position

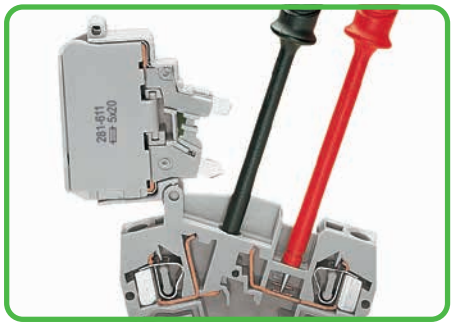


Fuse holder will remain safely locked open in vertical assemblies.

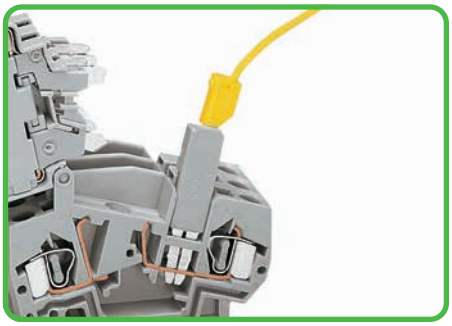
Testing (continued)



Testing voltage at the output via separate test slot.



Current measuring between jumper slot and separate test slot.



Voltage testing at input via 280-404 test plug adapter (shown) or 281-407 test plug.



fine-stranded, tip-bonded



fine-stranded, with ferrule ❶ (gastight crimped)

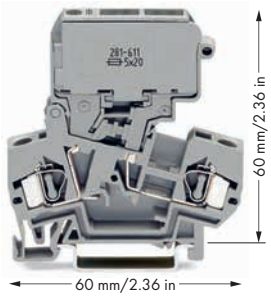


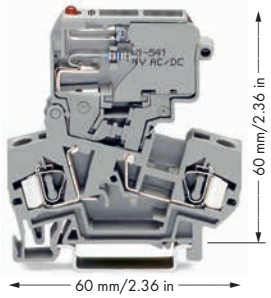
fine-stranded, with pin terminal (gastight crimped)

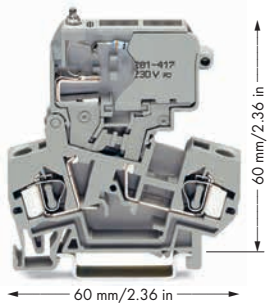
❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

Fuse Disconnect Terminal Blocks with Pivoting Fuse Holder 4 mm² for Miniature Fuses 5 x 20 mm, 5 x 25 mm and 5 x 30 mm 281 Series

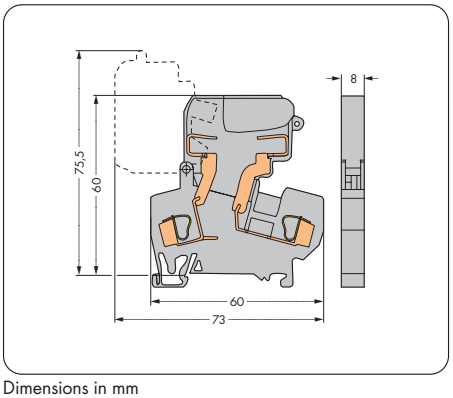
0.08 - 4 mm²	AWG 28 - 12		0.08 - 4 mm²	AWG 28 - 12		0.08 - 4 mm²	AWG 28 - 12	
800 V/8 kV/3 ❶ ❷	600 V, 10 A		800 V/8 kV/3 ❶ ❷	30 V, 10 A		800 V/8 kV/3 ❶ ❷	220 V, 10 A	
I_N 10 A (6.3 A)	600 V, 10 A		I_N 10 A (6.3 A)	230 V, 10 A		I_N 10 A (6.3 A)	230 V, 10 A	
Terminal block width 8 mm / 0.315 in			Terminal block width 8 mm / 0.315 in			Terminal block width 8 mm / 0.315 in		
9 - 10 mm / 0.37 in ❸			9 - 10 mm / 0.37 in ❸			9 - 10 mm / 0.37 in ❸		



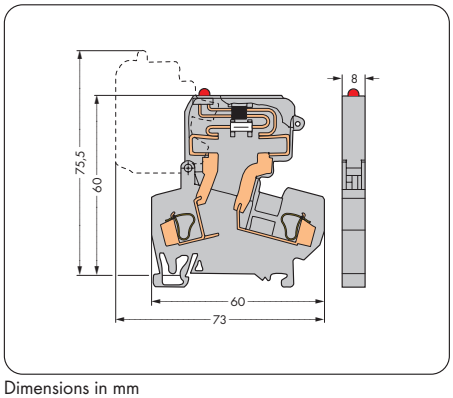




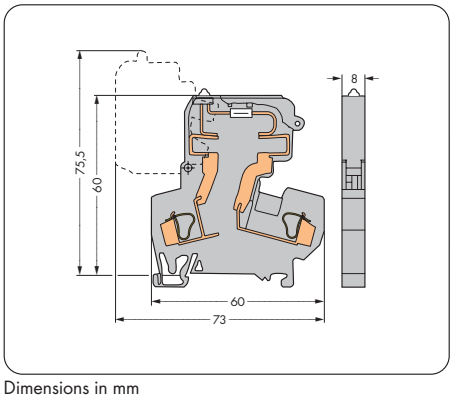
	Item No.	Pack. Unit		Item No.	Pack. Unit		Item No.	Pack. Unit
Fuse disconnect terminal block with pivoting fuse holder,			**Fuse disconnect terminal block with pivoting fuse holder,**			**Fuse disconnect terminal block with pivoting fuse holder,**		
for miniature fuses 5 x 20 mm,			for miniature fuses 5 x 20 mm,			for miniature fuses 5 x 20 mm,		
without blown fuse indication,			with blown fuse indication by LED, gray			with blown fuse indication by neon lamp, gray		
Nominal voltage and current are given by the fuse.			Nominal voltage and current are given by the LED or fuse.			Nominal voltage and current are given by the LED or fuse.		
			Leakage current in case of blown fuse: LED 6 mA			Leakage current in case of blown fuse: Neon lamp		
						< 0.4 mA		
gray	**281-611**	50	15 - 30 V	**281-611/281-541**	50	230 V	**281-611/281-417**	50
orange	**281-616**	50	30 - 65 V	**281-611/281-542**	50	120 V	**281-611/281-418**	50
Fuse disconnect terminal block with pivoting fuse holder,			**Fuse disconnect terminal block with pivoting fuse holder,**			**Fuse disconnect terminal block with pivoting fuse holder,**		
for miniature fuses 5 x 25 mm,			for miniature fuses 5 x 25 mm,			for miniature fuses 5 x 25 mm,		
without blown fuse indication,			with blown fuse indication by LED, gray			with blown fuse indication by neon lamp, gray		
Nominal voltage and current are given by the fuse.			Nominal voltage and current are given by the LED or fuse.			Nominal voltage and current are given by the LED or fuse.		
			Leakage current in case of blown fuse: LED 6 mA			Leakage current in case of blown fuse: Neon lamp		
						< 0.4 mA		
gray	**281-612**	50	15 - 30 V	**281-612/281-541**	50	230 V	**281-612/281-417**	50
			30 - 65 V	**281-612/281-542**	50	120 V	**281-612/281-418**	50
Fuse disconnect terminal block with pivoting fuse holder,			**Fuse disconnect terminal block with pivoting fuse holder,**			**Fuse disconnect terminal block with pivoting fuse holder,**		
for miniature fuses 5 x 30 mm,			for miniature fuses 5 x 30 mm,			for miniature fuses 5 x 30 mm,		
without blown fuse indication,			with blown fuse indication by LED, gray			with blown fuse indication by neon lamp, gray		
Nominal voltage and current are given by the fuse.			Nominal voltage and current are given by the LED or fuse.			Nominal voltage and current are given by the LED or fuse.		
			Leakage current in case of blown fuse: LED 6 mA			Leakage current in case of blown fuse: Neon lamp		
						< 0.4 mA		
gray	**281-622**	50	15 - 30 V	**281-622/281-541**	50	230 V	**281-622/281-417**	50
			30 - 65 V	**281-622/281-542**	50	120 V	**281-622/281-418**	50
Miniature fuse on request			Miniature fuse on request			Miniature fuse on request		



Dimensions in mm



Dimensions in mm

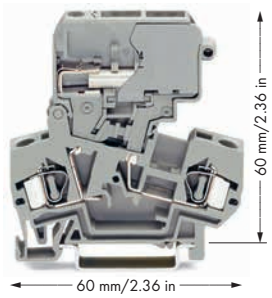


Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

0.08 - 4 mm²	AWG 28 - 12
800 V/8 kV/3 ❶	600 V, 16 A
I_N 16 A	600 V, 10 A

Terminal block width 8 mm / 0.315 in
9 - 10 mm / 0.37 in ❸





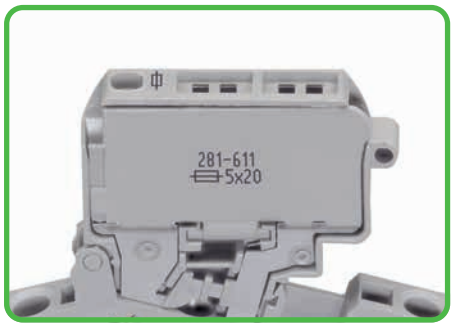
Fuse or fuse disconnect terminal blocks with a width of 8 mm can be assembled adjacently. At the end of an assembly, if there is **no** adjacent Fuse or fuse disconnect terminal block, an end or intermediate plate must be used.

❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

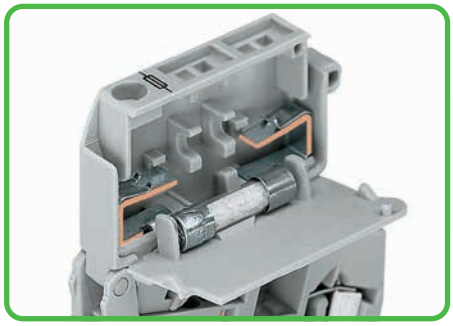
❷ Electrical ratings are given by the fuse (also see pages 254 – 255).

❸ Strip length, see packaging or instructions.

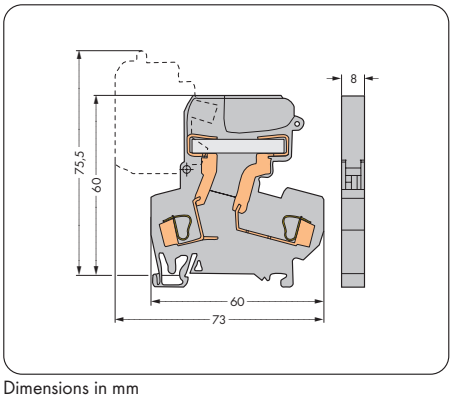
	Item No.	Pack. Unit
Disconnect terminal block with movable disconnect slide link		
gray	**281-624**	50
orange	**281-672**	50



Fuse holders are printed with correct fuse size.



Types 5x20 mm, 5x25 mm and ¼"x1" are fitted with stops on the inside of the cover.



Dimensions in mm

281 Series Accessories

Appropriate marking system:
WMB (see Section 13)

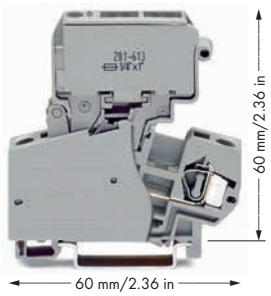
End and intermediate plate, 2.5 mm thick			
	orange	**281-309**	100 (4x25)
	gray	**281-311**	100 (4x25)
Adjacent jumper, insulated,			
	I_N = I_N terminal block		
	gray	**281-402**	200 (8x25)
Collective carrier for adjacent jumpers			
	gray	**209-100**	50 (2x25)
Test plug adapter, 5 mm wide,			
	for terminal blocks 1.5 - 4 mm²,		
	for 210-137 test plug 2.3 mm Ø		
	gray	**280-404**	100 (4x25)
Test plug,			
	with 500 mm cable,		
	2.3 mm Ø		
	yellow	**210-137**	50
Test plug adapter, 6 mm wide,			
	with CAGE CLAMP®,		
	for 0.08 - 2.5 mm²		
	I_N 24 A	**281-407**	100 (4x25)
Push-in type wire jumper,			
	insulated,		
	I_N 9 A,		
	wire size 0.75 mm²		
	L = 60 mm	**249-125**	10
	L = 110 mm	**249-126**	10
	L = 250 mm	**249-127**	10
Interlocking link,			
	mechanically locks multiple links,		
	1 m/3'3" long		
	transparent	**210-254**	1
Screwless end stop,			
	for DIN 35 rail,		
	6 mm wide		
	gray	**249-116**	100 (4x25)
Screwless end stop,			
	for DIN 35 rail,		
	10 mm wide		
	gray	**249-117**	50 (2x25)

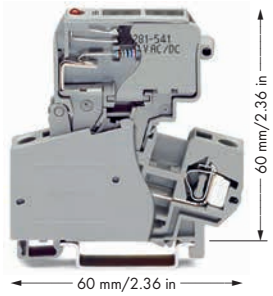
Fuse Disconnect Terminal Blocks with Pivoting Fuse Holder 4 mm² for Miniature Fuses ¼" x 1" and ¼" x 1¼" 281 Series

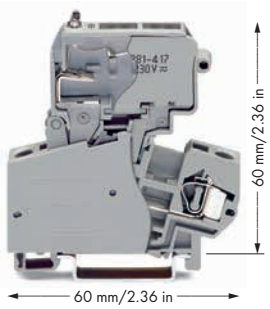
0.08 - 4 mm²	AWG 28 - 12	
800 V/8 kV/3 ❶ ❷	600 V, 10 A	
I_N 10 A (6.3 A)	600 V, 10 A	
Terminal block width 10 mm / 0.394 in		
9 - 10 mm / 0.37 in ❸		

0.08 - 4 mm²	AWG 28 - 12	
800 V/8 kV/3 ❶ ❷	30 V, 10 A	
I_N 10 A (6.3 A)	30 V, 10 A	
Terminal block width 10 mm / 0.394 in		
9 - 10 mm / 0.37 in ❸		

0.08 - 4 mm²	AWG 28 - 12	
800 V/8 kV/3 ❶ ❷	220 V, 10 A	
I_N 10 A (6.3 A)	100 V, 10 A	
Terminal block width 10 mm / 0.394 in		
9 - 10 mm / 0.37 in ❸		



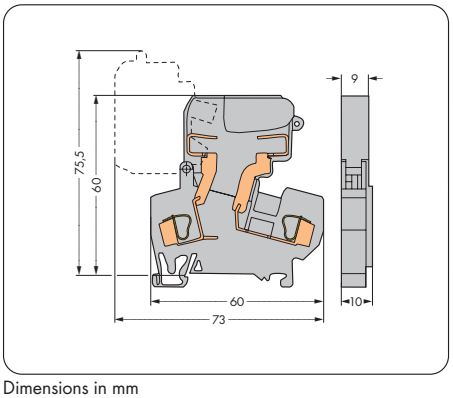




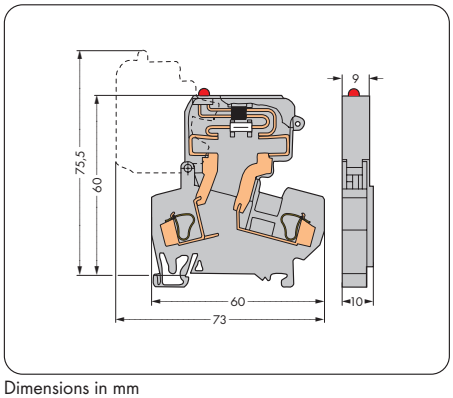
	Item No.	Pack. Unit
Fuse disconnect terminal block with pivoting fuse holder,		
for miniature fuses ¼" x 1",		
without blown fuse indication,		
Nominal voltage and current are given by the fuse.		
◯ gray	**281-613**	50
Fuse disconnect terminal block with pivoting fuse holder,		
for miniature fuses ¼" x 1¼",		
without blown fuse indication,		
Nominal voltage and current are given by the fuse.		
◯ gray	**281-623**	50
Miniature fuse on request		

	Item No.	Pack. Unit
Fuse disconnect terminal block with pivoting fuse holder,		
for miniature fuses ¼" x 1",		
with blown fuse indication by LED, gray		
Nominal voltage and current are given by the LED or fuse.		
Leakage current in case of blown fuse: LED 6 mA		
◯ 15 - 30 V	**281-613/281-541**	50
◯ 30 - 65 V	**281-613/281-542**	50
Fuse disconnect terminal block with pivoting fuse holder,		
for miniature fuses ¼" x 1¼",		
with blown fuse indication by LED, gray		
Nominal voltage and current are given by the LED or fuse.		
Leakage current in case of blown fuse: LED 6 mA		
◯ 15 - 30 V	**281-623/281-541**	50
◯ 30 - 65 V	**281-623/281-542**	50
Miniature fuse on request		

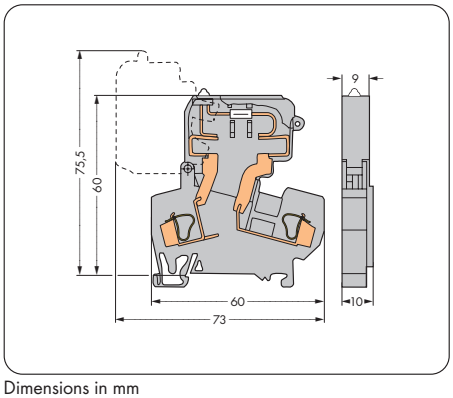
	Item No.	Pack. Unit
Fuse disconnect terminal block with pivoting fuse holder,		
for miniature fuses ¼" x 1",		
with blown fuse indication by neon lamp, gray		
Nominal voltage and current are given by the LED or fuse.		
Leakage current in case of blown fuse: Neon lamp < 0.4 mA		
◯ 230 V	**281-613/281-417**	50
◯ 120 V	**281-613/281-418**	50
Fuse disconnect terminal block with pivoting fuse holder,		
for miniature fuses ¼" x 1¼",		
with blown fuse indication by neon lamp, gray		
Nominal voltage and current are given by the LED or fuse.		
Leakage current in case of blown fuse: Neon lamp < 0.4 mA		
◯ 230 V	**281-623/281-417**	50
◯ 120 V	**281-623/281-418**	50
Miniature fuse on request		



Dimensions in mm



Dimensions in mm



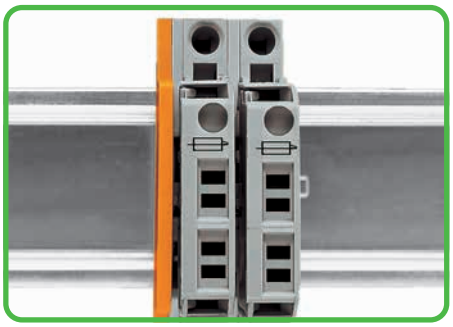
Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

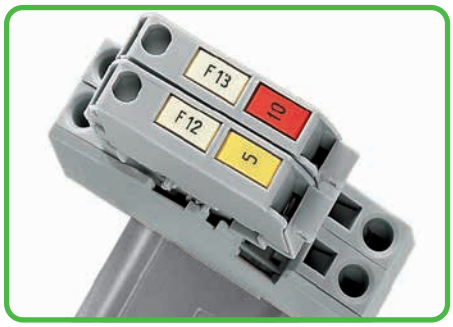
❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Electrical ratings are given by the fuse (also see pages 254 – 255).

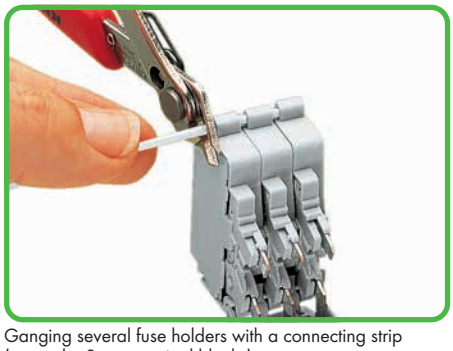
❸ Strip length, see packaging or instructions.



A spacer is standard equipment for 10 mm wide fuse terminal blocks. At the end of an assembly, or if there is **no** adjacent fuse terminal block, an end or intermediate plate must be used.



Two marker slots each per fuse holder are available for individual WMB Multi marking.
(example: 8 mm terminal blocks).



Ganging several fuse holders with a connecting strip (example: 8 mm terminal blocks).

281 Series Accessories

Appropriate marking system:
WMB (see Section 13)

End and intermediate plate, 2.5 mm thick			
	orange	**281-309**	100 (4x25)
	gray	**281-311**	100 (4x25)
Adjacent jumper, insulated,			
	I_N = I_N terminal block		
	gray	**281-402**	200 (8x25)
Collective carrier for adjacent jumpers			
	gray	**209-100**	50 (2x25)
Test plug adapter, 5 mm wide,			
	for terminal blocks 1.5 - 4 mm²,		
	for 210-137 test plug 2.3 mm Ø		
	gray	**280-404**	100 (4x25)
Test plug,			
	with 500 mm cable,		
	2.3 mm Ø		
	yellow	**210-137**	50
Test plug adapter, 6 mm wide,			
	with CAGE CLAMP®,		
	for 0.08 - 2.5 mm²		
	I_N 24 A	**281-407**	100 (4x25)
Push-in type wire jumper,			
	insulated,		
	I_N 9 A,		
	wire size 0.75 mm²		
	L = 60 mm	**249-125**	10
	L = 110 mm	**249-126**	10
	L = 250 mm	**249-127**	10
Interlocking link,			
	mechanically locks multiple links,		
	1 m/3'3" long		
	transparent	**210-254**	1
Screwless end stop,			
	for DIN 35 rail,		
	6 mm wide		
	gray	**249-116**	100 (4x25)
Screwless end stop,			
	for DIN 35 rail,		
	10 mm wide		
	gray	**249-117**	50 (2x25)

Fuse Plugs on Carrier Terminal Blocks 4 mm²
281 Series

Fuse plug with pull-tab

for miniature fuses 5 x 20 mm and 5 x 25 mm
250 V / I_N 6.3 A ❹

Plug width 6 mm / 0.236 in

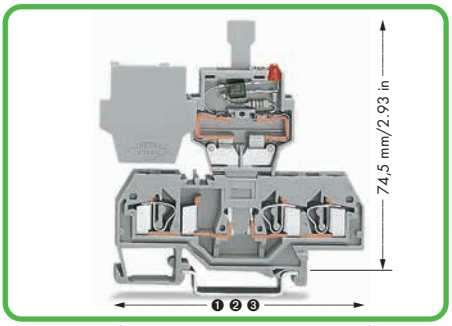


Fuse plug with pull-tab

for miniature fuses 5 x 20 mm and 5 x 25 mm
250 V / I_N 6.3 A ❹

Plug width 6 mm / 0.236 in

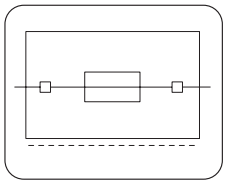




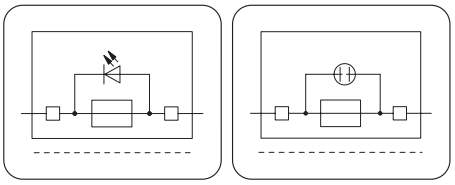
Dimensions of carrier terminal blocks with fuse plug
❶ 59 mm / 2.32 in for 281-916
❷ 73.5 mm / 2.89 in for 281-610
❸ 86 mm / 3.39 in for 281-656

For terminal blocks with side marking,
see www.wagocatalog.com

Circuit I Circuit II



Circuit I Circuit II



	Item No.	Pack. Unit
Fuse plug with pull-tab, for miniature fuses 5 x 20 mm and 5 x 25 mm, Nominal voltage and current are given by the fuse. 6 mm wide, gray		
◯ Circuit I	**281-511**	50
Fuse plug with pull-tab, for miniature fuses 5 x 20 mm and 5 x 25 mm, with hole for one LED (for self-assembly), Nominal voltage and current are given by the LED or fuse. 6 mm wide, gray		
◯ Circuit II	**281-512**	50

	Item No.	Pack. Unit
Fuse plug with pull-tab, for miniature fuses 5 x 20 mm and 5 x 25 mm, with LED indicator, 24 V AC/DC, Nominal voltage and current are given by the LED or fuse. Leakage current in case of blown fuse: 5 - 20 mA, 6 mm wide, gray		
◯ Circuit I	**281-512/281-501**	50
Fuse plug with pull-tab, for miniature fuses 5 x 20 mm and 5 x 25 mm, with neon lamp 120 V AC/DC, Nominal voltage and current are given by the LED or fuse. Leakage current in case of blown fuse: Neon lamp < 0.4 mA, 6 mm wide, gray		
◯ Circuit II	**281-512/281-418**	50
Fuse plug with pull-tab, for miniature fuses 5 x 20 mm and 5 x 25 mm, with neon lamp 230 V AC/DC, Nominal voltage and current are given by the LED or fuse. Leakage current in case of blown fuse: Neon lamp < 0.4 mA, 6 mm wide, gray		
◯ Circuit II	**281-512/281-417**	50

Accessories

Appropriate marking system: 4 mm wide WSB for plug and WMB for terminal block

2-conductor carrier terminal block,
❶ 0.08 - 4 mm² / AWG 28 - 12, Terminal block width 6 mm / 0.236 in
gray **281-916** 50

End and intermediate plate, 2.5 mm thick
orange **281-329** 100 (4x25)
gray **281-328** 100 (4x25)

Wire commoning chain, 50 connections, insulated, I_N 8 A
black **210-103** 1

3-conductor carrier terminal block,
❷ 0.08 - 4 mm² / AWG 28 - 12, Terminal block width 6 mm / 0.236 in
gray **281-610** 50

End and intermediate plate, 2.5 mm thick
orange **281-326** 100 (4x25)
gray **281-324** 100 (4x25)

Wire commoning chain, 50 connections, insulated, I_N 8 A
blue **210-123** 1

Accessories

4-conductor carrier terminal block,
❸ 0.08 - 4 mm² / AWG 28 - 12, Terminal block width 6 mm / 0.236 in
gray **281-656** 50

End and intermediate plate, 2.5 mm thick
orange **281-335** 100 (4x25)
gray **281-334** 100 (4x25)

Comb-style jumper bar, insulated, I_N = I_N terminal block
2-way **281-482** 100 (4x25)
3-way **281-483** 100 (4x25)
5-way **281-485** 100 (4x25)
10-way **281-490** 50 (2x25)

Alternate comb-style jumper bar, insulated, I_N = I_N terminal block
2-way **281-492** 100 (4x25)

Operating tool, of insulating material
2-way **280-432** 1
3-way **280-433** 1
5-way **281-440** 1

WSB Quick marking system, 10 strips with 10 markers per card, WSB Markers 4 mm wide
plain **209-701** 5

WSB Quick marking system, plain, 10 strips with 10 markers per card, WSB Markers 4 mm wide
yellow **209-701/000-002**
red **209-701/000-005**
blue **209-701/000-006**
gray **209-701/000-007**
orange **209-701/000-012**
light green **209-701/000-017**
green **209-701/000-023**
violet **209-701/000-024**
5

Shorting link, 5 x 20 mm, if the fuse plug is used as disconnect plug
I_N 6.3 A **281-503** 250 (10x25)

Certification organizations can be found in the overview on pages 622 and 623.

❹ Electrical ratings are given by the fuse or LED nominal voltage (also see pages 254 – 255).

Accessories

WSB Quick marking system,			
	for fuse plug 281-5..,		
	WSB Markers 4 mm wide		
	F1, ..., F10 (10x)	**209-787**	5
	F11, ..., F20 (10x)	**209-700/209-124**	
	F21, ..., F30 (10x)	**209-700/209-125**	
	F31, ..., F40 (10x)	**209-700/209-126**	
	F41, ..., F50 (10x)	**209-700/209-127**	
			5
WMB Multi marking system,			
	10 strips with 10 markers per card,		
	stretchable 5 - 5.2 mm		
	plain	**793-5501**	5
WMB Multi marking system, plain,			
	10 strips with 10 markers per card,		
	stretchable 5 - 5.2 mm		
	yellow	**793-5501/000-002**	
	red	**793-5501/000-005**	
	blue	**793-5501/000-006**	
	gray	**793-5501/000-007**	
	orange	**793-5501/000-012**	
	light green	**793-5501/000-017**	
	green	**793-5501/000-023**	
	violet	**793-5501/000-024**	
			5

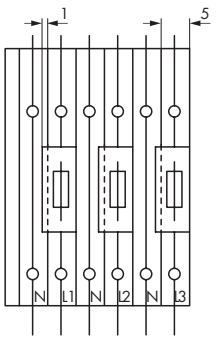


Using pluggable fuse holders with rail-mount terminal blocks for control circuit protection is highly advantageous for the user, as the function and the wiring are accomplished by two separate parts:

- No additional cost for assembly and wiring
- No risk of accidental contact with live parts during disconnection of fuse plug
- If exchanging a defective fuse, the fuse plug is completely separated from the carrier terminal block. This provides changeout away from current carrying parts.
- The fuse plug can be removed by service personnel, avoiding unintentional reclosing of the circuit by another person.
- Quickly exchange a fuse by using a prepared "stand-by plug."

The following fuse plug features provide quick and safe handling:

- Optional LED indicates blown fuse
- Markable fuse plug for clear coordination to the correct carrier terminal block
- Two touch-proof test slots
- High density with only 6 mm width of terminal block/ fuse plug
- Instead of a fuse, a shorting link may be used as a disconnect plug.



Open side of terminal block left

When corresponding Neutral-circuit is adjacent to a fuse plug, a 5 mm wide space saving terminal block may be used, as a 6 mm fuse plug may overlap the terminal block (see diagram below).
For 5 mm wide carrier terminal blocks, see page 250 (can be used with end plate, for example).

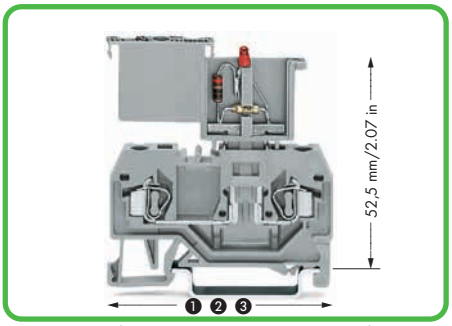
Fuse Plugs on Carrier Terminal Blocks 2.5 mm²
280 Series

Fuse plug
5 mm wide
125 V / I_N 5 A ❹
Plug width 5 mm / 0.197 in



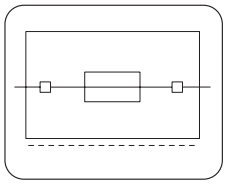
Fuse plug
5 mm wide
125 V / I_N 5 A ❹
Plug width 5 mm / 0.197 in

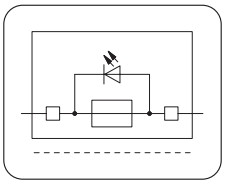




Dimensions of carrier terminal blocks with fuse plug
❶ 53 mm / 2.09 in for 280-916
❷ 64 mm / 2.52 in for 280-610
❸ 75 mm / 2.95 in for 280-816

For terminal blocks with side marking,
see www.wagocatalog.com





	Item No.	Pack. Unit
Fuse plug,		
with soldered miniature fuse,		
Nominal voltage and current are given by the fuse.		
5 mm wide		
◯ 250 mA FF	**280-850**	100
◯ 500 mA FF	**280-852**	100
◯ 1 A FF	**280-854**	100
◯ 2 A FF	**280-856**	100

	Item No.	Pack. Unit
Fuse plug,		
with soldered miniature fuse,		
with indicator lamp, additional LED,		
15 - 30 VDC. Nominal voltage and current are given by		
the LED or fuse. Leakage current in case of blown fuse:		
5 - 20 mA		
5 mm wide		
◯ 250 mA FF	**280-850/281-413**	100
◯ 500 mA FF	**280-852/281-413**	100
◯ 1 A FF	**280-854/281-413**	100
◯ 2 A FF	**280-856/281-413**	100

Fuse Plug Accessories

Wire commoning chain, 50 connections,
insulated, I_N 8 A
blue **210-123** 1

WMB Multi marking system,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
plain **793-5501** 5

WMB Multi marking system, plain,
10 strips with 10 markers per card,
stretchable 5 - 5.2 mm
yellow **793-5501/000-002**
red **793-5501/000-005**
blue **793-5501/000-006**
gray **793-5501/000-007**
orange **793-5501/000-012**
light green **793-5501/000-017**
green **793-5501/000-023**
violet **793-5501/000-024**
5

Accessories for Carrier terminal blocks

Appropriate marking system:
WMB (see Section 13)

2-conductor carrier terminal block,
❶ 0.08 - 2.5 mm² / AWG 28 - 14,
Terminal block width 5 mm / 0.197 in
gray **280-916** 100

End and intermediate plate, 2.5 mm thick
orange **280-309** 100 (4x25)
gray **280-308** 100 (4x25)

3-conductor carrier terminal block,
❷ 0.08 - 2.5 mm² / AWG 28 - 14,
Terminal block width 5 mm / 0.197 in
gray **280-610** 100

End and intermediate plate, 2.5 mm thick
orange **280-326** 100 (4x25)
gray **280-324** 100 (4x25)

4-conductor carrier terminal block,
❸ 0.08 - 2.5 mm² / AWG 28 - 14,
Terminal block width 5 mm / 0.197 in
gray **280-816** 100

End and intermediate plate, 2.5 mm thick
orange **280-315** 100 (4x25)
gray **280-314** 100 (4x25)

Comb-style jumper bar, insulated,
I_N = I_N terminal block
2-way **280-482** 200 (8x25)
3-way **280-483** 200 (8x25)

Comb-style jumper bar, insulated,
I_N = I_N terminal block
10-way **280-490** 50 (2x25)

Alternate comb-style jumper bar,
insulated,
I_N = I_N terminal block
2-way **280-492** 200 (8x25)

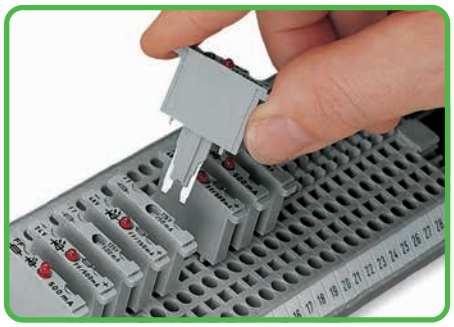
2-way **280-432** 1
3-way **280-433** 1

Operating tool, of insulating material
10-way **280-440** 1

Wire commoning chain, 50 connections,
insulated, I_N 8 A
black **210-103** 1

Certification organizations can be found in the overview on pages 622 and 623.

❹ Electrical ratings are given by the fuse or LED nominal voltage (also see pages 254 – 255).

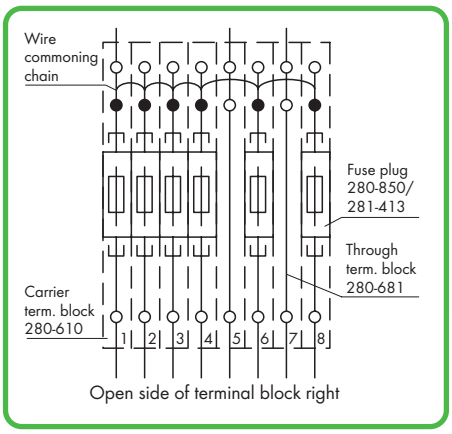


Using pluggable fuse holders with 280/281 and 769 Series rail-mount terminal blocks for control circuit protection is highly advantageous for the user, as the function and the wiring are accomplished by two separate parts:

- No additional cost for assembly and wiring
- No risk of accidental contact with live parts during disconnection of fuse plug
- Quick replacement of fuse plug in case of blown fuse
- The fuse plug can be be removed by service personnel, avoiding unintentional reclosing of the circuit by another person.

Further advantages:

- Extremely high density with only 5 mm width of terminal block/fuse plug
- Optional LED indicates blown fuse.



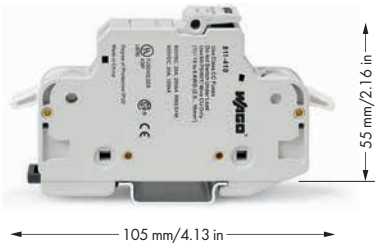
Fuse protection of individual outputs, supply via wire commoning chain

Fuse Terminal Blocks
for Class CC and 10 x 38 mm (13⁄32" x 1½") Fuses
811 Series

2.5 - 16 mm²	AWG 16 - 6	2.5 - 16 mm²	AWG 16 - 6	2.5 - 16 mm²	AWG 16 - 6
1000 VDC, 32 A	1000 VDC, 30 A	690 VAC, 32 A	600 VAC, 30 A	–	600 V, 30 A
		1000 VDC, 32 A	750 VAC, 30 A	–	600 V, 30 A
			1000 VDC, 30 A		
Terminal block width 17.5 mm / 0.689 in		Terminal block width 17.5 mm / 0.689 in		Terminal block width 17.5 mm / 0.689 in	
12 - 13 mm / 0.49 in		12 - 13 mm / 0.49 in		12 - 13 mm / 0.49 in	



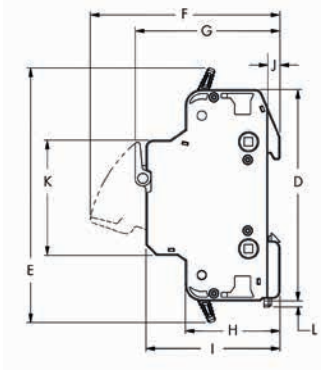


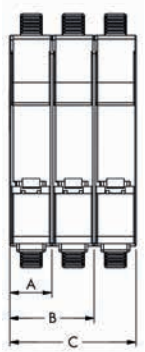


Item No.		Pack. Unit
Fuse terminal block for cylindrical fuses		
10 x 38 mm; 13⁄32" x 1½", for photovoltaic applications, light gray, without blown fuse indication, suitable for DIN 35 rail acc. to EN 60715		
◯ 1-pole	**811-316**	12
Fuse terminal block for cylindrical fuses 10 x 38 mm; 13⁄32" x 1½", for photovoltaic applications, light gray, with blown fuse indication, 230 - 1000 VDC, suitable for DIN 35 rail acc. to EN 60715		
◯ 1-pole	**811-317**	12
Cylindrical fuses are not offered by WAGO.		
Temperature scale handling from -35 °C to +85 °C.		
Nominal voltage and current are given by the LED or fuse.		

Item No.		Pack. Unit
Fuse terminal block for 10 x 38 mm; 13⁄32" x 1½", light gray, without blown fuse indication, suitable for DIN 35 rail acc. to EN 60715		
◯ 1-pole	**811-310**	12
◯ 2-pole	**811-320**	6
◯ 3-pole	**811-330**	4
Fuse terminal block for 10 x 38 mm; 13⁄32" x 1½", light gray, with blown fuse indication, 90 - 600 VAC, 115 - 600 VDC, suitable for DIN 35 rail acc. to EN 60715		
◯ 1-pole	**811-311**	12
◯ 2-pole	**811-321**	6
◯ 3-pole	**811-331**	4
Fuse terminal block for 10 x 38 mm; 13⁄32" x 1½", light gray, with blown fuse indication, 24 VDC, suitable for DIN 35 rail acc. to EN 60715		
◯ 1-pole	**811-314**	12
Cylindrical fuses are not offered by WAGO.		
Temperature scale handling from -35 °C to +85 °C.		
Nominal voltage and current are given by the LED or fuse.		

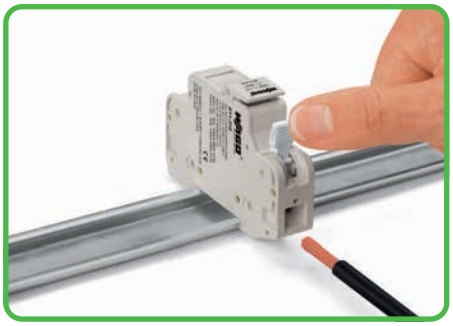
Item No.		Pack. Unit
Fuse terminal block for class CC fuses, light gray, without blown fuse indication, suitable for DIN 35 rail acc. to EN 60715		
◯ 1-pole	**811-410**	12
◯ 2-pole	**811-420**	6
◯ 3-pole	**811-430**	4
Fuse terminal block for class CC fuses, light gray, with blown fuse indication, 90 - 600 VAC, 115 - 600 VDC, suitable for DIN 35 rail acc. to EN 60715		
◯ 1-pole	**811-411**	12
◯ 2-pole	**811-421**	6
◯ 3-pole	**811-431**	4
Fuse terminal block for class CC fuses, light gray, with blown fuse indication, 24 VDC, suitable for DIN 35 rail acc. to EN 60715		
◯ 1-pole	**811-414**	12
Cylindrical fuses are not offered by WAGO.		
Temperature scale handling from -35 °C to +85 °C.		
Nominal voltage and current are given by the LED or fuse.		



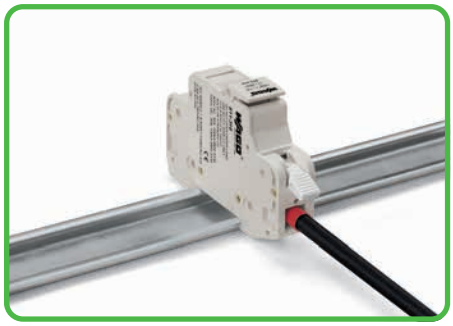


Dimension	mm (in.)
A	17.3 (0.68)
B	34.6 (1.36)
C	51.9 (2.04)
D	87 (3.43)
E	104.9 (4.13)
F	78.3 (3.08)
G	59.7 (2.35)
H	39 (1.54)
I	55.2 (2.17)
J	5 (0.2)
K	47.4 (1.87)
L	2.5 (0.1)

Certification organizations can be found in the overview on pages 622 and 623.



Conductor termination:
Open clamping unit via integrated lever.



Ferruled conductors up to 10 mm² (AWG 8) can be terminated.



Screwdriver used to open and close lever.



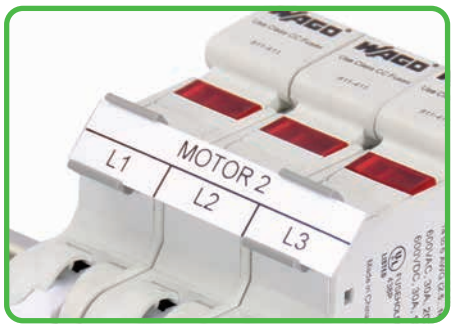
Inserting a fuse.



Remove terminal block from the carrier rail.



WMB marking location for convenient identification.



Marking adapter (285-442) allows the continuous marking strip to be used.



Jumper bar for quick and convenient commoning.



Coupling kit used to create a 2- or 3-pole fuse terminal block.

811 Series Accessories

Jumper bar, I_N 63 A, 1000 V, lightgray			
	2-way	**811-472**	50 (5x10)
	3-way	**811-473**	40 (4x10)
	4-way	**811-474**	40 (4x10)
	5-way	**811-475**	40 (4x10)
	6-way	**811-476**	30 (3x10)
	7-way	**811-477**	20 (2x10)
	8-way	**811-478**	20 (2x10)
	9-way	**811-479**	20 (2x10)
	10-way	**811-480**	20 (2x10)
	11-way	**811-481**	20 (2x10)
	12-way	**811-482**	20 (2x10)
Supply module, 35 mm², 600 VAC, 1000 VDC		**811-471**	16 (4x4)
Test plug, with 500 mm cable, 2 mm Ø	red	**210-136**	50
Coupling kit for 12 poles		**811-612**	1
Marker carrier, uses 2009-110 marker strip, 10.4 mm wide	gray	**285-442**	25
Marking strip, plain, 11 mm wide, 50 m roll	white	**2009-110**	1
WMB Multi marking system, 10 strips with 10 markers per card, stretchable 5 - 5.2 mm	plain	**793-5501**	5
Screwless end stop, for DIN 35 rail, gray	6 mm wide	**249-116**	100 (4x25)
	10 mm wide	**249-117**	50 (2x25)
Twin ferrules for 811 Series, insulated, L1 = 12 mm, sleeve for 2 x 2.5 mm² / AWG 14	blue	**216-545**	100
sleeve for 2 x 4 mm² / AWG 12	gray	**216-546**	100
sleeve for 2 x 6 mm² / AWG 10	yellow	**216-547**	100

Applications Notes on Terminal Blocks for Miniature Fuses

Terminal blocks for miniature fuses tested acc. to IEC or EN 60947-7-3/VDE 0611-6

When selecting miniature fuses, the maximum power loss listed below should not be exceeded.
The power loss is determined according to IEC or EN 60947-7-3/VDE 0611-6 at 23 °C.
The temperature rise of the terminal blocks must be checked according to their application and mounting.
Higher ambient temperatures represent an additional impact on miniature fuses.
Therefore, in such applications the rated current must be reduced if necessary.
More details from the manufacturer.

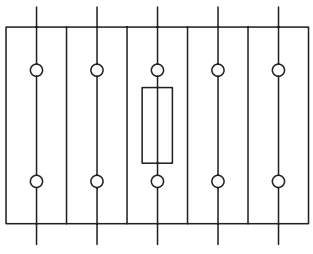
Miniature fuses 5 x 20

Series Item No.	Overload and short circuit protection		Short-circuit protection only	
	Individual arrangement	Block arrangement	Individual arrangement	Block arrangement
Fuse terminal blocks (with screw cap), side-entry (5 x 20 mm)				
282-122 **282-124**	2.5 W	2.5 W	4 W	4 W
Fuse disconnect terminal blocks with pivoting fuse holder for miniature fuses (5 x 20 mm)				
281-611 **281-616** **281-611/281-541** **281-611/281-542** **281-611/281-417** **281-611/281-418**	2.5 W	1.6 W	4 W	4 W
Fuse plugs for miniature fuses (5 x 20 mm)				
281-511 **281-512** **281-512/281-501** **281-512/281-418** **281-512/281-417**	2.5 W	1.6 W	4 W	4 W

Miniature fuses 6.3 x 32

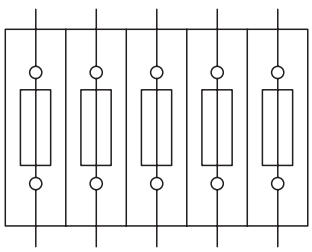
Series Item No.	Overload and short circuit protection		Short-circuit protection only	
	Individual arrangement	Block arrangement	Individual arrangement	Block arrangement
Fuse terminal blocks (with screw cap), side-entry ($^1/_4$" x $1^1/_4$" ≈ 6.3 x 32 mm)				
282-128 **282-128/281-418** **282-128/281-413** **282-128/281-417**	2.5 W	2.5 W	4 W	4 W
Fuse disconnect terminal blocks with pivoting fuse holder for miniature fuses ($^1/_4$" x $1^1/_4$" ≈ 6.3 x 32 mm)				
281-623 **281-623/281-541** **281-623/281-542** **281-623/281-417** **281-623/281-418**	2.5 W	1.6 W	4 W	2.5 W

Individually arranged fuse terminal blocks



Terminal block assembly including
one fuse terminal block and through terminal blocks

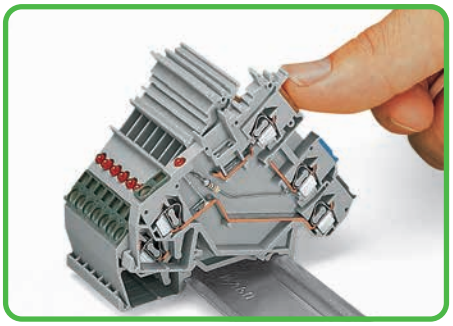
Fuse terminal block in a group



Terminal block assembly including
5 fuse terminal blocks

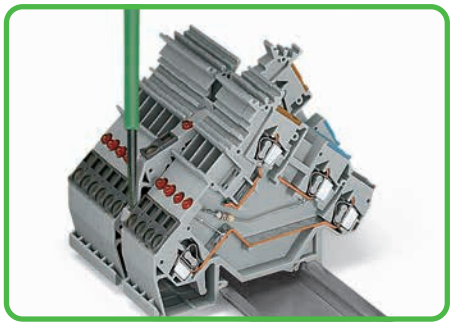
Sensor and Actuator Terminal Blocks
280 Series

Assembly



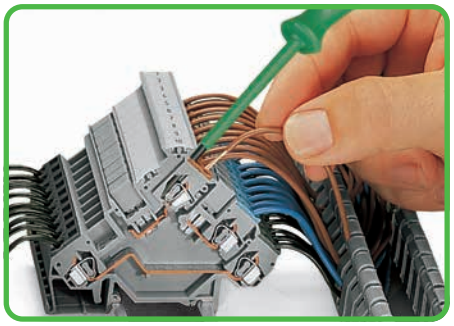
Assembly on the carrier rail. Terminal blocks with ground connection automatically establish a direct contact to the rail.

Removal



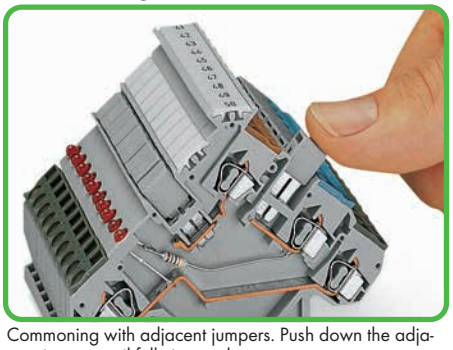
Removal from the carrier rail.
Notice: Remove jumper contacts first.

CAGE CLAMP® connection

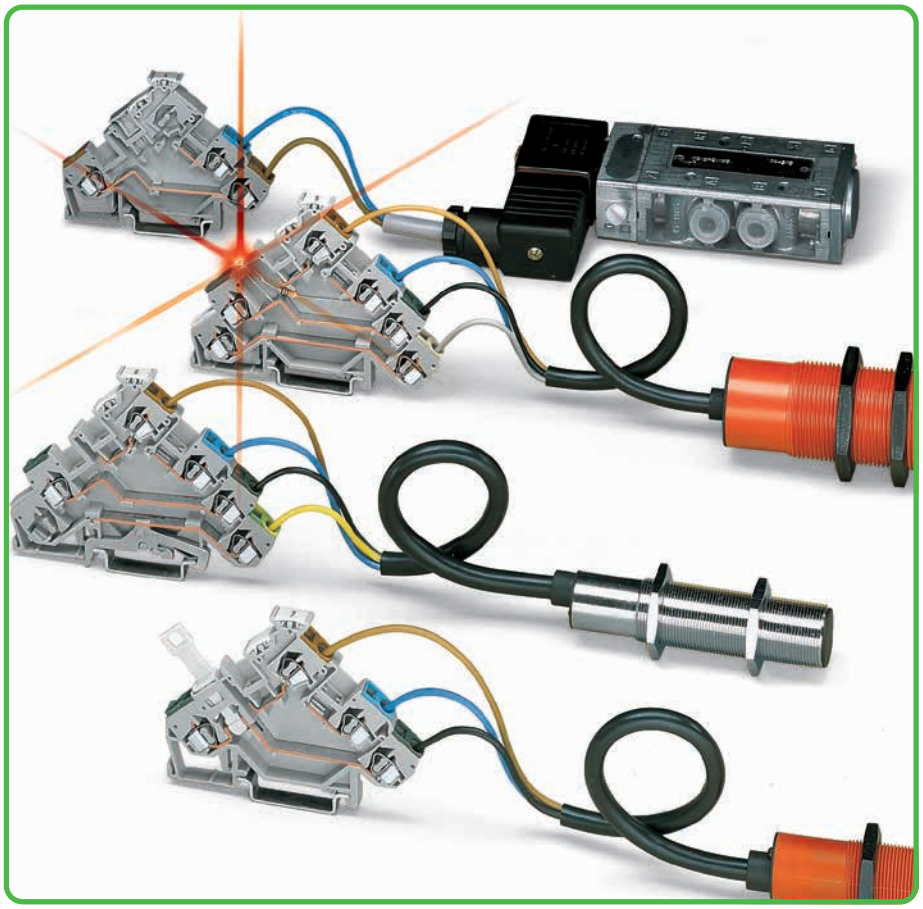


Conductor termination with straight operating tool (210-720).

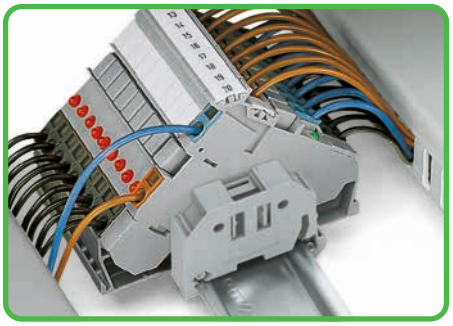
Commoning



Commoning with adjacent jumpers. Push down the adjacent jumper until fully inserted.

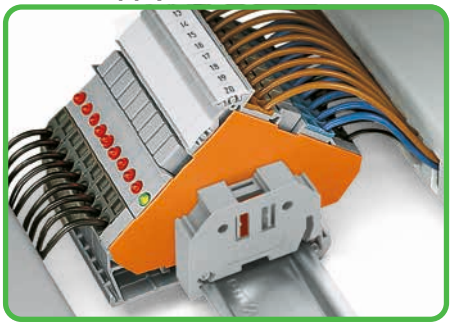


Power supply

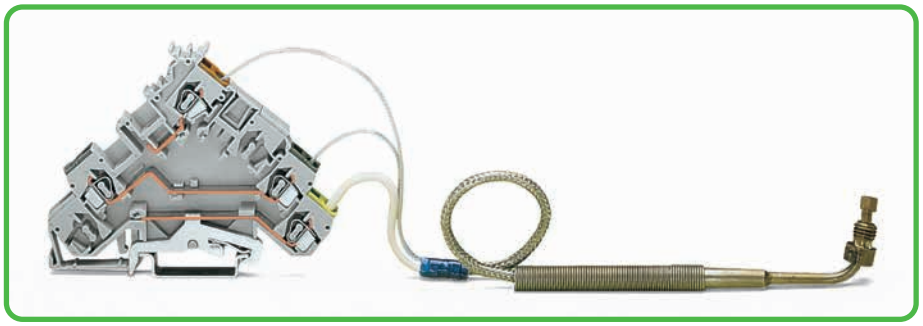


Sensor terminal blocks.
Power supply from control cabinet side.

Power supply



Sensor terminal blocks.
Power supply from sensor side.



Actuator terminal block and thermocouple with shield contact.



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded

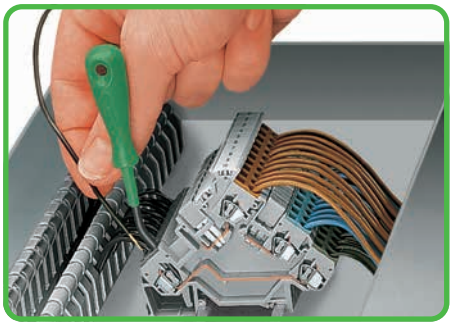


fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

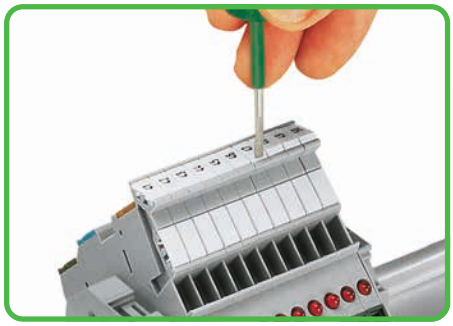
– Description and Handling –

CAGE CLAMP® connection



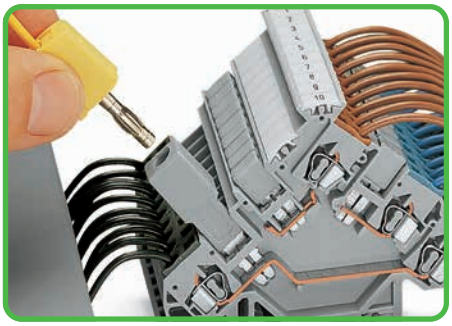
Conductor termination with angled operating tool (210-658).

Marking

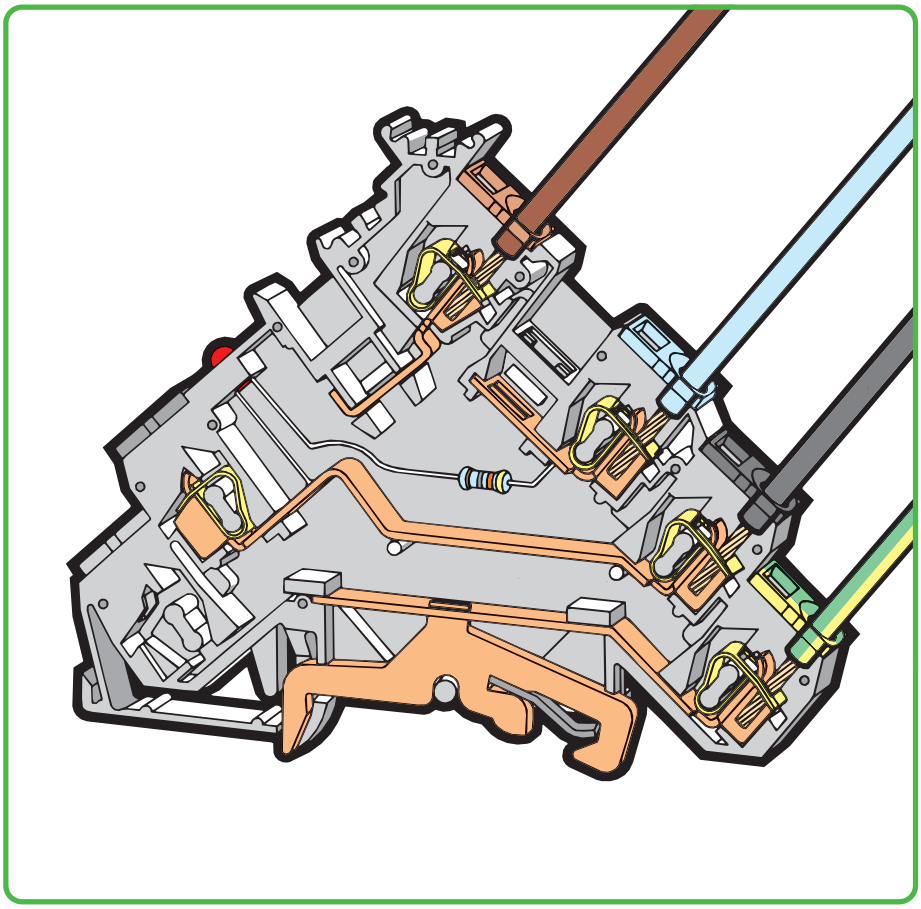


Marking with WMB Multi marking system.
For additional systems, see Section 13.

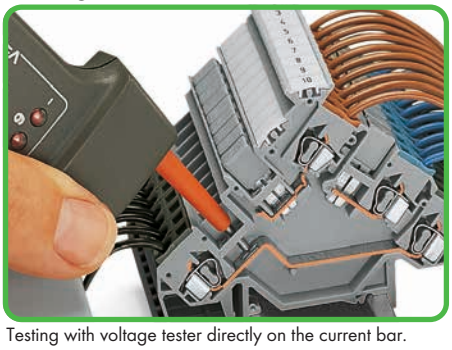
Testing



Testing via banana plug and 209-170 test plug adapter.



Testing

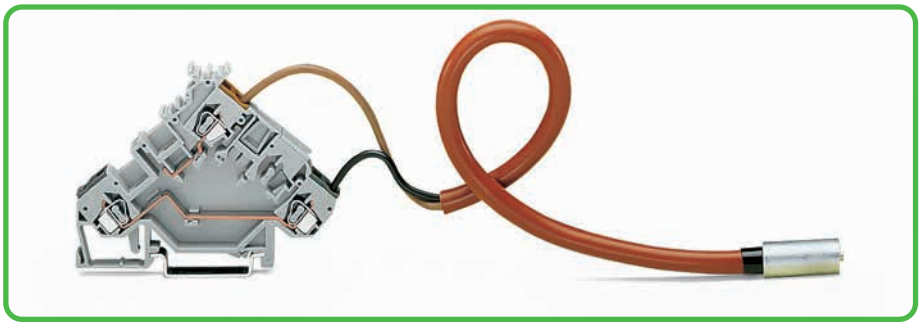


Testing with voltage tester directly on the current bar.

Fuse plugs

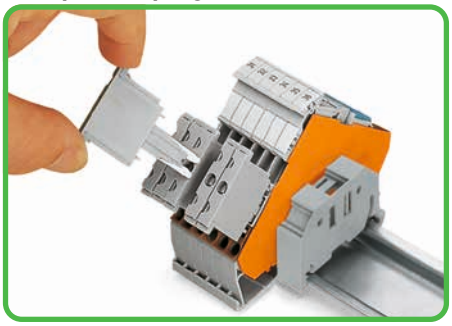


Actuator terminal blocks with 281-511 fuse plugs (requires additional intermediate plates).



Actuator terminal block with thermocouple.

Component plugs



Actuator terminal blocks with component plugs (280-801).



fine-stranded, tip-bonded



fine-stranded, with ferrule ❶ (gastight crimped)

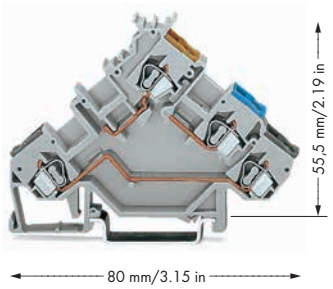


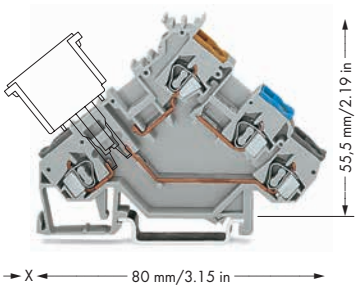
fine-stranded, with pin terminal (gastight crimped)

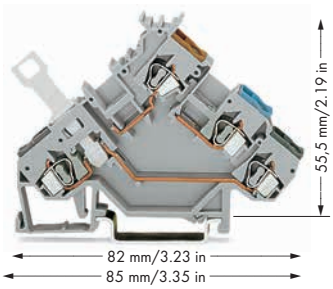
❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

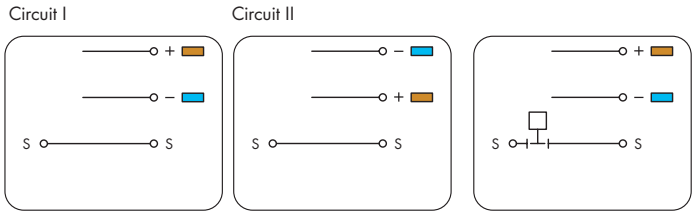
Sensor Terminal Blocks 2.5 mm² for 3-Conductor Sensors
280 Series

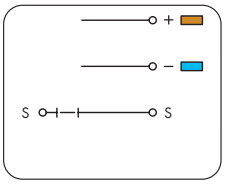
0.08 - 2.5 mm²	AWG 28 - 12 *	0.08 - 2.5 mm²	AWG 28 - 12 *	0.08 - 2.5 mm²	AWG 28 - 12 *
400 V/6 kV/3 ❶	300 V, 15 A	250 V/4 kV/3 ❶ ❷	300 V, 6 A	400 V/6 kV/3 ❶	300 V, 10 A
I_N 20 A	300 V, 15 A	I_N 6 A ❷	300 V, 15 A	I_N 10 A	300 V, 15 A
Terminal block width 5 mm / 0.197 in		Terminal block width 5 mm / 0.197 in		Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❸		8 - 9 mm / 0.33 in ❸		8 - 9 mm / 0.33 in ❸	







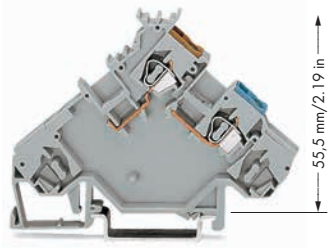




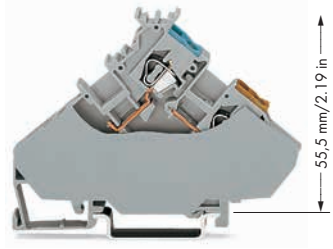
Item No.		Pack. Unit
Sensor terminal block		
Circuit I	**280-560**	50
Circuit II	**280-553**	50

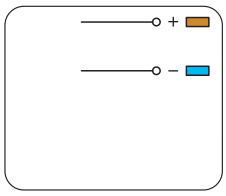
Item No.		Pack. Unit
Sensor terminal block,		
for component plugs		
	280-561 ❹	50

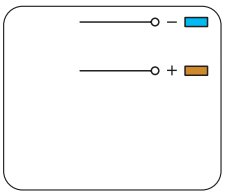
Item No.		Pack. Unit
Sensor disconnect terminal block,		
for signal interruption		
	280-563	50









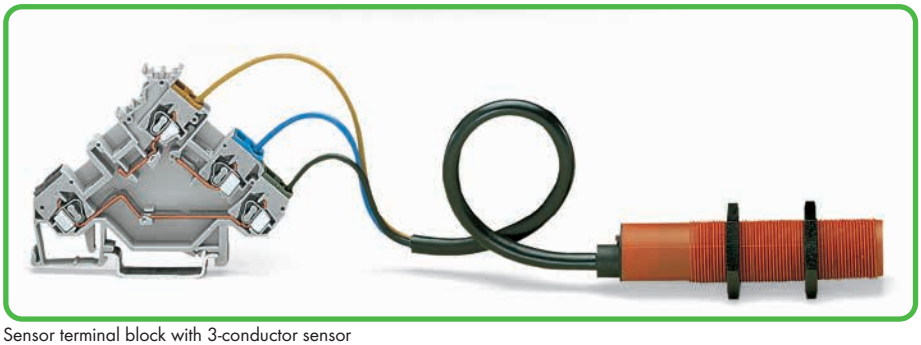


Item No.		Pack. Unit
Sensor supply terminal block,		
power supply from sensor side		
	280-564	10

Item No.		Pack. Unit
Spacer,		
same profile as 3-conductor sensor terminal blocks or appropriate actuator terminal blocks		
Spacers with the profile clearly differentiate between sensor or actuator terminal groups, e.g., of different power supply.		
gray	**280-559**	50

Item No.		Pack. Unit
Sensor supply terminal block,		
power supply from control panel side, with end plate		
	280-567	20
Technical data:		
400 V/6 kV/3	I_N 20 A	

Certification organizations can be found in the overview on pages 622 and 623.



Sensor terminal block with 3-conductor sensor

* AWG 12: THHN, THWN

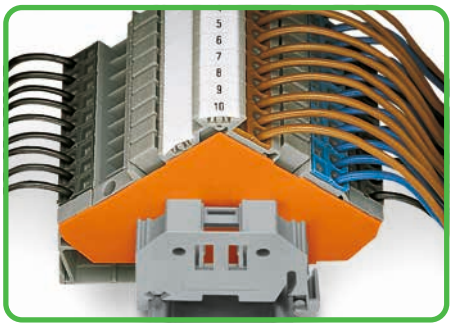
❶ 400 V/250 V = rated voltage
6 kV/4 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

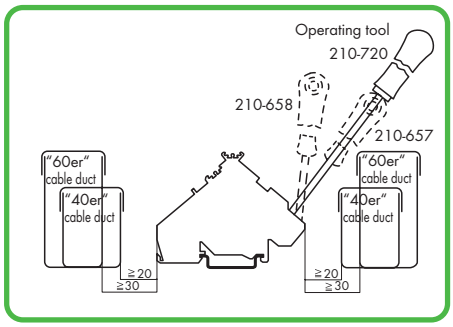
❷ Electrical ratings are given by the fuse plug or empty component plug housing.

❸ Strip length, see packaging or instructions.

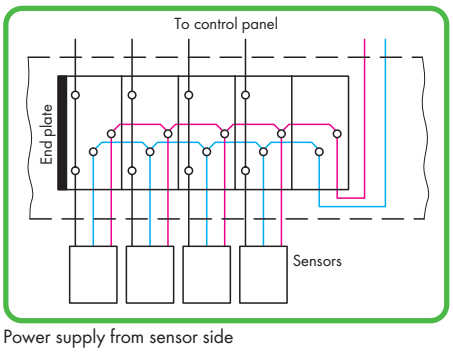
❹ For empty component plug housings, see interface modules
x = 12 mm/0.472 in
For fuse plugs, see page 250
x = 20 mm/0.787 in

❺ See application notes for:
Insulation stop, page 293

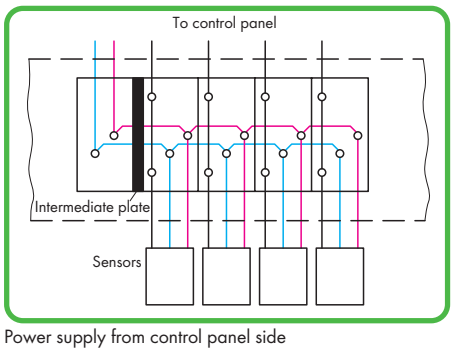




Min. mounting distance – terminal blocks to cable duct



Power supply from sensor side



Power supply from control panel side

280 Series Accessories

Appropriate marking system:
WMB (see Section 13)

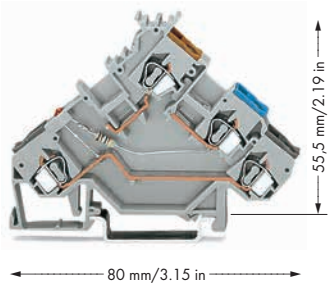
End and intermediate plate, 1 mm thick, for triple-deck terminal blocks			
	orange	**280-321**	100 (4x25)
	gray	**280-319**	100 (4x25)
Insulation stop, ❺	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop, ❺	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop, ❺	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)
Adjacent jumper, insulated, $I_N = I_N$ terminal block			
	gray	**280-402**	200 (8x25)
Screwless end stop, for DIN 35 rail, 6 mm wide			
	gray	**249-116**	100 (4x25)
Screwless end stop, for DIN 35 rail, 10 mm wide			
	gray	**249-117**	50 (2x25)

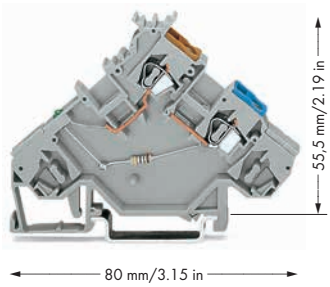
Sensor LED Terminal Blocks 2.5 mm² for 3-Conductor Sensors 280 Series

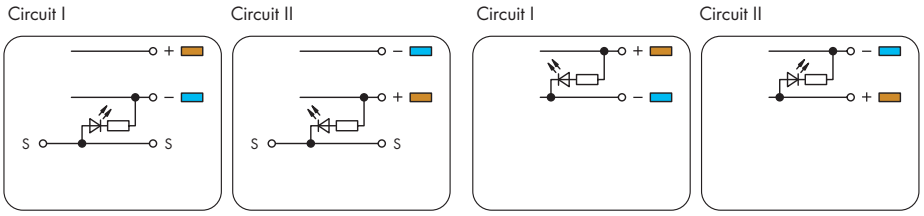
CAGE CLAMP®

0.08 - 2.5 mm²	AWG 28 - 12 *
24 VDC ❶	24 V, 15 A
20 A	300 V, 15 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷	

0.08 - 2.5 mm²	AWG 28 - 12 *
24 VDC ❶	24 V, 15 A
20 A	300 V, 15 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷	



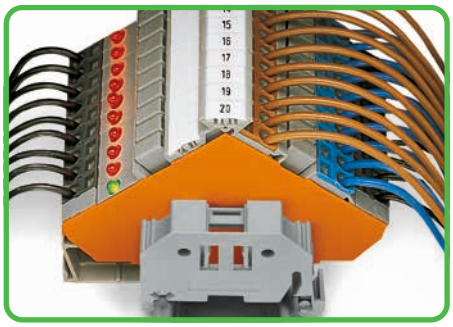




* AWG 12: THHN, THWN

❶ Other voltages upon request.

❷ Strip length, see packaging or instructions.



	Item No.	Pack. Unit
Sensor LED terminal block, for PNP (positive) switching sensors, additional LED, 24 VDC, LED power consumption: 4.8 mA		
Circuit I	**280-560/281-434**	50
Sensor LED terminal block, for NPN (negative) switching sensors, red LED, 24 VDC, LED power consumption: 4.8 mA		
Circuit II	**280-561/281-413**	50

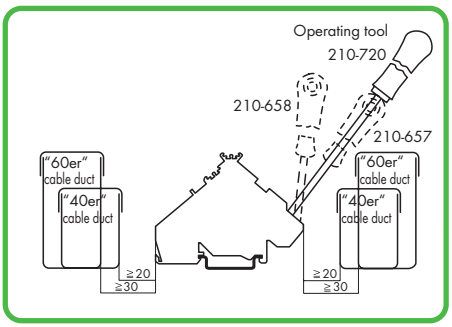
	Item No.	Pack. Unit
Sensor LED supply terminal block, power supply from sensor side, for PNP (positive) switching sensors, green LED, 24 VDC, LED power consumption: 4.8 mA		
Circuit I	**280-564/281-483**	10
Sensor LED supply terminal block, power supply from sensor side, for NPN (negative) switching sensors, green LED, 24 VDC, LED power consumption: 4.8 mA		
Circuit II	**280-566/281-496**	10

280 Series Accessories

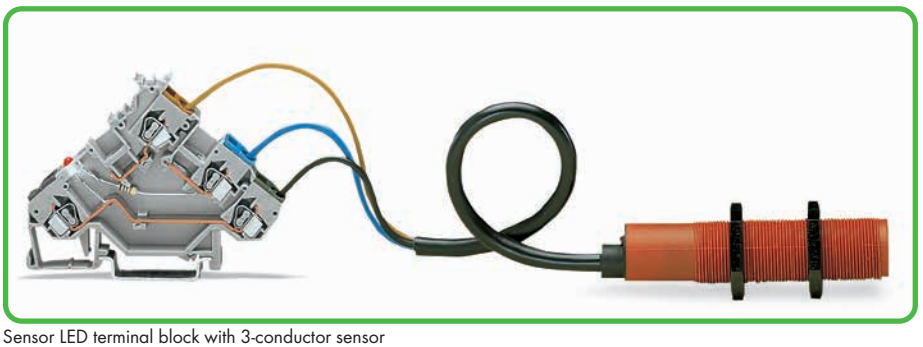
Appropriate marking system:
WMB (see Section 13)

End and intermediate plate, 1 mm thick, for triple-deck terminal blocks			
orange	**280-321**	100 (4x25)	
gray	**280-319**	100 (4x25)	
Insulation stop, 5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")			
white	**280-470**	200 (8x25)	

Insulation stop, 5 pcs/strip, 0.25 - 0.5 mm²			
light gray	**280-471**	200 (8x25)	
Insulation stop, 5 pcs/strip, 0.75 - 1 mm²			
dark gray	**280-472**	200 (8x25)	



Min. mounting distance – terminal blocks to cable duct



Sensor LED terminal block with 3-conductor sensor

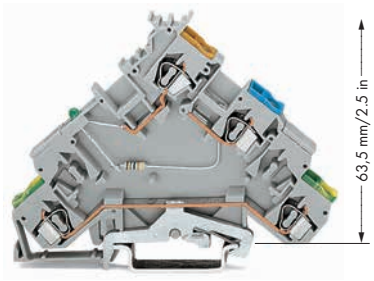
Certification organizations can be found in the overview on pages 622 and 623.

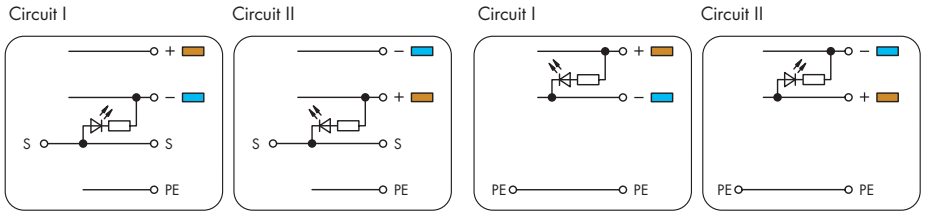
Sensor LED Terminal Blocks 2.5 mm² for 4-Conductor Sensors 280 Series

0.08 - 2.5 mm²	AWG 28 - 12 *
24 VDC ❶	24 V, 15 A
20 A	300 V, 15 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷	

0.08 - 2.5 mm²	AWG 28 - 12 *
24 VDC ❶	24 V, 15 A
20 A	300 V, 15 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷	







* AWG 12: THHN, THWN

❶ Other voltages upon request.

❷ Strip length, see packaging or instructions.



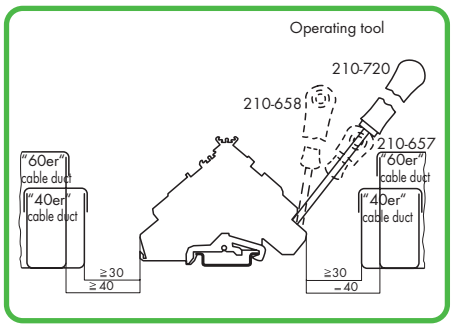
Item No.		Pack. Unit
Sensor LED terminal block,		
for PNP (positive) switching sensors,		
red LED, 24 VDC, LED power consumption: 4.8 mA		
Circuit I	**280-570/281-434**	50
Sensor LED terminal block,		
for NPN (negative) switching sensors,		
additional LED, 24 VDC, LED power consumption: 4.8 mA		
Circuit II	**280-571/281-413**	50

Item No.		Pack. Unit
Sensor LED supply terminal block,		
power supply from sensor side,		
for PNP (positive) switching sensors,		
green LED, 24 VDC, LED power consumption: 4.8 mA		
Circuit I	**280-574/281-483**	10
Sensor LED supply terminal block,		
power supply from sensor side,		
for NPN (negative) switching sensors,		
green LED, 24 VDC, LED power consumption: 4.8 mA		
Circuit II	**280-576/281-496**	10
Sensor LED supply terminal block,		
power supply from control panel side,		
for PNP (positive) switching sensors,		
green LED, 24 VDC, LED power consumption: 4.8 mA,		
with end plate		
Circuit II	**280-577/281-496**	20

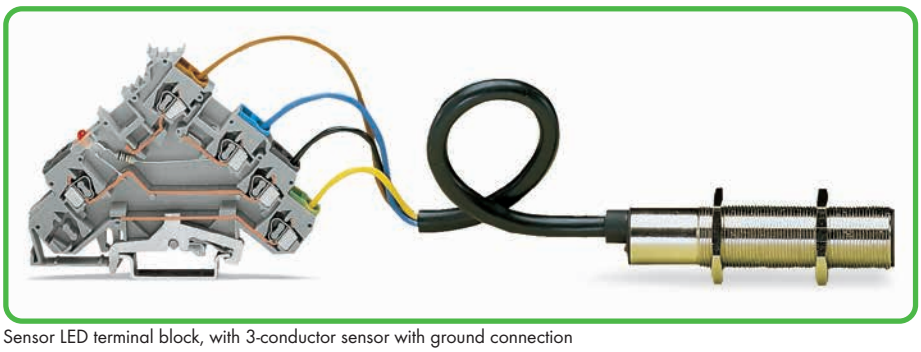
280 Series Accessories

Appropriate marking system:
WMB (see Section 13)

End and intermediate plate, 1 mm thick,			
for quadruple-deck terminal blocks			
orange	**280-323**	100 (4x25)	
gray	**280-320**	100 (4x25)	



Min. mounting distance – terminal blocks to cable duct



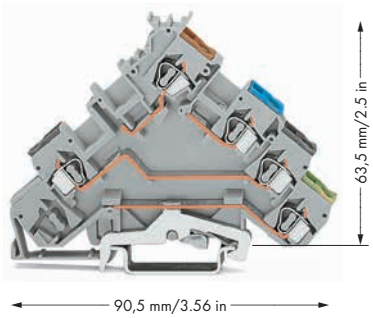
Sensor LED terminal block, with 3-conductor sensor with ground connection

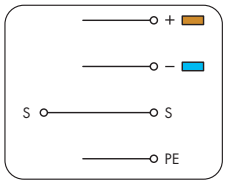
Certification organizations can be found in the overview on pages 622 and 623.

Sensor Terminal Blocks 2.5 mm² for 3-Conductor Sensors with Ground Connection
280 Series

0.08 - 2.5 mm²	AWG 28 - 12 *
400 V/6 kV/3 ❶	300 V, 15 A
I_N 20 A	300 V, 15 A

Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❸

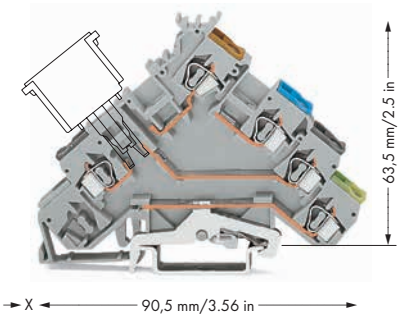


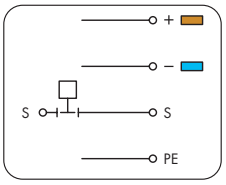


Item No.	Pack. Unit
Sensor terminal block with ground connection	
280-570	50

0.08 - 2.5 mm²	AWG 28 - 12 *
250 V/4 kV/3 ❶❷	300 V, 6 A
I_N 6 A	300 V, 15 A

Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❸

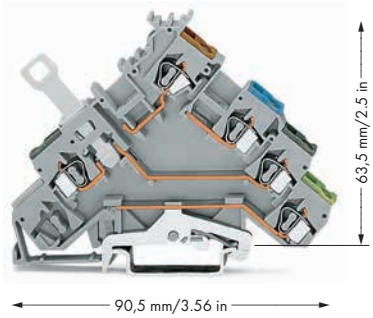


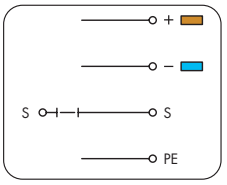


Item No.	Pack. Unit
Sensor terminal block with ground connection, for component plugs	
280-571 ❹	50

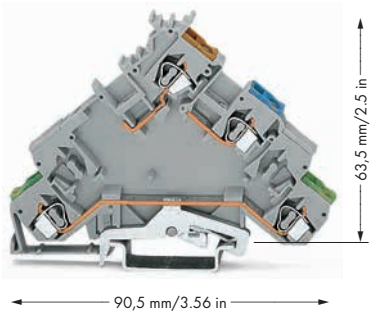
0.08 - 2.5 mm²	AWG 28 - 12 *
400 V/6 kV/3 ❶	300 V, 10 A
I_N 10 A	300 V, 15 A

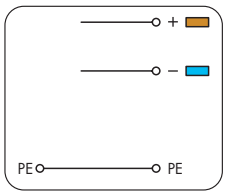
Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❸



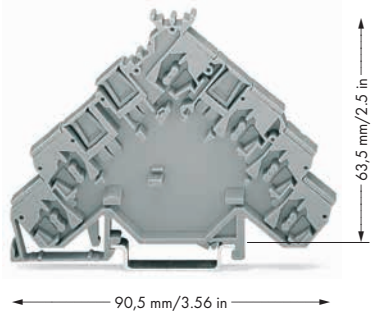


Item No.	Pack. Unit
Sensor disconnect terminal block with ground connection, for signal interruption	
280-573	50

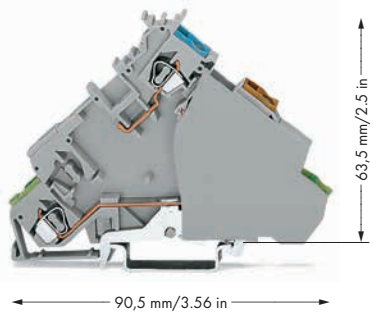


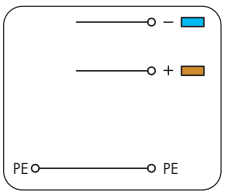


Item No.	Pack. Unit
Sensor supply terminal block with ground connection, power supply from sensor side	
280-574	10



Item No.	Pack. Unit
Spacer, same profile as 4-conductor sensor terminal blocks, 3-conductor sensor terminal blocks with ground connection or appropriate actuator terminal blocks Spacers with the profile clearly differentiate between sensor or actuator terminal groups, e.g., of different power supply.	
280-582	50

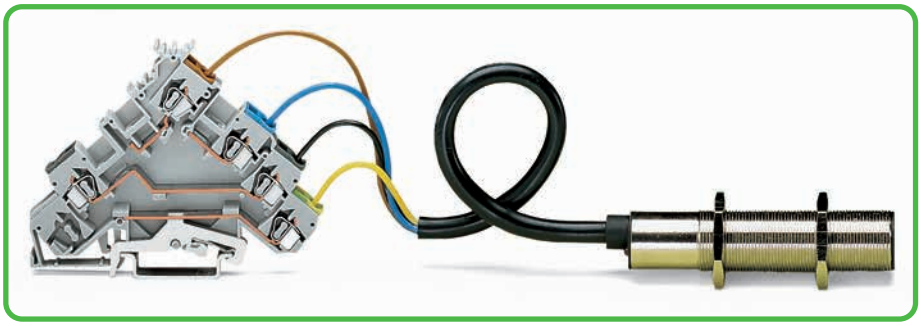




Item No.	Pack. Unit
Sensor supply terminal block with ground connection, power supply from control panel side, with end plate	
280-577	20

Technical data:
400 V/6 kV/3 I_N 20 A

Certification organizations can be found in the overview on pages 622 and 623.



Sensor terminal block, with 3-conductor sensor with ground connection

* AWG 12: THHN, THWN

❶ 400 V/250 V = rated voltage
6 kV/4 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

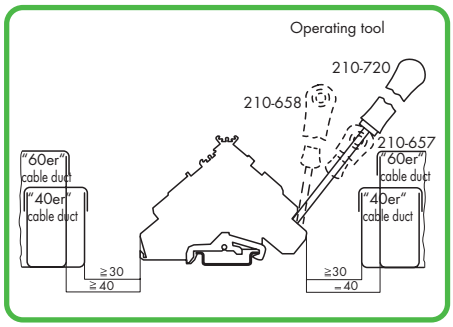
❷ Electrical ratings are given by the fuse plug or empty component plug housing.

❸ Strip length, see packaging or instructions.

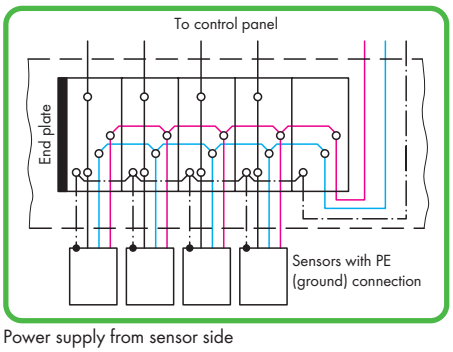
❹ For empty component plug housings, see interface modules
x = 12 mm/0.472 in
For fuse plugs, see page 250
x = 20 mm/0.787 in

❺ See application notes for:
Insulation stop, page 293

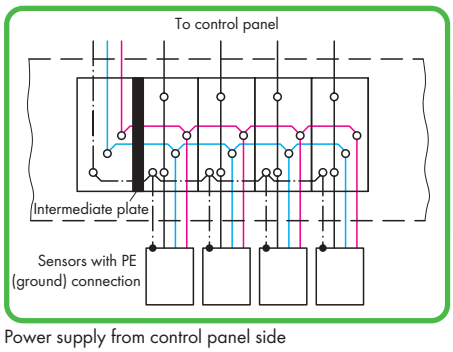




Min. mounting distance – terminal blocks to cable duct



Power supply from sensor side



Power supply from control panel side

280 Series Accessories

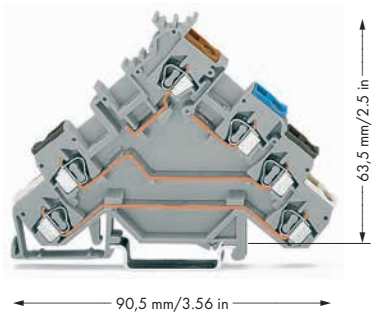
Appropriate marking system:
WMB (see Section 13)

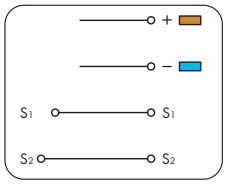
End and intermediate plate, 1 mm thick, for quadruple-deck terminal blocks			
	orange	**280-323**	100 (4x25)
	gray	**280-320**	100 (4x25)
Insulation stop, ❺ 5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")			
	white	**280-470**	200 (8x25)
Insulation stop, ❺ 5 pcs/strip, 0.25 - 0.5 mm²			
	light gray	**280-471**	200 (8x25)
Insulation stop, ❺ 5 pcs/strip, 0.75 - 1 mm²			
	dark gray	**280-472**	200 (8x25)
Adjacent jumper, insulated, $I_N = I_N$ terminal block			
	gray	**280-402**	200 (8x25)
Screwless end stop, for DIN 35 rail, 6 mm wide			
	gray	**249-116**	100 (4x25)
Screwless end stop, for DIN 35 rail, 10 mm wide			
	gray	**249-117**	50 (2x25)

Sensor Terminal Blocks 2.5 mm² for 4-Conductor Sensors
280 Series

0.08 - 2.5 mm²	AWG 28 - 12 *
400 V/6 kV/3 ❶	300 V, 15 A
I_N 20 A	300 V, 15 A

Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❸

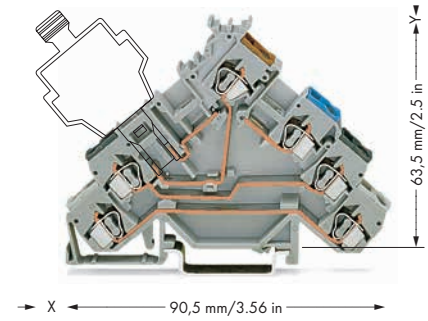


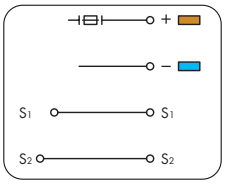


Item No.		Pack. Unit
Sensor terminal block		
○	**280-580**	50

0.08 - 2.5 mm²	AWG 28 - 12 *
125 V/5 A ❷	300 V, 6 A
250 V/6.3 A ❷	300 V, 15 A

Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❸

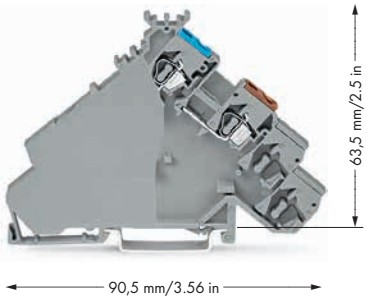


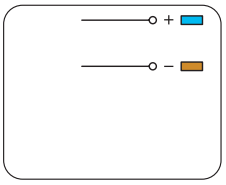


Item No.		Pack. Unit
Sensor terminal block,		
for fuse plugs,		
for PNP (positive) switching sensors without end plate		
○	**280-588** ❹	50

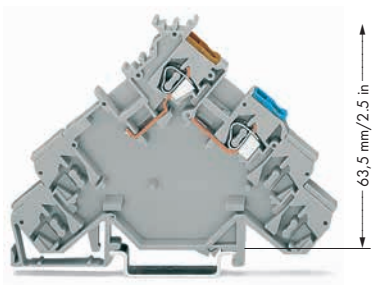
0.08 - 2.5 mm²	AWG 28 - 12 *
400 V/6 kV/3 ❶	24 V, 15 A
I_N 20 A	300 V, 15 A

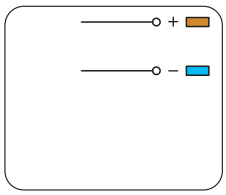
Terminal block width 6 mm / 0.236 in
8 - 9 mm / 0.33 in ❸



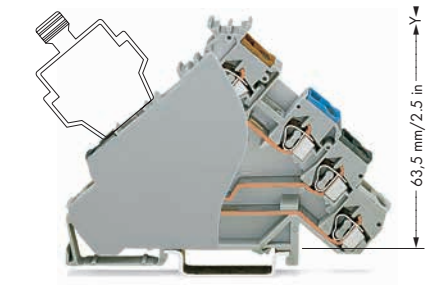


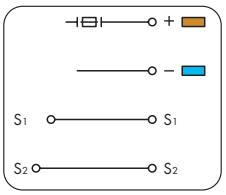
Item No.		Pack. Unit
Sensor supply terminal block,		
power supply from control panel side,		
with end plate		
○	**280-587**	20





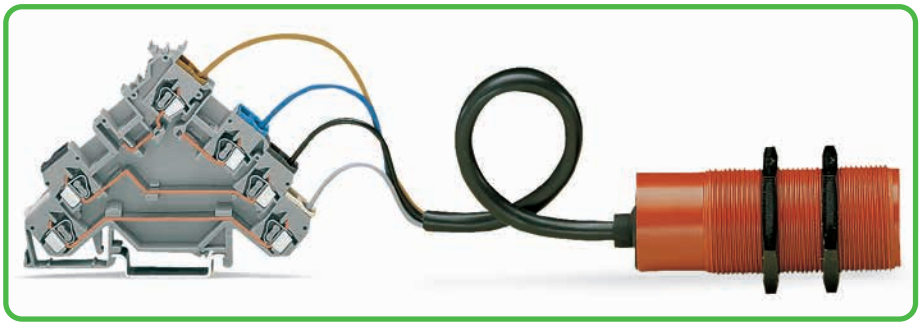
Item No.		Pack. Unit
Sensor supply terminal block,		
power supply from sensor side,		
without end plate		
○	**280-584**	10





Item No.		Pack. Unit
Sensor terminal block, for fuse plugs,		
for PNP (positive) switching sensors		
with gray end plate		
○	**280-588/280-320**	50
with orange end plate		
○	**280-588/280-323**	50

Certification organizations can be found in the overview on pages 622 and 623.



Sensor terminal block with 4-conductor sensor

* AWG 12: THHN, THWN

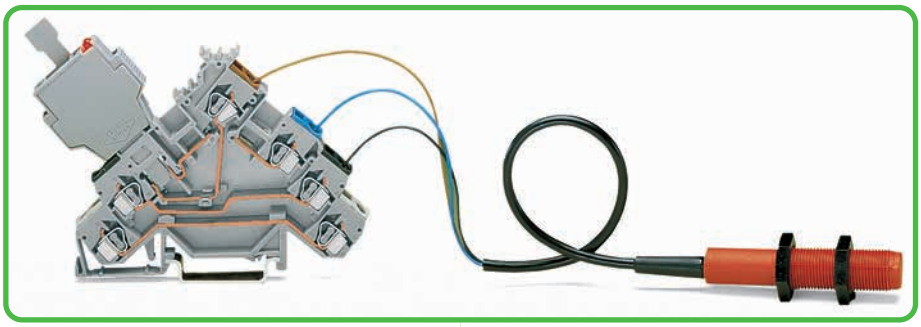
❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Electrical ratings are given by the fuse plug or empty component plug housing.

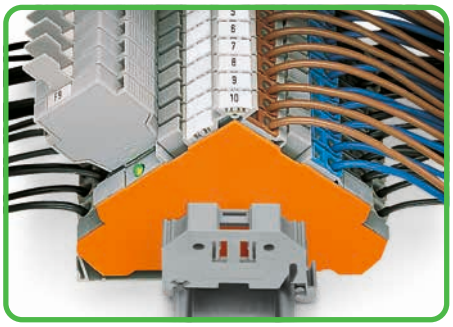
❸ Strip length, see packaging or instructions.

❹ For empty component plug housings, see interface modules
x =12 mm/0.472 in
For fuse plugs, see page 248
x = 15.5 mm/0.61 in
y = 10 mm/0.394 in

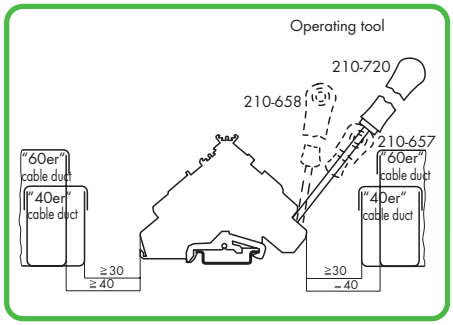
❺ See application notes for:
Insulation stop, page 293



Sensor terminal block with fuse plug, including 3-conductor sensor



The fuse plug is 1 mm wider than the terminal block. This means an intermediate plate has to be fitted.



Min. mounting distance – terminal blocks to cable duct

280 Series Accessories

Appropriate marking system:
WMB (see Section 13)

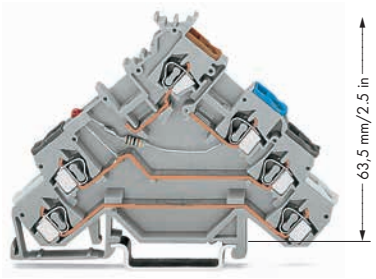
End and intermediate plate, 1 mm thick,			
	for quadruple-deck terminal blocks		
	orange	**280-323**	100 (4x25)
	gray	**280-320**	100 (4x25)
Insulation stop,			
❺	5 pcs/strip,		
	0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop,			
❺	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop,			
❺	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)
Adjacent jumper, insulated,			
	$I_N = I_N$ terminal block		
	gray	**280-402**	200 (8x25)
Screwless end stop,			
	for DIN 35 rail,		
	6 mm wide		
	gray	**249-116**	100 (4x25)
Screwless end stop,			
	for DIN 35 rail,		
	10 mm wide		
	gray	**249-117**	50 (2x25)

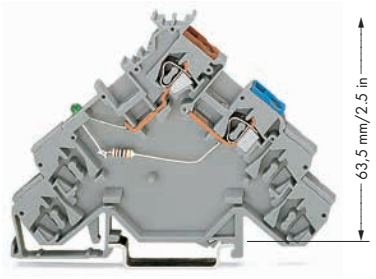
Sensor LED Terminal Blocks 2.5 mm² for 4-Conductor Sensors 280 Series

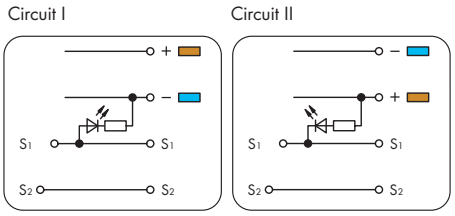
CAGE CLAMP®

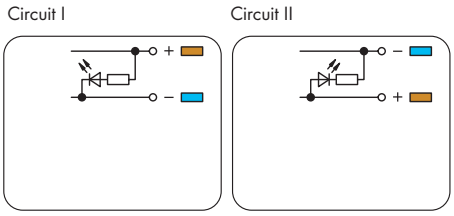
0.08 - 2.5 mm²	AWG 28 - 12 *
24 VDC ❶	24 V, 15 A
20 A	
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷	

0.08 - 2.5 mm²	AWG 28 - 12 *
24 VDC ❶	24 V, 15 A
20 A	300 V, 15 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷	





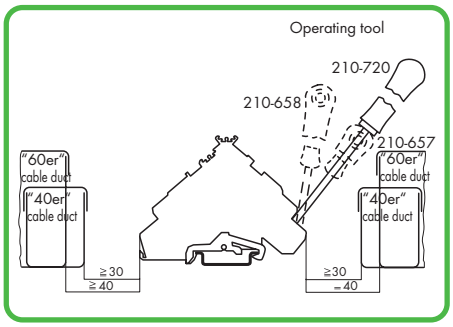




* AWG 12: THHN, THWN

❶ Other voltages upon request.

❷ Strip length, see packaging or instructions.



Min. mounting distance – terminal blocks to cable duct

Item No.		Pack. Unit
Sensor LED terminal block,		
for PNP (positive) switching sensors,		
red LED, 24 VDC, LED power consumption: 4.8 mA		
Circuit I	**280-580/281-434**	50
Sensor LED terminal block,		
for NPN (negative) switching sensors,		
red LED, 24 VDC, LED power consumption: 4.8 mA		
Circuit II	**280-581/281-413**	50

Item No.		Pack. Unit
Sensor LED supply terminal block,		
power supply from sensor side,		
for PNP (positive) switching sensors,		
green LED, 24 VDC, LED power consumption: 4.8 mA		
Circuit I	**280-584/281-483**	10
Sensor LED supply terminal block,		
power supply from sensor side,		
for NPN (negative) switching sensors,		
green LED, 24 VDC, LED power consumption: 4.8 mA		
Circuit II	**280-586/281-496**	10

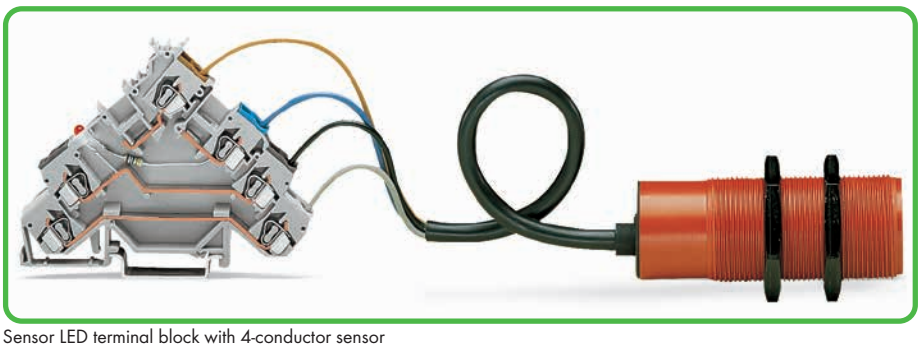
280 Series Accessories

Appropriate marking system:
WMB (see Section 13)

End and intermediate plate, 1 mm thick,			
for quadruple-deck terminal blocks			
orange	**280-323**	100 (4x25)	
gray	**280-320**	100 (4x25)	
Insulation stop,			
5 pcs/strip,			
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")			
white	**280-470**	200 (8x25)	

Insulation stop,		
5 pcs/strip,		
0.25 - 0.5 mm²		
light gray	**280-471**	200 (8x25)
Insulation stop,		
5 pcs/strip,		
0.75 - 1 mm²		
dark gray	**280-472**	200 (8x25)





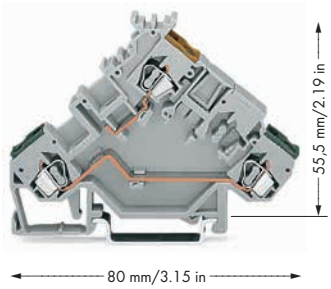
Sensor LED terminal block with 4-conductor sensor

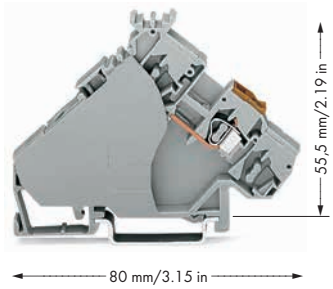
Certification organizations can be found in the overview on pages 622 and 623.

Actuator Terminal Blocks 2.5 mm²
for Pressure Switches, Thermocouples, etc.
Serie 280

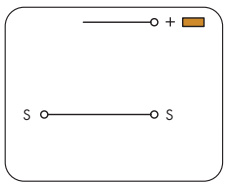
0.08 - 2.5 mm²	AWG 28 - 12 *
400 V/6 kV/3 ❶	300 V, 15 A
I_N 20 A	300 V, 15 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷	

0.08 - 2.5 mm²	AWG 28 - 12 *
400 V/6 kV/3 ❶	300 V, 15 A
I_N 20 A	300 V, 15 A
Terminal block width 6 mm / 0.236 in	
8 - 9 mm / 0.33 in ❷	

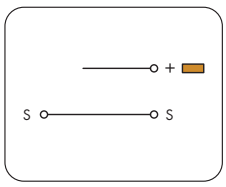


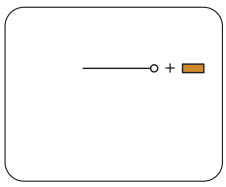


Circuit I



Circuit II

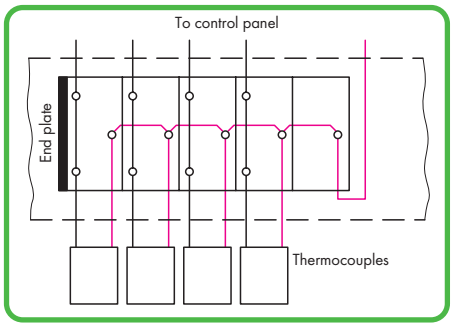




* AWG 12: THHN, THWN

❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.



Power supply from actuator side

	Item No.	Pack. Unit
Actuator terminal block		
Circuit I	**280-555**	50
Actuator terminal block, (no picture)		
Circuit II	**280-554**	50

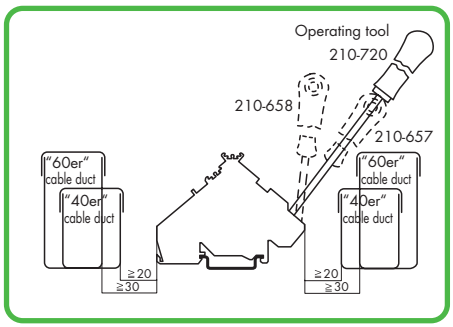
	Item No.	Pack. Unit
Actuator supply terminal block, in connection with 280-555: power supply from control cabinet side, in connection with 280-554: power supply from actuator side, with end plate		
	280-556	20

280 Series Accessories

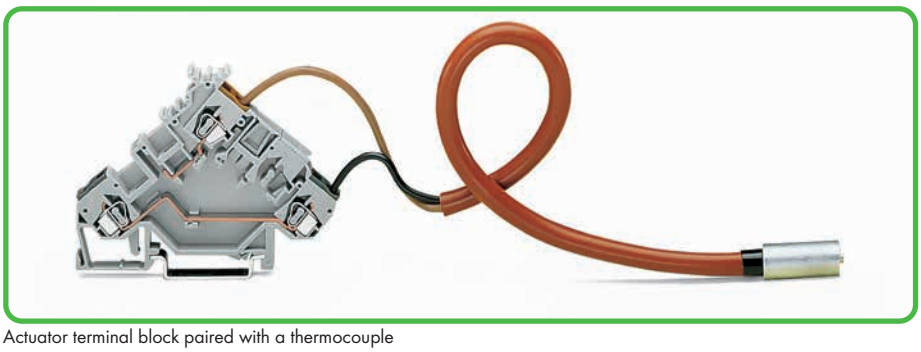
Appropriate marking system:
WMB (see Section 13)

End and intermediate plate, 1 mm thick, for triple-deck terminal blocks			
orange	**280-321**	100 (4x25)	
gray	**280-319**	100 (4x25)	
Insulation stop, 5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")			
white	**280-470**	200 (8x25)	
Screwless end stop, for DIN 35 rail, 6 mm wide			
gray	**249-116**	100 (4x25)	

Insulation stop, 5 pcs/strip, 0.25 - 0.5 mm²			
light gray	**280-471**	200 (8x25)	
Insulation stop, 5 pcs/strip, 0.75 - 1 mm²			
dark gray	**280-472**	200 (8x25)	
Screwless end stop, for DIN 35 rail, 10 mm wide			
gray	**249-117**	50 (2x25)	



Min. mounting distance – terminal blocks to cable duct

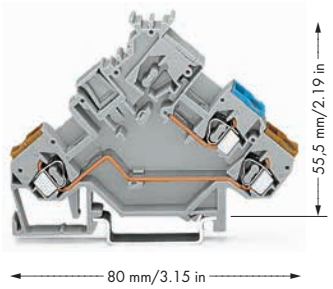


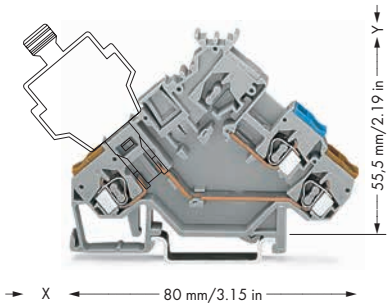
Actuator terminal block paired with a thermocouple

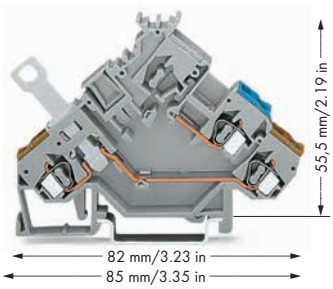
Certification organizations can be found in the overview on pages 622 and 623.

Actuator Terminal Blocks 2.5 mm² for Magnetic Valves, Servomotors, etc.
280 Series

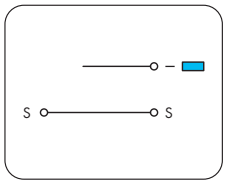
0.08 - 2.5 mm²	AWG 28 - 12 *	0.08 - 2.5 mm²	AWG 28 - 12 *	0.08 - 2.5 mm²	AWG 28 - 12 *
400 V/6 kV/3; 20 A ❶ ❷	300 V, 15 A	125 V/5 A ❷	300 V, 6 A	400 V/6 kV/3 ❶	300 V, 10 A
250 V/4 kV/3; 20 A ❶ ❷	300 V, 15 A	250 V/6.3 A ❷	300 V, 15 A	I_N 10 A	300 V, 15 A
Terminal block width 5 mm / 0.197 in		Terminal block width 5 mm / 0.197 in		Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❸		8 - 9 mm / 0.33 in ❸		8 - 9 mm / 0.33 in ❸	

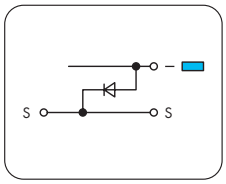


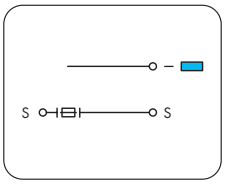


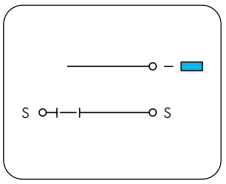


Circuit I Circuit II

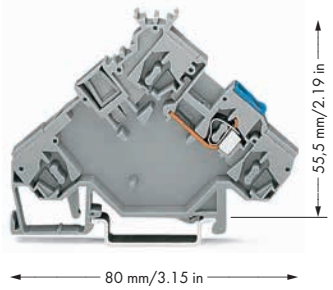


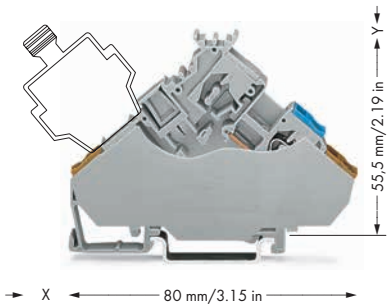


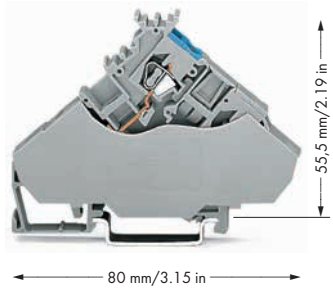


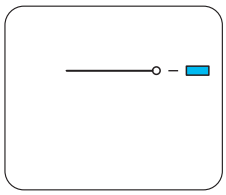


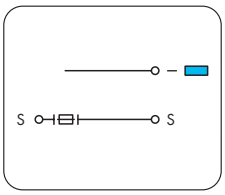
Item No.		Pack. Unit	Item No.		Pack. Unit	Item No.		Pack. Unit
Actuator terminal block			**Actuator terminal block,**			**Actuator disconnect terminal block,**		
			for fuse plugs,			for interruption of line		
			for fuse protection of line voltage, without end plate					
○ Circuit I	**280-562**	50	○	**280-565** ❹	50	○	**280-566**	50
Actuator terminal block,								
with recovery diode 1N4007								
○ Circuit II	**280-562/281-411**	50						

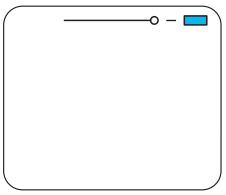






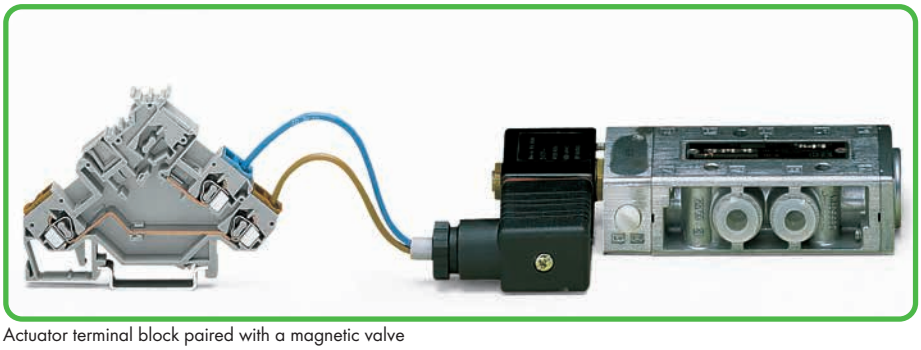






Item No.		Pack. Unit	Item No.		Pack. Unit	Item No.		Pack. Unit
Actuator supply terminal block,			**Actuator terminal block,** for fuse plugs,			**Actuator supply terminal block,**		
power supply form actuator side			for fuse protection of line voltage,			power supply from control panel side,		
			with gray end plate			with end plate		
○	**280-592**	10	○	**280-565/280-319**	50	○	**280-568**	20
			with orange end plate					
			○	**280-565/280-321**	50	Technical data:		
						400 V/6 kV/3	I_N 20 A	

Certification organizations can be found in the overview on pages 622 and 623.



Actuator terminal block paired with a magnetic valve

* AWG 12: THHN, THWN

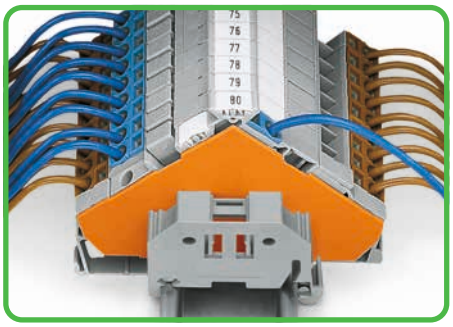
❶ 400 V/250 V = rated voltage
6 kV/4 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

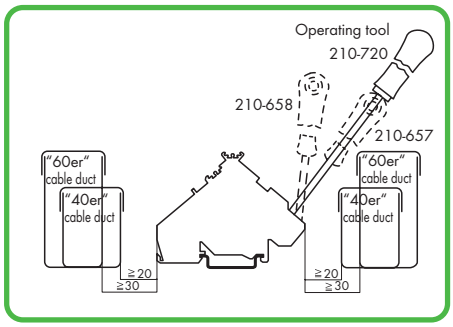
❷ Electrical ratings are given by the fuse plug or empty component plug housing.

❸ Strip length, see packaging or instructions.

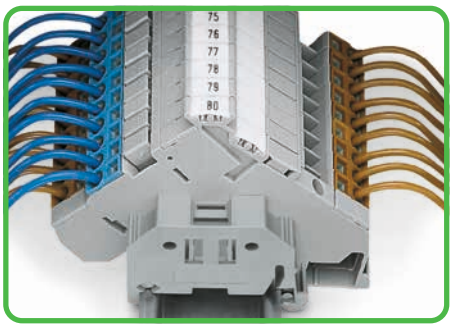
❹ For empty component plug housings, see interface modules
x =12 mm/0.472 in
For fuse plugs, see page 248
x = 15.5 mm/0.61 in
y = 10 mm/0.394 in

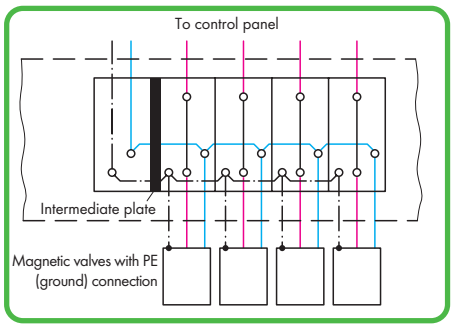
❺ See application notes for:
Insulation stop, page 293





Min. mounting distance – terminal blocks to cable duct





Power supply from control panel side

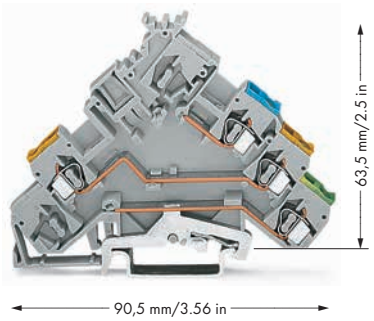
280 Series Accessories

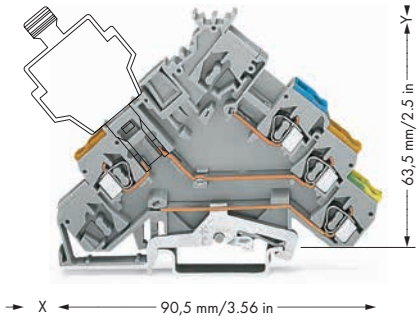
Appropriate marking system:
WMB (see Section 13)

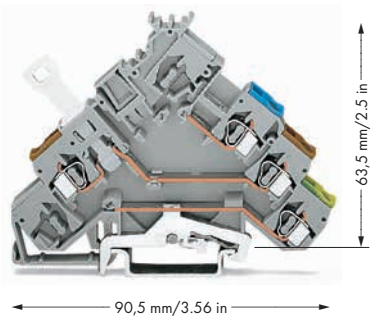
End and intermediate plate, 1 mm thick, for triple-deck terminal blocks			
	orange	**280-321**	100 (4x25)
	gray	**280-319**	100 (4x25)
Insulation stop, ❺	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop, ❺	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop, ❺	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)
Adjacent jumper, insulated, $I_N = I_N$ terminal block			
	gray	**280-402**	200 (8x25)
Screwless end stop, for DIN 35 rail, 6 mm wide			
	gray	**249-116**	100 (4x25)
Screwless end stop, for DIN 35 rail, 10 mm wide			
	gray	**249-117**	50 (2x25)

Actuator Terminal Blocks with Ground Connection 2.5 mm² for Magnetic Valves, Servomotors
280 Series

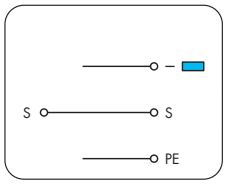
0.08 - 2.5 mm²	AWG 28 - 12 *	0.08 - 2.5 mm²	AWG 28 - 12 *	0.08 - 2.5 mm²	AWG 28 - 12 *
400 V/6 kV/3; 20 A ❶ ❷	300 V, 15 A	125 V/5 A ❷	300 V, 6 A	400 V/6 kV/3 ❶	300 V, 10 A
250 V/4 kV/3; 20 A ❶ ❷	300 V, 15 A	250 V/6.3 A ❷	300 V, 15 A	I_N 10 A	300 V, 15 A
Terminal block width 5 mm / 0.197 in		Terminal block width 5 mm / 0.197 in		Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❸		8 - 9 mm / 0.33 in ❸		8 - 9 mm / 0.33 in ❸	



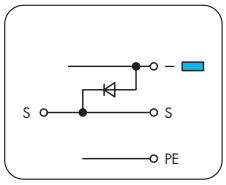


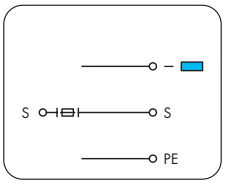


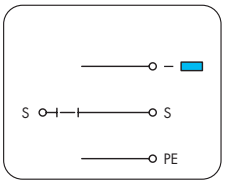
Circuit I



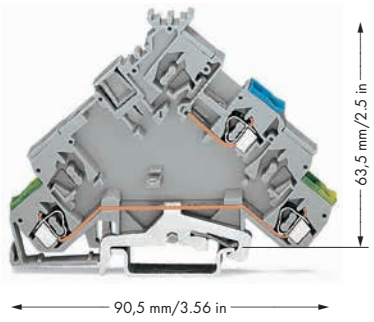
Circuit II

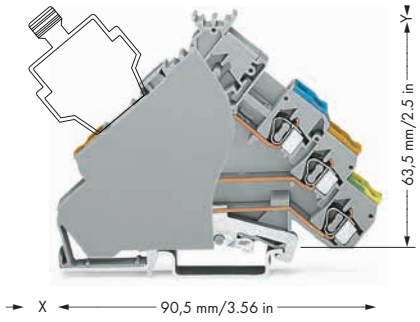


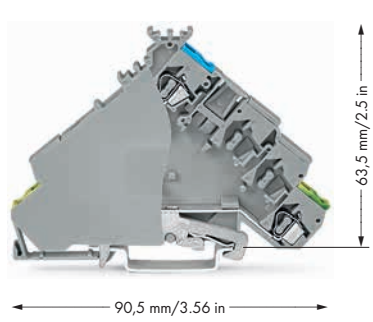


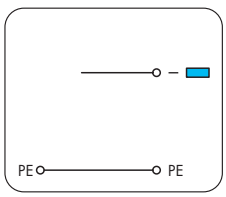


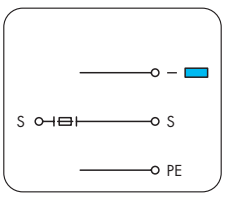
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Actuator terminal block with ground connection		**Actuator terminal block with ground connection,**		**Actuator disconnect terminal block with ground connection,**	
		for fuse plugs,		for interruption of line	
		for fuse protection of line voltage, without end plate			
◯ Circuit I **280-572**	50	◯ **280-575** ❹	50	◯ **280-576**	50
Actuator terminal block with ground connection,					
with recovery diode 1N4007					
◯ Circuit II **280-572/281-411**	50				

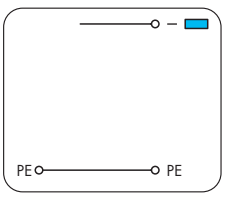






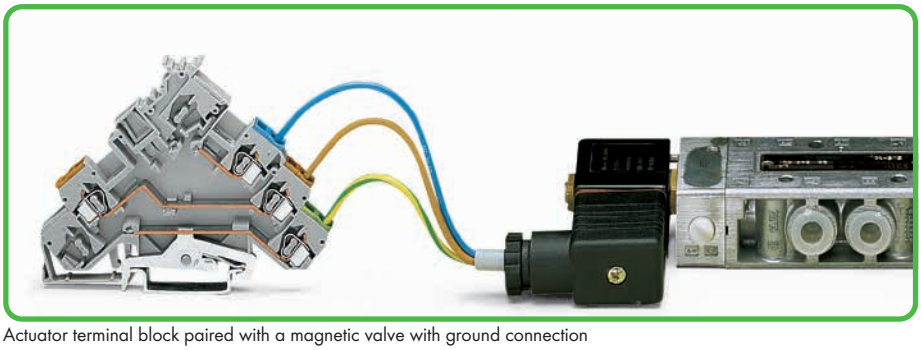






Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Actuator supply terminal block with ground connection,		**Actuator terminal block with ground connection,**		**Actuator supply terminal block with ground connection,** power supply from control panel side, with end plate	
power supply form actuator side		for fuse plugs, for fuse protection of line voltage,			
		with gray end plate			
◯ **280-593**	10	◯ **280-575/280-320**	50	◯ **280-578**	20
		with orange end plate			
		◯ **280-575/280-323**	50	Technical data:	
				400 V/6 kV/3	I_N 20 A

Certification organizations can be found in the overview on pages 622 and 623.



Actuator terminal block paired with a magnetic valve with ground connection

* AWG 12: THHN, THWN

❶ 400 V/250 V = rated voltage
6 kV/4 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

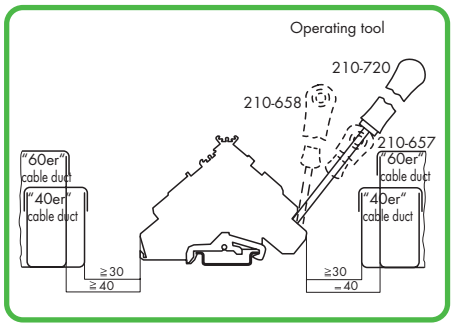
❷ Electrical ratings are given by the fuse plug or empty component plug housing.

❸ Strip length, see packaging or instructions.

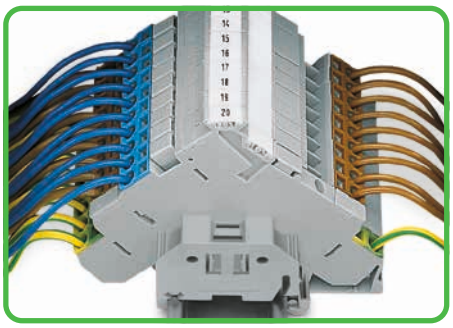
❹ For empty component plug housings, see interface modules
x =12 mm/0.472 in
For fuse plugs, see page 248
x = 15.5 mm/0.61 in
y = 10 mm/0.394 in

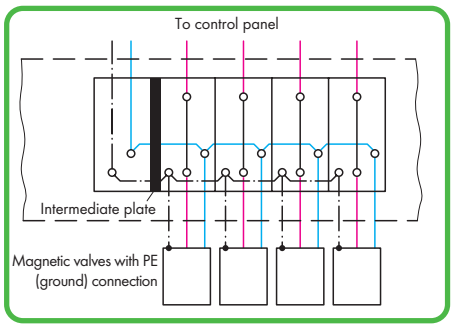
❺ See application notes for:
Insulation stop, page 293





Min. mounting distance – terminal blocks to cable duct





Power supply from control panel side

280 Series Accessories

Appropriate marking system:
WMB (see Section 13)

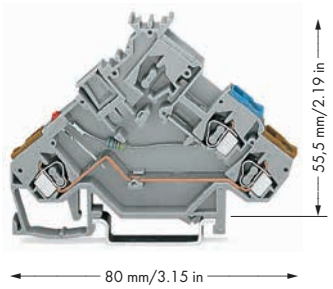
End and intermediate plate, 1 mm thick,			
	for quadruple-deck terminal blocks		
	orange	**280-323**	100 (4x25)
	gray	**280-320**	100 (4x25)
Insulation stop,			
❺ 	5 pcs/strip,		
	0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop,			
❺ 	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop,			
❺ 	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)
Adjacent jumper, insulated,			
	I_N = I_N terminal block		
	gray	**280-402**	200 (8x25)
Screwless end stop,			
	for DIN 35 rail,		
	6 mm wide		
	gray	**249-116**	100 (4x25)
Screwless end stop,			
	for DIN 35 rail,		
	10 mm wide		
	gray	**249-117**	50 (2x25)

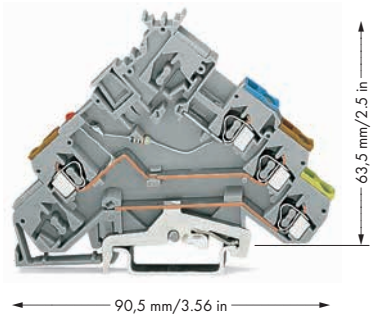
Actuator LED Terminal Blocks
Actuator LED Terminal Blocks with Ground Connection 2.5 mm²
280 Series

CAGE CLAMP®

0.08 - 2.5 mm²	AWG 28 - 12 *
24 VDC ❶	24 V, 15 A
20 A	300 V, 15 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷	

0.08 - 2.5 mm²	AWG 28 - 12 *
24 VDC ❶	24 V, 15 A
20 A	300 V, 15 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷	





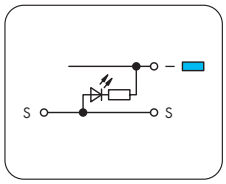
* AWG 12: THHN, THWN

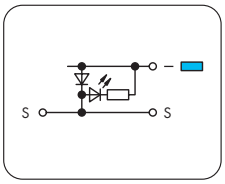
❶ Other voltages upon request.

❷ Strip length, see packaging or instructions.

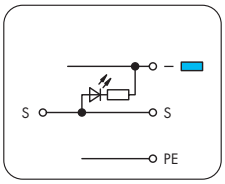
❸ See application notes for:
Insulation stop, page 293

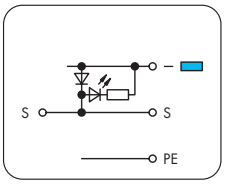
Circuit I Circuit II

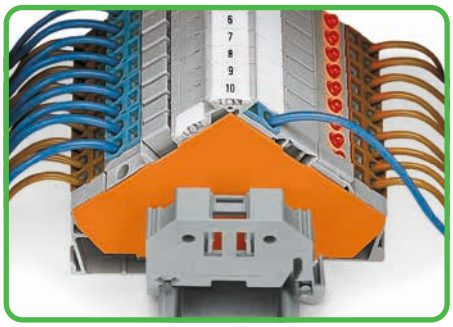




Circuit I Circuit II







	Item No.		Pack. Unit
Actuator LED terminal block, additional LED, 24 VDC, LED power consumption: 4.8 mA			
Circuit I	**280-562/281-434**		50
Actuator LED terminal block, with recovery diode 1N4007, red LED, 24 VDC, LED power consumption: 4.8 mA			
Circuit II	**280-562/281-420**		50

	Item No.		Pack. Unit
Actuator LED terminal block with ground connection, additional LED, 24 VDC, LED power consumption: 4.8 mA			
Circuit I	**280-572/281-434**		50
Actuator LED terminal block with ground connection, with recovery diode 1N4007, additional LED, 24 VDC, LED power consumption: 4.8 mA			
Circuit II	**280-572/281-420**		50

Item-Specific Accessories

End and intermediate plate, 1 mm thick,



for triple-deck terminal blocks			
orange	**280-321**		100 (4x25)
gray	**280-319**		100 (4x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick,



for quadruple-deck terminal blocks			
orange	**280-323**		100 (4x25)
gray	**280-320**		100 (4x25)

280 Series Accessories

Appropriate marking system:
WMB (see Section 13)

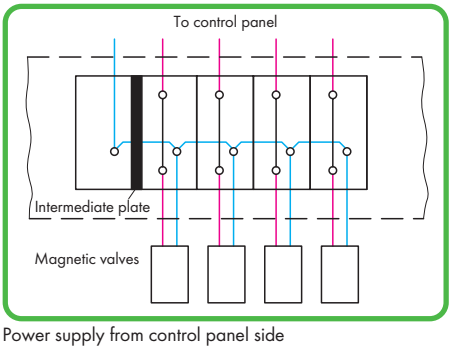
Insulation stop, ❸

5 pcs/strip,			
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")			
white	**280-470**		200 (8x25)

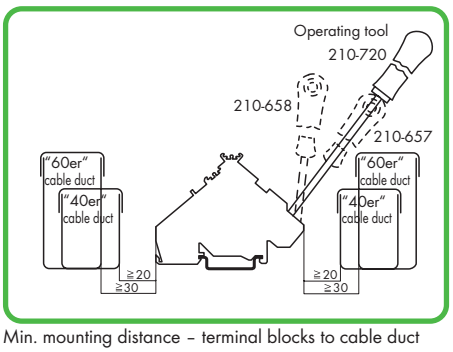
Adjacent jumper, insulated,



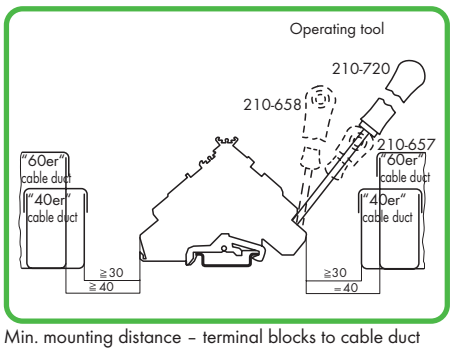
$I_N = I_N$ terminal block			
gray	**280-402**		200 (8x25)



Power supply from control panel side



Min. mounting distance – terminal blocks to cable duct



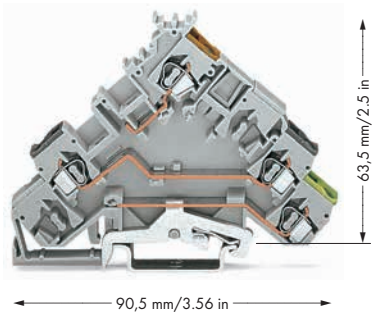
Min. mounting distance – terminal blocks to cable duct

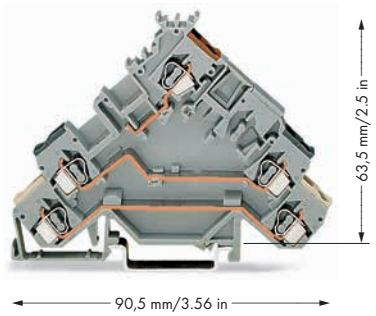
Certification organizations can be found in the overview on pages 622 and 623.

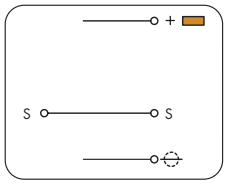
Actuator Terminal Blocks 2.5 mm² for Actuators with Shield Connection and Actuators with Shield Conductor Through Contact for Thermocouples, etc. – 280 Series

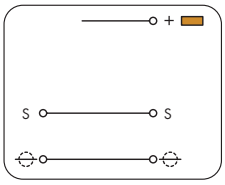
0.08 - 2.5 mm² 400 V/6 kV/3 ❶ I_N 20 A	AWG 28 - 12 * 300 V, 15 A 300 V, 15 A
Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❷	

0.08 - 2.5 mm² 400 V/6 kV/3 ❶ I_N 20 A	AWG 28 - 12 * 300 V, 15 A
Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❷	





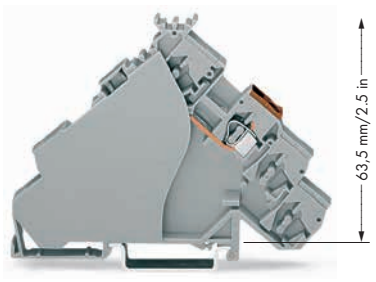


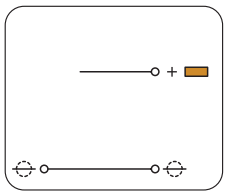


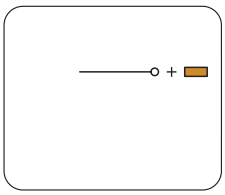
Item No.	Pack. Unit
Actuator terminal block with shield connection	
280-585	50
Item-specific accessories, see page 263	

Item No.	Pack. Unit
Actuator terminal block with shield conductor through contact	
280-583	50
Item-specific accessories, see page 263	









Item No.	Pack. Unit
Actuator supply terminal block with shield connection, power supply from control panel side, with end plate	
280-586	50
Item-specific accessories, see page 263	

Item No.	Pack. Unit
Actuator supply terminal block, power supply from control panel side, with end plate, for actuators with shield conductor through contact	
280-515	20
Item-specific accessories, see page 263	

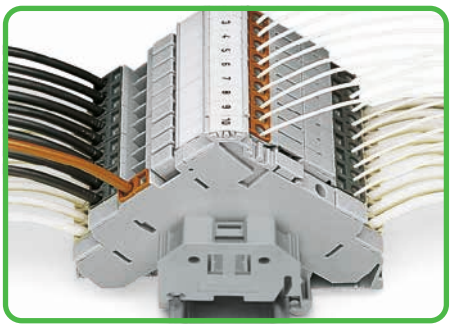
* AWG 12: THHN, THWN

❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.



Green-yellow clamping unit = shield contact

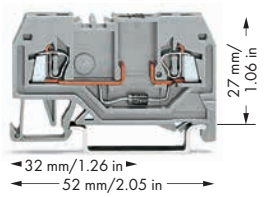


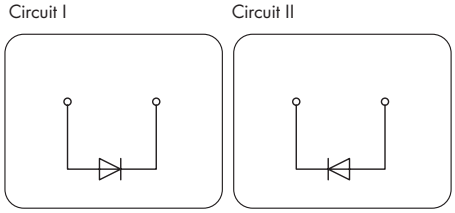
White clamping unit = shield conductor through contact

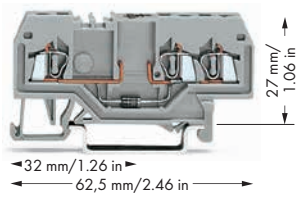
Certification organizations can be found in the overview on pages 622 and 623.

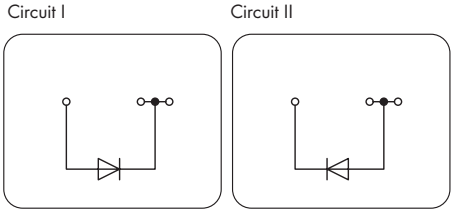
Diode Terminal Blocks and LED Terminal Blocks 1.5 mm²
279 Series

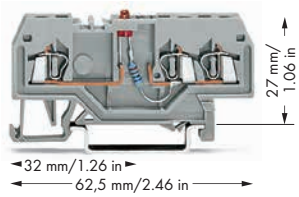
0.08 - 1.5 mm² | AWG 28 - 16 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 4 mm / 0.157 in 8 - 9 mm / 0.33 in ❶	0.08 - 1.5 mm² | AWG 28 - 16 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 4 mm / 0.157 in 8 - 9 mm / 0.33 in ❶	0.08 - 1.5 mm² | AWG 28 - 16 24 VDC I_F 0.025 A max. Terminal block width 4 mm / 0.157 in 8 - 9 mm / 0.33 in ❶

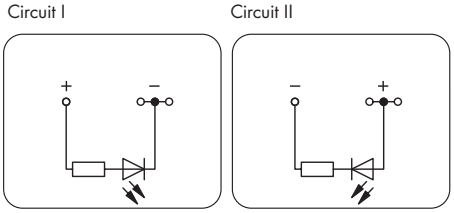








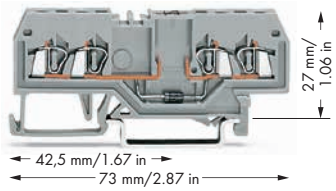


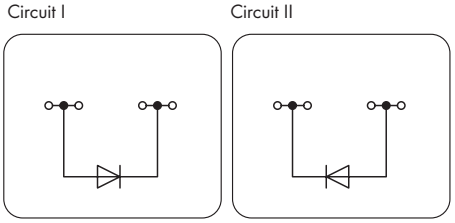


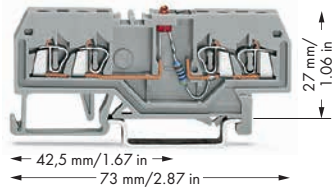
	Item No.	Pack. Unit
2-conductor diode terminal block with 1N4007 diode, gray		
Circuit I	**279-915/281-410**	100
Circuit II	**279-915/281-411**	100

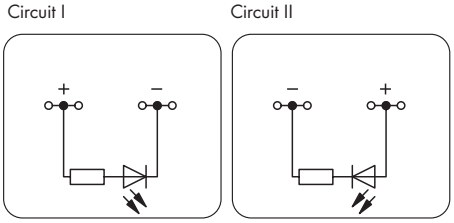
	Item No.	Pack. Unit
3-conductor diode terminal block with 1N4007 diode, gray		
Circuit I	**279-673/281-410**	100
Circuit II	**279-673/281-411**	100

	Item No.	Pack. Unit
3-conductor LED terminal block with red LED, 24 VDC, gray		
Circuit I	**279-674/281-434**	100
Circuit II	**279-674/281-413**	100









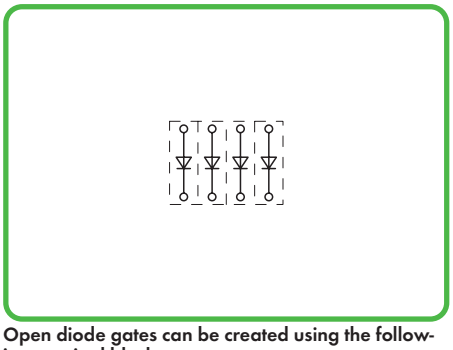
	Item No.	Pack. Unit
Through terminal blocks with same profile, see page 180		

	Item No.	Pack. Unit
4-conductor diode terminal block with 1N4007 diode, gray		
Circuit I	**279-815/281-410**	100
Circuit II	**279-815/281-411**	100

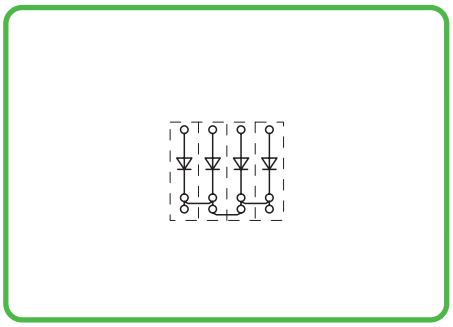
	Item No.	Pack. Unit
4-conductor LED terminal block with red LED, 24 VDC, gray		
Circuit I	**279-809/281-434**	100
Circuit II	**279-809/281-413**	100

Certification organizations can be found in the overview on pages 622 and 623.

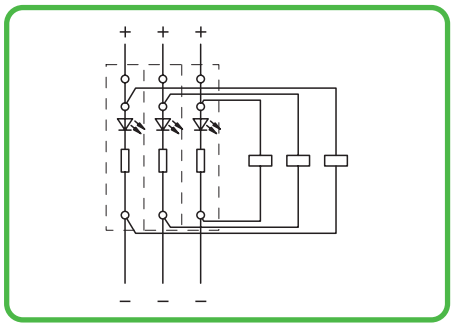
Circuit Configuration Examples
Diode Terminal Blocks and LED Terminal Blocks



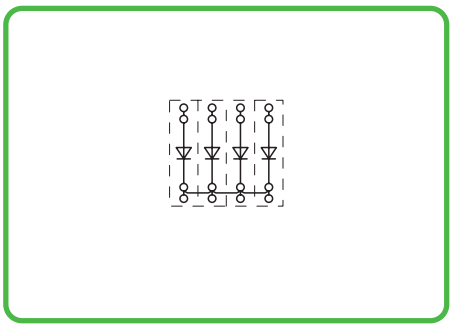
Open diode gates can be created using the following terminal blocks:
279-915/281-410 or
279-915/281-411



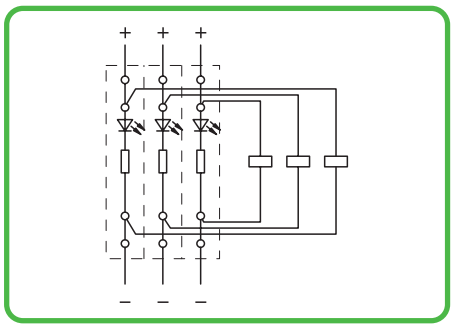
Polarized diode gates with common cathode can be created using the following terminal blocks:
279-673/281-410 or
279-673/281-411



Circuit-related voltage indications can be created using the following terminal blocks:
279-674/281-434 or
279-674/281-413



Polarized diode gates with common cathode can be created using the following terminal blocks:
279-815/281-410 or
279-815/281-411



Circuit-related voltage indications can be created using the following terminal blocks:
279-809/281-434 or
279-809/281-413

❶ Strip length, see packaging or instructions.

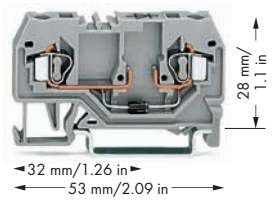
279 Series Accessories

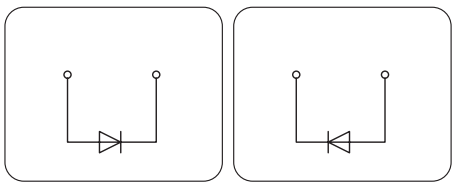
Appropriate marking system:
WMB (see Section 13)

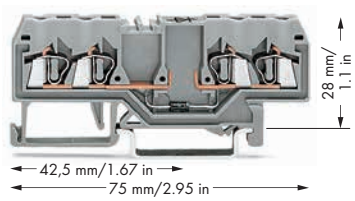
Insulation stop,			
	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**279-470**	200 (8x25)
Insulation stop,			
	5 pcs/strip, 0.25 mm²		
	dark gray	**279-471**	200 (8x25)
Comb-style jumper bar, insulated,			
	$I_N = I_N$ terminal block		
	2-way	**279-482**	200 (8x25)
	3-way	**279-483**	200 (8x25)
Comb-style jumper bar, insulated,			
	$I_N = I_N$ terminal block		
	10-way	**279-490**	50 (2x25)
Alternate comb-style jumper bar,			
	insulated, $I_N = I_N$ terminal block		
	2-way	**279-492**	200 (8x25)
Operating tool, of insulating material			
	2-way	**279-432**	1
	3-way	**279-433**	1
Operating tool, of insulating material			
	10-way	**279-440**	1

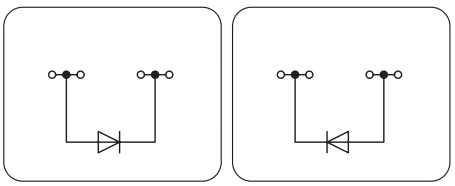
Diode Terminal Blocks and LED Terminal Blocks 2.5 mm²
280 Series

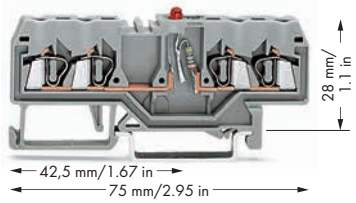
0.08 - 2.5 mm² | AWG 28 - 14 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❶	0.08 - 2.5 mm² | AWG 28 - 14 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❶	0.08 - 2.5 mm² | AWG 28 - 14 24 VDC I_F 0.025 A max. Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❶

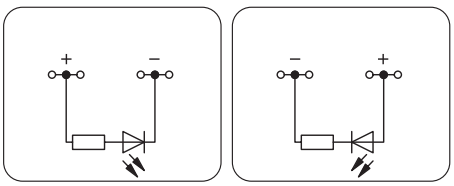








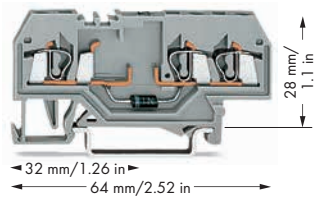


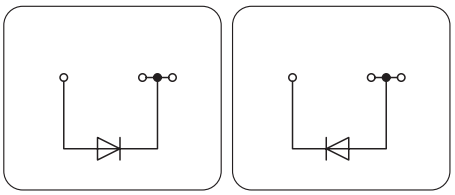


	Item No.	Pack. Unit
2-conductor diode terminal block with 1N4007		
diode, gray		
Circuit I	**280-915/281-410**	100
Circuit II	**280-915/281-411**	100

	Item No.	Pack. Unit
4-conductor diode terminal block with 1N4007		
diode, gray		
Circuit I	**280-815/281-410**	100
Circuit II	**280-815/281-411**	100

	Item No.	Pack. Unit
4-conductor LED terminal block with red LED,		
24 VDC, gray		
Circuit I	**280-809/281-434**	100
Circuit II	**280-809/281-413**	100

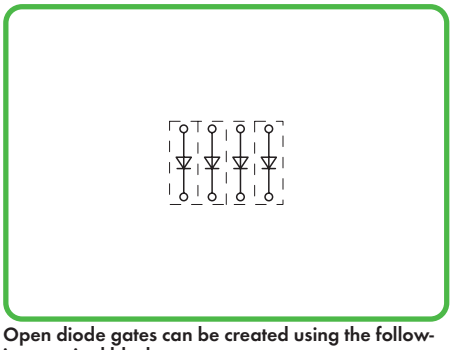




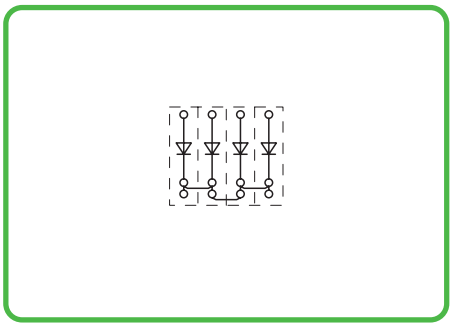
	Item No.	Pack. Unit
Through terminal blocks with same profile, see page 182		
	3-conductor diode terminal block with 1N4007	
	diode, gray	
Circuit I	**280-673/281-410**	100
Circuit II	**280-673/281-411**	100

Certification organizations can be found in the overview on pages 622 and 623.

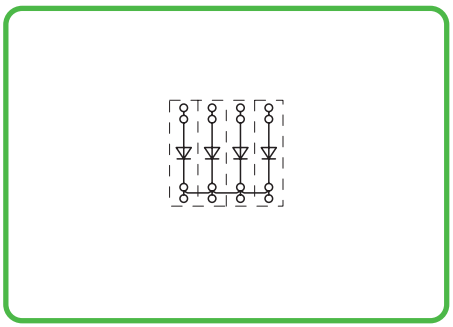
Circuit Configuration Examples
Diode Terminal Blocks and LED Terminal Blocks



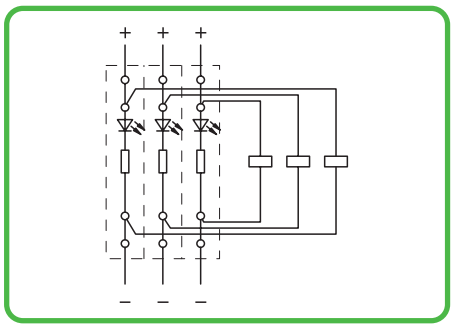
Open diode gates can be created using the following terminal blocks:
280-915/281-410 or
280-915/281-411



Polarized diode gates with common cathode can be created using the following terminal blocks:
280-673/281-410 or
280-673/281-411



Polarized diode gates with common cathode can be created using the following terminal blocks:
280-815/281-410 or
280-815/281-411



Circuit-related voltage indications can be created using the following terminal blocks:
280-809/281-434 or
280-809/281-413

❶ Strip length, see packaging or instructions.

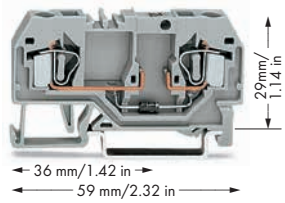
280 Series Accessories

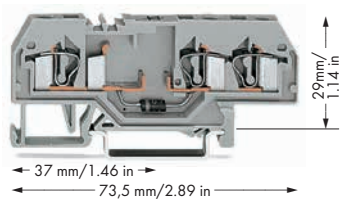
Appropriate marking system:
WMB (see Section 13)

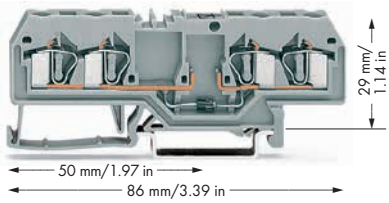
Insulation stop,			
	5 pcs/strip,		
	0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop,			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop,			
	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)
Comb-style jumper bar, insulated,			
	I_N = I_N terminal block		
	2-way	**280-482**	200 (8x25)
	3-way	**280-483**	200 (8x25)
Comb-style jumper bar, insulated,			
	I_N = I_N terminal block		
	10-way	**280-490**	50 (2x25)
Alternate comb-style jumper bar,			
	insulated,		
	I_N = I_N terminal block		
	2-way	**280-492**	200 (8x25)
Operating tool, of insulating material			
	2-way	**280-432**	1
	3-way	**280-433**	1
Operating tool, of insulating material			
	10-way	**280-440**	1
Wire commoning chain, 50 connections,			
	insulated, I_N 8 A		
	black	**210-103**	1
Wire commoning chain, 50 connections,			
	insulated, I_N 8 A		
	blue	**210-123**	1

Diode Terminal Blocks 4 mm²
281 Series

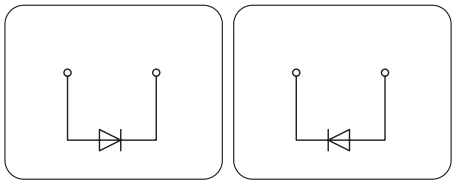
0.08 - 4 mm² | AWG 28 - 12 U_N 250 V, U_{RM} 1000 V Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in ❶	0.08 - 4 mm² | AWG 28 - 12 U_N 250 V, U_{RM} 1000 V Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in ❶	0.08 - 4 mm² | AWG 28 - 12 U_N 250 V, U_{RM} 1000 V Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in ❶



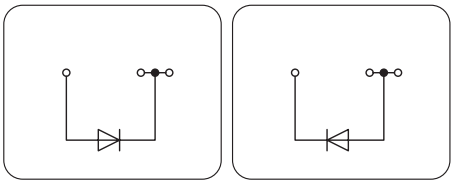




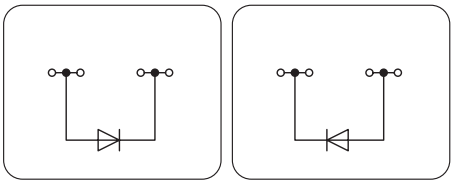
Circuit I Circuit II



Circuit I Circuit II



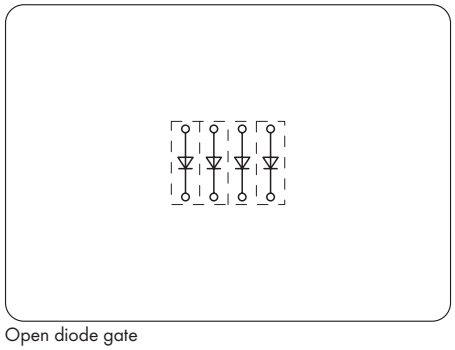
Circuit I Circuit II



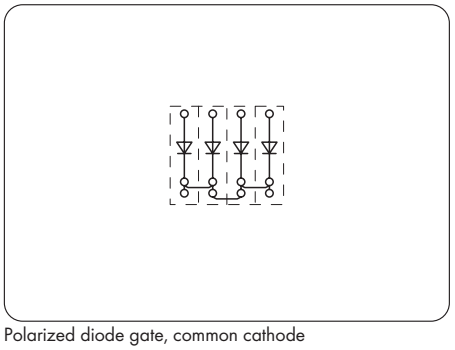
	Item No.	Pack. Unit
2-conductor diode terminal block with 1N4007		
diode, 0.5 A continuous current, gray		
Circuit I	**281-915/281-410**	50
Circuit II	**281-915/281-411**	50
2-conductor diode terminal block with 1N5408		
diode, 1.5 A continuous current, gray		
Circuit I	**281-915/281-400**	50
Circuit II	**281-915/281-401**	50
Other terminal blocks with the same profile:		
Through	**281-901**	Page 188

	Item No.	Pack. Unit
3-conductor diode terminal block with 1N4007		
diode, 0.5 A continuous current, gray		
Circuit I	**281-673/281-410**	50
Circuit II	**281-673/281-411**	50
3-conductor diode terminal block with 1N5408		
diode, 1.5 A continuous current, gray		
Circuit I	**281-673/281-400**	50
Circuit II	**281-673/281-401**	50
Other terminal blocks with the same profile:		
Through	**281-681**	Page 188

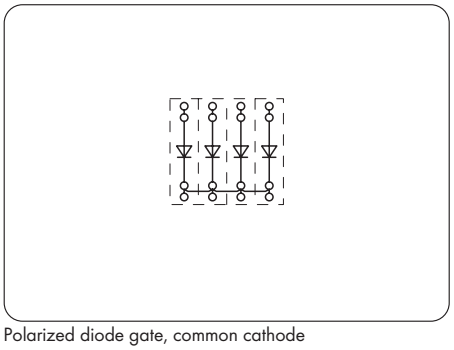
	Item No.	Pack. Unit
4-conductor diode terminal block with 1N4007		
diode, 0.5 A continuous current, gray		
Circuit I	**281-665/281-410**	50
Circuit II	**281-665/281-411**	50
4-conductor diode terminal block with 1N5408		
diode, 1.5 A continuous current, gray		
Circuit I	**281-665/281-400**	50
Circuit II	**281-665/281-401**	50
Other terminal blocks with the same profile:		
Through	**281-652**	Page 188



Open diode gate

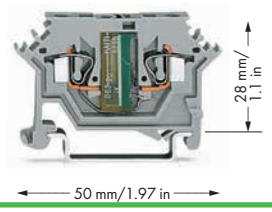


Polarized diode gate, common cathode



Polarized diode gate, common cathode

Certification organizations can be found in the overview on pages 622 and 623.



Variable resistor terminal blocks, with balancing resistance
0.5 Ohm – 20 Ohm, 0.75 W
gray 280-615/281-412 ❷

0.5 Ohm – 20 Ohm, 0.75 W
blue 280-645/281-412 ❷❸

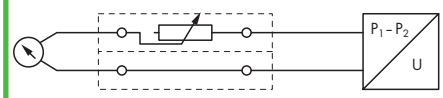
20 Ohm – 1 kOhm, 0.75 W
gray 280-615/281-428 ❷



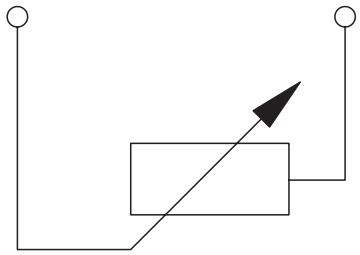
End plates for variable resistor terminal blocks

orange	280-331	100 (4x25)
gray	280-330	100 (4x25)

For terminal blocks with side marking (e.g., 280-601), see www.wagocatalog.com



Variable resistor terminal blocks
Trimming circuit for differential pressure



Circuit diagram
Variable resistor terminal block with balancing resistance

❷ Other resistors on request

❸ Suitable for Ex i applications in connection with the 280-331 intermediate plate

❶ Strip length, see packaging or instructions.

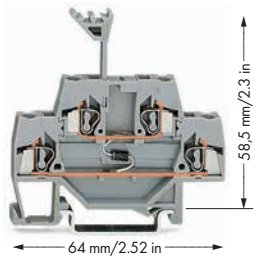
281 Series Accessories

Appropriate marking system:
WMB (see Section 13)

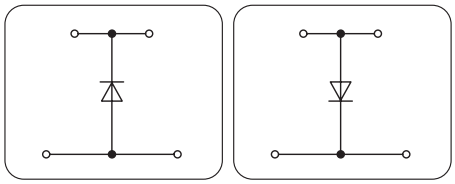
Insulation stop,			
	5 pcs/strip,		
	0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**281-470**	200 (8x25)
Insulation stop,			
	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**281-471**	200 (8x25)
Insulation stop,			
	5 pcs/strip,		
	0.25 - 1.5 mm²		
	dark gray	**281-472**	200 (8x25)
Comb-style jumper bar, insulated,			
	I_N = I_N terminal block		
	2-way	**281-482**	100 (4x25)
	3-way	**281-483**	100 (4x25)
	5-way	**281-485**	100 (4x25)
	10-way	**281-490**	50 (2x25)
Alternate comb-style jumper bar,			
	insulated,		
	I_N = I_N terminal block		
	2-way	**281-492**	100 (4x25)
Operating tool, of insulating material			
	2-way	**280-432**	1
	3-way	**280-433**	1
	5-way	**281-440**	1
Wire commoning chain, 50 connections,			
	insulated, I_N 8 A		
	black	**210-103**	1
Wire commoning chain, 50 connections,			
	insulated, I_N 8 A		
	blue	**210-123**	1

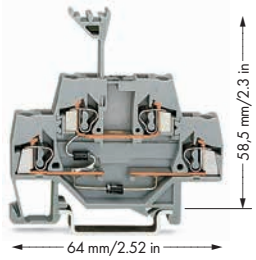
Double-Deck Diode Terminal Blocks and LED Terminal Blocks 2.5 mm²
280 Series

0.08 - 2.5 mm² | AWG 28 - 14 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❶	0.08 - 2.5 mm² | AWG 28 - 14 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❶	0.08 - 2.5 mm² | AWG 28 - 14 24 VDC I_F 0.025 A max. Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❶

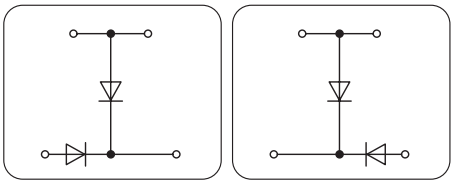


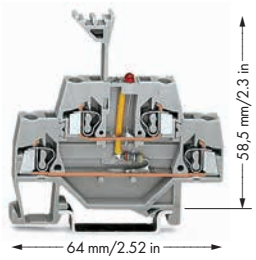
Circuit I Circuit II



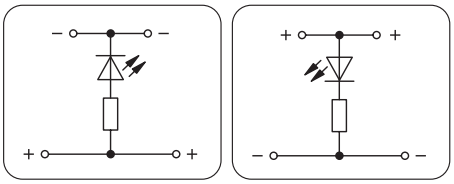


Circuit I Circuit II





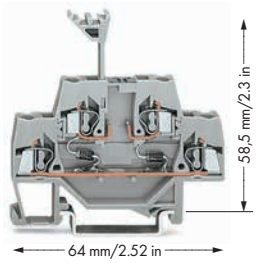
Circuit I Circuit II



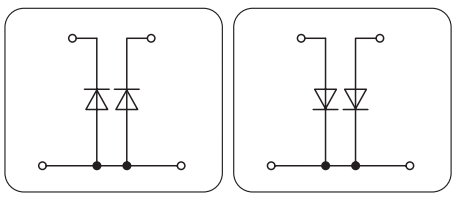
Item No.		Pack. Unit
Double-deck diode terminal block with 1N4007 diode, gray		
Circuit I	**280-940/281-410**	50
Circuit II	**280-940/281-411**	50

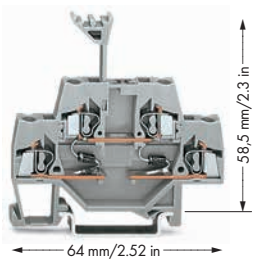
Item No.		Pack. Unit
Double-deck diode terminal block with 2 diodes 1N4007, gray		
Circuit I	**280-941/281-492**	50
Circuit II	**280-941/281-491**	50

Item No.		Pack. Unit
Double-deck LED terminal block with red LED, 24 VDC, gray		
Circuit I	**280-943/281-434**	50
Circuit II	**280-943/281-413**	50

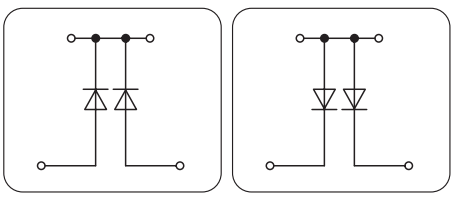


Circuit I Circuit II





Circuit I Circuit II



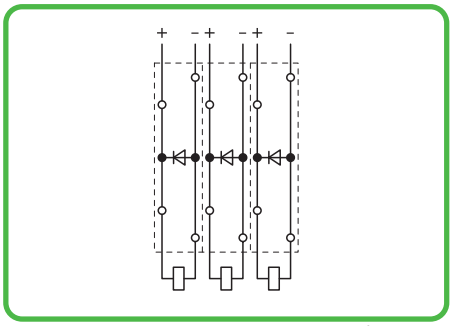
Item No.		Pack. Unit
Double-deck diode terminal block with 2 diodes 1N4007, gray		
Circuit I	**280-942/281-487**	50
Circuit II	**280-942/281-488**	50

Item No.		Pack. Unit
Double-deck diode terminal block with 2 diodes 1N4007, gray		
Circuit I	**280-941/281-489**	50
Circuit II	**280-941/281-490**	50

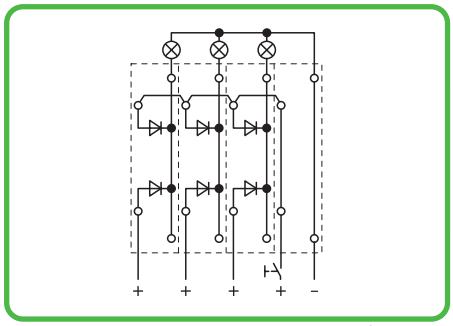
Through terminal blocks with same profile,
see page 202

Certification organizations can be found in the overview on pages 622 and 623.

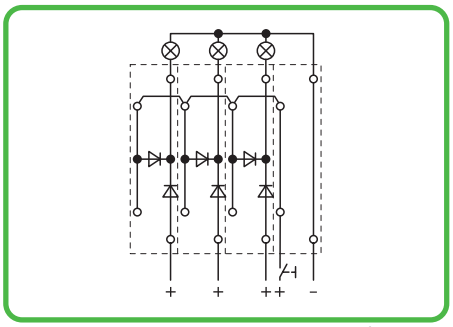
Circuit Configuration Examples
Double-Deck Diode and LED Terminal Blocks



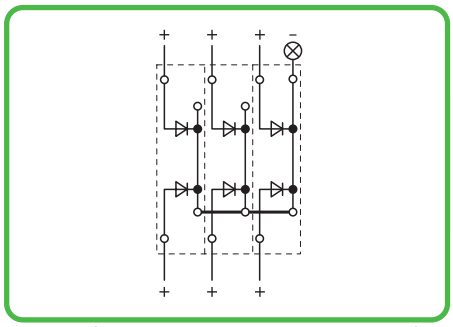
Recovery diodes can be created using the following terminal blocks:
280-940/281-410 or
280-940/281-411



Lamp test circuits can be created using the following terminal blocks:
280-942/281-487 or
280-942/281-488

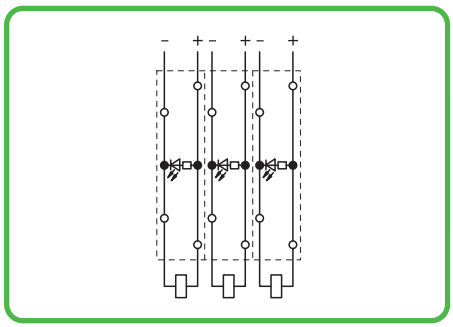


Lamp test circuits can be created using the following terminal blocks:
280-941/281-492 or
280-941/281-491



Collective fault signals can be created using the following terminal blocks:
280-941/281-489 or
280-941/281-490

Double-deck diode terminal blocks
have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits. Using LED terminal blocks, monitoring units can be designed, e.g., for control and operating circuits. The terminal blocks provide high-density wiring, while maintaining a width of only 5 mm.



Circuit-related voltage indications can be created using the following terminal blocks:
280-943/281-434 or
280-943/281-413

❶ Strip length, see packaging or instructions.

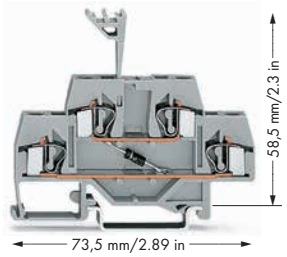
280 Series Accessories

Appropriate marking systems (see Section 13)

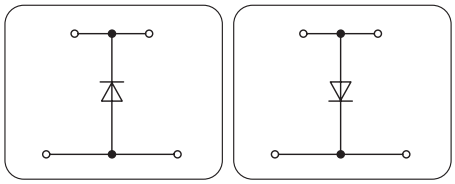
End and intermediate plate, 2.5 mm thick			
	orange	**280-341**	100 (4x25)
	gray	**280-340**	100 (4x25)
Insulation stop,			
	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop,			
	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop,			
	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)
Comb-style jumper bar, insulated,			
	I_N = I_N terminal block		
	2-way	**280-482**	200 (8x25)
	3-way	**280-483**	200 (8x25)
Comb-style jumper bar, insulated,			
	I_N = I_N terminal block		
	10-way	**280-490**	50 (2x25)
Alternate comb-style jumper bar,			
	insulated, I_N = I_N terminal block		
	2-way	**280-492**	200 (8x25)
Operating tool, of insulating material			
	2-way	**280-432**	1
	3-way	**280-433**	1
Operating tool, of insulating material			
	10-way	**280-440**	1
Wire commoning chain, 50 connections,			
	insulated, I_N 8 A		
	black	**210-103**	1
Wire commoning chain, 50 connections,			
	insulated, I_N 8 A		
	blue	**210-123**	1

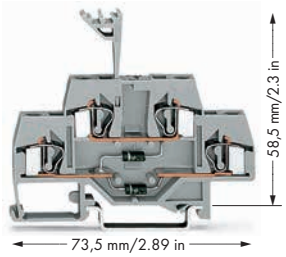
Double-Deck Diode Terminal Blocks and LED Terminal Blocks 4 mm²
281 Series

0.08 - 4 mm² | AWG 28 - 12 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in ❶	0.08 - 4 mm² | AWG 28 - 12 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in ❶	0.08 - 4 mm² | AWG 28 - 12 24 VDC I_F 0.025 A max. Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in ❶

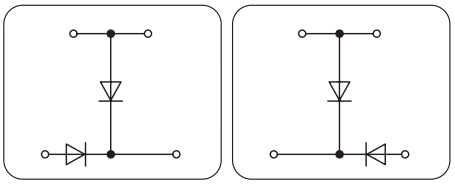


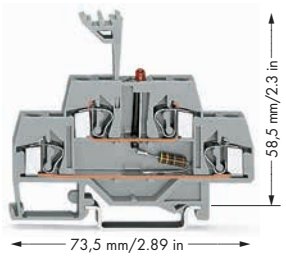
Circuit I Circuit II



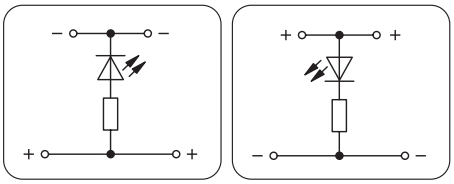


Circuit I Circuit II





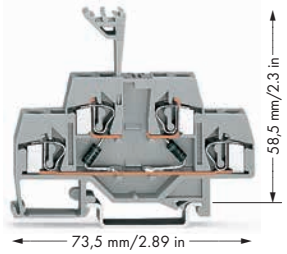
Circuit I Circuit II



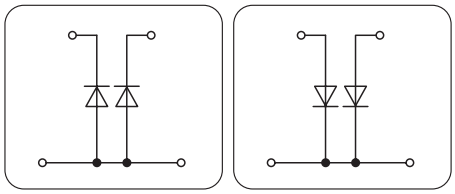
Item No.		Pack. Unit
Double-deck diode terminal block with 1N4007 diode, gray		
Circuit I	**281-633/281-410**	50
Circuit II	**281-633/281-411**	50

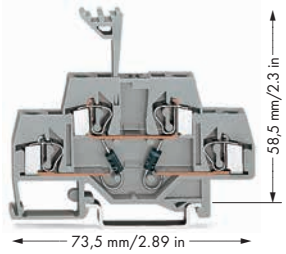
Item No.		Pack. Unit
Double-deck diode terminal block with 2 diodes 1N4007, gray		
Circuit I	**281-635/281-492**	50
Circuit II	**281-635/281-491**	50

Item No.		Pack. Unit
Double-deck LED terminal block with red LED, 24 VDC, gray		
Circuit I	**281-634/281-434**	50
Circuit II	**281-634/281-413**	50

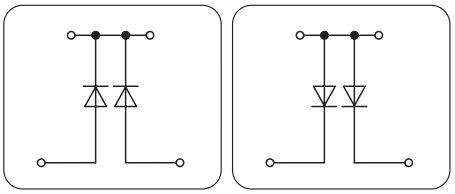


Circuit I Circuit II





Circuit I Circuit II



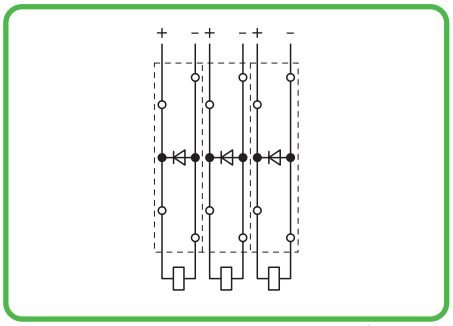
Item No.		Pack. Unit
Double-deck diode terminal block with 2 diodes 1N4007, gray		
Circuit I	**281-636/281-487**	50
Circuit II	**281-636/281-488**	50

Item No.		Pack. Unit
Double-deck diode terminal block with 2 diodes 1N4007, gray		
Circuit I	**281-635/281-489**	50
Circuit II	**281-635/281-490**	50

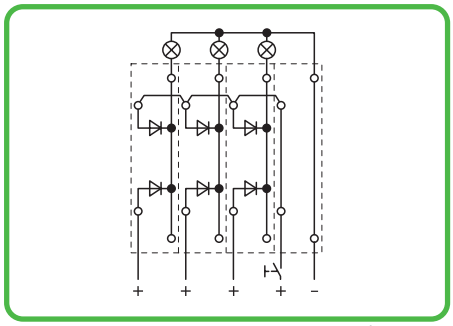
Through terminal blocks with same profile,
see page 206

Certification organizations can be found in the overview on pages 622 and 623.

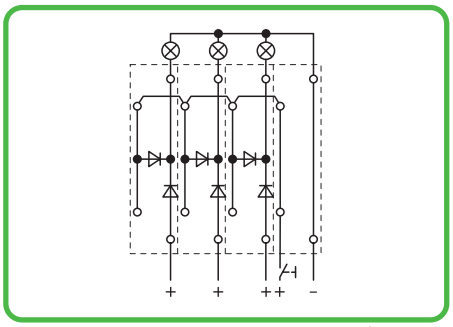
Circuit Configuration Examples
Double-Deck Diode and LED Terminal Blocks



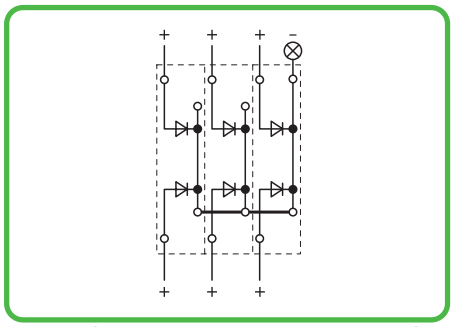
Recovery diodes can be created using the following terminal blocks:
281-633/281-410 or
281-633/281-411



Lamp test circuits can be created using the following terminal blocks:
281-636/281-487 or
281-636/281-488

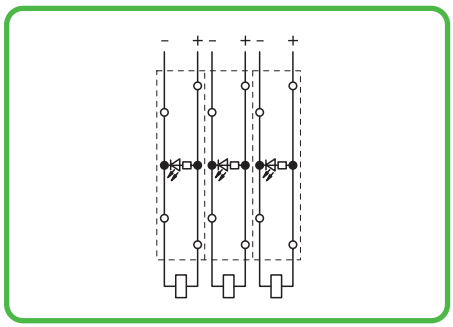


Lamp test circuits can be created using the following terminal blocks:
281-635/281-492 or
281-635/281-491



Collective fault signals can be created using the following terminal blocks:
281-635/281-489 or
281-635/281-490

Double-deck diode terminal blocks
have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits. Using LED terminal blocks, monitoring units can be designed, e.g., for control and operating circuits. The terminal blocks provide high-density wiring, while maintaining a width of only 6 mm.



Circuit-related voltage indications can be created using the following terminal blocks:
281-634/281-434 or
281-634/281-413

❶ Strip length, see packaging or instructions.

281 Series Accessories

Appropriate marking system:
WMB (see Section 13)

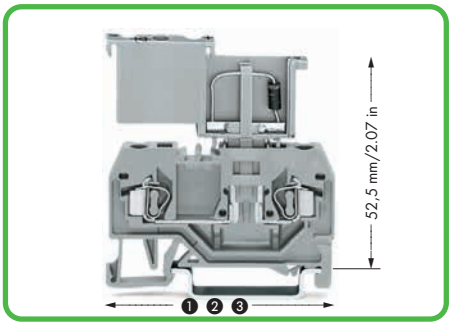
End and intermediate plate, 2.5 mm thick			
	orange	**281-341**	100 (4x25)
	gray	**281-340**	100 (4x25)
Insulation stop,			
	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**281-470**	200 (8x25)
Insulation stop,			
	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**281-471**	200 (8x25)
Insulation stop,			
	5 pcs/strip, 0.25 - 1.5 mm²		
	dark gray	**281-472**	200 (8x25)
Comb-style jumper bar, insulated,			
	$I_N = I_N$ terminal block		
	2-way	**281-482**	100 (4x25)
	3-way	**281-483**	100 (4x25)
	5-way	**281-485**	100 (4x25)
	10-way	**281-490**	50 (2x25)
Alternate comb-style jumper bar,			
	insulated, $I_N = I_N$ terminal block		
	2-way	**281-492**	100 (4x25)
Operating tool, of insulating material			
	2-way	**280-432**	1
	3-way	**280-433**	1
	5-way	**281-440**	1
Wire commoning chain, 50 connections,			
	insulated, I_N 8 A		
	black	**210-103**	1
Wire commoning chain, 50 connections,			
	insulated, I_N 8 A		
	blue	**210-123**	1

Pluggable Diode Modules on Carrier Terminal Blocks 2.5 mm²
280 Series

CAGE CLAMP®

Diode module
with 1N4007 diode
U_N 250 V, U_{RM} 1000 V
I_N 1 A
Plug width 5 mm / 0.197 in

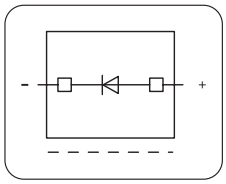




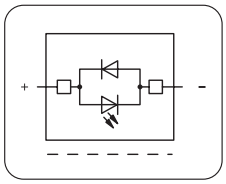
These diode have been designed for use in lamp test circuits or collective fault indicating systems, and offer the following advantages:
- Separation into functional and wiring level
- Polarized direction of switching
- Quick and easy exchange of modules
- High density with only 5 mm width of terminal block and module.

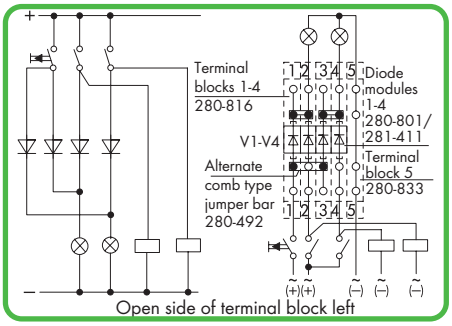
1. Length of 280-916: 53 mm / 2.09 in
2-conductor carrier terminal block, front-entry
2. Length of 280-610: 64 mm / 2.52 in
3-conductor carrier terminal block, front-entry
3. Length of 280-816: 75 mm / 2.95 in
4-conductor carrier terminal block, front-entry
4. See application notes for:
Insulation stop, page 293
Comb-style jumper bar, page 294
Operating tool, page 294

Circuit I



Circuit II

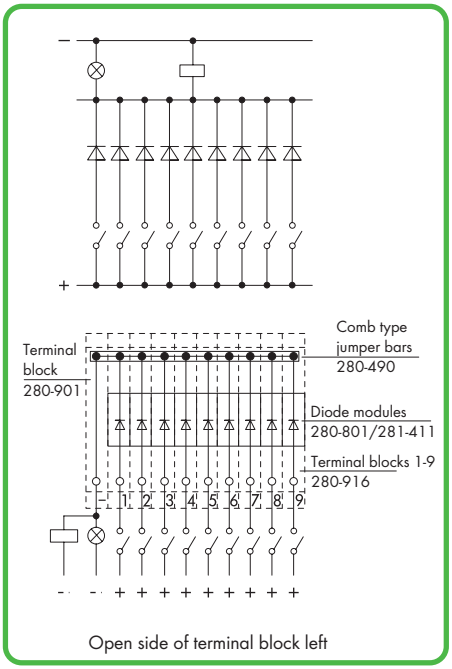




Open side of terminal block left

Lamp test circuit with blocking diodes

For terminal blocks with side marking, see www.wagocatalog.com



Open side of terminal block left

Diode gate for collective fault indication

	Item No.	Pack. Unit
Diode module,		
with 1N4007 diode,		
5 mm wide		
○	**280-801/281-411**	100
Diode module,		
with recovery diode 1N4007,		
red LED,		
5 mm wide		
○ 24 VDC	**280-801/281-420**	100
○ 48 VDC	**280-801/281-421**	100

Carrier Term. Blocks and Accessories

Appropriate marking system:
WMB (see Section 13)

2-conductor carrier terminal block,			
❶	0.08 - 2.5 mm² / AWG 28 - 14,		
	Terminal block width 5 mm / 0.197 in		
	gray	**280-916**	100
End and intermediate plate, 2.5 mm thick			
	orange	**280-309**	100 (4x25)
	gray	**280-308**	100 (4x25)
3-conductor carrier terminal block,			
❷	0.08 - 2.5 mm² / AWG 28 - 14,		
	Terminal block width 5 mm / 0.197 in		
	gray	**280-610**	100
End and intermediate plate, 2.5 mm thick			
	orange	**280-326**	100 (4x25)
	gray	**280-324**	100 (4x25)
4-conductor carrier terminal block,			
❸	0.08 - 2.5 mm² / AWG 28 - 14,		
	Terminal block width 5 mm / 0.197 in		
	gray	**280-816**	100
End and intermediate plate, 2.5 mm thick			
	orange	**280-315**	100 (4x25)
	gray	**280-314**	100 (4x25)

Accessories

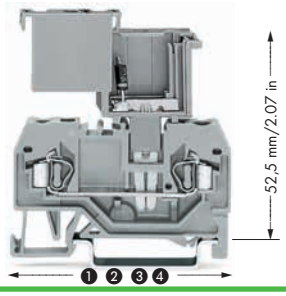
Insulation stop,			
❹	5 pcs/strip,		
	0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop,			
❹	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop,			
❹	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)
Comb-style jumper bar, insulated,			
❹	I_N = I_N terminal block		
	2-way	**280-482**	200 (8x25)
	3-way	**280-483**	200 (8x25)
Comb-style jumper bar, insulated,			
	I_N = I_N terminal block		
	10-way	**280-490**	50 (2x25)
Alternate comb-style jumper bar,			
	insulated,		
	I_N = I_N terminal block		
	2-way	**280-492**	200 (8x25)
Operating tool, of insulating material			
	2-way	**280-432**	1
	3-way	**280-433**	1
Operating tool, of insulating material			
	10-way	**280-440**	1
Wire commoning chain, 50 connections,			
	insulated, I_N 8 A		
	black	**210-103**	1
Wire commoning chain, 50 connections,			
	insulated, I_N 8 A		
	blue	**210-123**	1

Certification organizations can be found in the overview on pages 622 and 623.

Pluggable Diode Modules on Through Terminal Blocks 2.5 mm²
280 Series

Diode module
with 1N4007 diode
U_N 250 V, U_{RM} 1000 V
I_N 1 A
Plug width 10 mm / 0.394 in



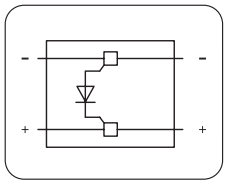


Similar to a push-in jumper, these diode modules are simply pushed into the contact slots of the current bars for two adjacent through terminal blocks.
This offers the following advantages:
- The modules are suitable for all 280 Series through terminal blocks.
- Easily retrofit terminal blocks with diode modules.

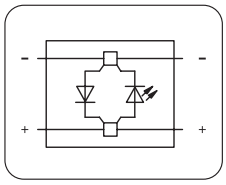
* AWG 12: THHN, THWN

1. Length of 280-901: 53 mm / 2.09 in 2-conductor through terminal block, front-entry
2. Length of 280-681: 64 mm / 2.52 in 3-conductor through terminal block, front-entry
3. Length of 280-833: 75 mm / 2.95 in 4-conductor through terminal block, front-entry
4. Length of 280-101: 42.5 mm / 1.67 in 2-conductor through terminal block, side-entry
5. See application notes for:
   Insulation stop, page 293
   Comb-style jumper bar, page 294
   Operating tool, page 294

Circuit I



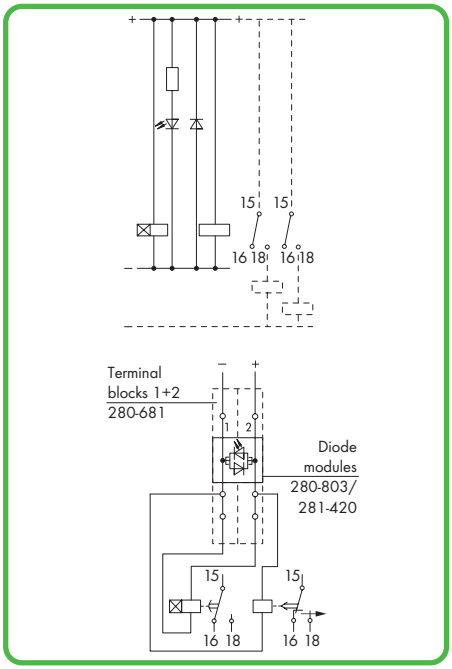
Circuit II





Further advantages:
- Separation into functional and wiring level
- Modules can be replaced quickly by other types of modules

For terminal blocks with side marking, see www.wagocatalog.com



Free-wheeling diode and voltage check

	Item No.	Pack. Unit
Diode module, with 1N4007 diode, 10 mm wide		
	280-803/281-411	50
Diode module, with recovery diode 1N4007, additional LED, 10 mm wide		
24 VDC	**280-803/281-420**	50
48 VDC	**280-803/281-421**	50

Through Term. Blocks and Accessories

Appropriate marking system:
WMB (see Section 13)

2-conductor through terminal block,			
1	0.08 - 2.5 mm² / AWG 28 - 12 *, Terminal block width 5 mm / 0.197 in		
	gray	**280-901**	100
End and intermediate plate, 2.5 mm thick			
	orange	**280-309**	100 (4x25)
	gray	**280-308**	100 (4x25)
3-conductor through terminal block,			
2	0.08 - 2.5 mm² / AWG 28 - 12 *, Terminal block width 5 mm / 0.197 in		
	gray	**280-681**	100
End and intermediate plate, 2.5 mm thick			
	orange	**280-326**	100 (4x25)
	gray	**280-324**	100 (4x25)
4-conductor through terminal block,			
3	0.08 - 2.5 mm² / AWG 28 - 12 *, Terminal block width 5 mm / 0.197 in		
	gray	**280-833**	100
End and intermediate plate, 2.5 mm thick			
	orange	**280-315**	100 (4x25)
	gray	**280-314**	100 (4x25)

Accessories

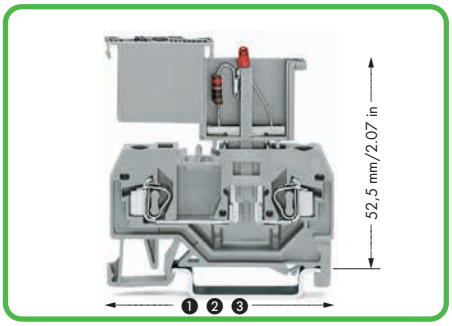
2-conductor through terminal block,			
4	0.08 - 2.5 mm² / AWG 28 - 12 *, Terminal block width 5 mm / 0.197 in		
	gray	**280-101**	100
End and intermediate plate, 2.5 mm thick			
	orange	**280-302**	100 (4x25)
	gray	**280-301**	100 (4x25)
Insulation stop,			
5	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop,			
5	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop,			
5	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)
Adjacent jumper, insulated,			
	I_N = I_N terminal block		
	gray	**280-402**	200 (8x25)
Wire commoning chain, 50 connections,			
	insulated, I_N 8 A		
	black	**210-103**	1
Wire commoning chain, 50 connections,			
	insulated, I_N 8 A		
	blue	**210-123**	1

Pluggable LED and Neon Indicator Modules on Carrier Terminal Blocks 2.5 mm²
280 Series

CAGE CLAMP®

LED module
I_N 5.6 mA; I_F 25 mA
Neon indicator module
I_N 0.5 mA
Plug width 5 mm / 0.197 in





The monitoring of control and operating current circuits with LED and neon indicator modules on rail-mounted terminal blocks offers various advantages to the user:
- No additional cost for assembly and wiring
- Separation into functional and wiring level
- Modules can be replaced quickly and easily by other types of modules

❶ Length of 280-916: 53 mm / 2.09 in
2-conductor carrier terminal block, front-entry

❷ Length of 280-610: 64 mm / 2.52 in
3-conductor carrier terminal block, front-entry

❸ Length of 280-816: 75 mm / 2.95 in
4-conductor carrier terminal block, front-entry

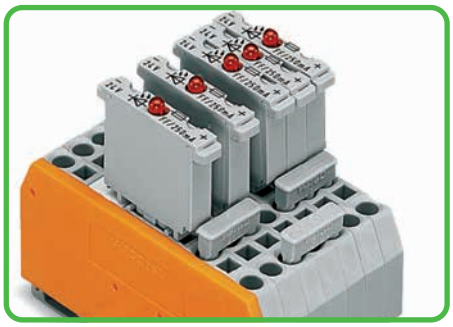
	Item No.	Pack. Unit
LED module,		
with red LED,		
5 mm wide		
◯ 24 VDC	**280-801/281-413**	100
◯ 48 VDC	**280-801/281-414**	100
LED module,		
with red LED,		
5 mm wide		
◯ 24 V AC/DC	**280-801/281-415**	100
◯ 48 V AC/DC	**280-801/281-416**	100
Neon indicator module,		
5 mm wide		
◯ 120 V AC/DC	**280-801/281-418**	100
◯ 230 V AC/DC	**280-801/281-417**	100

Carrier terminal blocks, see page 284



Futher advantages:
- Polarized direction of switching
- High density with only 5 mm width of terminal block and module

For terminal blocks with side marking, see www.wagocatalog.com



Carrier terminal blocks with component plugs
Alternate comb-style jumper bars
3-way, comb-style jumper bar

Circuit Diagrams

LED module



24 VDC **280-801/281-413**
48 VDC **280-801/281-414**

LED module

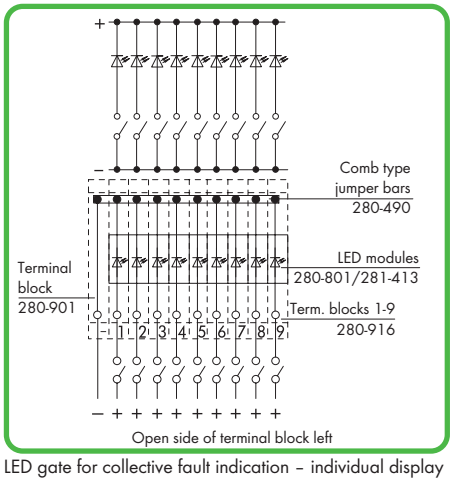


24 V AC/DC **280-801/281-415**
48 V AC/DC **280-801/281-416**

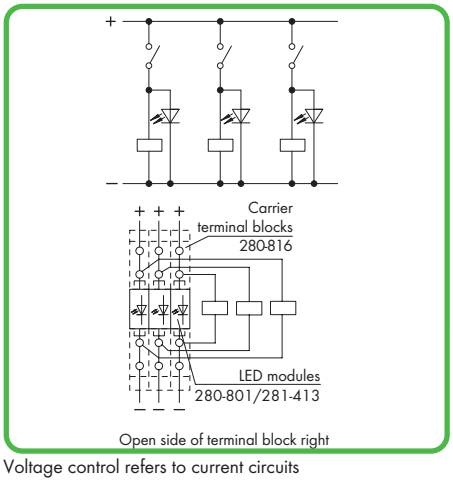
Neon indicator module



120 V AC/DC **280-801/281-418**
230 V AC/DC **280-801/281-417**



LED gate for collective fault indication – individual display

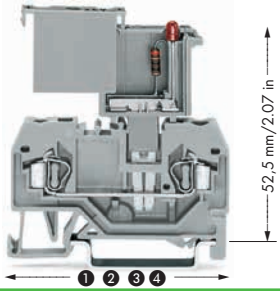


Voltage control refers to current circuits

Pluggable LED and Neon Indicator Modules on Through Terminal Blocks 2.5 mm²
280 Series

LED module
I_N 5.6 mA; I_F 25 mA
Neon indicator module
I_N 0.5 mA
Plug width 10 mm / 0.394 in





Similar to a push-in jumper, these LED and neon indicator modules are simply pushed into the current bar contact slots of two adjacent through terminal blocks.
This offers the following advantages:
- The modules are suitable for all 280 Series through terminal blocks
- Easily retrofit terminal blocks with diode modules

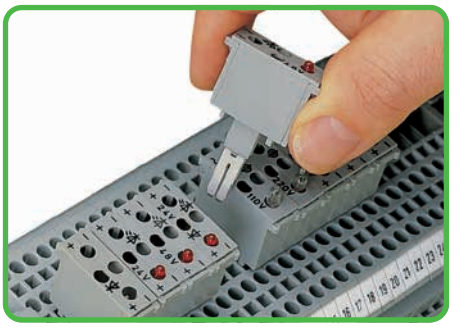
1. Length of 280-901: 53 mm / 2.09 in 2-conductor through terminal block, front-entry
2. Length of 280-681: 64 mm / 2.52 in 3-conductor through terminal block, front-entry
3. Length of 280-833: 75 mm / 2.95 in 4-conductor through terminal block, front-entry
4. Length of 280-101: 42.5 mm / 1.67 in 2-conductor through terminal block, side-entry

	Item No.	Pack. Unit
LED module,		
with red LED,		
10 mm wide		
24 VDC	**280-803/281-413**	50
48 VDC	**280-803/281-414**	50
LED module,		
with red LED,		
10 mm wide		
24 V AC/DC	**280-803/281-415**	50
48 V AC/DC	**280-803/281-416**	50
Neon indicator module,		
10 mm wide		
120 V AC/DC	**280-803/281-418**	50
230 V AC/DC	**280-803/281-417**	50

Through terminal blocks, see page 285

Further advantages:
- Separation into functional and wiring level
- Modules can be replaced quickly by other types of modules

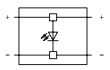
For terminal blocks with side marking, see www.wagocatalog.com



Diode and LED modules on through terminal blocks with side marking

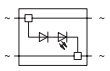
Circuit Diagrams

LED module



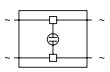
24 VDC	**280-803/281-413**
48 VDC	**280-803/281-414**

LED module

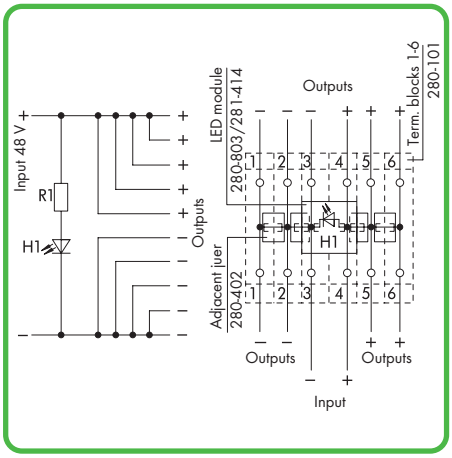


24 V AC/DC	**280-803/281-415**
48 V AC/DC	**280-803/281-416**

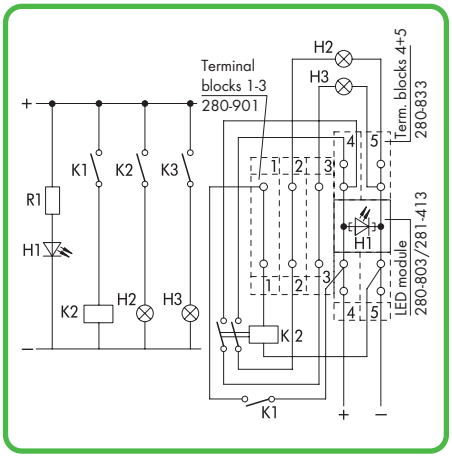
Neon indicator module



120 V AC/DC	**280-803/281-418**
230 V AC/DC	**280-803/281-417**



Multiple outputs with indicator lamp

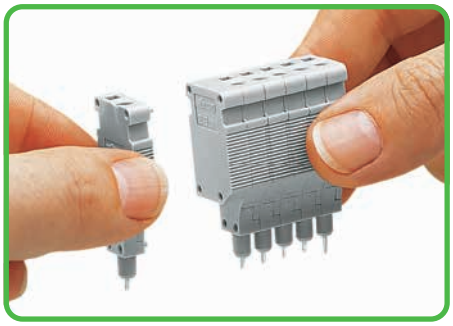


Control unit

L-Type Test Plug Modules for Testing Rail-Mounted Terminal Blocks, Terminal Block Width 5 mm or 6 mm, via Conductor Wire Opening

CAGE CLAMP®

Test plug module for rail-mounted terminal blocks		Test plug module for rail-mounted terminal blocks	
0.08 - 1.5 mm²	AWG 28 - 16	0.08 - 2.5 mm²	AWG 28 - 14
Test voltage 630 V	Test current 6 A	Test voltage 630 V	Test current 6 A
Module width 5 mm / 0.197 in These test plugs are not suitable for Ex e applications.		Module width 6 mm / 0.236 in These test plugs are not suitable for Ex e applications.	



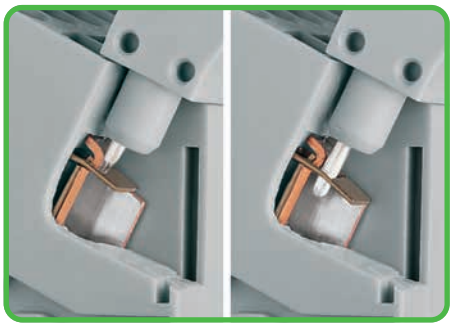
Snapping test plug and spacer modules together to assemble a multipole test plug module (max. 10 poles).





	Item No.	Pack. Unit
L-type test plug module with spring-loaded contact pin and CAGE CLAMP®, center module, can be snapped together, module width 5 mm		
gray	**249-141**	100 (4x25)
End module with rigid contact pin and CAGE CLAMP®, end module, can be snapped together, module width 5 mm		
gray	**249-142**	100 (4x25)
Spacer module, e.g., for bridging commoned terminal blocks, can be snapped together, module width 5 mm		
gray	**249-143**	100 (4x25)

	Item No.	Pack. Unit
L-type test plug module with spring-loaded contact pin and CAGE CLAMP®, center module, can be snapped together, module width 6 mm		
gray	**249-144**	100 (4x25)
End module with rigid contact pin and CAGE CLAMP®, end module, can be snapped together, module width 6 mm		
gray	**249-145**	100 (4x25)
Spacer module, e.g., for bridging commoned terminal blocks, can be snapped together, module width 6 mm		
gray	**249-146**	100 (4x25)

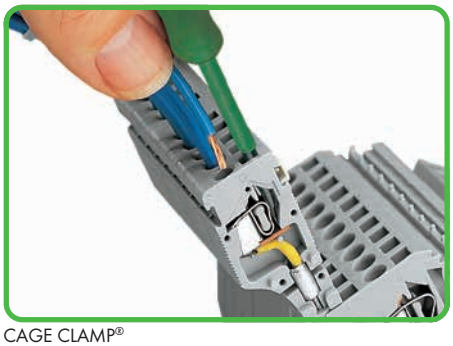


A = Center module spring-loaded contact pin
B = End module with rigid contact pin

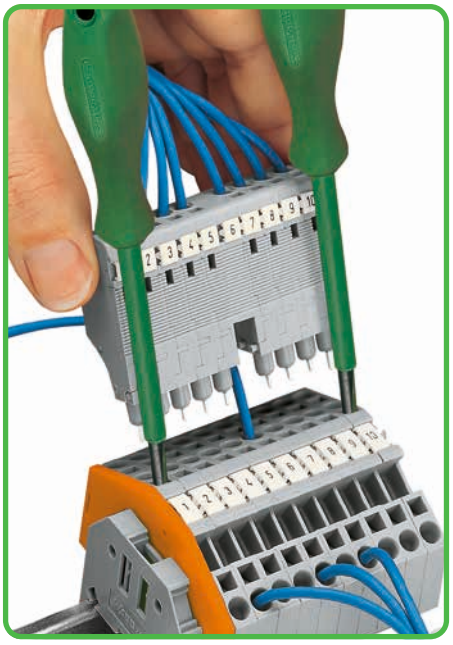
Accessories for L-Type Test Plug Modules

Appropriate marking systems: WMB/Miniature WSB/ Miniature WSB Inline (see Section 13)

WMB Multi marking system, 10 strips with 10 markers per card, stretchable 5 - 5.2 mm			
plain	**793-5501**	5	
Miniature WSB Quick marking system, 10 strips with 10 markers per card, 5 mm wide markers			
plain	**248-501**	5	



CAGE CLAMP®
0.08 mm² – 1.5 mm²/AWG 28 – 16;
module width 5 mm
0.08 mm² – 2.5 mm²/AWG 28 – 14;
module width 6 mm



For easily testing terminal block assemblies, these test plug modules with CAGE CLAMP® (version using the conductor wire opening) may be used on unwired terminal blocks. For testing, the module is assembled with spring-loaded pins in the center positions and rigid pin modules at the ends. The terminal blocks corresponding to the end position modules are opened using operating tools (as shown), these rigid pins are then held in place by the CAGE CLAMP®.

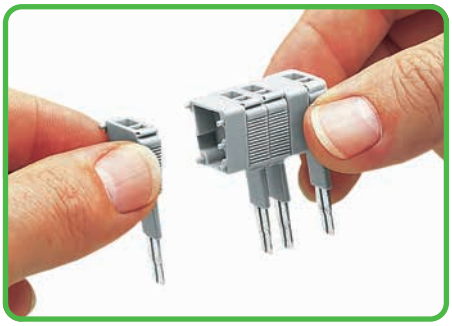
The intermediate pins are spring-loaded and make contact with the current bars, for test currents up to 6A.

Clamping units needing to remain wired may be skipped over by assembling a spacer in the test plug module.

Notice:
Mating direction must be observed (see picture).

B-Type Test Plug Modules for Testing Rail-Mounted Terminal Blocks, Terminal Block Width 5 mm or 6 mm, via Jumper Contact Slot in Current Bar

Test plug module for rail-mounted terminal blocks		Test plug module for rail-mounted terminal blocks	
0.08 - 1.5 mm²	AWG 28 - 16	0.08 - 2.5 mm²	AWG 28 - 14
Test voltage 630 V	Test current 10 A	Test voltage 630 V	Test current 10 A
Module width 5 mm / 0.197 in These test plugs are not suitable for Ex e applications.		Module width 6 mm / 0.236 in These test plugs are not suitable for Ex e applications.	



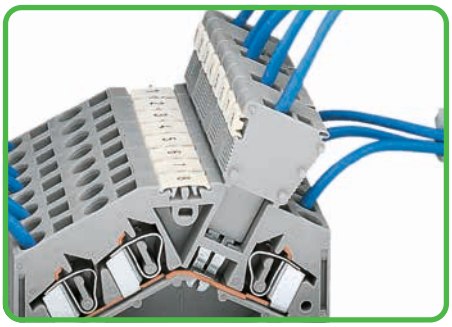
Snapping test plug and spacer modules together to assemble a multipole test plug module (max. 10 poles).





	Item No.	Pack. Unit
B-type test plug module with CAGE CLAMP®, can be snapped together, module width 5 mm		
gray	**249-106**	100 (4x25)
B-type spacer module, e.g., for bridging commoned terminal blocks, can be snapped together, module width 5 mm		
gray	**249-107**	100 (4x25)

	Item No.	Pack. Unit
B-type test plug module with CAGE CLAMP®, can be snapped together, module width 6 mm		
gray	**249-147**	100 (4x25)
B-type spacer module, e.g., for bridging commoned terminal blocks, can be snapped together, module width 6 mm		
gray	**249-148**	100 (4x25)

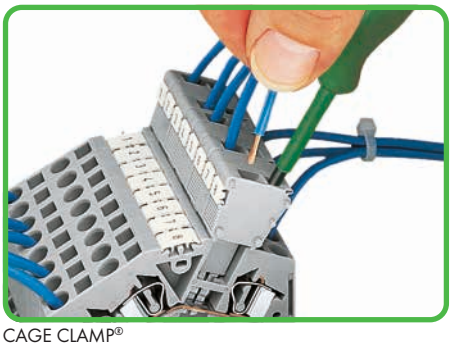


B-type test plugs are directly inserted into the jumper contact slots of the current bar.

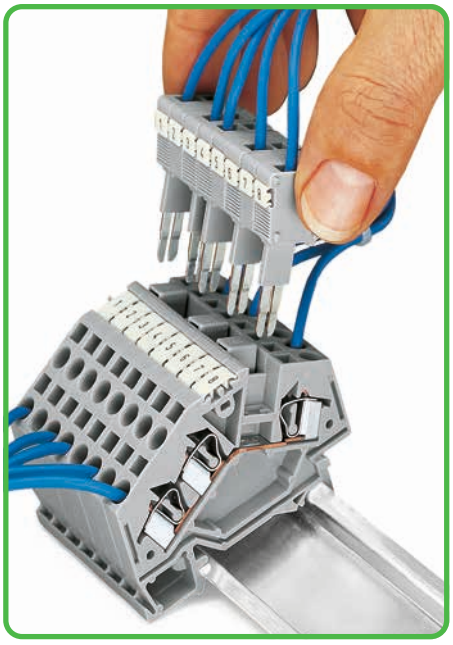
Accessories for B-Type Test Plug Modules

Appropriate marking systems: WMB/Miniature WSB/ Miniature WSB Inline (see Section 13)

WMB Multi marking system, 10 strips with 10 markers per card, stretchable 5 - 5.2 mm	plain	**793-5501**	5
Miniature WSB Quick marking system, 10 strips with 10 markers per card, 5 mm wide markers	plain	**248-501**	5



CAGE CLAMP®
0.08 mm² – 1.5 mm²/AWG 28 – 16; module width 5 mm
0.08 mm² – 2.5 mm²/AWG 28 – 14; module width 6 mm



For testing individual circuits, WAGO offers a single-pole test plug accessory with CAGE CLAMP® up to 2.5 mm²/ AWG 14 for direct contact with the current bar of a terminal block, or 1-pole test plug adapters for 4 mm Ø test plugs.

For serial testing on assembled terminal block assemblies, WAGO has developed special multipole (max. 10 poles) modular test plug modules. For testing completely wired terminal blocks (even when using adjacent jumpers), the test plug modules with CAGE CLAMP® (version using jumper contact position in current bar) are ideal. For this type of testing, the structure of the testing plug modules adapts directly to the terminal block assembly. The test plug modules make direct contact to the jumper contact slot of the terminal blocks to be tested.

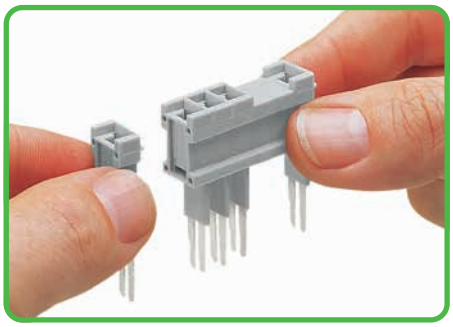
Test Plug Modules for Testing Rail-Mounted Terminal Blocks, Terminal Block Width 5 mm or 6 mm, via Jumper Contact Slot in Current Bar

Test plug module for rail-mounted terminal blocks Test voltage 400 V | Test current 6 A Module width 5 mm / 0.197 in These test plugs are not suitable for Ex e applications.	Test plug module for rail-mounted terminal blocks Test voltage 400 V | Test current 6 A Module width 6 mm / 0.236 in These test plugs are not suitable for Ex e applications.





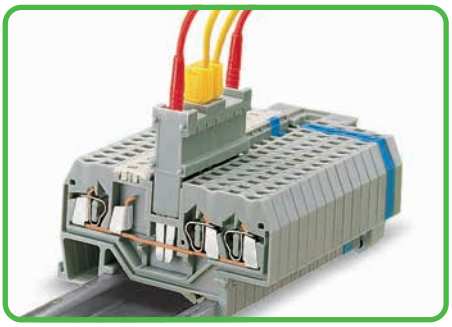
	Item No.	Pack. Unit		Item No.	Pack. Unit
Test plug module,			**Test plug module,**		
can be snapped together,			can be snapped together,		
module width 5 mm			module width 6 mm		
◯ gray	**280-418**	100 (4x25)	◯ gray	**281-418**	100 (4x25)
Spacer module, e.g., for bridging commoned terminal			**Spacer module,** e.g., for bridging commoned terminal		
blocks,			blocks,		
can be snapped together, module width 5 mm			can be snapped together, module width 6 mm		
◯ gray	**280-419**	100 (4x25)	◯ gray	**281-419**	100 (4x25)



Snapping test plug and spacer modules together to assemble a multipole test plug module.

Accessories

Test plug,			
	with 500 mm cable, 2 mm Ø		
	red	**210-136**	50
Test plug,			
	with 500 mm cable, 2.3 mm Ø		
	yellow	**210-137**	50



The test plug modules are directly inserted into the jumper contact slots of the current bar.

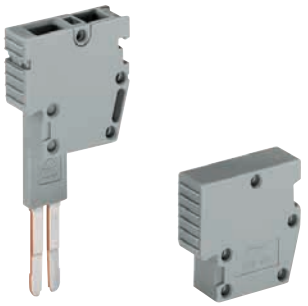
B-Type Test Plug Modules for Testing Rail-Mounted Terminal Blocks, Terminal Block Width 8 mm or 10 mm, via Jumper Contact Slot in Current Bar

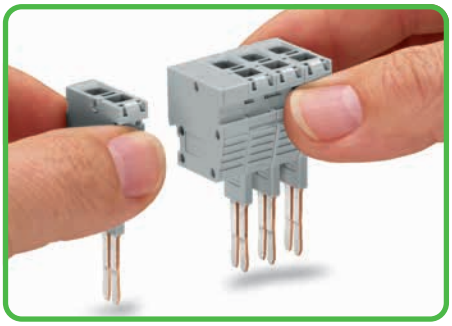
Test plug module for rail-mounted terminal blocks
0.2 - 6 mm² | **AWG 24 - 10**
Test voltage 800 V | **Test current 32 A**

Module width 8 mm / 0.315 in
These test plugs are not suitable for Ex e applications.

Spacer plate for rail-mounted terminal blocks with 10 mm/0.394 in module width

Module width 2 mm / 0.079 in
These intermediate plates are not suitable for Ex e applications.

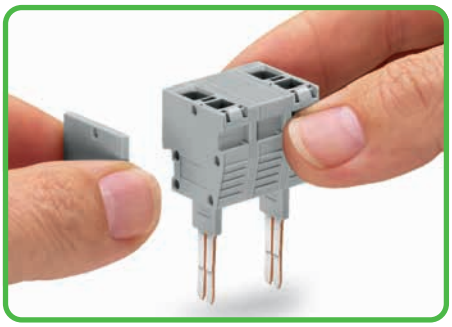




Snapping test plug and spacer modules together to assemble a multipole test plug module (max. 10 poles) for 8 mm terminal block width.

	Item No.	Pack. Unit
B-type test plug module with CAGE CLAMP®, can be snapped together, module width 8 mm		
gray	**709-310**	100 (4x25)
B-type spacer module, e.g., for bridging commoned terminal blocks, can be snapped together, module width 8 mm		
gray	**709-311**	100 (4x25)

	Item No.	Pack. Unit
B-type spacer plate, snaps on 709-310 B-type test plug modules and 709-311 B-type spacer modules, can be snapped together, module width 2 mm		
gray	**709-312**	100 (4x25)



Snapping test plug and spacer modules with spacer plate together to assemble a multipole test plug module (max. 10 poles) for 10 mm terminal block width.

Item-Specific Accessories

Strain relief plate, gray,



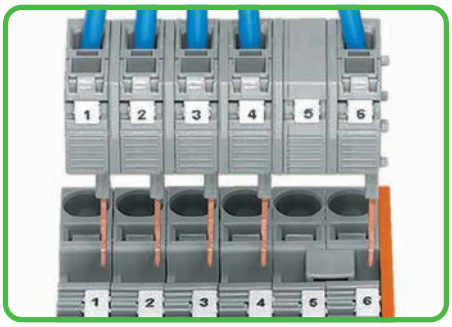
for 8 mm wide terminal blocks		
2-pole	**709-322**	100 (4x25)
4-pole	**709-324**	100 (4x25)
6-pole	**709-326**	100 (4x25)

Item-Specific Accessories

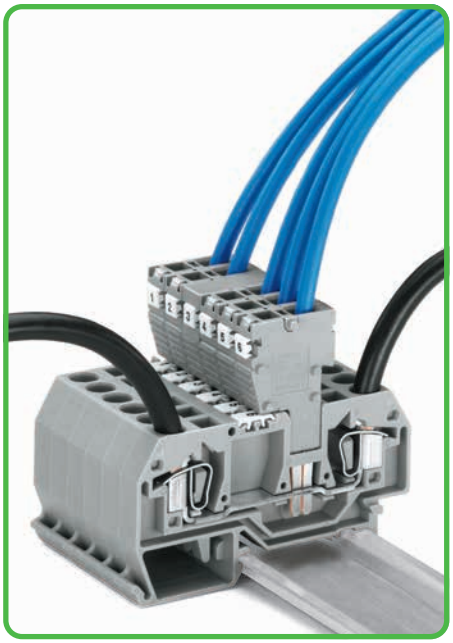
Strain relief plate, gray,



for 10 mm wide terminal blocks		
2-pole	**709-332**	100 (4x25)
4-pole	**709-334**	100 (4x25)
6-pole	**709-336**	100 (4x25)



The test plug modules are directly inserted into the jumper contact slots of the current bar (picture shows 284 Series).



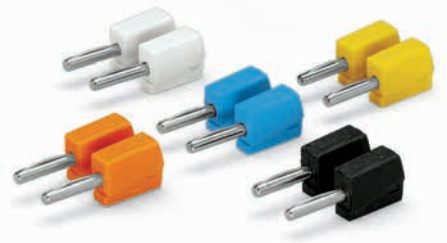
For testing individual circuits, WAGO offers a single-pole test plug accessory with CAGE CLAMP® up to 6 mm²/AWG 10 for direct contact with the current bar of a terminal block, or 1-pole test plug adapters for 4 mm Ø test plugs.

For serial testing on assembled terminal block assemblies, WAGO has developed special multipole (max. 10 poles) modular test plug modules. For testing completely wired terminal blocks (even when using adjacent jumpers), the test plug modules with CAGE CLAMP® (version using jumper contact position in current bar) are ideal. For this type of testing, the structure of the testing plug modules adapts directly to the terminal block assembly. The test plug modules make direct contact to the jumper contact slot of the terminal blocks to be tested.

Banana Plugs
(Only for Safety Extra-Low Voltage)

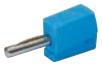
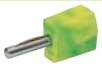
CAGE CLAMP®

0.08 - 2.5 mm² | AWG 28 - 14
42 V
I_N 20 A
for socket 4 mm Ø
9 - 11 mm / 0.39 in



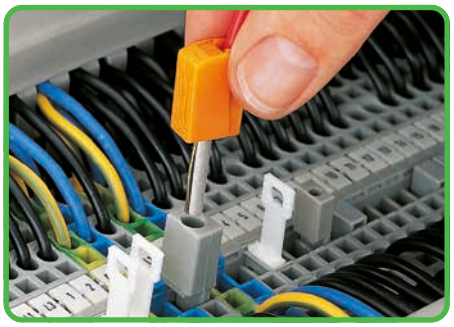
	Item No.	Pack. Unit
Banana plug,		
for socket 4 mm Ø,		
color mixed,		
10 x each - orange, white, black, blue, yellow		
	215-111	50

single plugs

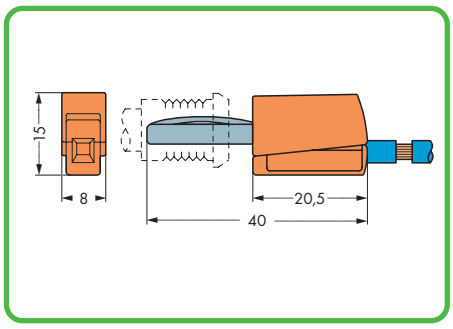
Banana plug,			
	for socket 4 mm Ø orange	**215-211**	50
Banana plug,			
	for socket 4 mm Ø red	**215-212**	50
Banana plug,			
	for socket 4 mm Ø black	**215-311**	50
Banana plug,			
	for socket 4 mm Ø green	**215-411**	50
Banana plug,			
	for socket 4 mm Ø yellow	**215-511**	50
Banana plug,			
	for socket 4 mm Ø white	**215-611**	50
Banana plug,			
	for socket 4 mm Ø blue	**215-711**	50
Banana plug,			
	for socket 4 mm Ø gray	**215-811**	50
Banana plug,			
	for socket 4 mm Ø green-yellow	**215-911**	50



Conductor termination: Press button fully and insert stripped conductor into square entry until it hits backstop and release.



Banana plug used as test plug.
Picture shows 209-170 test plug adapter.



Dimensions in mm

Conductor Insulation Stops
0.08 mm² – 1.5 mm² / AWG 28 – 16

Insulation stop suitable for all rail-mounted terminal blocks featuring: Terminal block width 4 mm / 0.157 in	Insulation stop suitable for all rail-mounted terminal blocks featuring: Terminal block width 5 mm / 0.197 in	Insulation stop suitable for all rail-mounted terminal blocks featuring: Terminal block width 6 mm / 0.236 in







Item No.	Pack. Unit
Insulation stop,	
5 pcs/strip,	
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")	
◯ white **279-470**	200 (8x25)
Insulation stop,	
5 pcs/strip,	
0.25 mm²	
● dark gray **279-471**	200 (8x25)

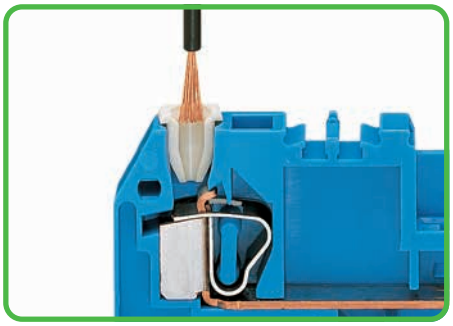
Item No.	Pack. Unit
Insulation stop,	
5 pcs/strip,	
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")	
◯ white **280-470**	200 (8x25)
Insulation stop,	
5 pcs/strip,	
0.25 - 0.5 mm²	
◯ light gray **280-471**	200 (8x25)
Insulation stop,	
5 pcs/strip,	
0.75 - 1 mm²	
● dark gray **280-472**	200 (8x25)

Item No.	Pack. Unit
Insulation stop,	
5 pcs/strip,	
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")	
◯ white **281-470**	200 (8x25)
Insulation stop,	
5 pcs/strip,	
0.25 - 0.5 mm²	
◯ light gray **281-471**	200 (8x25)
Insulation stop,	
5 pcs/strip,	
0.25 - 1.5 mm²	
● dark gray **281-472**	200 (8x25)

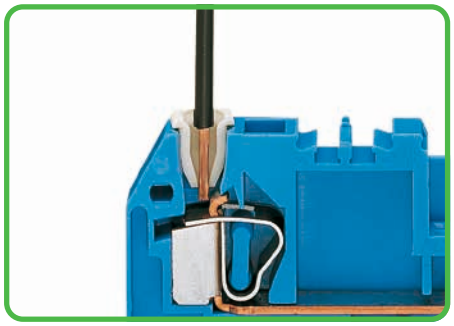
The wiring of programmable logic controllers and microprocessor-operated control circuits often relies on very small cross sections of fine-stranded conductors. These small conductors are highly flexible, and they deform when pushed against the conductor stop in terminal blocks. As a result, the conductor insulation – not the copper conductor – may be clamped, causing intermittent contact or no contact at all. Common to all terminal block types currently offered, this problem creates unnecessary downtime for troubleshooting.

The solution: an insulation stop for rail-mount terminal blocks. Insulation stops automatically bundle the cores of fine-stranded conductors when inserted into the clamping unit, preventing splaying. This also limits the conductor entry to a defined cross sectional area – ensuring the actual conductor, not the insulation, will enter the clamping unit.

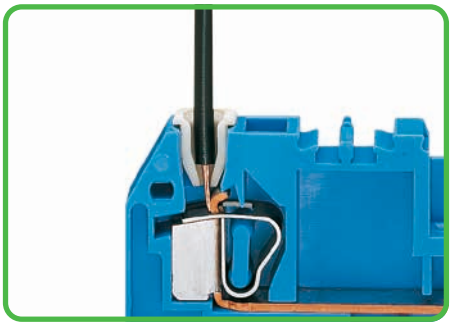
The insulation stop is available as dividable 5-pole strip for 279, 280/780/870/880 and 281/781 Series rail-mount terminal blocks. Insulation stop usage will not affect the conductor strip lengths for the aforementioned rail-mount terminal blocks.



Insert stripped, untwisted conductor into insulation stop.



The conductor is bundled.



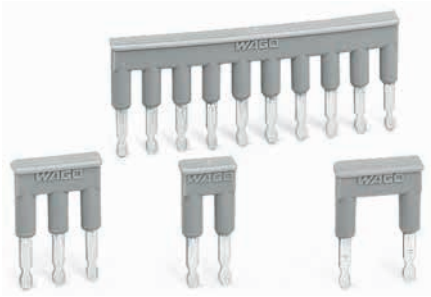
The conductor insulation is prevented from being pushed into the clamping unit by the positive stop.

Comb-Style Jumper Bars and Alternate Comb-Style Jumper Bars Operating Tool

Comb-style jumper bars and alternate comb-style jumper bars	Comb-style jumper bars and alternate comb-style jumper bars	Comb-style jumper bars and alternate comb-style jumper bars
for 279 Series I_N = I_N terminal block Operating tool	for 280/769/780/880 Series I_N = I_N terminal block Operating tool	for 281/781 Series I_N = I_N terminal block Operating tool



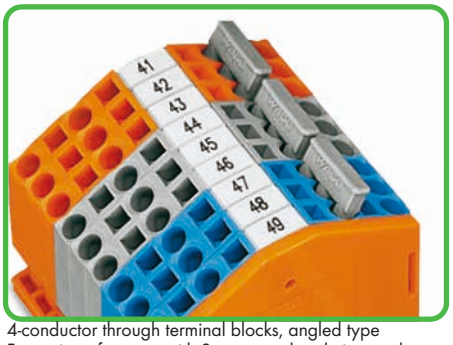




	Item No.	Pack. Unit
Comb-style jumper bar,		
insulated		
2-way	**279-482**	200 (8x25)
3-way	**279-483**	200 (8x25)
10-way	**279-490**	50 (2x25)
Alternate comb-style jumper bar,		
insulated		
2-way	**279-492**	200 (8x25)
Operating tool,		
of insulating material		
2-way	**279-432**	1
3-way	**279-433**	1
10-way	**279-440**	1

	Item No.	Pack. Unit
Comb-style jumper bar,		
insulated		
2-way	**280-482**	200 (8x25)
3-way	**280-483**	200 (8x25)
10-way	**280-490**	50 (2x25)
Alternate comb-style jumper bar,		
insulated		
2-way	**280-492**	200 (8x25)
Operating tool,		
of insulating material		
2-way	**280-432**	1
3-way	**280-433**	1
10-way	**280-440**	1

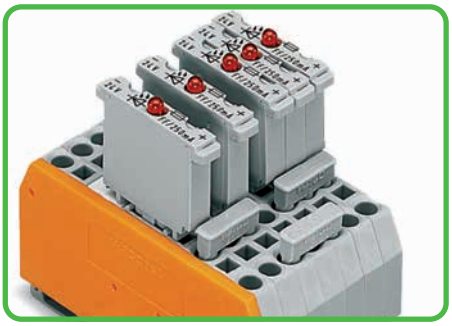
	Item No.	Pack. Unit
Comb-style jumper bar,		
insulated		
2-way	**281-482**	100 (4x25)
3-way	**281-483**	100 (4x25)
5-way	**281-485**	100 (4x25)
10-way	**281-490**	50 (2x25)
Alternate comb-style jumper bar,		
insulated		
2-way	**281-492**	100 (4x25)
Operating tool,		
of insulating material		
2-way	**280-432**	1
3-way	**280-433**	1
5-way	**281-440**	1



4-conductor through terminal blocks, angled type
Formation of groups with 3-way, comb-style jumper bars



Disconnect terminal blocks for test and measurement
10-way, comb-style jumper bar

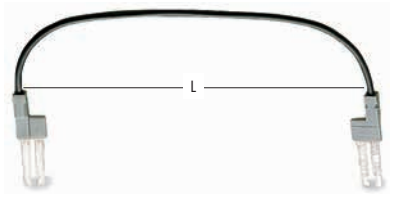


Carrier terminal blocks with component plugs
Alternate comb-style jumper bars
3-way, comb-style jumper bar

Staggered Jumpers and Push-In Type Wire Jumpers

Staggered jumper	Push-in type wire jumper
Nominal voltage 400 V/6 kV/3	**800 V/8 kV/3** **I_N 9 A** **Conductor size 0.75 mm²**





❶ Suitable for Ex e II applications
max. rated voltage 275 V
23 A for 2-conductor terminal blocks
22 A for 3-conductor terminal blocks
20 A for 4-conductor terminal blocks
(also see Section 14)

❷ Suitable for Ex e II applications
max. rated voltage 275 V, 26 A
(also see Section 14)

	Item No.	Pack. Unit
Staggered jumper, insulated,		
Spacing: 5 mm, I_N 24 A		
◯ from 1 to 2	**780-452** ❶	100 (4x25)
◯ from 1 to 3	**780-453** ❶	100 (4x25)
◯ from 1 to 4	**780-454** ❶	100 (4x25)
◯ from 1 to 5	**780-455** ❶	50 (2x25)
◯ from 1 to 6	**780-456** ❶	50 (2x25)
◯ from 1 to 7	**780-457** ❶	50 (2x25)
◯ from 1 to 8	**780-458** ❶	50 (2x25)
Staggered jumper, insulated,		
Spacing: 6 mm, I_N 32 A		
◯ from 1 to 2	**781-452** ❷	100 (4x25)
◯ from 1 to 3	**781-453** ❷	100 (4x25)
◯ from 1 to 4	**781-454** ❷	100 (4x25)
◯ from 1 to 5	**781-455** ❷	50 (2x25)
◯ from 1 to 6	**781-456** ❷	50 (2x25)

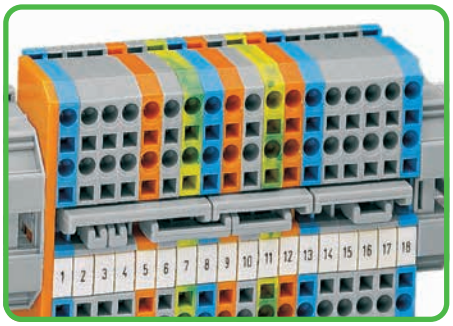
	Item No.	Pack. Unit
Push-in type wire jumper, insulated		
Wire length of wire jumpers:		
L = 60 mm	**249-125**	10
Push-in type wire jumper, insulated		
Wire length of wire jumpers:		
L = 110 mm	**249-126**	10
Push-in type wire jumper, insulated		
Wire length of wire jumpers:		
L = 250 mm	**249-127**	10
Note:		
Push down the wire jumper until fully inserted.		

Wire jumpers
When installing machines or control systems, it is often necessary to make an additional connection between two terminal blocks that are not next to each other on the rail. In such cases, the plug-in, touchproof wire jumper is ideal.

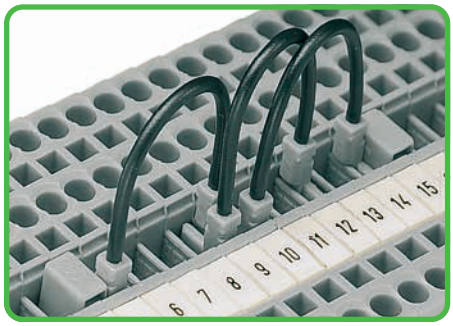
Suitable for rail-mount terminal blocks of 279 Series (1.5 mm²/AWG 16), 280/775/780 Series (2.5 mm²/AWG 14) and 281/769/776/777/781 and 880 Series (4 mm²/AWG 12), this jumper is available in 3 wire lengths: 60, 110 and 250 mm.
This allows up to 60 terminal blocks between the two blocks being commoned (see table below).

Terminal blocks Series	Wire jumpers Item No.	"n"
279 (1.5 mm²/AWG 16)	249-125 249-126 249-127	13 25 60
280, 775, 780 (2.5 mm²/AWG 14) 769, 880 (4 mm²/AWG 12)	249-125 249-126 249-127	10 20 48
281, 781, 776, 777 (4 mm²/AWG 12)	249-125 249-126 249-127	9 17 40

"n" = number of 279, 280/769/780/880 and 281/781 Series terminal blocks which can be skipped with a wire jumper.



Staggered jumpers for sophisticated circuit requirements.

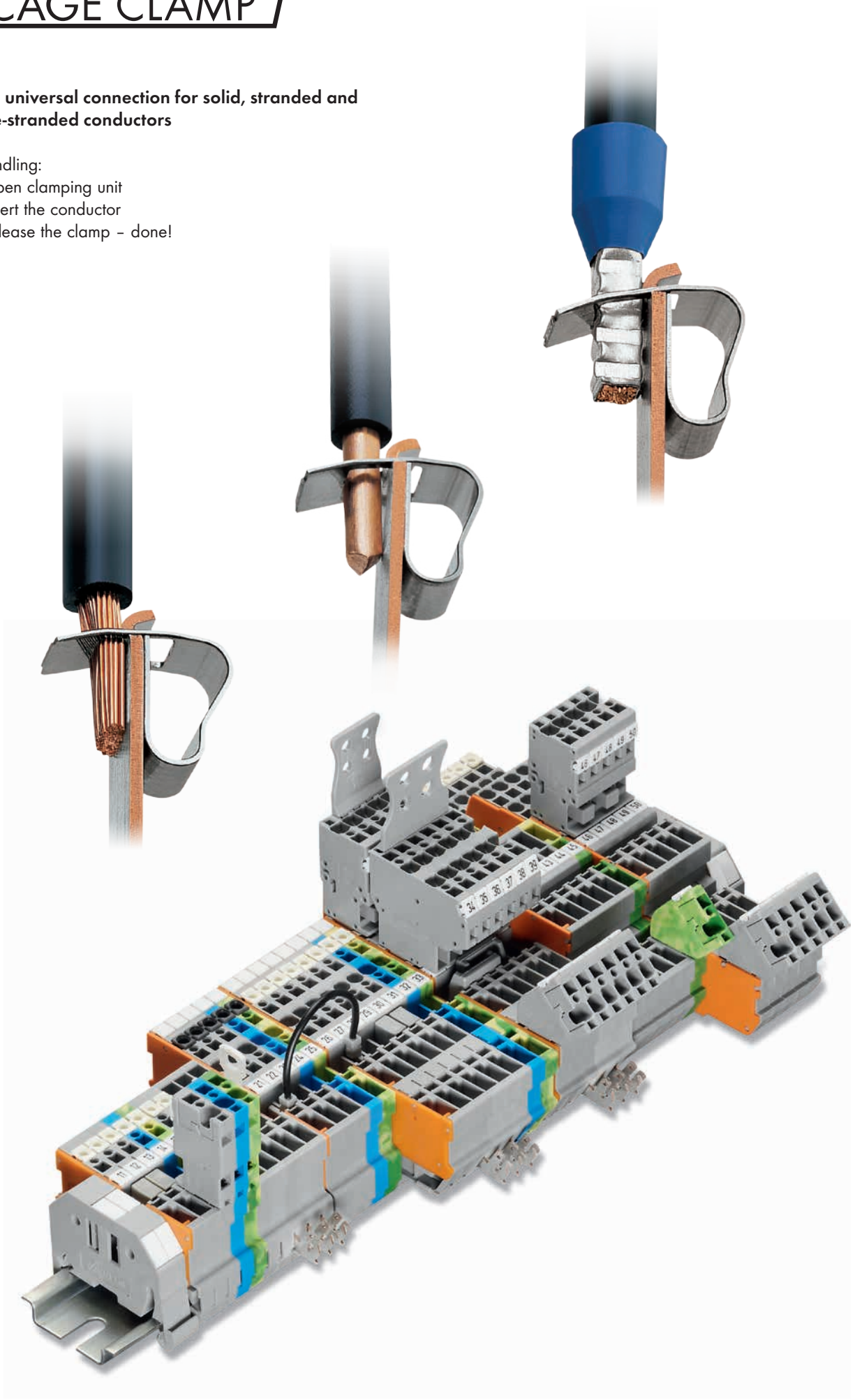


Series 280/775/780 and 281/776/777/781 will accept two wire jumpers, so it is possible to bridge several terminal blocks together. Since the 279 Series will only accept one wire jumper per terminal block, bridging several terminal blocks is not possible. Series 280/769/775/780/880 and 281/776/777/781 permit the introduction of a wire jumper and a adjacent jumper into the same block simultaneously.

CAGE CLAMP®

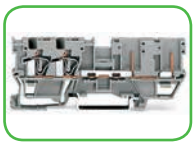
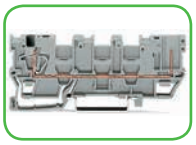
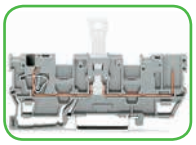
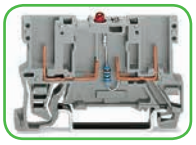
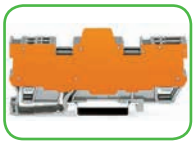
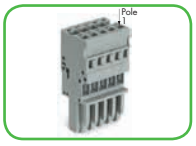
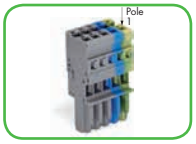
The universal connection for solid, stranded and fine-stranded conductors

Handling:
- Open clamping unit
- Insert the conductor
- Release the clamp – done!

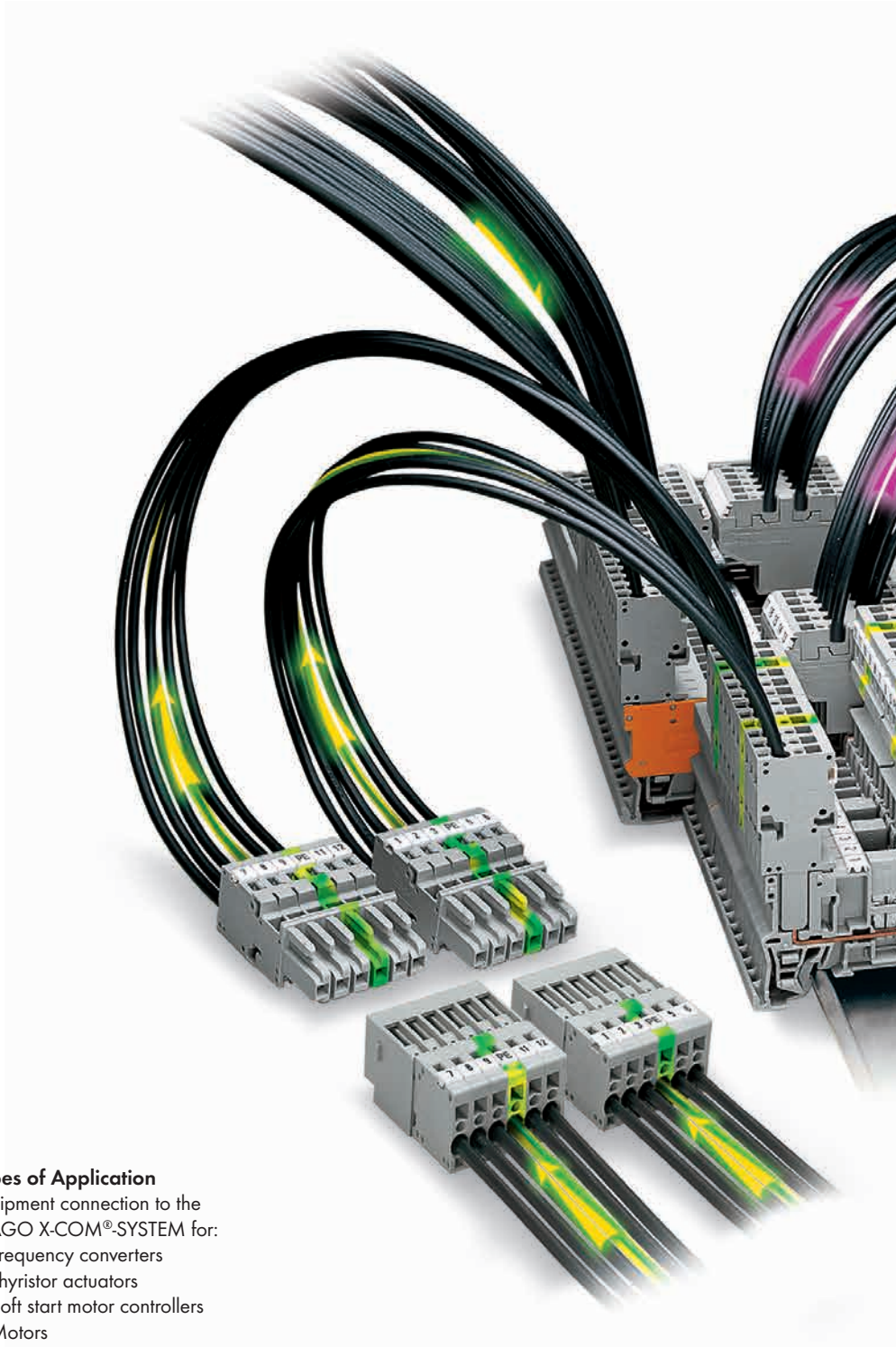


Rail-Mounted Terminal Blocks with Pluggable Connector, X-COM®-SYSTEM, Classic

Front-Entry Wiring

			Page
	**Carrier Terminal Blocks** 0.08 mm² to 4 mm² (28–12 AWG)	769 Series	304
	**Carrier Terminal Blocks with 3 Jumper Positions** 0.08 mm² to 4 mm² (28–12 AWG)	769 Series	314
	**Disconnect Carrier Terminal Blocks with 2 Jumper Positions** 0.08 mm² to 4 mm² (28–12 AWG)	769 Series	316
	**Diode and LED Carrier Terminal Blocks** 0.08 mm² to 4 mm² (28–12 AWG)	769 Series	318
	**Carrier Terminal Blocks for Pluggable Modules** 0.08 mm² to 4 mm² (28–12 AWG)	769 Series	326
	**Double-Deck Carrier Terminal Blocks** 0.08 mm² to 2.5 (4 “f-st”) mm² (28–12 AWG)	870 Series	334
	**Male Connectors with CAGE CLAMP®** 0.08 mm² to 4 mm² (28–12 AWG)	769 Series	342
	**Male Headers with Solder Pins** 0.08 mm² to 4 mm² (28–12 AWG)	769 Series	346
	**Female Plugs with and without Lateral Locking Levers** 0.08 mm² to 4 mm² (28–12 AWG)	769 Series	352
	**Female Plugs for Self-Assembly** 0.08 mm² to 4 mm² (28–12 AWG)	769 Series	356
	**Pre-Assembled Female Plugs** 0.08 mm² to 4 mm² (28–12 AWG)	769 Series	358
	**Strain Relief Housings**	769 Series	359

WAGO X-COM®-SYSTEM
COM-bination of Connectors and Rail-Mounted Terminal Blocks



The WAGO X-COM® SYSTEM
is a staple of switchgear and control applications.

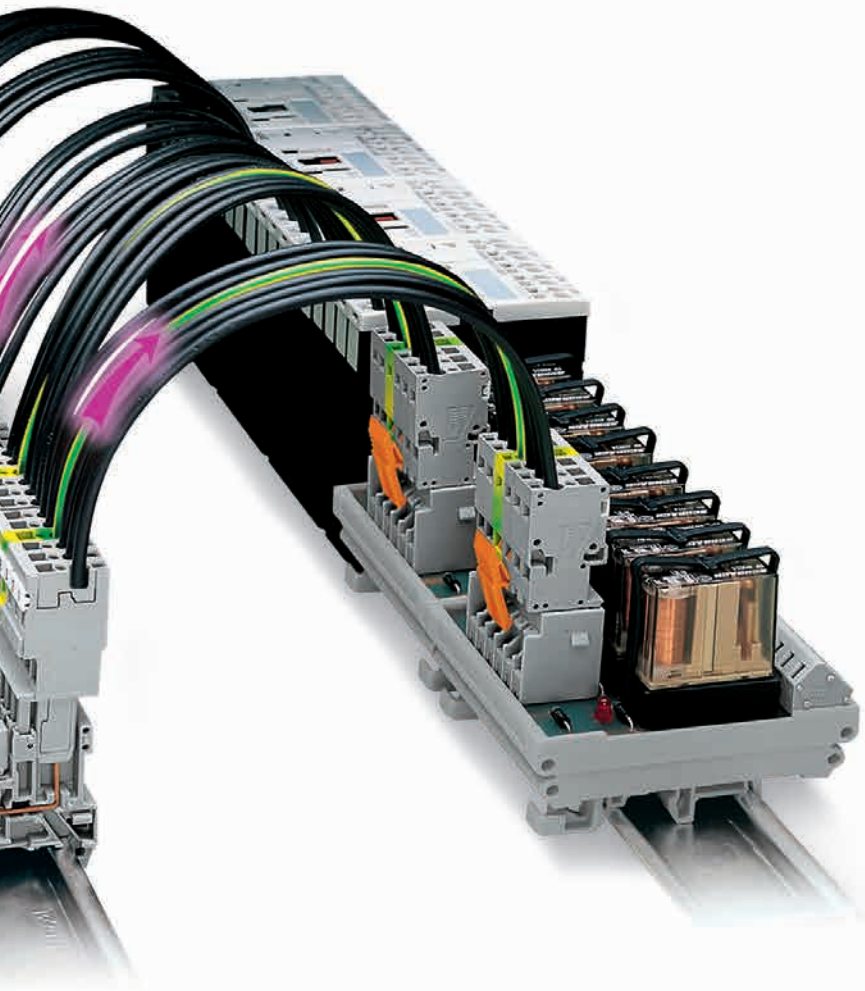
It is designed for a **rated current up to 16/32A at V_N 500V and 4mm² (AWG 12) rated cross section (up to 600V, 10A, and 12 AWG UL).** This offers an alternative to heavy-duty rectangular and circular connectors used in power wiring applications where electrical compliance is more important than a high degree of protection.
X-COM® conveniently enables the use of pre-assembled connector systems and the following advantages:
- During manufacturing: Pre-assembled part or function assemblies can be tested before assembly.
- During assembly: Pre-assembled pluggable cable harnesses help solve time and space issues on site. Connector systems with protection against mismating can be handled by installers of all skill levels.
- During servicing: Sub-assemblies can be replaced quickly and without failure.

The X-COM®-SYSTEM consists of carrier consists of rail-mounted terminal blocks, male connectors and female plugs with different mounting systems, as well as male headers with solder pins. Pin spacing is generally 5 mm.

Protection Against Mismating and Accidental Contact
The WAGO X-COM®-SYSTEM **is fully protected against accidental contact – even when plugs are disconnected**. This significantly simplifies the planning of power distribution. Furthermore, the whole system is **100% protected against mismating**. Coded, without the loss of any poles, prevents mismating of male connectors and female plugs having the same number of poles.

Carrier Terminal Blocks
Carrier terminal blocks are available as through terminal blocks, double-deck terminal blocks, and ground conductor terminal blocks with automatic contact to the carrier rail.
Carrier terminal blocks with specialty functions are available in disconnect, diode and LED versions. Carrier terminal blocks equipped with an additional socket can accommodate a wide range of pluggable electronic modules (e.g., relays, optocouplers, transducers).
Depending on the type of terminal block, the carrier terminal blocks are equipped with one to three jumper positions for commoning signals via insulated push-in type jumpers.

Types of Application
Equipment connection to the
WAGO X-COM®-SYSTEM for:
- Frequency converters
- Thyristor actuators
- Soft start motor controllers
- Motors
- Phase filter
- Power sub-assemblies
- Power supply units
- Uninterruptible power supply (UPS)
- “Panel-to-door” wiring
- Pluggable high-current, feed-through connections
- Flying leads



Female Plugs
The mating half of the carrier consists of terminal blocks modular 1- to 15-pole, 1-conductor and 2-conductor straight or angled female plugs. Angled female plugs combined with double-deck terminal blocks offer high-density wiring and reduce overall terminal block height. A jumper slot simplifies potential distribution – even on the female plugs.
This makes commoning supply lines particularly easy as the power supply of downstream sub-assemblies is maintained even after female plugs have been removed.

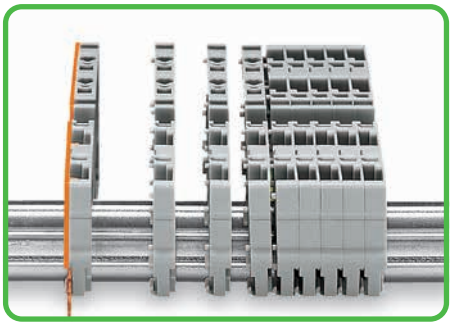
1-Pole Female Plugs
Special 1-pole female plugs can carry the full rated current of the terminal blocks for many applications:
- as test plug adapters
- as connectors for motor lead tests
- for all types of patchboard applications
- for the creation of multi-pole prototypes
- for phase selection in a three-phase network without interfering with the wiring
- for single-pole power supply in commercial or recreational vehicles. The grounding of all electrical components is connected through the chassis.

Male Connectors and Male Headers
Male connectors are available with snap-in mounting feet for panel mounting, with fixing flanges for feed-through applications or without mounting elements for flying leads. Strain relief plates are available as accessories.
Sub-assemblies on printed circuit boards can be integrated into the system wiring using male headers with solder pins. As a result, parts can be exchanged quickly without wiring failures.

Degree of Protection
In mated condition: IP20
Unmated: IP20
Temperature range:
– 35 °C to +100 °C

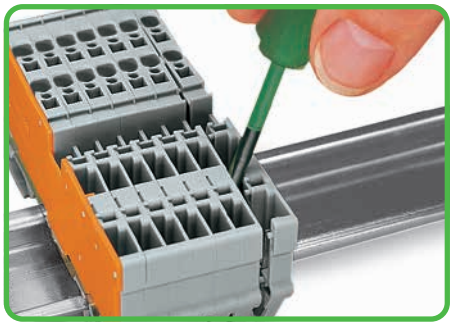
X-COM®-SYSTEM
Carrier Terminal Blocks and Female Plugs, 769 Series

Assembly



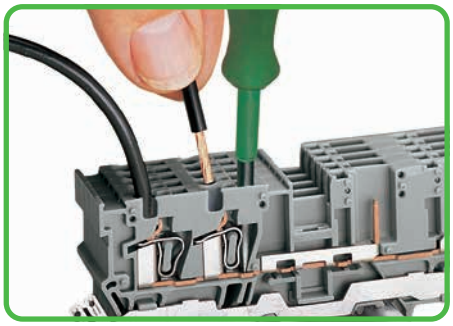
Snap individual carrier terminal blocks onto carrier rail and slide together.

Removal



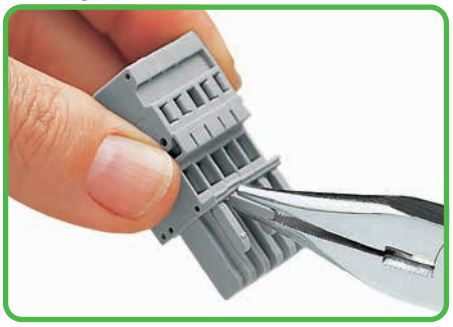
Unlock assembly with operating tool and remove terminal block via release lever.

CAGE CLAMP® connection



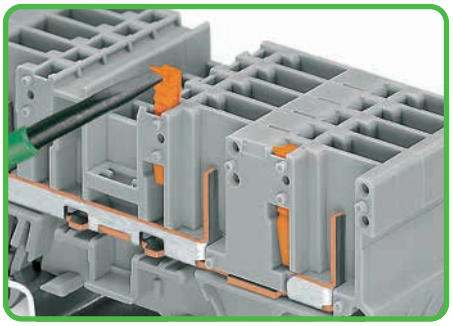
Carrier terminal block: connection/removal of conductor with (3.5 x 0.5) mm operating tool.

Coding

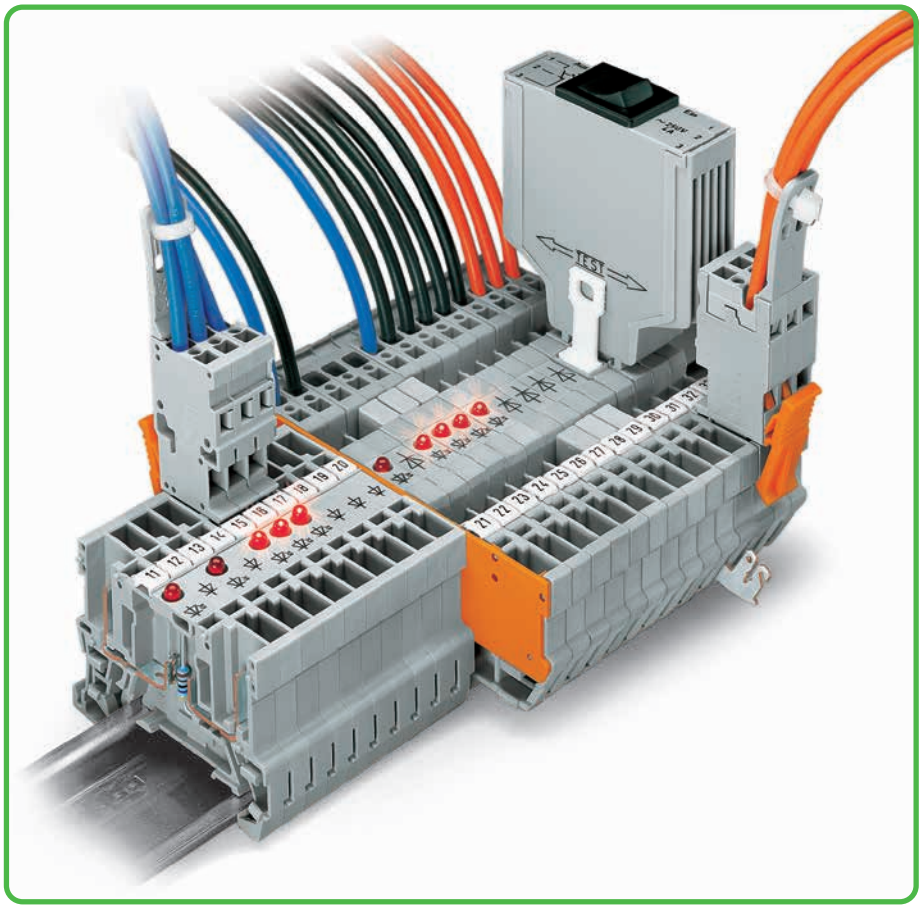


Coding a female plug – removal of coding finger(s). Do not break off the first and last latch position coding fingers!

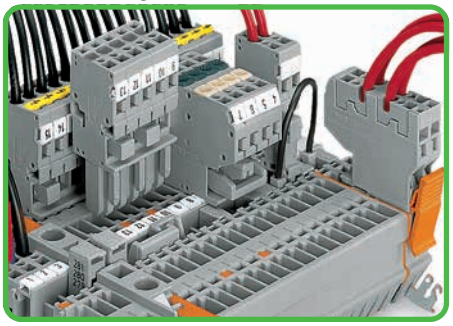
Coding



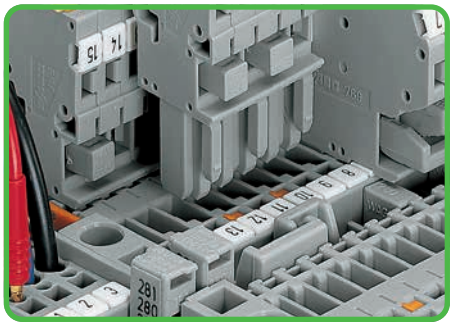
Snap coding pin in proper direction on carrier terminal block. Shown: Removal of a coding pin from carrier terminal block.



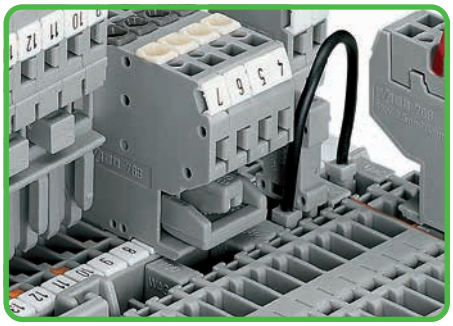
Commoning



Commoning with adjacent or staggered jumpers. Push jumpers down firmly until fully inserted.



Commoning carrier terminal blocks with staggered jumpers.



Commoning 2-conductor female plug with staggered jumper and commoning carrier terminal block with adjacent jumper.



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded

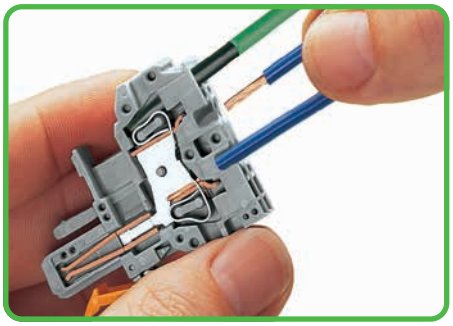


fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

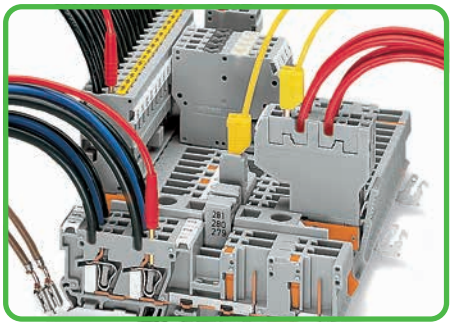
– Description and Handling –

CAGE CLAMP® connection



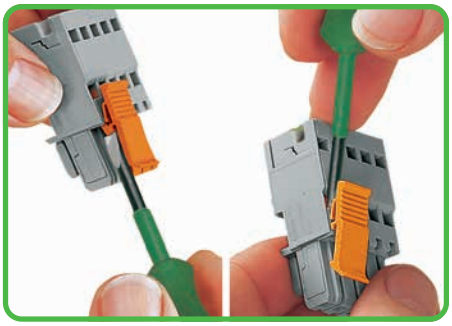
Female plug: termination/removal of conductor.
Operation 90° to wire also possible.

Testing



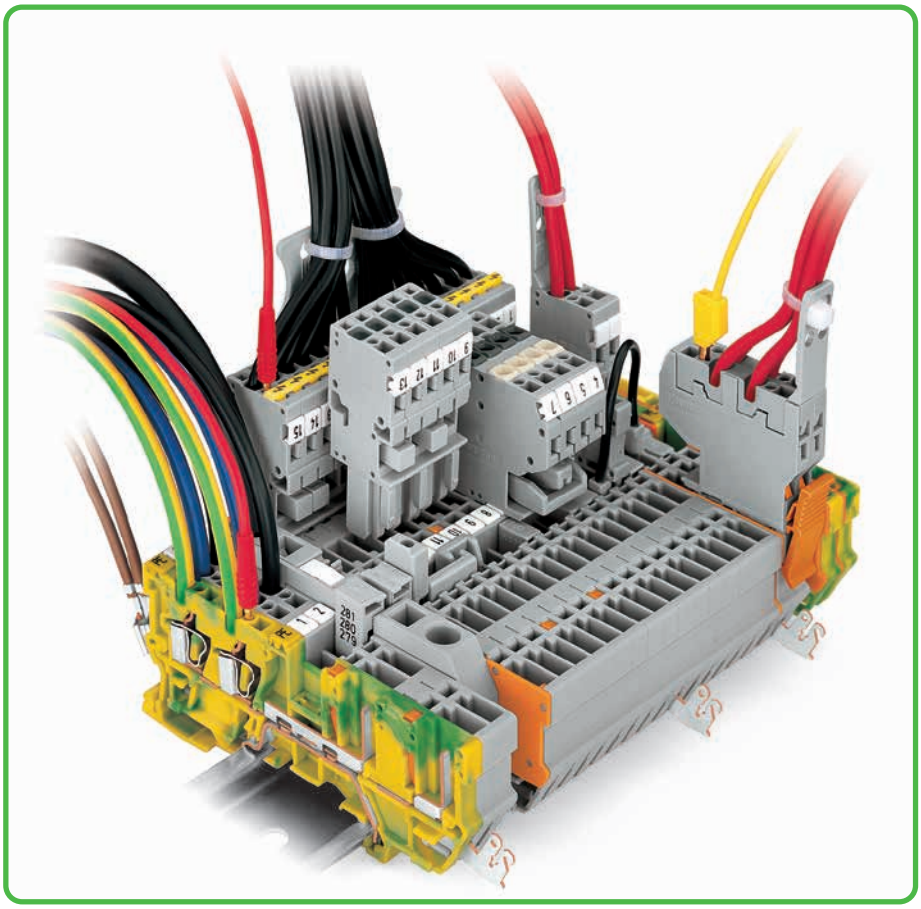
Testing with test plug 2 mm Ø (red) or
2.3 mm Ø (yellow).

Locking lever

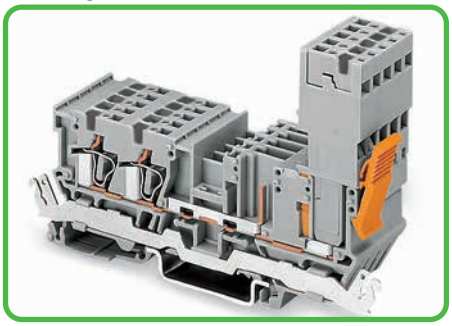


Snapping in/removal of locking lever.

Note: Connectors used according to the regulations shall not be connected or disconnected when live or under load.

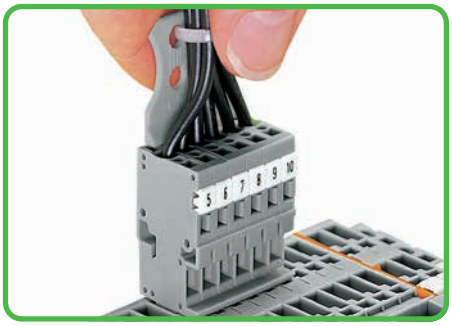


Locking lever



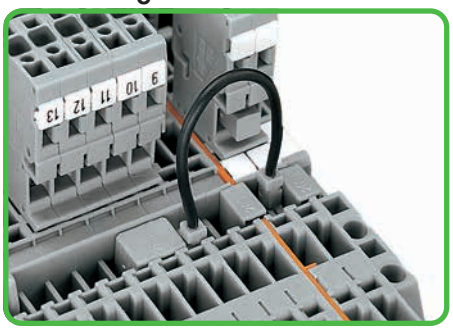
Female plug secured with locking lever in external area of carrier terminal block.

Strain relief

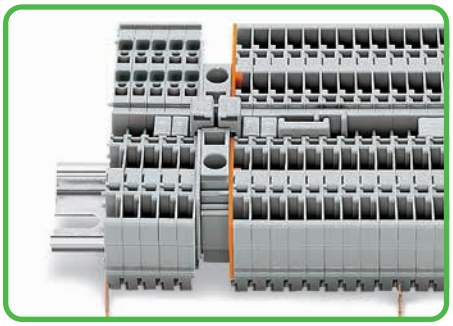


Removal of female plug, conductors provided with strain relief plate.

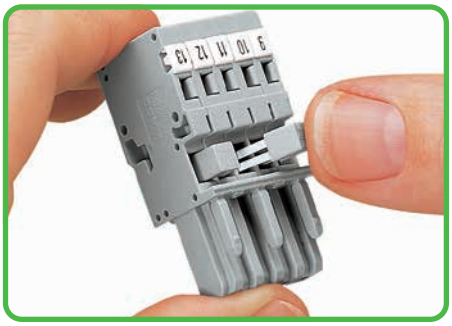
Commoning



Commoning carrier terminal blocks with push-in type wire, or adjacent jumpers over the intermediate plate.



Step-down jumper used for commoning terminal blocks of different sizes (max. 10 mm²/AWG 8).



Commoning 1-conductor female plugs with miniature adjacent jumpers.



fine-stranded,
tip-bonded



fine-stranded,
with ferrule ❶
(gastight crimped)

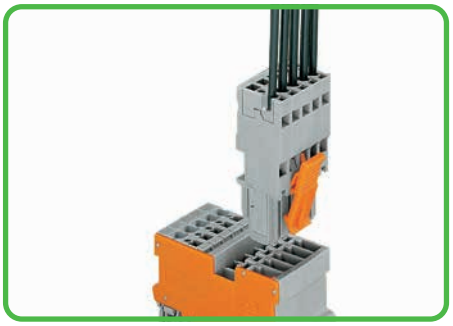


fine-stranded,
with pin terminal
(gastight crimped)

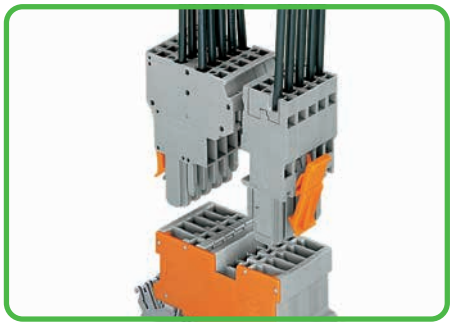
❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

X-COM®-SYSTEM, 769 Series
Carrier Terminal Blocks, Female Plugs, Male Headers and Male Connectors

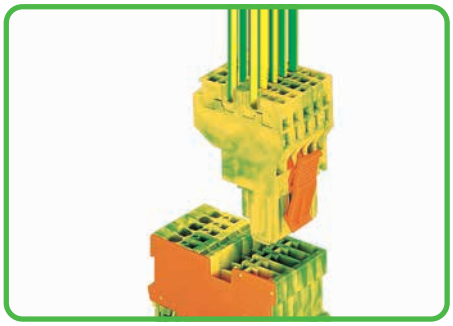
Range overview



1-conductor/1-pin carrier terminal block
1-conductor female plug, straight*

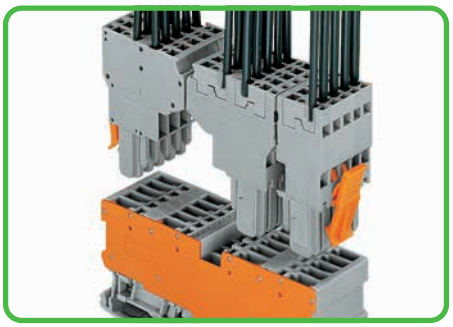


2-pin shield carrier terminal block
2-conductor female plug
1-conductor female plug, straight*

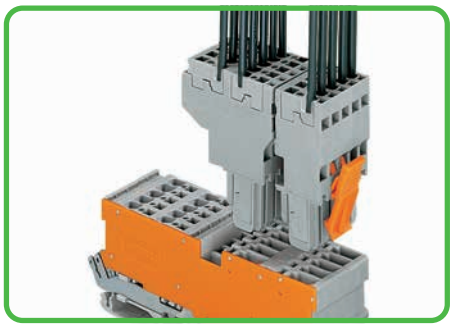


1-conductor/1-pin ground carrier terminal block
2-conductor female plug, green-yellow

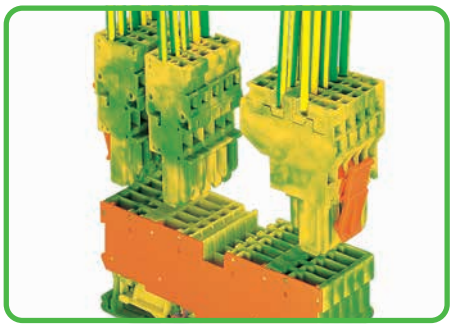
* or 1-conductor female plug, angled



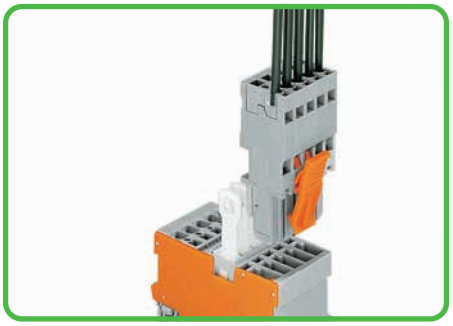
4-pin carrier terminal block
2-conductor female plug
1-conductor female plug, straight



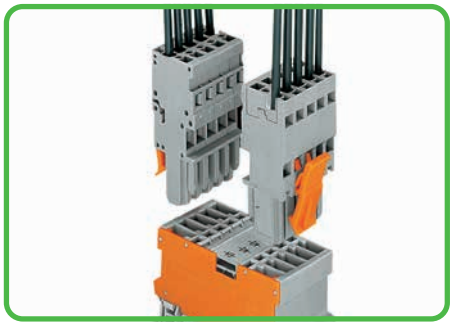
2-conductor/2-pin shield carrier terminal block
2-conductor female plug
1-conductor female plug, straight



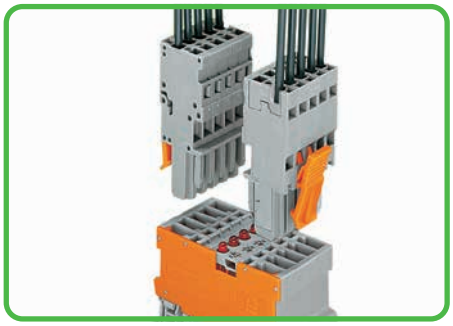
4-pin ground carrier terminal block
1-conductor female plug, straight
2-conductor female plug



1-conductor/1-pin disconnect carrier terminal block
1-conductor female plug, straight*

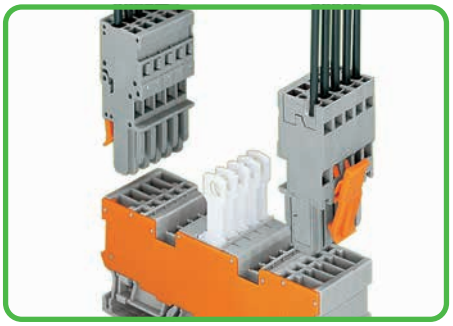


2-pin diode carrier terminal block
1-conductor female plug, straight*

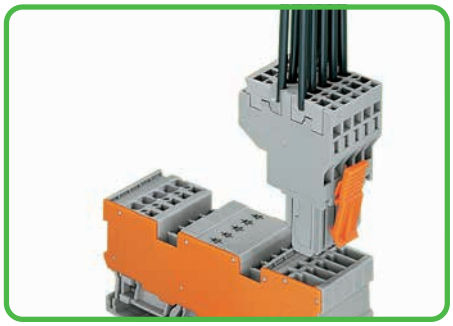


2-pin LED carrier terminal block
1-conductor female plug, straight*

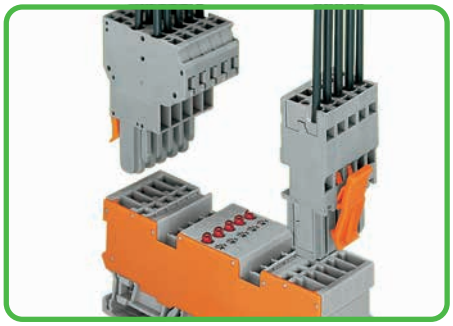
* or 1-conductor female plug, angled



2-pin disconnect carrier terminal block
with 2 jumper positions
1-conductor female plug, straight*

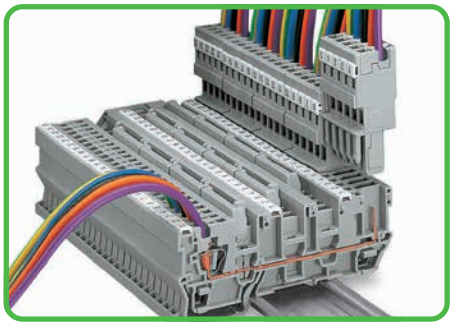


1-conductor/1-diode carrier terminal block with 2 jumper positions
2-conductor female plug



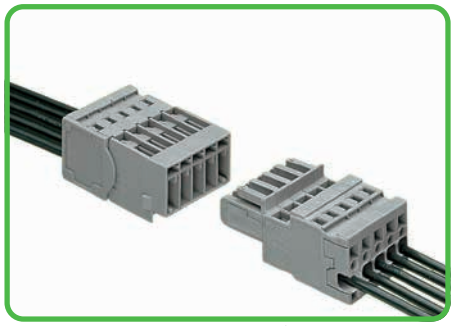
2-pin LED carrier terminal block with 2 jumper positions
2-conductor female plug
1-conductor female plug, straight

* or 1-conductor female plug, angled

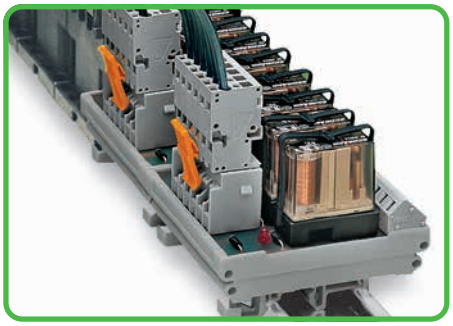


1-conductor/1-pin carrier terminal block with 3 jumper positions
1-conductor female plug, straight*

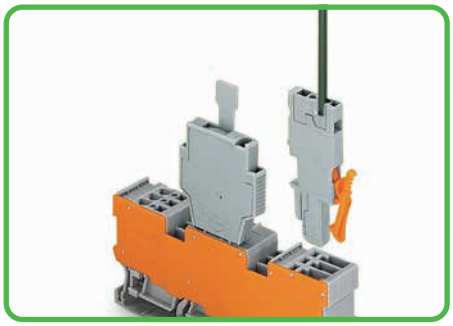
* or 1-conductor female plug, angled



Male connector with CAGE CLAMP®
1-conductor female plug, straight

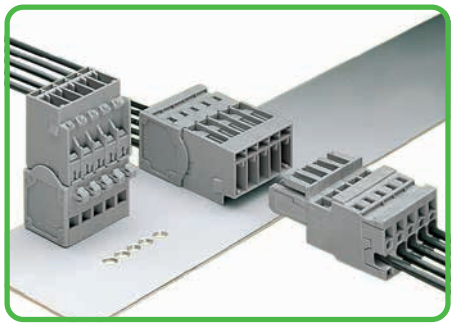


Male header with straight solder pins
1-conductor female plug, straight

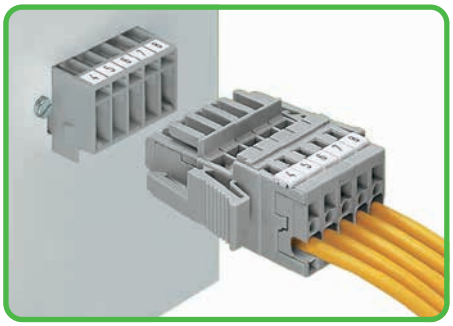


1-conductor/1-pin carrier terminal block with 2 jumper positions
1-conductor female plug, straight*
Fuse plug 6 mm wide (every other terminal block)

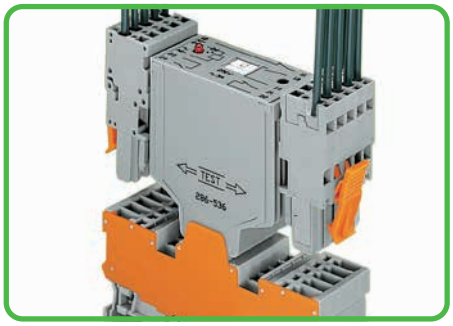
* or 1-conductor female plug, angled



Male connector with CAGE CLAMP® connection and mounting feet
1-conductor female plug, straight

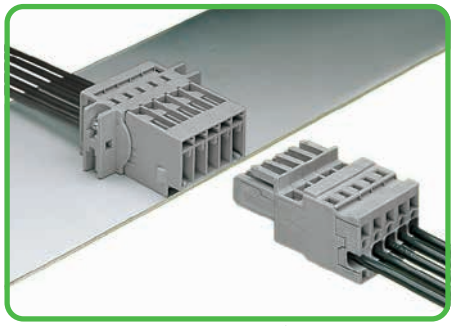


Male header with straight or angled solder pins and fixing flanges
1-conductor female plug straight with lateral locking levers

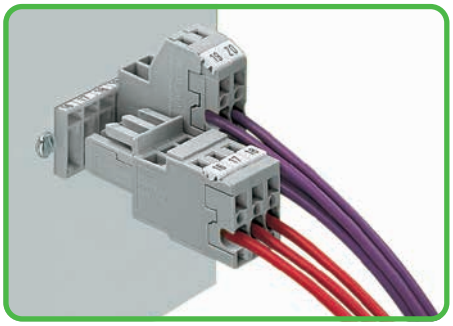


2-pin terminal block for pluggable modules with 2 jumper positions and separator plate
1-conductor female plug, straight*
Relay plug 25 mm wide

* or 1-conductor female plug, angled

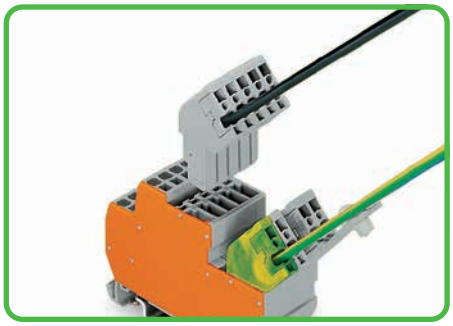


Male connector with CAGE CLAMP® connection and fixing flanges
1-conductor female plug, straight



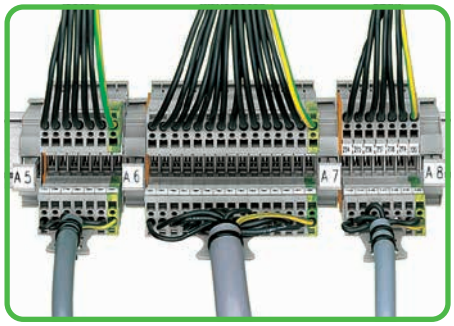
Male header with straight or angled solder pins and feed-through flanges
1-conductor female plug, straight
2-conductor female plug

Application example: Cost-effective alternative



1-conductor/1-pin double-deck carrier terminal block
1-conductor female plug, angled*

* or 1-conductor female plug, straight



Installing cables in a cables in a switch cabinet.
The cables are installed **with** the connected female plugs and are directly plugged in the carrier terminal blocks.



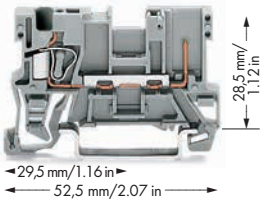
Cable entry in the base of the switch cabinet, with separate strain relief, movable IP54 bottom plates sealed with sponge rubber (e.g., by Rittal)

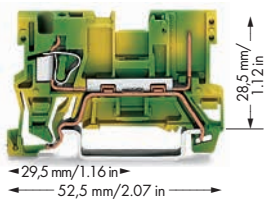
X-COM®-SYSTEM
1-Conductor/1-Pin Carrier Terminal Blocks

CAGE CLAMP®

0.08 - 4 mm²	AWG 28 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A ❷	300 V, 20 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❸	

0.08 - 4 mm²	AWG 28 - 12
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❸	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
250 V/4 kV/3 =
ominal voltage with shield contact
(also see Section 14)

❷ See current-carrying capacity curve, page 360 and at www.wago.com

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Test plug modules, pages 289 – 290
Insulation stop, page 293
Staggered jumper, page 295
Push-in type wire jumper, page 295

	Item No.	Pack. Unit
1-conductor/1-pin carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**769-176**	100
blue	**769-176/000-006**	100
1-conductor/1-pin carrier terminal block with shield contact, (no picture), for DIN 35 rail, acc. to EN 60715		
gray	**769-231** ❶	50

Item-Specific Accessories

Protective warning marker, with high-voltage symbol, black, for 5 terminal blocks		
yellow	**280-415**	100 (4x25)

769 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

End and intermediate plate, 1.1 mm thick		
orange	**769-308**	100 (4x25)
gray	**769-307**	100 (4x25)
Insulation stop, ❹ 5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
white	**769-470**	200 (8x25)
Insulation stop, ❹ 5 pcs/strip, 0.25 - 0.5 mm²		
light gray	**769-471**	200 (8x25)
Insulation stop, ❹ 5 pcs/strip, 0.75 - 1 mm²		
dark gray	**769-472**	200 (8x25)
Coding pin, for coding female plugs		
orange	**769-435**	100 (4x25)
Adjacent jumper, insulated, I_N = I_N terminal block		
gray	**280-402**	200 (8x25)
Alternate jumper, insulated, I_N = I_N terminal block		
gray	**280-409**	100 (4x25)

	Item No.	Pack. Unit
1-conductor/1-pin ground carrier terminal block, for DIN 35 rail, acc. to EN 60715		
green-yellow	**769-237**	100

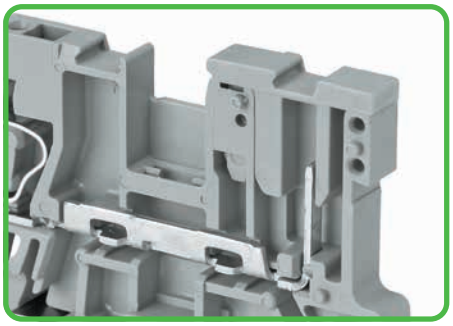
Staggered jumper, ❹ insulated, Spacing: 5 mm, I_N 24 A		
from 1 to 2	**780-452**	100 (4x25)
from 1 to 3	**780-453**	100 (4x25)
from 1 to 4	**780-454**	100 (4x25)
from 1 to 5	**780-455**	50 (2x25)
from 1 to 6	**780-456**	50 (2x25)
from 1 to 7	**780-457**	50 (2x25)
from 1 to 8	**780-458**	50 (2x25)
Push-in type wire jumper, ❹ insulated, I_N 9 A, wire size 0.75 mm²		
L = 60 mm	**249-125**	10
L = 110 mm	**249-126**	10
L = 250 mm	**249-127**	10
Test plug module, ❹ can be snapped together, 5 mm wide		
gray	**280-418**	100 (4x25)
Spacer module, can be snapped together, 5 mm wide		
gray	**280-419**	100 (4x25)

Accessories

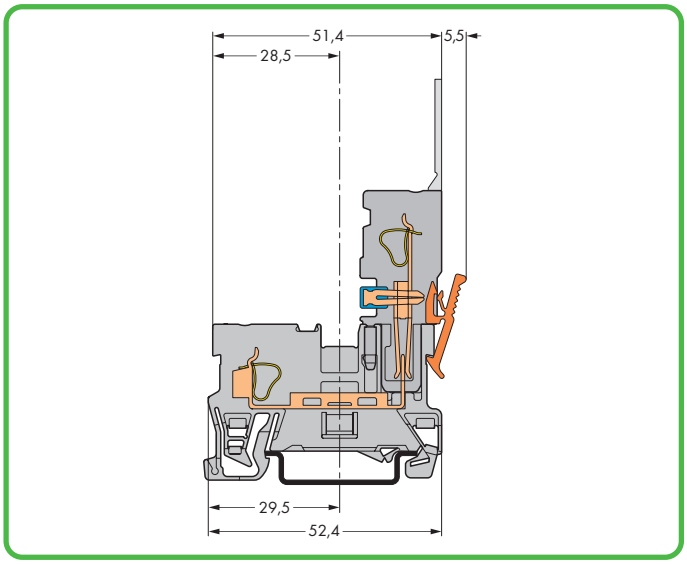
Test plug, with 500 mm cable, 2 mm Ø		
red	**210-136**	50
Test plug, with 500 mm cable, 2.3 mm Ø		
yellow	**210-137**	50
Test plug adapter, 5 mm wide, for terminal blocks 1.5 - 4 mm², for 210-137 test plug 2.3 mm Ø		
gray	**280-404**	100 (4x25)
Pin cover, with receptacle for miniature WSB		
gray	**769-438**	100 (4x25)
orange	**769-439**	100 (4x25)
1-conductor female plug, straight		
gray	**769-101**	200
1-conductor female plug, angled		
gray	**769-101/022-000**	200
2-conductor female plug		
gray	**769-121**	100
Miniature WSB Quick marking system, 10 strips with 10 markers per card, 5 mm wide markers		
plain	**248-501**	5
Screwless end stop, for DIN 35 rail, 6 mm wide		
gray	**249-116**	100 (4x25)
Screwless end stop, for DIN 35 rail, 10 mm wide		
gray	**249-117**	50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.

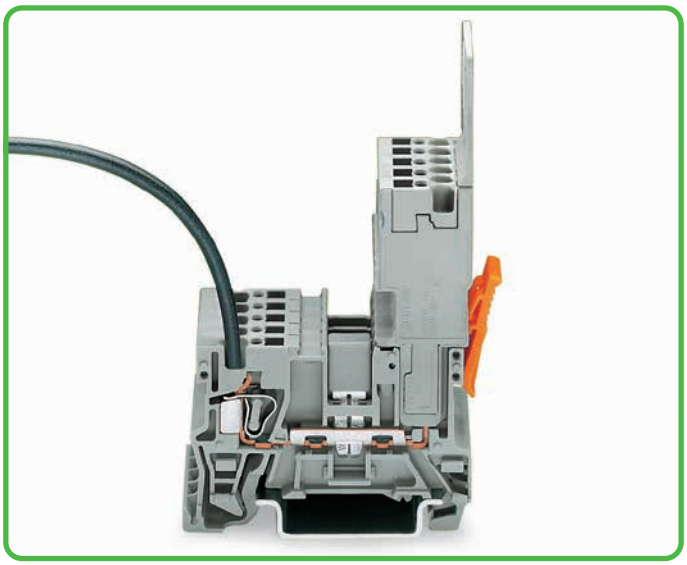
Types of Assembly
1-Conductor/1-Pin Carrier Terminal Blocks and 1-/2-Conductor Female Plugs



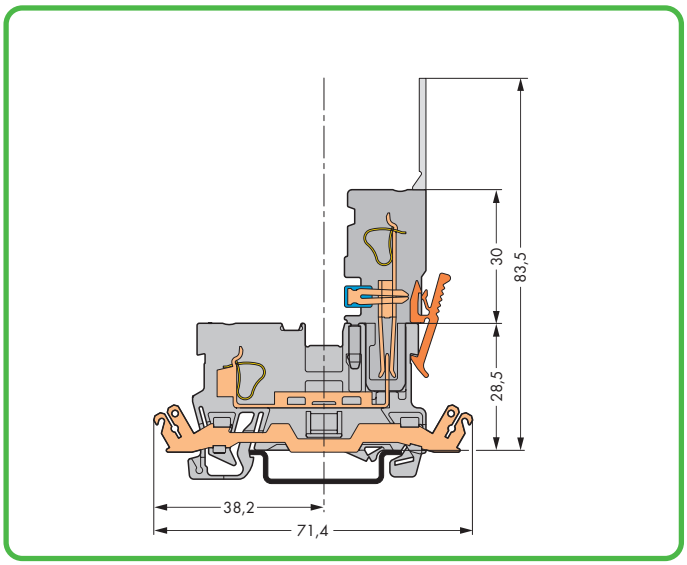
Pin cover
with receptacle for miniature WSB



Carrier terminal block



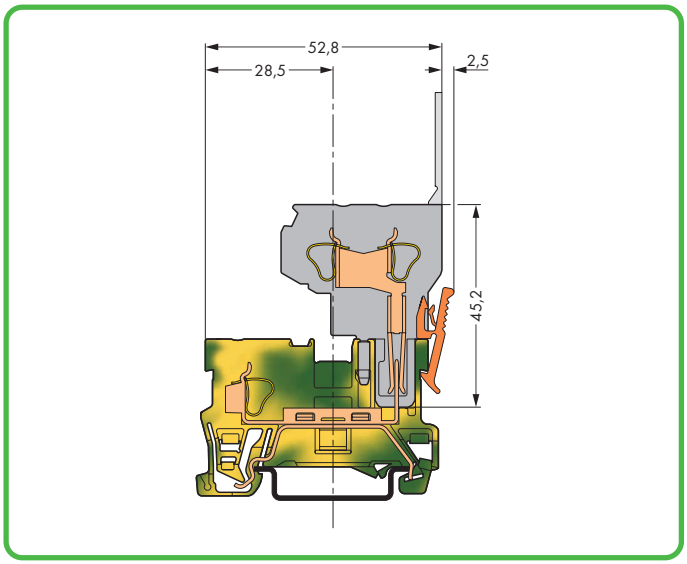
1-conductor female plug
Commoning carrier terminal blocks via 280 and 780 Series jumpers and testing using 280-4.. test plug adapter.



Carrier terminal block with shield contact



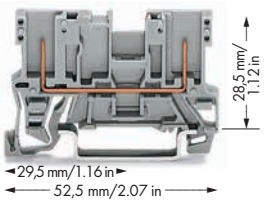
2-conductor female plug
Carrier terminal blocks can only be commoned via 280 Series adjacent and alternate jumpers.

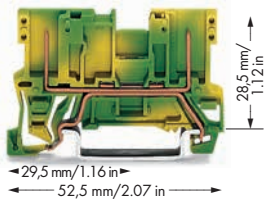


Ground carrier terminal block

X-COM®-SYSTEM
2-Pin Carrier Terminal Blocks

500 V/6 kV/3 ❶ | 300 V, 20 A I_N 32 A ❷ | 300 V, 20 A	Terminal block width 5 mm / 0.197 in
Terminal block width 5 mm / 0.197 in	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
250 V/4 kV/3 =
ominal voltage with shield contact
(also see Section 14)

❷ See current-carrying capacity curve, page 360 and at www.wago.com

❸ See application notes for:
Test plug modules, pages 289 – 290
Staggered jumper, page 295
Push-in type wire jumper, page 295

	Item No.	Pack. Unit
2-pin carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**769-156**	100
2-pin carrier terminal block with shield contact, (no picture), for DIN 35 rail, acc. to EN 60715		
gray	**769-221** ❶	50

	Item No.	Pack. Unit
2-pin ground carrier terminal block, for DIN 35 rail, acc. to EN 60715		
green-yellow	**769-227**	100

769 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

		Item No.	Pack. Unit
End and intermediate plate, 1.1 mm thick	orange	**769-306**	100 (4x25)
	gray	**769-305**	100 (4x25)
Coding pin,	for coding female plugs		
	orange	**769-435**	100 (4x25)
Adjacent jumper, insulated,	I_N = I_N terminal block		
	gray	**280-402**	200 (8x25)
Alternate jumper, insulated,	I_N = I_N terminal block		
	gray	**280-409**	100 (4x25)
Staggered jumper, ❸	insulated,		
	Spacing: 5 mm,		
	I_N 24 A		
	from 1 to 2	**780-452**	100 (4x25)
	from 1 to 3	**780-453**	100 (4x25)
	from 1 to 4	**780-454**	100 (4x25)
	from 1 to 5	**780-455**	50 (2x25)
	from 1 to 6	**780-456**	50 (2x25)
	from 1 to 7	**780-457**	50 (2x25)
	from 1 to 8	**780-458**	50 (2x25)
Push-in type wire jumper, ❸	insulated,		
	I_N 9 A,		
	wire size 0.75 mm²		
	L = 60 mm	**249-125**	10
	L = 110 mm	**249-126**	10
	L = 250 mm	**249-127**	10

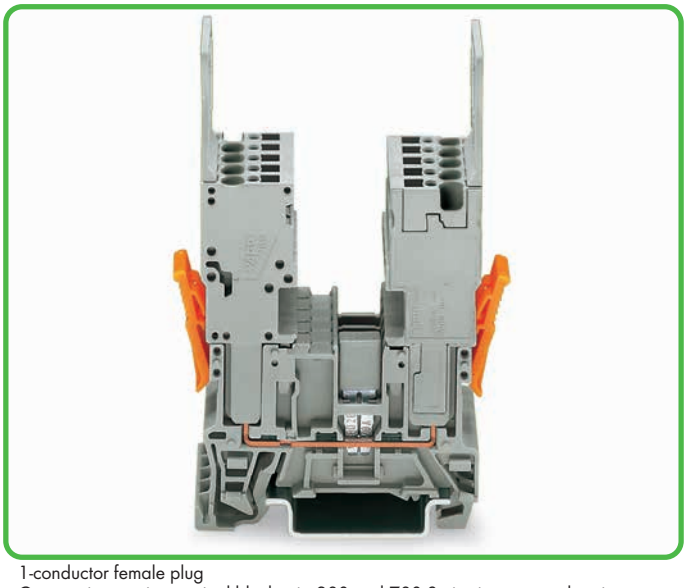
		Item No.	Pack. Unit
Test plug module, ❸	can be snapped together,		
	5 mm wide		
	gray	**280-418**	100 (4x25)
Spacer module,	can be snapped together,		
	5 mm wide		
	gray	**280-419**	100 (4x25)
Test plug,	with 500 mm cable,		
	2.3 mm Ø		
	yellow	**210-137**	50
Test plug adapter, 5 mm wide,	for terminal blocks 1.5 - 4 mm²,		
	for 210-137 test plug 2.3 mm Ø		
	gray	**280-404**	100 (4x25)
1-conductor female plug,	straight		
	gray	**769-101**	200
1-conductor female plug,	angled		
	gray	**769-101/022-000**	200
2-conductor female plug	gray	**769-121**	100
Pin cover,	with receptacle for miniature WSB		
	gray	**769-438**	100 (4x25)
	orange	**769-439**	100 (4x25)

Accessories

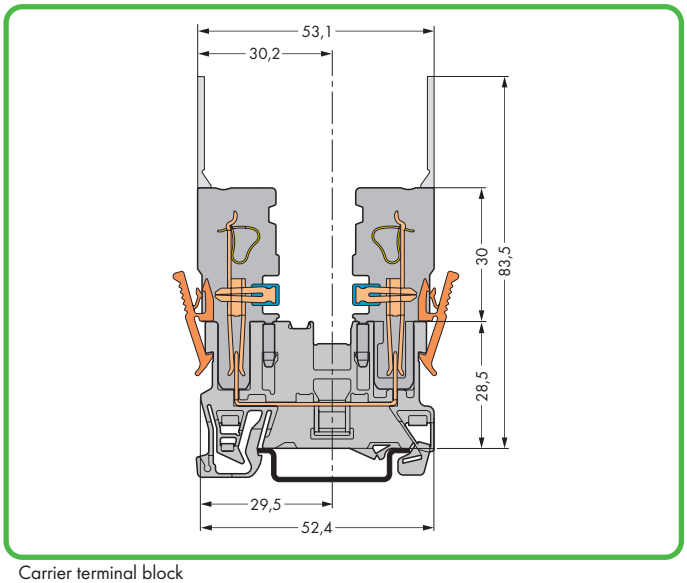
Screwless end stop,	for DIN 35 rail,		
	6 mm wide		
	gray	**249-116**	100 (4x25)
Screwless end stop,	for DIN 35 rail,		
	10 mm wide		
	gray	**249-117**	50 (2x25)
Miniature WSB Quick marking system,	10 strips with 10 markers per card,		
	5 mm wide markers		
	plain	**248-501**	5
Miniature WSB Quick marking system, plain,	10 strips with 10 markers per card,		
	5 mm wide markers		
	yellow	**248-501/000-002**	
	red	**248-501/000-005**	
	blue	**248-501/000-006**	
	gray	**248-501/000-007**	
	orange	**248-501/000-012**	
	light green	**248-501/000-017**	
	green	**248-501/000-023**	
	violet	**248-501/000-024**	
			5

Certification organizations can be found in the overview on pages 622 and 623.

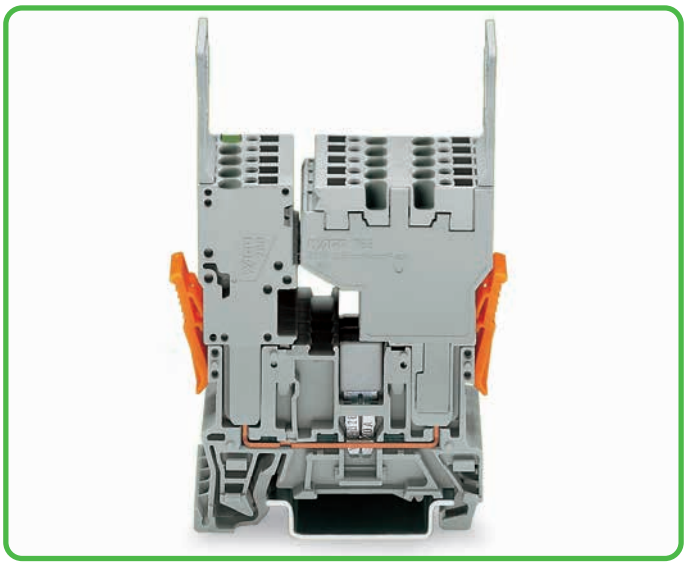
Types of Assembly
2-Pin Carrier Terminal Blocks and 1-/2-Conductor Female Plugs



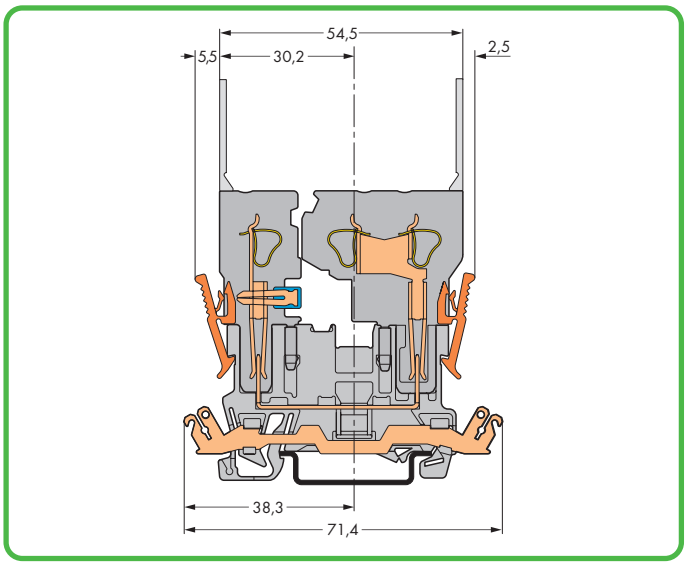
1-conductor female plug
Commoning carrier terminal blocks via 280 and 780 Series jumpers and testing using 280-4.. test plug adapter.



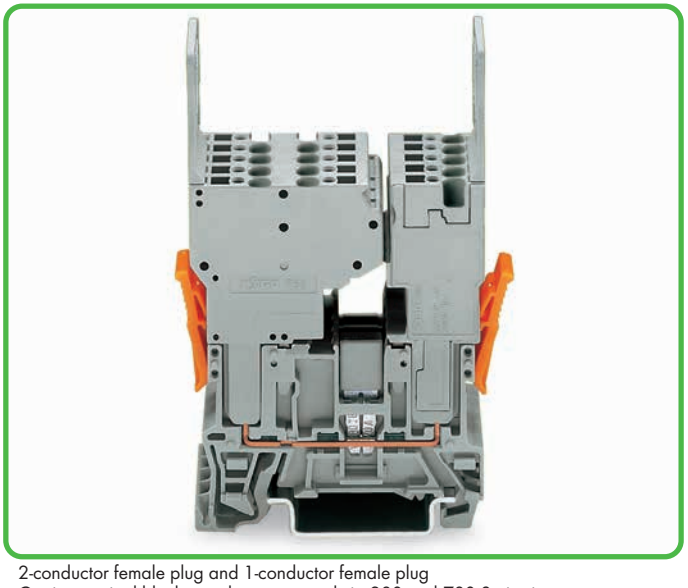
Carrier terminal block



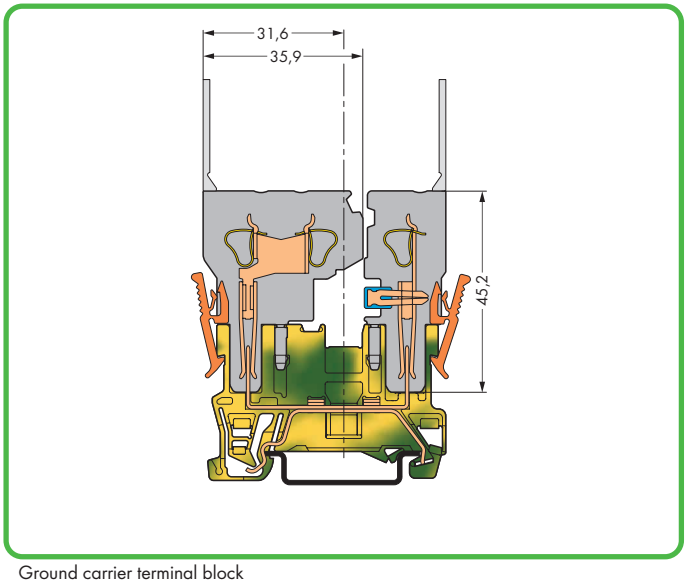
1-conductor female plug and 2-conductor female plug
Carrier terminal blocks can only be commoned via 280 Series adjacent and alternate jumpers.



Carrier terminal block with shield contact



2-conductor female plug and 1-conductor female plug
Carrier terminal blocks can be commoned via 280 and 780 Series jumpers.



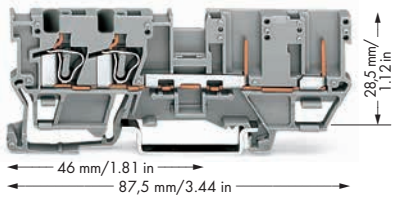
Ground carrier terminal block

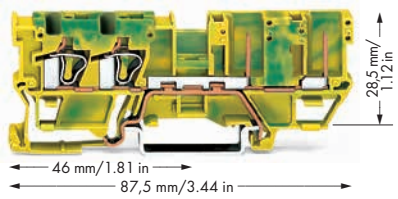
X-COM®-SYSTEM
2-Conductor/2-Pin Carrier Terminal Blocks

CAGE CLAMP®

0.08 - 4 mm²	AWG 28 - 12
500 V/6 kV/3 ❶	600 V, 20 A
I_N 32 A ❷	300 V, 20 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❸	

0.08 - 4 mm²	AWG 28 - 12
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❸	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
250 V/4 kV/3 =
ominal voltage with shield contact
(also see Section 14)

❷ See current-carrying capacity curve, page 361 and at www.wago.com

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Test plug modules, pages 288 – 290
Insulation stop, page 293
Staggered jumper, page 295
Push-in type wire jumper, page 295

❺ Note:
1-conductor female plug, angled is not suitable.

	Item No.	Pack. Unit
2-conductor/2-pin carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**769-171**	50
blue	**769-171/000-006**	50
2-conductor/2-pin carrier terminal block with shield contact, (no picture), for DIN 35 rail, acc. to EN 60715		
gray	**769-211** ❶	50

Item-Specific Accessories

Protective warning marker, with high-voltage symbol, black, for 5 terminal blocks		
yellow	**280-415**	100 (4x25)

769 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

End and intermediate plate, 1.1 mm thick		
orange	**769-304**	100 (4x25)
gray	**769-303**	100 (4x25)
Insulation stop, ❹ 5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
white	**769-470**	200 (8x25)
Insulation stop, ❹ 5 pcs/strip, 0.25 - 0.5 mm²		
light gray	**769-471**	200 (8x25)
Insulation stop, ❹ 5 pcs/strip, 0.75 - 1 mm²		
dark gray	**769-472**	200 (8x25)
Coding pin, for coding female plugs		
orange	**769-435**	100 (4x25)
Adjacent jumper, insulated, I_N = I_N terminal block		
gray	**280-402**	200 (8x25)
Alternate jumper, insulated, I_N = I_N terminal block		
gray	**280-409**	100 (4x25)

	Item No.	Pack. Unit
2-conductor/2-pin ground carrier terminal block, for DIN 35 rail, acc. to EN 60715		
green-yellow	**769-217**	50

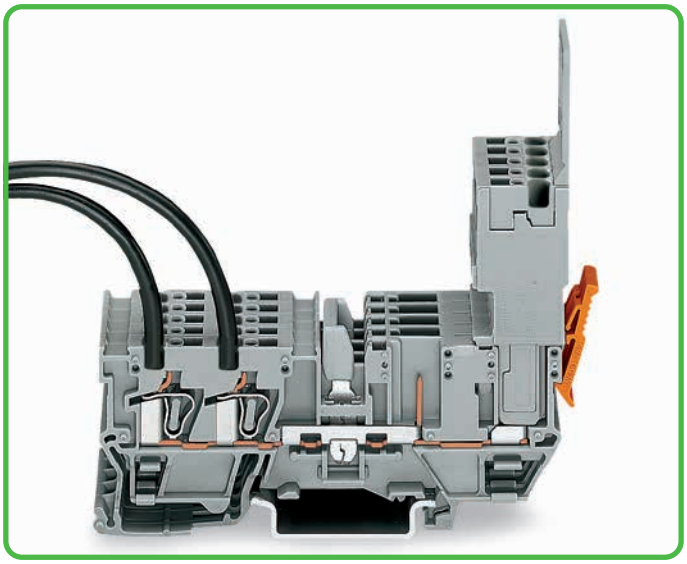
Staggered jumper, ❹ insulated, Spacing: 5 mm, I_N 24 A		
from 1 to 2	**780-452**	100 (4x25)
from 1 to 3	**780-453**	100 (4x25)
from 1 to 4	**780-454**	100 (4x25)
from 1 to 5	**780-455**	50 (2x25)
from 1 to 6	**780-456**	50 (2x25)
from 1 to 7	**780-457**	50 (2x25)
from 1 to 8	**780-458**	50 (2x25)
Push-in type wire jumper, ❹ insulated, I_N 9 A, wire size 0.75 mm²		
L = 60 mm	**249-125**	10
L = 110 mm	**249-126**	10
L = 250 mm	**249-127**	10
Test plug module, ❹ can be snapped together, 5 mm wide		
gray	**280-418**	100 (4x25)
Spacer module, can be snapped together, 5 mm wide		
gray	**280-419**	100 (4x25)

Accessories

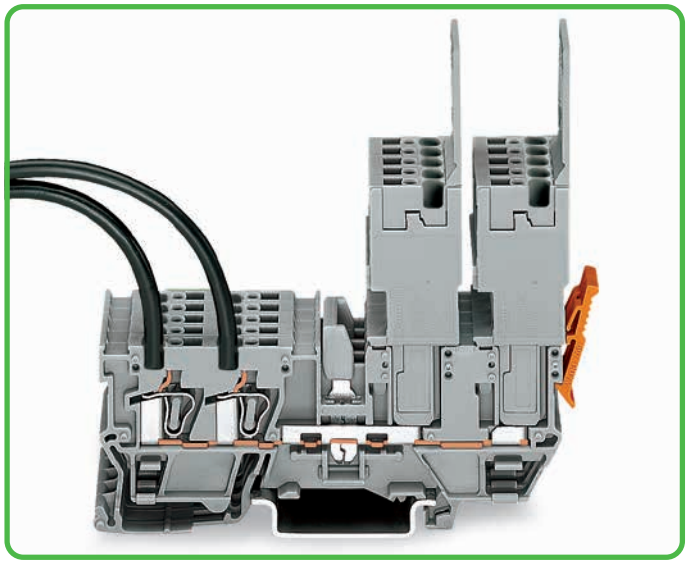
Test plug, with 500 mm cable, 2 mm Ø		
red	**210-136**	50
Test plug, with 500 mm cable, 2.3 mm Ø		
yellow	**210-137**	50
Test plug adapter, 5 mm wide, for terminal blocks 1.5 - 4 mm², for 210-137 test plug 2.3 mm Ø		
gray	**280-404**	100 (4x25)
Pin cover, with receptacle for miniature WSB		
gray	**769-438**	100 (4x25)
orange	**769-439**	100 (4x25)
1-conductor female plug, ❺ straight		
gray	**769-101**	200
2-conductor female plug		
gray	**769-121**	100
Miniature WSB Quick marking system, 10 strips with 10 markers per card, 5 mm wide markers		
plain	**248-501**	5
Screwless end stop, for DIN 35 rail, 6 mm wide		
gray	**249-116**	100 (4x25)
Screwless end stop, for DIN 35 rail, 10 mm wide		
gray	**249-117**	50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.

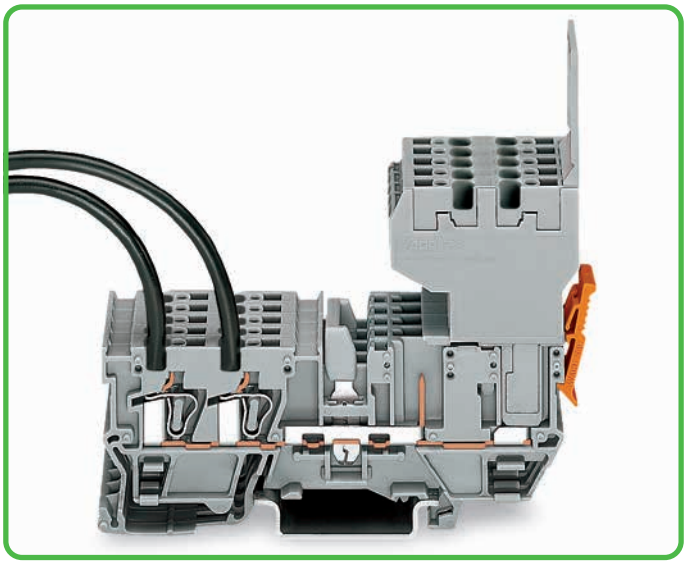
Types of Assembly
2-Conductor/2-Pin Carrier Terminal Blocks and 1-/2-Conductor Female Plugs



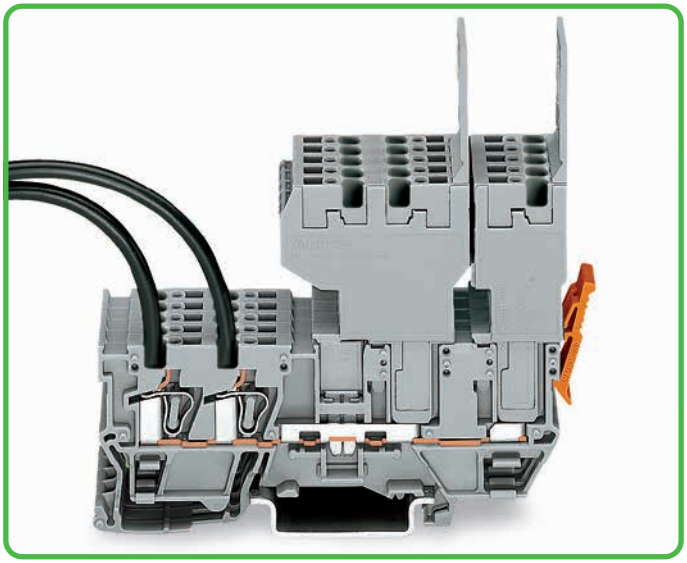
1-conductor female plug
Commoning carrier terminal blocks via 280 and 780 Series jumpers and testing using 280-4.. test plug adapter.



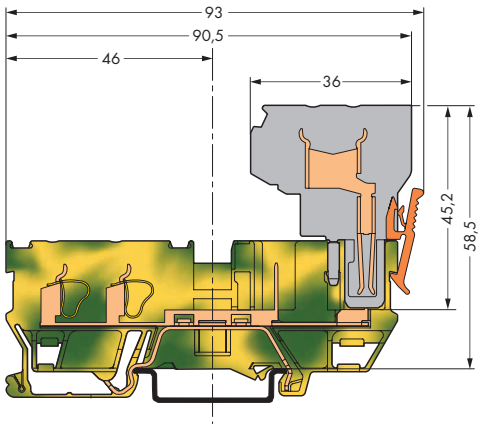
1-conductor female plug
Commoning carrier terminal blocks via 280 and 780 Series jumpers and testing using 280-4.. test plug adapter.

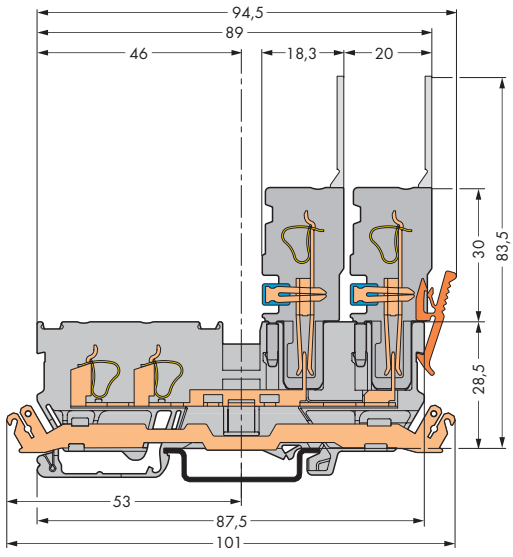


2-conductor female plug
Commoning carrier terminal blocks via 280 and 780 Series jumpers and testing using 280-4.. test plug adapter.



1-conductor female plug and 2-conductor female plug
Carrier terminal blocks can only be commoned via 280 Series adjacent and alternate jumpers.

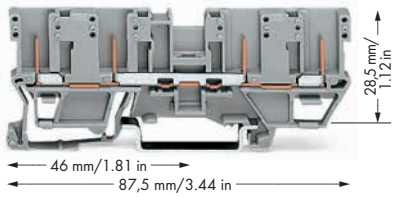


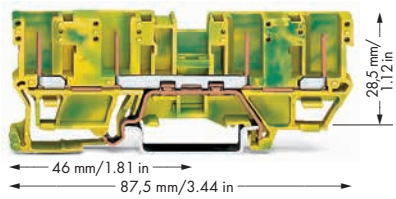


Ground carrier terminal block
Carrier terminal block with shield contact

X-COM®-SYSTEM
4-Pin Carrier Terminal Blocks

500 V/6 kV/3 ❶ | 300 V, 20 A I_N 32 A ❷ | 300 V, 20 A	Terminal block width 5 mm / 0.197 in
Terminal block width 5 mm / 0.197 in	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
250 V/4 kV/3 =
ominal voltage with shield contact
(also see Section 14)

❷ See current-carrying capacity curve, page 361 and at www.wago.com

❸ See application notes for:
Test plug modules, pages 289 – 290
Staggered jumper, page 295
Push-in type wire jumper, page 295

❹ Note:
1-conductor female plug, angled is not suitable.

	Item No.	Pack. Unit
4-pin carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**769-151**	50
4-pin carrier terminal block with shield contact, (no picture), for DIN 35 rail, acc. to EN 60715		
gray	**769-201** ❶	50

	Item No.	Pack. Unit
4-pin ground carrier terminal block, for DIN 35 rail, acc. to EN 60715		
green-yellow	**769-207**	50

769 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

End and intermediate plate, 1.1 mm thick			
	orange	**769-302**	100 (4x25)
	gray	**769-301**	100 (4x25)
Coding pin,			
	for coding female plugs		
	orange	**769-435**	100 (4x25)
Adjacent jumper, insulated,			
	I_N = I_N terminal block		
	gray	**280-402**	200 (8x25)
Alternate jumper, insulated,			
	I_N = I_N terminal block		
	gray	**280-409**	100 (4x25)
Staggered jumper, ❸			
	insulated,		
	Spacing: 5 mm,		
	I_N 24 A		
	from 1 to 2	**780-452**	100 (4x25)
	from 1 to 3	**780-453**	100 (4x25)
	from 1 to 4	**780-454**	100 (4x25)
	from 1 to 5	**780-455**	50 (2x25)
	from 1 to 6	**780-456**	50 (2x25)
	from 1 to 7	**780-457**	50 (2x25)
	from 1 to 8	**780-458**	50 (2x25)
Push-in type wire jumper, ❸			
	insulated,		
	I_N 9 A,		
	wire size 0.75 mm²		
	L = 60 mm	**249-125**	10
	L = 110 mm	**249-126**	10
	L = 250 mm	**249-127**	10

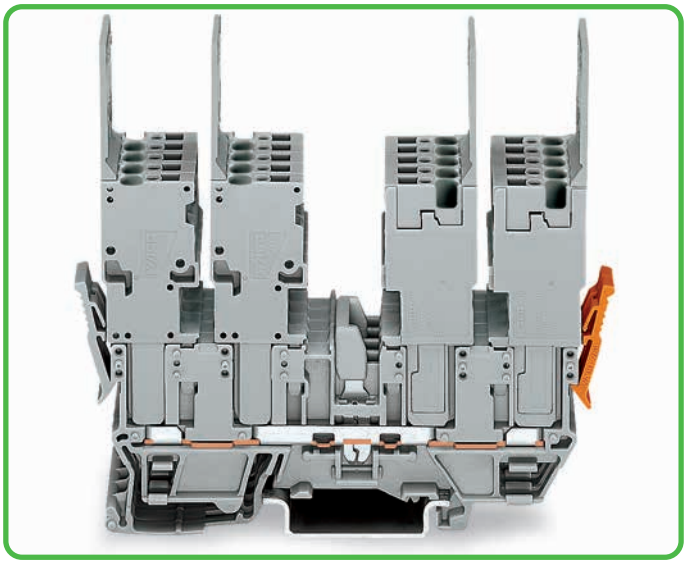
Test plug module, ❸			
	can be snapped together,		
	5 mm wide		
	gray	**280-418**	100 (4x25)
Spacer module,			
	can be snapped together,		
	5 mm wide		
	gray	**280-419**	100 (4x25)
Test plug,			
	with 500 mm cable,		
	2.3 mm Ø		
	yellow	**210-137**	50
Test plug adapter, 5 mm wide,			
	for terminal blocks 1.5 - 4 mm²,		
	for 210-137 test plug 2.3 mm Ø		
	gray	**280-404**	100 (4x25)
Pin cover,			
	with receptacle for miniature WSB		
	gray	**769-438**	100 (4x25)
	orange	**769-439**	100 (4x25)
1-conductor female plug, ❹			
	straight		
	gray	**769-101**	200
2-conductor female plug			
	gray	**769-121**	100

Accessories

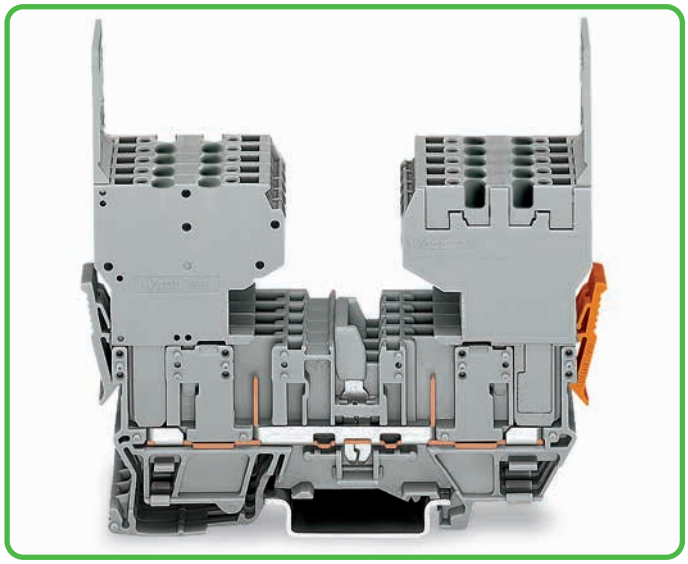
Miniature WSB Quick marking system,			
	10 strips with 10 markers per card,		
	5 mm wide markers		
	plain	**248-501**	5
Miniature WSB Quick marking system, plain,			
	10 strips with 10 markers per card,		
	5 mm wide markers		
	yellow	**248-501/000-002**	
	red	**248-501/000-005**	
	blue	**248-501/000-006**	
	gray	**248-501/000-007**	
	orange	**248-501/000-012**	
	light green	**248-501/000-017**	
	green	**248-501/000-023**	
	violet	**248-501/000-024**	
			5
Screwless end stop,			
	for DIN 35 rail,		
	6 mm wide		
	gray	**249-116**	100 (4x25)
Screwless end stop,			
	for DIN 35 rail,		
	10 mm wide		
	gray	**249-117**	50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.

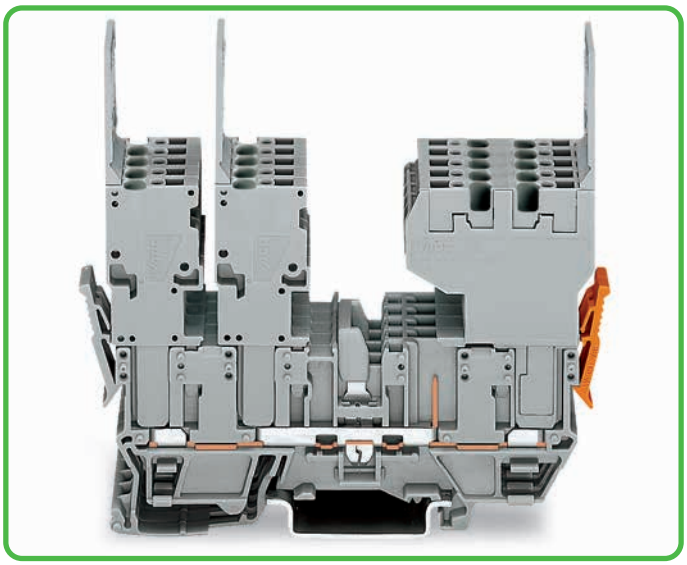
Types of Assembly
4-Pin Carrier Terminal Blocks and 1-/2-Conductor Female Plugs



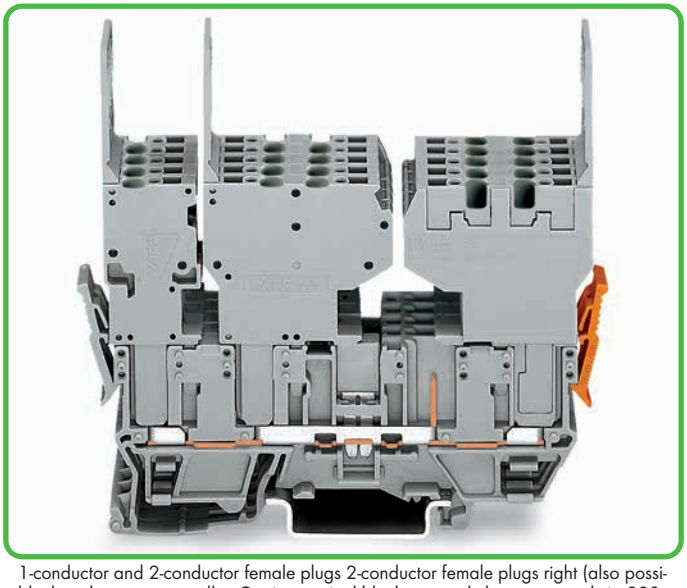
4 x 1-conductor female plugs – Commoning carrier terminal blocks via 280 and 780 Series jumpers and testing using 280-4.. test plug adapter.



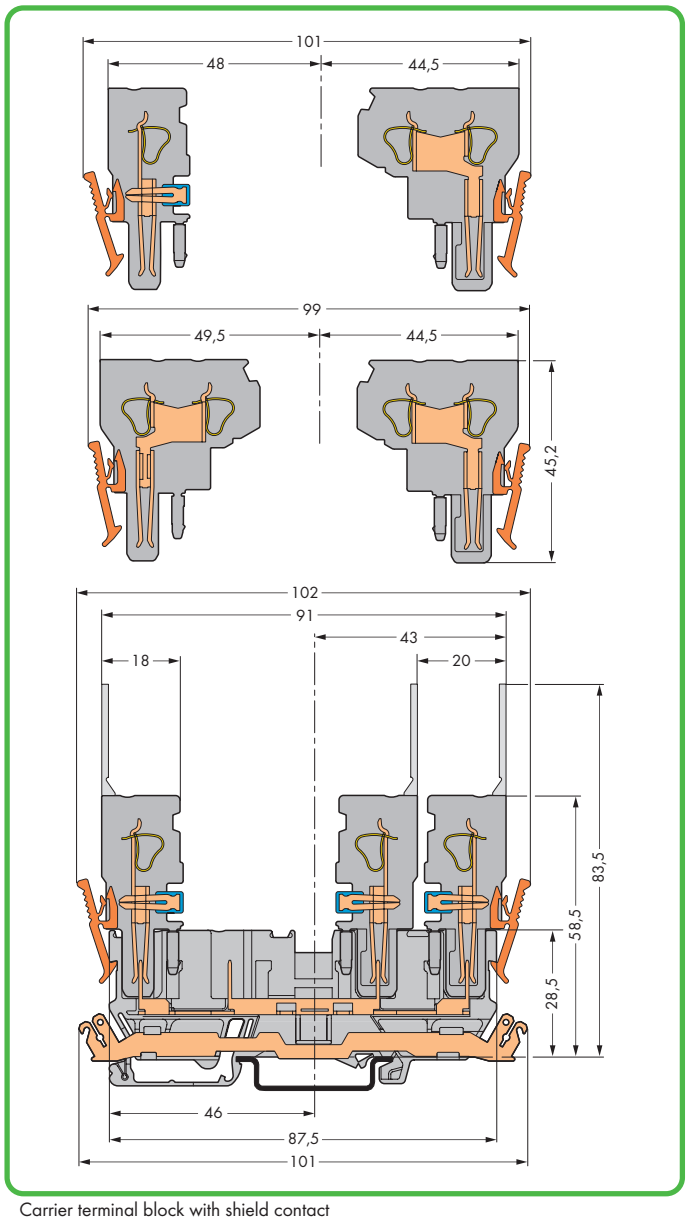
2 x 2-conductor female plugs – Commoning carrier terminal blocks via 280 and 780 Series jumpers and testing using 280-4.. test plug adapter.



2 x 1-conductor female plugs left 1 x 2-conductor female plugs right (also possible the other way around) – Commoning carrier terminal blocks via 280 and 780 Series jumpers and testing using 280-4.. test plug adapter.



1-conductor and 2-conductor female plugs 2-conductor female plugs right (also possible the other way around) – Carrier terminal blocks can only be commoned via 280 Series adjacent and alternate jumpers.



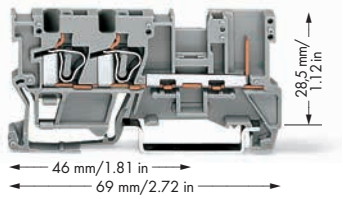
Carrier terminal block with shield contact

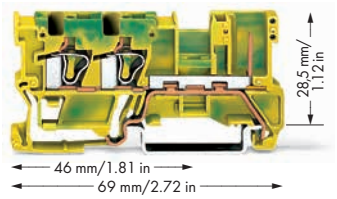
X-COM®-SYSTEM
2-Conductor/1-Pin Carrier Terminal Blocks

CAGE CLAMP®

0.08 - 4 mm²	AWG 28 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A ❷	300 V, 20 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❸	

0.08 - 4 mm²	AWG 28 - 12
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❸	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ See current-carrying capacity curve at www.wago.com

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Test plug modules, pages 288 – 290
Insulation stop, page 293
Staggered jumper, page 295
Push-in type wire jumper, page 295

	Item No.	Pack. Unit
2-conductor/1-pin carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**769-251**	50
blue	**769-251/000-006**	50

Item-Specific Accessories

Protective warning marker,
with high-voltage symbol, black, for 5 terminal blocks
yellow **280-415** 100 (4x25)

769 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

End and intermediate plate, 1.1 mm thick
orange **769-321** 100 (4x25)
gray **769-320** 100 (4x25)

Insulation stop, ❹
5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **769-470** 200 (8x25)

Insulation stop, ❹
5 pcs/strip, 0.25 - 0.5 mm²
light gray **769-471** 200 (8x25)

Insulation stop, ❹
5 pcs/strip, 0.75 - 1 mm²
dark gray **769-472** 200 (8x25)

Coding pin,
for coding female plugs
orange **769-435** 100 (4x25)

Adjacent jumper, insulated,
I_N = I_N terminal block
gray **280-402** 200 (8x25)

Alternate jumper, insulated, ❹
I_N = I_N terminal block
gray **280-409** 100 (4x25)

Push-in type wire jumper,
insulated, I_N 9 A, wire size 0.75 mm²
L = 60 mm **249-125** 10
L = 110 mm **249-126** 10
L = 250 mm **249-127** 10

	Item No.	Pack. Unit
2-conductor/1-pin ground carrier terminal block, for DIN 35 rail, acc. to EN 60715		
green-yellow	**769-257**	50

Staggered jumper, ❹
insulated, Spacing: 5 mm, I_N 24 A
from 1 to 2 **780-452** 100 (4x25)
from 1 to 3 **780-453** 100 (4x25)
from 1 to 4 **780-454** 100 (4x25)
from 1 to 5 **780-455** 50 (2x25)
from 1 to 6 **780-456** 50 (2x25)
from 1 to 7 **780-457** 50 (2x25)
from 1 to 8 **780-458** 50 (2x25)

Test plug module, ❹
can be snapped together, 5 mm wide
gray **280-418** 100 (4x25)

Spacer module,
can be snapped together, 5 mm wide
gray **280-419** 100 (4x25)

B-type test plug module, ❹
can be snapped together, 5 mm wide
gray **249-106** 100 (4x25)

Test plug,
with 500 mm cable, 2 mm Ø
red **210-136** 50

Test plug,
with 500 mm cable, 2.3 mm Ø
yellow **210-137** 50

Test plug adapter, 5 mm wide,
for terminal blocks 1.5 - 4 mm², for 210-137 test plug 2.3 mm Ø
gray **280-404** 100 (4x25)

Accessories

Pin cover,
with receptacle for miniature WSB
gray **769-438** 100 (4x25)
orange **769-439** 100 (4x25)

1-conductor female plug,
straight
gray **769-101** 200

1-conductor female plug,
angled
gray **769-101/022-000** 200

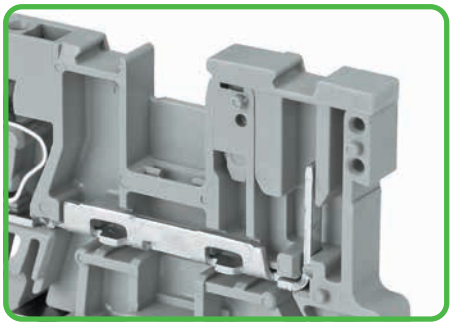
2-conductor female plug
gray **769-121** 100

Miniature WSB Quick marking system,
10 strips with 10 markers per card, 5 mm wide markers
plain **248-501** 5

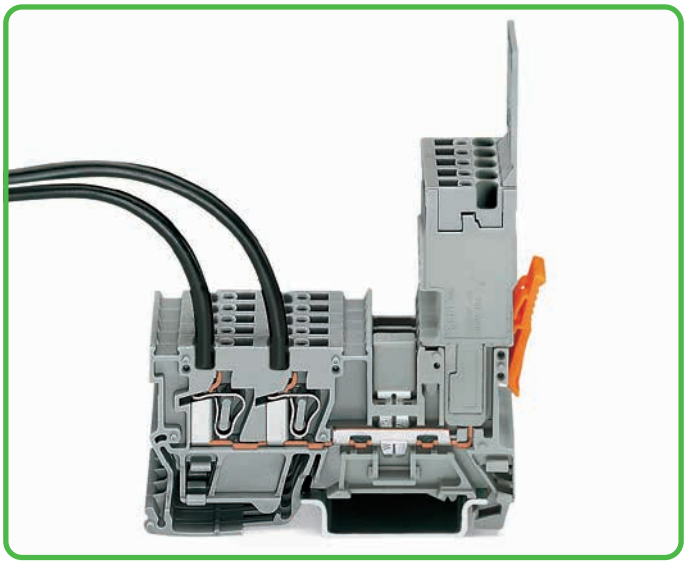
Miniature WSB Quick marking system, plain,
10 strips with 10 markers per card, 5 mm wide markers
yellow **248-501/000-002**
red **248-501/000-005**
blue **248-501/000-006**
gray **248-501/000-007**
orange **248-501/000-012**
light green **248-501/000-017**
green **248-501/000-023**
violet **248-501/000-024**
5

Certification organizations can be found in the overview on pages 622 and 623.

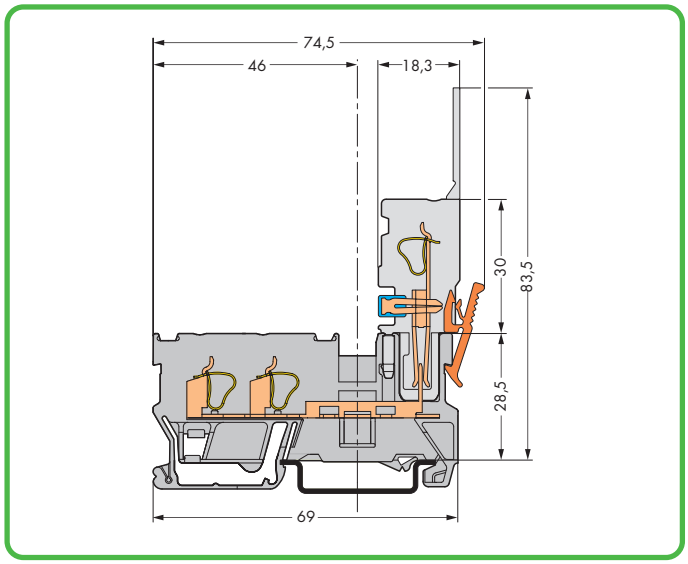
Types of Assembly
2-Conductor/1-Pin Carrier Terminal Blocks and 1-/2-Conductor Female Plugs



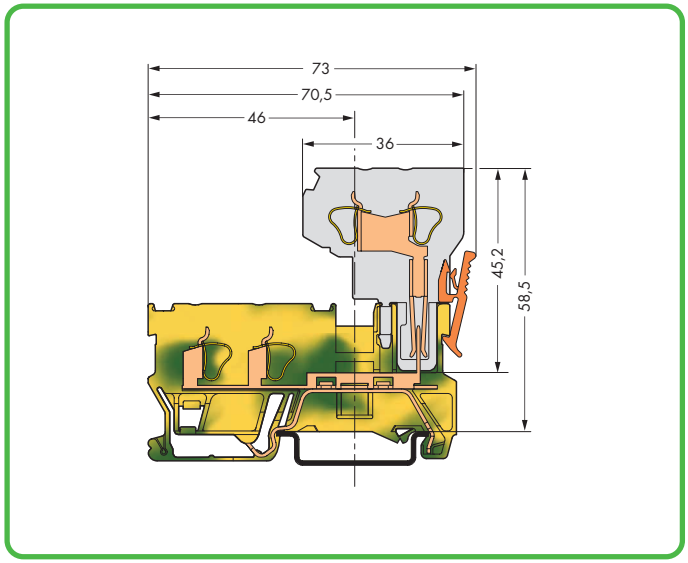
Pin cover
with receptacle for miniature WSB



1-conductor female plug
Commoning carrier terminal blocks via 280 and 780 Series jumpers and testing using 280-4.. test plug adapter.



Carrier terminal block



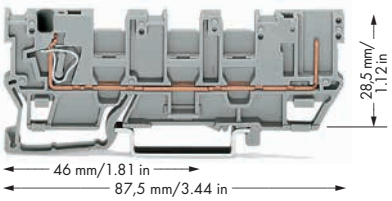
Ground carrier terminal block

X-COM®-SYSTEM
1-Conductor/1-Pin Carrier Terminal Blocks with 3 Jumper Positions

CAGE CLAMP®

0.08 - 4 mm²	AWG 28 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A ❷	300 V, 20 A

Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❸



❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ See current-carrying capacity curve at www.wago.com

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Insulation stop, page 293

Item No.		Pack. Unit
1-conductor/1-pin carrier terminal block with 3 jumper positions,		
for DIN 35 rail, acc. to EN 60715		
gray	**769-214**	50
Full range of 769 Series accessories, see page 304		

769 Series Accessories

End and intermediate plate, 1.1 mm thick



orange	**769-316**	100 (4x25)
gray	**769-315**	100 (4x25)

Insulation stop, ❹



5 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")

white	**769-470**	200 (8x25)

Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

Insulation stop, ❹



5 pcs/strip,
0.25 - 0.5 mm²

light gray	**769-471**	200 (8x25)

Insulation stop, ❹



5 pcs/strip,
0.75 - 1 mm²

dark gray	**769-472**	200 (8x25)

Adjacent jumper, insulated,



I_N = I_N terminal block

gray	**280-402**	200 (8x25)

Alternate jumper, insulated,



I_N = I_N terminal block

gray	**280-409**	100 (4x25)

Coding pin,



for coding female plugs

orange	**769-435**	100 (4x25)

1-conductor female plug,



straight

gray	**769-101**	200

1-conductor female plug,



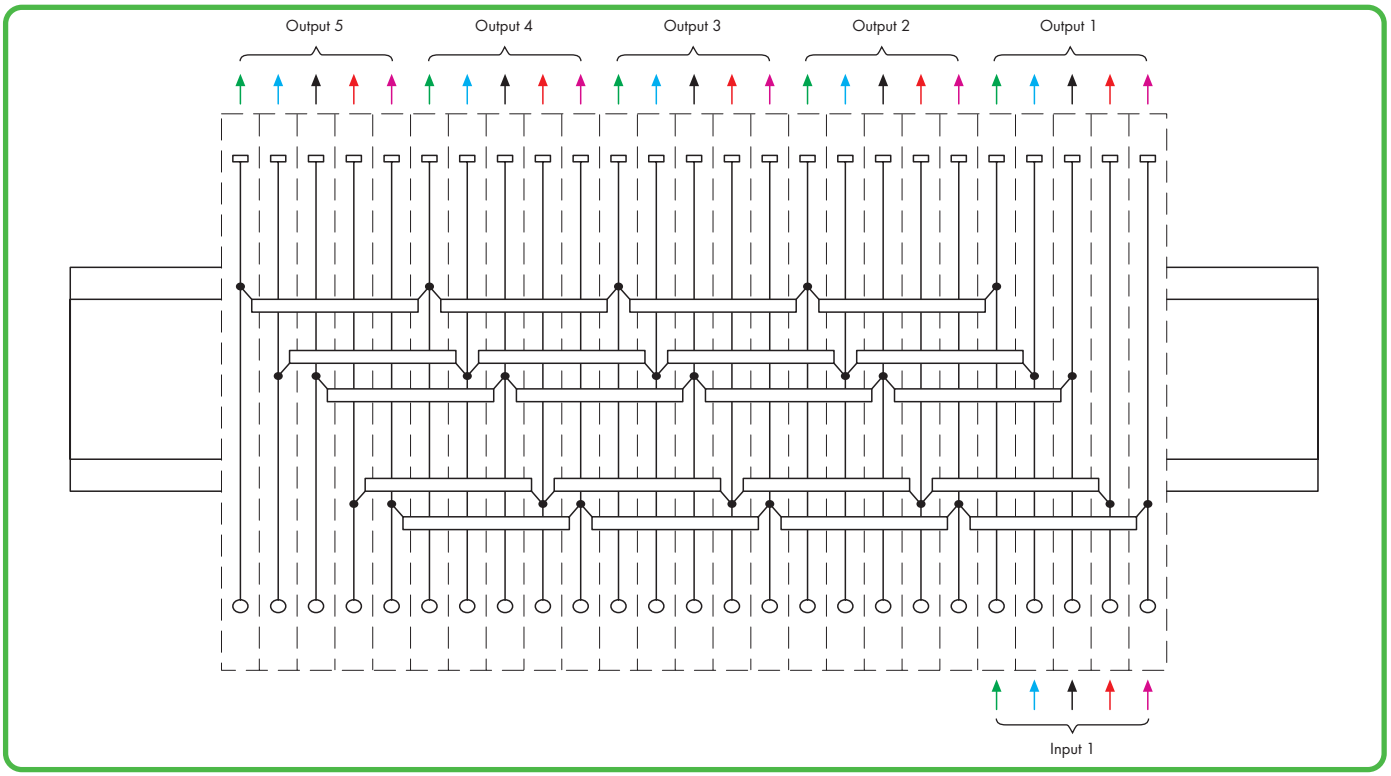
angled

gray	**769-101/022-000**	200

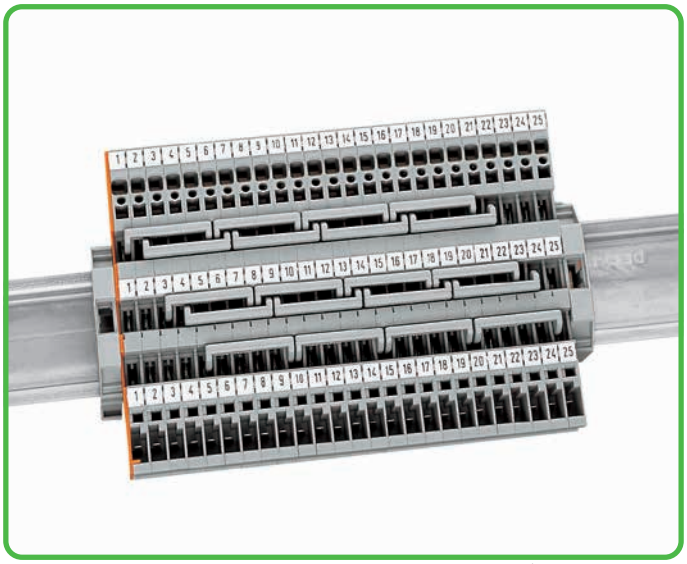
2-conductor female plug

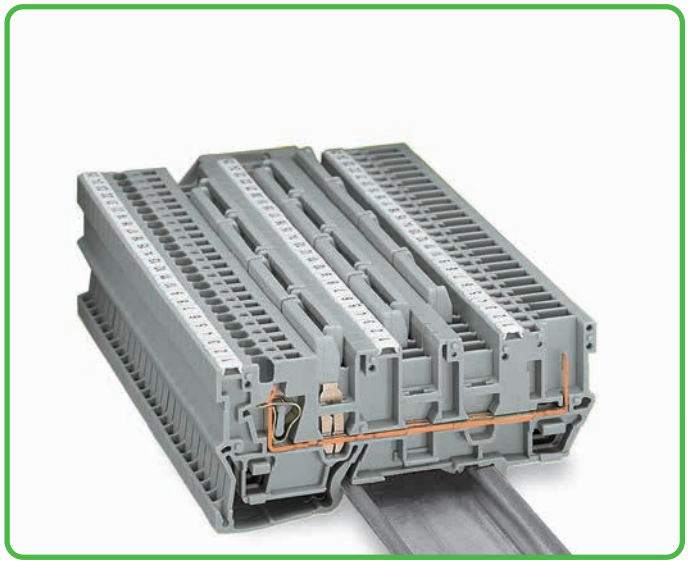


gray	**769-121**	100

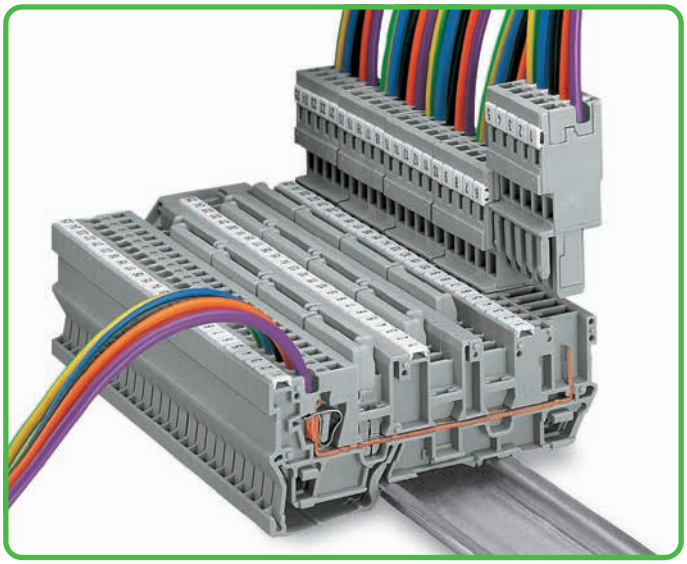


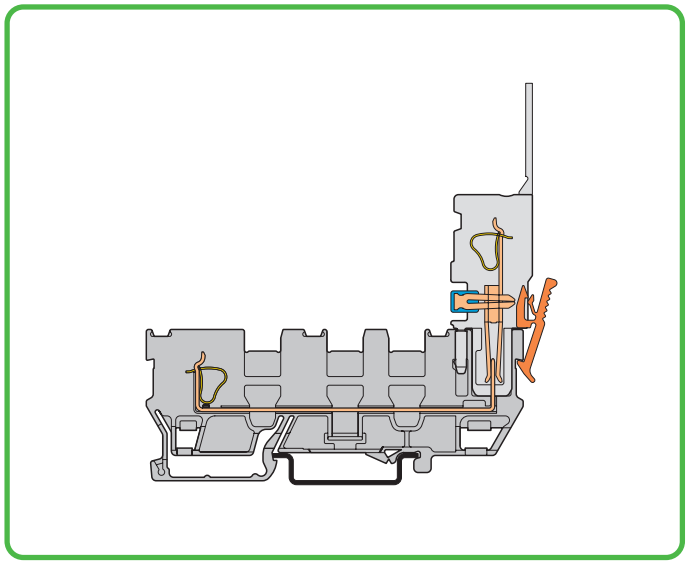
Certification organizations can be found in the overview on pages 622 and 623.





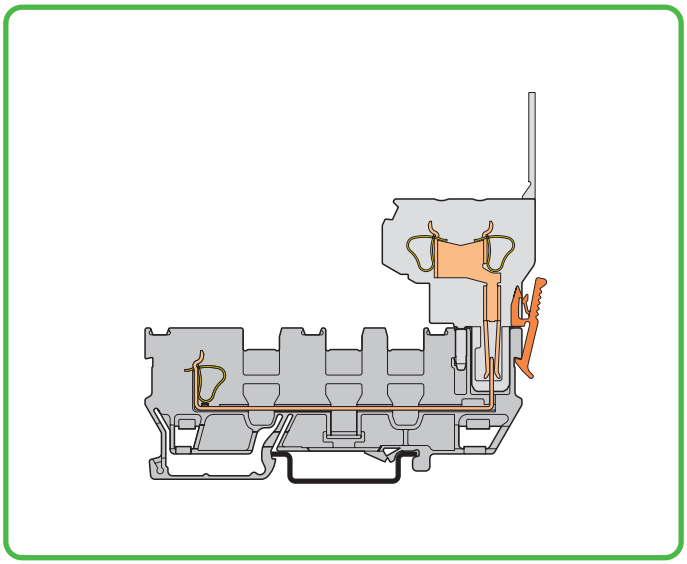
1-conductor/1-pin carrier terminal blocks with 3 jumper positions
The 3 jumper positions allow up to six jumpering possibilities for staggered jumpers.





Carrier terminal block
For dimensions, see page 308.

Application examples:
- Muliplication of three-phase circuits L1-L2-L3-N-PE with pluggable outputs; e.g., use with motors, frequency converters, power units.
- Voltage supplies to multiple locations
  ± 15 V, 0 V, + 5 V, + 12 V, + 24 V
- Various wire-to-wire interfacing possibilities



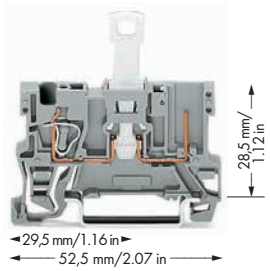
Carrier terminal block
For dimensions, see page 308.

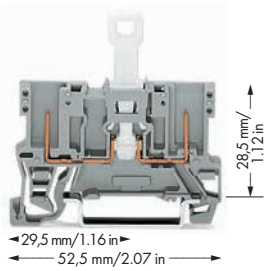
X-COM®-SYSTEM
1-Conductor/1-Pin and 2-Pin Disconnect Carrier Terminal Blocks

CAGE CLAMP®

0.08 - 4 mm²	AWG 28 - 12
400 V/6 kV/3 ❶	300 V, 20 A
I_N 16 A ❷	300 V, 20 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❸	

400 V/6 kV/3 ❶	600 V, 20 A
I_N 16 A ❷	300 V, 20 A
Terminal block width 5 mm / 0.197 in	





❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
250 V/4 kV/3 =
ominal voltage with shield contact
(also see Section 14)

❷ 16 A, 85°C upper temperature limit (see current-carrying capacity curve at www.wago.com)

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Insulation stop, page 293

❺ Note:
2-conductor female plug is not suitable.

	Item No.	Pack. Unit
1-conductor/1-pin disconnect carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**769-232**	50
1-conductor/1-pin disconnect carrier terminal block with shield contact, (no picture), for DIN 35 rail, acc. to EN 60715		
gray	**769-233** ❶	50

Item-Specific Accessories

End and intermediate plate, 1.1 mm thick			
	orange	**769-308**	100 (4x25)
	gray	**769-307**	100 (4x25)
Insulation stop, ❹			
	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**769-470**	200 (8x25)
Insulation stop, ❹			
	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**769-471**	200 (8x25)
Insulation stop, ❹			
	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**769-472**	200 (8x25)
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**280-415**	100 (4x25)
Test plug,			
	with 500 mm cable, 2 mm Ø		
	red	**210-136**	50

769 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

Coding pin,			
	for coding female plugs		
	orange	**769-435**	100 (4x25)
Test plug,			
	with 500 mm cable, 2.3 mm Ø		
	yellow	**210-137**	50
Disconnect lock,			
	for disconnect tab used on 280/281 and 769 Series disconnect terminal blocks		
	red	**709-170**	200 (8x25)

	Item No.	Pack. Unit
2-pin disconnect carrier terminal block, for DIN 35 rail, acc. to EN 60715		
gray	**769-222**	50
2-pin disconnect carrier terminal block with shield contact, (no picture), for DIN 35 rail, acc. to EN 60715		
gray	**769-223** ❶	50

Item-Specific Accessories

End and intermediate plate, 1.1 mm thick			
	orange	**769-306**	100 (4x25)
	gray	**769-305**	100 (4x25)

1-conductor female plug, ❺ straight			
	gray	**769-101**	200
1-conductor female plug, angled			
	gray	**769-101/022-000**	200
Miniature WSB Quick marking system,			
	10 strips with 10 markers per card, 5 mm wide markers		
	plain	**248-501**	5

Accessories

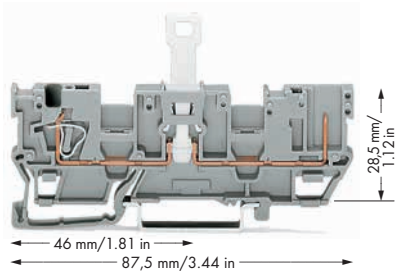
Miniature WSB Quick marking system, plain, 10 strips with 10 markers per card, 5 mm wide markers			
	yellow	**248-501/000-002**	
	red	**248-501/000-005**	
	blue	**248-501/000-006**	
	gray	**248-501/000-007**	
	orange	**248-501/000-012**	
	light green	**248-501/000-017**	
	green	**248-501/000-023**	
	violet	**248-501/000-024**	
			5
Screwless end stop, for DIN 35 rail, 6 mm wide			
	gray	**249-116**	100 (4x25)
Screwless end stop, for DIN 35 rail, 10 mm wide			
	gray	**249-117**	50 (2x25)

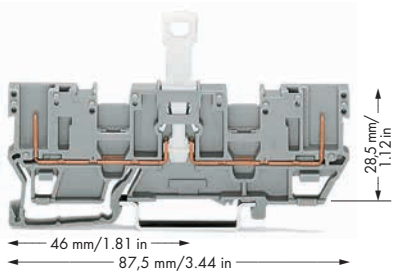
Certification organizations can be found in the overview on pages 622 and 623.

X-COM®-SYSTEM
1-Conductor/1-Pin and 2-Pin Disconnect Carrier Terminal Blocks with 2 Jumper Positions

0.08 - 4 mm²	AWG 28 - 12
400 V/6 kV/3 ❶	300 V, 20 A
I_N 16 A ❷	300 V, 20 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❸	

400 V/6 kV/3 ❶	300 V, 20 A
I_N 16 A ❷	300 V, 20 A
Terminal block width 5 mm / 0.197 in	





❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
250 V/4 kV/3 =
ominal voltage with shield contact
(also see Section 14)

❷ 16 A, 85°C upper temperature limit (see current-carrying capacity curve at www.wago.com)

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Test plug module, page 290
Insulation stop, page 293
Staggered jumper, page 295
Push-in type wire jumper, page 295

Item No.		Pack. Unit
1-conductor/1-pin disconnect carrier terminal block with 2 jumper positions, for DIN 35 rail, acc. to EN 60715		
gray	**769-212**	50
1-conductor/1-pin disconnect carrier terminal block with 2 jumper positions and with shield contact, (no picture), for DIN 35 rail, acc. to EN 60715		
gray	**769-213** ❶	50

Item No.		Pack. Unit
2-pin disconnect carrier terminal block with 2 jumper positions, for DIN 35 rail, acc. to EN 60715		
gray	**769-202**	50
2-pin disconnect carrier terminal block with 2 jumper positions and with shield contact, (no picture), for DIN 35 rail, acc. to EN 60715		
gray	**769-203** ❶	50

Item-Specific Accessories

End and intermediate plate, 1.1 mm thick			
	orange	**769-312**	100 (4x25)
	gray	**769-311**	100 (4x25)
Separator, oversized, 1.1 mm thick			
	orange	**769-314**	100 (4x25)
Insulation stop, ❹			
	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**769-470**	200 (8x25)
Insulation stop, ❹			
	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**769-471**	200 (8x25)
Insulation stop, ❹			
	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**769-472**	200 (8x25)
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**280-415**	100 (4x25)
Test plug,			
	with 500 mm cable, 2 mm Ø		
	red	**210-136**	50

Item-Specific Accessories

End and intermediate plate, 1.1 mm thick			
	orange	**769-310**	100 (4x25)
	gray	**769-309**	100 (4x25)
Separator, oversized, 1.1 mm thick			
	orange	**769-313**	100 (4x25)

769 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

Coding pin,			
	for coding female plugs		
	orange	**769-435**	100 (4x25)
Test plug,			
	with 500 mm cable, 2.3 mm Ø		
	yellow	**210-137**	50

Accessories

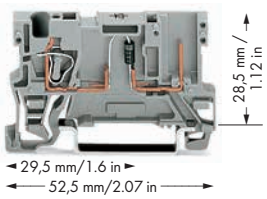
Adjacent jumper, insulated,			
	I_N = I_N terminal block		
	gray	**280-402**	200 (8x25)
Alternate jumper, insulated,			
	I_N = I_N terminal block		
	gray	**280-409**	100 (4x25)
Staggered jumper, ❹			
	insulated, Spacing: 5 mm, I_N 24 A		
	from 1 to 2	**780-452**	100 (4x25)
	from 1 to 3	**780-453**	100 (4x25)
	from 1 to 4	**780-454**	100 (4x25)
	from 1 to 5	**780-455**	50 (2x25)
	from 1 to 6	**780-456**	50 (2x25)
	from 1 to 7	**780-457**	50 (2x25)
	from 1 to 8	**780-458**	50 (2x25)
Push-in type wire jumper, ❹			
	insulated, I_N 9 A, wire size 0.75 mm²		
	L = 60 mm	**249-125**	10
	L = 110 mm	**249-126**	10
	L = 250 mm	**249-127**	10
Test plug module, ❹			
	can be snapped together, 5 mm wide		
	gray	**280-418**	100 (4x25)
Disconnect lock,			
	for disconnect tab used on 280/281 and 769 Series disconnect terminal blocks		
	red	**709-170**	200 (8x25)
1-conductor female plug,			
	straight		
	gray	**769-101**	200
1-conductor female plug,			
	angled		
	gray	**769-101/022-000**	200
2-conductor female plug			
	gray	**769-121**	100

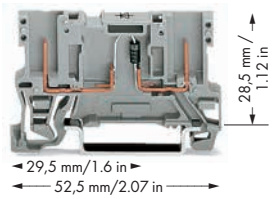
Certification organizations can be found in the overview on pages 622 and 623.

X-COM®-SYSTEM
1-Conductor/1-Pin and 2-Pin Diode Carrier Terminal Blocks

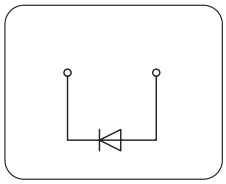
CAGE CLAMP®

0.08 - 4 mm² | AWG 28 - 12 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❶	U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in

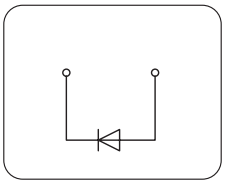




Circuit I Circuit II



Circuit I Circuit II



❶ Strip length, see packaging or instructions.
❷ See application notes for: Insulation stop, page 293
❸ Note: 2-conductor female plug is not suitable.

Item No.		Pack. Unit
1-conductor/1-pin diode carrier terminal block,		
for DIN 35 rail, acc. to EN 60715		
Anode right	**769-238/281-411**	100
Anode left	**769-238/281-410**	100

Item No.		Pack. Unit
2-pin diode carrier terminal block,		
for DIN 35 rail, acc. to EN 60715		
Anode right	**769-228/281-411**	100
Anode left	**769-228/281-410**	100

Item-Specific Accessories

End and intermediate plate, 1.1 mm thick			
orange	**769-308**	100 (4x25)	
gray	**769-307**	100 (4x25)	
Insulation stop, ❷			
5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")			
white	**769-470**	200 (8x25)	
Insulation stop, ❷			
5 pcs/strip, 0.25 - 0.5 mm²			
light gray	**769-471**	200 (8x25)	
Insulation stop, ❷			
5 pcs/strip, 0.75 - 1 mm²			
dark gray	**769-472**	200 (8x25)	
Protective warning marker,			
with high-voltage symbol, black, for 5 terminal blocks			
yellow	**280-415**	100 (4x25)	
Test plug,			
with 500 mm cable, 2 mm Ø			
red	**210-136**	50	

Item-Specific Accessories

End and intermediate plate, 1.1 mm thick			
orange	**769-306**	100 (4x25)	
gray	**769-305**	100 (4x25)	

769 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

Coding pin,			
for coding female plugs			
orange	**769-435**	100 (4x25)	
Test plug,			
with 500 mm cable, 2.3 mm Ø			
yellow	**210-137**	50	

1-conductor female plug, ❸			
straight			
gray	**769-101**	200	
1-conductor female plug,			
angled			
gray	**769-101/022-000**	200	

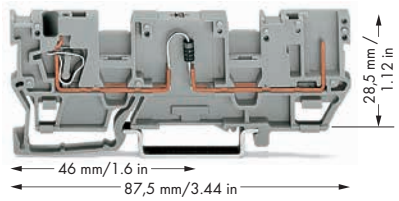
Accessories

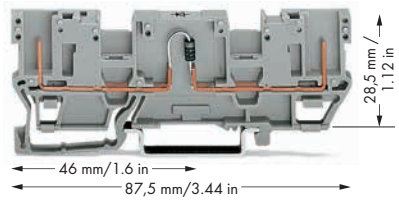
Miniature WSB Quick marking system,			
10 strips with 10 markers per card, 5 mm wide markers			
plain	**248-501**		5
Miniature WSB Quick marking system, plain,			
10 strips with 10 markers per card, 5 mm wide markers			
yellow	**248-501/000-002**		
red	**248-501/000-005**		
blue	**248-501/000-006**		
gray	**248-501/000-007**		
orange	**248-501/000-012**		
light green	**248-501/000-017**		
green	**248-501/000-023**		
violet	**248-501/000-024**		
			5
Screwless end stop,			
for DIN 35 rail, 6 mm wide			
gray	**249-116**	100 (4x25)	
Screwless end stop,			
for DIN 35 rail, 10 mm wide			
gray	**249-117**	50 (2x25)	

Certification organizations can be found in the overview on pages 622 and 623.

X-COM®-SYSTEM
1-Conductor/1-Pin and 2-Pin Diode Carrier Terminal Blocks with 2 Jumper Positions

0.08 - 4 mm² | AWG 28 - 12 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❶	U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in

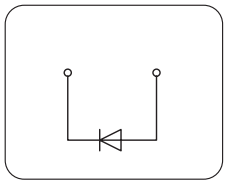




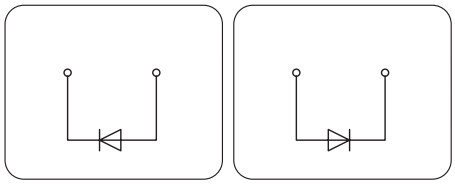
❶ Strip length, see packaging or instructions.

❷ See application notes for:
Test plug module, page 290
Insulation stop, page 293
Staggered jumper, page 295
Push-in type wire jumper, page 295

Circuit I Circuit II



Circuit I Circuit II



Item No.		Pack. Unit
1-conductor/1-pin diode carrier terminal block with 2 jumper positions, for DIN 35 rail, acc. to EN 60715		
Anode right	**769-218/281-411**	50
Anode left	**769-218/281-410**	50

Full range of 769 Series accessories, see page 304

Item No.		Pack. Unit
2-pin diode carrier terminal block with 2 jumper positions, for DIN 35 rail, acc. to EN 60715		
Anode right	**769-208/281-411**	50
Anode left	**769-208/281-410**	50

Full range of 769 Series accessories, see page 306

Item-Specific Accessories

End and intermediate plate, 1.1 mm thick			
	orange	**769-312**	100 (4x25)
	gray	**769-311**	100 (4x25)
Separator, oversized, 1.1 mm thick			
	orange	**769-314**	100 (4x25)
Insulation stop, ❷			
	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**769-470**	200 (8x25)
Insulation stop, ❷			
	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**769-471**	200 (8x25)
Insulation stop, ❷			
	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**769-472**	200 (8x25)
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**280-415**	100 (4x25)
Test plug,			
	with 500 mm cable, 2 mm Ø		
	red	**210-136**	50

Item-Specific Accessories

End and intermediate plate, 1.1 mm thick			
	orange	**769-310**	100 (4x25)
	gray	**769-309**	100 (4x25)
Separator, oversized, 1.1 mm thick			
	orange	**769-313**	100 (4x25)

769 Series Accessories

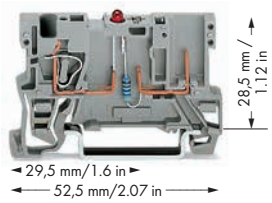
Appropriate marking system: Miniature WSB (see Section 13)

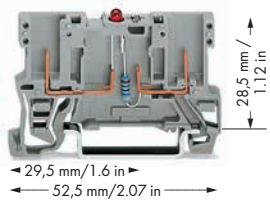
Coding pin,			
	for coding female plugs		
	orange	**769-435**	100 (4x25)
Test plug,			
	with 500 mm cable, 2.3 mm Ø		
	yellow	**210-137**	50
Adjacent jumper, insulated,			
	I_N = I_N terminal block		
	gray	**280-402**	200 (8x25)
Staggered jumper, ❷			
	insulated, Spacing: 5 mm, I_N 24 A		
	from 1 to 2	**780-452**	100 (4x25)
	from 1 to 3	**780-453**	100 (4x25)
	from 1 to 4	**780-454**	100 (4x25)
	from 1 to 5	**780-455**	50 (2x25)
	from 1 to 6	**780-456**	50 (2x25)
	from 1 to 7	**780-457**	50 (2x25)
	from 1 to 8	**780-458**	50 (2x25)
Push-in type wire jumper, ❷			
	insulated, I_N 9 A, wire size 0.75 mm²		
	L = 60 mm	**249-125**	10
	L = 110 mm	**249-126**	10
	L = 250 mm	**249-127**	10
Test plug module, ❷			
	can be snapped together, 5 mm wide		
	gray	**280-418**	100 (4x25)
1-conductor female plug,			
	straight		
	gray	**769-101**	200
1-conductor female plug,			
	angled		
	gray	**769-101/022-000**	200
2-conductor female plug			
	gray	**769-121**	100

X-COM®-SYSTEM
1-Conductor/1-Pin and 2-Pin LED Carrier Terminal Blocks

CAGE CLAMP®

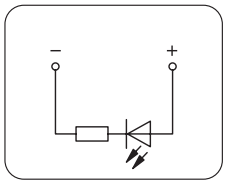
0.08 - 4 mm² | AWG 28 - 12 **24 VDC** **I_F 0.025 A max.** **Terminal block width 5 mm / 0.197 in** **8 - 9 mm / 0.33 in ❶**	**24 VDC** **I_F 0.025 A max.** **Terminal block width 5 mm / 0.197 in**



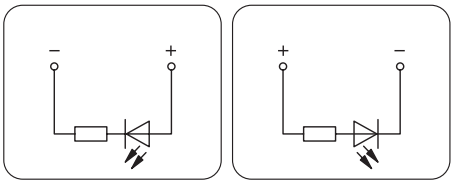


❶ Strip length, see packaging or instructions.
❷ See application notes for: Insulation stop, page 293
❸ Note: 2-conductor female plug is not suitable.

Circuit I Circuit II



Circuit I Circuit II



Item No.		Pack. Unit
1-conductor/1-pin LED carrier terminal block,		
for DIN 35 rail, acc. to EN 60715		
Anode right	**769-239/281-413**	100
Anode left	**769-239/281-434**	100

Item No.		Pack. Unit
2-pin LED carrier terminal block,		
for DIN 35 rail, acc. to EN 60715		
Anode right	**769-229/281-413**	100
Anode left	**769-229/281-434**	100

Item-Specific Accessories

End and intermediate plate, 1.1 mm thick



orange	**769-308**	100 (4x25)
gray	**769-307**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 1.1 mm thick



orange	**769-306**	100 (4x25)
gray	**769-305**	100 (4x25)

Insulation stop, ❷



5 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")

white	**769-470**	200 (8x25)

Insulation stop, ❷



5 pcs/strip,
0.25 - 0.5 mm²

light gray	**769-471**	200 (8x25)

Insulation stop, ❷



5 pcs/strip,
0.75 - 1 mm²

dark gray	**769-472**	200 (8x25)

Protective warning marker,



with high-voltage symbol, black,
for 5 terminal blocks

yellow	**280-415**	100 (4x25)

Test plug,



with 500 mm cable,
2 mm Ø

red	**210-136**	50

769 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

Coding pin,



for coding female plugs

orange	**769-435**	100 (4x25)

Test plug,



with 500 mm cable,
2.3 mm Ø

yellow	**210-137**	50

1-conductor female plug, ❸



straight

gray	**769-101**	200

1-conductor female plug,



angled

gray	**769-101/022-000**	200

Accessories

Miniature WSB Quick marking system,



10 strips with 10 markers per card,
5 mm wide markers

plain	**248-501**	5

Miniature WSB Quick marking system, plain,



10 strips with 10 markers per card,
5 mm wide markers

yellow	**248-501/000-002**	
red	**248-501/000-005**	
blue	**248-501/000-006**	
gray	**248-501/000-007**	
orange	**248-501/000-012**	
light green	**248-501/000-017**	
green	**248-501/000-023**	
violet	**248-501/000-024**	
		5

Screwless end stop,



for DIN 35 rail,
6 mm wide

gray	**249-116**	100 (4x25)

Screwless end stop,



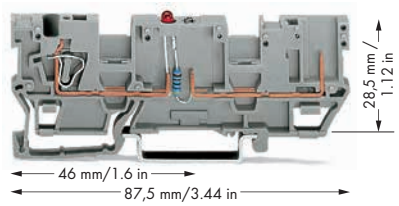
for DIN 35 rail,
10 mm wide

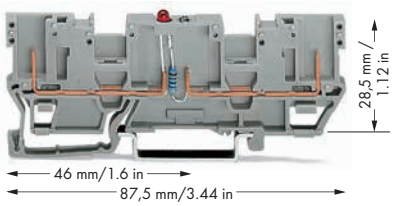
gray	**249-117**	50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.

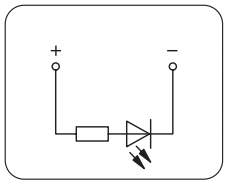
X-COM®-SYSTEM
1-Conductor/1-Pin and 2-Pin LED Carrier Terminal Blocks with 2 Jumper Positions

0.08 - 4 mm² | AWG 28 - 12 **24 VDC** **I_F 0.025 A max.** **Terminal block width 5 mm / 0.197 in** **8 - 9 mm / 0.33 in ❶**	**24 VDC** **I_F 0.025 A max.** **Terminal block width 5 mm / 0.197 in**

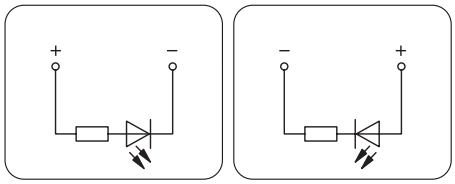




Circuit I Circuit II



Circuit I Circuit II



❶ Strip length, see packaging or instructions.

❷ See application notes for:
Test plug module, page 290
Insulation stop, page 293
Staggered jumper, page 295
Push-in type wire jumper, page 295

	Item No.	Pack. Unit
1-conductor/1-pin LED carrier terminal block with 2 jumper positions, for DIN 35 rail, acc. to EN 60715		
Anode left	**769-219/281-434**	50
Anode right	**769-219/281-413**	50

	Item No.	Pack. Unit
2-pin LED carrier terminal block with 2 jumper positions, for DIN 35 rail, acc. to EN 60715		
Anode left	**769-209/281-434**	50
Anode right	**769-209/281-413**	50

Item-Specific Accessories

End and intermediate plate, 1.1 mm thick			
	orange	**769-312**	100 (4x25)
	gray	**769-311**	100 (4x25)
Separator, oversized, 1.1 mm thick			
	orange	**769-314**	100 (4x25)
Insulation stop, ❷			
	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**769-470**	200 (8x25)
Insulation stop, ❷			
	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**769-471**	200 (8x25)
Insulation stop, ❷			
	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**769-472**	200 (8x25)
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**280-415**	100 (4x25)
Test plug,			
	with 500 mm cable, 2 mm Ø		
	red	**210-136**	50

Item-Specific Accessories

End and intermediate plate, 1.1 mm thick			
	orange	**769-310**	100 (4x25)
	gray	**769-309**	100 (4x25)
Separator, oversized, 1.1 mm thick			
	orange	**769-313**	100 (4x25)

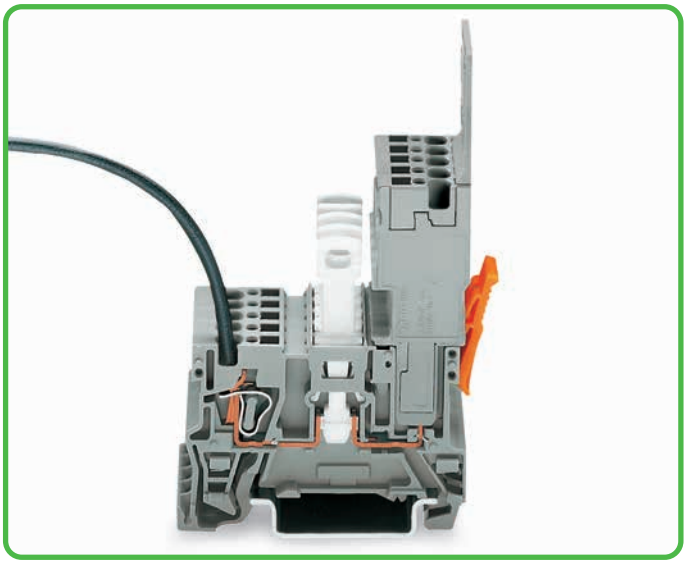
769 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

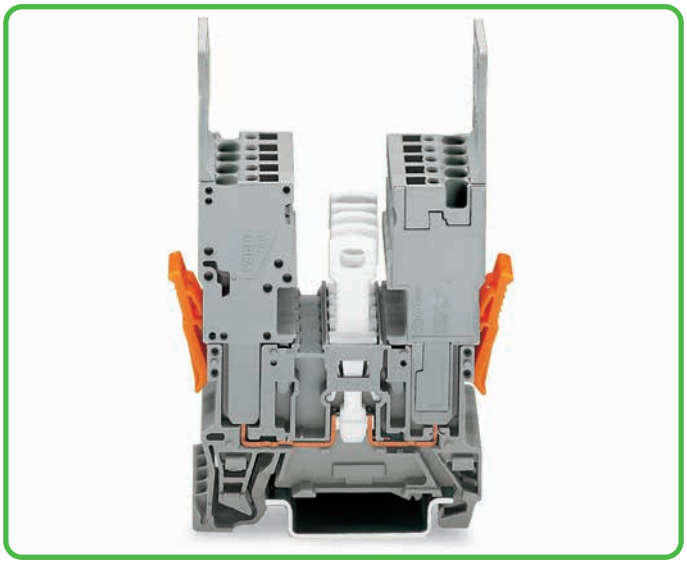
Coding pin,			
	for coding female plugs		
	orange	**769-435**	100 (4x25)
Test plug,			
	with 500 mm cable, 2.3 mm Ø		
	yellow	**210-137**	50
Adjacent jumper, insulated,			
	I_N = I_N terminal block		
	gray	**280-402**	200 (8x25)
Staggered jumper,			
❷ 	insulated, Spacing: 5 mm, I_N 24 A		
	from 1 to 2	**780-452**	100 (4x25)
	from 1 to 3	**780-453**	100 (4x25)
	from 1 to 4	**780-454**	100 (4x25)
	from 1 to 5	**780-455**	50 (2x25)
	from 1 to 6	**780-456**	50 (2x25)
	from 1 to 7	**780-457**	50 (2x25)
	from 1 to 8	**780-458**	50 (2x25)
Push-in type wire jumper,			
❷ 	insulated, I_N 9 A, wire size 0.75 mm²		
	L = 60 mm	**249-125**	10
	L = 110 mm	**249-126**	10
	L = 250 mm	**249-127**	10
Test plug module,			
❷ 	can be snapped together, 5 mm wide		
	gray	**280-418**	100 (4x25)
1-conductor female plug,			
	straight		
	gray	**769-101**	200
1-conductor female plug,			
	angled		
	gray	**769-101/022-000**	200
2-conductor female plug			
	gray	**769-121**	100

Certification organizations can be found in the overview on pages 622 and 623.

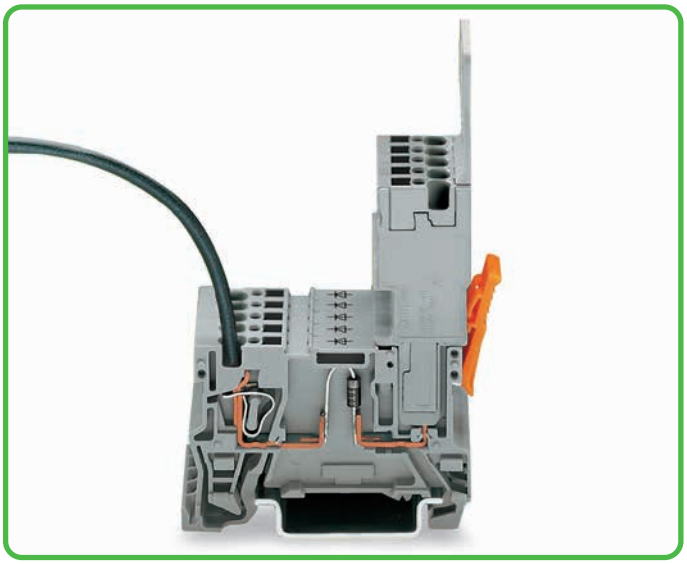
Types of Assembly
1-Conductor/1-Pin and 2-Pin Carrier Terminal Blocks and 1-Conductor Female Plugs



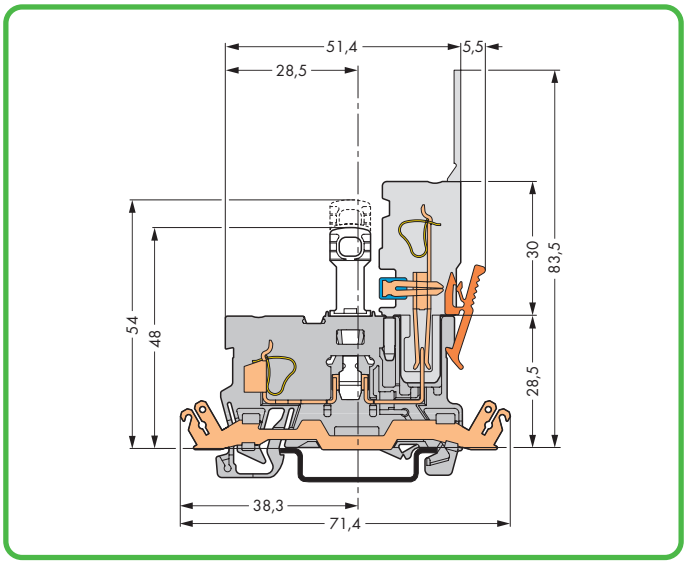
1-conductor female plug
Jumpers cannot be fitted to disconnect carrier terminal blocks.



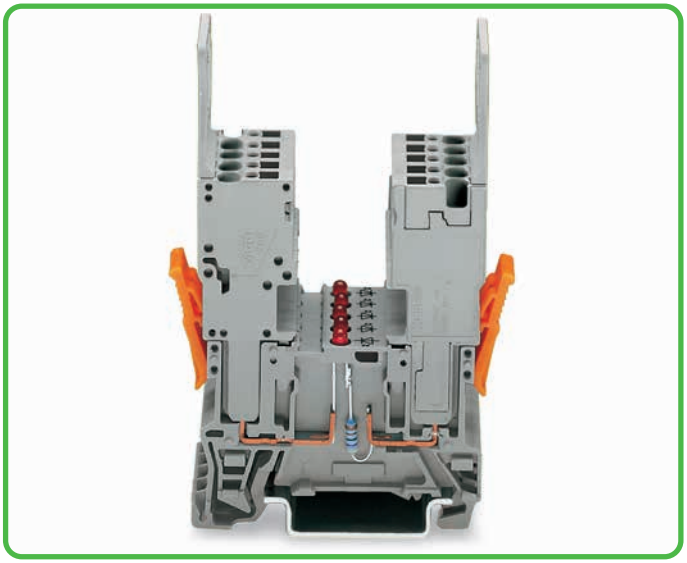
1-conductor female plug
Jumpers cannot be fitted to disconnect carrier terminal blocks.



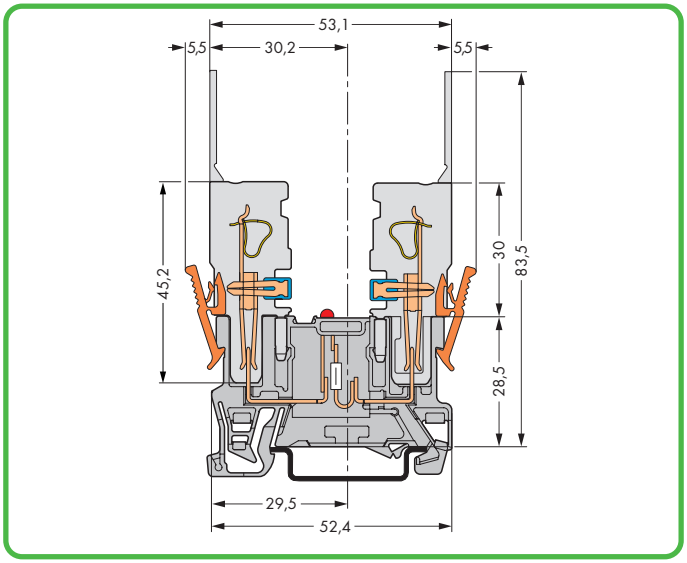
1-conductor female plug
Jumpers cannot be fitted to diode carrier terminal blocks.



Disconnect carrier terminal block with shield contact

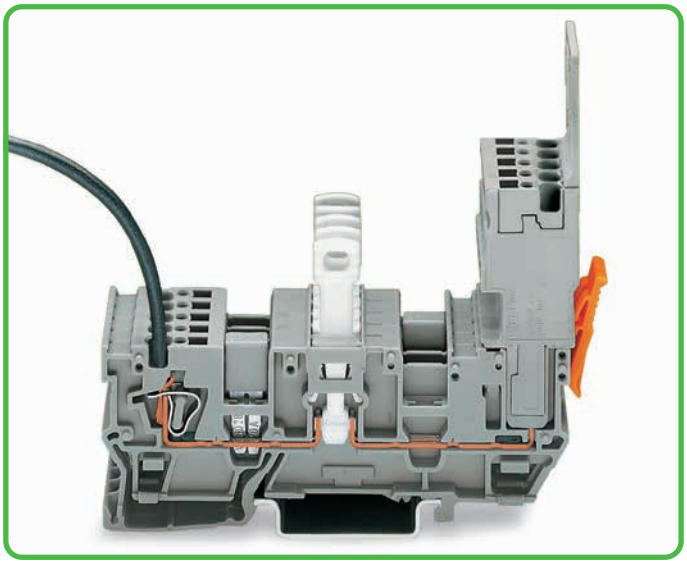


1-conductor female plug
Jumpers cannot be fitted to LED carrier terminal blocks.

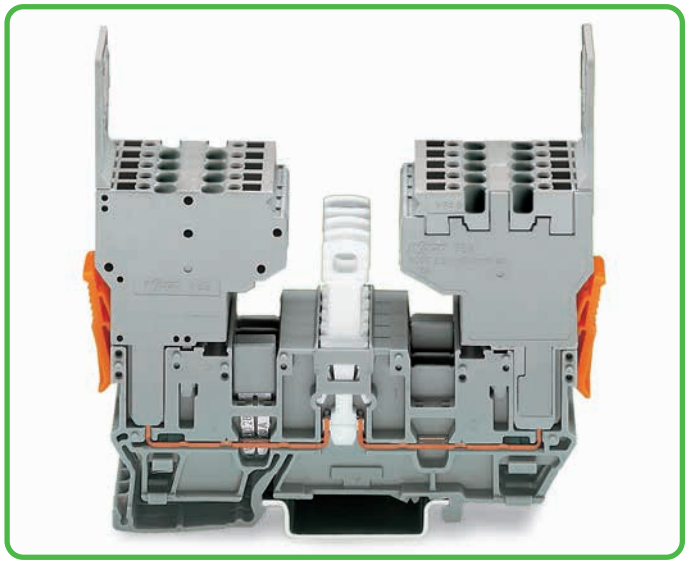


LED carrier terminal block

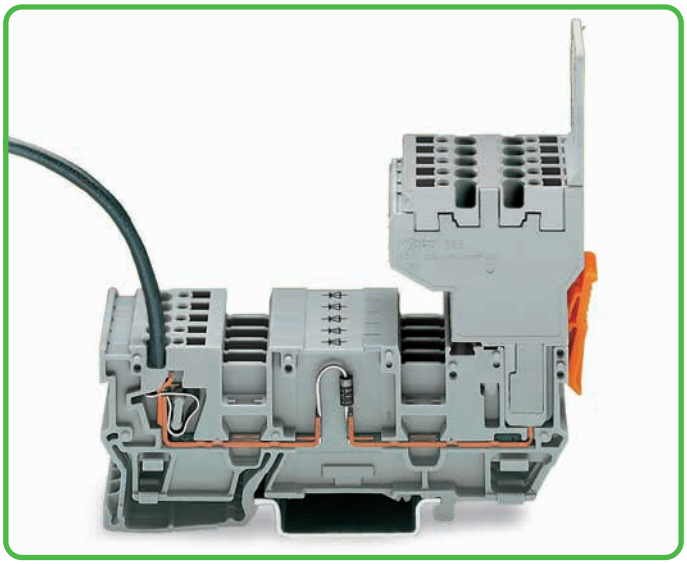
Types of Assembly
1-Conductor/1-Pin and 2-Pin Carrier Terminal Blocks with 2 Jumper Positions and 1-/2-Conductor Female Plugs



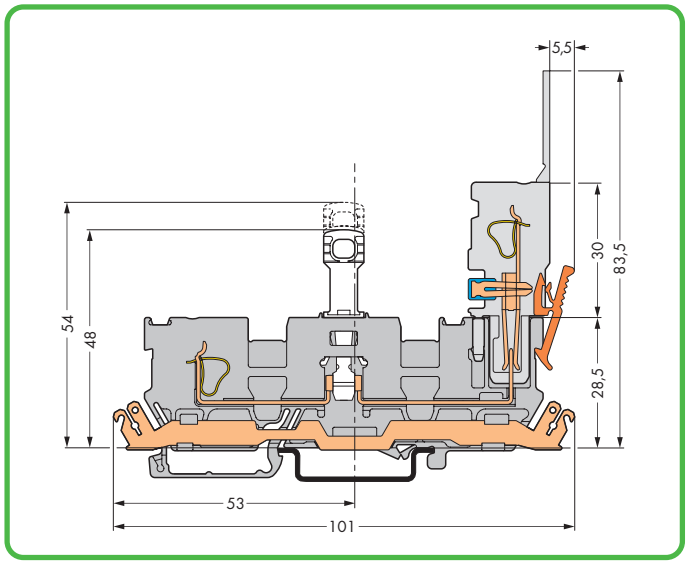
1-conductor female plug
Commoning disconnect carrier terminal blocks via 280 and 780 Series jumpers and testing using 280-4.. test plug adapter.



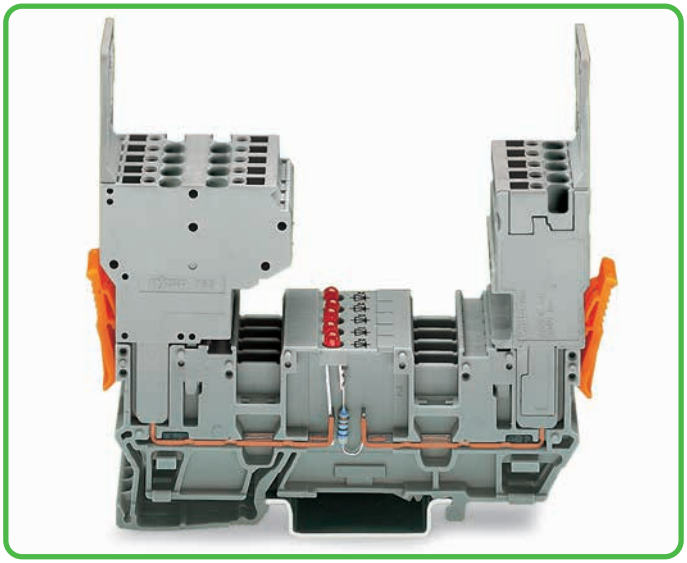
2-conductor female plug
Commoning disconnect carrier terminal blocks via 280 and 780 Series jumpers.



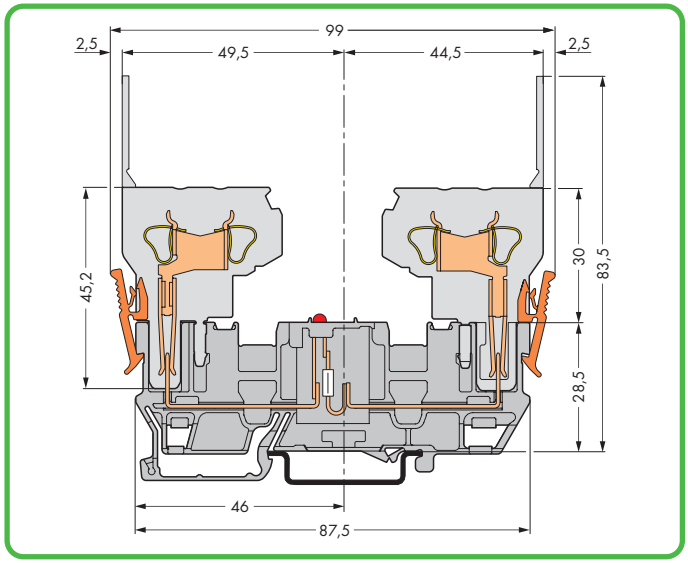
2-conductor female plug
Commoning diode carrier terminal blocks via 280 and 780 Series jumpers and testing using 280-4.. test plug adapter.



Disconnect carrier terminal block with shield contact.
For other dimensions, also see page 308.



2-conductor female plug and 1-conductor female (also possible the other way around) Commoning LED carrier terminal blocks via 280 and 780 Series jumpers and testing using 280-4.. test plug adapter.

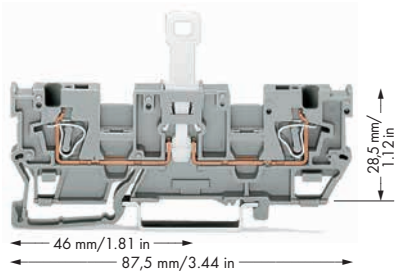


LED carrier terminal block
For other dimensions, also see page 310.

X-COM®-SYSTEM
1-Conductor/1-Conductor Disconnect Carrier Terminal Blocks with 2 Jumper Positions

CAGE CLAMP®

0.08 - 4 mm² | **AWG 28 - 12**
400 V/6 kV/3 ❶
I_N 16 A
Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❷



❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
250 V/4 kV/3 =
ominal voltage with shield contact
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ See application notes for:
Test plug modules, pages 288 – 290
Insulation stop, page 293
Staggered jumper, page 295
Push-in type wire jumper, page 295

	Item No.	Pack. Unit
1-conductor/1-conductor disconnect carrier terminal block with 2 jumper positions,		
for DIN 35 rail, acc. to EN 60715		
gray	**769-242**	50
1-conductor/1-conductor disconnect carrier terminal block with shield contact and with 2 jumper positions, (no picture),		
for DIN 35 rail, acc. to EN 60715		
gray	**769-243** ❶	50

769 Series Accessories

End and intermediate plate, 1.1 mm thick			
	orange	**769-318**	100 (4x25)
	gray	**769-317**	100 (4x25)
Seperator plate, oversized, 1.1 mm thick			
	orange	**769-319**	100 (4x25)
Insulation stop, ❸			
	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**769-470**	200 (8x25)
Insulation stop, ❸			
	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**769-471**	200 (8x25)
Insulation stop, ❸			
	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**769-472**	200 (8x25)
Adjacent jumper, insulated,			
	I_N = I_N terminal block		
	gray	**280-402**	200 (8x25)
Alternate jumper, insulated,			
	I_N = I_N terminal block		
	gray	**280-409**	100 (4x25)
Push-in type wire jumper, ❸			
	insulated, I_N 9 A, wire size 0.75 mm²		
	L = 60 mm	**249-125**	10
	L = 110 mm	**249-126**	10
	L = 250 mm	**249-127**	10

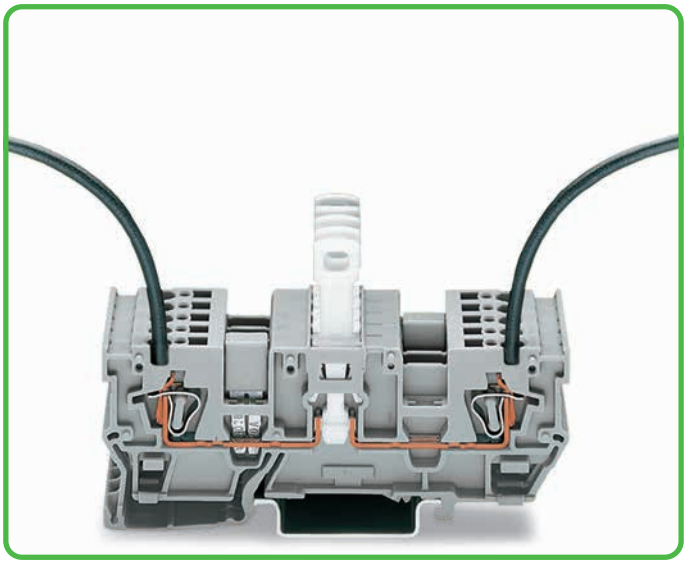
Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

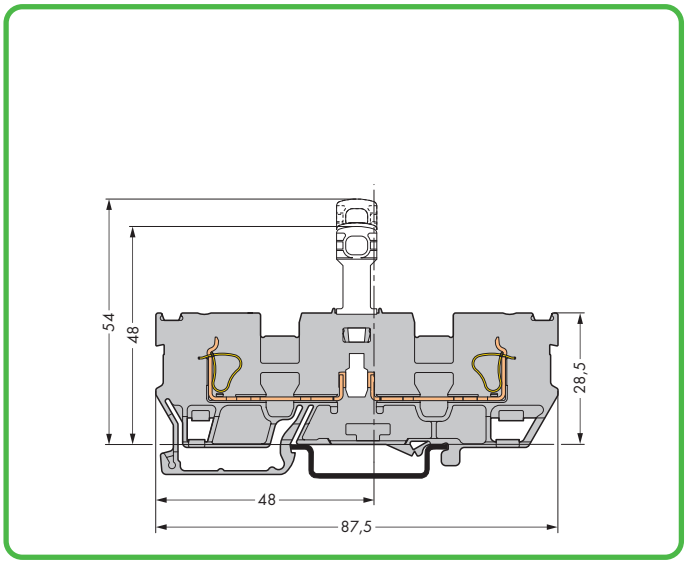
Staggered jumper, ❸			
	insulated, Spacing: 5 mm, I_N 24 A		
	from 1 to 2	**780-452**	100 (4x25)
	from 1 to 3	**780-453**	100 (4x25)
	from 1 to 4	**780-454**	100 (4x25)
	from 1 to 5	**780-455**	50 (2x25)
	from 1 to 6	**780-456**	50 (2x25)
	from 1 to 7	**780-457**	50 (2x25)
	from 1 to 8	**780-458**	50 (2x25)
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**280-415**	100 (4x25)
Disconnect lock,			
	for disconnect tab used on 280/281 and 769 Series disconnect terminal blocks		
	red	**709-170**	200 (8x25)
Test plug module, ❸			
	can be snapped together, 5 mm wide		
	gray	**280-418**	100 (4x25)
Spacer module,			
	can be snapped together, 5 mm wide		
	gray	**280-419**	100 (4x25)
Test plug adapter, 5 mm wide,			
	for terminal blocks 1.5 - 4 mm², for 210-137 test plug 2.3 mm Ø		
	gray	**280-404**	100 (4x25)
Test plug,			
	with 500 mm cable, 2 mm Ø		
	red	**210-136**	50
Test plug,			
	with 500 mm cable, 2.3 mm Ø		
	yellow	**210-137**	50
Screwless end stop,			
	for DIN 35 rail, 6 mm wide		
	gray	**249-116**	100 (4x25)
Screwless end stop,			
	for DIN 35 rail, 10 mm wide		
	gray	**249-117**	50 (2x25)

Miniature WSB Quick marking system,			
	10 strips with 10 markers per card, 5 mm wide markers		
	plain	**248-501**	5
Miniature WSB Quick marking system, plain,			
	10 strips with 10 markers per card, 5 mm wide markers		
	yellow	**248-501/000-002**	
	red	**248-501/000-005**	
	blue	**248-501/000-006**	
	gray	**248-501/000-007**	
	orange	**248-501/000-012**	
	light green	**248-501/000-017**	
	green	**248-501/000-023**	
	violet	**248-501/000-024**	
			5

Certification organizations can be found in the overview on pages 622 and 623.



Commoning carrier terminal blocks via 280 and 780 Series jumpers and testing using 280-4.. test plug adapter.



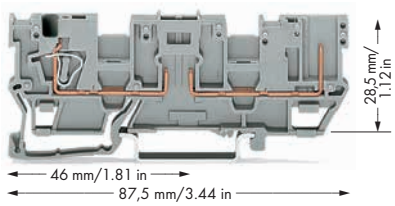
Disconnect carrier terminal block

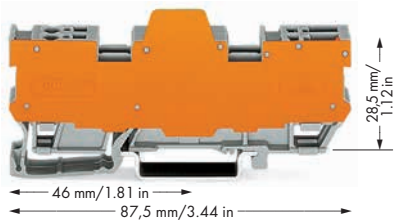
X-COM®-SYSTEM
1-Conductor/1-Pin Carrier Terminal Blocks and Carrier Terminal Blocks for Pluggable Modules (Fuses, Relays, Optocouplers, etc.)

CAGE CLAMP®

0.08 - 4 mm²	AWG 28 - 12
400 V/6 kV/3 ❶	600 V, 20 A
I_N 16 A ❷	300 V, 20 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❸	

0.08 - 4 mm²	AWG 28 - 12
400 V/6 kV/3 ❶	300 V, 20 A
I_N 16 A ❷	300 V, 20 A
8 - 9 mm / 0.33 in ❸	





❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ 16 A, 85 °C upper temperature limit (see current-carrying capacity curve at www.wago.com)

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Test plug modules, page 290
Insulation stop, page 293
Staggered jumper, page 295
Push-in type wire jumper, page 295

❺ Note:
2-conductor female plug is not suitable.

	Item No.	Pack. Unit
1-conductor/1-pin carrier terminal block with 2 jumper positions, for DIN 35 rail, acc. to EN 60715, gray		
2-pole	**769-181**	50

	Item No.	Pack. Unit
1-conductor/1-pin carrier terminal block with 2 jumper positions and with orange separator plate, for DIN 35 rail, acc. to EN 60715, gray		
4-pole, 11.1 mm wide	**769-182/769-314**	10
6-pole, 16.1 mm wide	**769-183/769-314**	5
8-pole, 21.1 mm wide	**769-184/769-314**	5
10-pole, 26.1 mm wide	**769-185/769-314**	5

Accessories

Test plug, with 500 mm cable, 2 mm Ø, red — **210-136** — 50

Test plug, with 500 mm cable, 2.3 mm Ø, yellow — **210-137** — 50

Test plug adapter, 5 mm wide, for terminal blocks 1.5 - 4 mm², for 210-137 test plug 2.3 mm Ø, gray — **280-404** — 100 (4x25)

1-conductor female plug, ❺ straight, gray — **769-101** — 200

769 Series Accessories

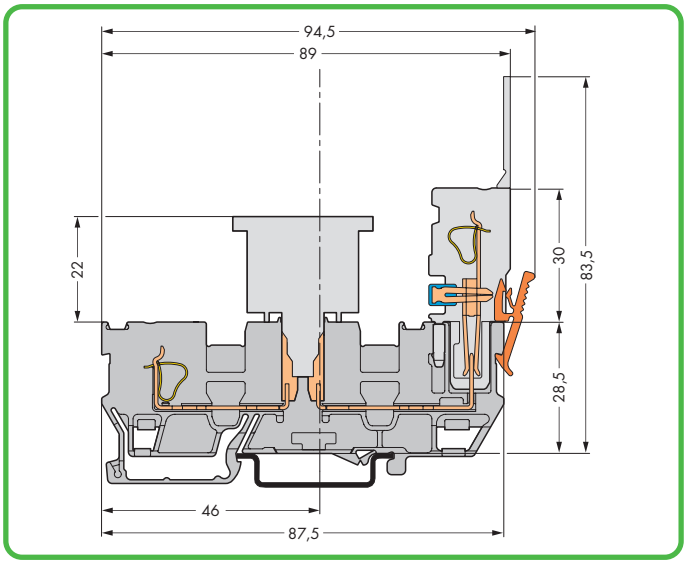
Appropriate marking system:
Miniature WSB (see Section 13)

End and intermediate plate, 1.1 mm thick			
	orange	**769-312**	100 (4x25)
	gray	**769-311**	100 (4x25)
Separator, oversized, 1.1 mm thick			
	orange	**769-314**	100 (4x25)
Insulation stop, ❹ 5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")			
	white	**769-470**	200 (8x25)
Insulation stop, ❹ 5 pcs/strip, 0.25 - 0.5 mm²			
	light gray	**769-471**	200 (8x25)
Insulation stop, ❹ 5 pcs/strip, 0.75 - 1 mm²			
	dark gray	**769-472**	200 (8x25)
Coding pin, for coding female plugs			
	orange	**769-435**	100 (4x25)
Adjacent jumper, insulated, I_N = I_N terminal block			
	gray	**280-402**	200 (8x25)
Alternate jumper, insulated, I_N = I_N terminal block			
	gray	**280-409**	100 (4x25)

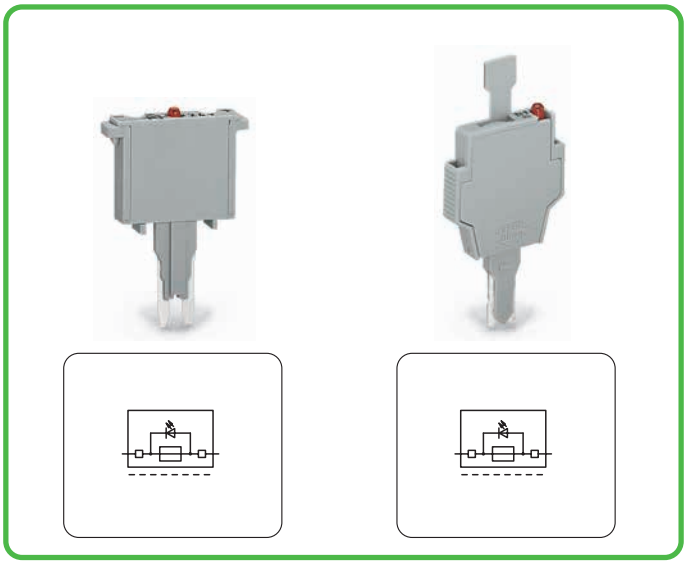
Staggered jumper, ❹ insulated, Spacing: 5 mm, I_N 24 A			
	from 1 to 2	**780-452**	100 (4x25)
	from 1 to 3	**780-453**	100 (4x25)
	from 1 to 4	**780-454**	100 (4x25)
	from 1 to 5	**780-455**	50 (2x25)
	from 1 to 6	**780-456**	50 (2x25)
	from 1 to 7	**780-457**	50 (2x25)
	from 1 to 8	**780-458**	50 (2x25)
Push-in type wire jumper, ❹ insulated, I_N 9 A, wire size 0.75 mm²			
	L = 60 mm	**249-125**	10
	L = 110 mm	**249-126**	10
	L = 250 mm	**249-127**	10
Protective warning marker, with high-voltage symbol, black, for 5 terminal blocks			
	yellow	**280-415**	100 (4x25)
Test plug module, ❹ can be snapped together, 5 mm wide			
	gray	**280-418**	100 (4x25)
Spacer module, can be snapped together, 5 mm wide			
	gray	**280-419**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

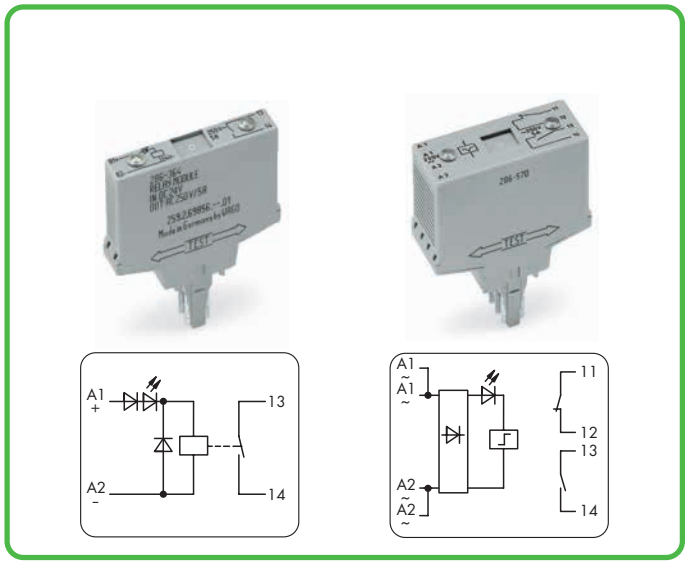
Types of Assembly with 1-Conductor Female Plugs and Selection of Pluggable Modules



Carrier terminal block



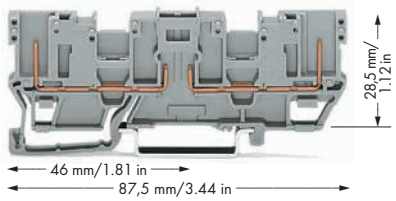
Also see page 332.

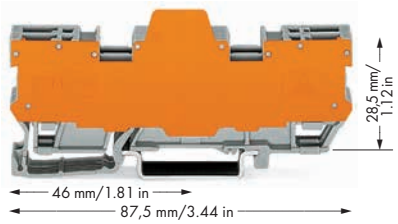


Also see page 333.

X-COM®-SYSTEM
2-Pin Carrier Terminal Blocks and Carrier Terminal Blocks for Pluggable Modules (Fuses, Relays, Optocouplers, etc.)

400 V/6 kV/3 ❶ | 300 V, 20 A I_N 16 A ❷ | 300 V, 20 A	400 V/6 kV/3 ❶ | 300 V, 20 A I_N 16 A ❷ | 300 V, 20 A
Terminal block width 5 mm / 0.197 in	





❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ 16 A, 85 °C upper temperature limit (see current-carrying capacity curve at www.wago.com)

❸ See application notes for:
Staggered jumper, page 295
Push-in type wire jumper, page 295

❹ Note:
2-conductor female plug is not suitable.

	Item No.	Pack. Unit
2-pin carrier terminal block with 2 jumper positions, for DIN 35 rail, acc. to EN 60715, gray		
2-pole	**769-161**	50

	Item No.	Pack. Unit
2-pin carrier terminal block with 2 jumper positions and with orange separator plate, for DIN 35 rail, acc. to EN 60715, gray		
4-pole, 11.1 mm wide	**769-162/769-313**	10
6-pole, 16.1 mm wide	**769-163/769-313**	5
8-pole, 21.1 mm wide	**769-164/769-313**	5
10-pole, 26.1 mm wide	**769-165/769-313**	5

Accessories

Miniature WSB Quick marking system, plain,



10 strips with 10 markers per card, 5 mm wide markers

yellow	**248-501/000-002**	
red	**248-501/000-005**	
blue	**248-501/000-006**	
gray	**248-501/000-007**	
orange	**248-501/000-012**	
light green	**248-501/000-017**	
green	**248-501/000-023**	
violet	**248-501/000-024**	

5

769 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

End and intermediate plate, 1.1 mm thick



orange	**769-310**	100 (4x25)
gray	**769-309**	100 (4x25)

Separator, oversized, 1.1 mm thick



orange	**769-313**	100 (4x25)

Adjacent jumper, insulated,



I_N = I_N terminal block

gray	**280-402**	200 (8x25)

Alternate jumper, insulated,



I_N = I_N terminal block

gray	**280-409**	100 (4x25)

Staggered jumper, ❸



insulated,
Spacing: 5 mm,
I_N 24 A

from 1 to 2	**780-452**	100 (4x25)
from 1 to 3	**780-453**	100 (4x25)
from 1 to 4	**780-454**	100 (4x25)
from 1 to 5	**780-455**	50 (2x25)
from 1 to 6	**780-456**	50 (2x25)
from 1 to 7	**780-457**	50 (2x25)
from 1 to 8	**780-458**	50 (2x25)

Coding pin,



for coding female plugs

orange	**769-435**	100 (4x25)

Push-in type wire jumper, ❸



insulated,
I_N 9 A,
wire size 0.75 mm²

L = 60 mm	**249-125**	10
L = 110 mm	**249-126**	10
L = 250 mm	**249-127**	10

Test plug,



with 500 mm cable,
2.3 mm Ø

yellow	**210-137**	50

1-conductor female plug, ❹



straight

gray	**769-101**	200

1-conductor female plug,



angled

gray	**769-101/022-000**	200

Screwless end stop,



for DIN 35 rail,
6 mm wide

gray	**249-116**	100 (4x25)

Screwless end stop,



for DIN 35 rail,
10 mm wide

gray	**249-117**	50 (2x25)

Miniature WSB Quick marking system,

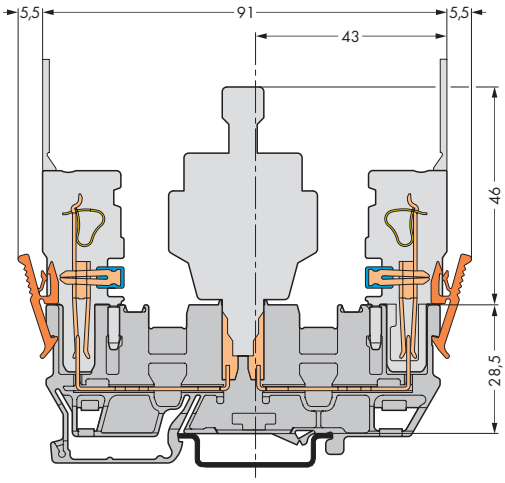


10 strips with 10 markers per card,
5 mm wide markers

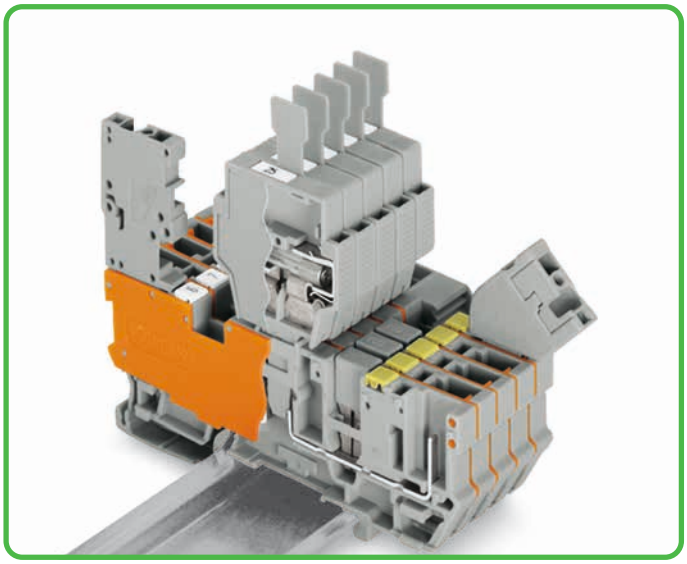
plain	**248-501**	5

Certification organizations can be found in the overview on pages 622 and 623.

Types of Assembly with 1-Conductor Female Plugs and Selection of Pluggable Modules

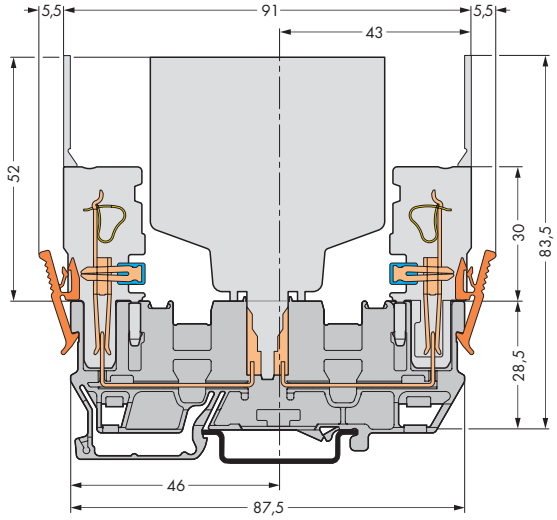


Carrier terminal block

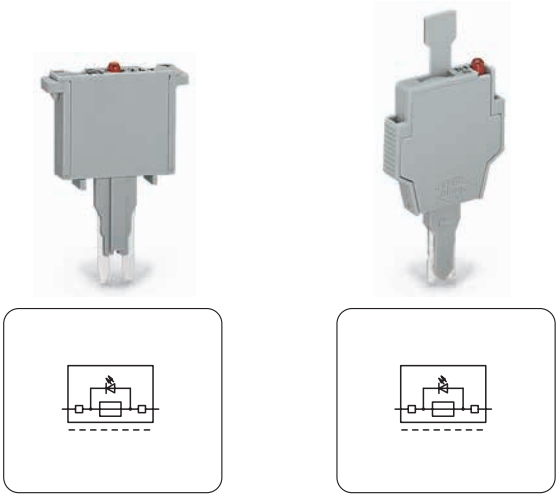


With 6mm-wide fuse plugs, only 1-pole female plugs can be used.
Commoning is only possible using 280 Series adjacent jumpers and wire jumpers.

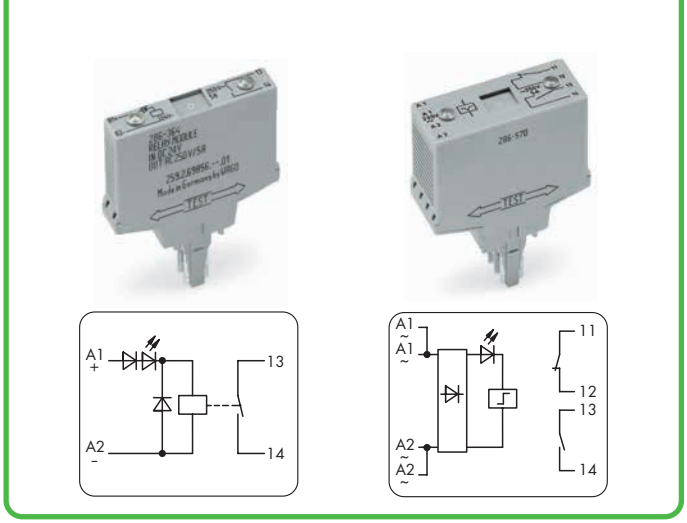




Carrier terminal block
For dimensions, also see page 310.



Also see page 332.



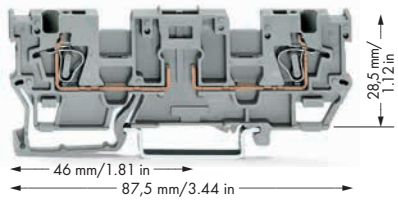
Also see page 333.

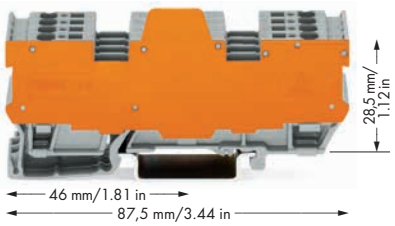
X-COM®-SYSTEM
1-Conductor/1-Conductor Carrier Terminal Blocks and Carrier Terminal Blocks for Pluggable Modules (Fuses, Relays, Optocouplers, etc.)

CAGE CLAMP®

0.08 - 4 mm²	AWG 28 - 12
400 V/6 kV/3 ❶	600 V, 20 A
I_N 16 A ❷	300 V, 20 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❸	

0.08 - 4 mm²	AWG 28 - 12
400 V/6 kV/3 ❶	600 V, 20 A
I_N 16 A ❷	300 V, 20 A
8 - 9 mm / 0.33 in ❸	





❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ 16 A, 85 °C upper temperature limit (see current-carrying capacity curve at www.wago.com)

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Insulation stop, page 293
Staggered jumper, page 295
Push-in type wire jumper, page 295

Item No.		Pack. Unit
1-conductor/1-conductor carrier terminal block with 2 jumper positions, for DIN 35 rail, acc. to EN 60715, gray		
◯ 2-pole	**769-191**	50

Item No.		Pack. Unit
1-conductor/1-conductor carrier terminal block with 2 jumper positions and with orange separator plate, for DIN 35 rail, acc. to EN 60715, gray		
◯ 4-pole, 11.1 mm wide	**769-192/769-319**	10
◯ 6-pole, 16.1 mm wide	**769-193/769-319**	5
◯ 8-pole, 21.1 mm wide	**769-194/769-319**	5
◯ 10-pole, 26.1 mm wide	**769-195/769-319**	5

Accessories

Miniature WSB Quick marking system, plain,



10 strips with 10 markers per card, 5 mm wide markers		
yellow	**248-501/000-002**	
red	**248-501/000-005**	
blue	**248-501/000-006**	
gray	**248-501/000-007**	
orange	**248-501/000-012**	
light green	**248-501/000-017**	
green	**248-501/000-023**	
violet	**248-501/000-024**	5

Screwless end stop,



for DIN 35 rail, 6 mm wide		
gray	**249-116**	100 (4x25)

Screwless end stop,



for DIN 35 rail, 10 mm wide		
gray	**249-117**	50 (2x25)

769 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

End and intermediate plate, 1.1 mm thick

orange	**769-318**	100 (4x25)
gray	**769-317**	100 (4x25)

Seperator plate, oversized, 1.1 mm thick



orange	**769-319**	100 (4x25)

Insulation stop, ❹



5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
white	**769-470**	200 (8x25)

Insulation stop, ❹



5 pcs/strip, 0.25 - 0.5 mm²		
light gray	**769-471**	200 (8x25)

Insulation stop, ❹



5 pcs/strip, 0.75 - 1 mm²		
dark gray	**769-472**	200 (8x25)

Protective warning marker,



with high-voltage symbol, black, for 5 terminal blocks		
yellow	**280-415**	100 (4x25)

Adjacent jumper, insulated,



I_N = I_N terminal block		
gray	**280-402**	200 (8x25)

Alternate jumper, insulated,



I_N = I_N terminal block		
gray	**280-409**	100 (4x25)

Staggered jumper, ❹



insulated, Spacing: 5 mm, I_N 24 A		
from 1 to 2	**780-452**	100 (4x25)
from 1 to 3	**780-453**	100 (4x25)
from 1 to 4	**780-454**	100 (4x25)
from 1 to 5	**780-455**	50 (2x25)
from 1 to 6	**780-456**	50 (2x25)
from 1 to 7	**780-457**	50 (2x25)
from 1 to 8	**780-458**	50 (2x25)

Push-in type wire jumper, ❹



insulated, I_N 9 A, wire size 0.75 mm²		
L = 60 mm	**249-125**	10
L = 110 mm	**249-126**	10
L = 250 mm	**249-127**	10

Test plug,



with 500 mm cable, 2 mm Ø		
red	**210-136**	50

Test plug,



with 500 mm cable, 2.3 mm Ø		
yellow	**210-137**	50

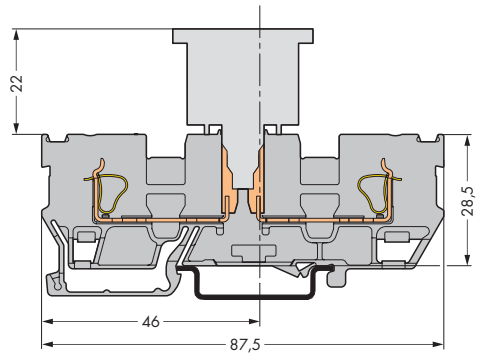
Miniature WSB Quick marking system,



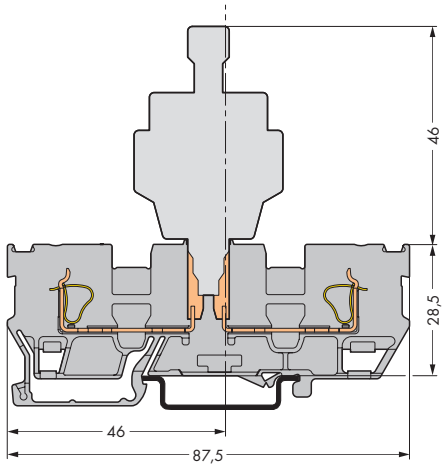
10 strips with 10 markers per card, 5 mm wide markers		
plain	**248-501**	5

Certification organizations can be found in the overview on pages 622 and 623.

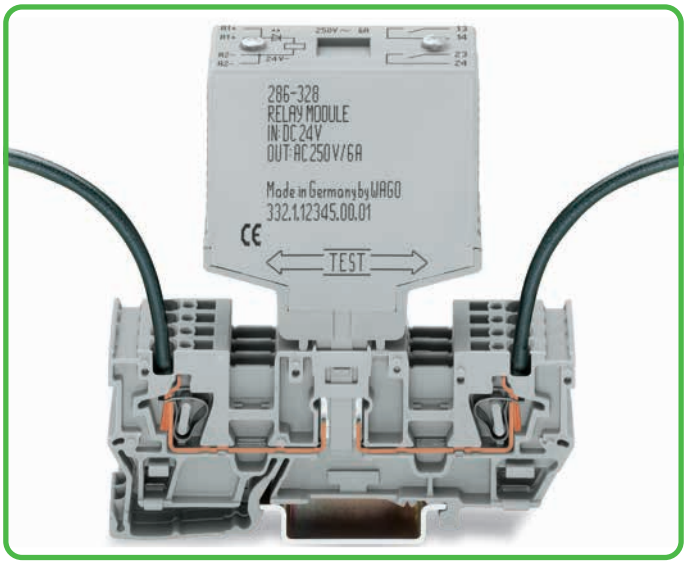
Types of Assembly with Selection of Pluggable Modules

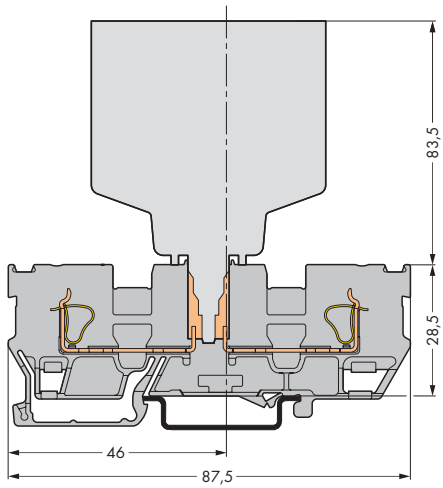


Carrier terminal block



Carrier terminal block

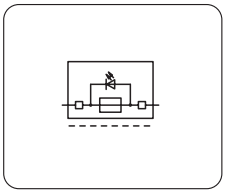


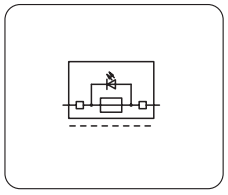


Carrier terminal block





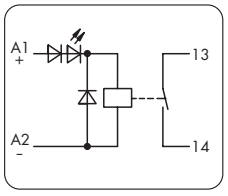


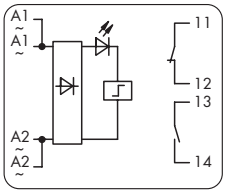


Also see page 332.





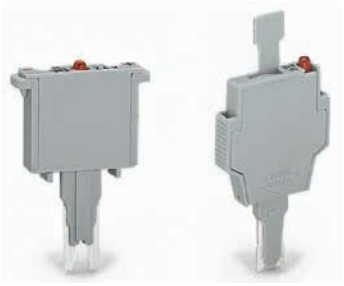


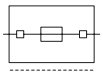
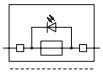
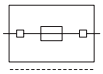
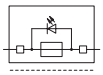
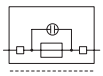


Also see page 333.

Fuse Plugs and Pluggable Diode and LED Modules

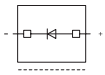
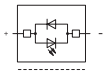
Fuse plugs



Item No.		Pack. Unit
Fuse plug, 5 mm wide,		
	with soldered miniature fuse	
250 mA FF	**280-850**	100
500 mA FF	**280-852**	100
1 A FF	**280-854**	100
2 A FF	**280-856**	100
Fuse plug, 5 mm wide,		
	with soldered miniature fuse with indicator lamp, additionally LED, 15 – 30 VDC	
Leakage current in case of blown fuse: 5 – 20 mA		
250 mA FF	**280-850/281-413**	100
500 mA FF	**280-852/281-413**	100
1 A FF	**280-854/281-413**	100
2 A FF	**280-856/281-413**	100
Fuse plug with pull-tab, 6 mm wide,		
	for miniature fuses 5 x 20 mm and 5 x 25 mm	
	281-511	50
with hole for one LED (for self-assembly)		
	281-512	50
Fuse plug with pull-tab, 6 mm wide,		
	for miniature fuses 5 x 20 mm and 5 x 25 mm, with LED inicator	
Leakage current in case of blown fuse: 5 – 20 mA		
Use in both switching directions		
24 V AC/DC	**281-512/281-501**	50
Fuse plug with pull-tab, 6 mm wide,		
	for miniature fuses 5 x 20 mm and 5 x 25 mm with neon lamp	
Leakage current in case of blown fuse:		
Neon lamp < 0.4mA		
120 V AC/DC	**281-512/281-418**	50
230 V AC/DC	**281-512/281-417**	50

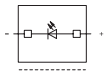
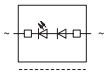
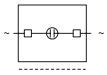
Diode modules



Item No.		Pack. Unit
Diode module, 5 mm wide,		
	with 1N4007 diode	
	280-801/281-411	100
Diode module, 5 mm wide,		
	with recovery diode 1N4007, additional LED	
24 VDC	**280-801/281-420**	100
48 VDC	**280-801/281-421**	100

LED modules



Item No.		Pack. Unit
LED module, 5 mm wide,		
	with red LED	
24 VDC	**280-801/281-413**	100
48 VDC	**280-801/281-414**	100
LED module, 5 mm wide,		
	with red LED	
24 V AC/DC	**280-801/281-415**	100
48 V AC/DC	**280-801/281-416**	100
Neon indicator module, 5 mm wide		
		
120 V AC/DC	**280-801/281-418**	100
230 V AC/DC	**280-801/281-417**	100

Certification organizations can be found in the overview on pages 622 and 623.

Pluggable Modules
see also Interface Modules – Volume 4

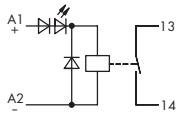
Switching relay modules	Pulse relay modules Transient suppression modules	Pluggable modules







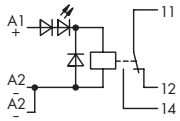
Switching relay module,



10 mm module width,
Relay with 1 make contact (1a)

24 VDC | **286-364** | 1

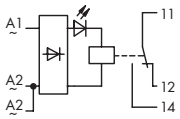
Switching relay module,



15 mm module width,
Relay with 1 changeover contact (1u)

24 VDC | **286-304** | 1

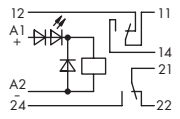
Switching relay module,



15 mm module width,
relay with 1 changeover contact (1u)

230 VDC | **286-508** | 1

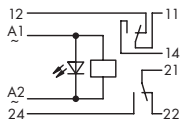
Switching relay module,



20 mm module width,
relay with 2 changeover contacts (2u)

24 VDC | **286-312** | 1

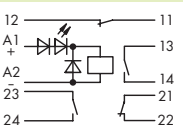
Switching relay module,



20 mm module width,
relay with 2 changeover contacts (2u)

230 VDC | **286-516** | 1

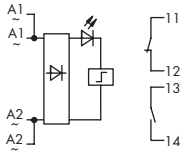
Switching relay module,



25 mm module width,
relay with 2 break contacts and 2 make contacts (2ar)

24 VDC | **286-336** | 1

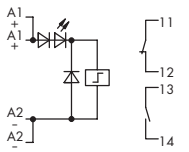
Pulse relay module,



20 mm module width,
relay with 1 break contact and 1 make contact (1ar)

230 VAC | **286-570** | 1

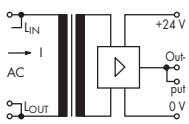
Pulse relay module,



20 mm module width,
relay with 1 break contact and 1 make contact (1ar)

24 VDC | **286-571** | 1

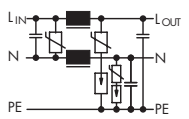
Current flow monitoring module,



20 mm module width

24 VAC/80 mA – 6 A | **286-661** | 1

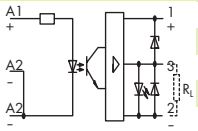
Transient suppression module,



25 mm module width

230 VDC ± 10 % | **286-842** | 1

Optocoupler module,

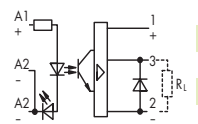


positive switching,
15 mm module width,

24 VDC input, 24 VDC/500 mA output

286-752 | 1

Optocoupler module,

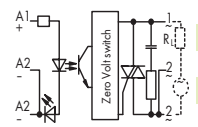


positive switching,
15 mm module width,

24 VDC input, 24 VDC/4 A output

286-723 | 1

Optocoupler module,

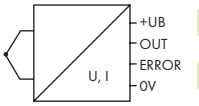


15 mm module width,

24 VDC input, 230 VAC/50 mA – 1 A output

286-734 | 1

Temperature transducer module with wire break



controlling (4-20 mA),
20 mm module width,

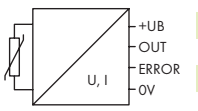
Thermocouple J: 0 – 750 °C

286-867 | 1

Thermocouple K: 0 – 1000 °C

286-868 | 1

Temperature transducer module,



20 mm module width,

from -30 °C to +150 °C (PT 100)

286-862/150-030 | 1

from 0 °C to +300 °C (PT 100)

286-862/000-300 | 1

from 0 °C to +100 °C (PT 1000)

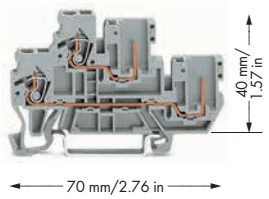
286-875 | 1

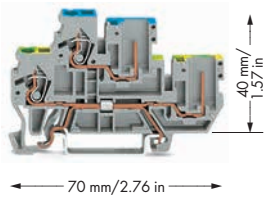
Certification organizations can be found in the overview on pages 622 and 623.

X-COM®-SYSTEM
1-Conductor/1-Pin Double-Deck Carrier Terminal Blocks
870 Series

CAGE CLAMP®

0.08 - 2.5 (4"f-st")mm² ❶ AWG 28 - 12 500 V/6 kV/3 ❷ 300 V, 20 A I_N 16 A Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸	0.08 - 2.5 (4"f-st")mm² ❶ AWG 28 - 12 500 V/6 kV/3 ❷ I_N 16 A Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸





❶ Max. insulation diameter: 4.4 mm

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

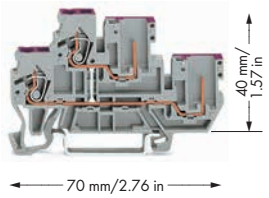
❸ Strip length, see packaging or instructions.

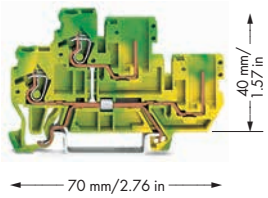
❹ See application notes for:
Insulation stop, page 293

❺ Note:
2-conductor female plug is not suitable.

	Item No.	Pack. Unit
1-conductor/1-pin double-deck carrier terminal block, through/through terminal block,		
gray housing		
L/L	**870-101**	50
N/L	**870-102**	50
L/N	**870-103**	50
1-conductor/1-pin double-deck carrier terminal block, through/through terminal block,		
blue housing		
N/N	**870-104**	50
Other terminal blocks with the same profile:		
Through	**870-501**	Page 374

	Item No.	Pack. Unit
1-conductor/1-pin double-deck carrier terminal block, ground conductor/through terminal block,		
gray housing		
PE/N	**870-117**	50
PE/L	**870-127**	50





	Item No.	Pack. Unit
2-conductor/2-pin double-deck carrier terminal block, 2-conductor/2-pin through terminal block,		
internal commoning,		
conductor entry with violet marking,		
gray housing		
L	**870-108**	50
2-conductor/2-pin double-deck carrier terminal block, 2-conductor/2-pin through terminal block,		
internal commoning,		
conductor entry with violet marking,		
blue housing		
N	**870-109**	50

	Item No.	Pack. Unit
2-conductor/2-pin double-deck carrier terminal block, 2-conductor/2-pin ground conductor terminal block,		
internal commoning,		
green-yellow housing		
PE	**870-107**	50

Accessories

Appropriate marking system:
Miniature WSB/WMB (see Section 13)

End and intermediate plate, 1 mm thick



orange	**870-119**	100 (4x25)
gray	**870-118**	100 (4x25)

Insulation stop,

❹ 

5 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")

white	**280-470**	200 (8x25)

Push-in type jumper bar, insulated,



I_N 18 A,
light gray

2-way	**870-402**	200 (8x25)
3-way	**870-403**	200 (8x25)
4-way	**870-404**	200 (8x25)
5-way	**870-405**	100 (4x25)
6-way	**870-406**	100 (4x25)
7-way	**870-407**	100 (4x25)
8-way	**870-408**	100 (4x25)
9-way	**870-409**	100 (4x25)
10-way	**870-410**	100 (4x25)

Push-in type jumper bar, insulated,



I_N 18 A,
light gray

from 1 to 3	**870-433**	200 (8x25)
from 1 to 4	**870-434**	200 (8x25)
from 1 to 5	**870-435**	100 (4x25)
from 1 to 6	**870-436**	100 (4x25)
from 1 to 7	**870-437**	100 (4x25)
from 1 to 8	**870-438**	100 (4x25)
from 1 to 9	**870-439**	100 (4x25)

Coding pin,



for coding female plugs		
orange	**769-435**	100 (4x25)

Pin cover,



with receptacle for miniature WSB		
gray	**769-438**	100 (4x25)
orange	**769-439**	100 (4x25)

1-conductor female plug,



angled		
gray	**769-101/022-000**	200

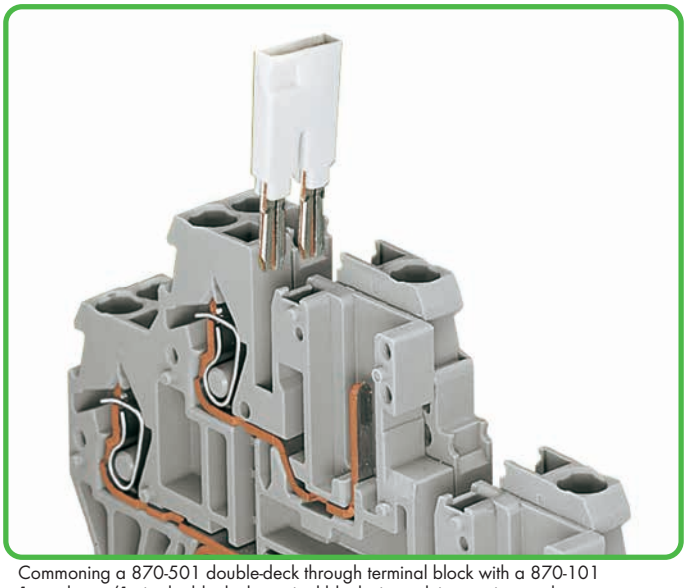
1-conductor female plug,

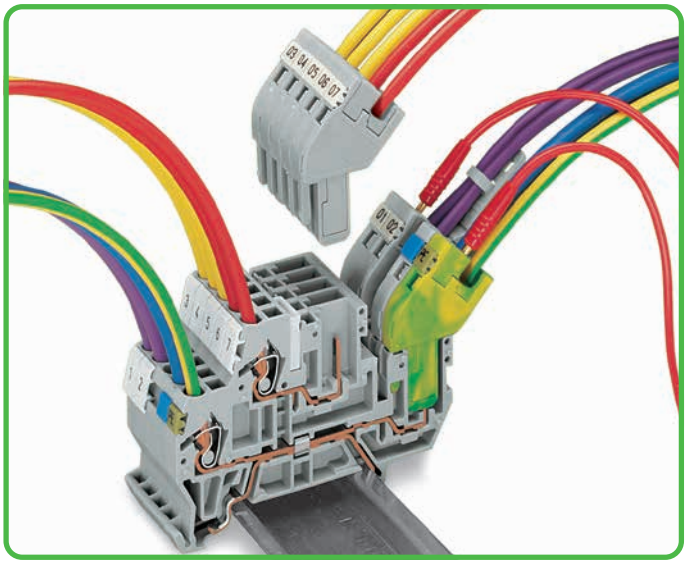
❺ 

straight		
gray	**769-101**	200

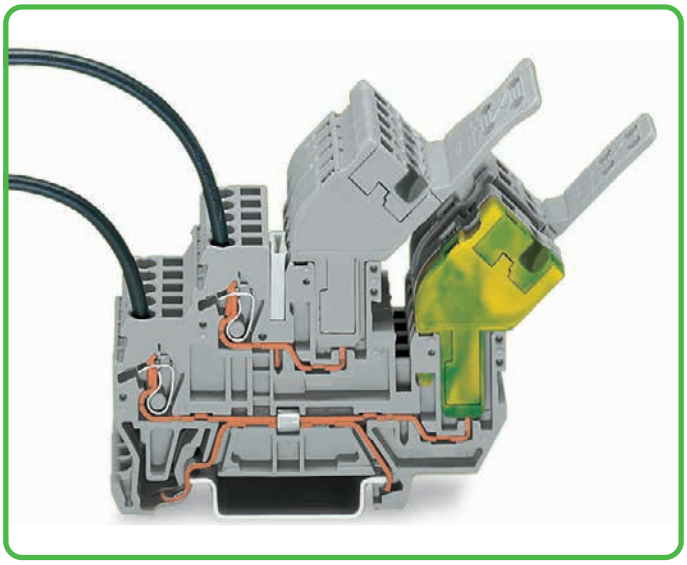
Certification organizations can be found in the overview on pages 622 and 623.

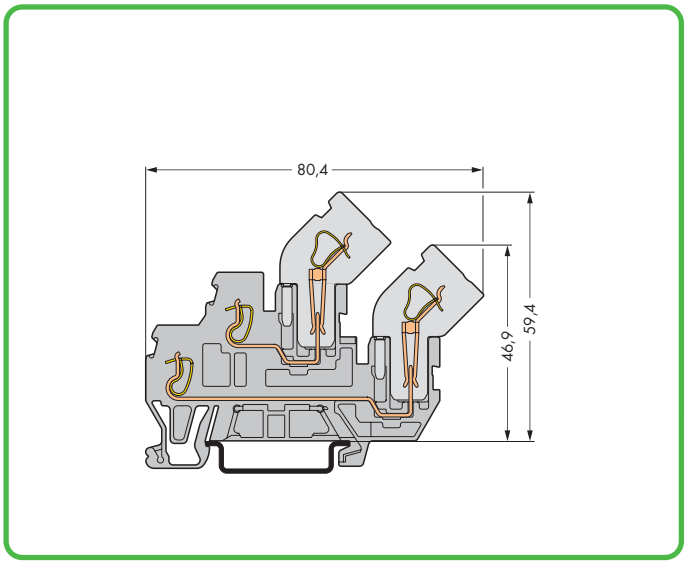
Types of Assembly
1-Conductor/1-Pin Double-Deck Carrier Terminal Blocks and 1-Conductor Female Plugs



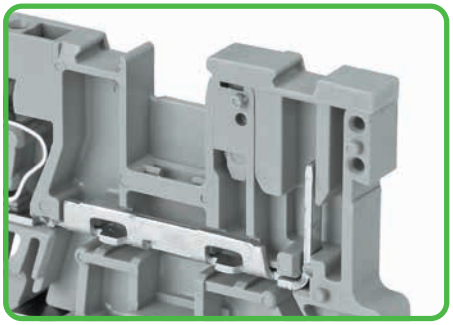


Commoning a 870-501 double-deck through terminal block with a 870-101 1-conductor/1-pin double-deck terminal block via push-in type jumper bar.

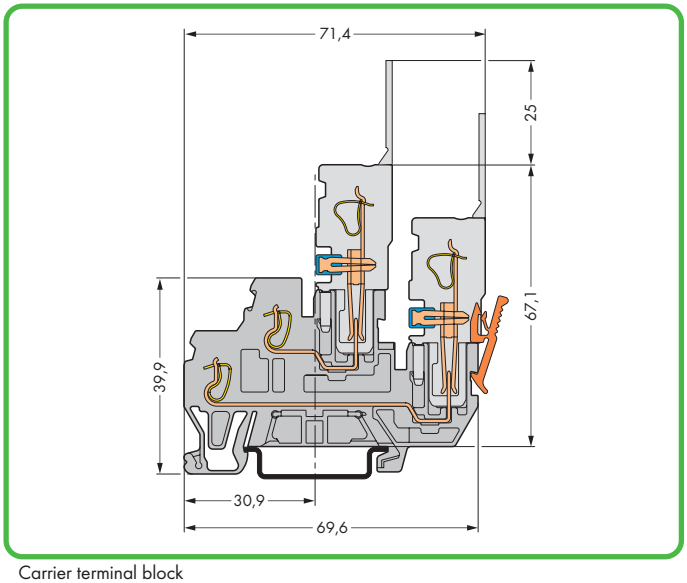




Carrier terminal block



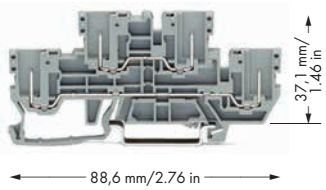
Pin cover
with receptacle for miniature WSB

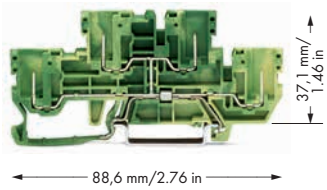


Carrier terminal block

X-COM®-SYSTEM
2-Pin/2-Pin Double-Deck Carrier Terminal Blocks
870 Series

500 V/6 kV/3 ❶ **I_N 16 A** **Terminal block width 5 mm / 0.197 in**	**Terminal block width 5 mm / 0.197 in**



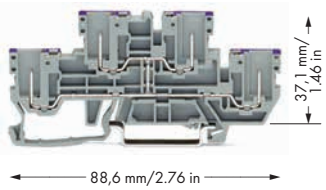


❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Note:
2-conductor female plug is not suitable.

	Item No.	Pack. Unit
2-pin/2-pin double-deck carrier terminal block,		
through/through terminal block,		
gray housing		
◯ L/L	**870-151**	50

	Item No.	Pack. Unit
4-pin double-deck carrier terminal block,		
4-pin ground conductor terminal block,		
internal commoning,		
green-yellow housing		
◑ PE	**870-157**	50



	Item No.	Pack. Unit
4-pin double-deck carrier terminal block,		
4-pin through terminal block,		
internal commoning,		
female plug conductor entry with violet marking,		
gray housing		
◯ L	**870-158**	50

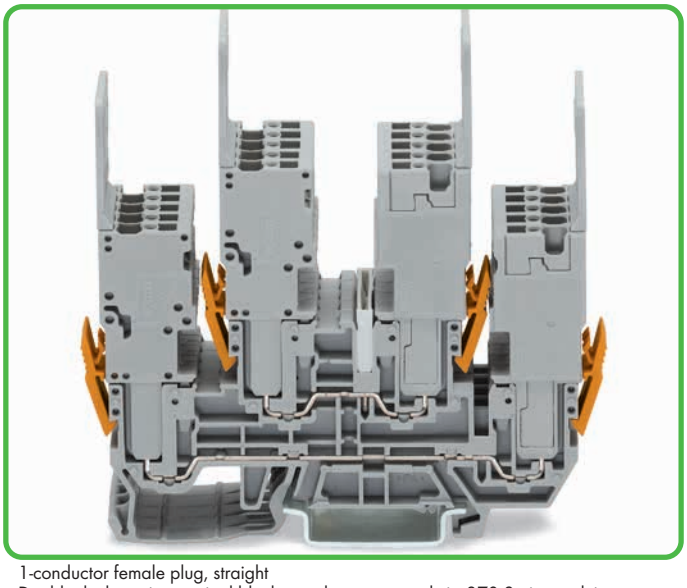
Accessories

Appropriate marking system:
Miniature WSB/WMB (see Section 13)

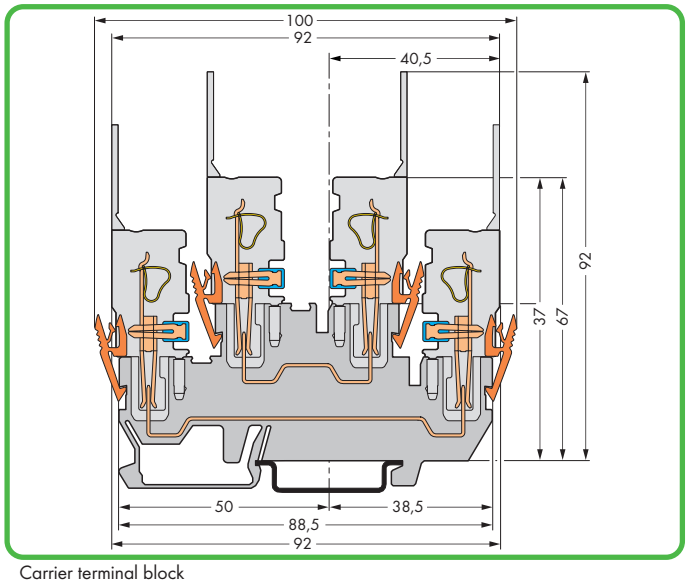
End and intermediate plate, 1 mm thick			
	orange	**870-169**	100 (4x25)
	gray	**870-168**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 18 A, light gray		
	2-way	**870-402**	200 (8x25)
	3-way	**870-403**	200 (8x25)
	4-way	**870-404**	200 (8x25)
	5-way	**870-405**	100 (4x25)
	6-way	**870-406**	100 (4x25)
	7-way	**870-407**	100 (4x25)
	8-way	**870-408**	100 (4x25)
	9-way	**870-409**	100 (4x25)
	10-way	**870-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 18 A, light gray		
	from 1 to 3	**870-433**	200 (8x25)
	from 1 to 4	**870-434**	200 (8x25)
	from 1 to 5	**870-435**	100 (4x25)
	from 1 to 6	**870-436**	100 (4x25)
	from 1 to 7	**870-437**	100 (4x25)
	from 1 to 8	**870-438**	100 (4x25)
	from 1 to 9	**870-439**	100 (4x25)
	from 1 to 10	**870-440**	100 (4x25)
Coding pin,			
	for coding female plugs		
	orange	**769-435**	100 (4x25)
Pin cover,			
	with receptacle for miniature WSB		
	gray	**769-438**	100 (4x25)
	orange	**769-439**	100 (4x25)
1-conductor female plug,			
❷ 	straight		
	gray	**769-101**	200
1-conductor female plug,			
	angled		
	gray	**769-101/022-000**	200
Miniature WSB Quick marking system,			
	10 strips with 10 markers per card, 5 mm wide markers		
	plain	**248-501**	5

Certification organizations can be found in the overview on pages 622 and 623.

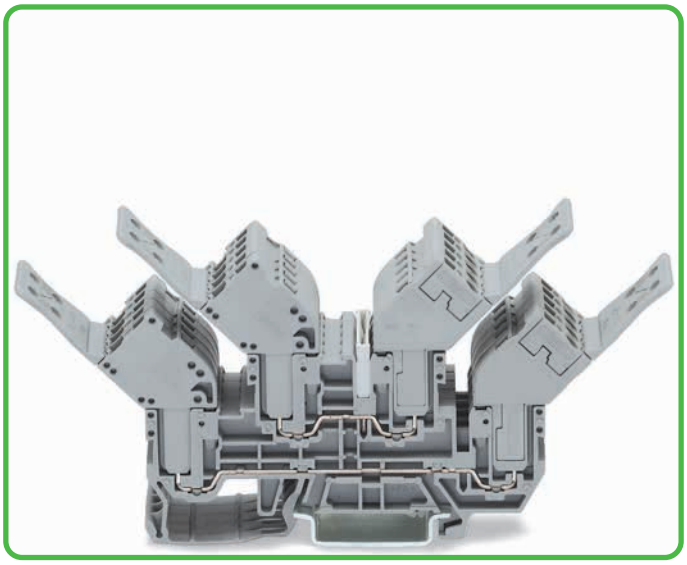
Types of Assembly
2-Pin/2-Pin Double-Deck Carrier Terminal Blocks with Straight and Angled Female Plugs



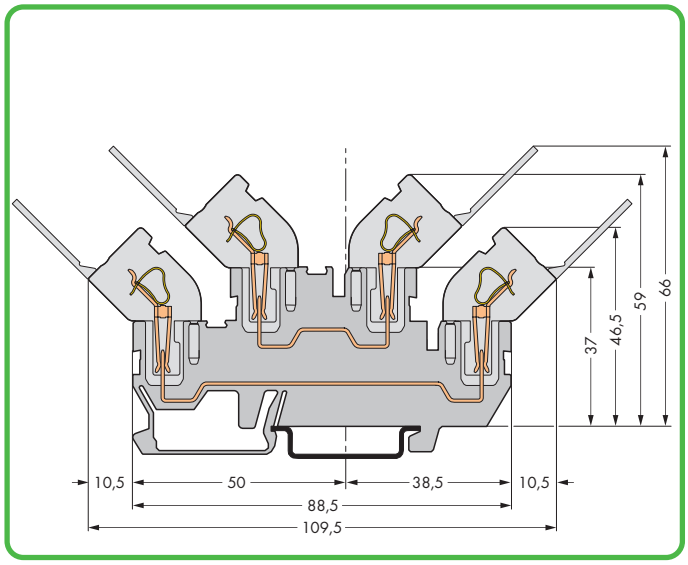
1-conductor female plug, straight
Double-deck carrier terminal blocks can be commoned via 870 Series push-in type jumper bars. **Notice: 2-conductor female plugs cannot be used.**



Carrier terminal block



1-conductor female plug, angled
Double-deck carrier terminal blocks can be commoned via 870 Series push-in type jumper bars.

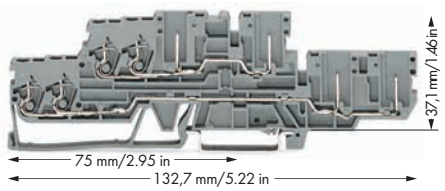


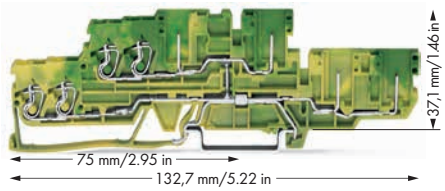
Carrier terminal block

X-COM®-SYSTEM
2-Conductor/2-Pin Double-Deck Carrier Terminal Blocks
870 Series

CAGE CLAMP®

0.08 - 2.5 (4"f-st")mm² ❶ AWG 28 - 12 500 V/6 kV/3 ❷ I_N 16 A Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸	0.08 - 2.5 (4"f-st")mm² ❶ AWG 28 - 12 Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸





❶ Max. insulation diameter: 4.4 mm

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

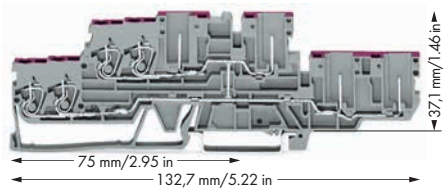
❸ Strip length, see packaging or instructions.

❹ See application notes for:
Insulation stop, page 293

❺ Note: 2-conductor female plug and 1-conductor female plug, angled are not suitable.

	Item No.	Pack. Unit
2-conductor/2-pin double-deck carrier terminal block, through/through terminal block, gray housing		
L/L	**870-131**	40

	Item No.	Pack. Unit
4-conductor/4-pin double-deck carrier terminal block, 4-conductor/4-pin ground conductor terminal block, internal commoning, green-yellow housing		
PE	**870-137**	40



	Item No.	Pack. Unit
4-conductor/4-pin double-deck carrier terminal block, 4-conductor/4-pin through terminal block, internal commoning, conductor entry with violet marking, gray housing		
L	**870-138**	40

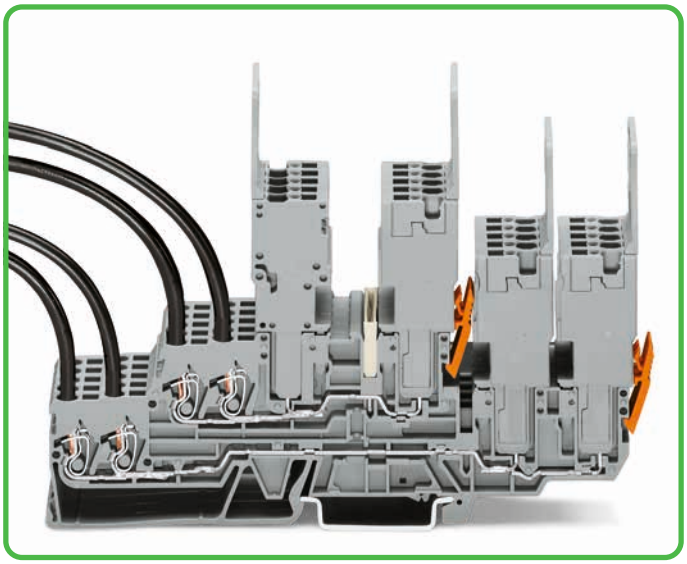
Accessories

Appropriate marking system:
Miniature WSB/WMB (see Section 13)

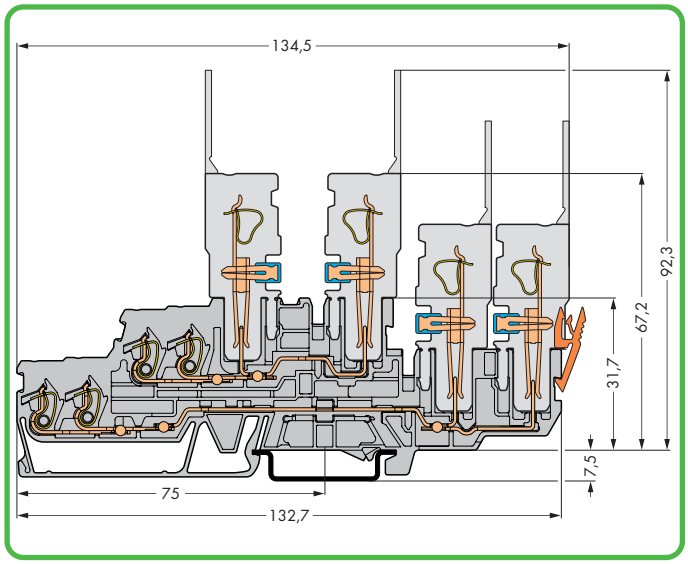
End and intermediate plate, 1 mm thick			
	orange	**870-149**	100 (4x25)
	gray	**870-148**	100 (4x25)
Insulation stop, ❹ 	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Push-in type jumper bar, insulated, 	I_N 18 A, light gray		
	2-way	**870-402**	200 (8x25)
	3-way	**870-403**	200 (8x25)
	4-way	**870-404**	200 (8x25)
	5-way	**870-405**	100 (4x25)
	6-way	**870-406**	100 (4x25)
	7-way	**870-407**	100 (4x25)
	8-way	**870-408**	100 (4x25)
	9-way	**870-409**	100 (4x25)
	10-way	**870-410**	100 (4x25)
Push-in type jumper bar, insulated, 	I_N 18 A, light gray		
	from 1 to 3	**870-433**	200 (8x25)
	from 1 to 4	**870-434**	200 (8x25)
	from 1 to 5	**870-435**	100 (4x25)
	from 1 to 6	**870-436**	100 (4x25)
	from 1 to 7	**870-437**	100 (4x25)
	from 1 to 8	**870-438**	100 (4x25)
	from 1 to 9	**870-439**	100 (4x25)
	from 1 to 10	**870-440**	100 (4x25)
Coding pin, 	for coding female plugs		
	orange	**769-435**	100 (4x25)
Protective warning marker, 	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**280-405**	100 (4x25)
Pin cover, 	with receptacle for miniature WSB		
	gray	**769-438**	100 (4x25)
	orange	**769-439**	100 (4x25)
1-conductor female plug, ❺ 	straight		
	gray	**769-101**	200

Certification organizations can be found in the overview on pages 622 and 623.

Types of Assembly
2-Conductor/2-Pin Double-Deck Carrier Terminal Blocks and 1-Conductor Female Plugs

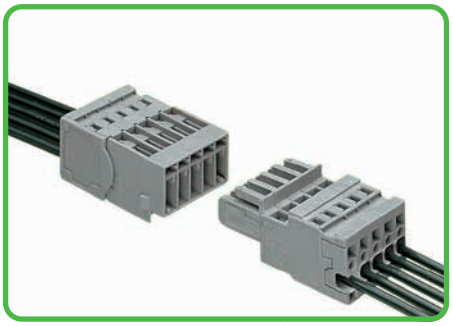


1-conductor female plug
Double-deck carrier terminal blocks can be commoned via 870 Series push-in type jumper bars.
Notice:
Female plugs must be opposing on the upper deck (see above).
Angled 1-conductor female plugs and 2-conductor female plugs cannot be used.

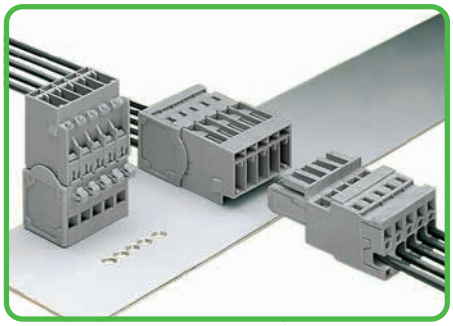


Carrier terminal block

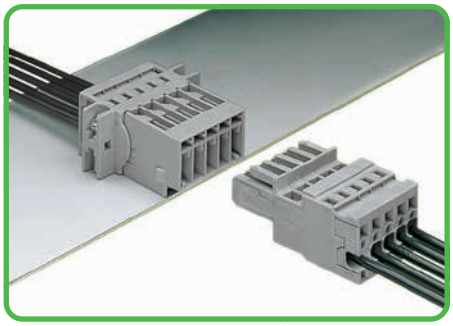
X-COM®-SYSTEM
Male Connectors and Male Headers, 769 Series



Male connector with CAGE CLAMP®.
1-conductor female plug, straight.

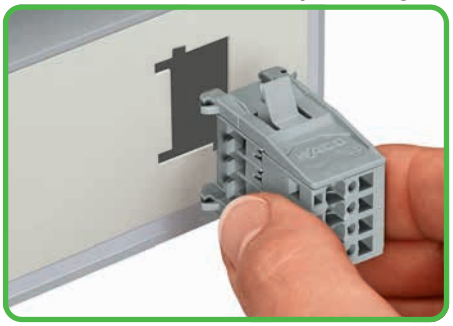


Male connector with CAGE CLAMP® connection and mounting feet.
1-conductor female plug, straight.



Male connector with CAGE CLAMP® connection and fixing flanges.
1-conductor female plug, straight.

Male connector with snap-in flanges



Snap-in mounting without tools.



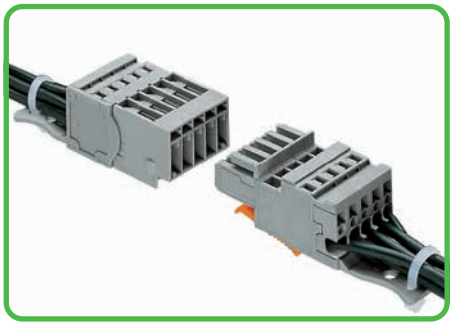


Operating tool



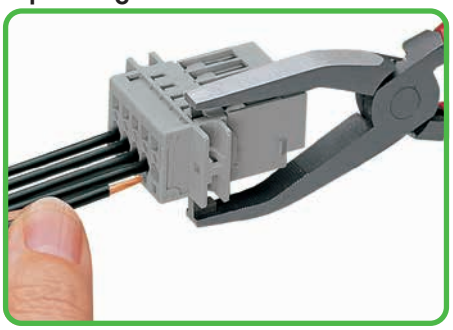
Conductor termination – side-entry wiring (example shows a female plug).

Strain relief plates

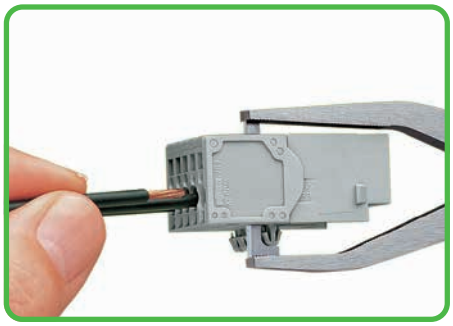


Can be snapped in male connector and female plug.

Operating tool



Conductor termination with operating tool (example shows a male connector).



Can also be used with male connectors with snap-in mounting feet.

Marking



Female connector with CAGE CLAMP®.
with miniature WSB quick marking system



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded

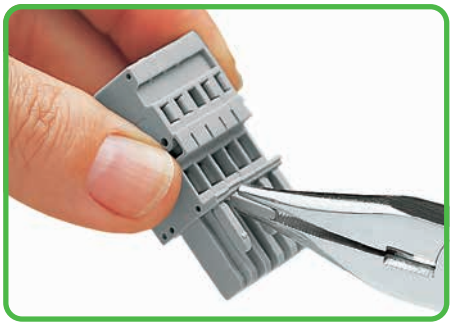


fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

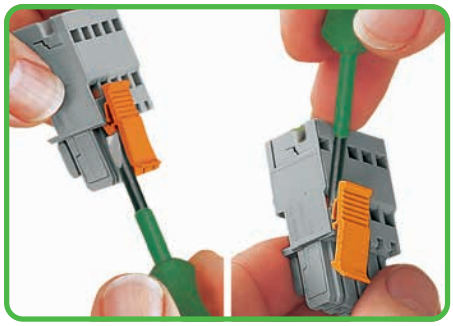
– Description and Handling –

Coding



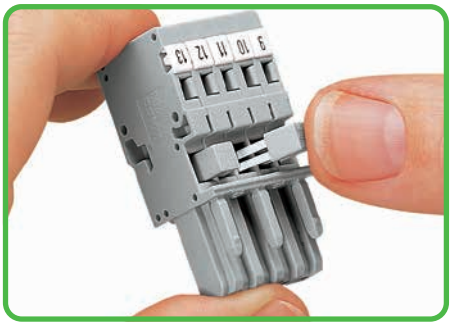
Coding a female plug – removal of coding finger(s). Do not break off the first and last latch position coding fingers!

Locking lever



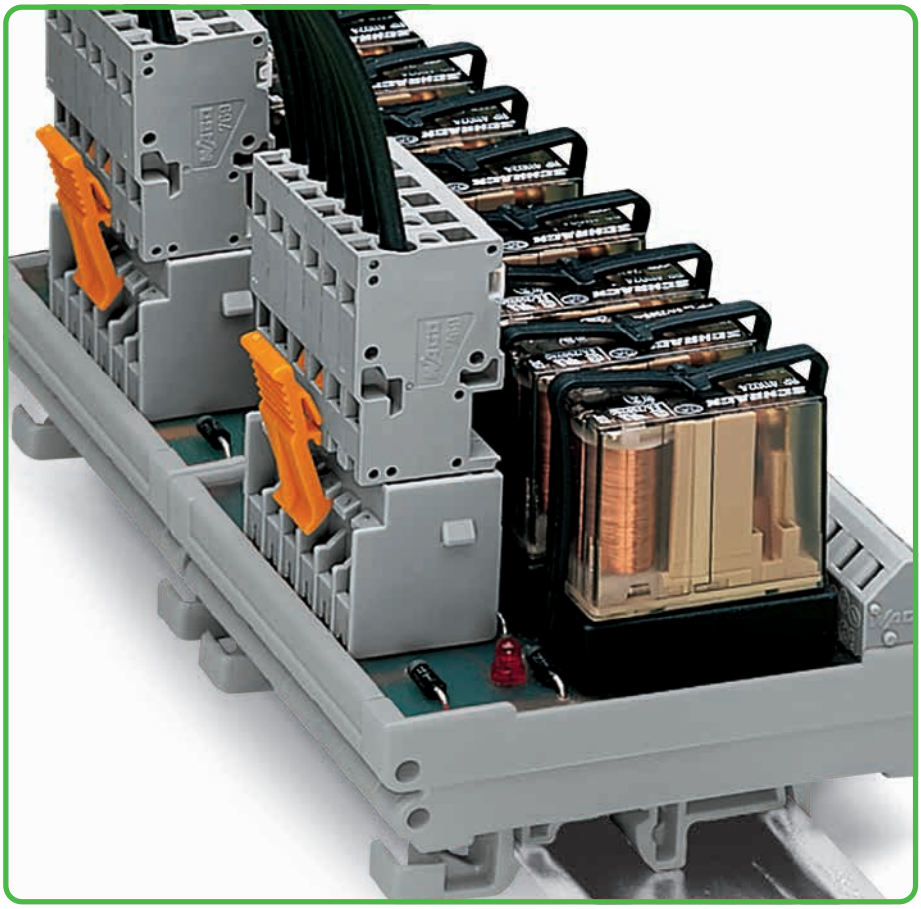
Snapping in/removal of locking lever.

Commoning

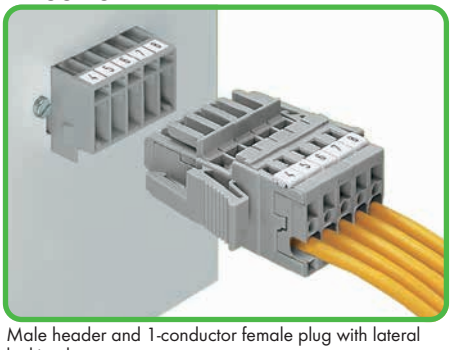


Commoning 1-conductor female plugs with miniature adjacent jumpers.

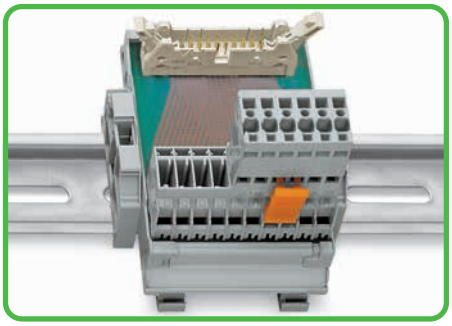
Note: Connectors used according to the regulations shall not be connected or disconnected when live or under load.



Plugging a female connector

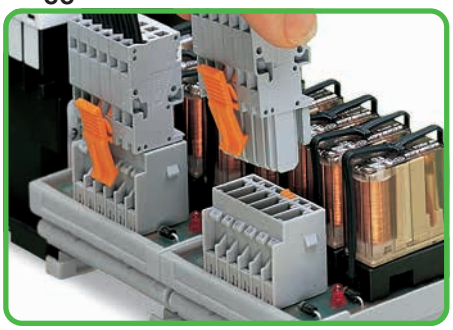


Male header and 1-conductor female plug with lateral locking levers.

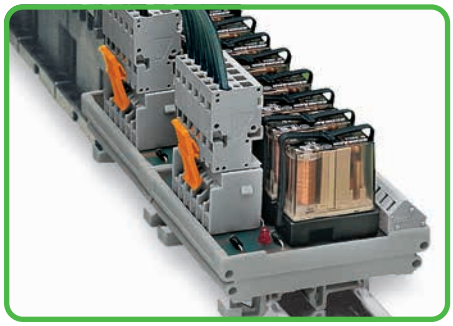


Male headers with solder pins for printed circuit boards.

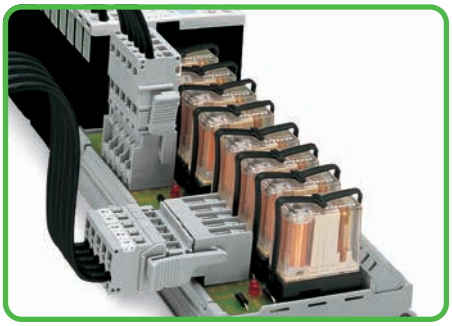
Pluggable PCB connection



Connection to a relay module inside the switchgear cabinet.



Application example showing a relay module:
Male headers with straight solder pins and 1-conductor female plugs.



Male headers with solder pins:
Integration of PCB sub-assemblies into the system wiring.



fine-stranded,
tip-bonded



fine-stranded,
with ferrule ❶
(gastight crimped)



fine-stranded,
with pin terminal
(gastight crimped)

❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

WAGO®

X-COM®-SYSTEM
Male Connectors
Pin Spacing 5 mm

Pin spacing 5 mm / 0.197 in, gray		Pin spacing 5 mm / 0.197 in, gray		Pin spacing 5 mm / 0.197 in, gray	
0.08 - 4 mm²	AWG 28 - 12	0.08 - 4 mm²	AWG 28 - 12	0.08 - 4 mm²	AWG 28 - 12
500 V/6 kV/3 ❶	600 V, 20 A	500 V/6 kV/3 ❶	600 V, 20 A	500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A ❷	300 V, 20 A	I_N 32 A ❷	300 V, 20 A	I_N 32 A ❷	300 V, 20 A
8 - 9 mm / 0.33 in ❸		8 - 9 mm / 0.33 in ❸		8 - 9 mm / 0.33 in ❸	







Pole No.	Item No.	Pack. Unit
Male connector with CAGE CLAMP® for flying leads, gray		
2	**769-602**	100
3	**769-603**	100
4	**769-604**	100
5	**769-605**	50
6	**769-606**	50
7	**769-607**	25
8	**769-608**	25
9	**769-609**	25
10	**769-610**	25
11	**769-611**	25
12	**769-612**	25
13	**769-613**	25
14	**769-614**	15
15	**769-615**	10

Pole No.	Item No.	Pack. Unit
Male connector with CAGE CLAMP® and snap-in mounting feet, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, with 209-137 mounting adapter for DIN 35 rail, gray		
2	**769-602/001-000**	100
3	**769-603/001-000**	100
4	**769-604/001-000**	50
5	**769-605/001-000**	50
6	**769-606/001-000**	50
7	**769-607/001-000**	25
8	**769-608/001-000**	25
9	**769-609/001-000**	25
10	**769-610/001-000**	25
11	**769-611/001-000**	25
12	**769-612/001-000**	25
13	**769-613/001-000**	15
14	**769-614/001-000**	15
15	**769-615/001-000**	20

Pole No.	Item No.	Pack. Unit
Male connector with CAGE CLAMP® and fixing flanges, for screw or similar mounting types, for vertical or horizontal mounting, gray		
2	**769-602/002-000**	100
3	**769-603/002-000**	50
4	**769-604/002-000**	50
5	**769-605/002-000**	50
6	**769-606/002-000**	50
7	**769-607/002-000**	25
8	**769-608/002-000**	25
9	**769-609/002-000**	25
10	**769-610/002-000**	25
11	**769-611/002-000**	25
12	**769-612/002-000**	25
13	**769-613/002-000**	15
14	**769-614/002-000**	10
15	**769-615/002-000**	20

Item-Specific Accessories

Strain relief plate, gray



2- to 3-pole	**769-411**	100 (4x25)
4- to 5-pole	**769-412**	100 (4x25)
6- to 9-pole	**769-413**	100 (4x25)
10- to 15-pole	**769-414**	100 (4x25)

Item-Specific Accessories

Mounting adapter, for DIN 35 rail,



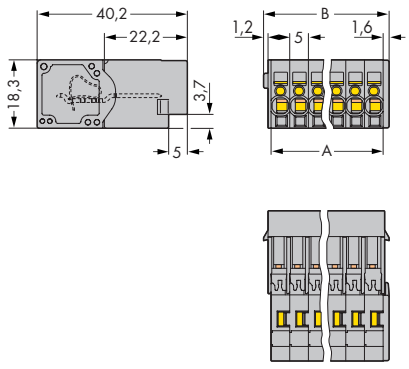
can be used as end plate, 6.5 mm wide		
gray	**209-137**	25

Item-Specific Accessories

Fixing screw M 2.5 x 16,

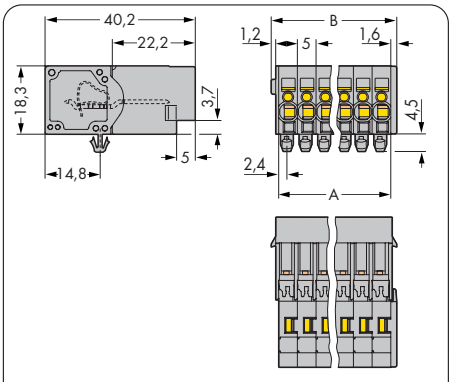


and hexagon nut M 2.5		
	769-499	100 (4x25)



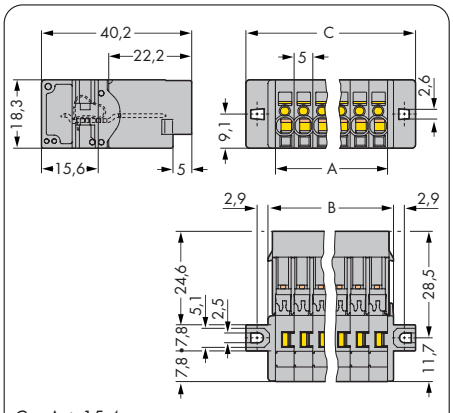
B = A + 3.6 mm
A = pole no. x pin spacing

Dimensions in mm



B = A + 3.6 mm
A = pole no. x pin spacing

Dimensions in mm



C = A + 15.4 mm
B = A + 3.6 mm
A = pole no. x pin spacing

Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

Pin spacing 5 mm / 0.197 in, gray	
0.08 - 4 mm²	AWG 28 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A ❷	300 V, 20 A
8 - 9 mm / 0.33 in ❸	

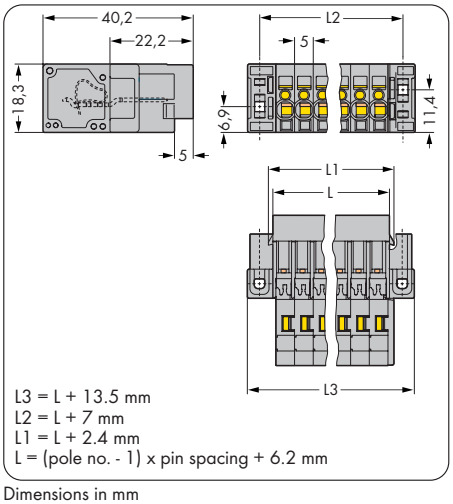


❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ See current-carrying capacity curve, page 363 and at www.wago.com

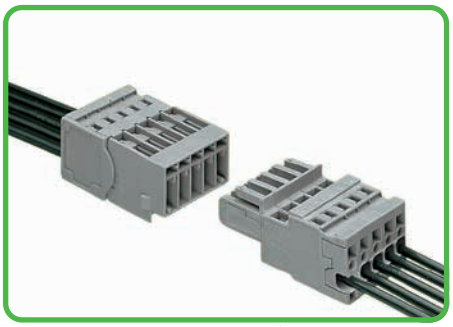
❸ Strip length, see packaging or instructions.

Pole No.	Item No.	Pack. Unit
Male connector with CAGE CLAMP® and feedthrough flanges,		
for screw or similar mounting types,		
for vertical or horizontal mounting,		
gray		
2	**769-602/004-000**	100
3	**769-603/004-000**	50
4	**769-604/004-000**	25
5	**769-605/004-000**	25
6	**769-606/004-000**	25
7	**769-607/004-000**	25
8	**769-608/004-000**	25
9	**769-609/004-000**	25
10	**769-610/004-000**	25
11	**769-611/004-000**	25
12	**769-612/004-000**	15
13	**769-613/004-000**	15
14	**769-614/004-000**	10
15	**769-615/004-000**	10

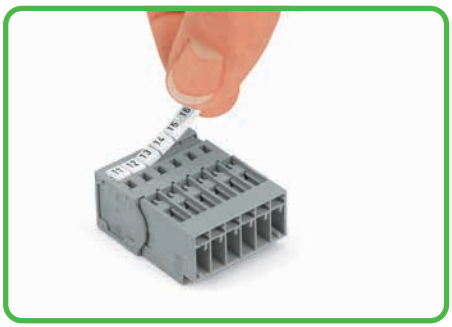


L3 = L + 13.5 mm
L2 = L + 7 mm
L1 = L + 2.4 mm
L = (pole no. - 1) x pin spacing + 6.2 mm

Dimensions in mm



Male connector with CAGE CLAMP®.
1-conductor female plug, straight.



Male connector with CAGE CLAMP®.
with miniature WSB quick marking system

769 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

1-conductor female plug,			
	straight		
	gray	**769-102**	100
1-conductor female plug,			
	with lateral locking levers		
	gray	**769-102/021-000**	50
2-conductor female plug			
	gray	**769-122**	50
Coding pin,			
	for coding female plugs		
	orange	**769-435**	100 (4x25)
Operating tool,			
	for female and male connectors with CAGE CLAMP®		
		210-490	1
Miniature WSB Quick marking system,			
	10 strips with 10 markers per card, 5 mm wide markers		
	plain	**248-501**	5
Operating lever, loose,			
	for female plugs and male connectors with CAGE CLAMP®		
		769-434	2000 (20x100)

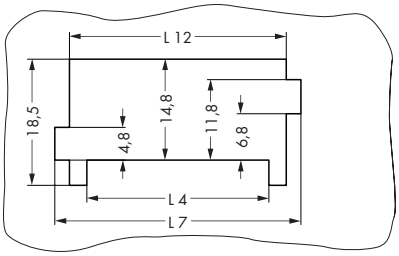
X-COM®-SYSTEM
Male Connectors with Snap-In Flanges
Pin Spacing 5 mm

CAGE CLAMP®

Pin spacing 5 mm / 0.197 in, gray

0.08 - 4 mm²	AWG 28 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A ❷	300 V, 20 A
8 - 9 mm / 0.33 in ❸	





L12 = pole no. x pin spacing + 6.8 mm
L4 = pole no. x pin spacing + 1.7 mm
L7 = L4 + 9.4 mm

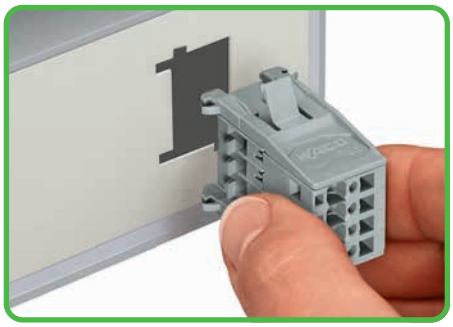
Sheet metal cut-out
Male connectors with CAGE CLAMP® connection and snap-in flanges

❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ See current-carrying capacity curve, page 363 and at www.wago.com

❸ Strip length, see packaging or instructions.

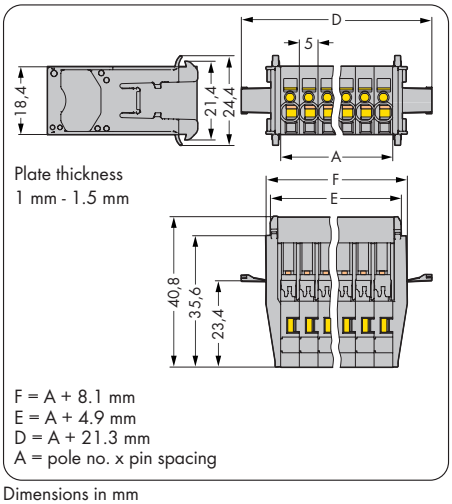
Pole No.	Item No.	Pack. Unit
Male connector with CAGE CLAMP® and snap-in flanges,		
for mounting without tools,		
gray		
2	**769-602/005-000**	50
3	**769-603/005-000**	25
4	**769-604/005-000**	25
5	**769-605/005-000**	25
6	**769-606/005-000**	25
7	**769-607/005-000**	25
8	**769-608/005-000**	20
9	**769-609/005-000**	20
10	**769-610/005-000**	20
11	**769-611/005-000**	15
12	**769-612/005-000**	15
13	**769-613/005-000**	15
14	**769-614/005-000**	10
15	**769-615/005-000**	10



Insert male connector into sheet metal cut-out.



Snap-in mounting without tools.



F = A + 8.1 mm
E = A + 4.9 mm
D = A + 21.3 mm
A = pole no. x pin spacing

Dimensions in mm

769 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

1-conductor female plug,

straight
gray **769-102** 100

1-conductor female plug,

with lateral locking levers
gray **769-102/021-000** 50

2-conductor female plug

gray **769-122** 50

Coding pin,

for coding female plugs
orange **769-435** 100 (4x25)

Operating tool,

for female and male connectors with CAGE CLAMP®
210-490 1

Miniature WSB Quick marking system,

10 strips with 10 markers per card,
5 mm wide markers
plain **248-501** 5

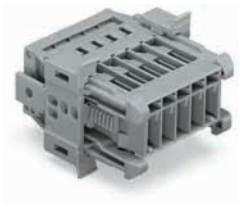
Operating lever, loose,

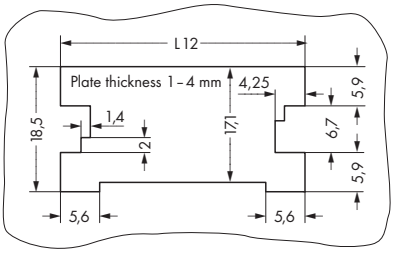
for female plugs and male connectors with CAGE CLAMP®
769-434 2000 (20x100)

Certification organizations can be found in the overview on pages 622 and 623.

X-COM®-SYSTEM
Male Connectors with Snap-In Flanges
Pin Spacing 5 mm

Pin spacing 5 mm / 0.197 in, gray
0.08 - 4 mm² | AWG 28 - 12
500 V/6 kV/3 ❶
I_N 32 A ❷
8 - 9 mm / 0.33 in ❸





L12 = pole no. x pin spacing + 10.2 mm

Sheet metal cut-out (for female plugs without locking levers)
Male connectors with CAGE CLAMP® connection and snap-in flanges

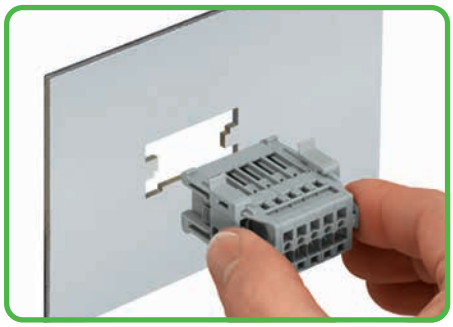
❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(see Section 14)

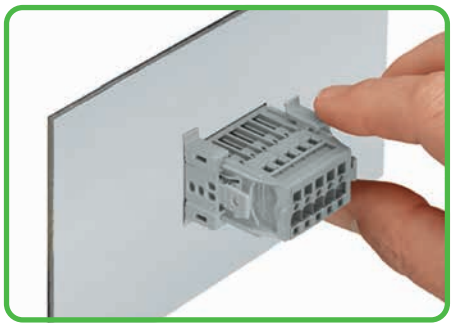
❷ See current-carrying capacity curve at www.wago.com

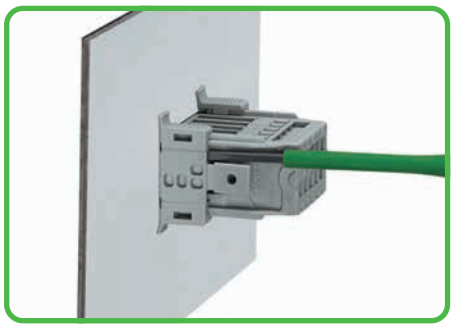
❸ Strip length, see packaging or instructions.

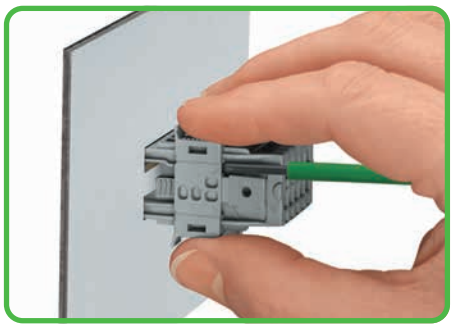
Pole No.	Item No.	Pack. Unit
Male connector with CAGE CLAMP® and snap-in flanges,		
for mounting without tools,		
gray		
2	**769-602/006-000**	100
3	**769-603/006-000**	100
4	**769-604/006-000**	50
5	**769-605/006-000**	25
6	**769-606/006-000**	25
7	**769-607/006-000**	25
8	**769-608/006-000**	25
9	**769-609/006-000**	20
10	**769-610/006-000**	25
11	**769-611/006-000**	25
12	**769-612/006-000**	25
13	**769-613/006-000**	15
14	**769-614/006-000**	15
15	**769-615/006-000**	10

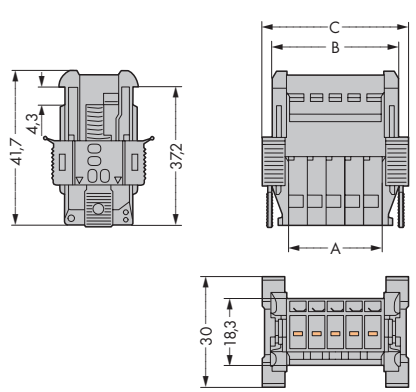
Accessories see page 344.


Insert male connector into sheet metal cut-out.


Fix snap-in flange.


For removal, insert operating tool (blade width 2.5 mm) into release slot.


Press center part of connector. Then remove snap-in flange.



C = A + 14.3 mm
B = A + 9.3 mm
A = pole no. x pin spacing

Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

X-COM®-SYSTEM
Male Headers with Solder Pins
Pin Spacing 5 mm

Pin spacing 5 mm / 0.197 in, gray	Pin spacing 5 mm / 0.197 in, gray
250 V/4 kV/3 ❶ | 300 V, 20 A	250 V/4 kV/3 ❶ | 600 V, 20 A
500 V/4 kV/2 ❶ | 300 V, 20 A	500 V/4 kV/2 ❶ | 300 V, 20 A
I_N 32 A ❷	I_N 32 A ❷



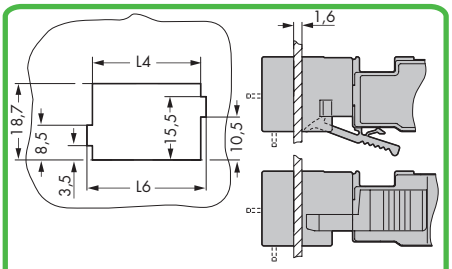


❶ 250 V/500 V = rated voltage
4 kV = rated surge voltage
3/2 = pollution degree
(also see Section 14)

❷ See current-carrying capacity curve, page 362 and at www.wago.com

Pole No.	Item No.	Pack. Unit
Male header with straight solder pins, 1 x 1 mm, gray		
2	**769-632**	200
3	**769-633**	100
4	**769-634**	50
5	**769-635**	50
6	**769-636**	50
7	**769-637**	50
8	**769-638**	25
9	**769-639**	25
10	**769-640**	25
11	**769-641**	25
12	**769-642**	25
13	**769-643**	25
14	**769-644**	25
15	**769-645**	25

Pole No.	Item No.	Pack. Unit
Male header with angled solder pins, 1 x 1 mm, gray		
2	**769-662**	200
3	**769-663**	100
4	**769-664**	50
5	**769-665**	50
6	**769-666**	50
7	**769-667**	50
8	**769-668**	25
9	**769-669**	25
10	**769-670**	25
11	**769-671**	25
12	**769-672**	25
13	**769-673**	25
14	**769-674**	25
15	**769-675**	25



L6 = L4 + 2.6 mm
L4 = pole no. x pin spacing + 1.7 mm

Sheet metal cut-out for male header

Accessories

1-conductor female plug,



straight

gray	**769-102**	100

1-conductor female plug,



with lateral locking levers

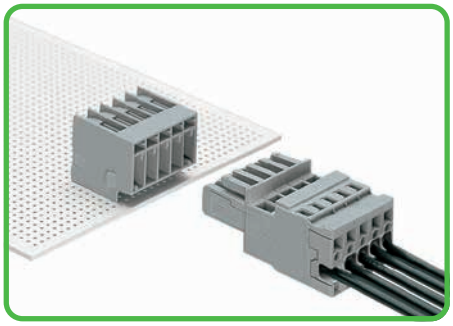
gray	**769-102/021-000**	50

Coding pin,

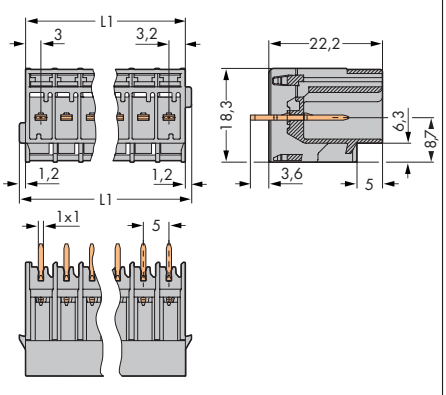


for coding female plugs

orange	**769-435**	100 (4x25)

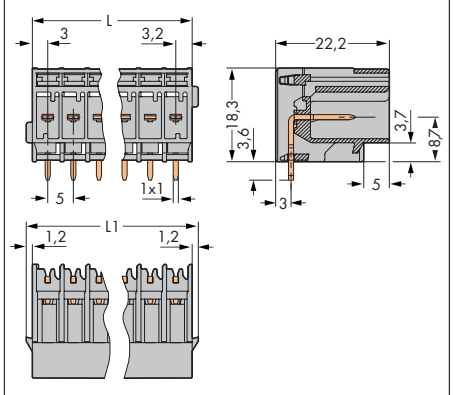


Male header with angled solder pins



L1 = L + 2.4 mm
L = (pole no. - 1) x pin spacing + 6.2 mm

Dimensions in mm



L1 = L + 2.4 mm
L = (pole no. - 1) x pin spacing + 6.2 mm

Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

X-COM®-SYSTEM
Male Headers with Solder Pins and Fixing Flanges
Pin Spacing 5 mm

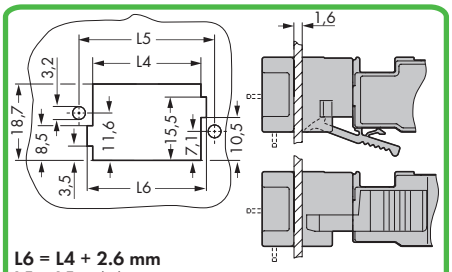
Pin spacing 5 mm / 0.197 in, gray	Pin spacing 5 mm / 0.197 in, gray
250 V/4 kV/3 ❶ | 300 V, 20 A	250 V/4 kV/3 ❶ | 600 V, 20 A
500 V/4 kV/2 ❶ | 300 V, 20 A	500 V/4 kV/2 ❶ | 300 V, 20 A
I_N 32 A ❷	I_N 32 A ❷

❶ 250 V/500 V = rated voltage
4 kV = rated surge voltage
3/2 = pollution degree
(also see Section 14)

❷ See current-carrying capacity curve, page 362 and at www.wago.com





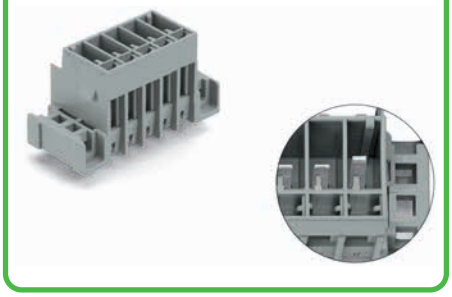


L6 = L4 + 2.6 mm
L5 = L5 + 6.6 mm
L4 = pole no. x pin spacing + 1.7 mm

Sheet metal cut-out for male header with fixing flanges

Pole No.	Item No.	Pack. Unit
Male header with straight solder pins and fixing flanges, 1 x 1 mm, gray		
2	**769-632/003-000**	200
3	**769-633/003-000**	100
4	**769-634/003-000**	50
5	**769-635/003-000**	50
6	**769-636/003-000**	25
7	**769-637/003-000**	25
8	**769-638/003-000**	25
9	**769-639/003-000**	25
10	**769-640/003-000**	25
11	**769-641/003-000**	25
12	**769-642/003-000**	25
13	**769-643/003-000**	15
14	**769-644/003-000**	15
15	**769-645/003-000**	15

Pole No.	Item No.	Pack. Unit
Male header with angled solder pins and fixing flanges, 1 x 1 mm, gray		
2	**769-662/003-000**	100
3	**769-663/003-000**	100
4	**769-664/003-000**	50
5	**769-665/003-000**	50
6	**769-666/003-000**	50
7	**769-667/003-000**	25
8	**769-668/003-000**	25
9	**769-669/003-000**	25
10	**769-670/003-000**	25
11	**769-671/003-000**	25
12	**769-672/003-000**	25
13	**769-673/003-000**	15
14	**769-674/003-000**	15
15	**769-675/003-000**	15



Male headers with preceding ground contact, with straight solder pins and fixing flanges
769-632/003-036
769-633/003-036
769-634/003-036
769-635/003-036
769-636/003-036

Accessories

1-conductor female plug,



straight
gray **769-102** 100

1-conductor female plug,

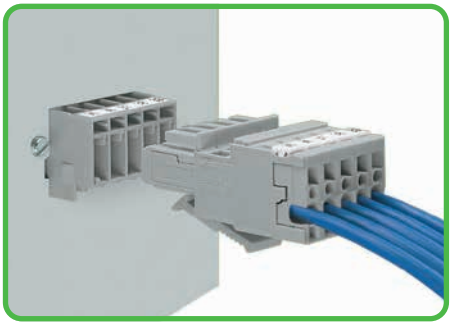


with lateral locking levers
gray **769-102/021-000** 50

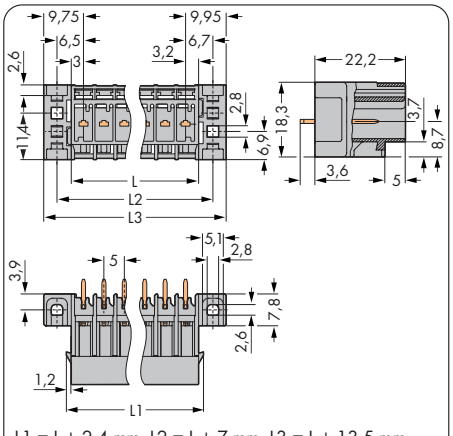
Coding pin,



for coding female plugs
orange **769-435** 100 (4x25)

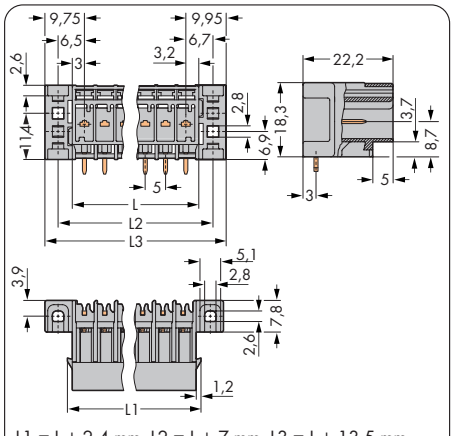


Male header and 1-conductor female plug with locking levers



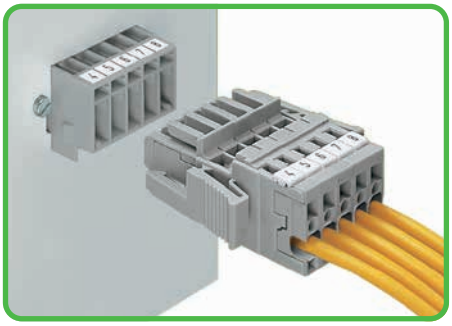
L1 = L + 2.4 mm, L2 = L + 7 mm, L3 = L + 13.5 mm
L = (pole no. - 1) x pin spacing + 6.2 mm

Dimensions in mm



L1 = L + 2.4 mm, L2 = L + 7 mm, L3 = L + 13.5 mm
L = (pole no. - 1) x pin spacing + 6.2 mm

Dimensions in mm



Male header and 1-conductor female plug with **lateral** locking levers

Certification organizations can be found in the overview on pages 622 and 623.

X-COM®-SYSTEM
Male Headers with Solder Pins and Feedthrough Flanges
Pin Spacing 5 mm

Pin spacing 5 mm / 0.197 in, gray	Pin spacing 5 mm / 0.197 in, gray
250 V/4 kV/3 ❶ | 300 V, 20 A	250 V/4 kV/3 ❶ | 300 V, 20 A
500 V/4 kV/2 ❶ | 300 V, 20 A	500 V/4 kV/2 ❶ | 300 V, 20 A
I_N 32 A ❷	I_N 32 A ❷



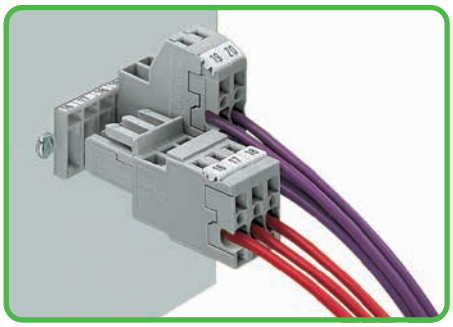


❶ 250 V/500 V = rated voltage
4 kV = rated surge voltage
3/2 = pollution degree
(also see Section 14)

❷ See current-carrying capacity curve, page 362 and at www.wago.com

Pole No.	Item No.	Pack. Unit
Male header with straight solder pins and feedthrough flanges, 1 x 1 mm, gray		
2	**769-632/004-000**	200
3	**769-633/004-000**	50
4	**769-634/004-000**	50
5	**769-635/004-000**	50
6	**769-636/004-000**	50
7	**769-637/004-000**	25
8	**769-638/004-000**	25
9	**769-639/004-000**	25
10	**769-640/004-000**	25
11	**769-641/004-000**	25
12	**769-642/004-000**	25
13	**769-643/004-000**	15
14	**769-644/004-000**	15
15	**769-645/004-000**	15

Pole No.	Item No.	Pack. Unit
Male header with angled solder pins and feedthrough flanges, 1 x 1 mm, gray		
2	**769-662/004-000**	200
3	**769-663/004-000**	100
4	**769-664/004-000**	50
5	**769-665/004-000**	50
6	**769-666/004-000**	50
7	**769-667/004-000**	50
8	**769-668/004-000**	25
9	**769-669/004-000**	25
10	**769-670/004-000**	25
11	**769-671/004-000**	25
12	**769-672/004-000**	25
13	**769-673/004-000**	25
14	**769-674/004-000**	15
15	**769-675/004-000**	15



Male header and 1- and 2-conductor female plugs

Accessories

1-conductor female plug,



straight

gray	**769-102**	100

1-conductor female plug,



with lateral locking levers

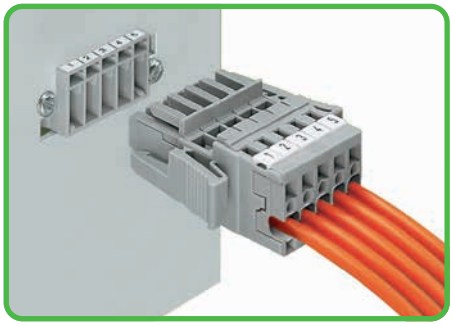
gray	**769-102/021-000**	50

Coding pin,

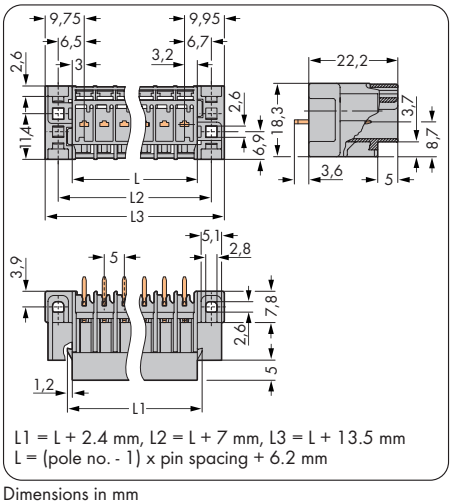


for coding female plugs

orange	**769-435**	100 (4x25)

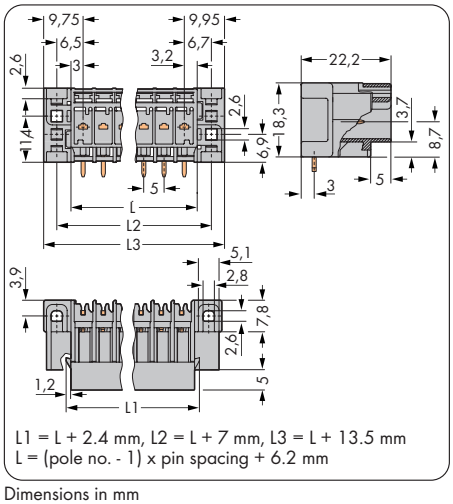


Male header and 1-conductor female plug with **lateral** locking levers



L1 = L + 2.4 mm, L2 = L + 7 mm, L3 = L + 13.5 mm
L = (pole no. - 1) x pin spacing + 6.2 mm

Dimensions in mm

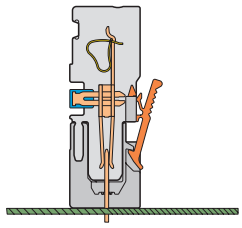


L1 = L + 2.4 mm, L2 = L + 7 mm, L3 = L + 13.5 mm
L = (pole no. - 1) x pin spacing + 6.2 mm

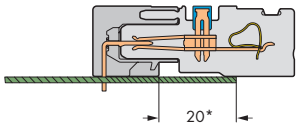
Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

Types of Assembly
Male Headers with Solder Pins with 1-/2-Conductor Female Plugs

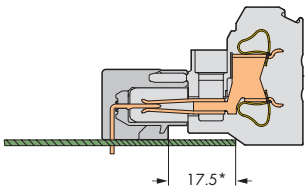


Male header with straight solder pins



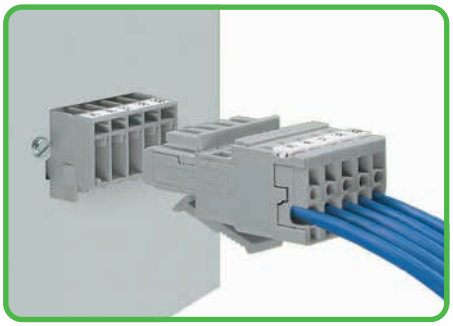
* Maximum dimension when using 1-conductor female plugs

Male header with angled solder pins

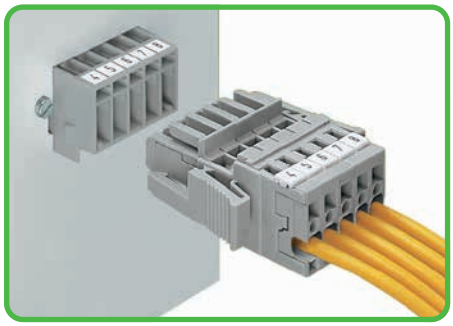


* Maximum dimension when using 2-conductor female plugs

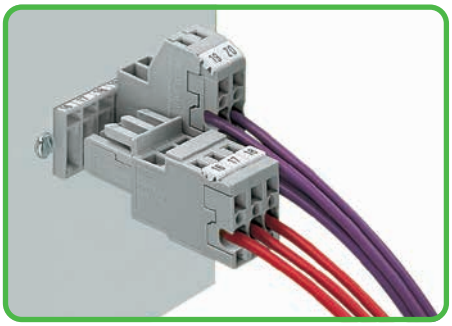
Male header with angled solder pins



Male header with fixing flanges
1-conductor female plug with **bottom-mount** locking levers



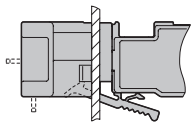
Male header with fixing flanges
1-conductor female plug with **lateral** locking levers



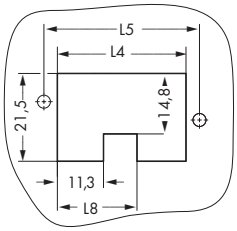
Male header with feedthrough flanges
1-conductor female plug
2-conductor female plug

Cutouts for headers with fixing flanges for feedthrough applications and locking levers

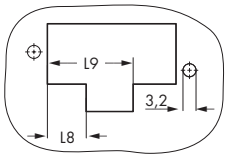
Female plugs with **bottom-mounted** locking levers



Cutouts for
2-pole locking levers
(2- to 15-pole female plugs)

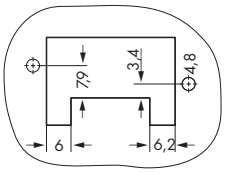


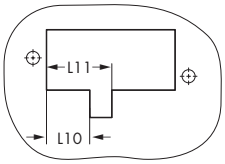
Layout for
locking levers
outer . . .



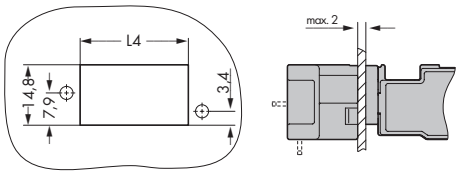
. . . inner

Cutouts for
single pole locking levers

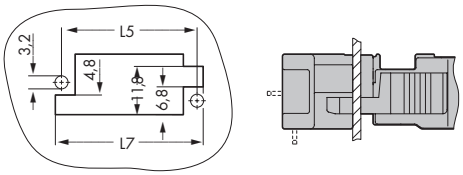




Female plug **without** locking levers



Female plug with **lateral** locking levers



L 4 = pole no. x pin spacing + 1.7 mm
L 5 = L4 + 6.6 mm
L 7 = L4 + 9.4 mm
L 8 = pole no. LL x pin spacing - 0.3 mm
L 9 = L8 + 11.6 mm
L10 = pole no. LL x pin spacing + 0.6 mm
L11 = L10 + 5.4 mm
pole no. LL: Number of poles before the poles with the locking lever attached
LL = locking lever

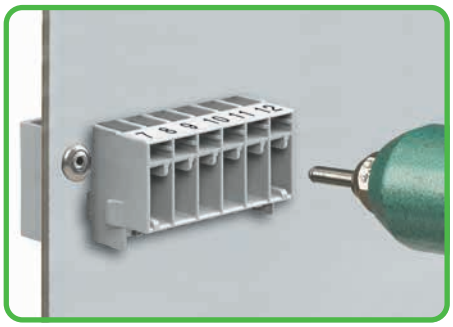
X-COM®-SYSTEM
Male Headers with Solder Pins and Rivet Fixing Flanges
Pin Spacing 5 mm

Pin spacing 5 mm / 0.197 in, gray
250 V/4 kV/3 ❶
500 V/4 kV/2 ❶
I_N 32 A ❷



❶ 250 V/500 V = rated voltage
4 kV = rated surge voltage
3/2 = pollution degree
(also see Section 14)

❷ See current-carrying capacity curve at www.wago.com



Mounting with 3 mm Ø blind rivets

Pole No.	Item No.	Pack. Unit
Male header with straight solder pins and rivet fixing flanges, 1 x 1 mm, gray		
2	**769-632/007-000**	200
3	**769-633/007-000**	50
4	**769-634/007-000**	50
5	**769-635/007-000**	50
6	**769-636/007-000**	50
7	**769-637/007-000**	25
8	**769-638/007-000**	25
9	**769-639/007-000**	25
10	**769-640/007-000**	25
11	**769-641/007-000**	25
12	**769-642/007-000**	25
13	**769-643/007-000**	15
14	**769-644/007-000**	15
15	**769-645/007-000**	15

Accessories

1-conductor female plug,



straight
gray **769-102** 100

1-conductor female plug,

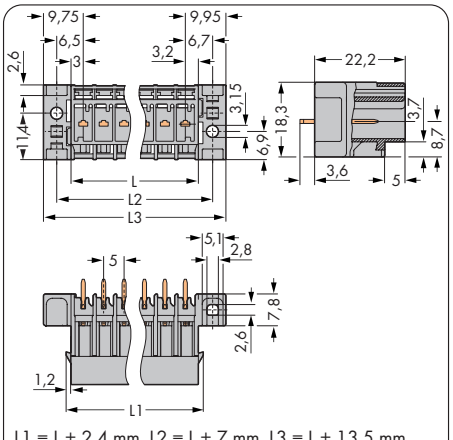


with lateral locking levers
gray **769-102/021-000** 50

Coding pin,



for coding female plugs
orange **769-435** 100 (4x25)



L1 = L + 2.4 mm, L2 = L + 7 mm, L3 = L + 13.5 mm
L = (pole no. - 1) x pin spacing + 6.2 mm

Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

X-COM®-SYSTEM
1-Conductor Female Plugs

CAGE CLAMP®

0.08 - 4 mm²	AWG 28 - 12
500 V/6 kV/3 ❶	600 V, 20 A
I_N 32 A ❷	300 V, 20 A

Module width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❸



❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ See current-carrying capacity curve, pages 360 to 363 and at www.wago.com

❸ Strip length, see packaging or instructions.

❹ Item-no. suffix
blue . . . /000-006
green-yellow . . . /000-016

❺ **Application examples for 1-pole female plug:**
- Phase selection in three-phase network
- Test plug with rated current capability
- Simplified circuit expansion – addition of base circuits requires only female plugs to be plugged in

❻ See page 359

Pole No.	Item No.	Pack. Unit
1-conductor female plug, for insertion into carrier terminal blocks or male connectors, with coding fingers, gray, commoning possible with miniature adjacent jumpers		
1	**769-101** ❺	200
2	**769-102**	100
3	**769-103**	50
4	**769-104**	50
5	**769-105**	50
6	**769-106**	25
7	**769-107**	25
8	**769-108**	25
9	**769-109**	25
10	**769-110**	25
11	**769-111**	20
12	**769-112**	20
13	**769-113**	10
14	**769-114**	10
15	**769-115**	10

Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

Insulation stop,
5 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **769-470** 200 (8x25)

light gray **769-471** 200 (8x25)

dark gray **769-472** 200 (8x25)

Miniature adjacent jumper, insulated,
I_N 24 A
gray **769-402** 100 (4x25)

Jumper cover, for 1-conductor female plugs,
for 5 poles
gray **769-436** 100 (4x25)

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks
yellow **280-415** 100 (4x25)

Operating lever, loose,
for female plugs and male connectors with CAGE CLAMP®
769-434 2000 (20x100)

Locking lever,
female plugs with 1-pole
gray **769-428** 100 (4x25)
orange **769-429** 100 (4x25)

Locking lever,
female plugs with 2-poles or more
orange **769-431** 100 (4x25)
gray **769-430** 100 (4x25)

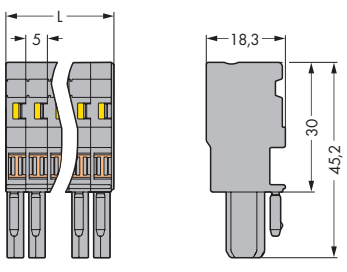
Strain relief plate, gray
1-pole **769-410** 100 (4x25)
2- to 3-pole **769-411** 100 (4x25)
4- to 5-pole **769-412** 100 (4x25)

Strain relief plate, gray
6- to 9-pole **769-413** 100 (4x25)
10- to 15-pole **769-414** 100 (4x25)

Snap-on type relief housing,
❻ consisting of strain relief support/housing
5-pole **769-1605** 25

Miniature WSB Quick marking system,
10 strips with 10 markers per card,
5 mm wide markers
plain **248-501** 5

Miniature WSB Quick marking system, plain,
10 strips with 10 markers per card,
5 mm wide markers
yellow **248-501/000-002**
red **248-501/000-005**
blue **248-501/000-006**
gray **248-501/000-007**
orange **248-501/000-012**
light green **248-501/000-017**
green **248-501/000-023**
violet **248-501/000-024**
5



L = pole no. x module width

Dimensions in mm

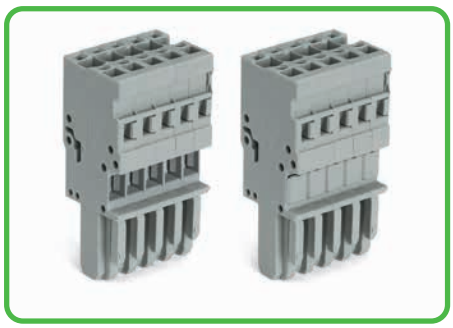
Certification organizations can be found in the overview on pages 622 and 623.

X-COM®-SYSTEM
1-Conductor Female Plugs with Lateral Locking Levers

0.08 - 4 mm²	AWG 28 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A ❷	300 V, 20 A

Module width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❸




Jumper cover for 1-conductor female plugs

❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ See current-carrying capacity curve, pages 360 to 363 and at www.wago.com

❸ Strip length, see packaging or instructions.

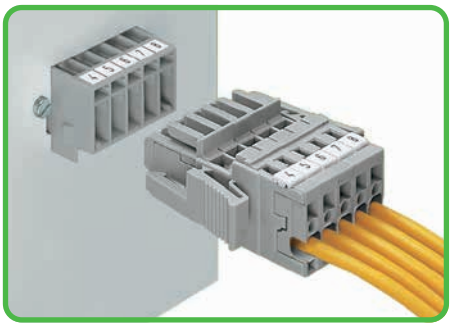
❹ See page 359

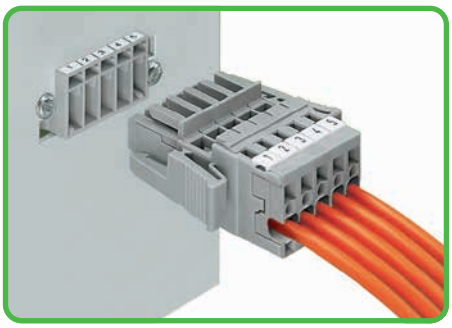
Pole No.	Item No.	Pack. Unit
1-conductor female plug with lateral locking levers, with coding fingers, gray, commoning possible with miniature adjacent jumpers, only to be used with male connectors		
2	**769-102/021-000**	50
3	**769-103/021-000**	25
4	**769-104/021-000**	25
5	**769-105/021-000**	25
6	**769-106/021-000**	25
7	**769-107/021-000**	25
8	**769-108/021-000**	20
9	**769-109/021-000**	20
10	**769-110/021-000**	10
11	**769-111/021-000**	10
12	**769-112/021-000**	10
13	**769-113/021-000**	10
14	**769-114/021-000**	10
15	**769-115/021-000**	10

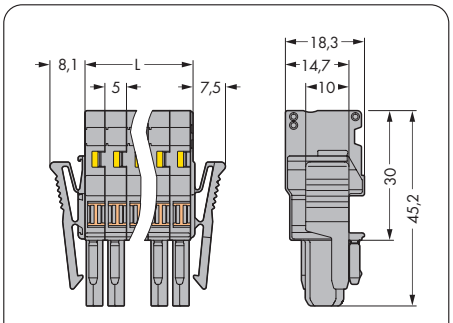
Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

Insulation stop,	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st") white	**769-470**	200 (8x25)
Insulation stop,	5 pcs/strip, 0.25 - 0.5 mm² light gray	**769-471**	200 (8x25)
Insulation stop,	5 pcs/strip, 0.75 - 1 mm² dark gray	**769-472**	200 (8x25)
Miniature adjacent jumper, insulated,	I_N 24 A gray	**769-402**	100 (4x25)
Jumper cover, for 1-conductor female plugs,	for 5 poles gray	**769-436**	100 (4x25)
Protective warning marker,	with high-voltage symbol, black, for 5 terminal blocks yellow	**280-415**	100 (4x25)
Operating lever, loose,	for female plugs and male connectors with CAGE CLAMP®	**769-434**	2000 (20x100)
Test plug,	with 500 mm cable, 2 mm Ø red	**210-136**	50
Test plug,	with 500 mm cable, 2.3 mm Ø yellow	**210-137**	50
Strain relief plate, gray	2- to 3-pole	**769-411**	100 (4x25)
	4- to 5-pole	**769-412**	100 (4x25)
Strain relief plate, gray	6- to 9-pole	**769-413**	100 (4x25)
	10- to 15-pole	**769-414**	100 (4x25)
Snap-on type relief housing, ❹	consisting of strain relief support/housing 5-pole	**769-1605**	25


Male connector with fixing flanges and 1-conductor female plug with **lateral** locking levers


Male connector and 1-conductor female plug with **lateral** locking levers



L = pole no. x module width

Dimensions in mm

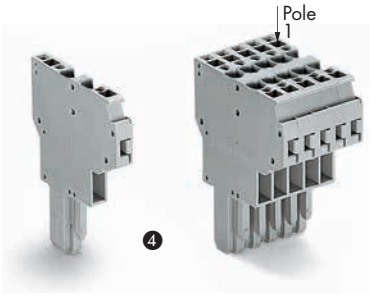
Certification organizations can be found in the overview on pages 622 and 623.

X-COM®-SYSTEM
2-Conductor Female Plugs

CAGE CLAMP®

0.08 - 4 mm²	AWG 28 - 12
500 V/6 kV/3 ❶	600 V, 20 A
I_N 32 A ❷	300 V, 20 A

Module width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❸



❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ See current-carrying capacity curve at www.wago.com

❸ Strip length, see packaging or instructions.

❹ Item-no. suffix
blue . . . /000-006
green-yellow . . . /000-016

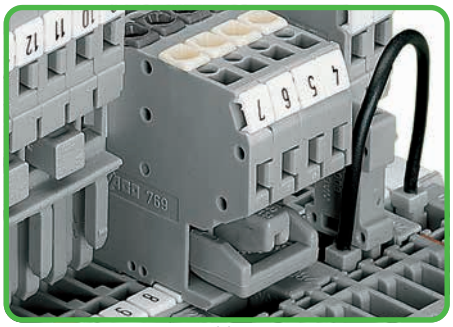
❺ See application notes for:
Staggered jumper, page 295

Pole No.	Item No.	Pack. Unit
2-conductor female plug, for insertion into carrier terminal blocks or male connectors, with coding fingers, gray, commoning possible with adjacent jumpers and staggered jumpers		
1	**769-121**	100
2	**769-122**	50
3	**769-123**	25
4	**769-124**	25
5	**769-125**	20
6	**769-126**	10
7	**769-127**	10
8	**769-128**	10
9	**769-129**	10
10	**769-130**	10
11	**769-131**	5
12	**769-132**	5
13	**769-133**	5
14	**769-134**	5
15	**769-135**	5

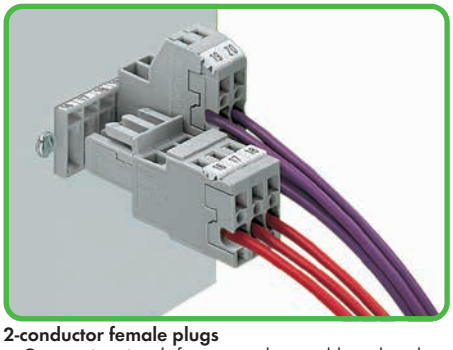
Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

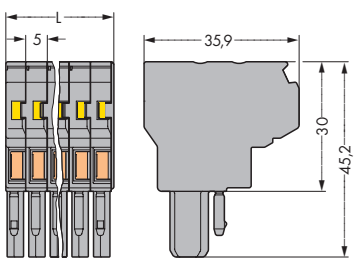
Insulation stop,			
	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**769-470**	200 (8x25)
Insulation stop,			
	5 pcs/strip, 0.25 - 0.5 mm²		
	light gray	**769-471**	200 (8x25)
Insulation stop,			
	5 pcs/strip, 0.75 - 1 mm²		
	dark gray	**769-472**	200 (8x25)
Adjacent jumper, insulated,			
	I_N = I_N terminal block		
	gray	**280-402**	200 (8x25)
Staggered jumper, ❺			
	insulated, Spacing: 5 mm, I_N 24 A		
	from 1 to 2	**780-452**	100 (4x25)
	from 1 to 3	**780-453**	100 (4x25)
	from 1 to 4	**780-454**	100 (4x25)
	from 1 to 5	**780-455**	50 (2x25)
	from 1 to 6	**780-456**	50 (2x25)
	from 1 to 7	**780-457**	50 (2x25)
	from 1 to 8	**780-458**	50 (2x25)
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks		
	yellow	**280-415**	100 (4x25)
Locking lever,			
	female plugs with 1-pole		
	gray	**769-428**	100 (4x25)
	orange	**769-429**	100 (4x25)
Locking lever,			
	female plugs with 2-poles or more		
	orange	**769-431**	100 (4x25)
	gray	**769-430**	100 (4x25)
Strain relief plate, gray			
	1-pole	**769-410**	100 (4x25)
	2- to 3-pole	**769-411**	100 (4x25)
	4- to 5-pole	**769-412**	100 (4x25)
Strain relief plate, gray			
	6- to 9-pole	**769-413**	100 (4x25)
	10- to 15-pole	**769-414**	100 (4x25)



Commoning possibility of female plugs
- After removal, commoned potentials still remain commoned
- Use of plug-in jumpers instead of additional wired jumpers
- Can be used as a "hardware" key for safety lockout
- Can also be used as a commoning jumper for sensor circuits or machine programming



2-conductor female plugs
- Commoning signals from one sub-assembly to the other (bus structure)
- Can be used as a T-wire branch tap connection (e.g., for lighting wiring)
- Enables a higher number of connection possibilities



L = pole no. x module width

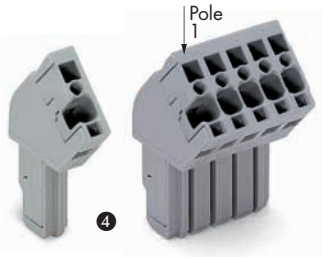
Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

X-COM®-SYSTEM
1-Conductor Female Plugs, Angled

0.08 - 4 mm²	AWG 28 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A ❷	300 V, 20 A

Module width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❸



❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ See current-carrying capacity curve at www.wago.com

❸ Strip length, see packaging or instructions.

❹ Item-no. suffix
blue . . . /000-006
green-yellow . . . /000-016

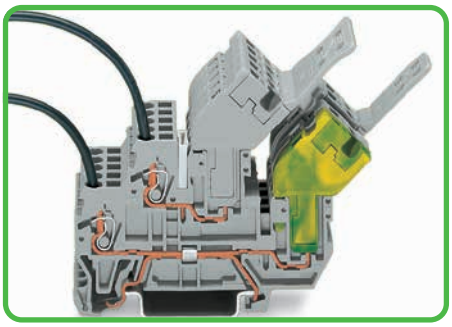
❺ See page 359

Pole No.	Item No.	Pack. Unit
1-conductor female plug, angled, for insertion into carrier terminal blocks or male connectors, with coding fingers, gray		
1	**769-101/022-000**	200
2	**769-102/022-000**	100
3	**769-103/022-000**	50
4	**769-104/022-000**	50
5	**769-105/022-000**	50
6	**769-106/022-000**	25
7	**769-107/022-000**	25
8	**769-108/022-000**	25
9	**769-109/022-000**	25
10	**769-110/022-000**	25
11	**769-111/022-000**	20
12	**769-112/022-000**	20
13	**769-113/022-000**	10
14	**769-114/022-000**	10
15	**769-115/022-000**	10

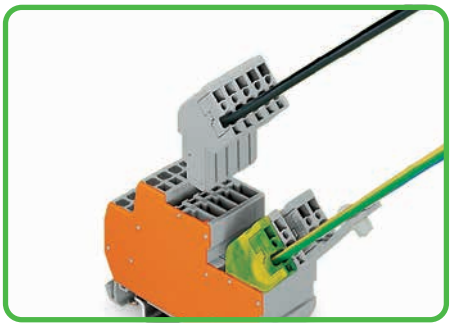
Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

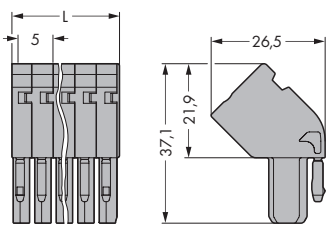
Insulation stop,	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st") white	**769-470**	200 (8x25)
Insulation stop,	5 pcs/strip, 0.25 - 0.5 mm² light gray	**769-471**	200 (8x25)
Insulation stop,	5 pcs/strip, 0.75 - 1 mm² dark gray	**769-472**	200 (8x25)
Protective warning marker,	with high-voltage symbol, black, for 5 terminal blocks yellow	**280-415**	100 (4x25)
Operating lever, loose,	for female plugs and male connectors with CAGE CLAMP®	**769-434**	2000 (20x100)
Test plug,	with 500 mm cable, 2 mm Ø red	**210-136**	50
Test plug,	with 500 mm cable, 2.3 mm Ø yellow	**210-137**	50
Strain relief plate, gray	1-pole	**769-410**	100 (4x25)
	2- to 3-pole	**769-411**	100 (4x25)
	4- to 5-pole	**769-412**	100 (4x25)
Strain relief plate, gray	6- to 9-pole	**769-413**	100 (4x25)
	10- to 15-pole	**769-414**	100 (4x25)
Snap-on type relief housing,	consisting of strain relief support/housing 5-pole	**769-1605**	25
Miniature WSB Quick marking system,	10 strips with 10 markers per card, 5 mm wide markers plain	**248-501**	5



Angled female plugs provide reduced installation height.



Angled female plugs installed on double-deck terminal block.



L = pole no. x module width

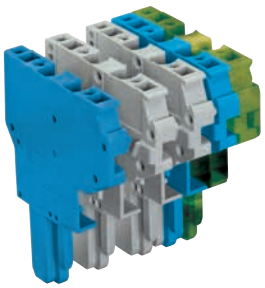
Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

X-COM®-SYSTEM
Female Plugs for Self-Assembly

0.08 - 4 mm² | AWG 28 - 12 500 V/6 kV/3 ❶ I_N 32 A ❷ Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❸	0.08 - 4 mm² | AWG 28 - 12 500 V/6 kV/3 ❶ I_N 32 A ❷ Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❸	0.08 - 4 mm² | AWG 28 - 12 500 V/6 kV/3 ❶ I_N 32 A ❷ Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❸







	Item No.	Pack. Unit
1-conductor end module, with coding fingers, commoning possible with miniature adjacent jumpers		
gray	**769-503**	250
blue	**769-503/000-006**	250
green-yellow	**769-503/000-016**	250
1-conductor center module, with coding fingers, commoning possible with miniature adjacent jumpers		
gray	**769-502**	250
blue	**769-502/000-006**	250
green-yellow	**769-502/000-016**	250
1-conductor base module, with integrated end plate, with coding fingers, commoning possible with miniature adjacent jumpers		
gray	**769-501**	250
blue	**769-501/000-006**	250
green-yellow	**769-501/000-016**	250

	Item No.	Pack. Unit
2-conductor end module, with coding fingers, commoning possible with adjacent jumpers and staggered jumpers		
gray	**769-506**	250
blue	**769-506/000-006**	250
green-yellow	**769-506/000-016**	250
2-conductor center module, with coding fingers, commoning possible with adjacent jumpers and staggered jumpers		
gray	**769-505**	250
blue	**769-505/000-006**	250
green-yellow	**769-505/000-016**	250
2-conductor base module, with integrated end plate, with coding fingers, commoning possible with adjacent jumpers and staggered jumpers		
gray	**769-504**	250
blue	**769-504/000-006**	250
green-yellow	**769-504/000-016**	250

	Item No.	Pack. Unit
1-conductor end module, angled, with coding fingers		
gray	**769-515**	250
blue	**769-515/000-006**	250
green-yellow	**769-515/000-016**	250
1-conductor center module, angled, with coding fingers		
gray	**769-513**	250
blue	**769-513/000-006**	250
green-yellow	**769-513/000-016**	250
1-conductor base module, angled, with integrated end plate, with coding fingers		
gray	**769-512**	250
blue	**769-512/000-006**	250
green-yellow	**769-512/000-016**	250

Item-Specific Accessories

Miniature adjacent jumper, insulated,



I_N 24 A
gray **769-402** 100 (4x25)

Item-Specific Accessories

Adjacent jumper, insulated,



$I_N = I_N$ terminal block
gray **280-402** 200 (8x25)

Accessories for Female Plugs

Appropriate marking system:
Miniature WSB (see Section 13)

Insulation stop,



5 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **769-470** 200 (8x25)

Insulation stop,



5 pcs/strip,
0.25 - 0.5 mm²
light gray **769-471** 200 (8x25)

Insulation stop,



5 pcs/strip,
0.75 - 1 mm²
dark gray **769-472** 200 (8x25)

Protective warning marker,



with high-voltage symbol, black,
for 5 terminal blocks
yellow **280-415** 100 (4x25)

Locking lever,



female plugs with 1-pole
gray **769-428** 100 (4x25)
orange **769-429** 100 (4x25)

Locking lever,



female plugs with 2-poles or more
orange **769-431** 100 (4x25)
gray **769-430** 100 (4x25)

Test plug,



with 500 mm cable,
2 mm Ø
red **210-136** 50

Test plug,



with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

Operating lever, loose,



for female plugs and male connectors with CAGE CLAMP®
769-434 2000 (20x100)

Miniature WSB Quick marking system,



10 strips with 10 markers per card,
5 mm wide markers
plain **248-501** 5

Strain relief plate, gray



1-pole **769-410** 100 (4x25)
2- to 3-pole **769-411** 100 (4x25)
4- to 5-pole **769-412** 100 (4x25)

Strain relief plate, gray



6- to 9-pole **769-413** 100 (4x25)
10- to 15-pole **769-414** 100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

Self-assembly of individual female plugs:
Using modular female plugs from the X-COM®-SYSTEM, female plugs can be customized for applications requiring varying numbers of poles (e.g., when designing prototypes).

Modules and pole numbers:
A self-assembled female plug consists of:
Base module with integrated end plate,
up to 13 center modules (corresponding to a 15-pole female plug = maximum number of poles),
end module.

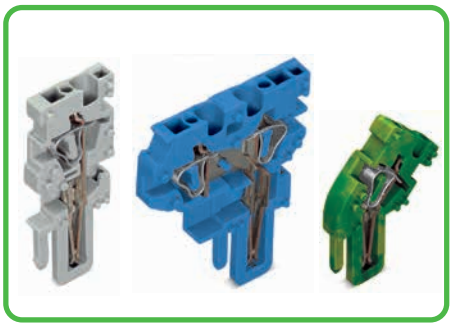
Intended use:
According to EN 61984, connectors without current interrupting capacity shall not be mated and unmated when live or under load.

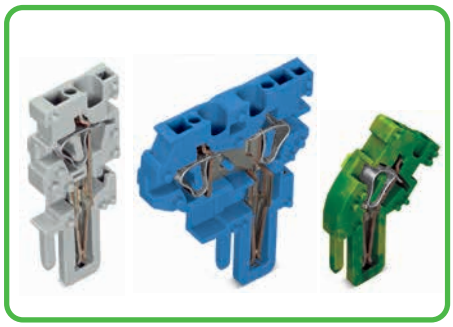
Assembly:
The appropriate mounting tool shall be used to guarantee that the individual modules are properly attached to each other without damaging the locking latches.

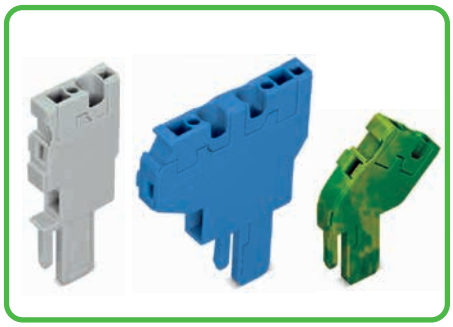
❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ See current-carrying capacity curve at www.wago.com

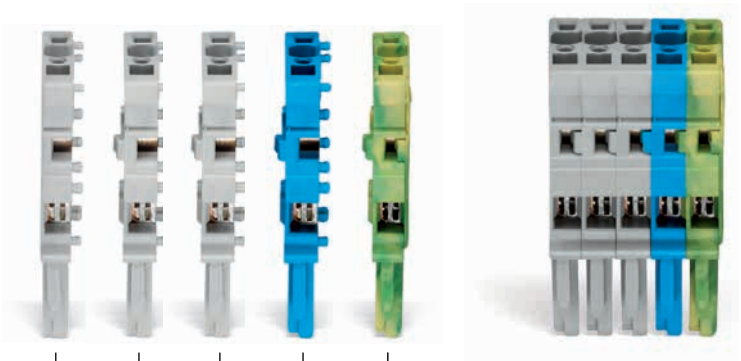
❸ Strip length, see packaging or instructions.


End module


Center module


Base module

Example: 5-Pole, 1-Conductor Female Plug



Base module with integrated end plate
769-501/000-016

Center module
769-502/000-006

Center modules
769-502

End module
769-503

X-COM®-SYSTEM
Pre-Assembled Female Plugs

CAGE CLAMP®

0.08 - 4 mm² | AWG 28 - 12 500 V/6 kV/3 ❶ I_N 32 A ❷ Module width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❸	0.08 - 4 mm² | AWG 28 - 12 500 V/6 kV/3 ❶ I_N 32 A ❷ Module width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ❸









❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ See current-carrying capacity curve at www.wago.com

❸ Strip length, see packaging or instructions.

Pole No.	Item No.	Pack. Unit
1-conductor female plug with ground base module (green-yellow), for insertion into carrier terminal blocks or male connectors, with coding fingers, commoning possible with miniature adjacent jumpers		
3	**769-103/000-036**	25
4	**769-104/000-036**	25
5	**769-105/000-036**	20
6	**769-106/000-036**	10
7	**769-107/000-036**	10
8	**769-108/000-036**	10
9	**769-109/000-036**	10
10	**769-110/000-036**	10
11	**769-111/000-036**	5
12	**769-112/000-036**	5
13	**769-113/000-036**	5
14	**769-114/000-036**	5
15	**769-115/000-036**	5
1-conductor female plug with ground end module (green-yellow), for insertion into carrier terminal blocks or male connectors, with coding fingers, commoning possible with miniature adjacent jumpers		
3	**769-103/000-037**	25
4	**769-104/000-037**	25
5	**769-105/000-037**	20
6	**769-106/000-037**	10
7	**769-107/000-037**	10
8	**769-108/000-037**	10
9	**769-109/000-037**	10
10	**769-110/000-037**	10
11	**769-111/000-037**	5
12	**769-112/000-037**	5
13	**769-113/000-037**	5
14	**769-114/000-037**	5
15	**769-115/000-037**	5

Pole No.	Item No.	Pack. Unit
1-conductor female plug with ground base module (green-yellow), for insertion into carrier terminal blocks or male connectors, with coding fingers, commoning possible with miniature adjacent jumpers		
3	**769-103/000-038**	25
4	**769-104/000-038**	25
5	**769-105/000-038**	20
6	**769-106/000-038**	10
7	**769-107/000-038**	10
8	**769-108/000-038**	10
9	**769-109/000-038**	10
10	**769-110/000-038**	10
11	**769-111/000-038**	5
12	**769-112/000-038**	5
13	**769-113/000-038**	5
14	**769-114/000-038**	5
15	**769-115/000-038**	5
1-conductor female plug with ground end module (green-yellow), for insertion into carrier terminal blocks or male connectors, with coding fingers, commoning possible with miniature adjacent jumpers		
3	**769-103/000-039**	25
4	**769-104/000-039**	25
5	**769-105/000-039**	20
6	**769-106/000-039**	10
7	**769-107/000-039**	10
8	**769-108/000-039**	10
9	**769-109/000-039**	10
10	**769-110/000-039**	10
11	**769-111/000-039**	5
12	**769-112/000-039**	5
13	**769-113/000-039**	5
14	**769-114/000-039**	5
15	**769-115/000-039**	5

Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

Locking lever,



female plugs with 1-pole
gray **769-428** 100 (4x25)
orange **769-429** 100 (4x25)

Locking lever,



female plugs with 2-poles or more
orange **769-431** 100 (4x25)
gray **769-430** 100 (4x25)

Test plug,



with 500 mm cable,
2 mm Ø
red **210-136** 50

Test plug,



with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

Protective warning marker,



with high-voltage symbol, black,
for 5 terminal blocks
yellow **280-415** 100 (4x25)

Strain relief plate, gray



2- to 3-pole **769-411** 100 (4x25)

Strain relief plate, gray



4- to 5-pole **769-412** 100 (4x25)

Snap-on type relief housing,



consisting of strain relief support/housing
3-pole **769-1603** 25

Snap-on type relief housing,



consisting of strain relief support/housing
5-pole **769-1605** 25

Operating lever, loose,



for female plugs and male connectors with CAGE CLAMP®
769-434 2000 (20x100)

Accessories for 1-Conductor Female Plugs

Appropriate marking system:
Miniature WSB (see Section 13)

Insulation stop,



5 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **769-470** 200 (8x25)

Insulation stop,



5 pcs/strip,
0.25 - 0.5 mm²
light gray **769-471** 200 (8x25)

Insulation stop,



5 pcs/strip,
0.75 - 1 mm²
dark gray **769-472** 200 (8x25)

Miniature adjacent jumper, insulated,



I_N 24 A
gray **769-402** 100 (4x25)

Miniature WSB Quick marking system,



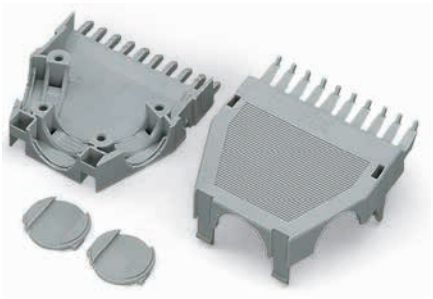
10 strips with 10 markers per card,
5 mm wide markers
plain **248-501** 5

Certification organizations can be found in the overview on pages 622 and 623.

Snap-on Type Strain Relief Housings for 769 Series Female Plugs and Male Connectors with CAGE CLAMP® Connection

Snap-on type relief housing	Snap-on type relief housing





1 cable outlet rear, 2- to 5-pole only suitable for cable ties (Fa. Hellermann – not offered by WAGO) not for cable clamp

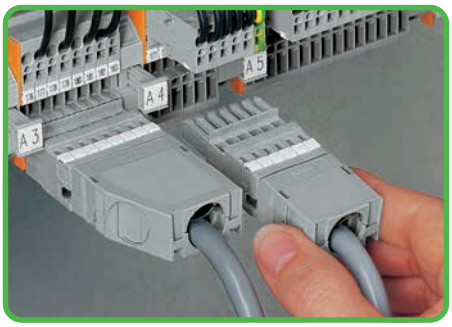
2 1 cable outlet rear

3 2 cable outlets, 1 cover

4 3 cable outlets, 2 covers

Pole No.	Item No.	Pack. Unit
Snap-on type relief housing, consisting of strain relief support/housing, gray		
2	**769-1602** 1	25
3	**769-1603** 1	25
4	**769-1604** 1	25
5	**769-1605** 1	25

Pole No.	Item No.	Pack. Unit
Snap-on type relief housing, consisting of strain relief support/housing, gray		
6	**769-1606** 2	25
7	**769-1607** 2	25
8	**769-1608** 3	25
9	**769-1609** 3	25
10	**769-1610** 4	25
11	**769-1611** 4	25
12	**769-1612** 4	25
13	**769-1613** 4	25
14	**769-1614** 4	25
15	**769-1615** 4	25



Application

Item-Specific Accessories

WSB Quick marking system,



10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm

plain **209-501** 5

Item-Specific Accessories

Cable clamp,



for strain relief

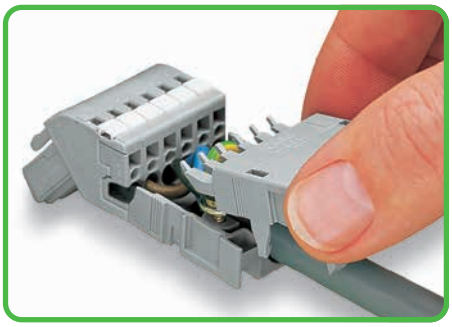
for 7 or more poles **209-174** 25

Fixing screw,



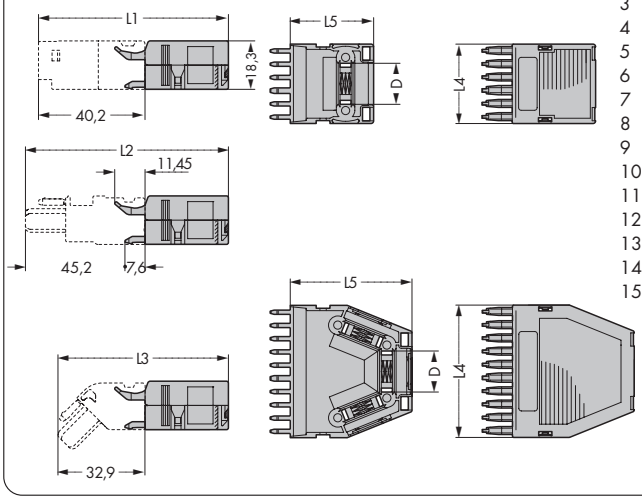
for cable clamp

for 7 or more poles **209-173** 50



Snapping on strain relief housing

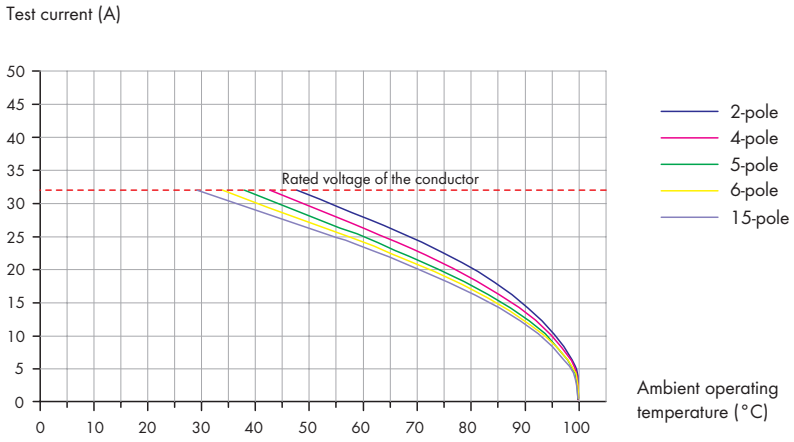
Dimensions for strain relief housings



pole no.	L1	L2	L3	L4	L5	D
2	71.7	76.7	64.4	10	31.5	5
3	71.7	76.7	64.4	15	31.5	9.7
4	71.7	76.7	64.4	20	31.5	14
5	71.7	76.7	64.4	25	31.5	14
6	71.7	76.7	64.4	30	31.5	15.5
7	77.7	81.7	69.4	35	36.5	15.5
8	86.2	91.2	78.9	40	46	15.5
9	86.2	91.2	78.9	45	46	15.5
10	86.2	91.2	78.9	50	46	15.5
11	86.2	91.2	78.9	55	46	15.5
12	86.2	91.2	78.9	60	46	15.5
13	86.2	91.2	78.9	65	46	15.5
14	86.2	91.2	78.9	70	46	15.5
15	86.2	91.2	78.9	75	46	15.5

Dimensions in mm

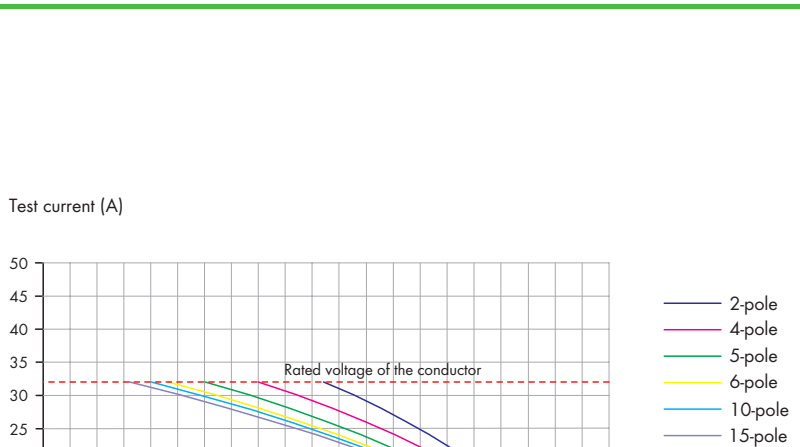
Current-Carrying Capacity Curves for 1-Conductor/1-Pin and 2-Pin Carrier Terminal Blocks and 1-Conductor Female Plugs





1-conductor/1-pin carrier terminal block: 769-176
Conductor cross section: 4 mm²/AWG 12

1-conductor female plugs: 769-102 to 769-115
Conductor cross section: 4 mm²/AWG 12
Conductor length: 1 m

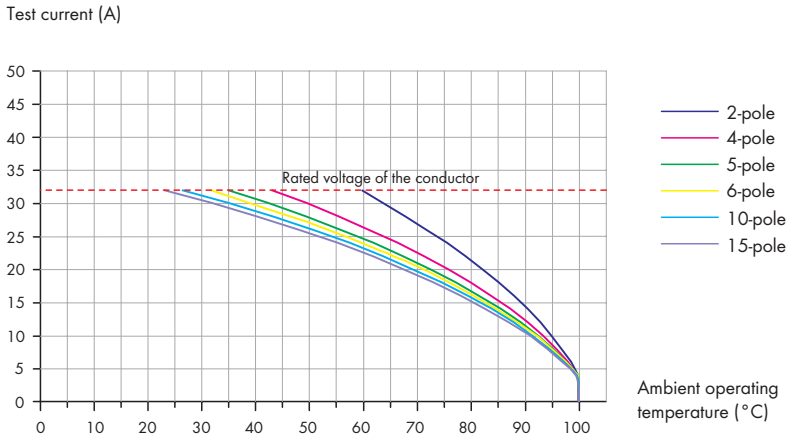


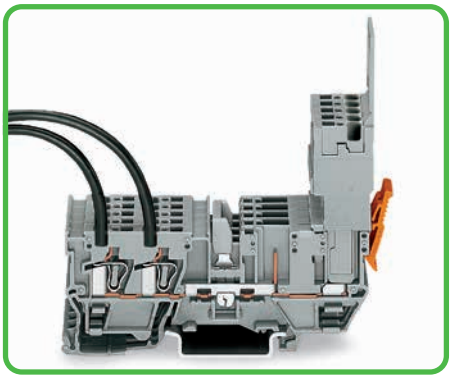


2-pin carrier terminal block: 769-156

1-conductor female plugs: 769-102 to 769-115
Conductor cross section: 4 mm²/AWG 12
Conductor length: 1 m

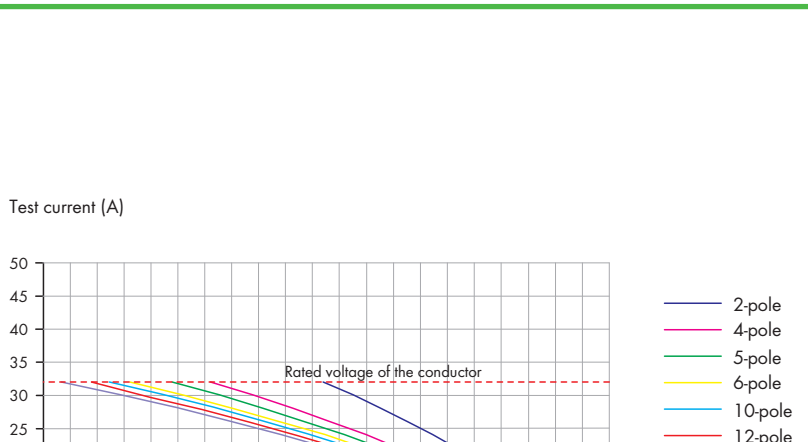
Current-Carrying Capacity Curves for 2-Conductor/2-Pin and 4-Pin Carrier Terminal Blocks and 1-Conductor Female Plugs

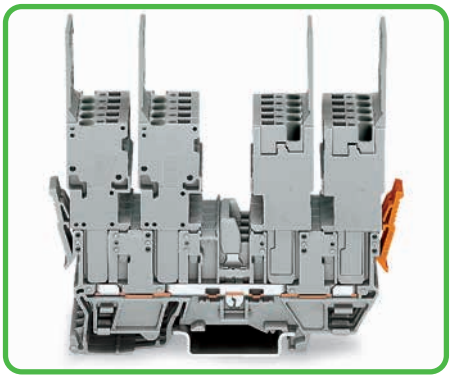




2-conductor/2-pin carrier terminal block: 769-171
Conductor cross section: 4 mm²/AWG 12

1-conductor female plugs: 769-102 to 769-115
Conductor cross section: 4 mm²/AWG 12
Conductor length: 1 m

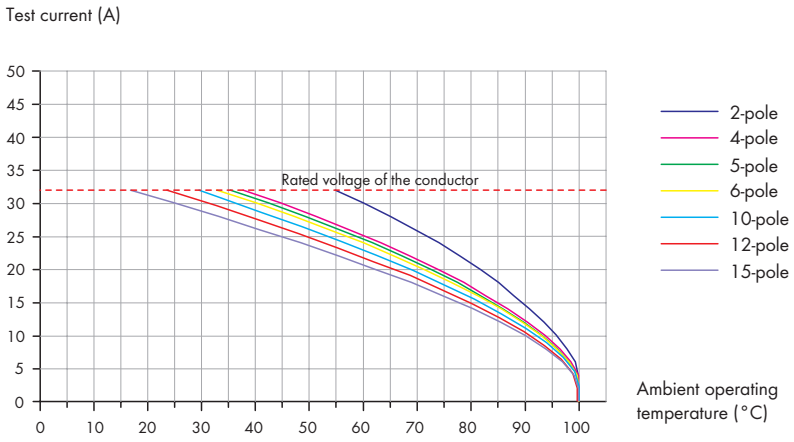


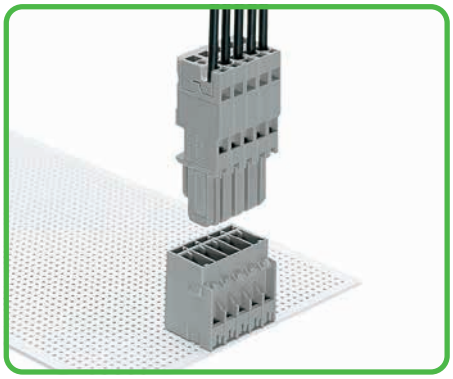


4-pin carrier terminal block: 769-151

1-conductor female plugs: 769-102 to 769-115
Conductor cross section: 4 mm²/AWG 12
Conductor length: 1 m

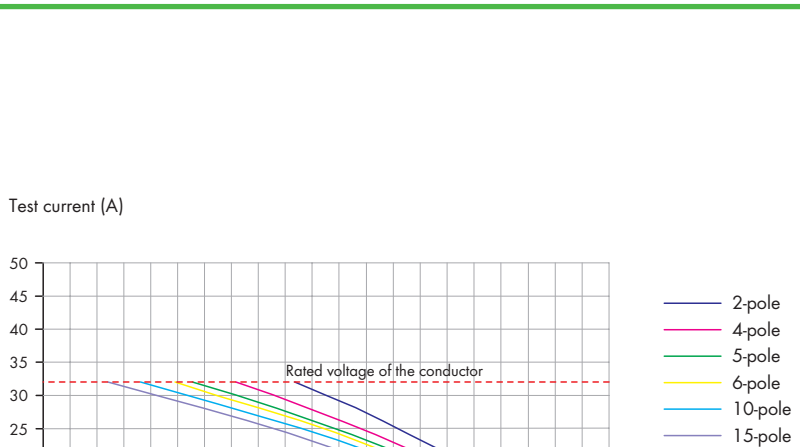
Current-Carrying Capacity Curves for Male Headers with Straight and Right-Angle Solder Pins 1-Conductor Female Plugs

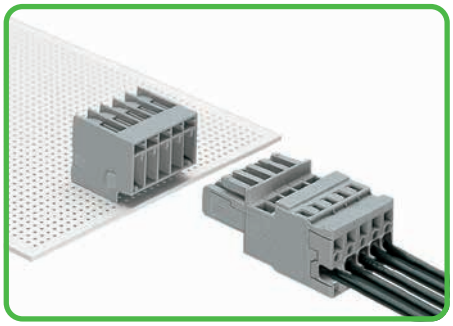




Male headers with
straight solder pins: 769-632 to 769-645

1-conductor female plugs: 769-102 to 769-115
Conductor cross section: 4 mm²/AWG 12
Conductor length: 1 m

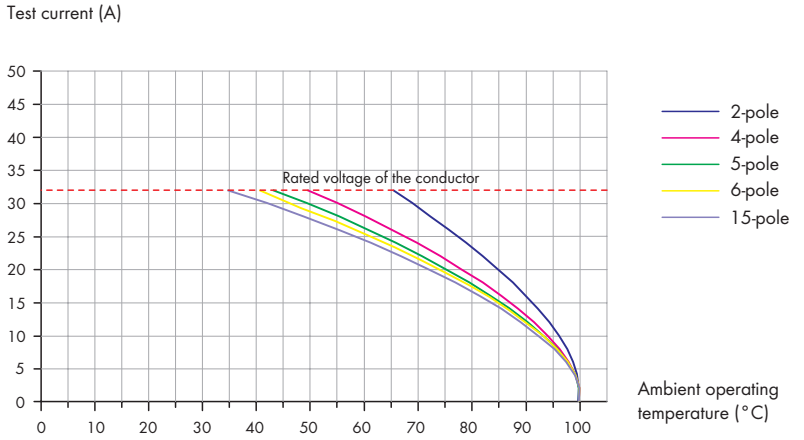


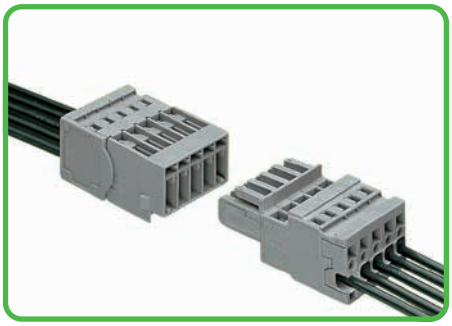


Male headers with
angled solder pins: 769-662 to 769-675

1-conductor female plugs: 769-102 to 769-115
Conductor cross section: 4 mm²/AWG 12
Conductor length: 1 m

Current-Carrying Capacity Curves for Male Connectors with CAGE CLAMP® Termination and 1-Conductor Female Plugs





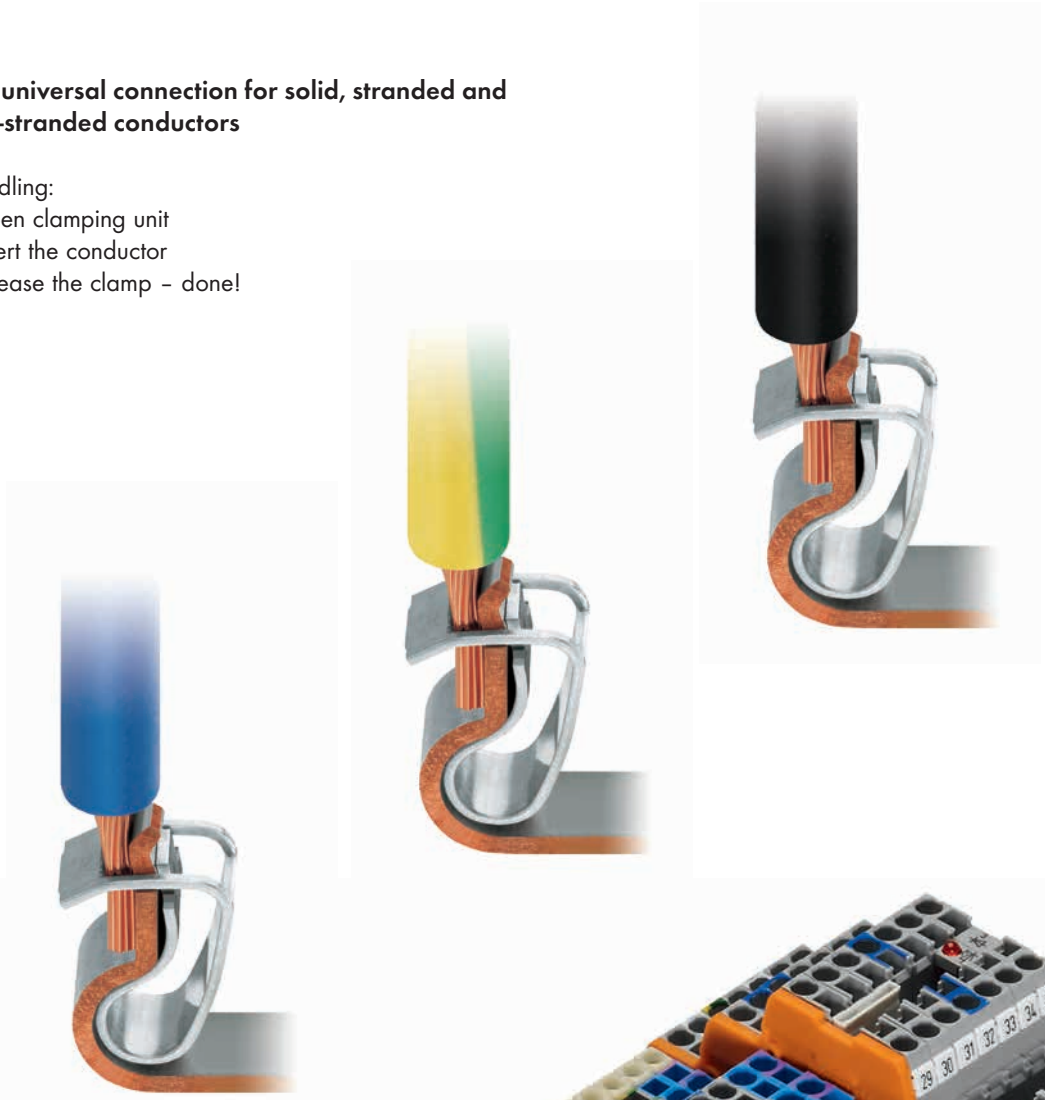
Male connectors with
CAGE CLAMP® connection: 769-602 to 769-615
Conductor cross section: 4 mm²/AWG 12

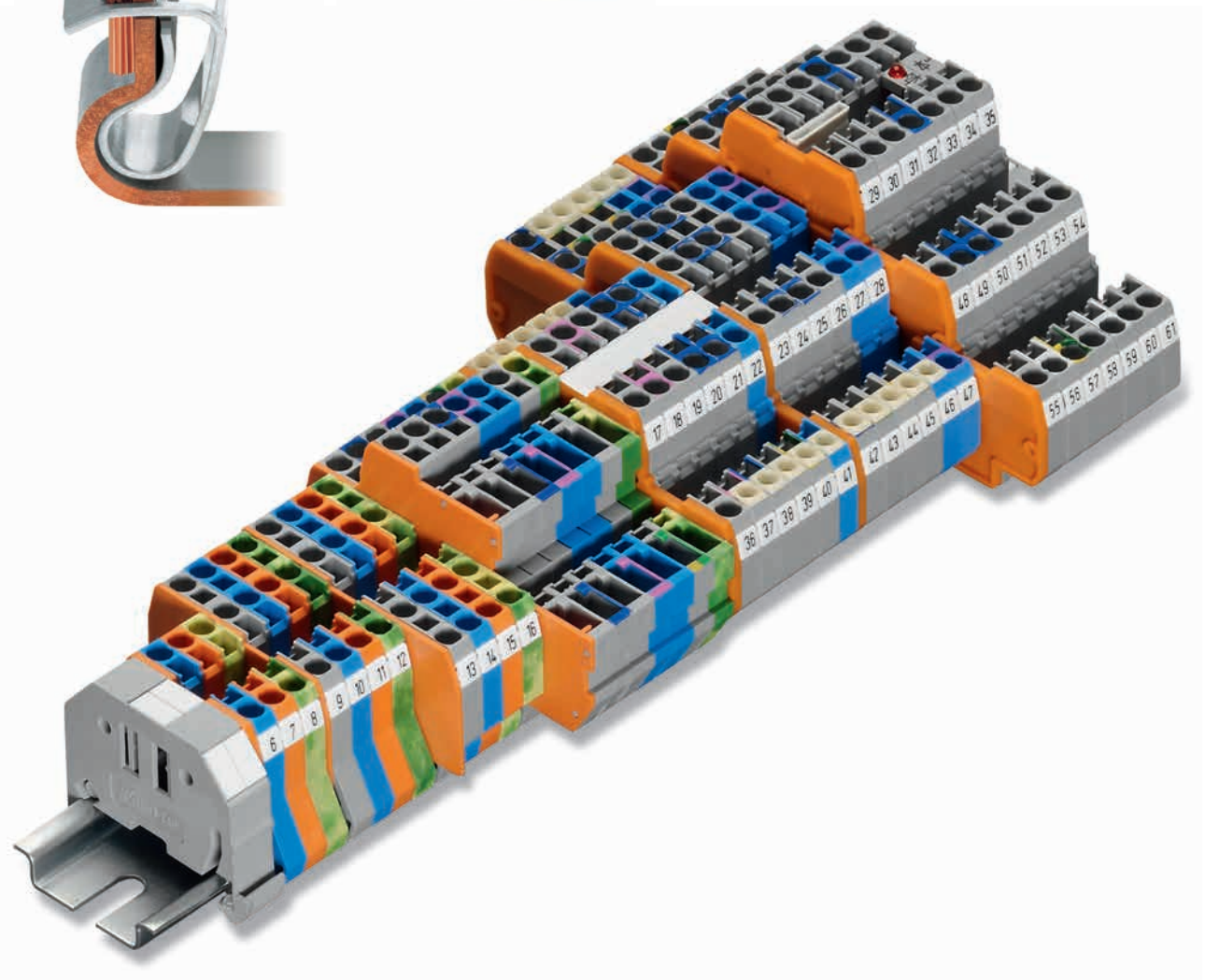
1-conductor female plugs: 769-102 to 769-115
Conductor cross section: 4 mm²/AWG 12
Conductor length: 1 m

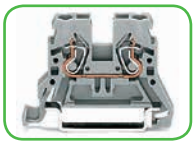
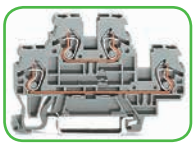
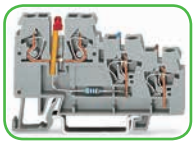
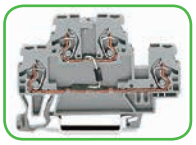
CAGE CLAMP®

The universal connection for solid, stranded and fine-stranded conductors

Handling:
- Open clamping unit
- Insert the conductor
- Release the clamp – done!

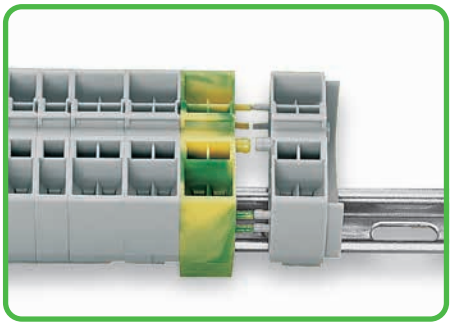




			Page
	**Through, Ground Conductor and Ex Terminal Blocks for DIN 35 and DIN 15 Rails** 0.08 mm² to 2.5 mm² (28–12 AWG)	264 Series	368
	**Through, Ground Conductor and Ex Terminal Blocks for DIN 35 and DIN 15 Rails** 0.08 mm² to 2.5 (4 "f-st") mm² (28–12 AWG)	870 Series	372
	**Double-Potential Terminal Blocks** 0.08 mm² to 2.5 (4 "f-st") mm² (28–12 AWG)	870 Series	373
	**Multilevel Rail-Mounted Terminal Blocks** 0.08 mm² to 2.5 (4 "f-st") mm² (28–12 AWG)	870 Series	374
	**Sensor and Actuator Terminal Blocks** 0.08 mm² to 2.5 mm² (28–12 AWG)	270 Series	381
	**Double- and Triple-Deck Diode and LED Terminal Blocks** 0.08 mm² to 2.5 (4 "f-st") mm² (28–12 AWG)	870 Series	384
	**Accessories for Rail-Mounted Terminal Blocks** – Tap-Off and Test Plug Modules – Group Marker Carriers	 for 870 Series for 870 Series	 379 377

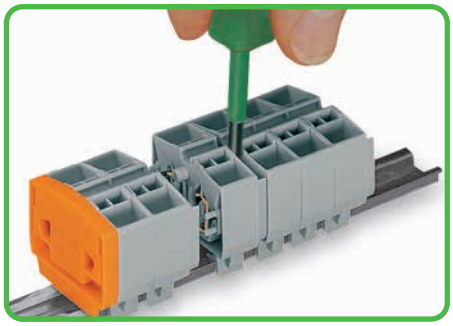
Miniature Rail-Mounted Terminal Blocks for DIN 15 and DIN 35 Rails
264 Series

Assembly



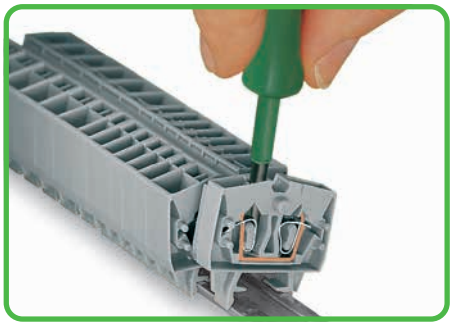
Quick assembly keys prevent reverse mounting.

Removal



Separate terminal strip and slide the individual terminal block laterally.

Removal



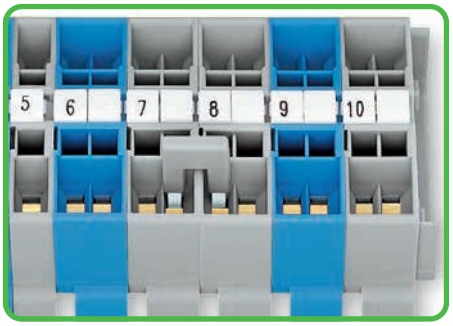
Remove terminal block from the carrier rail.

Commoning

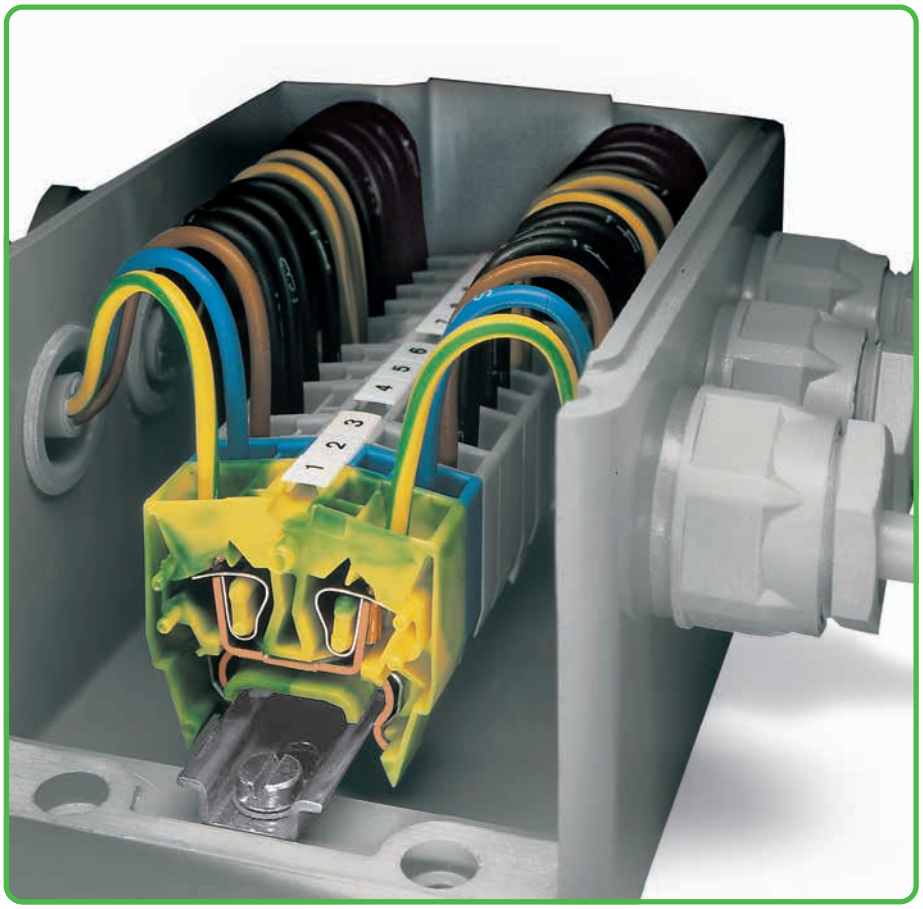


Commoning with comb-style jumper bar.

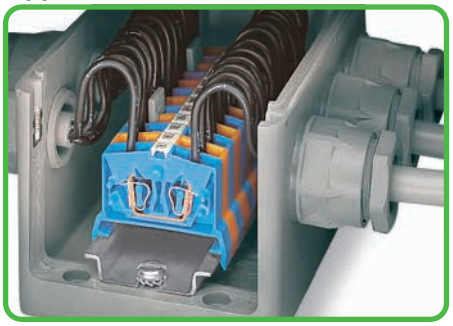
Commoning



Commoning with comb-style jumper bar.



Application



Easy handling with minimum space in small enclosures.

Combining/Marking



Combining 2- and 4-conductor terminal blocks.
Marking via miniature WSB quick marking system.



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded



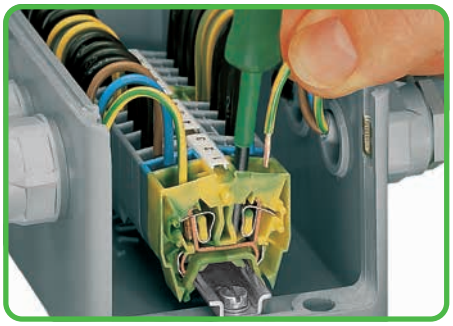
fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

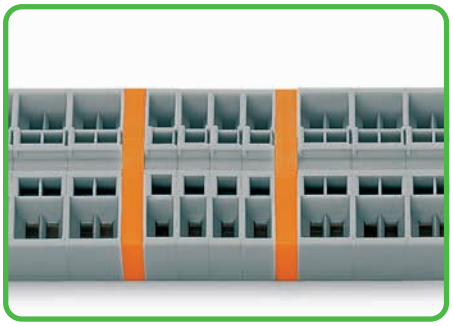
– Description and Handling –

CAGE CLAMP® connection



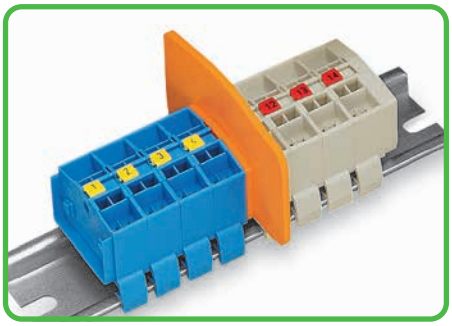
Conductor termination

Group formation

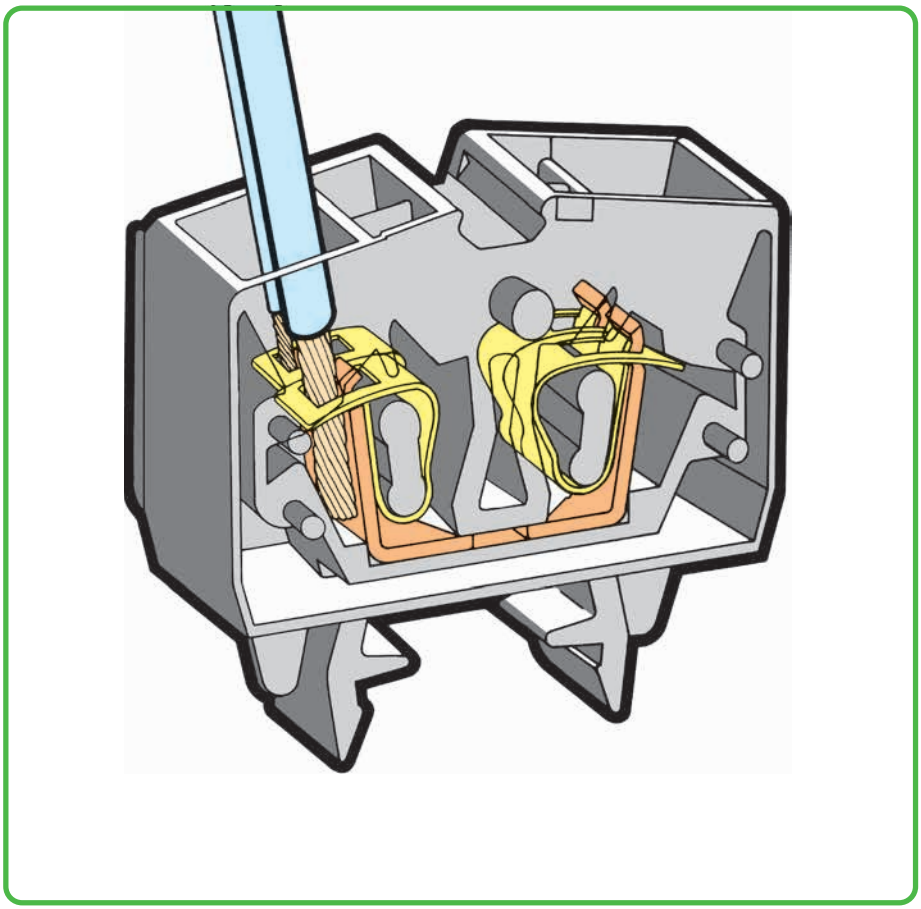


Indication of groups via intermediate plates.

Application notes



Ex e/Ex i separator plate for miniature rail-mounted terminal blocks.

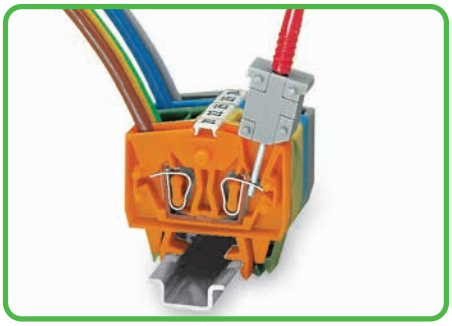


Testing



Testing by quick contact with the CAGE CLAMP® spring (limited to 0.5A).

Application notes



Testing via CAGE CLAMP® connection on the current bar – max. nominal current 6A;
CAGE CLAMP® clamps individual test contacts.

T marker tag



Marking with T marker tag (209-290).



fine-stranded,
tip-bonded



fine-stranded,
with ferrule ❶
(gastight crimped)



fine-stranded,
with pin terminal
(gastight crimped)

Miniature Through/Ground Conductor and Ex Terminal Blocks 2.5 mm² for DIN 35 Rail
264 Series

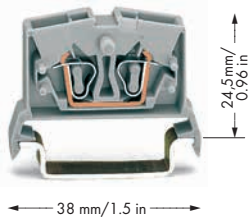
CAGE CLAMP®

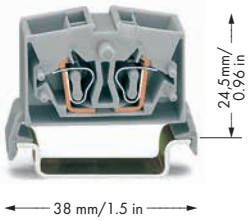
0.08 - 2.5 mm²	AWG 28 - 12 *
800 V/8 kV/3 ❶	300 V, 20 A
I_N 24 A	600 V, 20 A

Terminal block width 6 mm / 0.236 in
8 - 9 mm / 0.33 in ❷

0.08 - 2.5 mm²	AWG 28 - 12 *
800 V/8 kV/3 ❶	300 V, 20 A
I_N 24 A	600 V, 20 A

Terminal block width 10 mm / 0.394 in
8 - 9 mm / 0.33 in ❷





* AWG 12: THHN, THWN

❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ Suitable for Ex e II applications
0.5 mm² - 2.5 mm²/AWG 20 - 12*
690 V, 23 A
(also see Section 14)

❺ See application notes for:
Test plug module, page 416
Alternate comb-style jumper bar, page 294

	Item No.	Pack. Unit
2-conductor miniature through terminal block, for DIN 35 rail		
gray	**264-711**	100
blue	**264-714** ❸	100
orange	**264-716**	100
light gray	**264-125** ❹	100

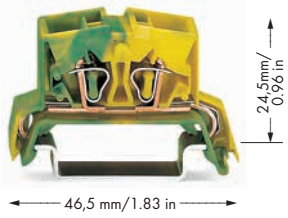
	Item No.	Pack. Unit
4-conductor miniature through terminal block, for DIN 35 rail		
gray	**264-731**	100
blue	**264-734** ❸	100
orange	**264-736**	100
light gray	**264-225** ❹	100

Item-Specific Accessories

	Item No.	Pack. Unit
Alternate comb-style jumper bar, ❺ insulated, I_N = I_N terminal block		
2-way	**281-492**	100 (4x25)
Test plug module, ❺ can be snapped together, 6 mm wide		
gray	**249-136**	100 (4x25)

Item-Specific Accessories

	Item No.	Pack. Unit
Alternate comb-style jumper bar, ❺ insulated, I_N = I_N terminal block		
2-way	**280-492**	200 (8x25)
Test plug module, ❺ can be snapped together, 10 mm wide		
gray	**249-139**	100 (4x25)



	Item No.	Pack. Unit
4-conductor miniature ground conductor terminal block, for DIN 35 rail		
green-yellow	**264-737**	100
green-yellow	**264-737/999-950** ❹	100

Item-Specific Accessories

	Item No.	Pack. Unit
Alternate comb-style jumper bar, ❺ insulated, I_N = I_N terminal block		
2-way	**280-492**	200 (8x25)
Test plug module, ❺ can be snapped together, 10 mm wide		
gray	**249-139**	100 (4x25)

264 Series Accessories

Miniature WSB
(see Section 13)

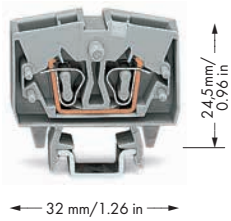
End and intermediate plate, 4 mm thick			
	orange	**264-369**	25
	gray	**264-368**	25
	light gray	**264-370**	25
Ex e/Ex i separator, orange, 4 mm thick			
	66 mm	**264-367**	25
Comb-style jumper bar, insulated, I_N 16 A, gray, reduces maximum conductor size to 1.5 mm²/AWG 16			
	2-way	**264-402**	200 (8x25)
Operating tool, of insulating material			
	2-way	**280-432**	1
Test plug, with 500 mm cable, 2 mm Ø			
	red	**210-136**	50
Test plug, with 500 mm cable, 2.3 mm Ø			
	yellow	**210-137**	50
Miniature WSB Quick marking system, 10 strips with 10 markers per card, 5 mm wide markers			
	plain	**248-501**	5
Screwless end stop, for DIN 35 rail, 6 mm wide			
	gray	**249-116**	100 (4x25)
Screwless end stop, for DIN 35 rail, 10 mm wide			
	gray	**249-117**	50 (2x25)
Steel carrier rail, acc. to EN 60715, 35 x 7.5 mm, 1 mm, 2 m/6'6" long			
	slotted	**210-112**	10 (10x1)
Steel carrier rail, acc. to EN 60715, 35 x 7.5 mm, 1 mm, 2 m/6'6" long			
	unslotted	**210-113**	10
Aluminum carrier rail, acc. to EN 60715, 35 x 8.2 mm, 1.6 mm, 2 m/6'6" long			
	unslotted	**210-196**	10

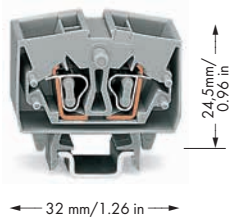
Certification organizations can be found in the overview on pages 622 and 623.

Miniature Through/Ground Conductor and Ex Terminal Blocks 2.5 mm² for DIN 15 Rail 264 Series

0.08 - 2.5 mm²	AWG 28 - 12 *
800 V/8 kV/3 ❶	300 V, 20 A
I_N 24 A	600 V, 20 A
Terminal block width 6 mm / 0.236 in	
8 - 9 mm / 0.33 in ❷	

0.08 - 2.5 mm²	AWG 28 - 12 *
800 V/8 kV/3 ❶	300 V, 20 A
I_N 24 A	600 V, 20 A
Terminal block width 10 mm / 0.394 in	
8 - 9 mm / 0.33 in ❷	





* AWG 12: THHN, THWN

❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ Suitable for Ex e II applications
0.5 mm² - 2.5 mm²/AWG 20 - 12*
690 V, 23 A
(also see Section 14)

❺ See application notes for:
Test plug module, page 416
Alternate comb-style jumper bar, page 294

	Item No.	Pack. Unit
2-conductor miniature through terminal block, for DIN 15 rail		
gray	**264-701**	100
blue	**264-704** ❸	100
orange	**264-706**	100
light gray	**264-120** ❹	100

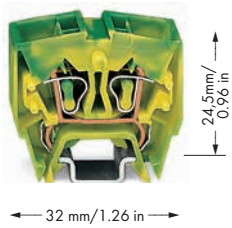
	Item No.	Pack. Unit
4-conductor miniature through terminal block, for DIN 15 rail		
gray	**264-721**	100
blue	**264-724** ❸	100
orange	**264-726**	100
light gray	**264-220** ❹	100

Item-Specific Accessories

	Item No.	Pack. Unit
Alternate comb-style jumper bar, ❺ insulated, I_N = I_N terminal block		
2-way	**281-492**	100 (4x25)
Test plug module, ❺ can be snapped together, 6 mm wide		
gray	**249-136**	100 (4x25)

Item-Specific Accessories

	Item No.	Pack. Unit
Alternate comb-style jumper bar, ❺ insulated, I_N = I_N terminal block		
2-way	**280-492**	200 (8x25)
Test plug module, ❺ can be snapped together, 10 mm wide		
gray	**249-139**	100 (4x25)



	Item No.	Pack. Unit
4-conductor miniature ground conductor terminal block, for DIN 15 rail		
green-yellow	**264-727**	100
green-yellow	**264-727/999-950** ❹	100

Item-Specific Accessories

	Item No.	Pack. Unit
Alternate comb-style jumper bar, ❺ insulated, I_N = I_N terminal block		
2-way	**280-492**	200 (8x25)
Test plug module, ❺ can be snapped together, 10 mm wide		
gray	**249-139**	100 (4x25)

264 Series Accessories

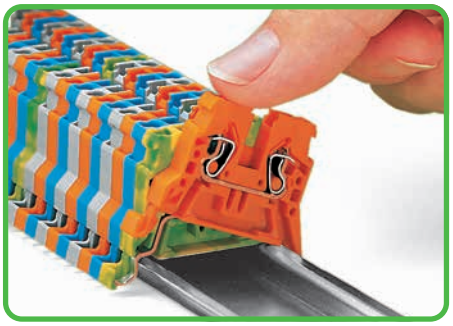
Miniature WSB
(see Section 13)

	Item No.	Pack. Unit
End and intermediate plate, 4 mm thick		
orange	**264-369**	25
gray	**264-368**	25
light gray	**264-370**	25
Ex e/Ex i separator, orange, 4 mm thick		
66 mm	**264-367**	25
Comb-style jumper bar, insulated, I_N 16 A, gray, reduces maximum conductor size to 1.5 mm²/AWG 16		
2-way	**264-402**	200 (8x25)
Operating tool, of insulating material		
2-way	**280-432**	1
Test plug, with 500 mm cable, 2 mm Ø		
red	**210-136**	50
Test plug, with 500 mm cable, 2.3 mm Ø		
yellow	**210-137**	50
Miniature WSB Quick marking system, 10 strips with 10 markers per card, 5 mm wide markers		
plain	**248-501**	5
Screwless end stop, for DIN 15 rail, 6 mm wide		
gray	**249-101**	25
Steel carrier rail, acc. to EN 60715, 15 x 5.5 mm, 1 mm, 2 m/6'6" long		
slotted	**210-111**	1
Steel carrier rail, acc. to EN 60715, 15 x 5.5 mm, 1 mm, 2 m/6'6" long		
unslotted	**210-295**	1
Aluminum carrier rail, acc. to EN 60715, 15 x 5.5 mm, 1 mm, 2 m/6'6" long		
unslotted	**210-296**	10
Operating tool, of insulating material		
1-way	**209-130**	1

Certification organizations can be found in the overview on pages 622 and 623.

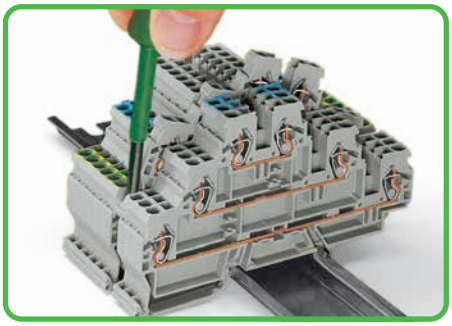
Compact Rail-Mounted Terminal Blocks for DIN 15 and DIN 35 Rails 870 Series

Assembly



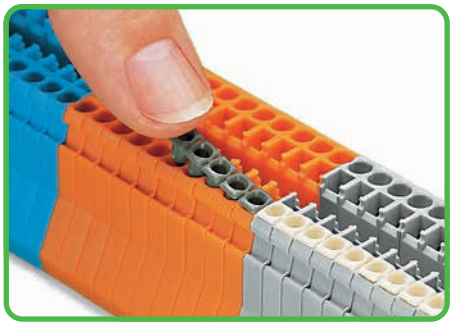
Snapping a rail-mount terminal block onto DIN 35 carrier rail.

Removal



Removing a terminal block from the assembly.

Insulation stop



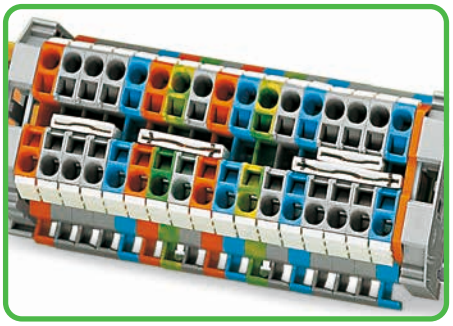
Inserting an insulation stop.

Push-in type jumper bar system

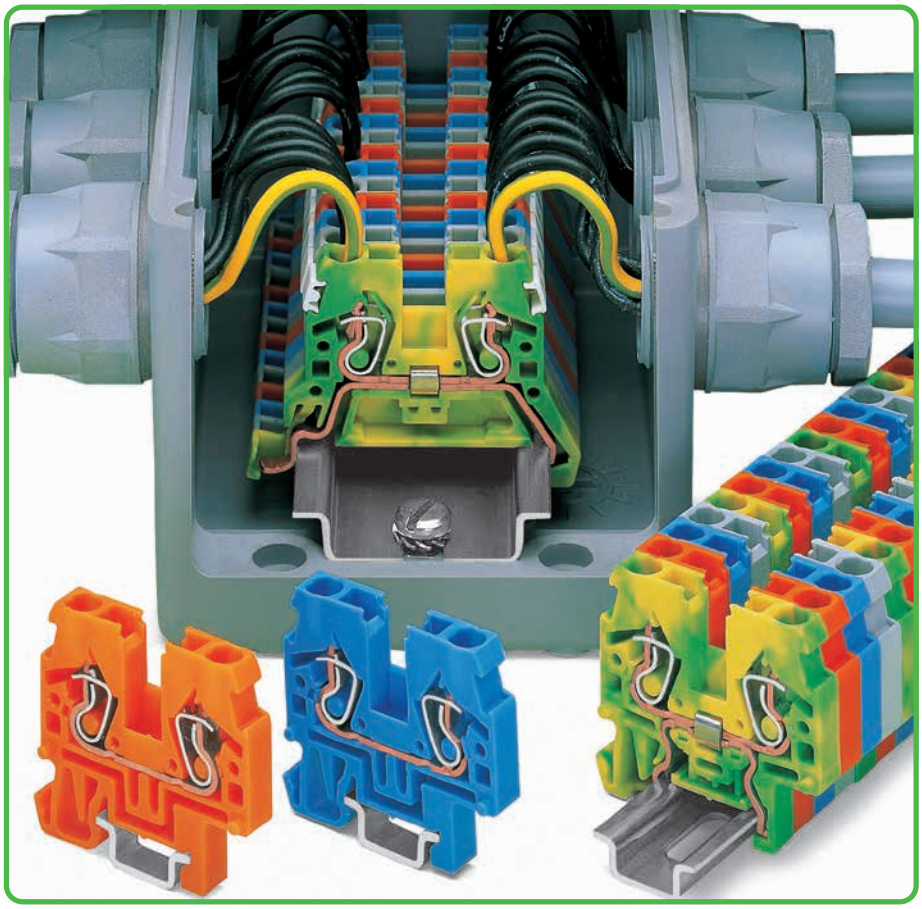


Push jumper bars down firmly until fully inserted. When using multipole bars, push alternately on right and then left side, until installed.
Push-in type jumper bars 1 – 3 – 5 – 7 or 1 – – 4 – – 7 upon request.

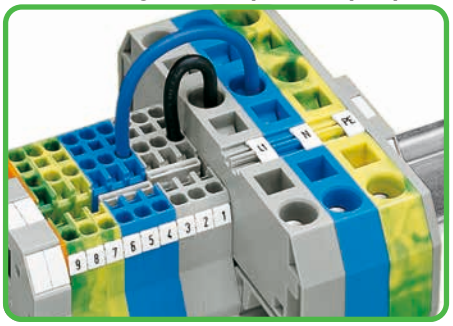
Push-in type jumper bar system



Two parallel jumper receptacles are accommodated in one terminal block.

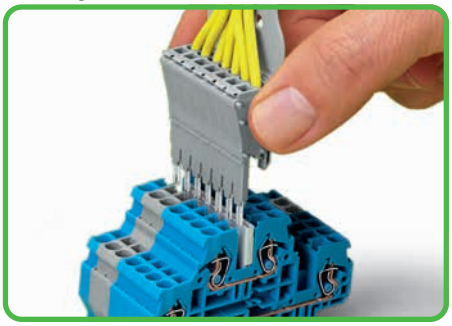


Commoning with step-down jumpers



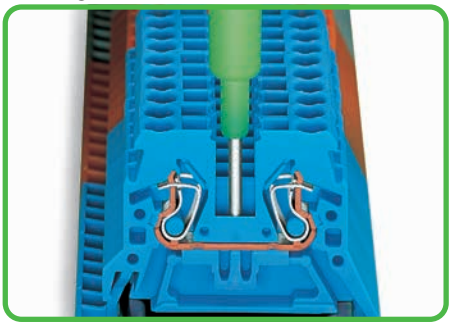
Commoning terminal blocks of different sizes – step down.

Testing



Testing is also possible using a pre-wired module assembly, similar to test plugs.

Testing



Testing with phase testing device, also possible with single-pole voltage tester.



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded



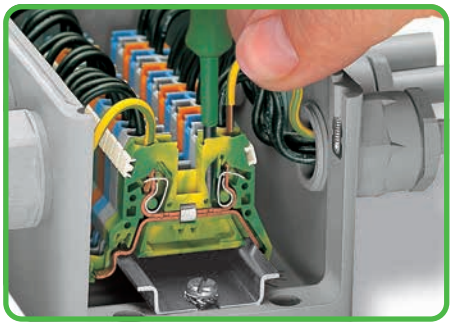
fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

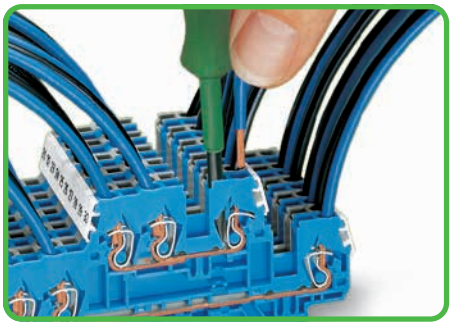
– Description and Handling –

CAGE CLAMP® connection

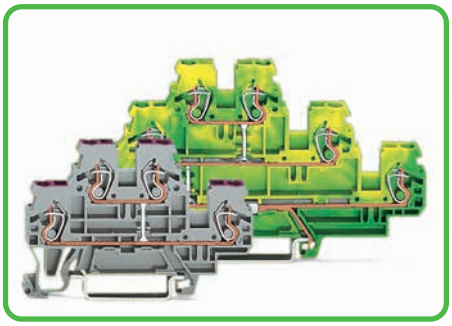


Terminating fine-stranded conductors ranging from 0.08 to 4 mm² (AWG 28 – 12).

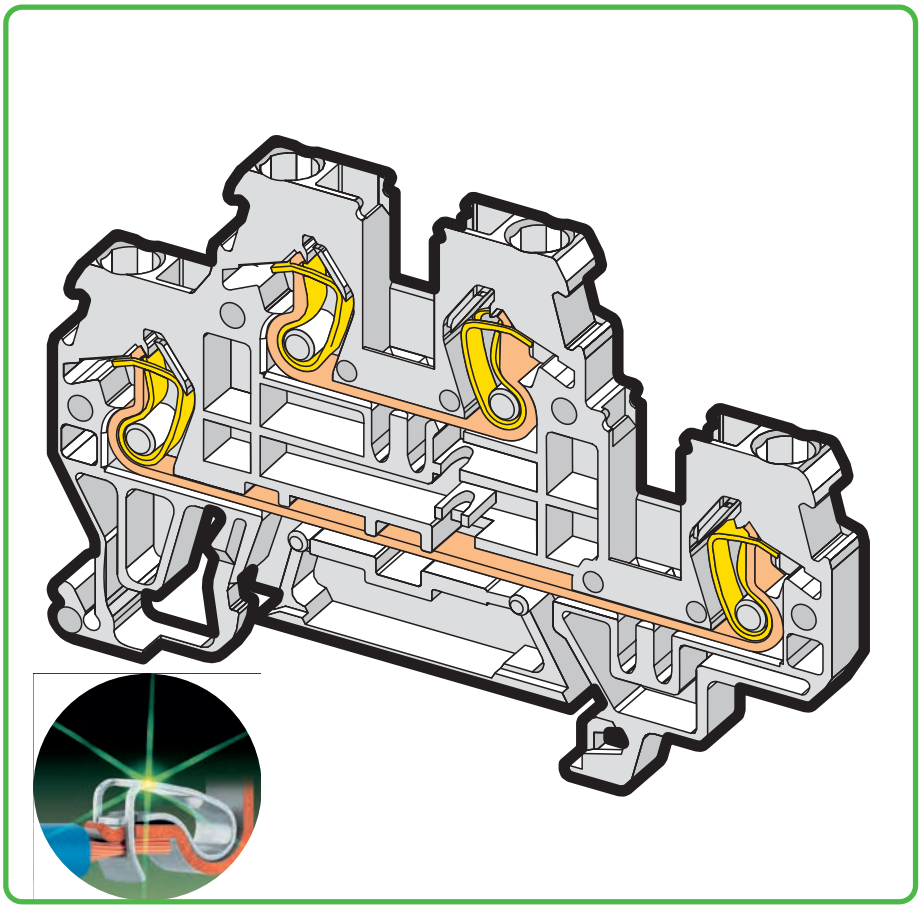
CAGE CLAMP® connection



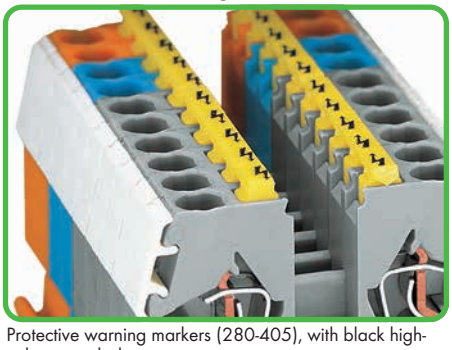
Multilevel terminal blocks



Double- and triple-deck terminal blocks with internal commoning acting as 4- and 6-conductor terminal blocks.

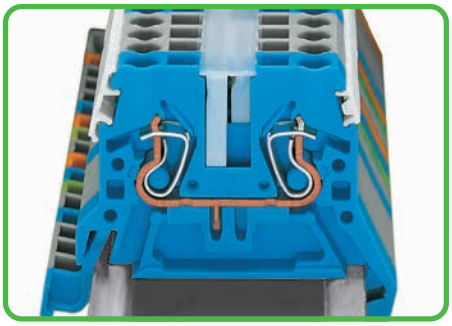


Protective warning marker



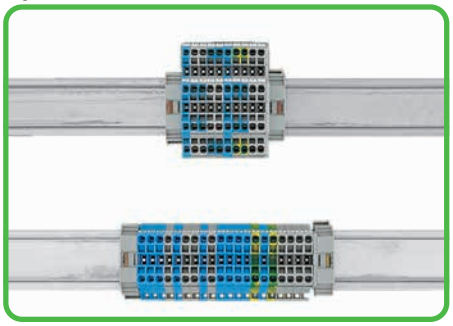
Protective warning markers (280-405), with black high-voltage symbols.

Marking



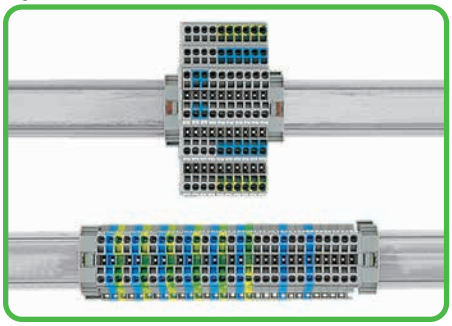
Marking the clamping unit via WMB Multi marking system or miniature WSB Quick marking system.

Space saver



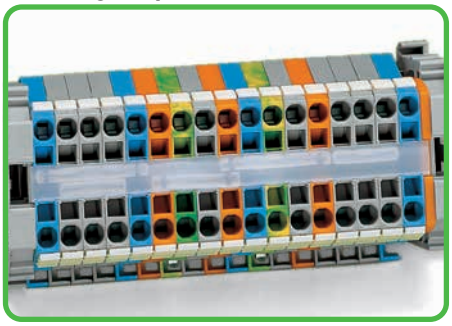
Save 50% of rail space when using double-deck terminal blocks.

Space saver



Save 67% of rail space when using triple-deck terminal blocks.

Marking Strips



Transparent marker strips (note: Jumpers below may be visible).



fine-stranded, tip-bonded



fine-stranded, with ferrule ❶ (gastight crimped)



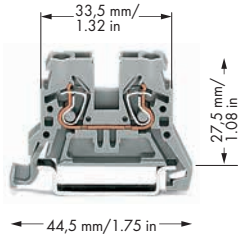
fine-stranded, with pin terminal (gastight crimped)

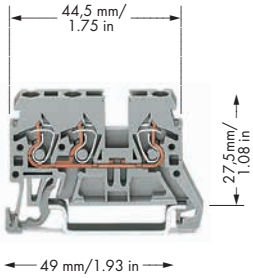
Through/Ground Conductor and Ex Terminal Blocks 2.5 mm² (4 mm² "f-st") for DIN 35 and DIN 15 Rails
870 Series

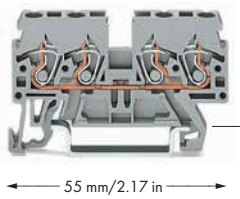
0.08 - 2.5 (4"f-st")mm² ❶	AWG 28 - 12	
500 V/6 kV/3 ❷	300 V, 20 A	
I_N 24 A		
Terminal block width 5 mm / 0.197 in		
6 - 7 mm / 0.26 in ❸		

0.08 - 2.5 (4"f-st")mm² ❶	AWG 28 - 12	
500 V/6 kV/3 ❷	300 V, 20 A	
I_N 24 A		
Terminal block width 5 mm / 0.197 in		
6 - 7 mm / 0.26 in ❸		

0.08 - 2.5 (4"f-st")mm² ❶	AWG 28 - 12	
500 V/6 kV/3 ❷	300 V, 20 A	
I_N 24 A		
Terminal block width 5 mm / 0.197 in		
6 - 7 mm / 0.26 in ❸		







	Item No.	Pack. Unit
2-conductor through terminal block,		
for DIN 35 rail		
gray	**870-901**	100
blue	**870-904** ❹	100
orange	**870-902**	100
light gray	**870-909** ❺	100
2-conductor ground terminal block,		
for DIN 35 rail,		
Notice: This ground conductor terminal block cannot be commoned with push-in type jumper bars!		
green-yellow	**870-907**	100
green-yellow	**870-907/999-950** ❺	100

	Item No.	Pack. Unit
3-conductor through terminal block,		
for DIN 35 rail		
gray	**870-681**	100
blue	**870-684** ❹	100
orange	**870-682**	100
3-conductor ground terminal block,		
for DIN 35 rail,		
Notice: This ground conductor terminal block cannot be commoned with push-in type jumper bars!		
green-yellow	**870-687**	100

	Item No.	Pack. Unit
4-conductor through terminal block,		
for DIN 35 rail		
gray	**870-831**	100
blue	**870-834** ❹	100
orange	**870-832**	100
4-conductor ground terminal block,		
for DIN 35 rail,		
Notice: This ground conductor terminal block cannot be commoned with push-in type jumper bars!		
green-yellow	**870-837**	100
Other terminal blocks with the same profile:		
Double-potential	**870-826**	Page 373

Item-Specific Accessories

End and intermediate plate, 2 mm thick			
	orange	**870-924**	100 (4x25)
	gray	**870-923**	100 (4x25)
	light gray	**870-925**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**870-929**	100 (4x25)
	gray	**870-928**	100 (4x25)
End and intermediate plate, 2 mm thick,			
for 2-conductor ground conductor Ex ter-			
minal blocks only,		**870-926**	100 (4x25)
green-yellow			
Ex e/Ex i separator, orange,			
3 mm thick			
90 mm		**209-190**	50 (2x25)
120 mm		**209-191**	50 (2x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick			
	orange	**870-934**	100 (4x25)
	gray	**870-933**	100 (4x25)
Separator, oversized, 1 mm thick			
	orange	**870-947**	100 (4x25)
	gray	**870-946**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 1 mm thick			
	orange	**870-944**	100 (4x25)
	gray	**870-943**	100 (4x25)
Separator, oversized, 1 mm thick			
	orange	**870-949**	100 (4x25)
	gray	**870-948**	100 (4x25)

870 Series Accessories

Appropriate marking systems: WMB/Miniature WSB
(see Section 13)

Insulation stop,			
❻ 5 pcs/strip,			
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")			
white		**280-470**	200 (8x25)
Insulation stop,			
❻ 5 pcs/strip,			
0.25 - 0.5 mm²			
light gray		**280-471**	200 (8x25)
Insulation stop,			
❻ 5 pcs/strip,			
0.75 - 1 mm²			
dark gray		**280-472**	200 (8x25)

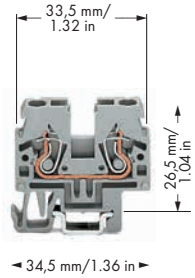
Push-in type jumper bar, insulated,			
I_N 18 A,			
light gray			
2-way		**870-402**	200 (8x25)
3-way		**870-403**	200 (8x25)
4-way		**870-404**	200 (8x25)
5-way		**870-405**	100 (4x25)
6-way		**870-406**	100 (4x25)
7-way		**870-407**	100 (4x25)
8-way		**870-408**	100 (4x25)
9-way		**870-409**	100 (4x25)
10-way		**870-410**	100 (4x25)

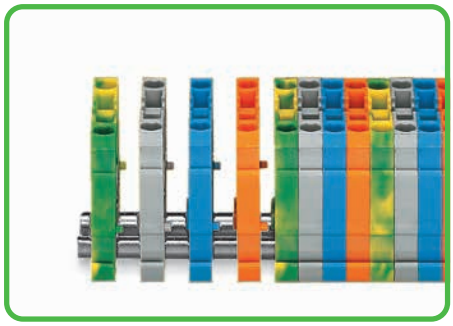
Push-in type jumper bar, insulated,			
I_N 18 A,			
light gray			
from 1 to 3		**870-433**	200 (8x25)
from 1 to 4		**870-434**	200 (8x25)
from 1 to 5		**870-435**	100 (4x25)
from 1 to 6		**870-436**	100 (4x25)
from 1 to 7		**870-437**	100 (4x25)
from 1 to 8		**870-438**	100 (4x25)
from 1 to 9		**870-439**	100 (4x25)
from 1 to 10		**870-440**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

0.08 - 2.5 (4"f-st")mm² ❶ | **AWG 28 - 12**
500 V/6 kV/3 ❷ | **300 V, 20 A**
I_N 24 A

Terminal block width 5 mm / 0.197 in
6 - 7 mm / 0.26 in ❸





Assembly:
Snap individual terminal blocks onto DIN 15 carrier rail and slide together.
Removal:
Open assembly by laterally sliding terminal blocks with an operating tool and remove them from the rail.

❶ Max. insulation diameter: 4.4 mm

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

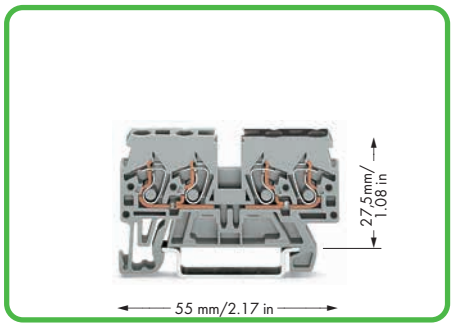
❸ Strip length, see packaging or instructions.

❹ Suitable for Ex i applications

❺ Suitable for Ex e II applications
0.2 mm² - 2.5 (4 "f-st") mm²/AWG 24 - 12
440 V, 22 A
Using push-in type jumper bars 1 to X, the maximum rated voltage is reduced to 275 V and the rated current to 13.5 A
(also see Section 14)

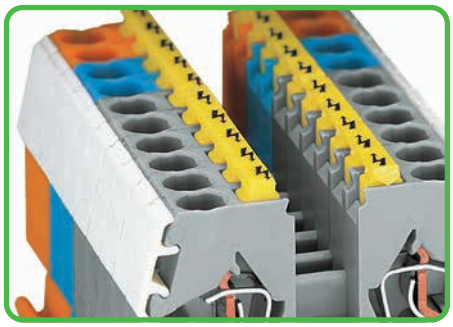
❻ See application notes for:
Insulation stop, page 293
Tap-off module, page 379

	Item No.	Pack. Unit
2-conductor through terminal block,		
for DIN 15 rail		
gray	**870-911**	100
blue	**870-914** ❹	100
orange	**870-912**	100
light gray	**870-919** ❺	100
2-conductor ground terminal block,		
for DIN 15 rail,		
Notice: This ground conductor terminal block cannot be commoned with push-in type jumper bars!		
green-yellow	**870-917**	100



Double-potential terminal block
with integrated marking position.
gray 870-826
Packing unit: 100 pcs
Notice: This double-potential terminal block cannot be commoned with push-in type jumper bars!

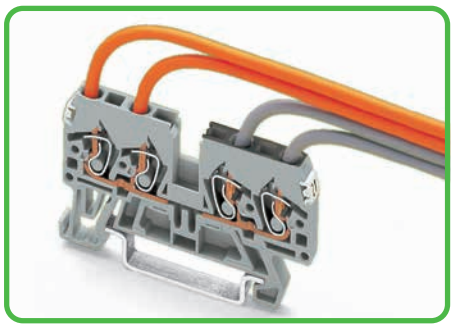
For technical data and accessories, see www.wagocatalog.com



Protective warning markers inserted into the operating slots.

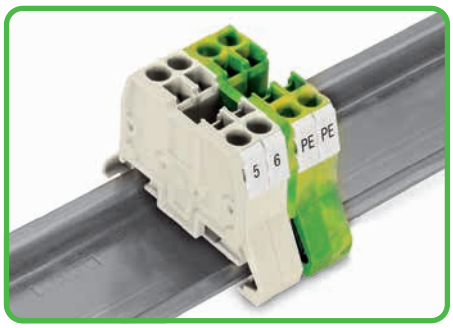
Item-Specific Accessories

End and intermediate plate, 2 mm thick			
	orange	**870-924**	100 (4x25)
	gray	**870-923**	100 (4x25)
	light gray	**870-925**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**870-929**	100 (4x25)
	gray	**870-928**	100 (4x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**280-405**	100 (4x25)
Tap-off module with anti-reverse mating protection, ❻			
	can be snapped together, 5 mm wide		
	gray	**870-425**	100 (4x25)
Miniature WSB Quick marking system,			
	10 strips with 10 markers per card,		
	5 mm wide markers		
	plain	**248-501**	5



Miniature WSB or WMB markers provide marking directly on terminal block.

WAGO front-entry double-potential terminal blocks are space savers.
Two independent feedthrough circuits are placed in one insulated housing on one level in just 5 mm/0.197 in. This achieves a width of just 2.5 mm/0.098 in is achieved versus standard through terminal blocks for a total height of only 27.5 mm/1.08 in from the upper edge of the carrier rail.
Input and output contacts of one circuit are placed on the same side of the terminal block. Both circuits can be individually marked according to input and output.



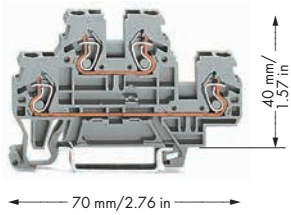
In order to meet creepage and clearance requirements for Ex e applications, it is necessary to insert an end or intermediate plate between a through and a ground conductor terminal block.
End plates 870-923 (gray), 870-924 (orange) and 870-925 (light gray), as well as separator plates 870-928 (gray) and 870-929 (orange) cannot be assembled to 870-907/999-950 2-conductor ground Ex terminal blocks.

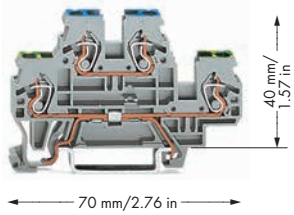
Double-Deck Terminal Blocks 2.5 mm² (4 mm² "f-st") 870 Series

CAGE CLAMP®

0.08 - 2.5 (4"f-st")mm² ❶	AWG 28 - 12
500 V/6 kV/3 ❷	300 V, 20 A
I_N 24 A	
Terminal block width 5 mm / 0.197 in	
6 - 7 mm / 0.26 in ❸	

0.08 - 2.5 (4"f-st")mm² ❶	AWG 28 - 12
500 V/6 kV/3 ❷	
I_N 24 A	
Terminal block width 5 mm / 0.197 in	
6 - 7 mm / 0.26 in ❸	





❶ Max. insulation diameter: 4.4 mm

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❸ Strip length, see packaging or instructions.

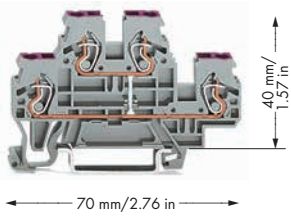
❹ Suitable for Ex i applications

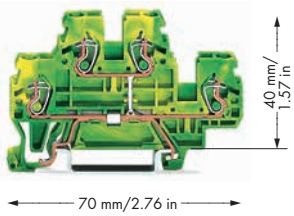
❺ Suitable for Ex e II applications
0.2 mm² - 2.5 (4 "f-st") mm²/AWG 24 - 12
440 V, 18 A
Using push-in type jumper bars 1 to X, the maximum rated voltage is reduced to 275 V and the rated current to 13.5 A
(also see Section 14)

❻ See application notes for:
Insulation stop, page 293

	Item No.	Pack. Unit
Through/through terminal block,		
gray housing		
L/L	**870-501**	50
N/L	**870-502**	50
L/N	**870-503**	50
Through/through terminal block,		
blue housing		
N/N	**870-504** ❹	50
Through/through terminal block,		
light gray housing		
L/L Ex	**870-961** ❺	50
Other terminal blocks with the same profile:		
Diode	**870-540/281-410**	Page 384
LED	**870-543/281-434**	Page 384

	Item No.	Pack. Unit
Ground conductor/through terminal block,		
gray housing		
PE/N	**870-517**	50
PE/L	**870-527**	50
Ground conductor/through terminal block,		
light gray housing		
PE/L Ex	**870-967/999-950** ❺	50





	Item No.	Pack. Unit
4-conductor through terminal block, internal commoning, conductor entry position colored in violet,		
gray housing		
L	**870-508**	50
4-conductor through terminal block, internal commoning, conductor entry position colored in violet,		
blue housing		
N	**870-509** ❹	50

	Item No.	Pack. Unit
4-conductor ground terminal block, internal commoning,		
green-yellow housing		
PE	**870-507**	50

Accessories

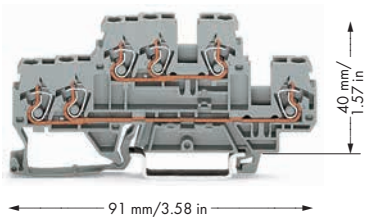
WMB/Miniature WSB
(see Section 13)

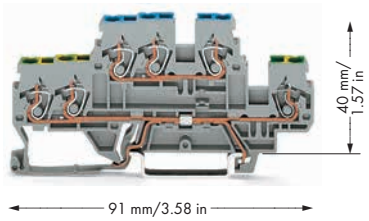
End and intermediate plate, 2 mm thick			
	orange	**870-519**	100 (4x25)
	gray	**870-518**	100 (4x25)
Ex e/Ex i separator, orange,			
	3 mm thick		
	125.5 mm	**209-192**	50 (2x25)
Insulation stop,			
❻ 	5 pcs/strip,		
	0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
❻ 			
	light gray	**280-471**	200 (8x25)
❻ 			
	dark gray	**280-472**	200 (8x25)
Push-in type jumper bar, insulated,			
	I_N 18 A,		
	light gray		
	2-way	**870-402**	200 (8x25)
	3-way	**870-403**	200 (8x25)
	4-way	**870-404**	200 (8x25)
	5-way	**870-405**	100 (4x25)
	6-way	**870-406**	100 (4x25)
	7-way	**870-407**	100 (4x25)
	8-way	**870-408**	100 (4x25)
	9-way	**870-409**	100 (4x25)
	10-way	**870-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 18 A,		
	light gray		
	from 1 to 3	**870-433**	200 (8x25)
	from 1 to 4	**870-434**	200 (8x25)
	from 1 to 5	**870-435**	100 (4x25)
	from 1 to 6	**870-436**	100 (4x25)
	from 1 to 7	**870-437**	100 (4x25)
	from 1 to 8	**870-438**	100 (4x25)
	from 1 to 9	**870-439**	100 (4x25)
	from 1 to 10	**870-440**	100 (4x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**280-405**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

3-Conductor Double-Deck Terminal Blocks 2.5 mm² (4 mm² "f-st") 870 Series

0.08 - 2.5 (4"f-st") mm² ❶ AWG 28 - 12 500 V/6 kV/3 ❷ 300 V, 20 A I_N 24 A Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸	0.08 - 2.5 (4"f-st") mm² ❶ AWG 28 - 12 500 V/6 kV/3 ❷ I_N 24 A Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸





❶ Max. insulation diameter: 4.4 mm

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

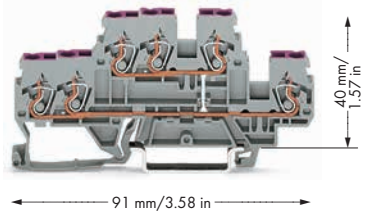
❸ Strip length, see packaging or instructions.

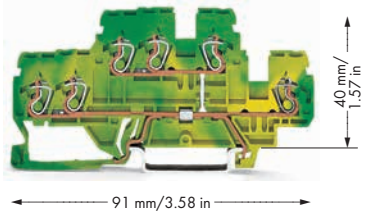
❹ Suitable for Ex i applications

❺ See application notes for:
Insulation stop, page 293

	Item No.	Pack. Unit
Through/through terminal block, gray housing		
L/L	**870-531**	50
N/L	**870-532**	50
L/N	**870-533**	50
Through/through terminal block, blue housing		
N/N	**870-534** ❹	50

	Item No.	Pack. Unit
Ground conductor/through terminal block, gray housing		
PE/N	**870-535**	50
PE/L	**870-536**	50





	Item No.	Pack. Unit
6-conductor through terminal block, internal commoning, conductor entry position colored in violet, gray housing		
L	**870-538**	50
6-conductor through terminal block, internal commoning, conductor entry position colored in violet, blue housing		
N	**870-539** ❹	50

	Item No.	Pack. Unit
6-conductor ground terminal block, internal commoning, green-yellow housing		
PE	**870-537**	50

Accessories

WMB/Miniature WSB
(see Section 13)

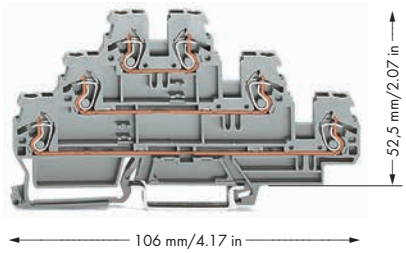
End and intermediate plate, 2 mm thick			
	orange	**870-574**	100 (4x25)
	gray	**870-573**	100 (4x25)
Insulation stop, ❺			
	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st") white	**280-470**	200 (8x25)
Insulation stop, ❺			
	5 pcs/strip, 0.25 - 0.5 mm² light gray	**280-471**	200 (8x25)
Insulation stop, ❺			
	5 pcs/strip, 0.75 - 1 mm² dark gray	**280-472**	200 (8x25)
Push-in type jumper bar, insulated,			
	I_N 18 A, light gray		
	2-way	**870-402**	200 (8x25)
	3-way	**870-403**	200 (8x25)
	4-way	**870-404**	200 (8x25)
	5-way	**870-405**	100 (4x25)
	6-way	**870-406**	100 (4x25)
	7-way	**870-407**	100 (4x25)
	8-way	**870-408**	100 (4x25)
	9-way	**870-409**	100 (4x25)
	10-way	**870-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 18 A, light gray		
	from 1 to 3	**870-433**	200 (8x25)
	from 1 to 4	**870-434**	200 (8x25)
	from 1 to 5	**870-435**	100 (4x25)
	from 1 to 6	**870-436**	100 (4x25)
	from 1 to 7	**870-437**	100 (4x25)
	from 1 to 8	**870-438**	100 (4x25)
	from 1 to 9	**870-439**	100 (4x25)
	from 1 to 10	**870-440**	100 (4x25)
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks yellow	**280-405**	100 (4x25)
Marking strip, plain,			
	7.5 mm wide, 1 m/3'3" long translucent	**709-196**	1

Certification organizations can be found in the overview on pages 622 and 623.

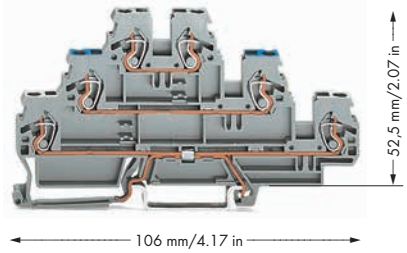
Triple-Deck Terminal Blocks 2.5 mm² (4 mm² "f-st") 870 Series

CAGE CLAMP®

0.08 - 2.5 (4"f-st")mm² ❶	AWG 28 - 12
500 V/6 kV/3 ❷	300 V, 20 A
I_N 24 A	
Terminal block width 5 mm / 0.197 in	
6 - 7 mm / 0.26 in ❸	



0.08 - 2.5 (4"f-st")mm² ❶	AWG 28 - 12
500 V/6 kV/3 ❷	300 V, 20 A
I_N 24 A	
Terminal block width 5 mm / 0.197 in	
6 - 7 mm / 0.26 in ❸	



❶ Max. insulation diameter: 4.4 mm

❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❸ Strip length, see packaging or instructions.

❹ Suitable for Ex e II applications
0.2 mm² - 2.5 (4 "f-st") mm²/AWG 24 - 12
440 V, 18 A
Using push-in type jumper bars 1 to X, the maximum rated voltage is reduced to 275 V and the rated current to 13.5 A
(also see Section 14)

❺ See application notes for:
Insulation stop, page 293

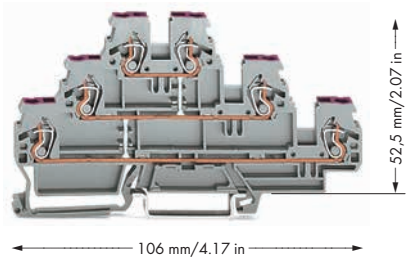
	Item No.	Pack. Unit
Through/through/through terminal block,		
gray housing		
L/L/L	**870-551**	50
L/L/N	**870-553**	50
Through/through/through terminal block,		
light gray housing		
L/L/L Ex	**870-951** ❹	50
Other terminal blocks with the same profile:		
Diode	**870-590/281-410**	Page 386
LED	**870-593/281-434**	Page 387

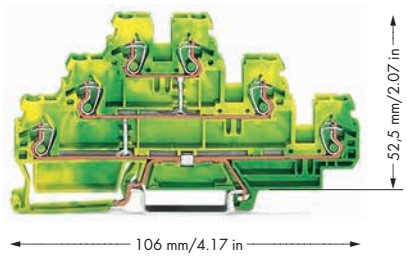
	Item No.	Pack. Unit
Shield/through/through terminal block,		
gray housing		
Shield/N/L	**870-558**	50
Shield/L/L	**870-559**	50
Ground conductor/through/through terminal block,		
gray housing		
PE/N/L	**870-567**	50
PE/L/L	**870-577**	50
Ground conductor/through/through terminal block,		
light gray housing		
PE/L/L	**870-957/999-950** ❹	50

Accessories

WMB/Miniature WSB
(see Section 13)

End and intermediate plate, 2 mm thick			
	orange	**870-569**	50 (2x25)
	gray	**870-568**	50 (2x25)
Insulation stop,			
❺	5 pcs/strip,		
	0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
	white	**280-470**	200 (8x25)
Insulation stop,			
❺	5 pcs/strip,		
	0.25 - 0.5 mm²		
	light gray	**280-471**	200 (8x25)
Insulation stop,			
❺	5 pcs/strip,		
	0.75 - 1 mm²		
	dark gray	**280-472**	200 (8x25)
Push-in type jumper bar, insulated,			
	I_N 18 A,		
	light gray		
	2-way	**870-402**	200 (8x25)
	3-way	**870-403**	200 (8x25)
	4-way	**870-404**	200 (8x25)
	5-way	**870-405**	100 (4x25)
	6-way	**870-406**	100 (4x25)
	7-way	**870-407**	100 (4x25)
	8-way	**870-408**	100 (4x25)
	9-way	**870-409**	100 (4x25)
	10-way	**870-410**	100 (4x25)
Push-in type jumper bar, insulated,			
	I_N 18 A,		
	light gray		
	from 1 to 3	**870-433**	200 (8x25)
	from 1 to 4	**870-434**	200 (8x25)
	from 1 to 5	**870-435**	100 (4x25)
	from 1 to 6	**870-436**	100 (4x25)
	from 1 to 7	**870-437**	100 (4x25)
	from 1 to 8	**870-438**	100 (4x25)
	from 1 to 9	**870-439**	100 (4x25)
	from 1 to 10	**870-440**	100 (4x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**280-405**	100 (4x25)
Marking strip, plain,			
	7.5 mm wide,		
	1 m/3'3" long		
	translucent	**709-196**	1





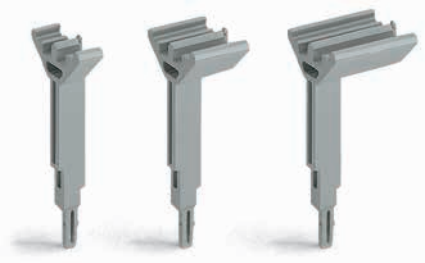
	Item No.	Pack. Unit
6-conductor through terminal block, internal commoning, conductor entry position colored in violet,		
gray housing		
L	**870-556**	50

	Item No.	Pack. Unit
6-conductor ground terminal block, internal commoning,		
green-yellow housing		
PE	**870-557**	50

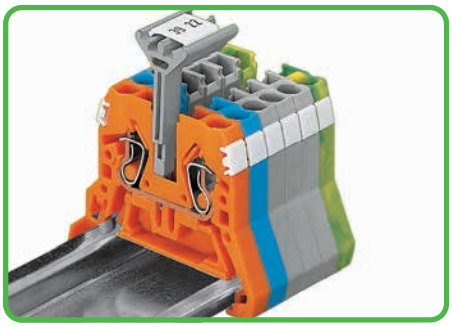
Certification organizations can be found in the overview on pages 622 and 623.

Group Marker Carriers

Group marker carrier



	Item No.	Pack. Unit
Group marker carrier,		
fits into terminal block jumper slots,		
module width 5 mm		
gray	**870-184**	50 (2x25)
Group marker carrier,		
fits into terminal block jumper slots,		
module width 10 mm		
gray	**870-183**	50 (2x25)
Group marker carrier,		
fits into terminal block jumper slots,		
module width 15 mm		
gray	**870-182**	50 (2x25)



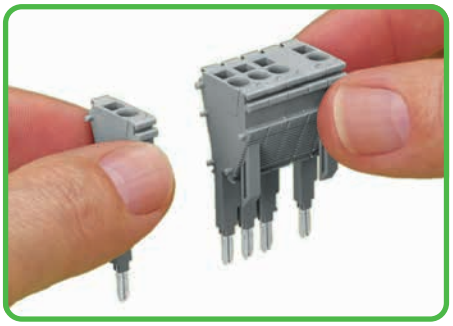
In addition to the plastic marker strips, group marker carriers are now available for the WMB and WSB marking systems. They can be mounted parallel to a push-in type jumper bar via open jumper contact slot. It assists with viewing marker slots on the side of the terminal block. Group marker carriers are available in 5 mm/0.197 in, 10 mm/0.394 in and 15 mm/0.591 in widths.

Notice:
Marker carriers are not suitable for ground conductor terminal blocks and double-potential terminal blocks as they have no jumper contact slots.

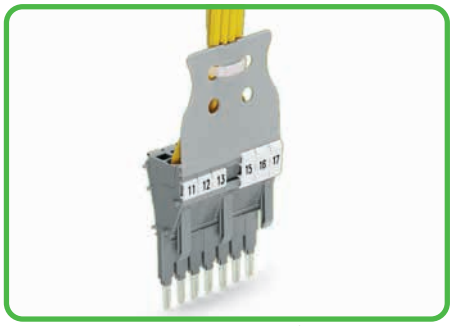
Tap-Off Modules, 870 Series
– Description and Handling –

CAGE CLAMP®

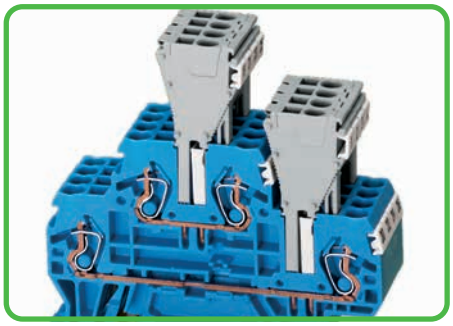
Assembly



Snapping together tap-off and spacer modules to create a module assembly (max. 10 poles).



Module assembly with CAGE CLAMP® connections (0.25 mm² - 2.5 mm²/AWG 24 - 14), including strain relief plate and marker slots for miniature WSB or WMB markers.

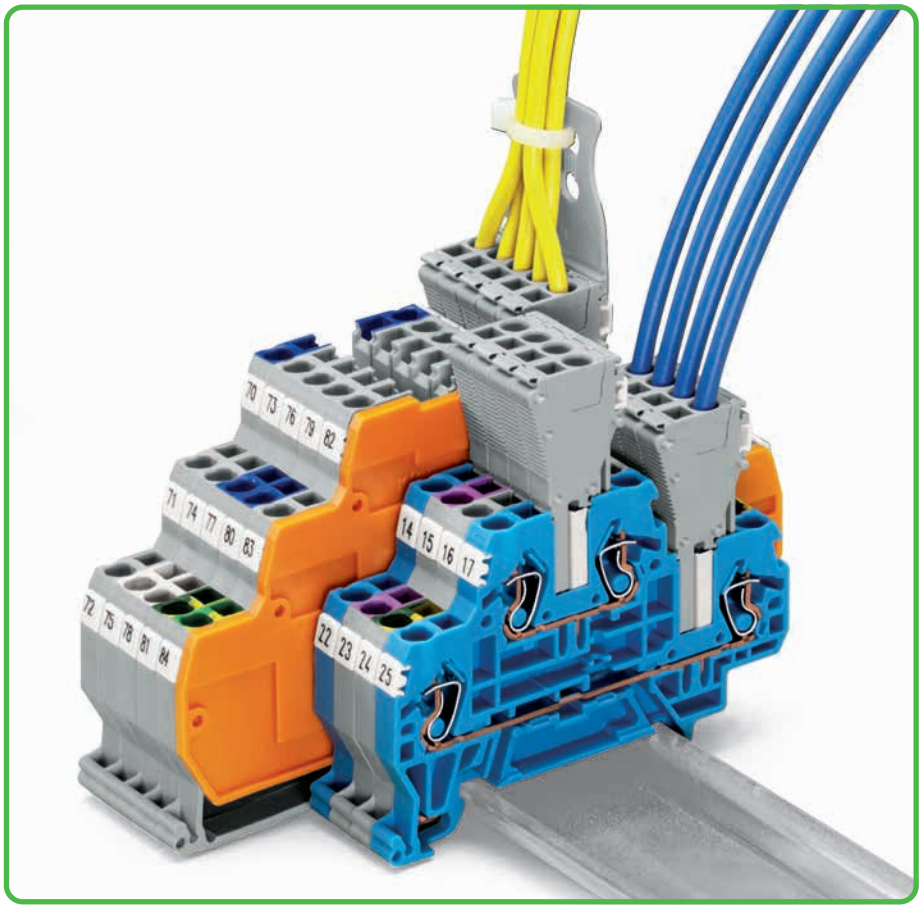


The module assembly can be directly inserted into jumper contact slots of the terminal blocks. The terminal blocks can also be commoned via push-in type jumper bars parallel to the jumper slots being used by the modules.

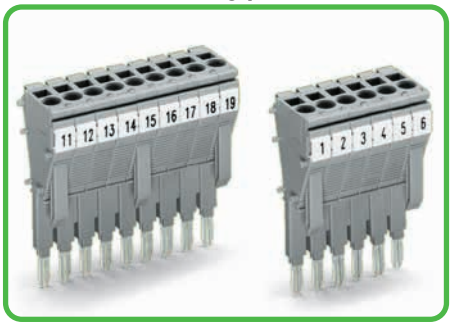
CAGE CLAMP® connection



Tap-off modules are used when additional or removable connections are required (can be used as a permanent connection or a test plug).
Wiring is possible whether the modules are plugged into the assembly or not.



Anti-reverse mating protection

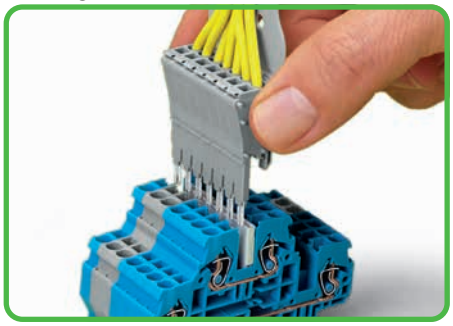


Using anti-reverse mating modules at both ends of a module assembly prevents reverse mating.



Three anti-reverse mating modules are necessary when snapping more than 7 modules together.

Testing



Testing is also possible using a pre-wired module assembly, similar to test plugs.



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded



fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

Tap-Off Modules
870 Series

0.25 - 2.5 mm² | AWG 22 - 14 500 V/6 kV/3 ❶ I_N 18 A Module width 5 mm / 0.197 in 10 mm / 0.38 in ❷	0.25 - 2.5 mm² | AWG 22 - 14 500 V/6 kV/3 ❶ I_N 10 A Module width 5 mm / 0.197 in 10 mm / 0.38 in ❷







❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

	Item No.	Pack. Unit
Tap-off module with CAGE CLAMP® and with anti-reverse mating protection, can be snapped together, suitable for 870 Series terminal blocks with jumper slots, module width 5 mm		
gray	**870-425**	100 (4x25)

	Item No.	Pack. Unit
Tap-off module with CAGE CLAMP®, can be snapped together, suitable for 870 Series terminal blocks with jumper slots, module width 5 mm		
gray	**870-426**	100 (4x25)
Spacer module, can be snapped together, e.g., for bridging commoned terminal blocks, module width 5 mm		
gray	**870-427**	100 (4x25)

For additional wire connections, as well as serial testing on terminal block assemblies, WAGO has developed special tap-off modules.
The tap-off modules readily adapt to terminal block assemblies using spacer modules, if necessary (see left).
It is possible to connect the modules is performed directly in the jumper contact positions of the terminal blocks to be tested/tapped, even though a push-in type jumper bar is already being used.

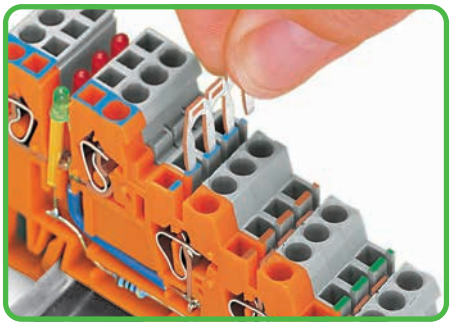
Accessories

Miniature WSB Quick marking system, 10 strips with 10 markers per card, 5 mm wide markers			
plain	**248-501**		5
WMB Multi marking system, 10 strips with 10 markers per card, stretchable 5 - 5.2 mm			
plain	**793-5501**		5
WMB Multi marking system, 10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm			
plain	**793-501**		5
Strip relief plate, gray			
35 mm width	**734-326**	100 (4x25)	
6 mm wide	**734-327**	100 (4x25)	
12.5 mm width	**734-328**	100 (4x25)	
25 mm wide	**734-329**	100 (4x25)	

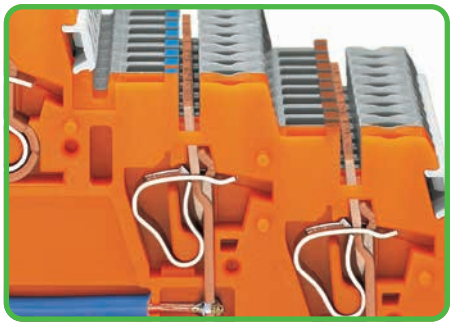
Certification organizations can be found in the overview on pages 622 and 623.

Sensor and Actuator Terminal Blocks, 270 Series
– Description and Handling –

Commoning



Inserting a jumper.

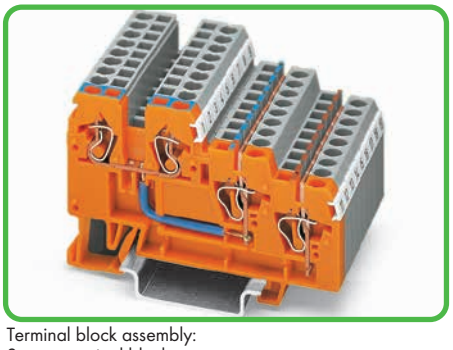


Commoning a supply voltage using uninsulated push-in type jumper bars, 2- to 9-way or 17-way (2 x 8 bits), depending on application.

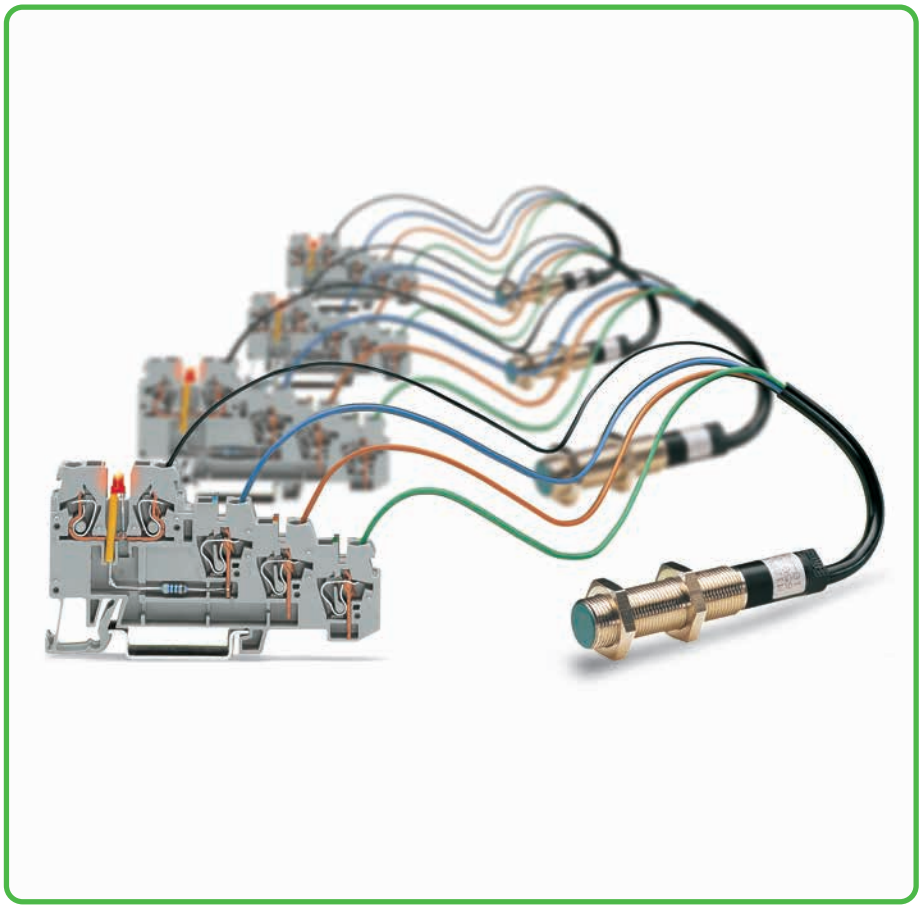


Commoning signal level voltage via insulated 870 Series push-in type jumper bars, 2- to 9-way, depending on application.
Sensor LED terminal blocks cannot be commoned on the signal level.

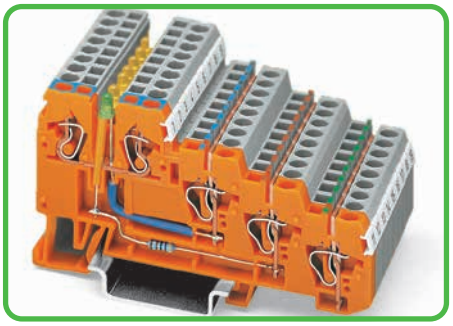
Sensor terminal blocks



Terminal block assembly:
Sensor terminal blocks



Sensor LED terminal blocks

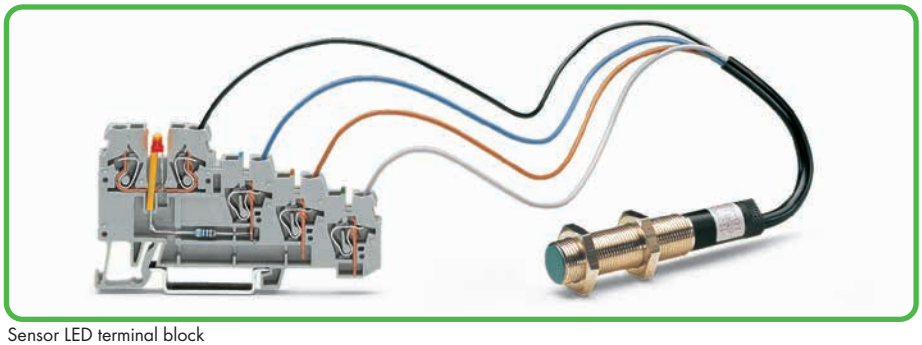


Terminal block assembly:
Sensor LED terminal blocks

Marking Strips



Marking strips
Item No. 709-196
Not suitable for LED terminal blocks!



Sensor LED terminal block

**CAGE CLAMP®
clamps the following
copper conductors:***

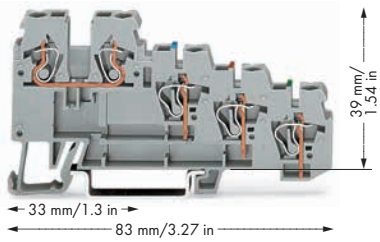
solid	stranded	fine-stranded, also with tinned single strands	fine-stranded, tip-bonded	fine-stranded, with ferrule ❶ (gastight crimped)	fine-stranded, with pin terminal (gastight crimped)

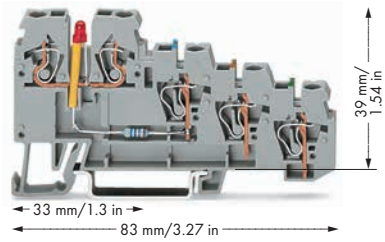
* For aluminum conductors, see notes in Section 14.

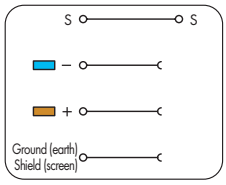
❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

4-Conductor Sensor Terminal Blocks and 4-Conductor Sensor LED Terminal Blocks 270 Series

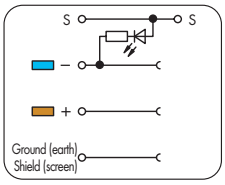
0.08 - 2.5 mm² / AWG 28 - 12 *	0.08 - 2.5 mm² / AWG 28 - 12 *
250 V/4 kV/3 ❶ / 300 V, 20 A	24 VDC ❸
I_N 18 A ❷ / 300 V, 10 A	
Terminal block width 5 mm / 0.197 in	Terminal block width 5 mm / 0.197 in
6 - 7 mm / 0.26 in ❹	6 - 7 mm / 0.26 in ❹



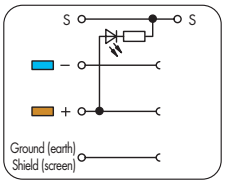




Circuit I

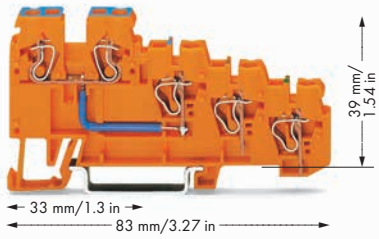


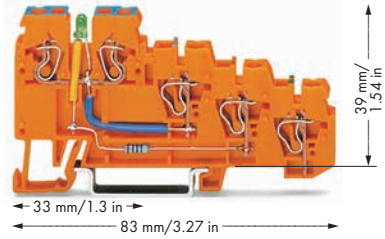
Circuit II

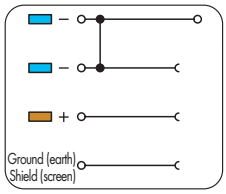


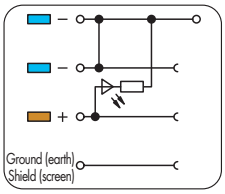
Item No.		Pack. Unit
4-conductor sensor terminal block,		
for DIN 35 rail		
gray	**270-570**	50

Item No.		Pack. Unit
4-conductor sensor LED terminal block,		
for DIN 35 rail,		
for PNP (positive) switching sensors, red LED		
Circuit I	**270-570/281-434**	50
4-conductor sensor LED terminal block,		
for DIN 35 rail,		
for NPN (negative) switching sensors, yellow LED		
Circuit II	**270-570/281-507**	50









Item No.		Pack. Unit
4-conductor sensor supply terminal block,		
for DIN 35 rail,		
internal bridge 9 A		
orange	**270-574**	10

Item No.		Pack. Unit
4-conductor sensor LED supply terminal block,		
for DIN 35 rail		
green LED	**270-574/281-483**	10

* AWG 12: THHN, THWN

❶ 250 V = rated voltage
4 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Internal bridge: 9 A

❸ Other voltages upon request.
LED power consumption: 4.8 mA

❹ Strip length, see packaging or instructions.

❺ See application notes for:
Insulation stop, page 293

Accessories for 4-Conductor Terminal Blocks

WMB/Miniature WSB (see Section 13)

End and intermediate plate, 1 mm thick,



for quadruple-deck terminal blocks		
orange	**270-322**	100 (4x25)
gray	**270-320**	100 (4x25)

Insulation stop, ❺



5 pcs/strip,		
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
white	**280-470**	200 (8x25)

Insulation stop, ❺



5 pcs/strip,		
0.25 - 0.5 mm²		
light gray	**280-471**	200 (8x25)

Insulation stop, ❺



5 pcs/strip,		
0.75 - 1 mm²		
dark gray	**280-472**	200 (8x25)

Jumper, uninsulated,



I_N 18 A		
Jumpers can be shortened using an electronic side cutter		
9-way	**270-409**	100 (4x25)
17-way	**270-417**	100 (4x25)
80-way	**270-480**	10

Push-in type jumper bar, insulated,



I_N 18 A,		
light gray		
2-way	**870-402**	200 (8x25)
3-way	**870-403**	200 (8x25)
4-way	**870-404**	200 (8x25)
5-way	**870-405**	100 (4x25)
6-way	**870-406**	100 (4x25)
7-way	**870-407**	100 (4x25)
8-way	**870-408**	100 (4x25)
9-way	**870-409**	100 (4x25)

Operating tool with partially insulated shaft,



type 2, (3.5 x 0.5) mm blade		
	210-720	1

Miniature WSB Quick marking system,



10 strips with 10 markers per card,		
5 mm wide markers		
plain	**248-501**	5

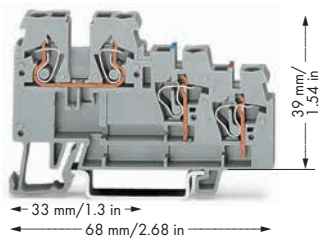
WMB Multi marking system,

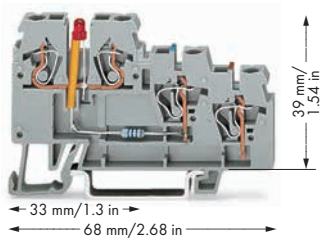
10 strips with 10 markers per card,		
stretchable 5 - 5.2 mm		
plain	**793-5501**	5

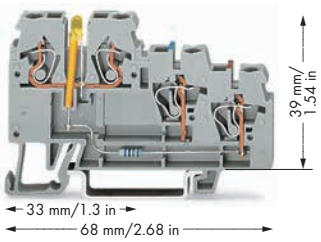
Certification organizations can be found in the overview on pages 622 and 623.

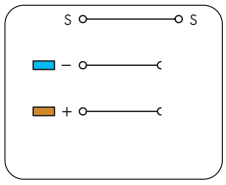
3-Conductor Sensor Terminal Blocks and 3-Conductor Sensor LED Terminal Blocks 270 Series

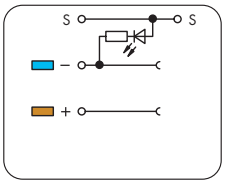
0.08 - 2.5 mm² | AWG 28 - 12 * 250 V/4 kV/3 ❶ | 300 V, 20 A I_N 18 A | 300 V, 10 A Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸	0.08 - 2.5 mm² | AWG 28 - 12 * 24 VDC ❷ Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸	0.08 - 2.5 mm² | AWG 28 - 12 * 24 VDC ❷ Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸

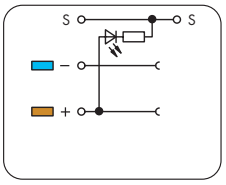








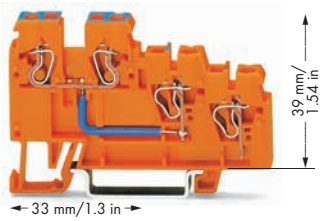


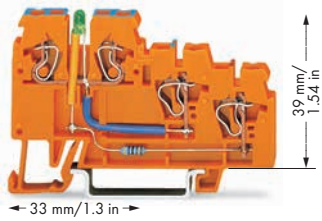


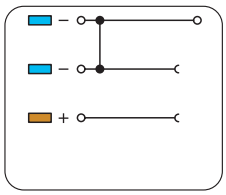
Item No.		Pack. Unit
3-conductor sensor terminal block,		
for DIN 35 rail		
gray	**270-560**	50

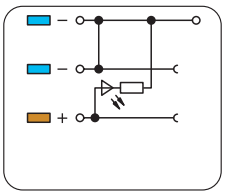
Item No.		Pack. Unit
3-conductor sensor LED terminal block,		
for DIN 35 rail,		
for PNP (positive) switching sensors		
red LED	**270-560/281-434**	50

Item No.		Pack. Unit
3-conductor sensor LED terminal block,		
for DIN 35 rail,		
for NPN (negative) switching sensors		
yellow LED	**270-560/281-507**	50









Item No.		Pack. Unit
3-conductor sensor supply terminal block,		
for DIN 35 rail,		
internal bridge 9 A		
orange	**270-564**	50

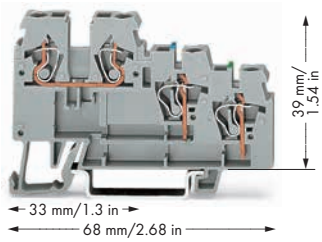
Item No.		Pack. Unit
3-conductor sensor LED supply terminal block,		
for DIN 35 rail		
green LED	**270-564/281-483**	10

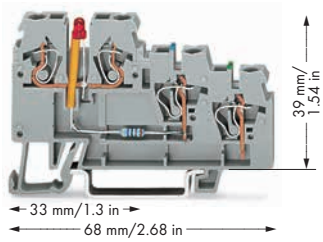
Tap-off modules (870-425, 870-426, 870-427) also suitable for signal level.

Certification organizations can be found in the overview on pages 622 and 623.

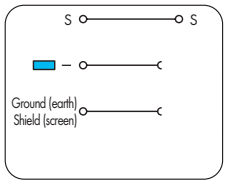
3-Conductor Actuator Terminal Blocks and 3-Conductor Actuator LED Terminal Blocks 270 Series

0.08 - 2.5 mm² / AWG 28 - 12 *	0.08 - 2.5 mm² / AWG 28 - 12 *
250 V/4 kV/3 ❶	24 VDC ❷
I_N 18 A	
300 V, 20 A	
300 V, 10 A	
Terminal block width 5 mm / 0.197 in	Terminal block width 5 mm / 0.197 in
6 - 7 mm / 0.26 in ❸	6 - 7 mm / 0.26 in ❸

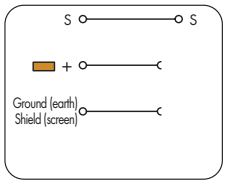


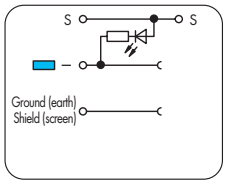


Circuit I



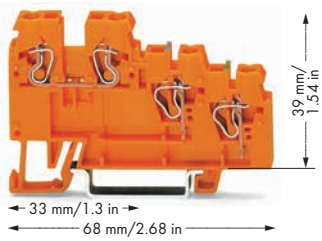
Circuit II

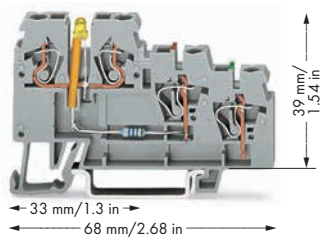




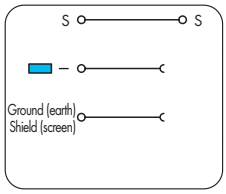
Item No.		Pack. Unit
3-conductor actuator terminal block,		
for DIN 35 rail		
Circuit I	**270-572**	50
3-conductor actuator terminal block,		
for DIN 35 rail		
Circuit II	**270-585**	50

Item No.		Pack. Unit
3-conductor actuator LED terminal block,		
for DIN 35 rail,		
for PNP (positive) switching actuators		
red LED	**270-572/281-434**	50

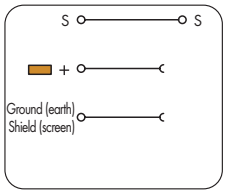


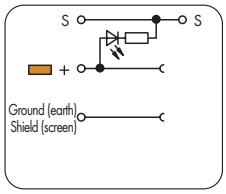


Circuit I



Circuit II





Item No.		Pack. Unit
3-conductor actuator supply terminal block,		
for DIN 35 rail		
Circuit I	**270-577**	10
3-conductor actuator supply terminal block,		
for DIN 35 rail		
Circuit II	**270-586**	10

Item No.		Pack. Unit
3-conductor actuator LED terminal block,		
for DIN 35 rail,		
for NPN (negative) switching actuators		
yellow LED	**270-585/281-507**	50

* AWG 12: THHN, THWN

❶ 250 V = rated voltage
4 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Other voltages upon request.
LED power consumption: 4.8 mA

❸ Strip length, see packaging or instructions.

❹ See application notes for:
Insulation stop, page 293

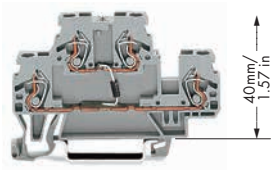
Accessories for 3-Conductor Terminal Blocks

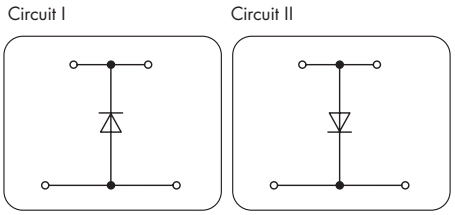
WMB/Miniature WSB (see Section 13)

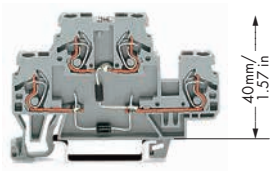
End and intermediate plate, 1 mm thick,			
for triple-deck terminal blocks			
orange		**270-321**	100 (4x25)
gray		**270-319**	100 (4x25)
Insulation stop, ❹			
5 pcs/strip,			
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")			
white		**280-470**	200 (8x25)
Insulation stop, ❹			
5 pcs/strip,			
0.25 - 0.5 mm²			
light gray		**280-471**	200 (8x25)
Insulation stop, ❹			
5 pcs/strip,			
0.75 - 1 mm²			
dark gray		**280-472**	200 (8x25)
Jumper, uninsulated,			
I_N 18 A			
Jumpers can be shortened using an electronic side cutter			
9-way		**270-409**	100 (4x25)
17-way		**270-417**	100 (4x25)
80-way		**270-480**	10
Push-in type jumper bar, insulated,			
I_N 18 A,			
light gray			
2-way		**870-402**	200 (8x25)
3-way		**870-403**	200 (8x25)
4-way		**870-404**	200 (8x25)
5-way		**870-405**	100 (4x25)
6-way		**870-406**	100 (4x25)
7-way		**870-407**	100 (4x25)
8-way		**870-408**	100 (4x25)
9-way		**870-409**	100 (4x25)
Operating tool with partially insulated shaft,			
type 2, (3.5 x 0.5) mm blade			
		210-720	1
Miniature WSB Quick marking system,			
10 strips with 10 markers per card,			
5 mm wide markers			
plain		**248-501**	5
WMB Multi marking system,			
10 strips with 10 markers per card,			
stretchable 5 - 5.2 mm			
plain		**793-5501**	5

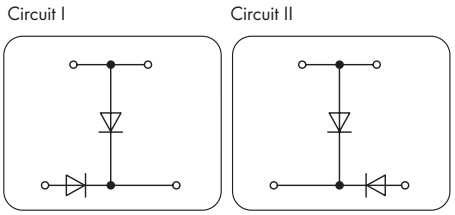
Double-Deck Diode Terminal Blocks and LED Terminal Blocks 2.5 mm² (4 mm² "f-st") 870 Series

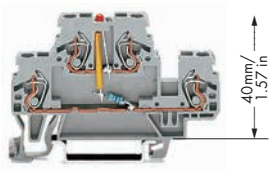
0.08 - 2.5 (4"f-st")mm² ❶ AWG 28 - 12 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❷	0.08 - 2.5 (4"f-st")mm² ❶ AWG 28 - 12 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❷	0.08 - 2.5 (4"f-st")mm² ❶ AWG 28 - 12 24 VDC I_F 0.025 A max. Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❷

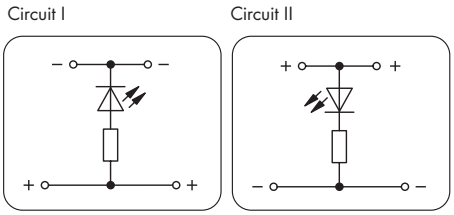








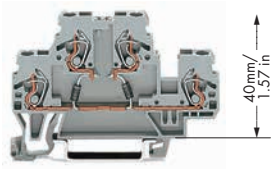


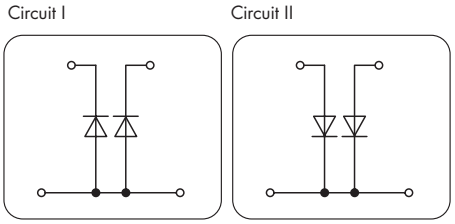


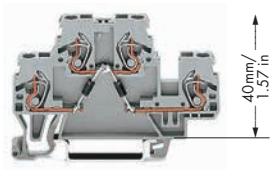
Item No.		Pack. Unit
Double-deck diode terminal block with 1N4007 diode, gray		
Circuit I	**870-540/281-410**	50
Circuit II	**870-540/281-411**	50

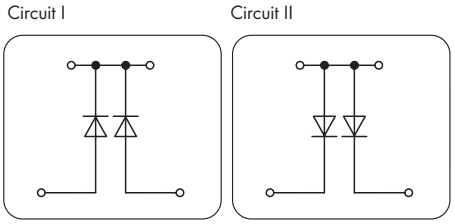
Item No.		Pack. Unit
Double-deck diode terminal block with 2 diodes		
1N4007, gray		
Circuit I	**870-541/281-492**	50
Circuit II	**870-541/281-491**	50

Item No.		Pack. Unit
Double-deck LED terminal block with red LED,		
24 VDC, gray		
Circuit I	**870-543/281-434**	50
Circuit II	**870-543/281-413**	50









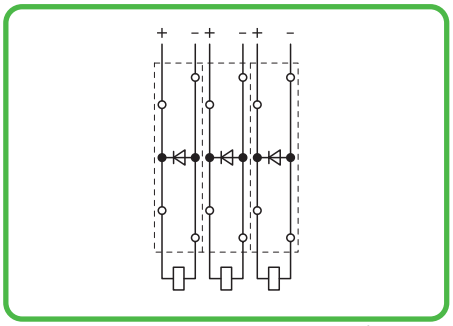
Item No.		Pack. Unit
Double-deck diode terminal block with 2 diodes		
1N4007, gray		
Circuit I	**870-542/281-487**	50
Circuit II	**870-542/281-488**	50

Item No.		Pack. Unit
Double-deck diode terminal block with 2 diodes		
1N4007, gray		
Circuit I	**870-541/281-489**	50
Circuit II	**870-541/281-490**	50

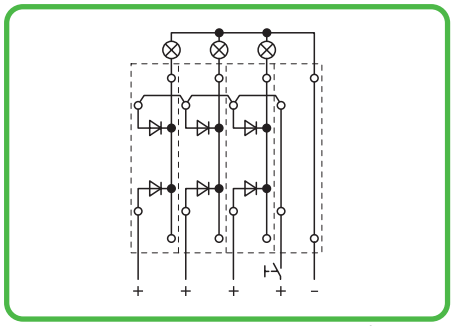
Through terminal blocks with same profile,
see page 374

Certification organizations can be found in the overview on pages 622 and 623.

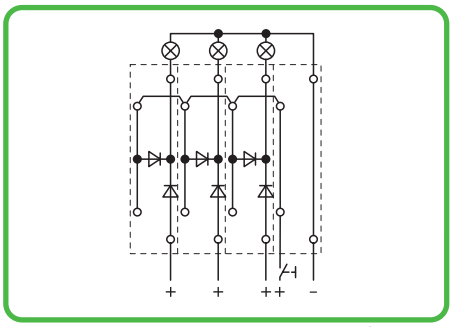
Circuit Configuration Examples
Double-Deck Diode and LED Terminal Blocks



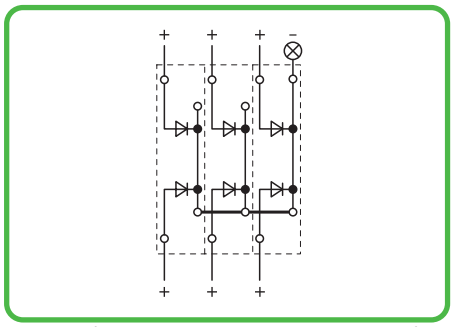
Recovery diodes can be created using the following terminal blocks:
870-540/281-410 or
870-540/281-411



Lamp test circuits can be created using the following terminal blocks:
870-542/281-487 or
870-542/281-488

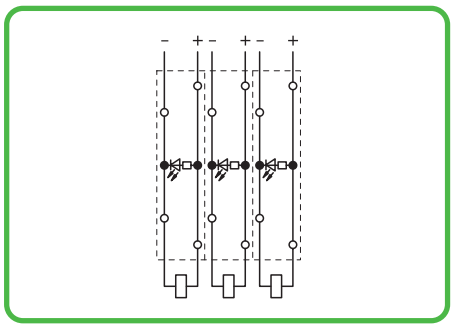


Lamp test circuits can be created using the following terminal blocks:
870-541/281-491 or
870-541/281-492



Collective fault signals can be created using the following terminal blocks:
870-541/281-489 or
870-541/281-490

Double-deck diode terminal blocks
have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits. Using LED terminal blocks, monitoring units can be designed, e.g., for control and operating circuits. The terminal blocks provide high-density wiring, while maintaining a width of only 5 mm. Push-in type jumper bars provide additional options for custom circuit design.



Circuit-related voltage indications can be created using the following terminal blocks:
870-543/281-434 or
870-543/281-413

❶ Max. insulation diameter: 4.4 mm
❷ Strip length, see packaging or instructions.
❸ See application notes for:
Insulation stop, page 1293

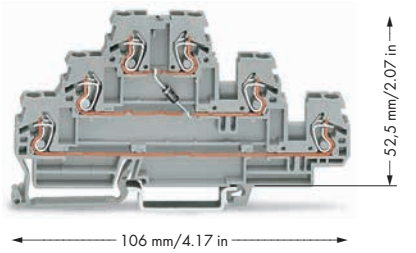
870 Series Accessories

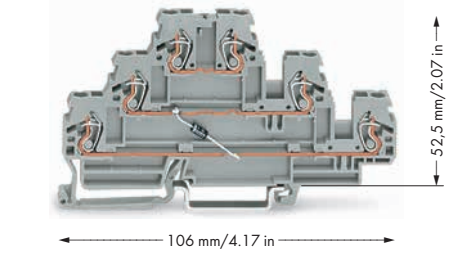
WMB/Miniature WSB
(see Section 13)

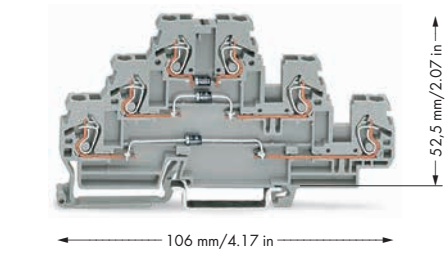
End and intermediate plate, 2 mm thick			
	orange	**870-519**	100 (4x25)
	gray	**870-518**	100 (4x25)
Insulation stop, ❸ 	5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st") white	**280-470**	200 (8x25)
Insulation stop, ❸ 	5 pcs/strip, 0.25 - 0.5 mm² light gray	**280-471**	200 (8x25)
Insulation stop, ❸ 	5 pcs/strip, 0.75 - 1 mm² dark gray	**280-472**	200 (8x25)
Push-in type jumper bar, insulated, 	I_N 18 A, light gray		
	2-way	**870-402**	200 (8x25)
	3-way	**870-403**	200 (8x25)
	4-way	**870-404**	200 (8x25)
	5-way	**870-405**	100 (4x25)
	6-way	**870-406**	100 (4x25)
	7-way	**870-407**	100 (4x25)
	8-way	**870-408**	100 (4x25)
	9-way	**870-409**	100 (4x25)
	10-way	**870-410**	100 (4x25)
Push-in type jumper bar, insulated, 	I_N 18 A, light gray		
	from 1 to 3	**870-433**	200 (8x25)
	from 1 to 4	**870-434**	200 (8x25)
	from 1 to 5	**870-435**	100 (4x25)
	from 1 to 6	**870-436**	100 (4x25)
	from 1 to 7	**870-437**	100 (4x25)
	from 1 to 8	**870-438**	100 (4x25)
	from 1 to 9	**870-439**	100 (4x25)
	from 1 to 10	**870-440**	100 (4x25)
Protective warning marker, 	with high-voltage symbol, black, for 5 terminal blocks yellow	**280-405**	100 (4x25)

Triple-Deck Diode Terminal Blocks and LED Terminal Blocks 2.5 mm² (4 mm² "f-st") 870 Series

0.08 - 2.5 (4"f-st")mm² ❶ AWG 28 - 12 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❷	0.08 - 2.5 (4"f-st")mm² ❶ AWG 28 - 12 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❷	0.08 - 2.5 (4"f-st")mm² ❶ AWG 28 - 12 U_N 250 V, U_{RM} 1000 V 1N4007 - 0.5 A continuous current Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❷







Item No.		Pack. Unit
Triple-deck diode terminal block with 1N4007 diode, gray		
Circuit I	**870-590/281-410**	50
Circuit II	**870-590/281-411**	50
Other terminal blocks with the same profile:		
Through	**870-551**	Page 376

Item No.		Pack. Unit
Triple-deck diode terminal block with 1N4007 diode, gray		
Circuit I	**870-590/281-675**	50
Circuit II	**870-590/281-676**	50

Item No.		Pack. Unit
Triple-deck diode terminal block with 3 diodes 1N4007, gray		
Circuit I	**870-596/281-673**	50
Circuit II	**870-596/281-674**	50

870 Series Accessories

Appropriate marking systems: WMB/Miniature WSB (see Section 13)

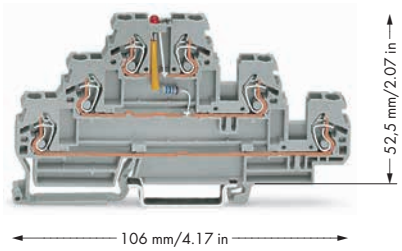
End and intermediate plate, 2 mm thick			
orange	**870-569**	50 (2x25)	
gray	**870-568**	50 (2x25)	
Insulation stop, ❸			
5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")			
white	**280-470**	200 (8x25)	
Insulation stop, ❸			
5 pcs/strip, 0.25 - 0.5 mm²			
light gray	**280-471**	200 (8x25)	
Insulation stop, ❸			
5 pcs/strip, 0.75 - 1 mm²			
dark gray	**280-472**	200 (8x25)	
Push-in type jumper bar, insulated,			
I_N 18 A, light gray			
2-way	**870-402**	200 (8x25)	
3-way	**870-403**	200 (8x25)	
4-way	**870-404**	200 (8x25)	
5-way	**870-405**	100 (4x25)	
6-way	**870-406**	100 (4x25)	
7-way	**870-407**	100 (4x25)	
8-way	**870-408**	100 (4x25)	
9-way	**870-409**	100 (4x25)	
10-way	**870-410**	100 (4x25)	

Push-in type jumper bar, insulated,			
I_N 18 A, light gray			
from 1 to 3	**870-433**	200 (8x25)	
from 1 to 4	**870-434**	200 (8x25)	
from 1 to 5	**870-435**	100 (4x25)	
from 1 to 6	**870-436**	100 (4x25)	
from 1 to 7	**870-437**	100 (4x25)	
from 1 to 8	**870-438**	100 (4x25)	
from 1 to 9	**870-439**	100 (4x25)	
from 1 to 10	**870-440**	100 (4x25)	
Protective warning marker,			
with high-voltage symbol, black, for 5 terminal blocks			
yellow	**280-405**	100 (4x25)	
Miniature WSB Quick marking system,			
10 strips with 10 markers per card, 5 mm wide markers			
plain	**248-501**		5
WMB Multi marking system,			
10 strips with 10 markers per card, stretchable 5 - 5.2 mm			
plain	**793-5501**		5
WMB Multi marking system,			
10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm			
plain	**793-501**		5

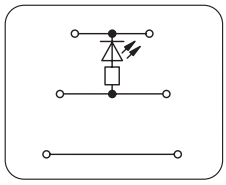
Miniature WSB Quick marking system, plain,			
10 strips with 10 markers per card, 5 mm wide markers			
yellow	**248-501/000-002**		
red	**248-501/000-005**		
blue	**248-501/000-006**		
gray	**248-501/000-007**		
orange	**248-501/000-012**		
light green	**248-501/000-017**		
green	**248-501/000-023**		
violet	**248-501/000-024**		
			5
WMB Multi marking system, plain,			
10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm			
yellow	**793-501/000-002**		
red	**793-501/000-005**		
blue	**793-501/000-006**		
gray	**793-501/000-007**		
orange	**793-501/000-012**		
light green	**793-501/000-017**		
green	**793-501/000-023**		
violet	**793-501/000-024**		
			5

Certification organizations can be found in the overview on pages 622 and 623.

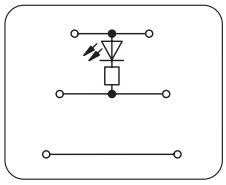
0.08 - 2.5 (4"f-st")mm²❶ AWG 28 - 12
24 VDC
I_F 0.025 A max.
Terminal block width 5 mm / 0.197 in
6 - 7 mm / 0.26 in ❷

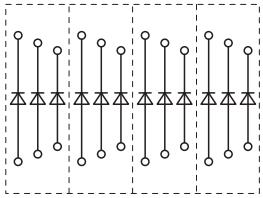


Circuit I



Circuit II





Triple-deck diode terminal blocks
have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits.

Using LED terminal blocks, monitoring units can be designed, e.g., for control and operating circuits. The terminal blocks provide high-density wiring, while maintaining a width of only 5 mm.

Push-in type jumper bars provide additional options for custom circuit design.

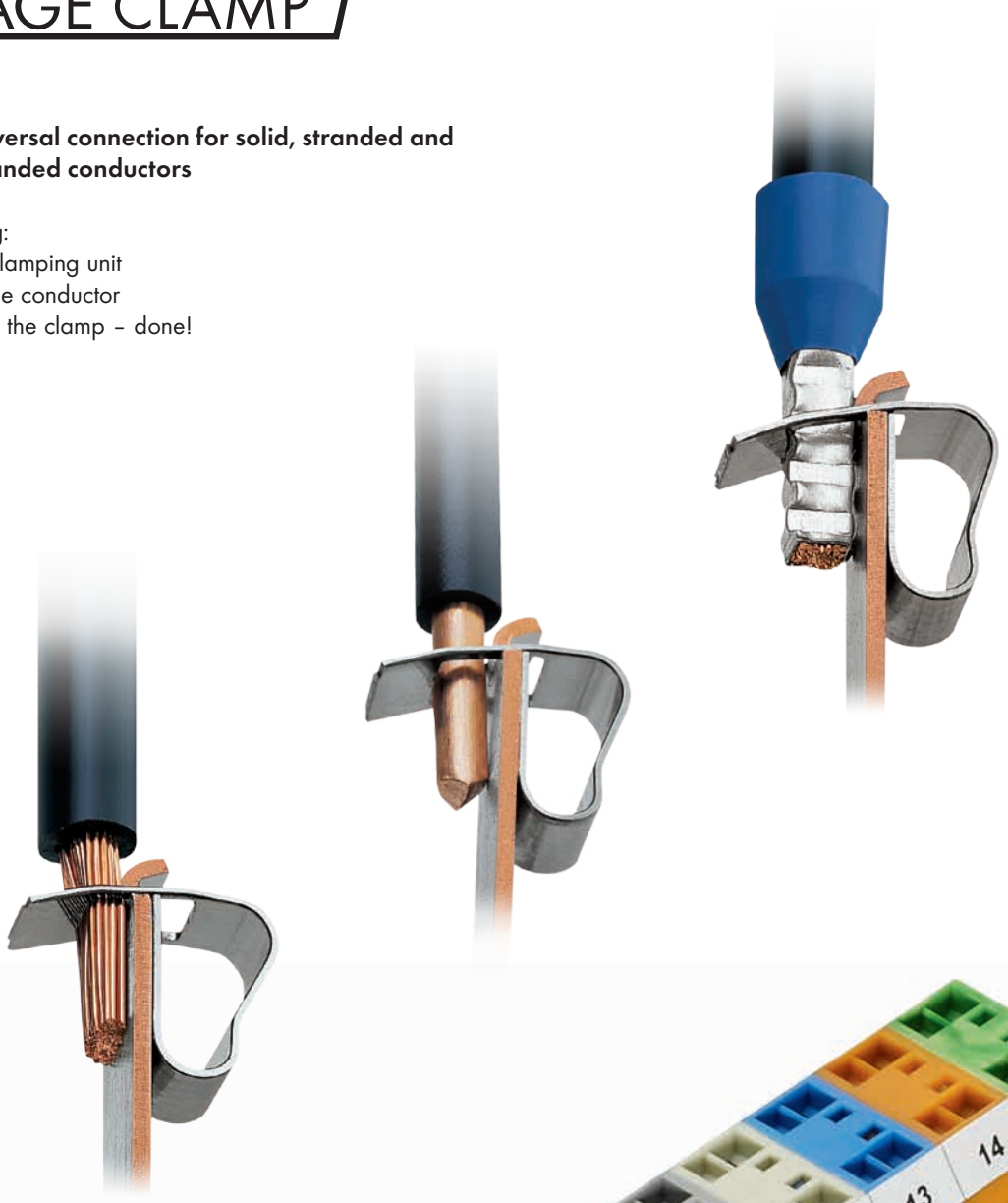
❶ Max. insulation diameter: 4.4 mm
❷ Strip length, see packaging or instructions.
❸ See application notes for:
Insulation stop, page 293

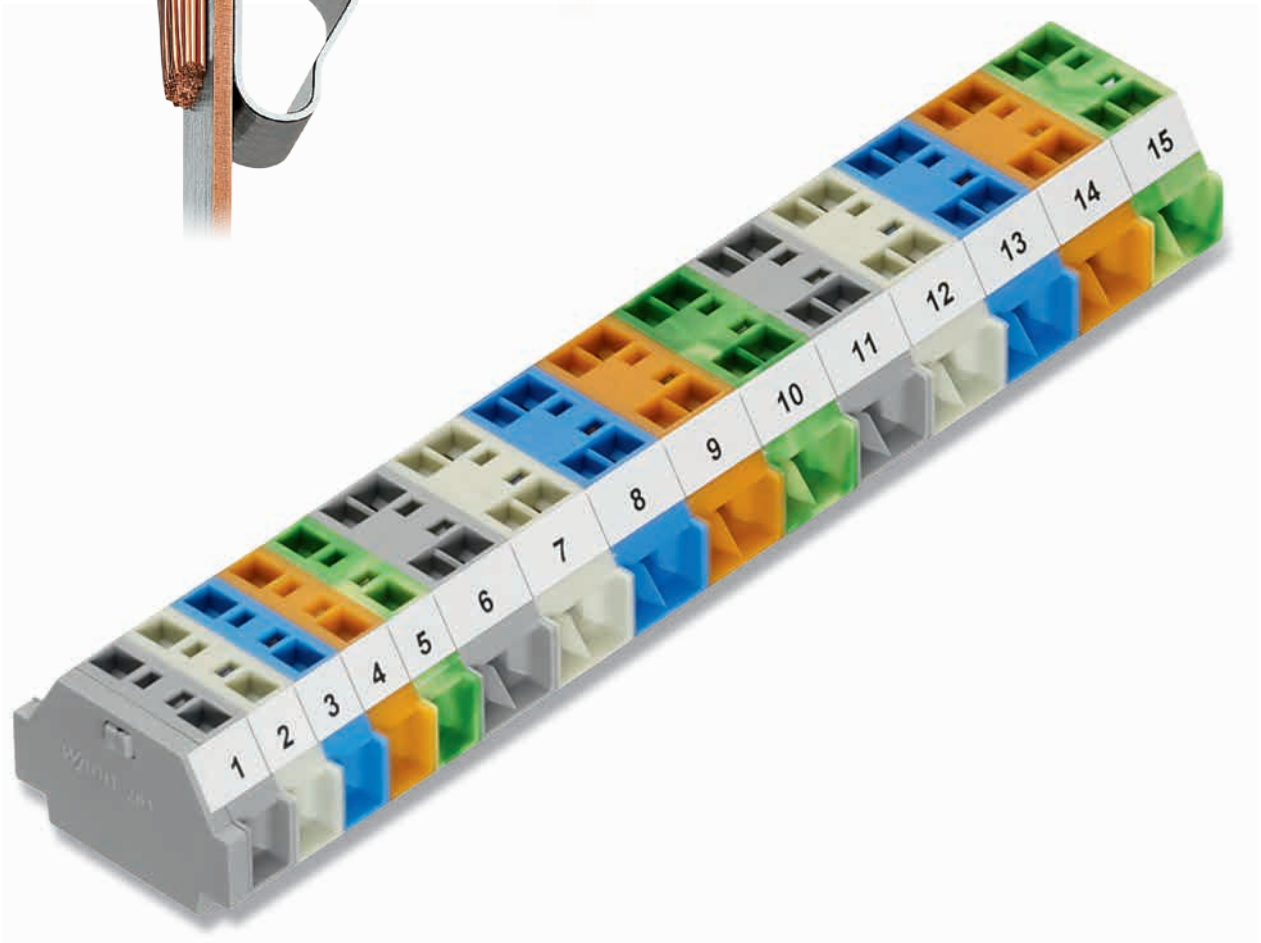
	Item No.	Pack. Unit
Triple-deck LED terminal block with red LED,		
24 VDC, gray		
Circuit I	**870-593/281-434**	50
Circuit II	**870-593/281-413**	50
WMB Multi marking system, plain,		
10 strips with 10 markers per card, stretchable 5 - 5.2 mm		
yellow	**793-5501/000-002**	
red	**793-5501/000-005**	
blue	**793-5501/000-006**	
gray	**793-5501/000-007**	
orange	**793-5501/000-012**	
light green	**793-5501/000-017**	
green	**793-5501/000-023**	
violet	**793-5501/000-024**	
		5

CAGE CLAMP®

The universal connection for solid, stranded and fine-stranded conductors

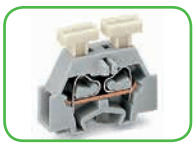
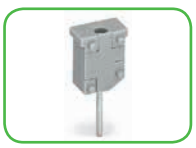
Handling:
- Open clamping unit
- Insert the conductor
- Release the clamp – done!





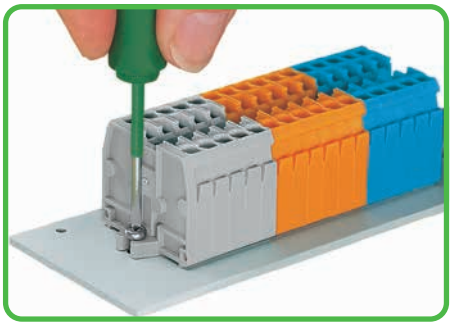
Modular Terminal Blocks and Terminal Strips

Side-/Front-Entry Wiring

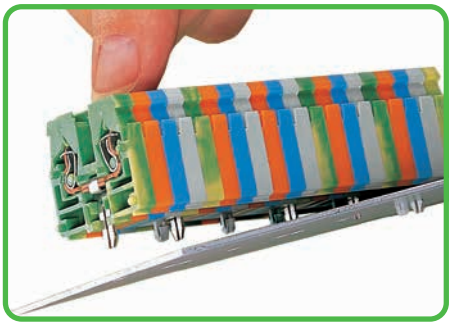
			Page
	**Modular Terminal Blocks and Terminal Strips with Fixing Flanges or Snap-In Mounting Feet, Front-Entry Wiring** 2.5 mm² (4 mm² "f-st") / 12 AWG	869 Series	391
	**Modular Terminal Blocks and Terminal Strips with Fixing Flanges or Snap-In Mounting Feet, Front-Entry Wiring** 2.5 mm² (12 AWG)	264 Series	396
	**Modular Terminal Blocks and Terminal Strips with Fixing Flanges or Snap-In Mounting Feet, Side-Entry Wiring** 0.08 mm² to 1.5 mm² (28–16 AWG) / 2.5 mm²/4 mm² (14/12 AWG)	260/261/262 Series	402
	**With Push-Buttons on One or Both Sides** 0.08 mm² to 1.5 mm² (28–16 AWG)	261 Series	406
	**With Additional Miniature WSB Side Marker Slot and Push-Buttons on One or Both Sides** 1.5 mm² (16 AWG)	261 Series	410
	**Test Plug Modules for 260/261/262 Series Terminal Strips**		416

Compact Terminal Strips, 869 Series
– Description and Handling –

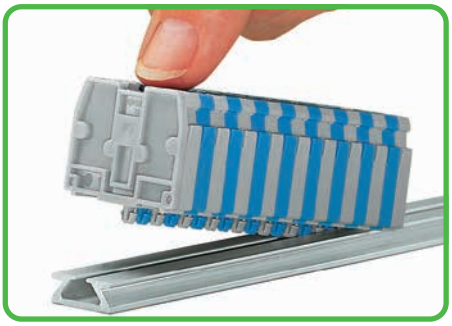
Fixing



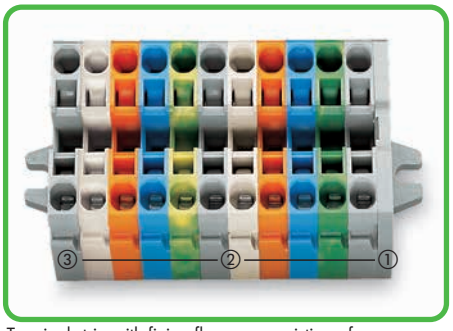
Terminal strip with fixing flanges, screw mount.



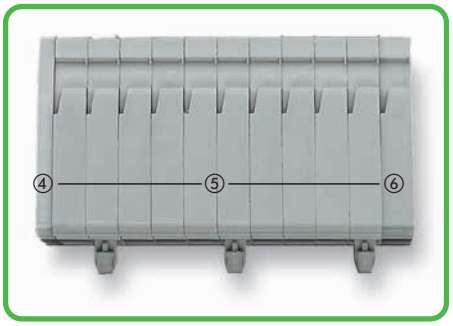
Terminal strip with snap-in mounting feet, mounting in holes.



Terminal strip with snap-in mounting feet, mounting onto special aluminum rail.



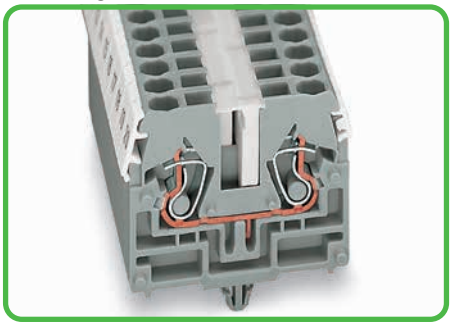
Terminal strip with fixing flanges, consisting of:
End plate with fixing flange ①
Center terminal blocks ②
End terminal block with fixing flange ③



Terminal strip with mounting feet, consisting of:
End plate ④ / Center terminal blocks with/without snap-in mounting feet ⑤ / End terminal block with/without snap-in mounting foot ⑥



Marking



WAGO WMB Multi marking system or WAGO miniature WSB Quick marking system.

Push-in type jumper bar system



Push jumper bars down firmly until fully inserted! When using multipole bars, push alternately on right and then left side, until installed.

CAGE CLAMP® clamps the following copper conductors:*

solid	stranded	fine-stranded, also with tinned single strands	fine-stranded, tip-bonded	fine-stranded, with ferrule ❶ (gastight crimped)	fine-stranded, with pin terminal (gastight crimped)

* For aluminum conductors, see notes in Section 14.

❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

Compact Terminal Strips 2.5 mm² (4 mm² "f-st") with Fixing Flanges or Snap-in Mounting Feet 869 Series

0.08 - 2.5 (4 "f-st") mm²	AWG 28 - 12
500 V/6 kV/3	300V, 20A
I_N 24 A	
Pole width 5 mm / 0.197 in	
6 - 7 mm / 0.26 in	

0.08 - 2.5 (4 "f-st") mm²	AWG 28 - 12
500 V/6 kV/3	300V, 20A
I_N 24 A	
Pole width 5 mm / 0.197 in	
6 - 7 mm / 0.26 in	

0.08 - 2.5 (4 "f-st") mm²	AWG 28 - 12
500 V/6 kV/3	300V, 20A
I_N 24 A	
Pole width 5 mm / 0.197 in	
6 - 7 mm / 0.26 in	





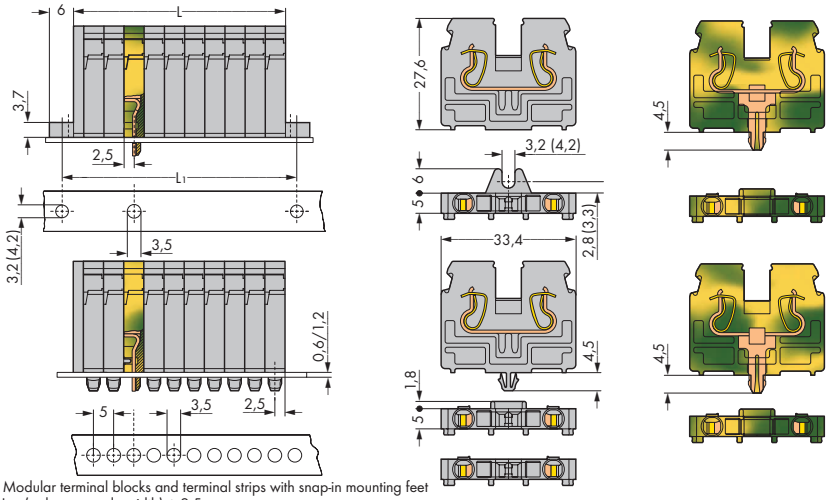


Pole No.	Item No.	Pack. Unit
Compact terminal strip with fixing flanges M3, for screw or similar mounting types, fixing hole 3.2 mm Ø,		
gray		
2	**869-102**	100
3	**869-103**	100
4	**869-104**	100
5	**869-105**	100
6	**869-106**	50
7	**869-107**	50
8	**869-108**	50
9	**869-109**	50
10	**869-110**	50
11	**869-111**	25
12 ❶	**869-112**	25
light gray		
2	**869-132**	100
3	**869-133**	100
4	**869-134**	100
5	**869-135**	100
6	**869-136**	50
7	**869-137**	50
8	**869-138**	50
9	**869-139**	50
10	**869-140**	25
11	**869-141**	25
12 ❶	**869-142**	25

Pole No.	Item No.	Pack. Unit
Compact terminal strip with fixing flanges M4, for screw or similar mounting types, fixing hole 4.2 mm Ø,		
gray		
2	**869-202**	100
3	**869-203**	100
4	**869-204**	100
5	**869-205**	100
6	**869-206**	50
7	**869-207**	50
8	**869-208**	50
9	**869-209**	50
10	**869-210**	25
11	**869-211**	25
12 ❶	**869-212**	25
light gray		
2	**869-232**	100
3	**869-233**	100
4	**869-234**	100
5	**869-235**	100
6	**869-236**	50
7	**869-237**	50
8	**869-238**	50
9	**869-239**	50
10	**869-240**	25
11	**869-241**	25
12 ❶	**869-242**	25

Pole No.	Item No.	Pack. Unit
Compact terminal strip with snap-in mounting feet, for plate thickness 0.6 - 1.2 mm, fixing hole		
3.5 +0.1 mm Ø, gray		
2	**869-152**	100
3	**869-153**	100
4	**869-154**	100
5	**869-155**	100
6	**869-156**	50
7	**869-157**	50
8	**869-158**	50
9	**869-159**	50
10	**869-160**	25
11	**869-161**	25
12 ❶	**869-162**	25
light gray		
2	**869-182**	100
3	**869-183**	100
4	**869-184**	100
5	**869-185**	100
6	**869-186**	50
7	**869-187**	50
8	**869-188**	50
9	**869-189**	50
10	**869-190**	25
11	**869-191**	25
12 ❶	**869-192**	25

Modular terminal blocks and terminal strips with fixing flanges
L = (pole no. x pole width) + 2.5 mm L_1 = L + 5.6 mm, with flange M4 6.6 mm



Modular terminal blocks and terminal strips with snap-in mounting feet
L = (pole no. x pole width) + 2.5 mm

❶ For longer strips and /or assemblies of different colors, please contact factory

Item no. suffixes for terminal strips:

869-102 to 869-112
869-202 to 869-212
869-152 to 869-162

blue . . ./000-006 ❷
green-yellow . . ./000-016

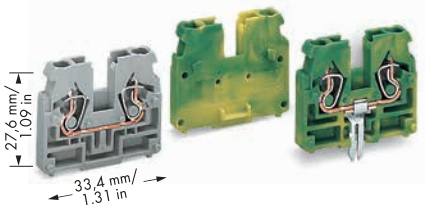
❷ Terminal blocks with blue insulation are suitable for Ex i applications

Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

Modular Terminal Blocks 2.5 mm² (4 mm² "f-st") with Fixing Flanges or Snap-in Mounting Feet 869 Series

0.08 - 2.5 (4"f-st")mm² ❶ AWG 28 - 12 500 V/6 kV/3 ❷ 300 V, 20 A I_N 24 A Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸	0.08 - 2.5 (4"f-st")mm² ❶ AWG 28 - 12 500 V/6 kV/3 ❷ 300 V, 20 A I_N 24 A Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸	0.08 - 2.5 (4"f-st")mm² ❶ AWG 28 - 12 500 V/6 kV/3 ❷ 300 V, 20 A I_N 24 A Terminal block width 5 mm / 0.197 in 6 - 7 mm / 0.26 in ❸







Color	Item No.	Pack. Unit
Center terminal block without snap-in mounting foot, required for terminal strips with fixing flanges between end plate and end terminal block		
gray	**869-321**	100
blue	**869-324** ❹	100
orange	**869-326**	100
green-yellow	**869-327**	100
light gray	**869-329**	100
Center terminal block with direct ground contact, fixing hole 3.5 +0.1 mm Ø, **Notice: Terminal block cannot be commoned.**		
green-yellow	**869-328**	100

Color	Item No.	Pack. Unit
End terminal block with fixing flange M3, for screw or similar mounting types, fixing hole 3.2 mm Ø		
gray	**869-301**	100
blue	**869-304** ❹	100
green-yellow	**869-307**	100
light gray	**869-309**	100
End terminal block with fixing flange M4, for screw or similar mounting types, fixing hole 4.2 mm Ø		
gray	**869-351**	100
blue	**869-354** ❹	100
green-yellow	**869-357**	100
light gray	**869-359**	100

Color	Item No.	Pack. Unit
End terminal block with snap-in mounting foot, for plate thickness 0.6-1.2 mm, fixing hole 3.5 +0.1 mm Ø		
gray	**869-331**	100
blue	**869-334** ❹	100
green-yellow	**869-337**	100
light gray	**869-339**	100
End terminal block without snap-in mounting foot, for plate thickness 0.6-1.2 mm		
gray	**869-341**	100
blue	**869-344** ❹	100
green-yellow	**869-347**	100
light gray	**869-349**	100

Item-Specific Accessories

Aluminum carrier rail,



1000 mm long, 18 mm wide, 7 mm high — **210-154** — 1

End stop, for WSB Quick markers, for 210-154 aluminum rail, 6 mm wide



209-122 — 25

869 Series Accessories

Appropriate marking systems: WMB/Miniature WSB (see Section 13)

End plate with fixing flange M3,



2.5 mm thick		
gray	**869-385**	100 (4x25)
blue	**869-388**	100 (4x25)
green-yellow	**869-389**	100 (4x25)
light gray	**869-387**	100 (4x25)

End plate with fixing flange M4,



2.5 mm thick		
gray	**869-395**	100 (4x25)
blue	**869-398**	100 (4x25)
green-yellow	**869-399**	100 (4x25)
light gray	**869-397**	100 (4x25)

End plate, for terminal blocks with snap-in mounting foot,



2.5 mm thick		
gray	**869-375**	100 (4x25)
blue	**869-378**	100 (4x25)
green-yellow	**869-379**	100 (4x25)
light gray	**869-377**	100 (4x25)

Insulation stop, ❺



5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")

white — **280-470** — 200 (8x25)

Insulation stop, ❺



5 pcs/strip, 0.25 - 0.5 mm²

light gray — **280-471** — 200 (8x25)

Insulation stop, ❺



5 pcs/strip, 0.75 - 1 mm²

dark gray — **280-472** — 200 (8x25)

Push-in type jumper bar, insulated,



I_N 18 A, light gray

2-way	**870-402**	200 (8x25)
3-way	**870-403**	200 (8x25)
4-way	**870-404**	200 (8x25)
5-way	**870-405**	100 (4x25)
6-way	**870-406**	100 (4x25)
7-way	**870-407**	100 (4x25)
8-way	**870-408**	100 (4x25)
9-way	**870-409**	100 (4x25)
10-way	**870-410**	100 (4x25)

Push-in type jumper bar, insulated,



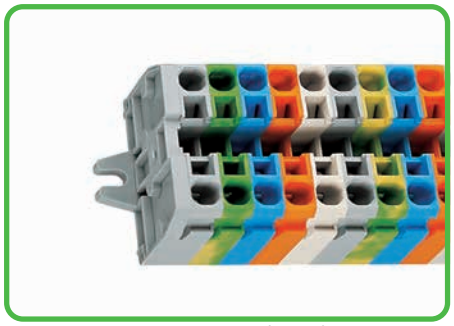
I_N 18 A, light gray

from 1 to 3	**870-433**	200 (8x25)
from 1 to 4	**870-434**	200 (8x25)
from 1 to 5	**870-435**	100 (4x25)
from 1 to 6	**870-436**	100 (4x25)
from 1 to 7	**870-437**	100 (4x25)
from 1 to 8	**870-438**	100 (4x25)
from 1 to 9	**870-439**	100 (4x25)
from 1 to 10	**870-440**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

0.08 - 2.5 (4"f-st")mm² ❶ | AWG 28 - 12
500 V/6 kV/3 ❷ | 300 V, 20 A
I_N 24 A

Terminal block width 5 mm / 0.197 in
6 - 7 mm / 0.26 in ❸

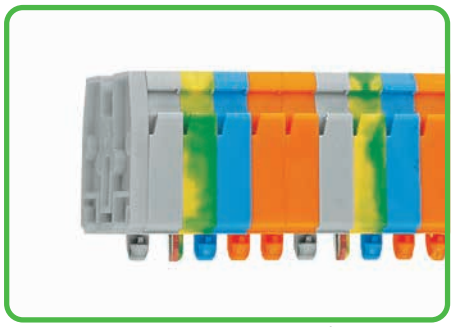


Terminal strips with M3 or M4 fixing flanges,
for screw or similar mounting types
3.2 mm Ø M3 flange
4.2 mm Ø M4 flange

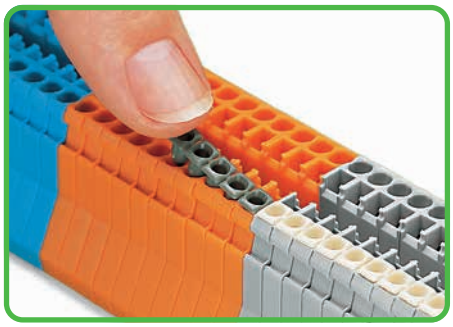


❶ Max. insulation diameter: 4.4 mm
❷ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)
❸ Strip length, see packaging or instructions.
❹ Suitable for Ex i applications
❺ See application notes for:
Insulation stop, page 293
Group marker carrier, page 377

Color	Item No.	Pack. Unit
Center terminal block with snap-in mounting foot,		
for plate thickness 0.6-1.2 mm,		
fixing hole 3.5 +0.1 mm Ø		
gray	**869-311**	100
blue	**869-314** ❹	100
orange	**869-316**	100
green-yellow	**869-317**	100
light gray	**869-319**	100



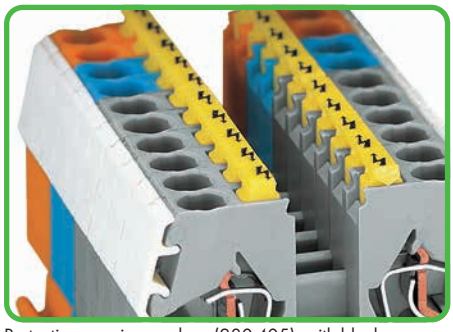
Terminal strips with snap-in mounting feet,
for plate thickness 0.6 – 1.2 mm,
fixing hole 3.5 $^{+0.1}$mm Ø



Insert insulation stop into conductor entry holes of terminal strip.

Item-Specific Accessories

Aluminum carrier rail,			
	1000 mm long, 18 mm wide, 7 mm high	**210-154**	1
End stop, for WSB Quick markers,			
	for 210-154 aluminum rail, 6 mm wide	**209-122**	25
Marking strip, plain,			
	7.5 mm wide, 1 m/3'3" long, translucent	**709-196**	1
Protective warning marker,			
	with high-voltage symbol, black, for 5 terminal blocks, yellow	**280-405**	100 (4x25)
Group marker carrier, ❺			
	fits into terminal block jumper slots, gray	**870-184**	50 (2x25)
Test plug,			
	with 500 mm cable, 2 mm Ø, red	**210-136**	50



Protective warning markers (280-405), with black high-voltage symbols.

Wiring programmable logic controllers and microprocessor-operated control circuits often relies on very small cross sections of fine-stranded conductors. These small conductors are highly flexible, and they deform when pushed against the conductor stop in terminal blocks. As a result, the conductor insulation – not the copper conductor – may be clamped, causing intermittent contact or no contact at all. Common to all terminal block types currently offered, this problem creates unnecessary downtime for troubleshooting.

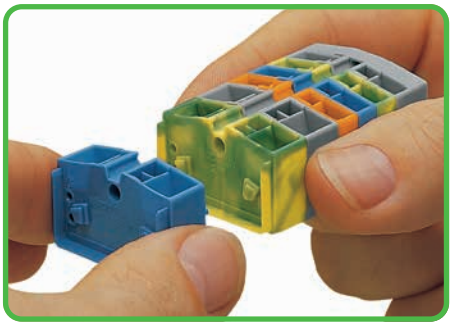
The solution: an insulation stop for compact terminal blocks. Insulation stops automatically bundle the cores of fine-stranded conductors when inserted into the clamping unit, preventing splaying. This also limits the conductor entry to a defined cross sectional area – ensuring the actual conductor, not the insulation, will enter the clamping unit.

The insulation stop is available as dividable 5-pole strip for the 869 Series terminal strips.

Insulation stop usage will not affect the conductor strip lengths for the aforementioned terminal strips.

Modular Terminal Blocks and Terminal Strips
264 Series

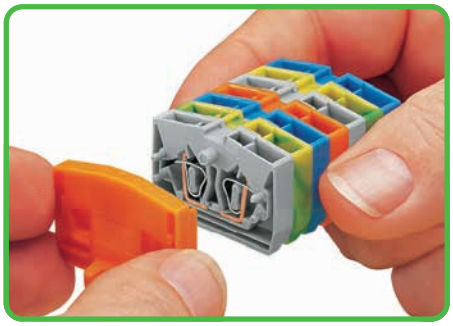
Assembly



Assembling modular terminal blocks into terminal strips.

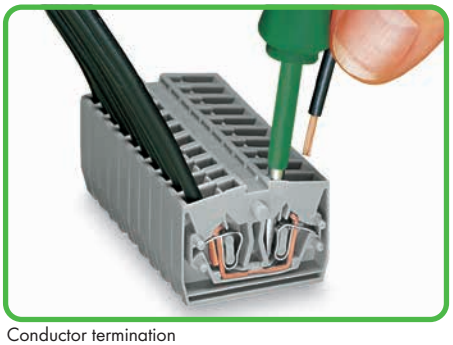


Mounting an "end terminal block" with fixing flange.

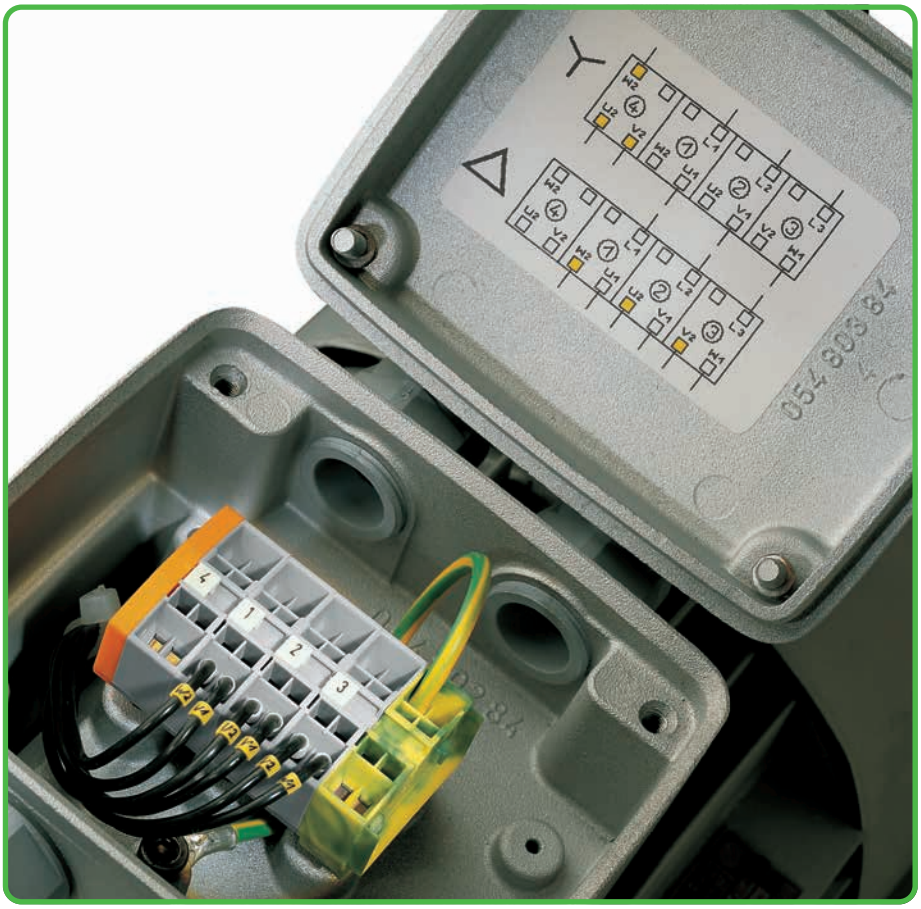


Mounting an end plate.

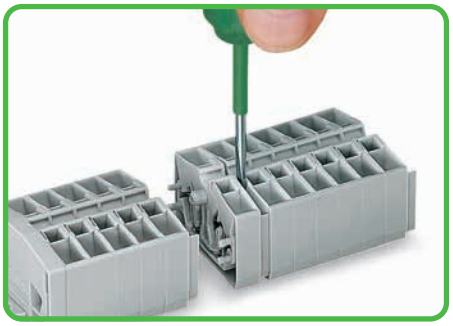
CAGE CLAMP® connection



Conductor termination

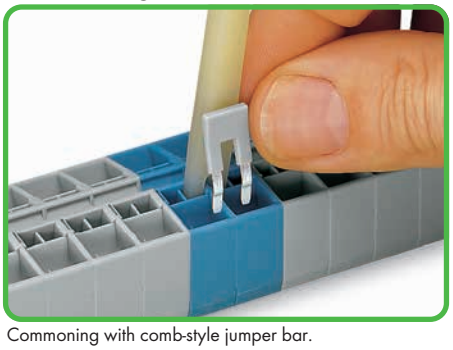


Removal



Removing a terminal block.

Commoning

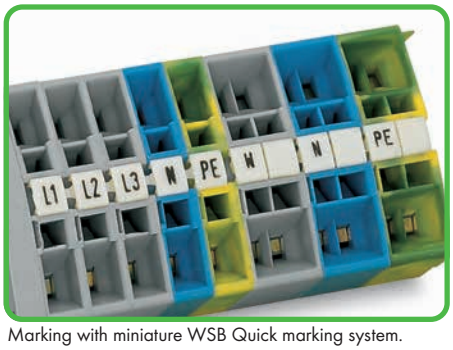


Commoning with comb-style jumper bar.

Marking



T marker tag (Item No. **209-290**)



Marking with miniature WSB Quick marking system.



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded

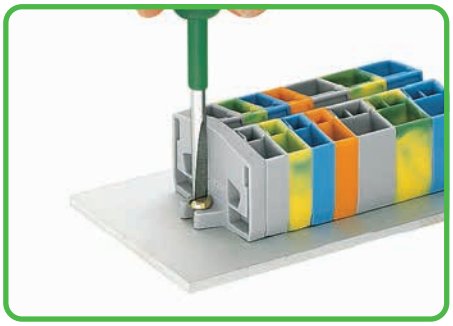


fine-stranded, also with tinned single strands

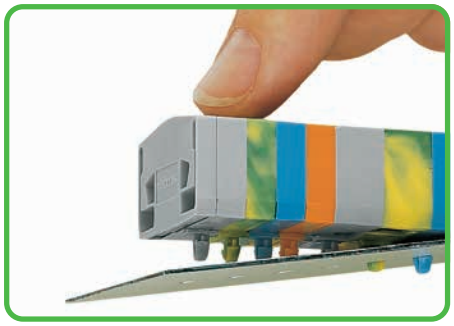
* For aluminum conductors, see notes in Section 14.

– Description and Handling –

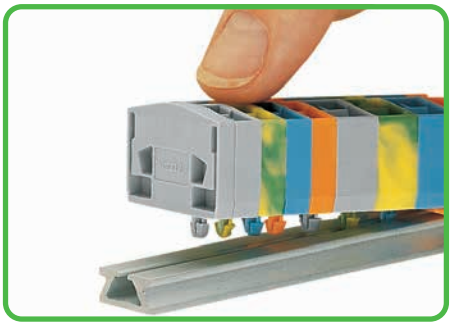
Fixing



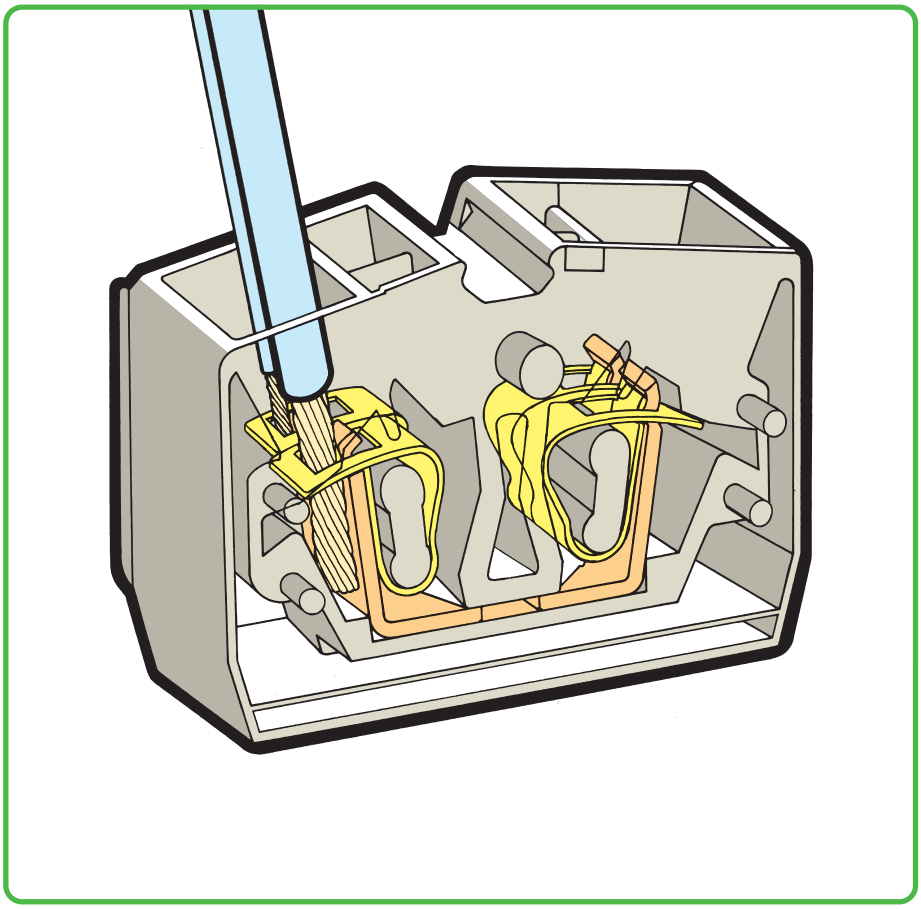
Terminal strip with fixing flanges,
screw mount.



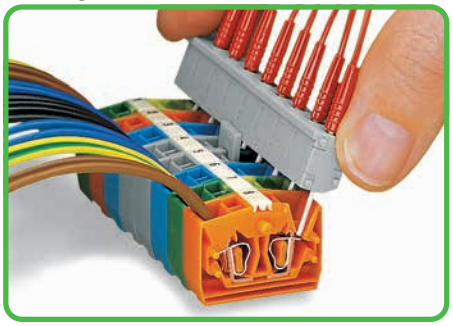
Terminal strip with snap-in mounting feet,
mounting in holes.



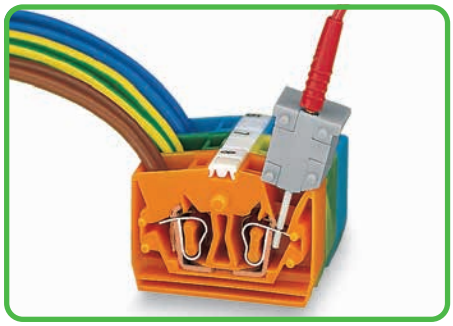
Terminal strip with snap-in mounting feet,
mounting onto special aluminum rail.



Testing



Testing with test plug module assembly
– touch contact.



Testing with test plug module – fully clamped by
CAGE CLAMP®.



fine-stranded,
tip-bonded



fine-stranded,
with ferrule ❶
(gastight crimped)



fine-stranded,
with pin terminal
(gastight crimped)

❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

Modular Terminal Blocks with Fixing Flange 2.5 mm²
264 Series

CAGE CLAMP®

0.08 - 2.5 mm²	AWG 28 - 12 *
800 V/8 kV/3 ❶	300 V, 20 A
I_N 24 A	600 V, 20 A

Terminal block width 6 mm / 0.236 in
8 - 9 mm / 0.33 in ❷

0.08 - 2.5 mm²	AWG 28 - 12 *
800 V/8 kV/3 ❶	300 V, 20 A
I_N 24 A	600 V, 20 A

Terminal block width 10 mm / 0.394 in
8 - 9 mm / 0.33 in ❷





* AWG 12: THHN, THWN

❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

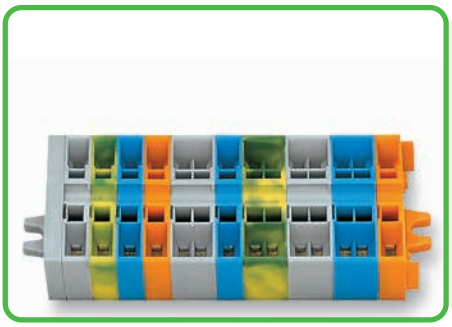
❸ Suitable for Ex i applications

❹ Suitable for Ex e II applications
0.5 mm² - 2.5 mm²/AWG 20 - 12*
690 V, 23 A
(also see Section 14)

❺ See application notes for:
Alternate comb-style jumper bar, page 294
Test plug module, page 416
Miniature WSB, page 542

Color	Item No.	Pack. Unit
2-conductor center terminal block, required between end plate and end terminal block for terminal strips with fixing flanges		
gray	**264-321**	100
blue	**264-324** ❸	100
orange	**264-326**	100
green-yellow	**264-327**	100
light gray	**264-131** ❹	100
2-conductor end terminal block with fixing flange, for screw or similar mounting types, fixing hole 3.2 mm Ø		
gray	**264-301**	100
blue	**264-304** ❸	100
orange	**264-306**	100
green-yellow	**264-307**	100
light gray	**264-130** ❹	100

Color	Item No.	Pack. Unit
4-conductor center terminal block, required for terminal strips with fixing flanges between end plate and end terminal block		
gray	**264-351**	100
blue	**264-354** ❸	100
orange	**264-356**	100
green-yellow	**264-357**	100
light gray	**264-231** ❹	100
4-conductor end terminal block with fixing flange, for screw or similar mounting types, fixing hole 3.2 mm Ø		
gray	**264-331**	100
blue	**264-334** ❸	100
orange	**264-336**	100
green-yellow	**264-337**	100
light gray	**264-230** ❹	100



Terminal strip with fixing flanges, consisting of:
- End plate with fixing flange
- Center terminal blocks
- End terminal block with fixing flange

Item-Specific Accessories

Alternate comb-style jumper bar, ❺	insulated, I_N = I_N terminal block		
	2-way	**281-492**	100 (4x25)
Test plug module, ❺	can be snapped together, 6 mm wide		
	gray	**249-136**	100 (4x25)
Miniature WSB Quick marking system, ❺	10 strips with 10 markers per card, 5 mm wide markers		
	plain	**248-501**	5

Item-Specific Accessories

Alternate comb-style jumper bar, ❺	insulated, I_N = I_N terminal block		
	2-way	**280-492**	200 (8x25)
Test plug module, ❺	can be snapped together, 10 mm wide		
	gray	**249-139**	100 (4x25)
Miniature WSB Quick marking system, ❺	10 strips with 10 markers per card, 5 mm wide markers		
		264-900	5

264 Series Accessories

Appropriate marking systems: Miniature WSB/T-marker tag (see Section 13)

End plate with fixing flange, 4 mm thick	gray	**264-361**	25
	orange	**264-364**	25
	light gray	**264-363**	25
Comb-style jumper bar, insulated, I_N 16 A, gray, reduces maximum conductor size to 1.5 mm²/AWG 16	2-way	**264-402**	200 (8x25)
Operating tool, of insulating material	2-way	**280-432**	1

Test plug, with 500 mm cable, 2 mm Ø	red	**210-136**	50
Test plug, with 500 mm cable, 2.3 mm Ø	yellow	**210-137**	50
T marker tag, 30 markers each tag, up to 6 characters per marker	plain	**209-290**	50

Certification organizations can be found in the overview on pages 622 and 623.

Modular Terminal Blocks with Snap-In Mounting Foot 2.5 mm²
264 Series

0.08 - 2.5 mm²	AWG 28 - 12 *
800 V/8 kV/3 ❶	300 V, 20 A
I_N 24 A	600 V, 20 A
Terminal block width 6 mm / 0.236 in	
8 - 9 mm / 0.33 in ❷	

0.08 - 2.5 mm²	AWG 28 - 12 *
800 V/8 kV/3 ❶	300 V, 20 A
I_N 24 A	600 V, 20 A
Terminal block width 10 mm / 0.394 in	
8 - 9 mm / 0.33 in ❷	





* AWG 12: THHN, THWN

❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ Suitable for Ex e II applications
0.5 mm² - 2.5 mm²/AWG 20 - 12*
690 V, 23 A
(also see Section 14)

❺ See application notes for:
Alternate comb-style jumper bar, page 294
Test plug module, page 416
Miniature WSB, page 542

Color	Item No.	Pack. Unit
2-conductor terminal block with snap-in mounting foot,		
for plate thickness 0.6-1.2 mm fixing hole 3.5 mm Ø		
gray	**264-311**	100
blue	**264-314** ❸	100
orange	**264-316**	100
green-yellow	**264-317**	100
light gray	**264-180** ❹	100

Color	Item No.	Pack. Unit
4-conductor terminal block with snap-in mounting foot,		
for plate thickness 0.6-1.2 mm fixing hole 3.5 mm Ø		
gray	**264-341**	100
blue	**264-344** ❸	100
orange	**264-346**	100
green-yellow	**264-347**	100
light gray	**264-280** ❹	100

Item-Specific Accessories

Alternate comb-style jumper bar, ❺	insulated, $I_N = I_N$ terminal block		
	2-way	**281-492**	100 (4x25)
Test plug module, ❺	can be snapped together, 6 mm wide		
	gray	**249-136**	100 (4x25)
Miniature WSB Quick marking system, ❺	10 strips with 10 markers per card, 5 mm wide markers		
	plain	**248-501**	5

Item-Specific Accessories

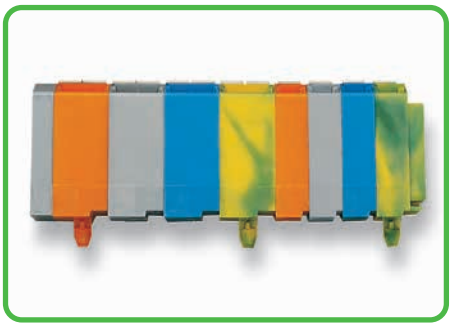
Alternate comb-style jumper bar, ❺	insulated, $I_N = I_N$ terminal block		
	2-way	**280-492**	200 (8x25)
Test plug module, ❺	can be snapped together, 10 mm wide		
	gray	**249-139**	100 (4x25)
Miniature WSB Quick marking system, ❺	10 strips with 10 markers per card, 5 mm wide markers		
		264-900	5

264 Series Accessories

Appropriate marking systems: Miniature WSB/T-marker tag (see Section 13)

End plate, for terminal blocks with snap-in mounting foot			
	gray	**264-371**	25
	orange	**264-374**	25
	light gray	**264-373**	25
Comb-style jumper bar, insulated, I_N 16 A, gray, reduces maximum conductor size to 1.5 mm²/AWG 16			
	2-way	**264-402**	200 (8x25)
Operating tool, of insulating material			
	2-way	**280-432**	1
Test plug, with 500 mm cable, 2 mm Ø			
	red	**210-136**	50
Test plug, with 500 mm cable, 2.3 mm Ø			
	yellow	**210-137**	50
Aluminum carrier rail, 1000 mm long, 18 mm wide, 7 mm high			
		210-154	1

End stop, for WSB Quick markers, for 210-154 aluminum rail, 6 mm wide			
		209-122	25
T marker tag, 30 markers each tag, up to 6 characters per marker			
	plain	**209-290**	50
Operating tool with partially insulated shaft,			
	type 2, (3.5 x 0.5) mm blade		
		210-720	1



Terminal strip with snap-in mounting feet, consisting of:
- End plate
- 4-conductor term. block with snap-in mounting foot[1)]
- Center terminal blocks
- 2-conductor term. block with snap-in mounting foot[1)]

[1)] at every 4th or 5th terminal block on the strip

Certification organizations can be found in the overview on pages 622 and 623.

Terminal Strips with Fixing Flanges or Snap-in Mounting Feet 2.5 mm² 264 Series

0.08 - 2.5 mm²	AWG 28 - 12 *	0.08 - 2.5 mm²	AWG 28 - 12 *	0.5 - 2.5 mm²	AWG 20 - 12 *
800 V/8 kV/3 ❶	300 V, 20 A	800 V/8 kV/3 ❶	300 V, 20 A	690 V ❷	300 V, 20 A
I_N 24 A	600 V, 20 A	I_N 24 A	600 V, 20 A	I_N 23 A	600 V, 20 A
Pole width 6 mm / 0.236 in		Pole width 10 mm / 0.394 in		Pole width 6 mm / 0.236 in	
8 - 9 mm / 0.33 in ❸		8 - 9 mm / 0.33 in ❸		8 - 9 mm / 0.33 in ❸	





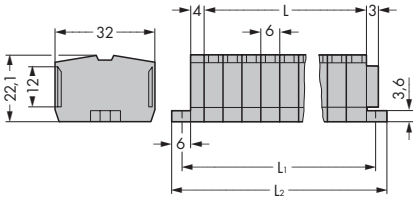


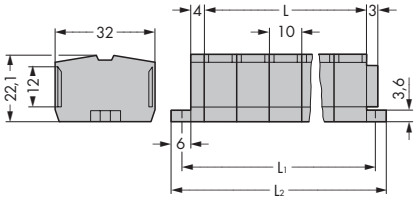
Pole No.	Item No.	Pack. Unit
2-conductor terminal strip with fixing flanges, for screw or similar mounting types, fixing hole 3.2 mm Ø, gray		
2	**264-102**	100
3	**264-103**	100
4	**264-104**	100
5	**264-105**	100
6	**264-106**	100
7	**264-107**	100
8	**264-108**	100
9	**264-109**	50
10	**264-110**	50
11	**264-111**	50
12 ❹	**264-112**	25
2-conductor terminal strip with snap-in mounting feet, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, gray		
2	**264-152**	100
3	**264-153**	100
4	**264-154**	100
5	**264-155**	100
6	**264-156**	50
7	**264-157**	50
8	**264-158**	50
9	**264-159**	50
10	**264-160**	25
11	**264-161**	25
12 ❹	**264-162**	25

Pole No.	Item No.	Pack. Unit
4-conductor terminal strip with fixing flanges, for screw or similar mounting types, fixing hole 3.2 mm Ø, gray		
2	**264-202**	100
3	**264-203**	100
4	**264-204**	100
5	**264-205**	100
6	**264-206**	100
7	**264-207**	100
8	**264-208**	100
9	**264-209**	50
10	**264-210**	50
11	**264-211**	25
12 ❹	**264-212**	25
4-conductor terminal strip with snap-in mounting feet, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, gray		
2	**264-252**	100
3	**264-253**	100
4	**264-254**	100
5	**264-255**	100
6	**264-256**	50
7	**264-257**	50
8	**264-258**	50
9	**264-259**	50
10	**264-260**	25
11	**264-261**	25
12 ❹	**264-262**	25

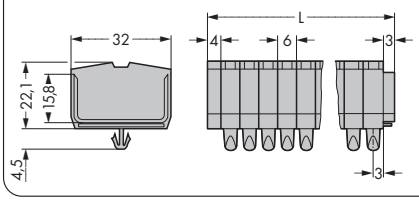
Pole No.	Item No.	Pack. Unit
2-conductor Ex e II terminal strip with fixing flanges, for screw or similar mounting types, fixing hole 3.2 mm Ø, light gray		
2	**264-132**	100
3	**264-133**	100
4	**264-134**	100
5	**264-135**	100
6	**264-136**	100
7	**264-137**	100
8	**264-138**	100
9	**264-139**	50
10	**264-140**	50
11	**264-141**	25
12 ❹	**264-142**	25
2-conductor Ex e II terminal strip with snap-in mounting feet, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, light gray		
2	**264-182**	100
3	**264-183**	100
4	**264-184**	100
5	**264-185**	100
6	**264-186**	50
7	**264-187**	50
8	**264-188**	50
9	**264-189**	50
10	**264-190**	25
11	**264-191**	25
12 ❹	**264-192**	25

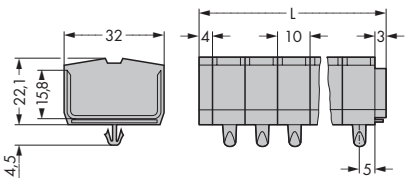
Modular terminal blocks and terminal strips with fixing flanges L = pole no. x pole width L_1 = L + 9.6 mm L_2 = L + 16 mm



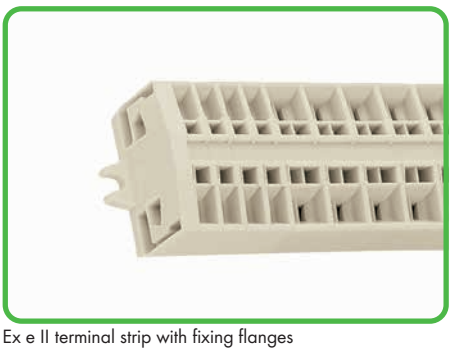


Modular terminal blocks and terminal strips with snap-in mounting feet L = (pole no. x pole width) + 7 mm





Dimensions in mm



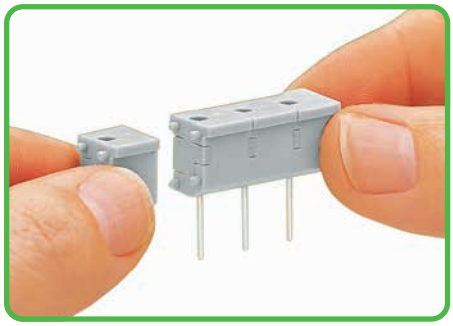
Ex e II terminal strip with fixing flanges

Certification organizations can be found in the overview on pages 622 and 623.

0.5 - 2.5 mm²	AWG 20 - 12 *
690 V ❷	300 V, 20 A
I_N 23 A	600 V, 20 A

Pole width 10 mm / 0.394 in
8 - 9 mm / 0.33 in ❸





Snapping together individual modules to assemble a multi-pole test plug module.

* AWG 12: THHN, THWN

❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Suitable for Ex e II applications
(also see Section 14)

❸ Strip length, see packaging or instructions.

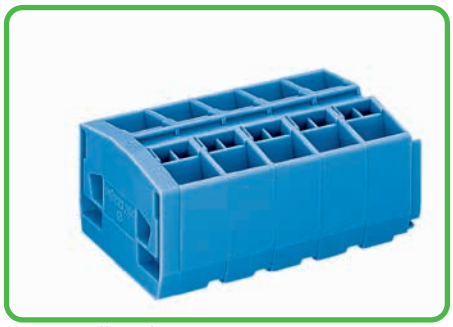
❹ For longer strips and/or assemblies of different colors, please contact factory

Pole No.	Item No.	Pack. Unit
4-conductor Ex e II terminal strip with fixing flanges, for screw or similar mounting types, fixing hole 3.2 mm Ø, light gray		
2	**264-232**	100
3	**264-233**	100
4	**264-234**	100
5	**264-235**	100
6	**264-236**	100
7	**264-237**	100
8	**264-238**	100
9	**264-239**	50
10	**264-240**	50
11	**264-241**	100
12 ❹	**264-242**	25
4-conductor Ex e II terminal strip with snap-in mounting feet, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, light gray		
2	**264-282**	100
3	**264-283**	100
4	**264-284**	100
5	**264-285**	100
6	**264-286**	100
7	**264-287**	50
8	**264-288**	50
9	**264-289**	50
10	**264-290**	25
11	**264-291**	25
12 ❹	**264-292**	25



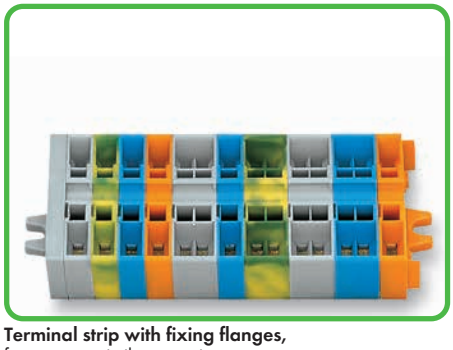
Item no. suffixes for gray terminal strips with fixing flanges:
264-102 to 264-112
264-202 to 264-212

blue . . . **/000-006**
Terminal blocks with blue insulation are suitable for Ex i applications.

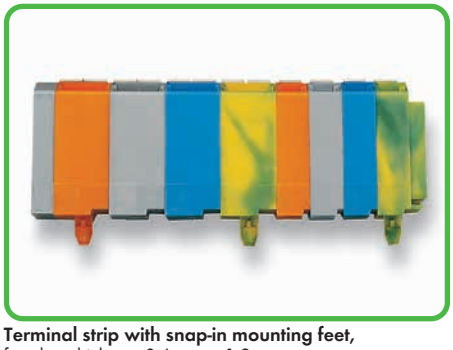


Item no. suffixes for gray terminal strips with snap-in mounting feet:
264-152 to 264-162
264-252 to 264-262

blue . . . **/000-006**
Terminal blocks with blue insulation are suitable for Ex i applications.



Terminal strip with fixing flanges,
for screw or similar mounting types,
fixing hole 3.2 mm Ø.



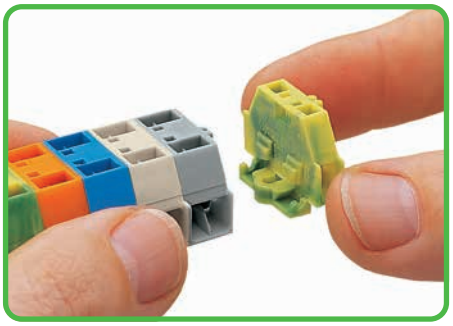
Terminal strip with snap-in mounting feet,
for plate thickness 0.6 mm – 1.2 mm,
fixing hole 3.5 mm Ø.



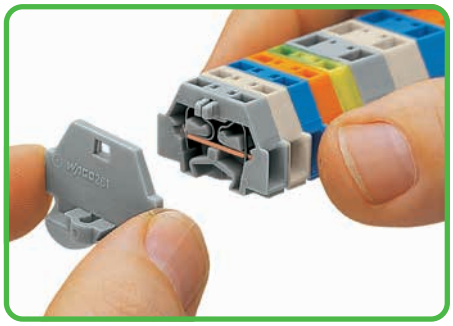
Ex e II terminal strip with snap-in mounting feet

Modular Terminal Blocks and Terminal Strips
260 to 262 Series

Assembly

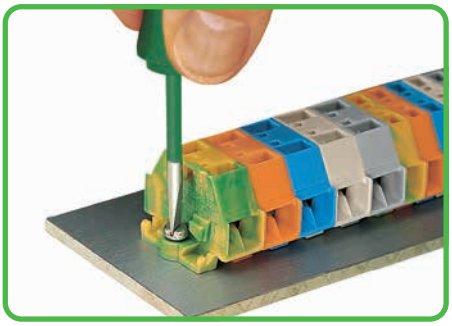


Assembling modular terminal blocks into terminal strips.



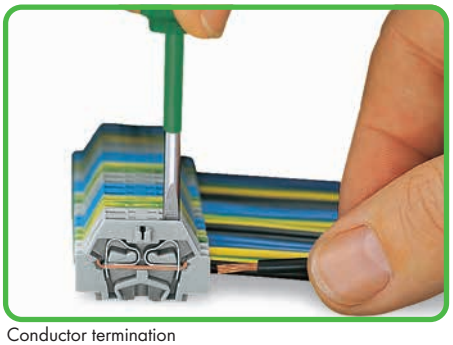
Mounting an end plate.

Fixing

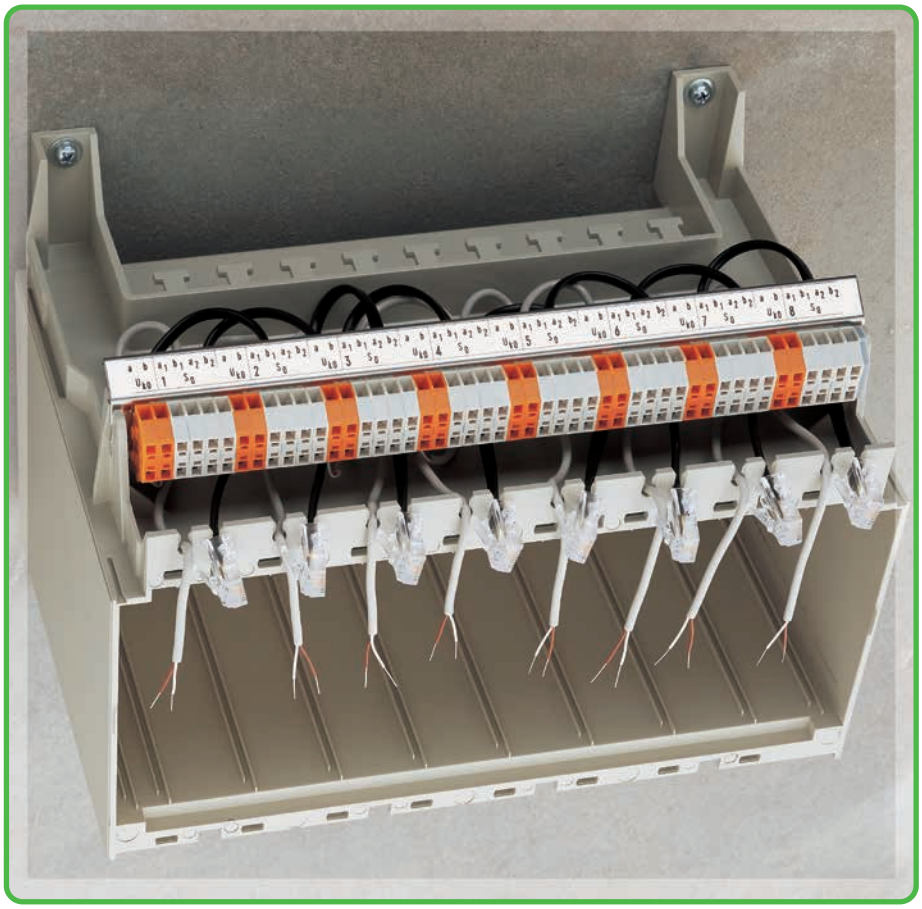


Terminal strip with fixing flanges, screw mount.

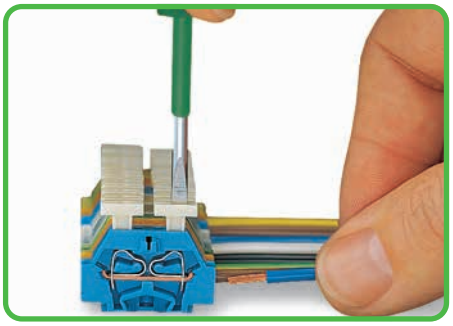
CAGE CLAMP® connection



Conductor termination

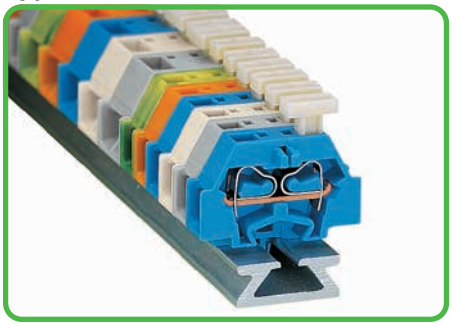


CAGE CLAMP® connection

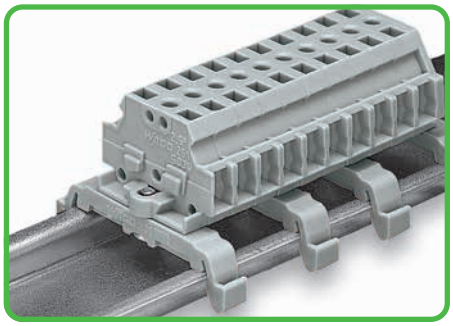


Conductor termination via push-button.

Types

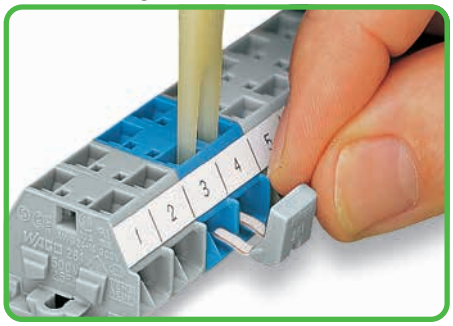


Terminal strip with push-buttons on one side.



Terminal strip with marker slot for miniature WSB Quick marking system.

Commoning



Commoning with comb-style jumper bar.



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded



fine-stranded, also with tinned single strands

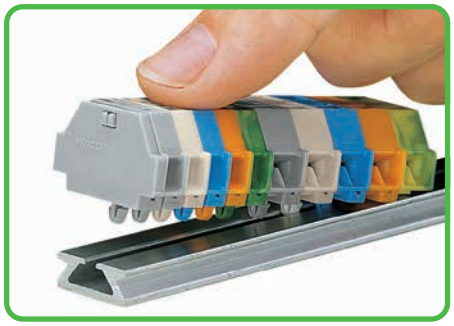
* For aluminum conductors, see notes in Section 14.

– Description and Handling –

Fixing



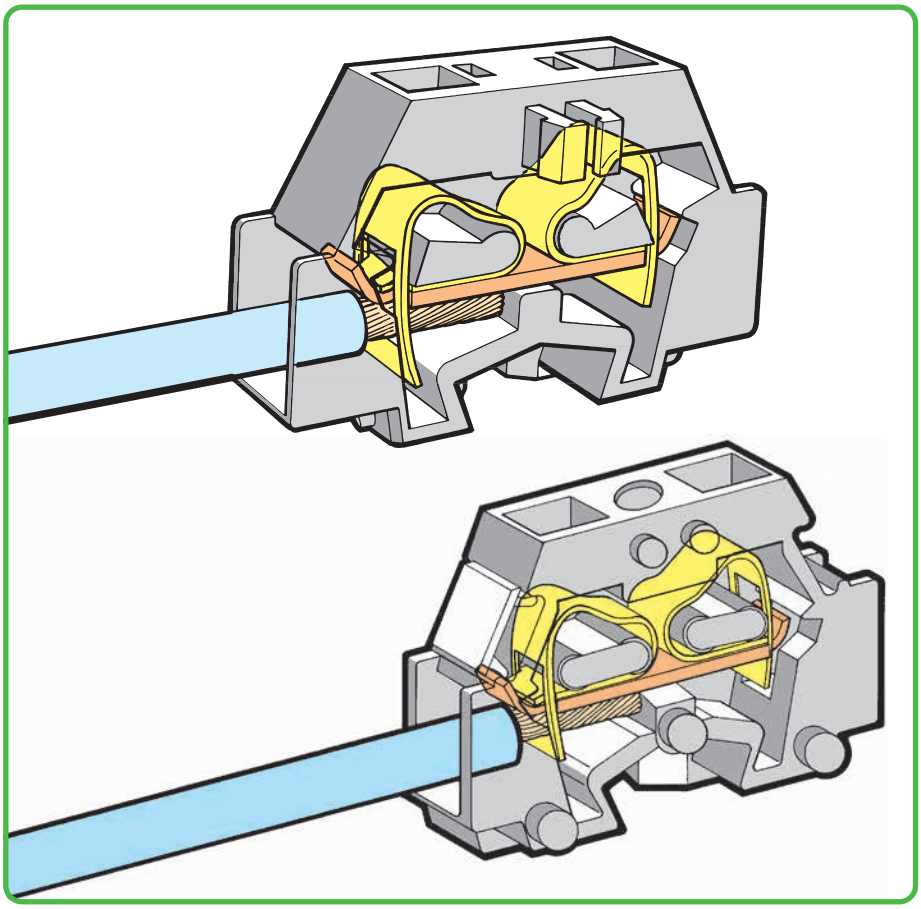
Terminal strip with snap-in mounting feet, mounting in holes.



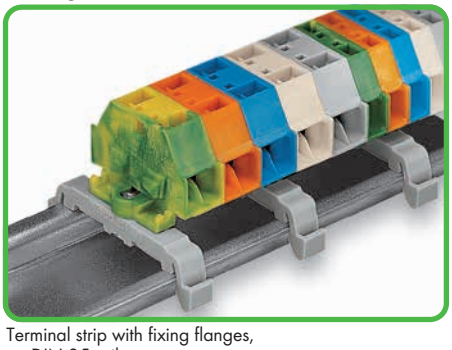
Terminal strip with snap-in mounting feet, mounting onto special aluminum rail.



Terminal strip with fixing flanges, screw mounting of 209-123 mounting adapter (The distance between mounting adapters should be 35 – 40 mm).

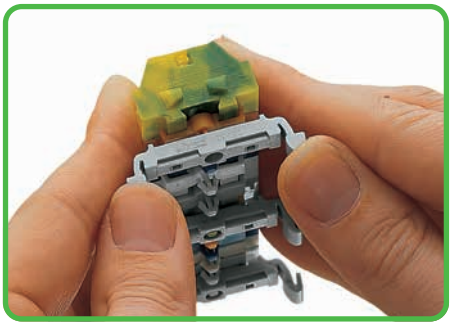


Fixing



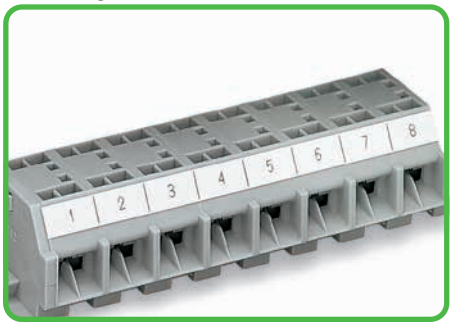
Terminal strip with fixing flanges, on DIN 35 rail.

Fixing

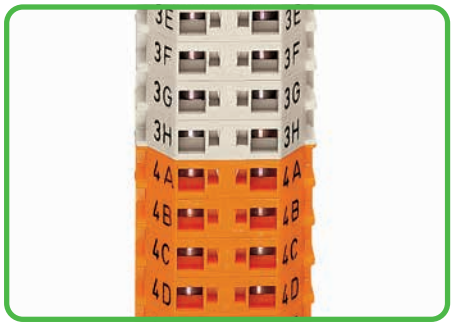


Terminal strip with snap-in mounting feet, connecting to 209-123 mounting adapter (The distance between mounting adapters should be 35 – 40 mm).

Marking

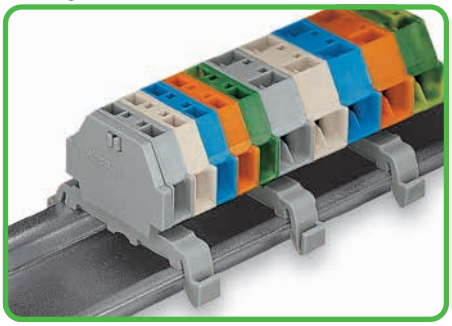


Marking with self-adhesive marker strips.



Marking by direct printing (on request).

Fixing



Terminal strip with snap-in mounting feet, on DIN 35 rail.



fine-stranded, tip-bonded



fine-stranded, with ferrule ❶ (gastight crimped)



fine-stranded, with pin terminal (gastight crimped)

❶ When using ferruled conductors, it is necessary to use a terminal block one size larger than the nominal cross section of the wire.

Modular Terminal Blocks with Fixing Flange or Snap-In Mounting Foot 1.5 mm²
260 Series

CAGE CLAMP®

0.08 - 1.5 mm²	AWG 28 - 16
400 V/6 kV/3 ❶	300 V, 10 A
I_N 18 A	300 V, 15 A
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷	

0.08 - 1.5 mm²	AWG 28 - 16
400 V/6 kV/3 ❶	300 V, 10 A
I_N 18 A	300 V, 15 A
Terminal block width 8 mm / 0.315 in	
8 - 9 mm / 0.33 in ❷	





❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ See application notes for:
Test plug module, page 416

Color	Item No.	Pack. Unit
2-conductor terminal block with fixing flange, for screw or similar mounting types, fixing hole 3.2 mm Ø, with 209-123 mounting adapter also for DIN 35 rail		
gray	**260-301**	300 (6x50)
light gray	**260-303**	300 (6x50)
blue	**260-304**	300 (6x50)
orange	**260-306**	300 (6x50)
green-yellow	**260-307**	300 (6x50)
2-conductor terminal block with snap-in mounting foot, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail		
gray	**260-311**	300 (6x50)
light gray	**260-313**	300 (6x50)
blue	**260-314**	300 (6x50)
orange	**260-316**	300 (6x50)
green-yellow	**260-317**	300 (6x50)
2-conductor end terminal block, without fixing foot, for terminal strips with snap-in mounting feet		
gray	**260-321**	300 (6x50)
light gray	**260-323**	300 (6x50)
blue	**260-324**	300 (6x50)
orange	**260-326**	300 (6x50)
green-yellow	**260-327**	300 (6x50)

Item-Specific Accessories

Test plug module, ❸

can be snapped together, 5 mm wide
gray **249-135** 100 (4x25)

Test plug module with locking levers, ❸

can be snapped together, 5 mm wide
gray **260-404** 100 (4x25)

260 Series Accessories

For marking accessories, see Section 13

End plate with fixing flange

gray **260-361** 300 (6x50)

End plate with snap-in mounting foot

gray **260-371** 300 (6x50)

Color	Item No.	Pack. Unit
4-conductor terminal block with fixing flange, for screw or similar mounting types, fixing hole 3.2 mm Ø, with 209-123 mounting adapter also for DIN 35 rail		
gray	**260-331**	300 (6x50)
light gray	**260-333**	300 (6x50)
blue	**260-334**	300 (6x50)
orange	**260-336**	300 (6x50)
green-yellow	**260-337**	300 (6x50)
4-conductor terminal block with snap-in mounting foot, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail		
gray	**260-341**	300 (6x50)
light gray	**260-343**	300 (6x50)
blue	**260-344**	300 (6x50)
orange	**260-346**	300 (6x50)
green-yellow	**260-347**	300 (6x50)
4-conductor end terminal block, without fixing foot, for terminal strips with snap-in mounting feet		
gray	**260-351**	300 (6x50)
light gray	**260-353**	300 (6x50)
blue	**260-354**	300 (6x50)
orange	**260-356**	300 (6x50)
green-yellow	**260-357**	300 (6x50)

Item-Specific Accessories

Test plug module, ❸

can be snapped together, 8 mm wide
gray **249-138** 100 (4x25)

Test plug module with locking levers, ❸

can be snapped together, 8 mm wide
gray **260-405** 100 (4x25)

Comb-style jumper bar, insulated, I_N 10 A, gray,

reduces maximum conductor size to 1 mm²/AWG 16
2-way **260-402** 25

Operating tool, of insulating material,

for inserting comb-style jumper bars
2-way **209-132** 1

260 Series Accessories

Marking accessories, see Section 13

Aluminum carrier rail,

1000 mm long, 18 mm wide, 7 mm high
210-154 1

End stop, for WSB Quick markers,

for 210-154 aluminum rail, 6 mm wide
209-122 25

Mounting foot, for DIN 35 rail, can be snapped on terminal blocks with snap-in mounting foot, 6.4 mm wide

gray **209-120** 25

Mounting foot with screw, for DIN 35 rail, can be screwed on terminal blocks with fixing flange, 6.4 mm wide

gray **209-123** 25

Mounting adapter, for DIN 35 rail, can be used as end plate, 6.5 mm wide

gray **209-137** 25

Test plug,

with 500 mm cable, 2 mm Ø
red **210-136** 50

Test plug,

with 500 mm cable, 2.3 mm Ø
yellow **210-137** 50

Operating tool with partially insulated shaft,

type 2, (3.5 x 0.5) mm blade
210-720 1

Certification organizations can be found in the overview on pages 622 and 623.

Terminal Strips with Fixing Flanges or Snap-in Mounting Feet 1.5 mm² 260 Series

0.08 - 1.5 mm²	AWG 28 - 16
400 V/6 kV/3 ❶	300 V, 10 A
I_N 18 A	300 V, 15 A
Pole width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷	

0.08 - 1.5 mm²	AWG 28 - 16
400 V/6 kV/3 ❶	300 V, 10 A
I_N 18 A	300 V, 15 A
Pole width 8 mm / 0.315 in	
8 - 9 mm / 0.33 in ❷	





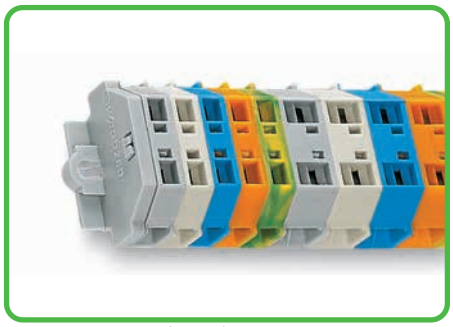
❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

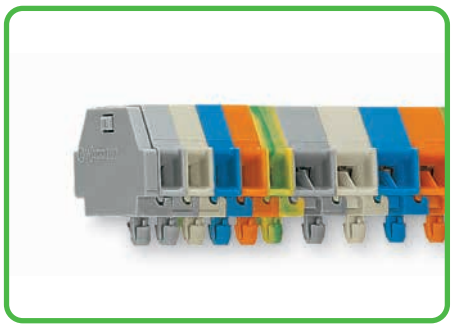
❸ For longer strips and/or assemblies of different colors, please contact factory

Pole No.	Item No.	Pack. Unit
2-conductor terminal strip with fixing flanges, gray		
2	**260-102**	100
3	**260-103**	100
4	**260-104**	100
5	**260-105**	100
6	**260-106**	50
7	**260-107**	50
8	**260-108**	50
9	**260-109**	50
10	**260-110**	25
11	**260-111**	25
12 ❸	**260-112**	25
2-conductor terminal strip with snap-in mounting feet, gray		
2	**260-152**	100
3	**260-153**	100
4	**260-154**	100
5	**260-155**	100
6	**260-156**	50
7	**260-157**	50
8	**260-158**	50
9	**260-159**	50
10	**260-160**	25
11	**260-161**	25
12 ❸	**260-162**	25

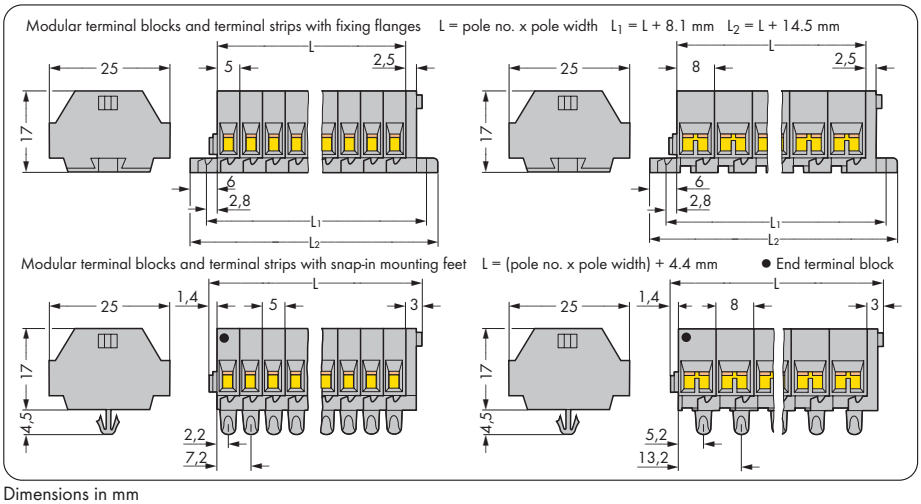
Pole No.	Item No.	Pack. Unit
4-conductor terminal strip with fixing flanges, gray		
2	**260-202**	100
3	**260-203**	100
4	**260-204**	100
5	**260-205**	100
6	**260-206**	50
7	**260-207**	50
8	**260-208**	50
9	**260-209**	50
10	**260-210**	25
11	**260-211**	25
12 ❸	**260-212**	25
4-conductor terminal strip with snap-in mounting feet, gray		
2	**260-252**	100
3	**260-253**	100
4	**260-254**	100
5	**260-255**	100
6	**260-256**	50
7	**260-257**	50
8	**260-258**	50
9	**260-259**	50
10	**260-260**	25
11	**260-261**	25
12 ❸	**260-262**	25



Terminal strip with fixing flanges,
for screw or similar mounting types,
fixing hole 3.2 mm Ø (with 209-123 mounting adapter also for DIN 35 rail)



Terminal strip with snap-in mounting feet,
for plate thickness 0.6 mm – 1.2 mm,
fixing hole 3.5 mm Ø (fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail)



Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

Modular Terminal Blocks with Fixing Flange or Snap-In Mounting Foot 2.5 mm²
261 Series

CAGE CLAMP®

0.08 - 2.5 mm²	AWG 28 - 14
500 V/6 kV/3 ❶	300 V, 15 A
I_N 24 A	300 V, 20 A

Terminal block width 6 mm / 0.236 in
8 - 9 mm / 0.33 in ❷

0.08 - 2.5 mm²	AWG 28 - 14
500 V/6 kV/3 ❶	300 V, 15 A
I_N 24 A	300 V, 20 A

Terminal block width 10 mm / 0.394 in
8 - 9 mm / 0.33 in ❷





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ See application notes for:
Test plug module, page 416

Color	Item No.	Pack. Unit
2-conductor terminal block with fixing flange, for screw or similar mounting types, fixing hole 3.2 mm Ø, with 209-123 mounting adapter also for DIN 35 rail		
gray	**261-301**	200 (4x50)
light gray	**261-303**	200 (4x50)
blue	**261-304** ❸	200 (4x50)
orange	**261-306**	200 (4x50)
green-yellow	**261-307**	200 (4x50)
2-conductor terminal block with snap-in mounting foot, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail		
gray	**261-311**	200 (4x50)
light gray	**261-313**	200 (4x50)
blue	**261-314** ❸	200 (4x50)
orange	**261-316**	200 (4x50)
green-yellow	**261-317**	200 (4x50)
2-conductor end terminal block, without fixing foot, for terminal strips with snap-in mounting feet		
gray	**261-321**	200 (4x50)
light gray	**261-323**	200 (4x50)
blue	**261-324** ❸	200 (4x50)
orange	**261-326**	200 (4x50)
green-yellow	**261-327**	200 (4x50)

Item-Specific Accessories

Test plug module, ❹
can be snapped together,
6 mm wide
gray **249-136** 100 (4x25)

Test plug module with locking levers, ❹
can be snapped together,
6 mm wide
gray **261-404** 100 (4x25)

261 Series Accessories

For marking accessories, see Section 13

End plate with fixing flange
gray **261-361** 300 (6x50)

End plate with snap-in mounting foot
gray **261-371** 300 (6x50)

Color	Item No.	Pack. Unit
4-conductor terminal block with fixing flange, for screw or similar mounting types, fixing hole 3.2 mm Ø, with 209-123 mounting adapter also for DIN 35 rail		
gray	**261-331**	200 (4x50)
light gray	**261-333**	200 (4x50)
blue	**261-334** ❸	200 (4x50)
orange	**261-336**	200 (4x50)
green-yellow	**261-337**	200 (4x50)
4-conductor terminal block with snap-in mounting foot, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail		
gray	**261-341**	200 (4x50)
light gray	**261-343**	200 (4x50)
blue	**261-344** ❸	200 (4x50)
orange	**261-346**	200 (4x50)
green-yellow	**261-347**	200 (4x50)
4-conductor end terminal block, without fixing foot, for terminal strips with snap-in mounting feet		
gray	**261-351**	200 (4x50)
light gray	**261-353**	200 (4x50)
blue	**261-354** ❸	200 (4x50)
orange	**261-356**	200 (4x50)
green-yellow	**261-357**	200 (4x50)

Item-Specific Accessories

Test plug module, ❹
can be snapped together,
10 mm wide
gray **249-139** 100 (4x25)

Test plug module with locking levers, ❹
can be snapped together,
10 mm wide
gray **261-405** 100 (4x25)

Comb-style jumper bar, insulated, I_N 16 A, gray,
reduces maximum conductor size to
1.5 mm²/AWG 16
2-way **261-402** 25

Operating tool, of insulating material,
for inserting comb-style jumper bars
2-way **209-132** 1

261 Series Accessories

Marking accessories, see Section 13

Aluminum carrier rail,
1000 mm long, 18 mm wide,
7 mm high
210-154 1

End stop, for WSB Quick markers,
for 210-154 aluminum rail,
6 mm wide
209-122 25

Mounting foot, for DIN 35 rail, can be snapped on terminal blocks with snap-in mounting foot,
6.4 mm wide
gray **209-120** 25

Mounting foot with screw, for DIN 35 rail, can be screwed on terminal blocks with fixing flange, 6.4 mm wide
gray **209-123** 25

Mounting adapter, for DIN 35 rail,
can be used as end plate,
6.5 mm wide
gray **209-137** 25

Test plug,
with 500 mm cable,
2 mm Ø
red **210-136** 50

Test plug,
with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

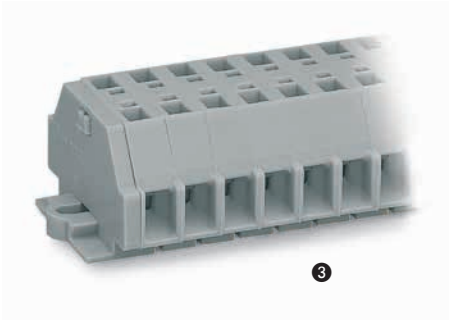
Operating tool with partially insulated shaft,
type 2, (3.5 x 0.5) mm blade
210-720 1

Certification organizations can be found in the overview on pages 622 and 623.

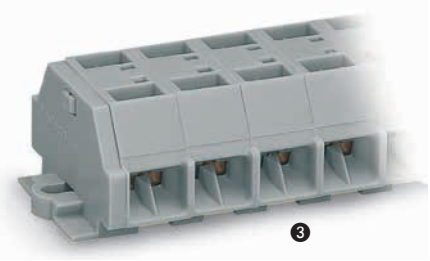
Terminal Strips with Fixing Flanges or Snap-in Mounting Feet 2.5 mm²
261 Series

0.08 - 2.5 mm²	AWG 28 - 14
500 V/6 kV/3 ❶	300 V, 15 A
I_N 24 A	300 V, 20 A
Pole width 6 mm / 0.236 in	
8 - 9 mm / 0.33 in ❷	

0.08 - 2.5 mm²	AWG 28 - 14
500 V/6 kV/3 ❶	300 V, 15 A
I_N 24 A	300 V, 20 A
Pole width 10 mm / 0.394 in	
8 - 9 mm / 0.33 in ❷	



❸



❸

❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Terminal blocks with blue insulation are suitable for Ex i applications
Item no. suffix **. . . /000-006**

❹ For longer strips and/or assemblies of different colors, please contact factory

Pole No.	Item No.	Pack. Unit
2-conductor terminal strip with fixing flanges, gray		
2	**261-102**	100
3	**261-103**	100
4	**261-104**	100
5	**261-105**	200
6	**261-106**	50
7	**261-107**	50
8	**261-108**	50
9	**261-109**	50
10	**261-110**	25
11	**261-111**	25
12 ❹	**261-112**	25
2-conductor terminal strip with snap-in mounting feet, gray		
2	**261-152**	100
3	**261-153**	100
4	**261-154**	100
5	**261-155**	100
6	**261-156**	50
7	**261-157**	50
8	**261-158**	50
9	**261-159**	50
10	**261-160**	25
11	**261-161**	25
12 ❹	**261-162**	25

Pole No.	Item No.	Pack. Unit
4-conductor terminal strip with fixing flanges, gray		
2	**261-202**	100
3	**261-203**	100
4	**261-204**	100
5	**261-205**	100
6	**261-206**	50
7	**261-207**	50
8	**261-208**	50
9	**261-209**	50
10	**261-210**	25
11	**261-211**	25
12 ❹	**261-212**	25
4-conductor terminal strip with snap-in mounting feet, gray		
2	**261-252**	100
3	**261-253**	100
4	**261-254**	100
5	**261-255**	100
6	**261-256**	50
7	**261-257**	50
8	**261-258**	50
9	**261-259**	50
10	**261-260**	25
11	**261-261**	25
12 ❹	**261-262**	25

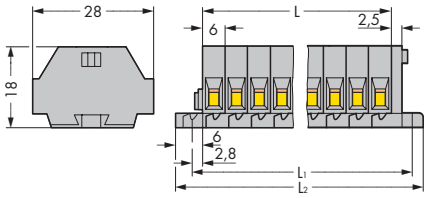


Terminal strip with fixing flanges,
for screw or similar mounting types,
fixing hole 3.2 mm Ø (with 209-123 mounting adapter also for DIN 35 rail)

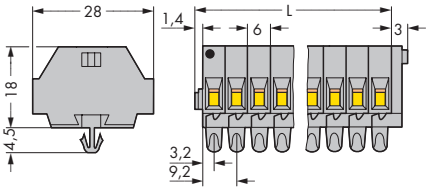


Terminal strip with snap-in mounting feet,
for plate thickness 0.6 mm – 1.2 mm,
fixing hole 3.5 mm Ø (fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail)

Modular terminal blocks and terminal strips with fixing flanges L = pole no. x pole width L_1 = L + 8.1 mm L_2 = L + 14.5 mm



Modular terminal blocks and terminal strips with snap-in mounting feet L = (pole no. x pole width) + 4.4 mm ● End terminal block



Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

Modular Terminal Blocks with Push-Buttons on One Side, Fixing Flange or Snap-In Mounting Foot 2.5 mm²
261 Series

CAGE CLAMP®

0.08 - 2.5 mm²	AWG 28 - 14
500 V/6 kV/3 ❶	300 V, 15 A
I_N 24 A	300 V, 20 A

Terminal block width 6 mm / 0.236 in
8 - 9 mm / 0.33 in ❷

0.08 - 2.5 mm²	AWG 28 - 14
500 V/6 kV/3 ❶	300 V, 15 A
I_N 24 A	300 V, 20 A

Terminal block width 10 mm / 0.394 in
8 - 9 mm / 0.33 in ❷





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

Color	Item No.	Pack. Unit
2-conductor terminal block with push-button on one side and with fixing flange, for screw or similar mounting types, fixing hole 3.2 mm Ø, with 209-123 mounting adapter also for DIN 35 rail		
gray	**261-301/331-000**	200 (4x50)
light gray	**261-303/331-000**	200 (4x50)
blue	**261-304/331-000** ❸	200 (4x50)
orange	**261-306/331-000**	200 (4x50)
green-yellow	**261-307/331-000**	200 (4x50)
2-conductor terminal block with push-button on one side and with snap-in mounting foot, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail		
gray	**261-311/331-000**	200 (4x50)
light gray	**261-313/331-000**	200 (4x50)
blue	**261-314/331-000** ❸	200 (4x50)
orange	**261-316/331-000**	200 (4x50)
green-yellow	**261-317/331-000**	200 (4x50)
2-conductor end terminal block with push-button on one side, without fixing foot, for terminal strips with snap-in mounting feet		
gray	**261-321/331-000**	200 (4x50)
light gray	**261-323/331-000**	200 (4x50)
blue	**261-324/331-000** ❸	200 (4x50)
orange	**261-326/331-000**	200 (4x50)
green-yellow	**261-327/331-000**	200 (4x50)

Color	Item No.	Pack. Unit
4-conductor terminal block with push-buttons on one side and with fixing flange, for screw or similar mounting types, fixing hole 3.2 mm Ø, with 209-123 mounting adapter also for DIN 35 rail		
gray	**261-331/332-000**	200 (4x50)
light gray	**261-333/332-000**	200 (4x50)
blue	**261-334/332-000** ❸	200 (4x50)
orange	**261-336/332-000**	200 (4x50)
green-yellow	**261-337/332-000**	200 (4x50)
4-conductor terminal block with push-buttons on one side and with snap-in mounting foot, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail		
gray	**261-341/332-000**	200 (4x50)
light gray	**261-343/332-000**	200 (4x50)
blue	**261-344/332-000** ❸	200 (4x50)
orange	**261-346/332-000**	200 (4x50)
green-yellow	**261-347/332-000**	200 (4x50)
4-conductor end terminal block with push-buttons on one side, without fixing foot, for terminal strips with snap-in mounting feet		
gray	**261-351/332-000**	200 (4x50)
light gray	**261-353/332-000**	200 (4x50)
blue	**261-354/332-000** ❸	200 (4x50)
orange	**261-356/332-000**	200 (4x50)
green-yellow	**261-357/332-000**	200 (4x50)

261 Series Accessories

For marking accessories, see Section 13

End plate with fixing flange

gray **261-361** 300 (6x50)

End plate with snap-in mounting foot

gray **261-371** 300 (6x50)

Comb-style jumper bar, insulated, I_N 16 A, gray, reduces maximum conductor size to 1.5 mm²/AWG 16

2-way **261-402** 25

Operating tool, of insulating material, for inserting comb-style jumper bars

2-way **209-132** 1

Aluminum carrier rail,

1000 mm long, 18 mm wide, 7 mm high
210-154 1

End stop, for WSB Quick markers, for 210-154 aluminum rail, 6 mm wide

209-122 25

Mounting foot, for DIN 35 rail, can be snapped on terminal blocks with snap-in mounting foot, 6.4 mm wide

gray **209-120** 25

Mounting foot with screw, for DIN 35 rail, can be screwed on terminal blocks with fixing flange, 6.4 mm wide

gray **209-123** 25

261 Series Accessories

Marking accessories, see Section 13

Mounting adapter, for DIN 35 rail, can be used as end plate, 6.5 mm wide

gray **209-137** 25

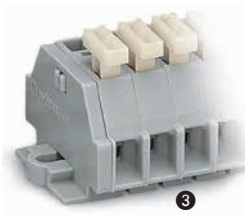
Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade

210-720 1

Certification organizations can be found in the overview on pages 622 and 623.

Terminal Strips with Push-Buttons on One Side, Fixing Flanges or Snap-in Mounting Feet 2.5 mm² 261 Series

0.08 - 2.5 mm² | AWG 28 - 14 500 V/6 kV/3 ❶ I_N 24 A Pole width 6 mm / 0.236 in 8 - 9 mm / 0.33 in ❷	0.08 - 2.5 mm² | AWG 28 - 14 500 V/6 kV/3 ❶ I_N 24 A Pole width 10 mm / 0.394 in 8 - 9 mm / 0.33 in ❷


❸


❸

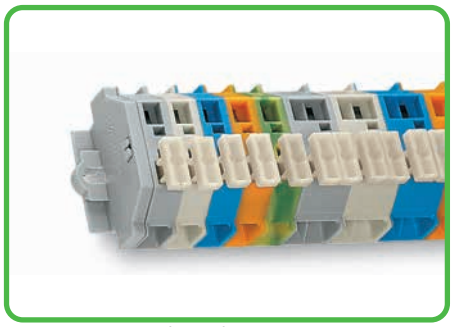
❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

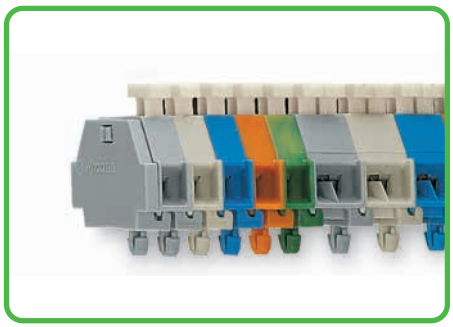
❸ Terminal blocks with blue insulation are suitable for Ex i applications
Item no. suffix **. . . /000-006**

❹ For longer strips and/or assemblies of different colors, please contact factory

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
2-conductor terminal strip with push-buttons on one side and with fixing flanges, gray			**4-conductor terminal strip with push-buttons on one side and with fixing flanges,** gray		
2	**261-102/331-000**	100	2	**261-202/332-000**	100
3	**261-103/331-000**	100	3	**261-203/332-000**	100
4	**261-104/331-000**	100	4	**261-204/332-000**	100
5	**261-105/331-000**	200	5	**261-205/332-000**	100
6	**261-106/331-000**	50	6	**261-206/332-000**	50
7	**261-107/331-000**	50	7	**261-207/332-000**	50
8	**261-108/331-000**	50	8	**261-208/332-000**	50
9	**261-109/331-000**	50	9	**261-209/332-000**	50
10	**261-110/331-000**	25	10	**261-210/332-000**	50
11	**261-111/331-000**	25	11	**261-211/332-000**	25
12 ❹	**261-112/331-000**	25	12 ❹	**261-212/332-000**	25
2-conductor terminal strip with push-buttons on one side and with snap-in mounting feet, gray			**4-conductor terminal strip with push-buttons on one side and with snap-in mounting feet,** gray		
2	**261-152/331-000**	100	2	**261-252/332-000**	100
3	**261-153/331-000**	100	3	**261-253/332-000**	100
4	**261-154/331-000**	100	4	**261-254/332-000**	100
5	**261-155/331-000**	100	5	**261-255/332-000**	100
6	**261-156/331-000**	50	6	**261-256/332-000**	50
7	**261-157/331-000**	50	7	**261-257/332-000**	50
8	**261-158/331-000**	50	8	**261-258/332-000**	50
9	**261-159/331-000**	50	9	**261-259/332-000**	50
10	**261-160/331-000**	25	10	**261-260/332-000**	25
11	**261-161/331-000**	25	11	**261-261/332-000**	100
12 ❹	**261-162/331-000**	25	12 ❹	**261-262/332-000**	25

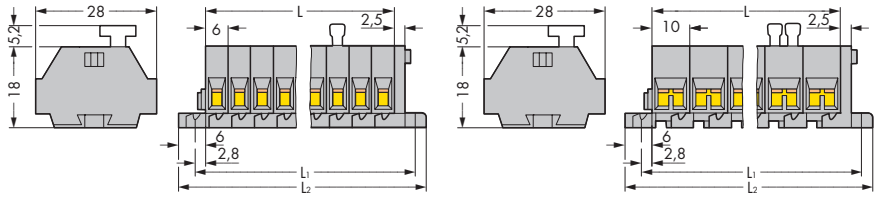


Terminal strip with fixing flanges,
for screw or similar mounting types,
fixing hole 3.2 mm Ø (with 209-123 mounting adapter also for DIN 35 rail)

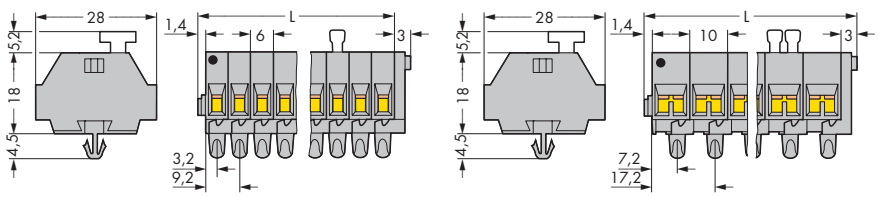


Terminal strip with snap-in mounting feet,
for plate thickness 0.6 mm – 1.2 mm,
fixing hole 3.5 mm Ø (fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail)

Modular terminal blocks and terminal strips with fixing flanges L = pole no. x pole width L_1 = L + 8.1 mm L_2 = L + 14.5 mm



Modular terminal blocks and terminal strips with snap-in mounting feet L = (pole no. x pole width) + 4.4 mm ● End terminal block



Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

Modular Terminal Blocks with Push-Buttons on Both Sides, Fixing Flange or Snap-In Mounting Foot 2.5 mm²
261 Series

CAGE CLAMP®

0.08 - 2.5 mm²	AWG 28 - 14
500 V/6 kV/3 ❶	300 V, 15 A
I_N 24 A	300 V, 20 A
Terminal block width 6 mm / 0.236 in	
8 - 9 mm / 0.33 in ❷	

0.08 - 2.5 mm²	AWG 28 - 14
500 V/6 kV/3 ❶	300 V, 15 A
I_N 24 A	300 V, 20 A
Terminal block width 10 mm / 0.394 in	
8 - 9 mm / 0.33 in ❷	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

Color	Item No.	Pack. Unit
2-conductor terminal block with push-buttons on both sides and with fixing flange, for screw or similar mounting types, fixing hole 3.2 mm Ø, with 209-123 mounting adapter also for DIN 35 rail		
gray	**261-301/341-000**	200 (4x50)
light gray	**261-303/341-000**	200 (4x50)
blue	**261-304/341-000** ❸	200 (4x50)
orange	**261-306/341-000**	200 (4x50)
green-yellow	**261-307/341-000**	200 (4x50)
2-conductor terminal block with push-buttons on both sides and with snap-in mounting foot, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail		
gray	**261-311/341-000**	200 (4x50)
light gray	**261-313/341-000**	200 (4x50)
blue	**261-314/341-000** ❸	200 (4x50)
orange	**261-316/341-000**	200 (4x50)
green-yellow	**261-317/341-000**	200 (4x50)
2-conductor end terminal block with push-buttons on both sides, without fixing foot, for terminal strips with snap-in mounting feet		
gray	**261-321/341-000**	200 (4x50)
light gray	**261-323/341-000**	200 (4x50)
blue	**261-324/341-000** ❸	200 (4x50)
orange	**261-326/341-000**	200 (4x50)
green-yellow	**261-327/341-000**	200 (4x50)

Color	Item No.	Pack. Unit
4-conductor terminal block with push-buttons on both sides and with fixing flange, for screw or similar mounting types, fixing hole 3.2 mm Ø, with 209-123 mounting adapter also for DIN 35 rail		
gray	**261-331/342-000**	200 (4x50)
light gray	**261-333/342-000**	200 (4x50)
blue	**261-334/342-000** ❸	200 (4x50)
orange	**261-336/342-000**	200 (4x50)
green-yellow	**261-337/342-000**	200 (4x50)
4-conductor terminal block with push-buttons on both sides and with snap-in mounting foot, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail		
gray	**261-341/342-000**	200 (4x50)
light gray	**261-343/342-000**	200 (4x50)
blue	**261-344/342-000** ❸	200 (4x50)
orange	**261-346/342-000**	200 (4x50)
green-yellow	**261-347/342-000**	200 (4x50)
4-conductor end terminal block with push-buttons on both sides, without fixing foot, for terminal strips with snap-in mounting feet		
gray	**261-351/342-000**	200 (4x50)
light gray	**261-353/342-000**	200 (4x50)
blue	**261-354/342-000** ❸	200 (4x50)
orange	**261-356/342-000**	200 (4x50)
green-yellow	**261-357/342-000**	200 (4x50)

261 Series Accessories

For marking accessories, see Section 13

End plate with fixing flange

gray **261-361** 300 (6x50)

End plate with snap-in mounting foot

gray **261-371** 300 (6x50)

Comb-style jumper bar, insulated, I_N 16 A, gray, reduces maximum conductor size to 1.5 mm²/AWG 16

2-way **261-402** 25

Operating tool, of insulating material, for inserting comb-style jumper bars

2-way **209-132** 1

Aluminum carrier rail,

1000 mm long, 18 mm wide, 7 mm high
210-154 1

End stop, for WSB Quick markers, for 210-154 aluminum rail, 6 mm wide

209-122 25

Mounting foot, for DIN 35 rail, can be snapped on terminal blocks with snap-in mounting foot, 6.4 mm wide

gray **209-120** 25

Mounting foot with screw, for DIN 35 rail, can be screwed on terminal blocks with fixing flange, 6.4 mm wide

gray **209-123** 25

261 Series Accessories

Marking accessories, see Section 13

Mounting adapter, for DIN 35 rail, can be used as end plate, 6.5 mm wide

gray **209-137** 25

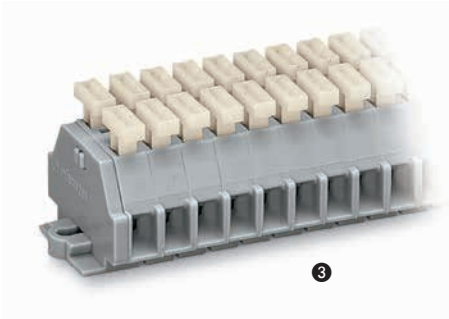
Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade

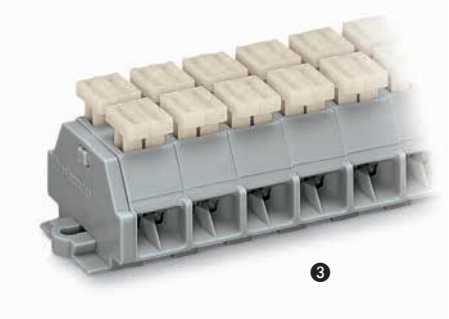
210-720 1

Certification organizations can be found in the overview on pages 622 and 623.

Terminal Strips with Push-Buttons on Both Sides, Fixing Flanges or Snap-in Mounting Feet 2.5 mm² 261 Series

0.08 - 2.5 mm² | AWG 28 - 14 500 V/6 kV/3 ❶ I_N 24 A Pole width 6 mm / 0.236 in 8 - 9 mm / 0.33 in ❷	0.08 - 2.5 mm² | AWG 28 - 14 500 V/6 kV/3 ❶ I_N 24 A Pole width 10 mm / 0.394 in 8 - 9 mm / 0.33 in ❷


❸


❸

❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

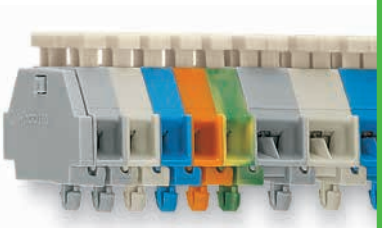
❸ Terminal blocks with blue insulation are suitable for Ex i applications
Item no. suffix **. . . /000-006**

❹ For longer strips and/or assemblies of different colors, please contact factory

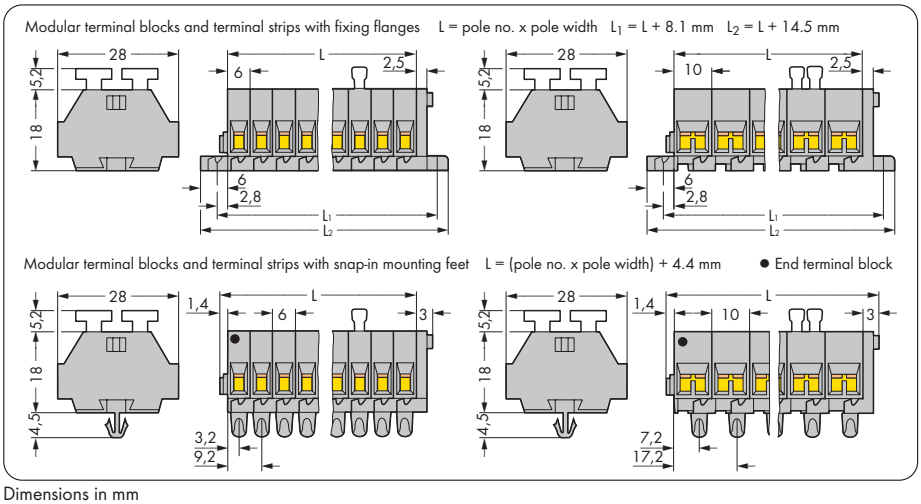
Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
2-conductor terminal strip with push-buttons on both sides and with fixing flanges, gray			**4-conductor terminal strip with push-buttons on both sides and with fixing flanges,** gray		
2	**261-102/341-000**	100	2	**261-202/342-000**	100
3	**261-103/341-000**	100	3	**261-203/342-000**	100
4	**261-104/341-000**	50	4	**261-204/342-000**	100
5	**261-105/341-000**	100	5	**261-205/342-000**	100
6	**261-106/341-000**	25	6	**261-206/342-000**	50
7	**261-107/341-000**	50	7	**261-207/342-000**	50
8	**261-108/341-000**	50	8	**261-208/342-000**	100
9	**261-109/341-000**	100	9	**261-209/342-000**	50
10	**261-110/341-000**	25	10	**261-210/342-000**	25
11	**261-111/341-000**	25	11	**261-211/342-000**	25
12 ❹	**261-112/341-000**	25	12 ❹	**261-212/342-000**	50
2-conductor terminal strip with push-buttons on both sides and with snap-in mounting feet, gray			**4-conductor terminal strip with push-buttons on both sides and with snap-in mounting feet,** gray		
2	**261-152/341-000**	100	2	**261-252/342-000**	100
3	**261-153/341-000**	100	3	**261-253/342-000**	100
4	**261-154/341-000**	50	4	**261-254/342-000**	100
5	**261-155/341-000**	100	5	**261-255/342-000**	100
6	**261-156/341-000**	100	6	**261-256/342-000**	50
7	**261-157/341-000**	50	7	**261-257/342-000**	50
8	**261-158/341-000**	50	8	**261-258/342-000**	50
9	**261-159/341-000**	50	9	**261-259/342-000**	50
10	**261-160/341-000**	25	10	**261-260/342-000**	25
11	**261-161/341-000**	25	11	**261-261/342-000**	100
12 ❹	**261-162/341-000**	100	12 ❹	**261-262/342-000**	25



Terminal strip with fixing flanges,
for screw or similar mounting types,
fixing hole 3.2 mm Ø (with 209-123 mounting adapter also for DIN 35 rail)



Terminal strip with snap-in mounting feet,
for plate thickness 0.6 mm – 1.2 mm,
fixing hole 3.5 mm Ø (fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail)



Dimensions in mm

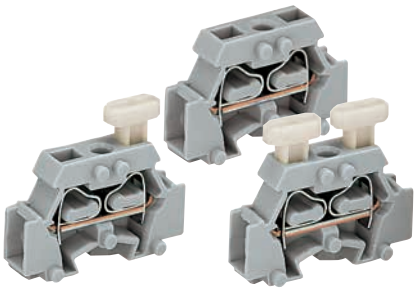
Certification organizations can be found in the overview on pages 622 and 623.

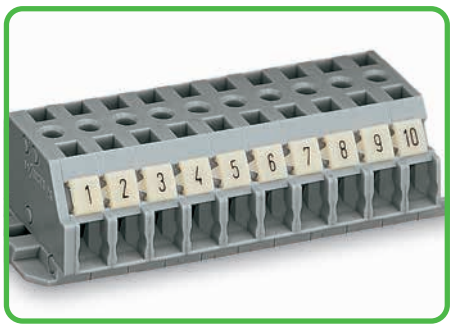
Modular Terminal Blocks with Fixing Flange 2.5 mm², with Miniature WSB Quick Marker Slot
261 Series

CAGE CLAMP®

0.08 - 2.5 mm²	AWG 28 - 14
500 V/6 kV/3 ❶	300 V, 15 A
I_N 24 A	300 V, 20 A

Terminal block width 6 mm / 0.236 in
8 - 9 mm / 0.33 in ❷



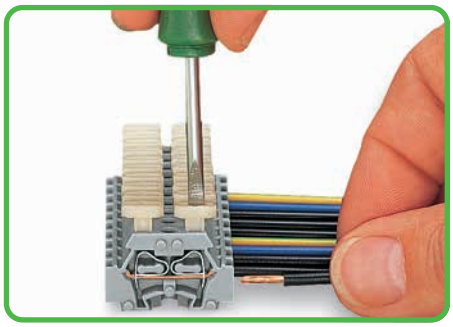


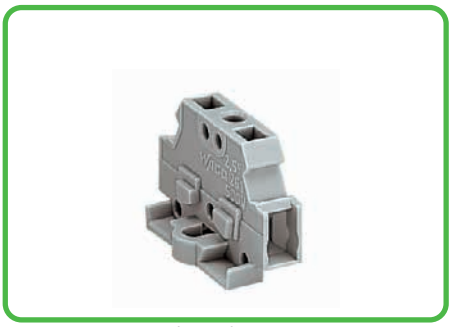
Marking with miniature WSB Quick marking system.

❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

Color	Item No.	Pack. Unit
2-conductor terminal block with fixing flange		
gray	**261-411**	200 (4x50)
2-conductor terminal block with push-button on one side and with fixing flange		
gray	**261-411/331-000**	200 (4x50)
2-conductor terminal block with push-buttons on both sides and with fixing flange		
gray	**261-411/341-000**	200 (4x50)

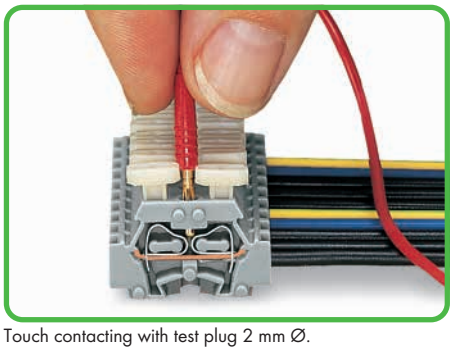

Conductor termination via push-button.


Terminal block with fixing flange,
for screw or similar mounting types,
fixing hole 3.2 mm Ø
(with 209-123 mounting adapter also for DIN 35 rail)
Lateral marking facility for miniature WSB Quick marking system, test slot.

261 Series Accessories

Appropriate marking system:
Miniature WSB (see Section 13)

End plate with fixing flange			
	gray	**261-410**	300 (6x50)
Comb-style jumper bar, insulated, I_N 16 A, gray, reduces maximum conductor size to 1.5 mm²/AWG 16			
	2-way	**261-402**	25
Operating tool, of insulating material, for inserting comb-style jumper bars			
	2-way	**209-132**	1
Mounting foot with screw, for DIN 35 rail, can be screwed on terminal blocks with fixing flange, 6.4 mm wide			
	gray	**209-123**	25
Mounting adapter, for DIN 35 rail, can be used as end plate, 6.5 mm wide			
	gray	**209-137**	25
Test plug, with 500 mm cable, 2 mm Ø			
	red	**210-136**	50
Miniature WSB Quick marking system, 10 strips with 10 markers per card, 5 mm wide markers			
	plain	**248-501**	5
Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade			
		**210-720**	1

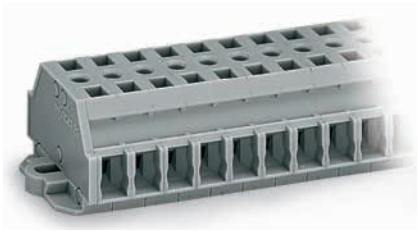

Touch contacting with test plug 2 mm Ø.

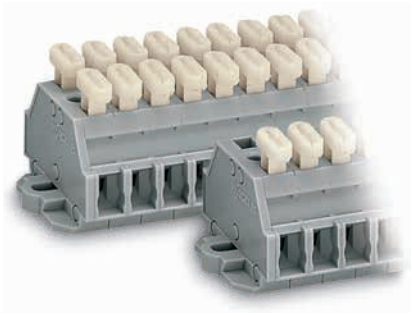
Certification organizations can be found in the overview on pages 622 and 623.

Terminal Strips with Fixing Flanges 2.5 mm², with Miniature WSB Quick Marker Slot 261 Series

0.08 - 2.5 mm²	AWG 28 - 14
500 V/6 kV/3 ❶	300 V, 15 A
I_N 24 A	300 V, 20 A
Pole width 6 mm / 0.236 in	
8 - 9 mm / 0.33 in ❷	

0.08 - 2.5 mm²	AWG 28 - 14
500 V/6 kV/3 ❶	300 V, 15 A
I_N 24 A	300 V, 20 A
Pole width 6 mm / 0.236 in	
8 - 9 mm / 0.33 in ❷	





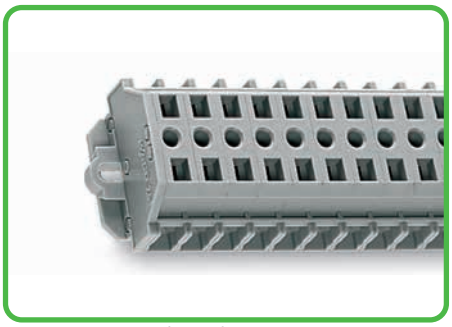
❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

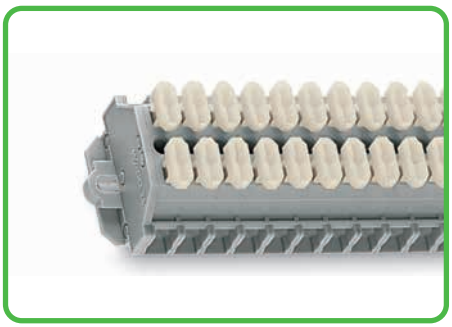
❸ For custom lengths, please contact factory

Pole No.	Item No.	Pack. Unit
2-conductor terminal strip with fixing flanges,		
gray		
2	**261-422**	100
3	**261-423**	100
4	**261-424**	100
5	**261-425**	100
6	**261-426**	50
7	**261-427**	50
8	**261-428**	50
9	**261-429**	50
10	**261-430**	25
11	**261-431**	25
12 ❸	**261-432**	25

Pole No.	Item No.	Pack. Unit
2-conductor terminal strip with push-buttons on one side and with fixing flanges,		
gray		
2	**261-422/331-000**	100
3	**261-423/331-000**	100
4	**261-424/331-000**	100
5	**261-425/331-000**	100
6	**261-426/331-000**	50
7	**261-427/331-000**	50
8	**261-428/331-000**	50
9	**261-429/331-000**	50
10	**261-430/331-000**	25
11	**261-431/331-000**	25
12 ❸	**261-432/331-000**	25
2-conductor terminal strip with push-buttons on both sides and with fixing flanges,		
gray		
2	**261-422/341-000**	100
3	**261-423/341-000**	100
4	**261-424/341-000**	100
5	**261-425/341-000**	100
6	**261-426/341-000**	50
7	**261-427/341-000**	50
8	**261-428/341-000**	50
9	**261-429/341-000**	50
10	**261-430/341-000**	25
11	**261-431/341-000**	25
12 ❸	**261-432/341-000**	25

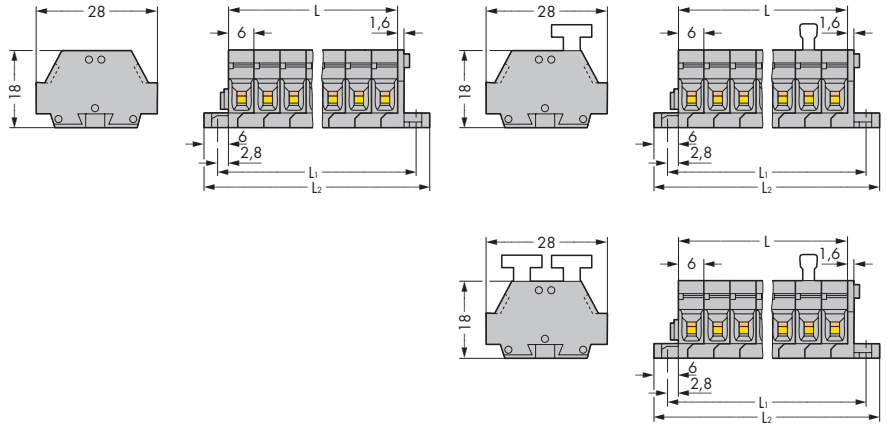


Terminal strip with fixing flanges,
for screw or similar mounting types,
fixing hole 3.2 mm Ø
(with 209-123 mounting adapter also for DIN 35 rail)



Terminal strip with fixing flanges,
with push-buttons on one or both sides of the strip,
for screw or similar mounting types,
fixing hole 3.2 mm Ø (with 209-123 mounting adapter also for DIN 35 rail)

Modular terminal blocks and terminal strips with fixing flanges L = pole no. x pole width L_1 = L + 7.2 mm L_2 = L + 13.6 mm



Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

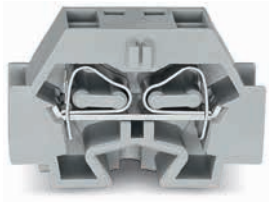
Modular Terminal Blocks with Fixing Flange or Snap-In Mounting Foot 4 mm²
262 Series

CAGE CLAMP®

0.08 - 4 mm²	AWG 28 - 12
630 V/8 kV/3 ❶	300 V, 20 A
I_N 24 A	300 V, 20 A
Terminal block width 7 mm / 0.276 in	
9 - 10 mm / 0.37 in ❷	

0.08 - 4 mm²	AWG 28 - 12
630 V/8 kV/3 ❶	300 V, 20 A
I_N 32 A	300 V, 20 A
Terminal block width 12 mm / 0.472 in	
9 - 10 mm / 0.37 in ❷	





❶ 630 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ See application notes for:
Test plug module, page 416

Color	Item No.	Pack. Unit
2-conductor terminal block with fixing flange, for screw or similar mounting types, fixing hole 3.2 mm Ø, with 209-123 mounting adapter also for DIN 35 rail		
gray	**262-301**	100 (2x50)
blue	**262-304** ❸	100 (2x50)
orange	**262-306**	100 (2x50)
green-yellow	**262-307**	100 (2x50)
2-conductor terminal block with snap-in mounting foot, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail		
gray	**262-311**	100 (2x50)
blue	**262-314** ❸	100 (2x50)
orange	**262-316**	100 (2x50)
green-yellow	**262-317**	100 (2x50)
2-conductor end terminal block, without fixing foot, for terminal strips with snap-in mounting feet		
gray	**262-321**	100 (2x50)
blue	**262-324** ❸	100 (2x50)
orange	**262-326**	100 (2x50)
green-yellow	**262-327**	100 (2x50)

Color	Item No.	Pack. Unit
4-conductor terminal block with fixing flange, for screw or similar mounting types, fixing hole 3.2 mm Ø, with 209-123 mounting adapter also for DIN 35 rail		
gray	**262-331**	100 (2x50)
blue	**262-334** ❸	100 (2x50)
orange	**262-336**	100 (2x50)
green-yellow	**262-337**	100 (2x50)
4-conductor terminal block with snap-in mounting foot, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail		
gray	**262-341**	100 (2x50)
blue	**262-344** ❸	100 (2x50)
orange	**262-346**	100 (2x50)
green-yellow	**262-347**	100 (2x50)
4-conductor end terminal block, without fixing foot, for terminal strips with snap-in mounting feet		
gray	**262-351**	100 (2x50)
blue	**262-354** ❸	100 (2x50)
orange	**262-356**	100 (2x50)
green-yellow	**262-357**	100 (2x50)

Item-Specific Accessories

Test plug module,
❹ can be snapped together, 7 mm wide
gray **249-137** 100 (4x25)

Item-Specific Accessories

Test plug module,
❹ can be snapped together, 12 mm wide
gray **249-140** 100 (4x25)

262 Series Accessories

For marking accessories, see Section 13

End plate with fixing flange
gray **262-361** 50

End plate with snap-in mounting foot
gray **262-371** 50

Comb-style jumper bar, insulated, I_N 16 A, gray, reduces maximum conductor size to 2.5 mm²/AWG 14
2-way **262-402** 25

Operating tool, of insulating material, for inserting comb-style jumper bars
2-way **209-132** 1

Aluminum carrier rail,
1000 mm long, 18 mm wide, 7 mm high
210-154 1

End stop, for WSB Quick markers, for 210-154 aluminum rail, 6 mm wide
209-122 25

Mounting foot, for DIN 35 rail, can be snapped on terminal blocks with snap-in mounting foot, 6.4 mm wide
gray **209-120** 25

Mounting foot with screw, for DIN 35 rail, can be screwed on terminal blocks with fixing flange, 6.4 mm wide
gray **209-123** 25

262 Series Accessories

Marking accessories, see Section 13

Mounting adapter, for DIN 35 rail, can be used as end plate, 6.5 mm wide
gray **209-137** 25

Test plug, with 500 mm cable, 2 mm Ø
red **210-136** 50

Test plug, with 500 mm cable, 2.3 mm Ø
yellow **210-137** 50

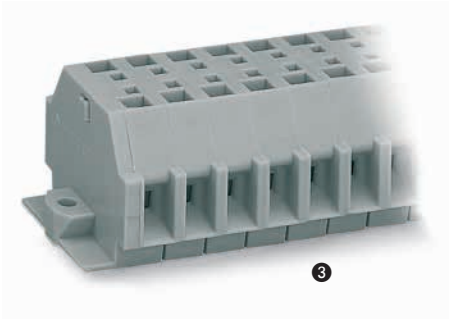
Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade
210-720 1

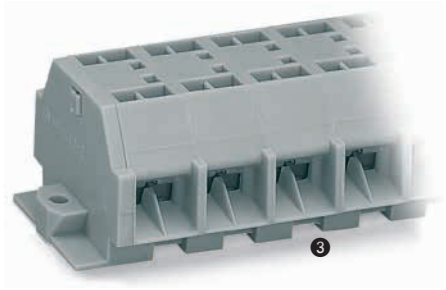
Certification organizations can be found in the overview on pages 622 and 623.

Terminal Strips with Fixing Flanges or Snap-in Mounting Feet 4 mm²
262 Series

0.08 - 4 mm²	AWG 28 - 12
630 V/8 kV/3 ❶	300 V, 20 A
I_N 24 A	300 V, 20 A
Pole width 7 mm / 0.276 in	
9 - 10 mm / 0.37 in ❷	

0.08 - 4 mm²	AWG 28 - 12
630 V/8 kV/3 ❶	300 V, 20 A
I_N 32 A	300 V, 20 A
Pole width 12 mm / 0.472 in	
9 - 10 mm / 0.37 in ❷	





❶ 630 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Terminal blocks with blue insulation are suitable for Ex i applications
Item no. suffix **. . . /000-006**

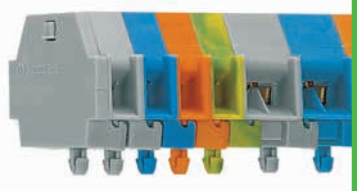
❹ For longer strips and/or assemblies of different colors, please contact factory

Pole No.	Item No.	Pack. Unit
2-conductor terminal strip with fixing flanges, gray		
2	**262-102**	100
3	**262-103**	100
4	**262-104**	100
5	**262-105**	100
6	**262-106**	100
7	**262-107**	100
8	**262-108**	100
9	**262-109**	50
10	**262-110**	25
11	**262-111**	25
12 ❹	**262-112**	25
2-conductor terminal strip with snap-in mounting feet, gray		
2	**262-152**	100
3	**262-153**	100
4	**262-154**	100
5	**262-155**	100
6	**262-156**	50
7	**262-157**	50
8	**262-158**	50
9	**262-159**	50
10	**262-160**	25
11	**262-161**	25
12 ❹	**262-162**	25

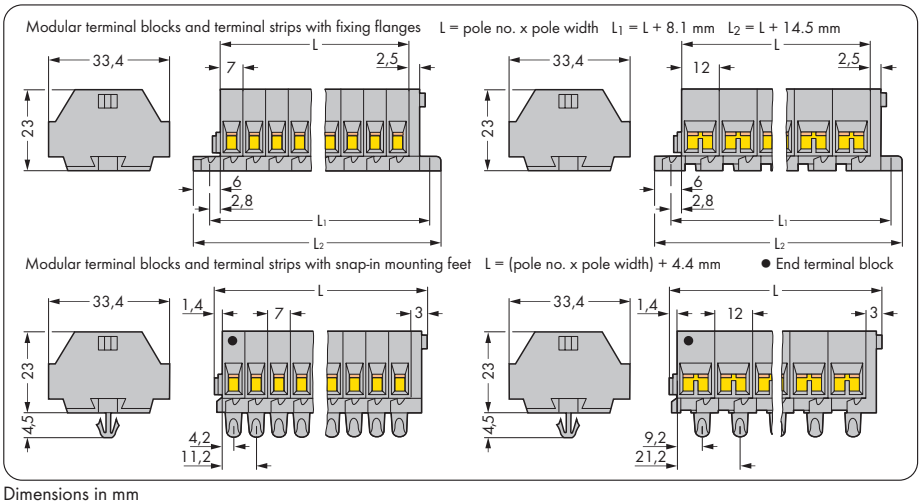
Pole No.	Item No.	Pack. Unit
4-conductor terminal strip with fixing flanges, gray		
2	**262-202**	100
3	**262-203**	100
4	**262-204**	100
5	**262-205**	100
6	**262-206**	50
7	**262-207**	50
8	**262-208**	50
9	**262-209**	50
10	**262-210**	25
11	**262-211**	25
12 ❹	**262-212**	25
4-conductor terminal strip with snap-in mounting feet, gray		
2	**262-252**	100
3	**262-253**	100
4	**262-254**	100
5	**262-255**	100
6	**262-256**	50
7	**262-257**	50
8	**262-258**	50
9	**262-259**	50
10	**262-260**	25
11	**262-261**	25
12 ❹	**262-262**	25



Terminal strip with fixing flanges,
for screw or similar mounting types,
fixing hole 3.2 mm Ø (with 209-123 mounting adapter also for DIN 35 rail)



Terminal strip with snap-in mounting feet,
for plate thickness 0.6 mm – 1.2 mm,
fixing hole 3.5 mm Ø (fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail)



Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

Ex Modular Terminal Blocks with Fixing Flange or Snap-In Mounting Foot 4 mm²
262 Series

CAGE CLAMP®

0.5 - 4 mm² ❶	AWG 20 - 12
550 V	300 V, 20 A
I_N 23 A	300 V, 20 A
Terminal block width 7 mm / 0.276 in	
9 - 10 mm / 0.37 in ❷	

0.5 - 4 mm² ❶	AWG 20 - 12
550 V	300 V, 20 A
I_N 30 A	300 V, 20 A
Terminal block width 12 mm / 0.472 in	
9 - 10 mm / 0.37 in ❷	



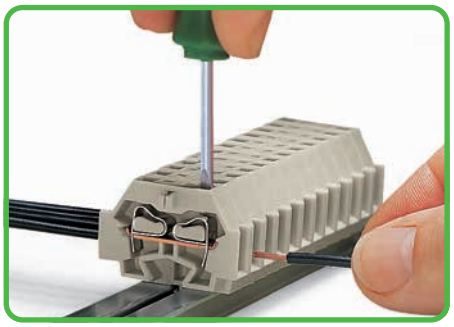


❶ Using crimped ferrules for corrosion protection, the rated cross section is reduced by one size. For conductor types and conductor preparation, see Section 14 "Electrical Equipment for Hazardous Environments."

❷ Strip length, see packaging or instructions.

Color	Item No.	Pack. Unit
2-conductor Ex e II terminal block with fixing flange, for screw or similar mounting types, fixing hole 3.2 mm Ø, with 209-123 mounting adapter also for DIN 35 rail		
◯ light gray	**262-130**	100 (2x50)
2-conductor Ex e II terminal block with snap-in mounting foot, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail		
◯ light gray	**262-180**	100 (2x50)
2-conductor Ex e II space-saving end terminal block, without fixing foot, for terminal strips with snap-in mounting feet		
◯ light gray	**262-181**	100 (2x50)

Color	Item No.	Pack. Unit
4-conductor Ex e II terminal block with fixing flange, for screw or similar mounting types, fixing hole 3.2 mm Ø, with 209-123 mounting adapter also for DIN 35 rail		
◯ light gray	**262-230**	100 (2x50)
4-conductor Ex e II terminal block with snap-in mounting foot, for plate thickness 0.6-1.2 mm, fixing hole 3.5 mm Ø, fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail		
◯ light gray	**262-280**	100 (2x50)
4-conductor Ex e II space-saving end terminal block, without fixing foot, for terminal strips with snap-in mounting feet		
◯ light gray	**262-281**	100 (2x50)



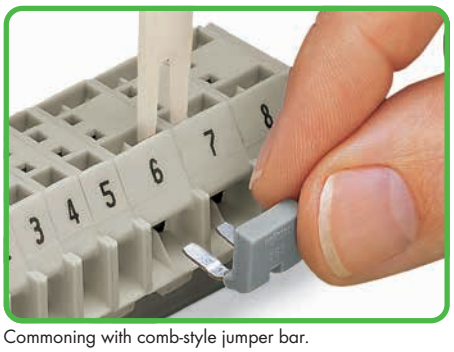
"Side-entry" conductor termination

262 Series Accessories

For marking accessories, see Section 13

End plate with fixing flange			
	light gray	**262-363**	50
End plate with snap-in mounting foot			
	light gray	**262-373**	50
Comb-style jumper bar, insulated, I_N 16 A, gray, reduces maximum conductor size to 2.5 mm²/AWG 14			
	2-way	**262-402**	25
Operating tool, of insulating material, for inserting comb-style jumper bars			
	2-way	**209-132**	1
Aluminum carrier rail,			
	1000 mm long, 18 mm wide, 7 mm high	**210-154**	1
End stop, for WSB Quick markers,			
	for 210-154 aluminum rail, 6 mm wide	**209-122**	25
Mounting foot, for DIN 35 rail, can be snapped on terminal blocks with snap-in mounting foot, 6.4 mm wide			
	gray	**209-120**	25

Mounting foot with screw, for DIN 35 rail, can be screwed on terminal blocks with fixing flange, 6.4 mm wide			
	gray	**209-123**	25
Mounting adapter, for DIN 35 rail, can be used as end plate, 6.5 mm wide			
	gray	**209-137**	25
Operating tool with partially insulated shaft, type 2, (3.5 x 0.5) mm blade			
		**210-720**	1



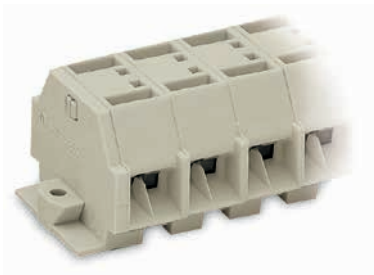
Commoning with comb-style jumper bar.

Certification organizations can be found in the overview on pages 622 and 623.

Ex Terminal Strips with Fixing Flanges or Snap-in Mounting Feet 4 mm²
262 Series

0.5 - 4 mm² ❶	AWG 20 - 12	0.5 - 4 mm² ❶	AWG 20 - 12
550 V	300 V, 20 A	550 V	300 V, 20 A
I_N 23 A	300 V, 20 A	I_N 30 A	300 V, 20 A
Pole width 7 mm / 0.276 in		Pole width 12 mm / 0.472 in	
9 - 10 mm / 0.37 in ❷		9 - 10 mm / 0.37 in ❷	





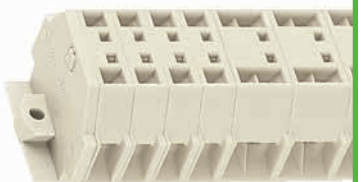
❶ Using crimped ferrules for corrosion protection, the rated cross section is reduced by one size. For conductor types and conductor preparation, see Section 14 "Electrical Equipment for Hazardous Environments."

❷ Strip length, see packaging or instructions.

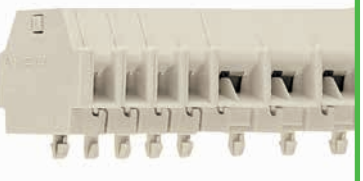
❸ For custom lengths, please contact factory

Pole No.	Item No.	Pack. Unit
2-conductor Ex e II terminal strip with fixing flanges, light gray		
2	**262-132**	100
3	**262-133**	100
4	**262-134**	100
5	**262-135**	100
6	**262-136**	100
7	**262-137**	50
8	**262-138**	50
9	**262-139**	50
10	**262-140**	25
11	**262-141**	25
12 ❸	**262-142**	25
2-conductor Ex e II terminal strip with snap-in mounting feet, light gray		
2	**262-182**	100
3	**262-183**	100
4	**262-184**	100
5	**262-185**	100
6	**262-186**	50
7	**262-187**	50
8	**262-188**	50
9	**262-189**	50
10	**262-190**	25
11	**262-191**	25
12 ❸	**262-192**	25

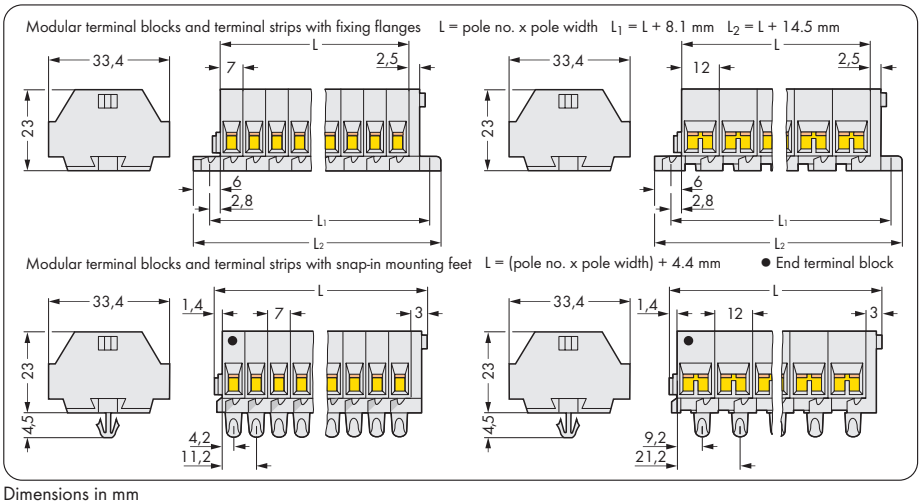
Pole No.	Item No.	Pack. Unit
4-conductor Ex e II terminal strip with fixing flanges, light gray		
2	**262-232**	100
3	**262-233**	100
4	**262-234**	100
5	**262-235**	100
6	**262-236**	50
7	**262-237**	50
8	**262-238**	50
9	**262-239**	50
10	**262-240**	25
11	**262-241**	25
12 ❸	**262-242**	25
4-conductor Ex e II terminal strip with snap-in mounting feet, light gray		
2	**262-282**	100
3	**262-283**	100
4	**262-284**	100
5	**262-285**	100
6	**262-286**	50
7	**262-287**	50
8	**262-288**	50
9	**262-289**	50
10	**262-290**	25
11	**262-291**	25
12 ❸	**262-292**	25



Terminal strip with fixing flanges,
for screw or similar mounting types,
fixing hole 3.2 mm Ø (with 209-123 mounting adapter also for DIN 35 rail)



Terminal strip with snap-in mounting feet,
for plate thickness 0.6 mm – 1.2 mm,
fixing hole 3.5 mm Ø (fits 210-154 aluminum rail or with 209-120 mounting adapter for DIN 35 rail)



Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

Test Plug Modules for Terminal Strips without Push-Button
260, 261 and 262 Series

Suitable for 260 Series	Suitable for 261 Series (also 264 Series)	Suitable for 262 Series
Test voltage 250 V/500 V ❶ ❷	Test voltage 400 V/800 V ❶ ❷	Test voltage 500 V/800 V ❶ ❷
Test current 0.5 A/6 A ❸	Test current 0.5 A/6 A ❸	Test current 0.5 A/6 A ❸
Average contact pressure 2.2 N per pin	Average contact pressure 2.2 N per pin	Average contact pressure 2.2 N per pin








	Item No.	Pack. Unit
Test plug module without locking levers, can be snapped together, module width 5 mm, for 2-conductor terminal blocks		
◯ gray	**249-135**	100 (4x25)
Test plug module without locking levers, can be snapped together, module width 8 mm, for 4-conductor terminal blocks		
◯ gray	**249-138**	100 (4x25)
Test plug module with locking levers, can be snapped together, module width 5 mm, for 2-conductor terminal blocks		
◯ gray	**260-404**	100 (4x25)
Test plug module with locking levers, can be snapped together, module width 8 mm, for 4-conductor terminal blocks		
◯ gray	**260-405**	100 (4x25)

	Item No.	Pack. Unit
Test plug module without locking levers, can be snapped together, module width 6 mm, for 2-conductor terminal blocks		
◯ gray	**249-136**	100 (4x25)
Test plug module without locking levers, can be snapped together, module width 10 mm, for 4-conductor terminal blocks		
◯ gray	**249-139**	100 (4x25)
Test plug module with locking levers, can be snapped together, module width 6 mm, for 2-conductor terminal blocks		
◯ gray	**261-404**	100 (4x25)
Test plug module with locking levers, can be snapped together, module width 10 mm, for 4-conductor terminal blocks		
◯ gray	**261-405**	100 (4x25)

	Item No.	Pack. Unit
Test plug module without locking levers, can be snapped together, module width 7 mm, for 2-conductor terminal blocks		
◯ gray	**249-137**	100 (4x25)
Test plug module without locking levers, can be snapped together, module width 12 mm, for 4-conductor terminal blocks		
◯ gray	**249-140**	100 (4x25)

Accessories for Test Plug Modules

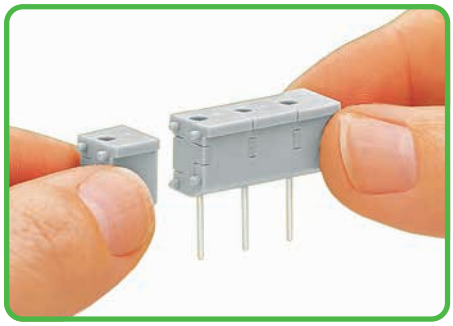
Test plug,			
	with 500 mm cable, 2 mm Ø		
	red	**210-136**	50
Test plug,			
	with 500 mm cable, 2.3 mm Ø		
	yellow	**210-137**	50

Insulation Stops for 869 Series Terminal Strips and Handling

Insulation stop
suitable for all rail-mounted terminal blocks featuring:

Terminal block width 5 mm / 0.197 in

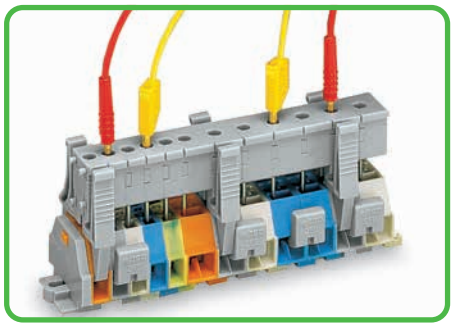




Snapping together individual modules to assemble a multi-pole test plug module.

1. Maximum test voltage 250-800V only in test equipment, in compliance with relevant air and creepage distances.
2. In case of touch contacting the max. test voltage must not exceed 48V, test pins are not touchproof.
3. Maximum test current in case of contact is 0.5A; 6A if the test pins are firmly connected in the clamping units

	Item No.	Pack. Unit
Insulation stop,		
5 pcs/strip,		
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
○ white	**280-470**	200 (8x25)
Insulation stop,		
5 pcs/strip,		
0.25 - 0.5 mm²		
○ light gray	**280-471**	200 (8x25)
Insulation stop,		
5 pcs/strip,		
0.75 - 1 mm²		
● dark gray	**280-472**	200 (8x25)



For testing, test plug modules are snapped onto the terminal strip – wired or unwired. As contact is made at the CAGE CLAMP® (stainless steel) unit, this type of is limited to 0.5A max.

Distance between locking devices must be 35 – 40 mm.



Testing terminated conductors.



Insert insulation stop into conductor entry holes of terminal strip.

Wiring programmable logic controllers and microprocessor-operated control circuits often relies on very small cross sections of fine-stranded conductors. These small conductors are highly flexible, and they deform when pushed against the conductor stop in terminal blocks. As a result, the conductor insulation – not the copper conductor – may be clamped, causing intermittent contact or no contact at all. Common to all terminal block types currently offered, this problem creates unnecessary downtime for trouble-shooting.

The solution: an insulation stop for compact terminal blocks. Insulation stops automatically bundle the cores of fine-stranded conductors when inserted into the clamping unit, preventing splaying. This also limits the conductor entry to a defined cross sectional area – ensuring the actual conductor, not the insulation, will enter the clamping unit.

The insulation stop is available as dividable 5-pole strip for the 869 Series terminal strips.

Insulation stop usage will not affect the conductor strip lengths for the aforementioned terminal strips.

CAGE CLAMP®S

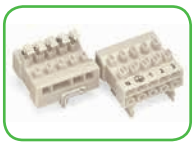
The universal connection with "SPECIAL"

Handling:
- Open clamping unit
- Insert the conductor
- Release clamp – done!
- Terminate both solid and ferruled conductors by simply pushing them in – no operating tool needed.





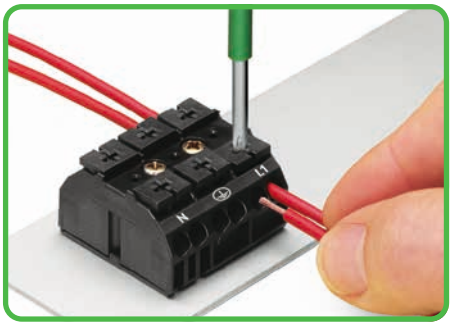


			Page
	**4-Conductor Chassis-Mount Terminal Strips** 0.5 mm² to 4 mm² (20–12 AWG)	862 Series	422
	**Power Supply Terminal Blocks** 0.5 mm² to 2.5 mm² (18–12 AWG)	294 Series	433
	**Power Supply Terminal Blocks** 0.5 mm² to 2.5 mm² (20–14 AWG)	293 Series	444

4-Conductor, Chassis-Mount Terminal Strips, 862 Series – Description and Handling –

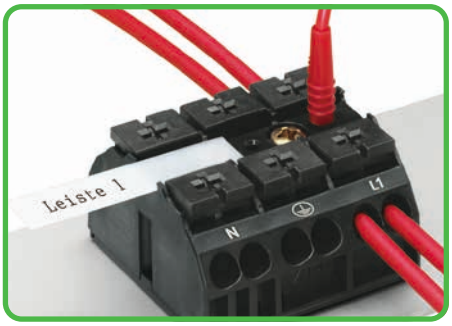
CAGE CLAMP®S

Conductor termination



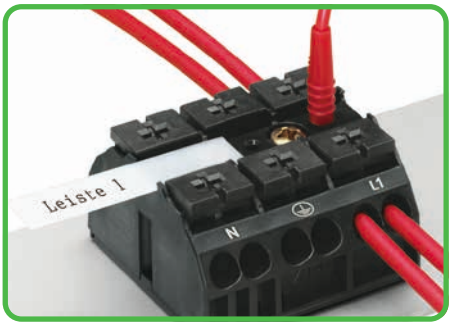
Four conductors per pole for solid and fine-stranded conductors

Marking



Marking by direct, one-side printing and/or marker strips

Testing

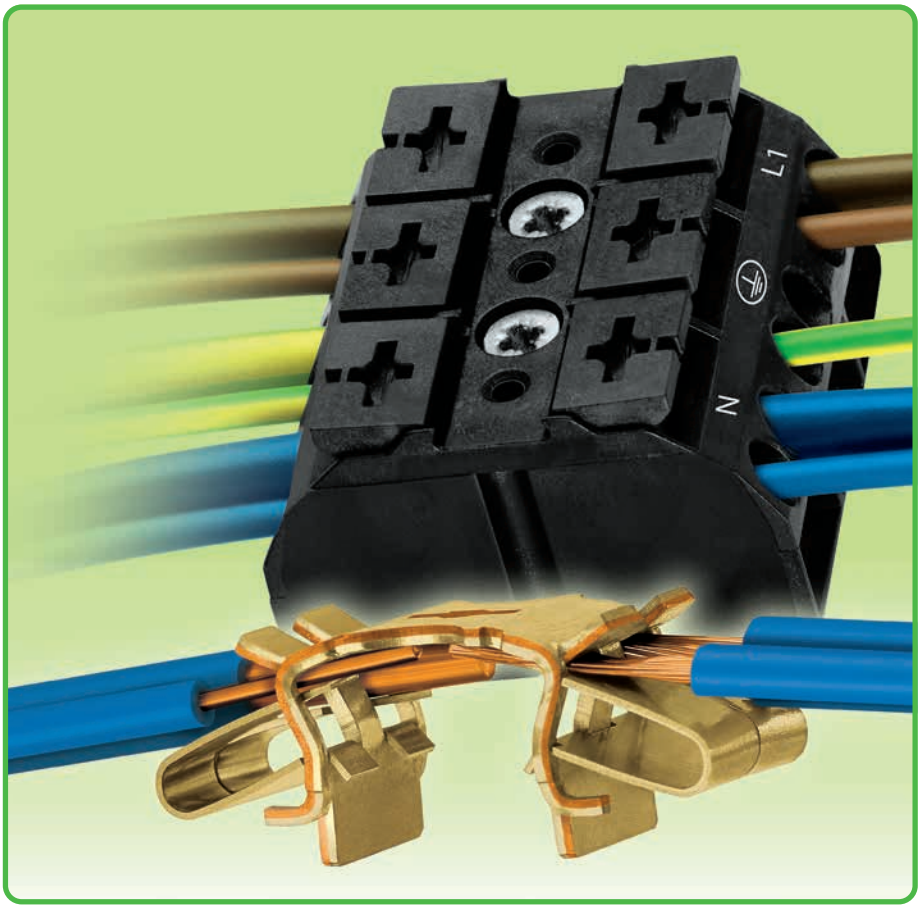


Testing with test plug 2 mm Ø.

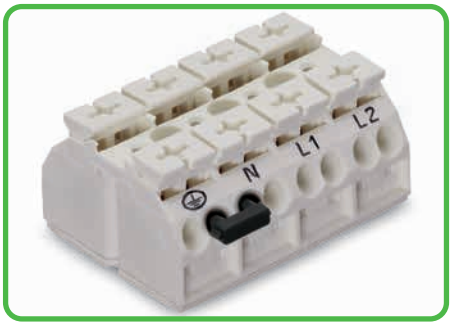
Ground contact (PE contact)



Makes an automatic contact to the mounting plate. The varnish coating is penetrated automatically.



Commoning



Commoning with comb-style jumper bar

Cost-effective features:

The 862 Series chassis-mount terminal strips were developed specifically to minimize wiring costs, while accommodating requirements for easy mounting, multiple connection points, marking and handling:

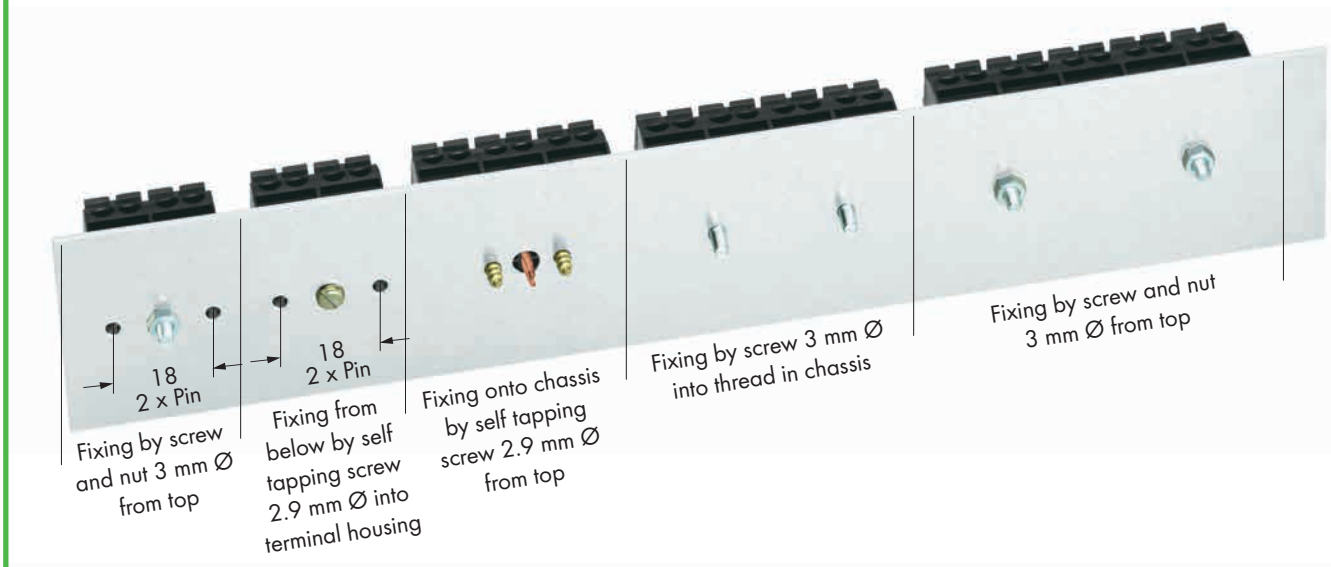
- The 862 Series equipped with CAGE CLAMP®S connects up to four conductors sized 0.5 mm² to 4 mm² (AWG 20 - 12). Due to multiple connection points per pole, different conductor sizes can be used within the same terminal block position.
- CAGE CLAMP®S termination technology allows solid conductors, fine-stranded conductors with ferrules or ultrasonically bonded conductors from 0.5 mm² to 4 mm² (AWG 20 - 12) to be connected by simply pushing the conductor into contact. (Length of bonded wire end min. 10 mm/0.39 in).
- Convenient automatic grounding contact available as an option.
- Snap-in mounting feet for fast assembly.
- Push-buttons for easy handling with an operating tool or by hand.
- Built-in test points simplify testing with test plug 2 mm Ø.
- Flexible marking options with standard marking (pre-marked), marker strip or custom marked for large quantity orders.

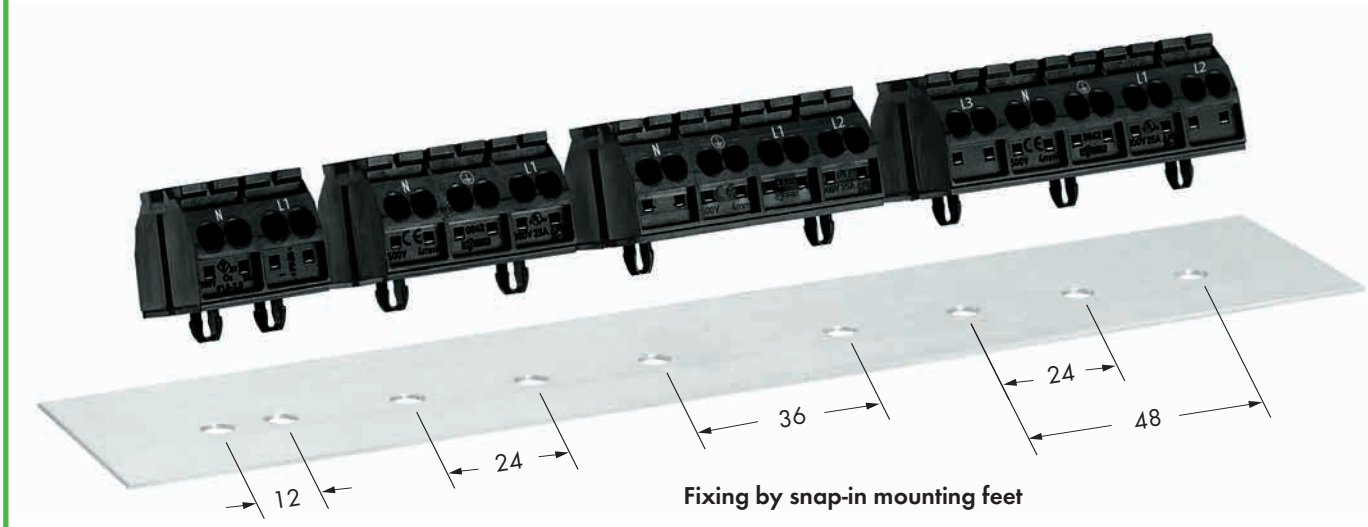
CAGE CLAMP®S clamps the following copper conductors:*

solid	stranded	fine-stranded, also with tinned single strands	fine-stranded, tip-bonded	fine-stranded, with ferrule ❶ (gastight crimped)	fine-stranded, with pin terminal (gastight crimped)

* For aluminum conductors, see notes in Section 14.

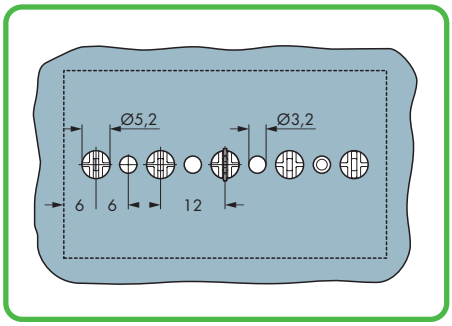
❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.



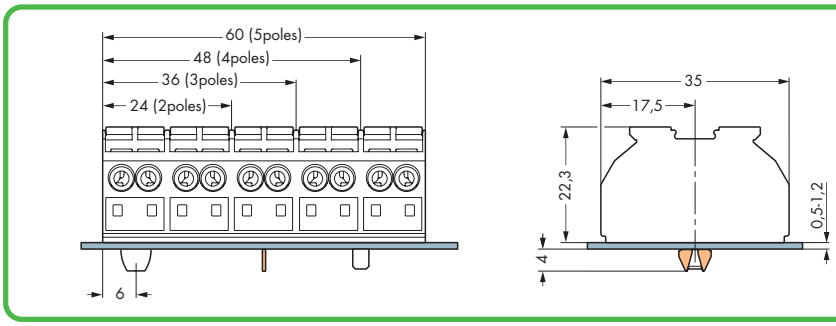


Fixing by snap-in mounting feet

Dimensions in mm



Dimensions in mm for ground contact and snap-in mounting foot 5.2 mm Ø.



Dimensions in mm for chassis-mount terminal strips

4-Conductor, Chassis-Mount Terminal Strips, 2-Pole, 4 mm², 862 Series

CAGE CLAMP®S

0.5 - 4 mm²	AWG 20 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A	300 V, 20 A
10 - 11 mm / 0.41 in ❷	

0.5 - 4 mm²	AWG 20 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A	300 V, 20 A
10 - 11 mm / 0.41 in ❷	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex e II applications
440 V, 28 A
(also see Section 14)

	Item No.	Pack. Unit
for mounting via screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top, with 2x pin, 2-pole,		
black		
● N-L1	**862-2552**	500
● L1-N	**862-1552**	500
● L1-N Ex	**862-1552/999-950** ❸	500
● plain	**862-552**	500
for self-tapping screw 2.9 mm Ø from below, with 2x pin, 2-pole,		
black		
● N-L1	**862-2562**	500
● L1-N	**862-1562**	500
● L1-N Ex	**862-1562/999-950** ❸	500
● plain	**862-562**	500
via 1 snap-in foot per pole, 2-pole,		
black		
● N-L1	**862-2532**	500
● L1-N	**862-1532**	500
● L1-N Ex	**862-1532/999-950** ❸	500
● plain	**862-532**	500

	Item No.	Pack. Unit
for mounting via screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top, with 2x pin, 2-pole,		
white		
○ N-L1	**862-2652**	500
○ L1-N	**862-1652**	500
○ L1-N Ex	**862-1652/999-950** ❸	500
○ plain	**862-652**	500
for self-tapping screw 2.9 mm Ø from below, with 2x pin, 2-pole,		
white		
○ N-L1	**862-2662**	500
○ L1-N	**862-1662**	500
○ L1-N Ex	**862-1662/999-950** ❸	500
○ plain	**862-662**	500
via 1 snap-in foot per pole, 2-pole,		
white		
○ N-L1	**862-2632**	500
○ L1-N	**862-1632**	500
○ L1-N Ex	**862-1632/999-950** ❸	500
○ plain	**862-632**	500

862 Series Accessories

Comb-style jumper bar,
simply push into the conductor entry hole



I_N 32 A	**862-482**	5

Test plug,
with 500 mm cable,
2 mm Ø



red	**210-136**	50

Test plug,
with 500 mm cable,
2.3 mm Ø



yellow	**210-137**	50

Marking strip, plain,
7.5 mm wide,
50 m roll



white	**709-178**	1

Operating tool with partially insulated shaft,
type 2, (3.5 x 0.5) mm blade



	210-720	1

Certification organizations can be found in the overview on pages 622 and 623.

4-Conductor, Chassis-Mount Terminal Strips, 3-Pole, 4 mm², 862 Series

0.5 - 4 mm²	AWG 20 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A	300 V, 20 A
10 - 11 mm / 0.41 in ❷	

0.5 - 4 mm²	AWG 20 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A	300 V, 20 A
10 - 11 mm / 0.41 in ❷	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex e II applications
440 V, 28 A
(also see Section 14)

	Item No.	Pack. Unit
for mounting via screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top,		
3-pole,		
black		
● N-PE-L1,		
without PE contact	**862-2503**	250
● PE-N-L1,		
without PE contact	**862-1503**	250
● PE-N-L1 Ex,		
without PE contact	**862-1503/999-950** ❸	250
● plain,		
without PE contact	**862-503**	250
● N-PE-L1,		
with PE contact	**862-8503**	250
● PE-N-L1,		
with PE contact	**862-9503**	250
via 1 snap-in foot per pole,		
3-pole,		
black		
● N-PE-L1,		
without PE contact	**862-2533**	250
● PE-N-L1,		
without PE contact	**862-1533**	250
● PE-N-L1 Ex,		
without PE contact	**862-1533/999-950** ❸	250
● plain,		
without PE contact	**862-533**	250
● N-PE-L1,		
with PE contact	**862-8533**	250
● PE-N-L1,		
with PE contact	**862-9533**	250
snap-in feet at pos. 1+3,		
3-pole,		
black		
● N-PE-L1,		
without PE contact	**862-2593**	250
● PE-N-L1,		
without PE contact	**862-1593**	250
● PE-N-L1 Ex,		
without PE contact	**862-1593/999-950** ❸	250
● plain,		
without PE contact	**862-593**	250
● N-PE-L1,		
with PE contact	**862-8593**	250
● PE-N-L1,		
with PE contact	**862-9593**	250

	Item No.	Pack. Unit
for mounting via screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top,		
3-pole,		
white		
○ N-PE-L1,		
without PE contact	**862-2603**	250
○ PE-N-L1,		
without PE contact	**862-1603**	250
○ PE-N-L1 Ex,		
without PE contact	**862-1603/999-950** ❸	250
○ plain,		
without PE contact	**862-603**	250
○ N-PE-L1,		
with PE contact	**862-8603**	250
○ PE-N-L1,		
with PE contact	**862-9603**	250
via 1 snap-in foot per pole,		
3-pole,		
white		
○ N-PE-L1,		
without PE contact	**862-2633**	250
○ PE-N-L1,		
without PE contact	**862-1633**	250
○ PE-N-L1 Ex,		
without PE contact	**862-1633/999-950** ❸	250
○ plain,		
without PE contact	**862-633**	250
○ N-PE-L1,		
with PE contact	**862-8633**	250
○ PE-N-L1,		
with PE contact	**862-9633**	250
snap-in feet at pos. 1+3,		
3-pole,		
white		
○ N-PE-L1,		
without PE contact	**862-2693**	250
○ PE-N-L1,		
without PE contact	**862-1693**	250
○ PE-N-L1 Ex,		
without PE contact	**862-1693/999-950** ❸	250
○ plain,		
without PE contact	**862-693**	250
○ N-PE-L1,		
with PE contact	**862-8693**	250
○ PE-N-L1,		
with PE contact	**862-9693**	250

862 Series Accessories

Comb-style jumper bar,



simply push into the conductor entry hole

I_N 32 A	**862-482**	5

Test plug,



with 500 mm cable, 2 mm Ø

red	**210-136**	50

Test plug,



with 500 mm cable, 2.3 mm Ø

yellow	**210-137**	50

Marking strip, plain,



7.5 mm wide, 50 m roll

white	**709-178**	1

Operating tool with partially insulated shaft,



type 2, (3.5 x 0.5) mm blade

210-720	1

Certification organizations can be found in the overview on pages 622 and 623.

4-Conductor, Chassis-Mount Terminal Strips, 4-Pole, 4 mm², 862 Series

CAGE CLAMP®S

0.5 - 4 mm²	AWG 20 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A	300 V, 20 A
10 - 11 mm / 0.41 in ❷	

0.5 - 4 mm²	AWG 20 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A	300 V, 20 A
10 - 11 mm / 0.41 in ❷	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex e II applications
440 V, 28 A
(also see Section 14)

	Item No.	Pack. Unit
for mounting via screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top,		
4-pole,		
black		
● N-PE-L1-L2,		
without PE contact	**862-2504**	200
● PE-N-L1-L2,		
without PE contact	**862-1504**	200
● PE-N-L1-L2 Ex,		
without PE contact	**862-1504/999-950** ❸	200
● plain,		
without PE contact	**862-504**	200
● N-PE-L1-L2,		
with PE contact	**862-8504**	200
● PE-N-L1-L2,		
with PE contact	**862-9504**	200
via 1 snap-in foot per pole,		
4-pole,		
black		
● N-PE-L1-L2,		
without PE contact	**862-2534**	200
● PE-N-L1-L2,		
without PE contact	**862-1534**	200
● PE-N-L1-L2 Ex,		
without PE contact	**862-1534/999-950** ❸	200
● plain,		
without PE contact	**862-534**	200
● N-PE-L1-L2,		
with PE contact	**862-8534**	200
● PE-N-L1-L2,		
with PE contact	**862-9534**	200
snap-in feet at pos. 1+4,		
4-pole,		
black		
● N-PE-L1-L2,		
without PE contact	**862-2594**	200
● PE-N-L1-L2,		
without PE contact	**862-1594**	200
● PE-N-L1-L2 Ex,		
without PE contact	**862-1594/999-950** ❸	200
● plain,		
without PE contact	**862-594**	200
● N-PE-L1-L2,		
with PE contact	**862-8594**	200
● PE-N-L1-L2,		
with PE contact	**862-9594**	200

	Item No.	Pack. Unit
for mounting via screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top,		
4-pole,		
white		
○ N-PE-L1-L2,		
without PE contact	**862-2604**	200
○ PE-N-L1-L2,		
without PE contact	**862-1604**	200
○ PE-N-L1-L2 Ex,		
without PE contact	**862-1604/999-950** ❸	200
○ plain,		
without PE contact	**862-604**	200
○ N-PE-L1-L2,		
with PE contact	**862-8604**	200
○ PE-N-L1-L2,		
with PE contact	**862-9604**	200
via 1 snap-in foot per pole,		
4-pole,		
white		
○ N-PE-L1-L2,		
without PE contact	**862-2634**	200
○ PE-N-L1-L2,		
without PE contact	**862-1634**	200
○ PE-N-L1-L2 Ex,		
without PE contact	**862-1634/999-950** ❸	200
○ plain,		
without PE contact	**862-634**	200
○ N-PE-L1-L2,		
with PE contact	**862-8634**	200
○ PE-N-L1-L2,		
with PE contact	**862-9634**	200
snap-in feet at pos. 1+4,		
4-pole,		
white		
○ N-PE-L1-L2,		
without PE contact	**862-2694**	200
○ PE-N-L1-L2,		
without PE contact	**862-1694**	200
○ PE-N-L1-L2 Ex,		
without PE contact	**862-1694/999-950** ❸	200
○ plain,		
without PE contact	**862-694**	200
○ N-PE-L1-L2,		
with PE contact	**862-8694**	200
○ PE-N-L1-L2,		
with PE contact	**862-9694**	200

862 Series Accessories

Comb-style jumper bar,
simply push into the conductor entry hole



I_N 32 A	**862-482**	5

Test plug,



with 500 mm cable,
2 mm Ø

red	**210-136**	50

Test plug,



with 500 mm cable,
2.3 mm Ø

yellow	**210-137**	50

Marking strip, plain,



7.5 mm wide,
50 m roll

white	**709-178**	1

Operating tool with partially insulated shaft,



type 2, (3.5 x 0.5) mm blade

	210-720	1

Certification organizations can be found in the overview on pages 622 and 623.

4-Conductor, Chassis-Mount Terminal Strips, 5-Pole, 4 mm², 862 Series

0.5 - 4 mm²	AWG 20 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A	300 V, 20 A
10 - 11 mm / 0.41 in ❷	

0.5 - 4 mm²	AWG 20 - 12
500 V/6 kV/3 ❶	300 V, 20 A
I_N 32 A	300 V, 20 A
10 - 11 mm / 0.41 in ❷	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex e II applications
440 V, 28 A
(also see Section 14)

	Item No.	Pack. Unit
for mounting via screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top,		
5-pole,		
black		
● L3-N-PE-L1-L2,		
without PE contact	**862-2505**	200
● PE-N-L1-L2-L3,		
without PE contact	**862-1505**	200
● PE-N-L1-L2-L3 Ex,		
without PE contact	**862-1505/999-950** ❸	200
● plain,		
without PE contact	**862-505**	200
● L3-N-PE-L1-L2,		
with PE contact	**862-8505**	200
● PE-N-L1-L2-L3,		
with PE contact	**862-9505**	200
1 snap-in foot at pos. 2+4,		
5-pole,		
black		
● L3-N-PE-L1-L2,		
without PE contact	**862-2525**	200
● PE-N-L1-L2-L3,		
without PE contact	**862-1525**	200
● PE-N-L1-L2-L3 Ex,		
without PE contact	**862-1525/999-950** ❸	200
● plain,		
without PE contact	**862-525**	200
● L3-N-PE-L1-L2,		
with PE contact	**862-8525**	200
● PE-N-L1-L2-L3,		
with PE contact	**862-9525**	200
snap-in feet at pos. 1+3+5,		
5-pole,		
black		
● L3-N-PE-L1-L2,		
without PE contact	**862-2515**	200
● PE-N-L1-L2-L3,		
without PE contact	**862-1515**	200
● PE-N-L1-L2-L3 Ex,		
without PE contact	**862-1515/999-950** ❸	200
● plain,		
without PE contact	**862-515**	200
● L3-N-PE-L1-L2,		
with PE contact	**862-8515**	200
● PE-N-L1-L2-L3,		
with PE contact	**862-9515**	200

	Item No.	Pack. Unit
for mounting via screw and nut 3 mm Ø or for self-tapping screw 2.9 mm Ø from top,		
5-pole,		
white		
○ L3-N-PE-L1-L2,		
without PE contact	**862-2605**	200
○ PE-N-L1-L2-L3,		
without PE contact	**862-1605**	200
○ PE-N-L1-L2-L3 Ex,		
without PE contact	**862-1605/999-950** ❸	200
○ plain,		
without PE contact	**862-605**	200
○ L3-N-PE-L1-L2,		
with PE contact	**862-8605**	200
○ PE-N-L1-L2-L3,		
with PE contact	**862-9605**	200
1 snap-in foot at pos. 2+4,		
5-pole,		
white		
○ L3-N-PE-L1-L2,		
without PE contact	**862-2625**	200
○ PE-N-L1-L2-L3,		
without PE contact	**862-1625**	200
○ PE-N-L1-L2-L3 Ex,		
without PE contact	**862-1625/999-950** ❸	200
○ plain,		
without PE contact	**862-625**	200
○ L3-N-PE-L1-L2,		
with PE contact	**862-8625**	200
○ PE-N-L1-L2-L3,		
with PE contact	**862-9625**	200
snap-in feet at pos. 1+3+5,		
5-pole,		
white		
○ L3-N-PE-L1-L2,		
without PE contact	**862-2615**	200
○ PE-N-L1-L2-L3,		
without PE contact	**862-1615**	200
○ PE-N-L1-L2-L3 Ex,		
without PE contact	**862-1615/999-950** ❸	200
○ plain,		
without PE contact	**862-615**	200
○ L3-N-PE-L1-L2,		
with PE contact	**862-8615**	200
○ PE-N-L1-L2-L3,		
with PE contact	**862-9615**	200

862 Series Accessories

Comb-style jumper bar,
simply push into the conductor entry hole



I_N 32 A — **862-482** — 5

Test plug,
with 500 mm cable,
2 mm Ø



red — **210-136** — 50

Test plug,
with 500 mm cable,
2.3 mm Ø



yellow — **210-137** — 50

Marking strip, plain,
7.5 mm wide,
50 m roll



white — **709-178** — 1

Operating tool with partially insulated shaft,
type 2, (3.5 x 0.5) mm blade

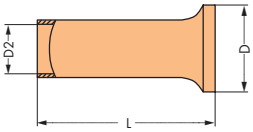


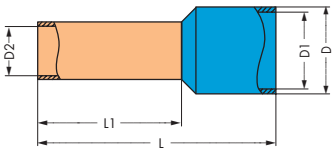
210-720 — 1

Certification organizations can be found in the overview on pages 622 and 623.

Ferrules for 4-Conductor, Chassis-Mount Terminal Strips and Crimping Tools

Ferrule, uninsulated, tin-plated, electrolytic copper, gastight crimped	Ferrule, insulated, tin-plated, electrolytic copper, gastight crimped	Variocrimp 4 crimping tool for insulated and uninsulated ferrules 0.25 mm² - 4 mm²/AWG 24 - 12







Item No.	Pack. Unit
Ferrule, uninsulated,	
according to DIN 46228, part 1/08.92	
216-141	5000 (5x1000)
216-142	5000 (5x1000)
216-143	5000 (5x1000)
216-144	5000 (5x1000)

Item No.		Pack. Unit
Ferrule, insulated,		
according to DIN 46228, part 4/09.90		
○ white	**216-241**	1000
○ gray	**216-242**	1000
○ red	**216-243**	1000
● black	**216-244**	1000

Item No.	Pack. Unit
Variocrimp 4 crimping tool,	
0.25 mm² - 4 mm²/AWG 24 - 12	
206-204	1

Ferrules

Technical Data

Ferrule, uninsulated,



sleeve for 0.5 mm²/AWG 22,
10 mm strip length,
L: 10 mm,
D: 2.1 mm, D2: 1 mm
216-141

Ferrule, insulated,



sleeve for 0.5 mm²/AWG 22,
12 mm strip length,
L: 16 mm, L1: 10 mm,
D: 3.1 mm, D1: 2.6 mm, D2: 1 mm
white **216-241**

Ferrule, uninsulated,



sleeve for 0.75 mm²/AWG 20,
10 mm strip length,
L: 10 mm,
D: 2.3 mm, D2: 1.2 mm
216-142

Ferrule, insulated,



sleeve for 0.75 mm²/AWG 20,
12 mm strip length,
L: 16 mm, L1: 10 mm,
D: 3.3 mm, D1: 2.8 mm, D2: 1.2 mm
gray **216-242**

Ferrule, uninsulated,



sleeve for 1 mm²/AWG 18,
10 mm strip length,
L: 10 mm,
D: 2.5 mm, D2: 1.4 mm
216-143

Ferrule, insulated,



sleeve for 1 mm²/AWG 18,
12 mm strip length,
L: 16 mm, L1: 10 mm,
D: 3.5 mm, D1: 3 mm, D2: 1.4 mm
red **216-243**

Ferrule, uninsulated,



sleeve for 1.5 mm²/AWG 16,
10 mm strip length,
L: 10 mm,
D: 2.8 mm, D2: 1.7 mm
216-144

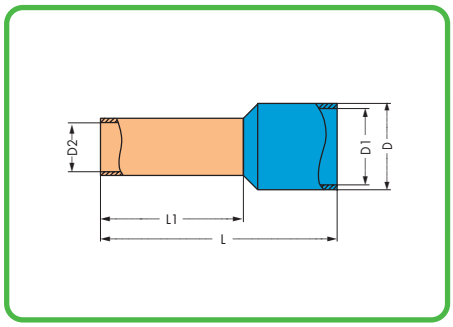
Ferrule, insulated,



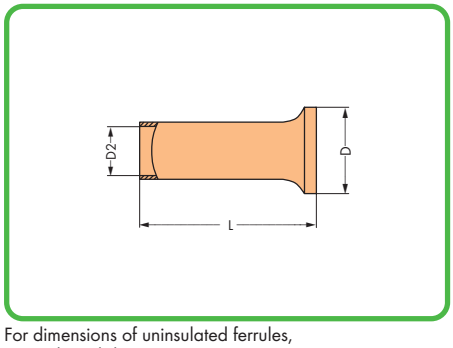
sleeve for 1.5 mm²/AWG 16,
12 mm strip length,
L: 16 mm, L1: 10 mm,
D: 4 mm, D1: 3.5 mm, D2: 1.7 mm
black **216-244**

Application notes:

- With "Variocrimp 4," the built-in crimping pressure control automatically adjusts force to the conductor cross section used. With "Variocrimp 16," it is necessary to select the wire gauge on the tool before crimping.
- Only one crimping station is needed to handle the specified conductor size range.
- Uniform compact crimping from all four sides for high conductor retention.
- No need to center the conductor into the ferrule.
- Conductor and ferrule insertion possible from both sides (for left- and right-handers).
- Built-in ratchet mechanism ensures gastight crimp connection.
- Crimping tools open automatically after crimping operation is complete.
- Comfortable handles for operator.

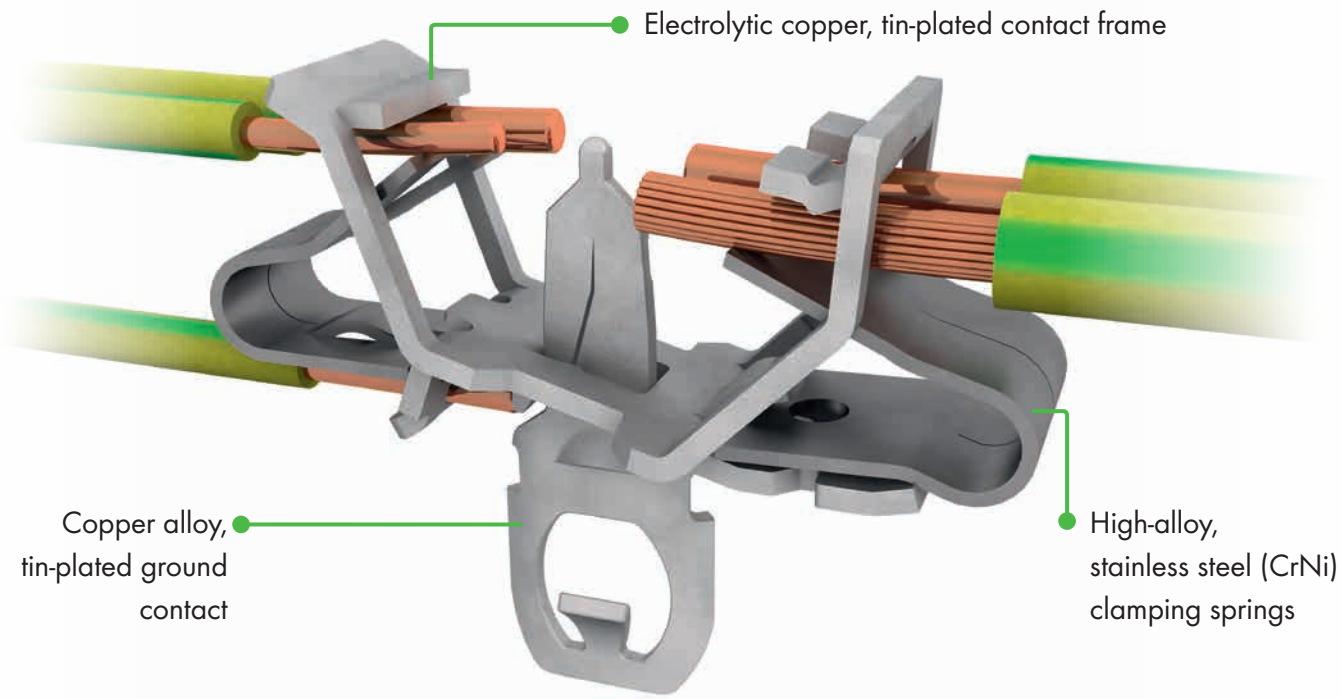


For dimensions of insulated ferrules,
see technical data.



For dimensions of uninsulated ferrules,
see technical data.

For Connecting Lighting and Equipment Worldwide
Contact Technology:
294 Series

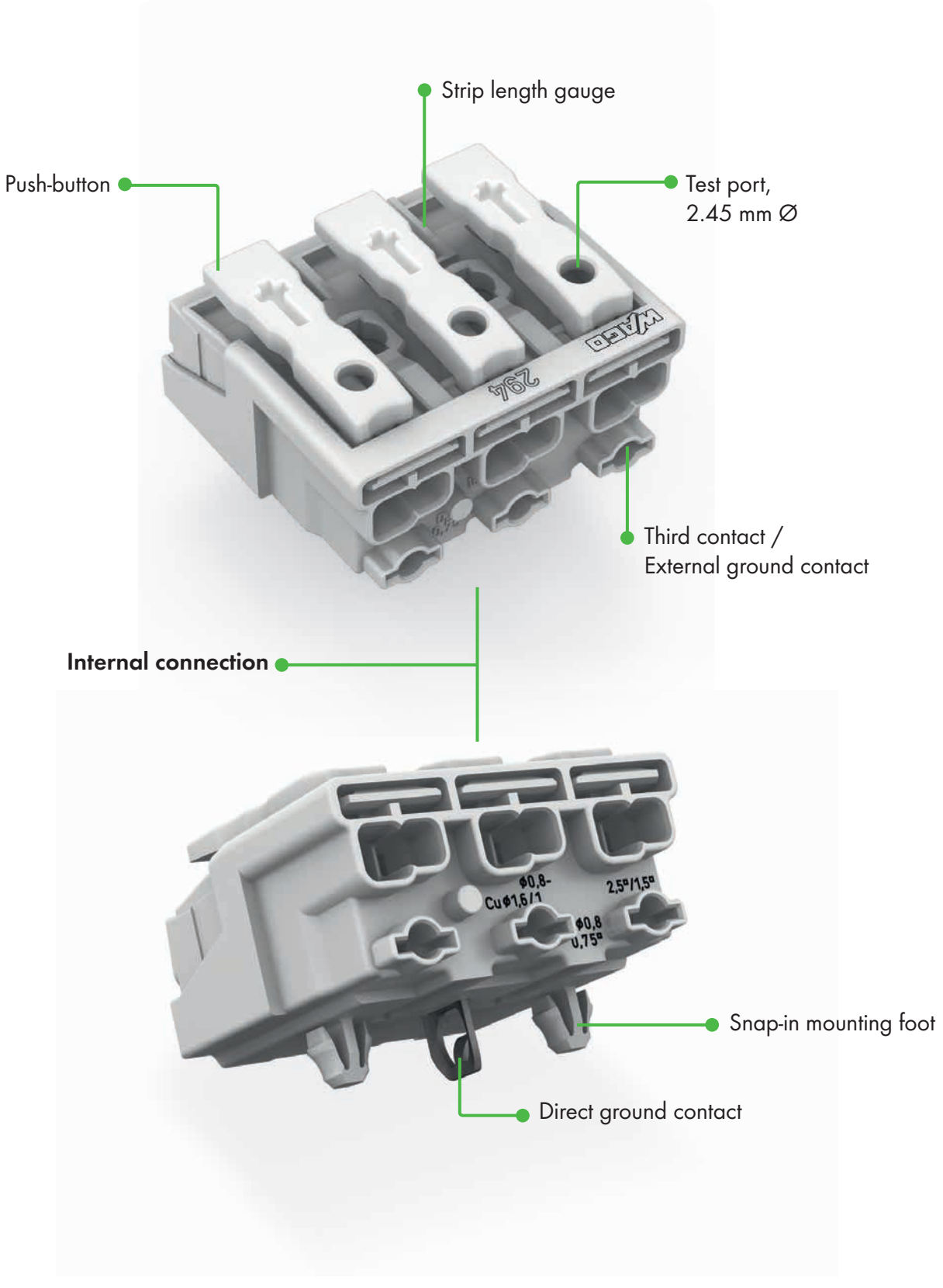


Internal connection:
PUSH WIRE® for internal wiring with solid conductors.

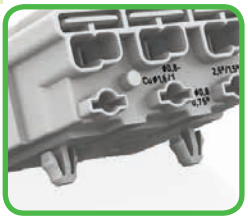
EUROPE
1 x 0.5 - 2.5 mm² "sol."
1 x 0.5 – 1.5 mm² "sol."
1 x 0.5 – 0.75 mm² "sol."
AMERICA
1 x AWG 18 - 14 "sol."
1 x AWG 18 - 16 "sol."
1 x AWG 18 "sol."
JAPAN
1 x 0.8 - 1.6 mm Ø "sol."
1 x 0.8 - 1 mm Ø "sol."
1 x 0.8 mm Ø "sol."

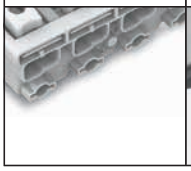
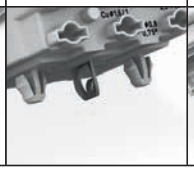
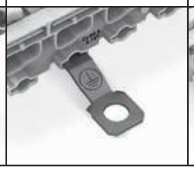
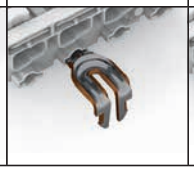
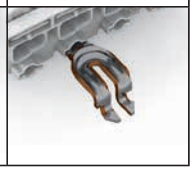
External connection:
CAGE CLAMP®S for power supply connections for all conductor types.

EUROPE
2 x 0.5 – 2.5 mm² "sol., str., f-str."
AMERICA
2 x AWG 18 - 12 "sol."
2 x AWG 18 - 14 "str., f-str."
JAPAN
2 x 0.8 - 2 mm Ø "sol."
2 x 0.5 - 2 mm² "str., f-str."


Strip length gauge
Push-button
Test port,
2.45 mm Ø
Third contact /
External ground contact
Internal connection
Snap-in mounting foot
Direct ground contact

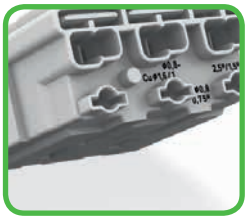
Power Supply Connectors With Two Snap-In Mounting Feet
294 Series

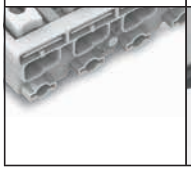
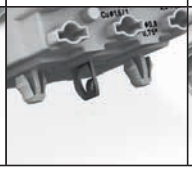
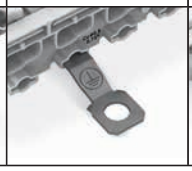
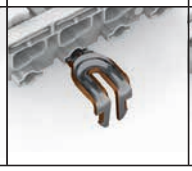
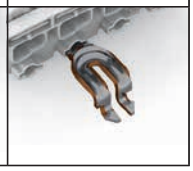


Without Ground Contact	With Direct Ground Contact	With Screw-Type Ground Contact	With Snap-In Ground Contact	With Angled Snap-In Ground Contact
				

Pole No.	Marking	Item No.	Item No.	Item No.	Item No.	Item No.
2 	without	**294-5002**	– – –	– – –	– – –	– – –
	N L	**294-5012**	– – –	– – –	– – –	– – –
	N' L'	**294-5022**	– – –	– – –	– – –	– – –
	DA– DA+	**294-5032**	– – –	– – –	– – –	– – –
	– +	**294-5072**	– – –	– – –	– – –	– – –
	1 N	**294-5052**	– – –	– – –	– – –	– – –
	2 1	**294-5042**	– – –	– – –	– – –	– – –
3 	without	**294-5003**	– – –	– – –	– – –	– – –
	N ⏚ L	**294-5013**	**294-5113**	**294-5413**	**294-5213**	**294-5313**
	N' ⏚ L'	**294-5023**	**294-5123**	**294-5423**	**294-5223**	**294-5323**
	1 ⏚ N	**294-5053**	**294-5153**	**294-5453**	**294-5253**	**294-5353**
	3 2 1	**294-5043**	– – –	– – –	– – –	– – –
4 	without	**294-5004**	– – –	– – –	– – –	– – –
	1/L' 2/L ⏚ N	**294-5024**	**294-5124**	**294-5424**	**294-5224**	**294-5324**
	1 2 ⏚ N	**294-5014**	**294-5114**	**294-5414**	**294-5214**	**294-5314**
	4 3 2 1	**294-5044**	– – –	– – –	– – –	– – –
5 	without	**294-5005**	– – –	– – –	– – –	– – –
	L3 L2 L1 ⏚ N	**294-5015**	– – –	**294-5415**	**294-5215**	**294-5315**
	L' N' L ⏚ N	**294-5025**	– – –	**294-5425**	**294-5225**	**294-5325**
	DA+ DA– L ⏚ N	**294-5035**	– – –	**294-5435**	**294-5235**	**294-5335**
	DA– N ⏚ L DA+	**294-5075**	**294-5175**	**294-5475**	**294-5275**	**294-5375**
	3 N ⏚ 1 2	**294-5055**	**294-5155**	**294-5455**	**294-5255**	**294-5355**
	5 4 3 2 1	**294-5045**	– – –	– – –	– – –	– – –

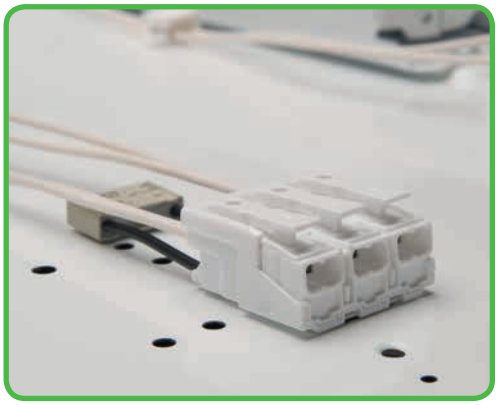
Power Supply Connectors Without Snap-In Mounting Feet
294 Series



Without Ground Contact	With Direct Ground Contact	With Screw-Type Ground Contact	With Snap-In Ground Contact	With Angled Snap-In Ground Contact
				

Pole No.	Marking	Item No.	Item No.	Item No.	Item No.	Item No.
2 	without	294-4002	– – –	– – –	– – –	– – –
	N L	294-4012	– – –	– – –	– – –	– – –
	N' L'	294-4022	– – –	– – –	– – –	– – –
	DA– DA+	294-4032	– – –	– – –	– – –	– – –
	– +	294-4072	– – –	– – –	– – –	– – –
	1 N	294-4052	– – –	– – –	– – –	– – –
	2 1	294-4042	– – –	– – –	– – –	– – –
3 	without	294-4003	– – –	– – –	– – –	– – –
	N ⏚ L	294-4013	– – –	294-4413	294-4213	294-4313
	N' ⏚ L'	294-4023	– – –	294-4423	294-4223	294-4323
	1 ⏚ N	294-4053	– – –	294-4453	294-4253	294-4353
	3 2 1	294-4043	– – –	– – –	– – –	– – –
4 	without	294-4004	– – –	– – –	– – –	– – –
	1/L' 2/L ⏚ N	294-4024	– – –	294-4424	294-4224	294-4324
	1 2 ⏚ N	294-4014	– – –	294-4414	294-4214	294-4314
	4 3 2 1	294-4044	– – –	– – –	– – –	– – –
5 	without	294-4005	– – –	– – –	– – –	– – –
	L3 L2 L1 ⏚ N	294-4015	– – –	294-4415	294-4215	294-4315
	L' N' L ⏚ N	294-4025	– – –	294-4425	294-4225	294-4325
	DA+ DA– L ⏚ N	294-4035	– – –	294-4435	294-4235	294-4335
	DA– N ⏚ L DA+	294-4075	– – –	294-4475	294-4275	294-4375
	3 N ⏚ 1 2	294-4055	– – –	294-4455	294-4255	294-4355
	5 4 3 2 1	294-4045	– – –	– – –	– – –	– – –
6 	without	294-4006	– – –	– – –	– – –	– – –
7 	without	294-4007	– – –	– – –	– – –	– – –

Power Supply Connectors for Lighting and Equipment
294 Series



- External connection of solid, stranded and fine-stranded connectors
- Universal conductor termination (AWG, metric)
- Third contact located at the bottom of internal connector end
- Strain relief plate can be retrofitted

Technical data:

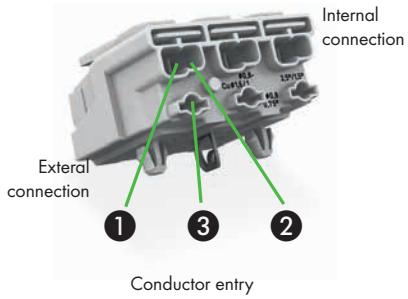
Rating per	**IEC/EN 60998-1**	**IEC/EN 60998-2-2**	
Overvoltage category	II	II	
Pollution degree	2	2	
Rated voltage	500 V	500 V	
Rated surge voltage	4 kV	4 kV	
Nominal current	24 A	24 A	
Temperature rating	T 85	T 85	

Conductor data (external connection):

Connection technology	**CAGE CLAMP®S**
Conductor size: solid, stranded or fine-stranded	2 x 0.5 – 2.5 mm²
Conductor size: with ferrule	2 x 0.5 – 1.5 mm²
AWG: solid	2 x 18 – 12
AWG: fine-stranded and stranded	2 x 18 – 14
Strip length	8 – 9 mm / 0.31 – 0.35 in

Conductor data (internal connection):

Connection technology	**PUSH WIRE®**	
Conductor entry ❶		
Conductor size: solid	0.5 – 2.5 mm²	
Conductor size: fine-stranded	0.5 – 1.5 mm²	(with uninsulated ferrule)
Conductor size: fine-stranded	0.5 – 1 mm²	(with insulated ferrule)
AWG: solid	18 – 14	
Strip length	8 – 9 mm / 0.31 – 0.35 in	
Conductor entry ❷		
Conductor size: solid	0.5 – 1.5 mm²	
Conductor size: fine-stranded	0.5 – 1 mm²	(with uninsulated ferrule)
Conductor size: fine-stranded	0.5 – 0.75 mm²	(with insulated ferrule)
AWG: solid	18 – 16	
Strip length	8 – 9 mm / 0.31 – 0.35 in	
Conductor entry ❸		
Conductor size: solid	0.5 – 0.75 mm²	
AWG: solid	18	
Strip length	8 – 9 mm / 0.31 – 0.35 in	



Material data:

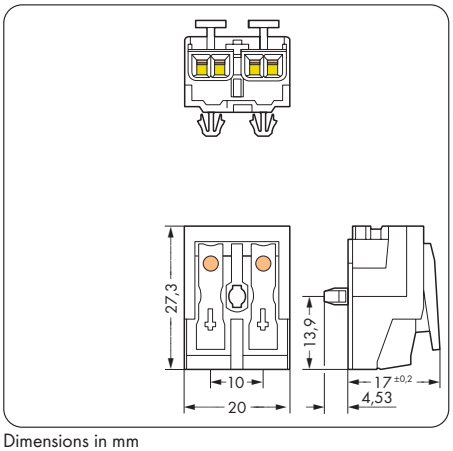
Material group	IIIa
Insulating material	Polycarbonate (PC)
Temperature stability	Relative temperature index (RTI) of 125 °C
Flammability rating per UL 94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E_{Cu})
Contact plating	tin-plated
16 mm-high versions are available upon request.	

Power Supply Connectors, 2-Pole
294 Series

without ground contact



	Item No.	Pack. Unit
Terminal block for field connection without ground contact,		
with snap-in mounting feet,		
2-pole, white		
◯ N-L	**294-5012**	1000
◯ N´-L´	**294-5022**	1000
◯ DA- DA+	**294-5032**	1000
◯ - +	**294-5072**	1000
◯ 2-1	**294-5042**	1000
◯ 1-N	**294-5052**	1000
◯ plain	**294-5002**	1000
Terminal block for field connection without ground contact,		
without snap-in mounting feet,		
2-pole, white		
◯ N-L	**294-4012**	1000
◯ N´-L´	**294-4022**	1000
◯ DA- DA+	**294-4032**	1000
◯ - +	**294-4072**	1000
◯ 2-1	**294-4042**	1000
◯ 1-N	**294-4052**	1000
◯ plain	**294-4002**	1000



Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

Power Supply Connectors, 3-Pole
294 Series

without ground contact	with direct ground contact	with screw-type ground contact



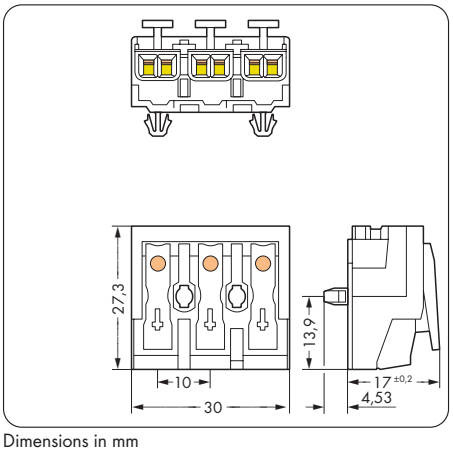




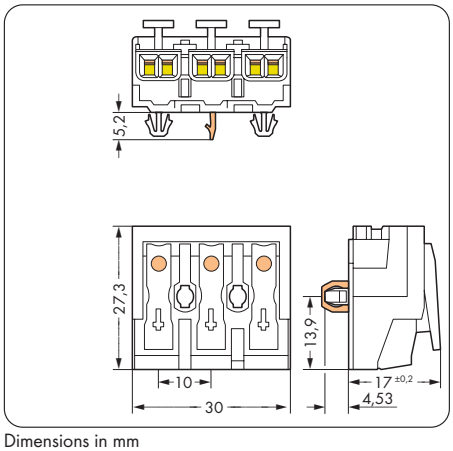
	Item No.	Pack. Unit
Terminal block for field connection without ground contact,		
with snap-in mounting feet,		
3-pole, white		
◯ N-PE-L	**294-5013**	500
◯ N´-PE-L´	**294-5023**	500
◯ 1-PE-N	**294-5053**	500
◯ 3-2-1	**294-5043**	500
◯ plain	**294-5003**	500
Terminal block for field connection without ground contact,		
without snap-in mounting feet,		
3-pole, white		
◯ N-PE-L	**294-4013**	500
◯ N´-PE-L´	**294-4023**	500
◯ 1-PE-N	**294-4053**	500
◯ 3-2-1	**294-4043**	500
◯ plain	**294-4003**	500

	Item No.	Pack. Unit
Terminal block for field connection with direct ground contact,		
with snap-in mounting feet,		
3-pole, white		
◯ N-PE-L	**294-5113**	500
◯ N´-PE-L´	**294-5123**	500
◯ 1-PE-N	**294-5153**	500

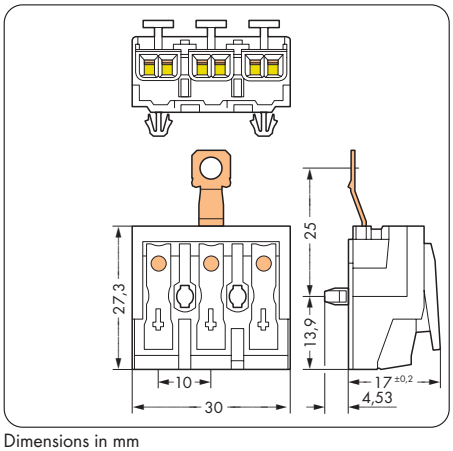
	Item No.	Pack. Unit
Terminal block for field connection with screw-type ground contact,		
with snap-in mounting feet,		
3-pole, white		
◯ N-PE-L	**294-5413**	500
◯ N´-PE-L´	**294-5423**	500
◯ 1-PE-N	**294-5453**	500
Terminal block for field connection with screw-type ground contact,		
without snap-in mounting feet,		
3-pole, white		
◯ N-PE-L	**294-4413**	500
◯ N´-PE-L´	**294-4423**	500
◯ 1-PE-N	**294-4453**	500



Dimensions in mm



Dimensions in mm



Dimensions in mm

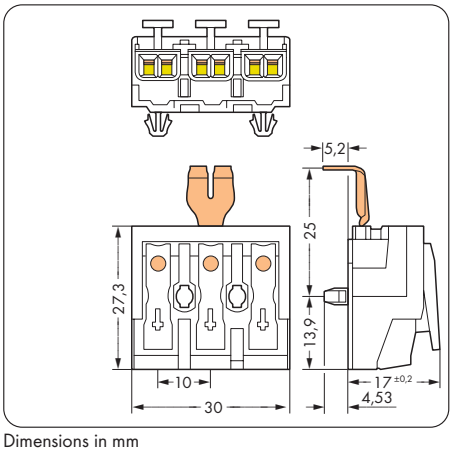
Certification organizations can be found in the overview on pages 622 and 623.

with snap-in ground contact	with angled snap-in ground contact

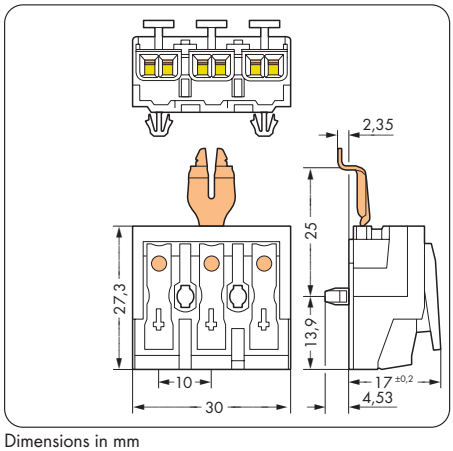




	Item No.	Pack. Unit		Item No.	Pack. Unit
Terminal block for field connection with snap-in ground contact, with snap-in mounting feet, 3-pole, white			**Terminal block for field connection with angled snap-in ground contact,** with angled snap-in mounting feet, 3-pole, white		
◯ N-PE-L	**294-5213**	500	◯ N-PE-L	**294-5313**	500
◯ N´-PE-L´	**294-5223**	500	◯ N´-PE-L´	**294-5323**	500
◯ 1-PE-N	**294-5253**	500	◯ 1-PE-N	**294-5353**	500
Terminal block for field connection with snap-in ground contact, without snap-in mounting feet, 3-pole, white			**Terminal block for field connection with angled snap-in ground contact,** without snap-in mounting feet, 3-pole, white		
◯ N-PE-L	**294-4213**	500	◯ N-PE-L	**294-4313**	500
◯ N´-PE-L´	**294-4223**	500	◯ N´-PE-L´	**294-4323**	500
◯ 1-PE-N	**294-4253**	500	◯ 1-PE-N	**294-4353**	500



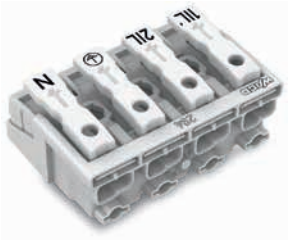
Dimensions in mm



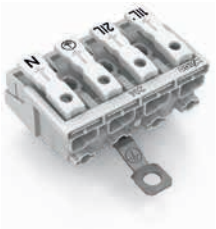
Dimensions in mm

Power Supply Connectors, 4-Pole
294 Series

without ground contact	with direct ground contact	with screw-type ground contact



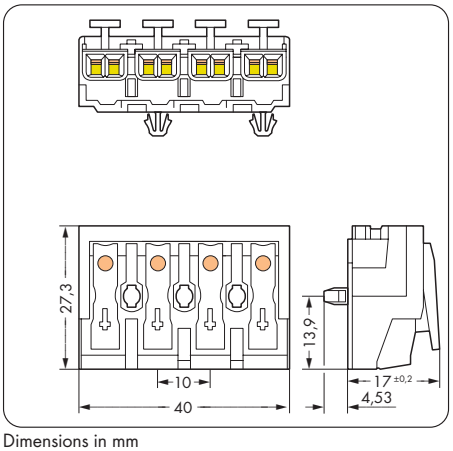




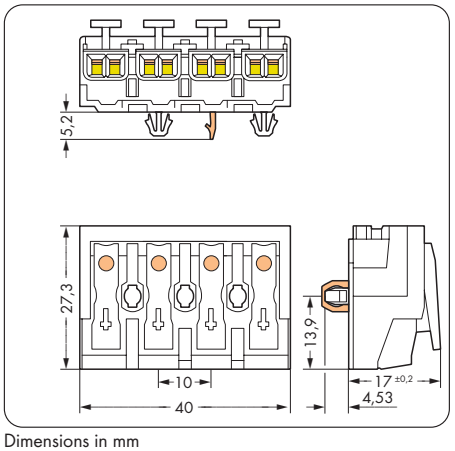
	Item No.	Pack. Unit
Terminal block for field connection without ground contact,		
with snap-in mounting feet,		
4-pole, white		
◯ 1/L´-2/L-PE-N	**294-5024**	500
◯ 1-2-PE-N	**294-5014**	500
◯ 4-3-2-1	**294-5044**	500
◯ plain	**294-5004**	500
Terminal block for field connection without ground contact,		
without snap-in mounting feet,		
4-pole, white		
◯ 1/L´-2/L-PE-N	**294-4024**	500
◯ 1-2-PE-N	**294-4014**	500
◯ 4-3-2-1	**294-4044**	500
◯ plain	**294-4004**	500

	Item No.	Pack. Unit
Terminal block for field connection with direct ground contact,		
with snap-in mounting feet,		
4-pole, white		
◯ 1/L´-2/L-PE-N	**294-5124**	500
◯ 1-2-PE-N	**294-5114**	500

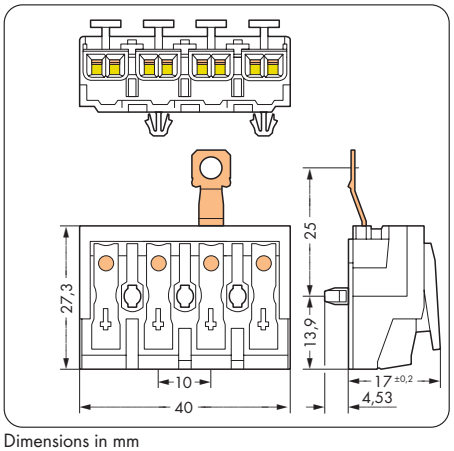
	Item No.	Pack. Unit
Terminal block for field connection with screw-type ground contact,		
with snap-in mounting feet,		
4-pole, white		
◯ 1/L´-2/L-PE-N	**294-5424**	500
◯ 1-2-PE-N	**294-5414**	500
Terminal block for field connection with screw-type ground contact,		
without snap-in mounting feet,		
4-pole, white		
◯ 1/L´-2/L-PE-N	**294-4424**	500
◯ 1-2-PE-N	**294-4414**	500



Dimensions in mm



Dimensions in mm



Dimensions in mm

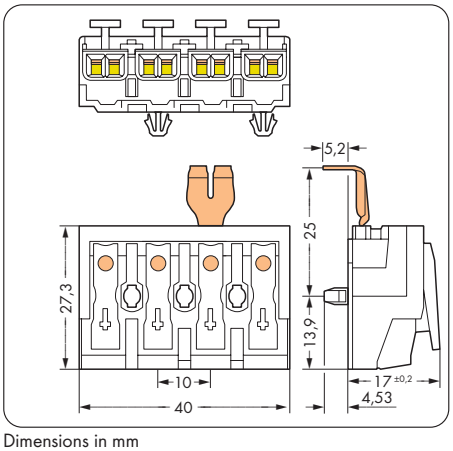
Certification organizations can be found in the overview on pages 622 and 623.

with snap-in ground contact	with angled snap-in ground contact

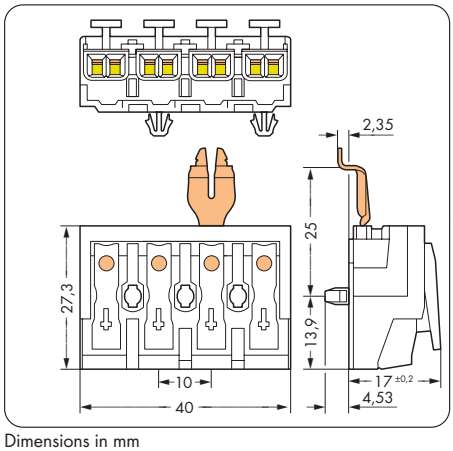




	Item No.	Pack. Unit		Item No.	Pack. Unit
Terminal block for field connection with snap-in ground contact, with snap-in mounting feet, 4-pole, white			**Terminal block for field connection with angled snap-in ground contact,** with snap-in mounting feet, 4-pole, white		
◯ 1/L´-2/L-PE-N	**294-5224**	500	◯ 1/L´-2/L-PE-N	**294-5324**	500
◯ 1-2-PE-N	**294-5214**	500	◯ 1-2-PE-N	**294-5314**	500
Terminal block for field connection without snap-in ground contact, without snap-in mounting feet, 4-pole, white			**Terminal block for field connection with angled snap-in ground contact,** without snap-in mounting feet, 4-pole, white		
◯ 1/L´-2/L-PE-N	**294-4224**	500	◯ 1/L´-2/L-PE-N	**294-4324**	500
◯ 1-2-PE-N	**294-4214**	500	◯ 1-2-PE-N	**294-4314**	500



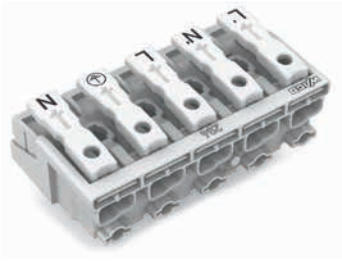
Dimensions in mm



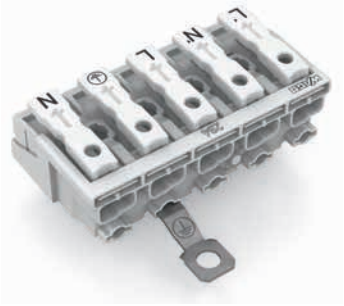
Dimensions in mm

Power Supply Connectors, 5-Pole
294 Series

without ground contact	with direct ground contact	with screw-type ground contact



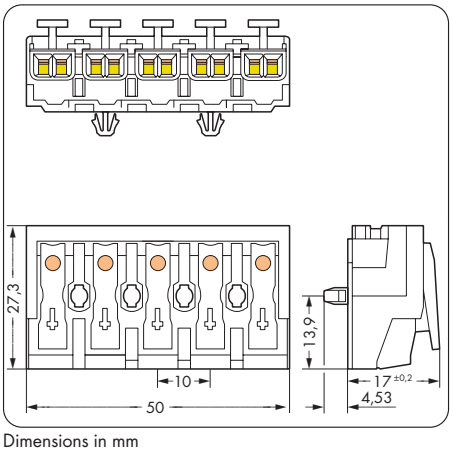




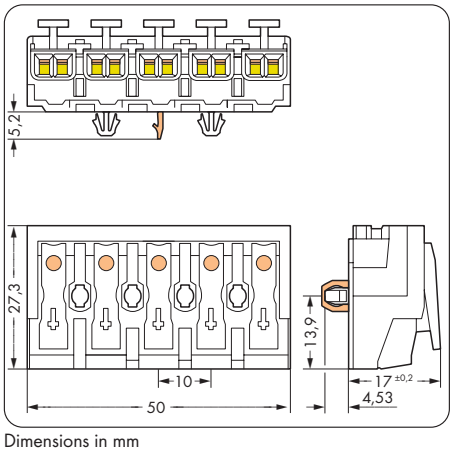
	Item No.	Pack. Unit
Terminal block for field connection without ground contact,		
with snap-in mounting feet,		
5-pole, white		
◯ L´-N´-L-PE-N	**294-5025**	250
◯ L3-L2-L1-PE-N	**294-5015**	250
◯ DA+ DA- L PE N	**294-5035**	250
◯ DA- N PE L DA+	**294-5075**	250
◯ 3-N-PE-1-2	**294-5055**	250
◯ 5-4-3-2-1	**294-5045**	250
◯ plain	**294-5005**	250
Terminal block for field connection without ground contact,		
without snap-in mounting feet,		
5-pole, white		
◯ L´-N´-L-PE-N	**294-4025**	250
◯ L3-L2-L1-PE-N	**294-4015**	250
◯ DA+ DA- L PE N	**294-4035**	250
◯ DA- N PE L DA+	**294-4075**	250
◯ 3-N-PE-1-2	**294-4055**	250
◯ 5-4-3-2-1	**294-4045**	250
◯ plain	**294-4005**	250

	Item No.	Pack. Unit
Terminal block for field connection with direct ground contact,		
with snap-in mounting feet,		
5-pole, white		
◯ DA- N PE L DA+	**294-5175**	250
◯ 3-N-PE-1-2	**294-5155**	250

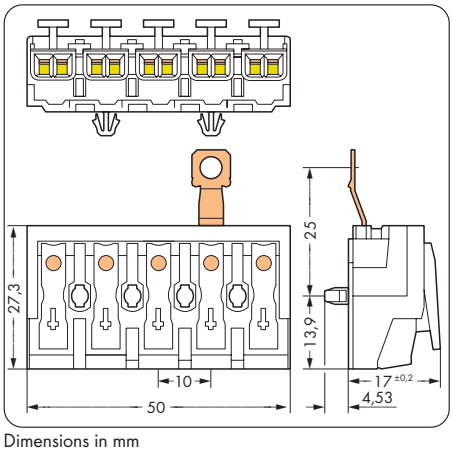
	Item No.	Pack. Unit
Terminal block for field connection with screw-type ground contact,		
with snap-in mounting feet,		
5-pole, white		
◯ L´-N´-L-PE-N	**294-5425**	250
◯ L3-L2-L1-PE-N	**294-5415**	250
◯ DA+ DA- L PE N	**294-5435**	250
◯ DA- N PE L DA+	**294-5475**	250
◯ 3-N-PE-1-2	**294-5455**	250
Terminal block for field connection with screw-type ground contact,		
without snap-in mounting feet,		
5-pole, white		
◯ L´-N´-L-PE-N	**294-4425**	250
◯ L3-L2-L1-PE-N	**294-4415**	250
◯ DA+ DA- L PE N	**294-4435**	250
◯ DA- N PE L DA+	**294-4475**	250
◯ 3-N-PE-1-2	**294-4455**	250



Dimensions in mm



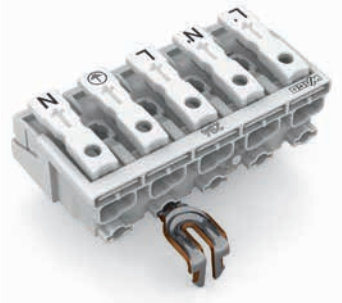
Dimensions in mm

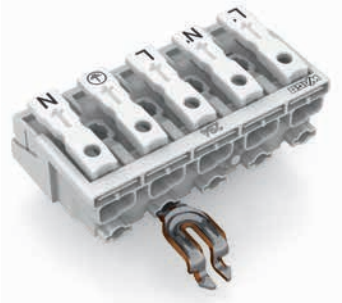


Dimensions in mm

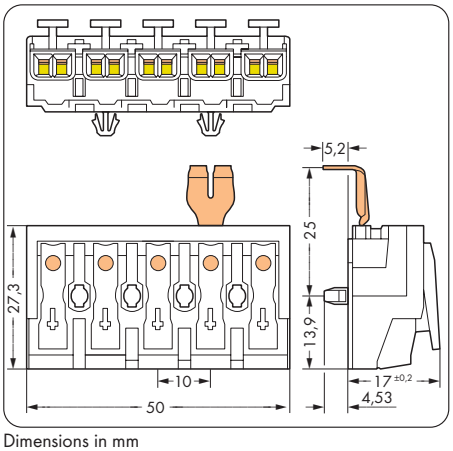
Certification organizations can be found in the overview on pages 622 and 623.

with snap-in ground contact	with angled snap-in ground contact

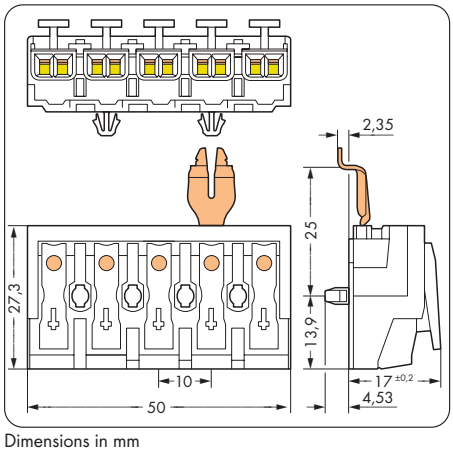




	Item No.	Pack. Unit		Item No.	Pack. Unit
Terminal block for field connection with snap-in ground contact, with snap-in mounting feet, 5-pole, white			**Terminal block for field connection with angled snap-in ground contact,** with snap-in mounting feet, 5-pole, white		
◯ L´-N´-L-PE-N	**294-5225**	250	◯ L´-N´-L-PE-N	**294-5325**	250
◯ L3-L2-L1-PE-N	**294-5215**	250	◯ L3-L2-L1-PE-N	**294-5315**	250
◯ DA+ DA- L PE N	**294-5235**	250	◯ DA+ DA- L PE N	**294-5335**	250
◯ DA- N PE L DA+	**294-5275**	250	◯ DA- N PE L DA+	**294-5375**	250
◯ 3-N-PE-1-2	**294-5255**	250	◯ 3-N-PE-1-2	**294-5355**	250
Terminal block for field connection with snap-in ground contact, without snap-in mounting feet, 5-pole, white			**Terminal block for field connection with angled snap-in ground contact,** without snap-in mounting feet, 5-pole, white		
◯ L´-N´-L-PE-N	**294-4225**	250	◯ L´-N´-L-PE-N	**294-4325**	250
◯ L3-L2-L1-PE-N	**294-4215**	250	◯ L3-L2-L1-PE-N	**294-4315**	250
◯ DA+ DA- L PE N	**294-4235**	250	◯ DA+ DA- L PE N	**294-4335**	250
◯ DA- N PE L DA+	**294-4275**	250	◯ DA- N PE L DA+	**294-4375**	250
◯ 3-N-PE-1-2	**294-4255**	250	◯ 3-N-PE-1-2	**294-4355**	250



Dimensions in mm



Dimensions in mm

Power Supply Connectors, 6- and 7-Pole
294 Series

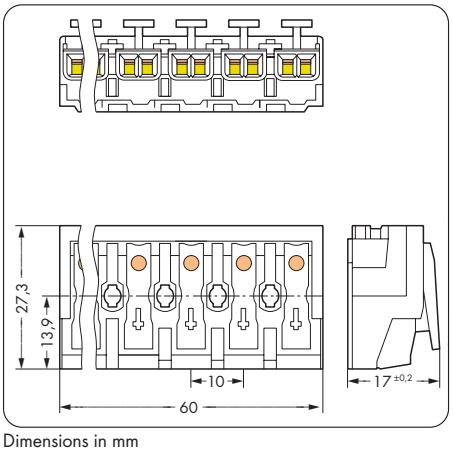
CAGE CLAMP® S
PUSH WIRE®

without ground contact	without ground contact	

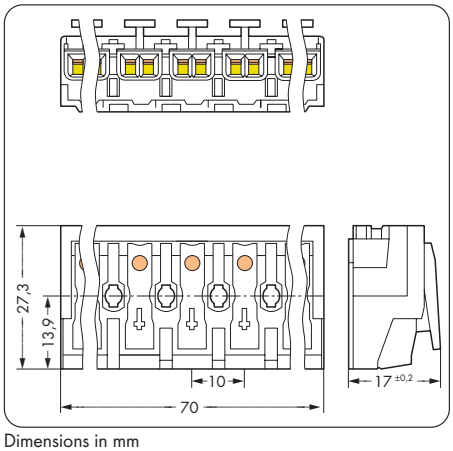




Item No.		Pack. Unit	Item No.		Pack. Unit	
Terminal block for field connection without ground contact,			**Terminal block for field connection without ground contact,**			
without snap-in mounting feet,			without snap-in mounting feet,			
6-pole, white			7-pole, white			
◯ plain	**294-4006**	250	◯ plain	**294-4007**	200	



Dimensions in mm



Dimensions in mm

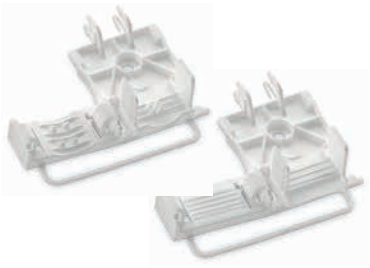
Certification organizations can be found in the overview on pages 622 and 623.

Tools and Strain Relief Plates

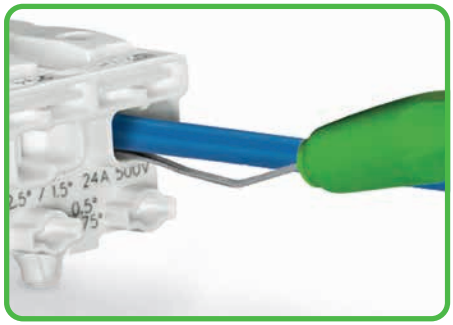
Assembly tool	Extraction tool	Strain relief plate



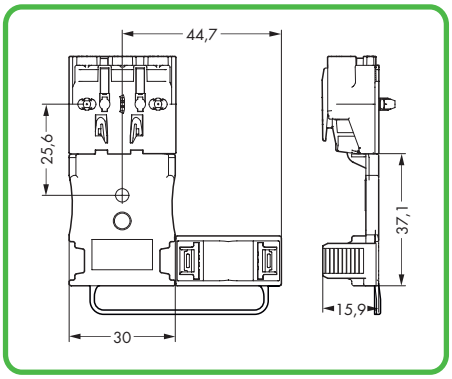




Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Assembly tool, for pressing the snap-in mounting feet into the mounting plate and for safe and easy fitting of the ground contacts		**Extraction tool,** suitable for removing conductors from PUSH WIRE® contacts		**Strain relief plate,** with locking clip, for multicore cable: 1 x outer diameter 5.2 - 12 mm	
294-199	1	**206-294**	1	◯ white **294-364**	50
				Strain relief plate, with locking clip, for flat cables and individual conductors: min. 3 x 0.5 mm², max. 5 x 2.5 mm² or 7 x 1.5 mm²	
				◯ white **294-384**	50



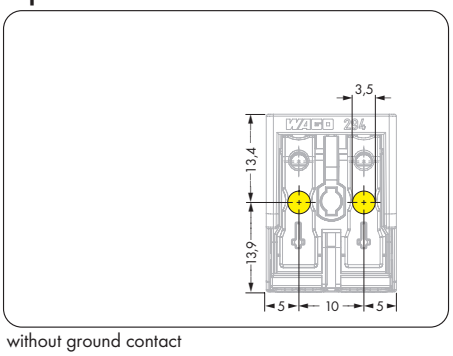
For removing a connected conductor.
Slide the extraction tool beneath the conductor and pull out the conductor along with the extraction tool.



Dimensions in mm

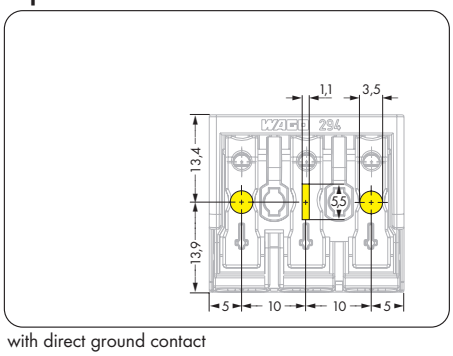
Drilled Hole Drawings for Attachment with Snap-In Mounting Feet 294 Series

2-pole



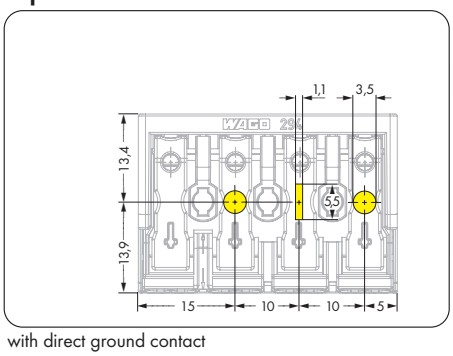
without ground contact

3-pole



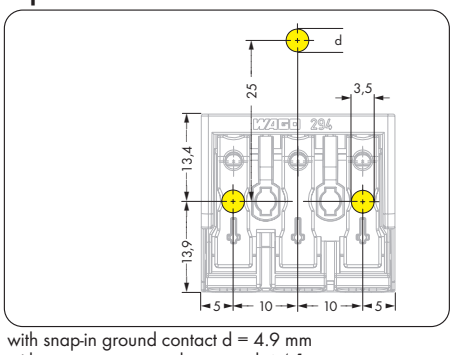
with direct ground contact

4-pole



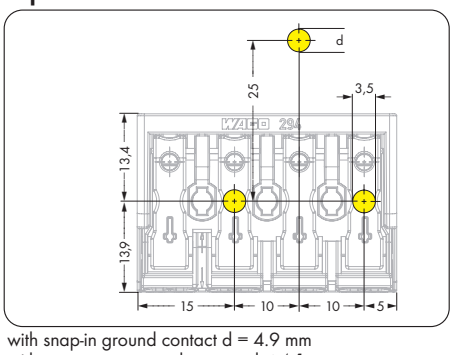
with direct ground contact

3-pole



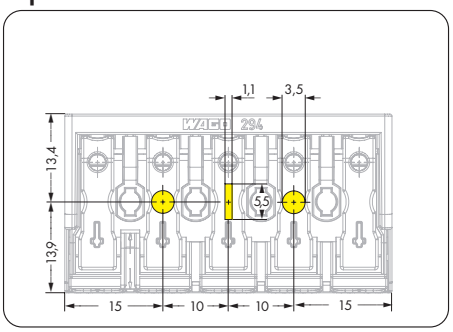
with snap-in ground contact d = 4.9 mm
with screw-type ground contact d ≤ 4.1 mm

4-pole



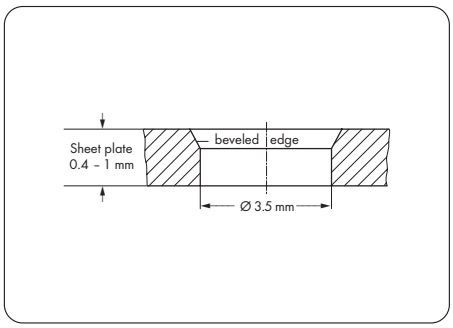
with snap-in ground contact d = 4.9 mm
with screw-type ground contact d ≤ 4.1 mm

5-pole

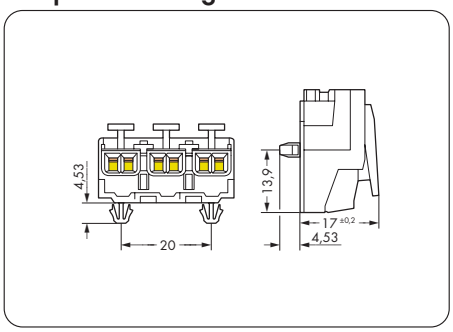


with direct ground contact

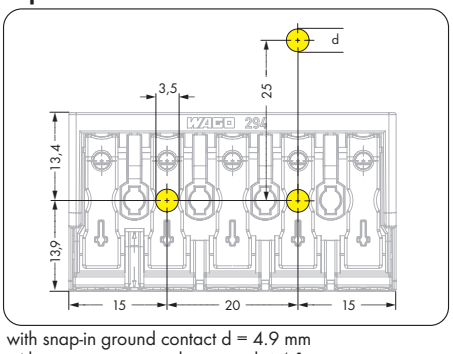
Drilled hole for snap-in mounting feet



Snap-in mounting foot



5-pole

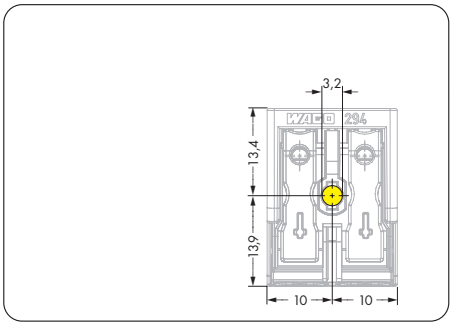


with snap-in ground contact d = 4.9 mm
with screw-type ground contact d ≤ 4.1 mm

Drilled hole drawings of scale 1 : 1

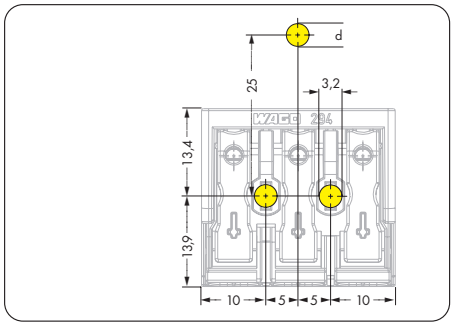
Drilled Hole Drawings for Attachment Using Screws
294 Series

2-pole



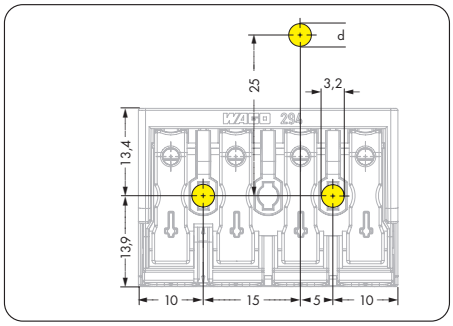
without ground contact

3-pole



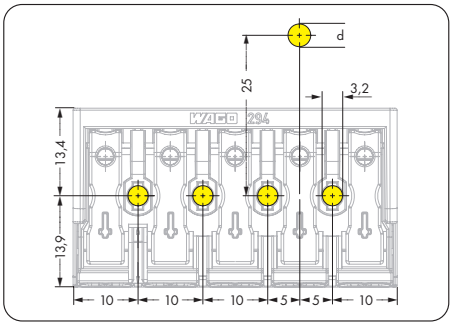
with snap-in ground contact d = 4.9 mm
with screw-type ground contact d ≤ 4.1 mm

4-pole



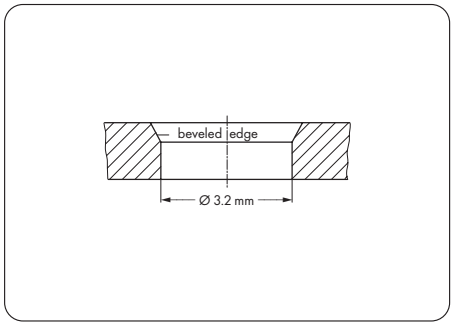
with snap-in ground contact d = 4.9 mm
with screw-type ground contact d ≤ 4.1 mm

5-pole



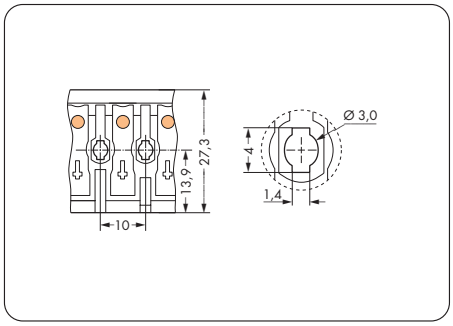
with snap-in ground contact d = 4.9 mm
with screw-type ground contact d ≤ 4.1 mm

Drilled hole for screw



Attention!
Maximum thread diameter for self-tapping screws: 3 mm.

Fixing hole for screw



Attention!
Maximum thread diameter for self-tapping screws: 3 mm.

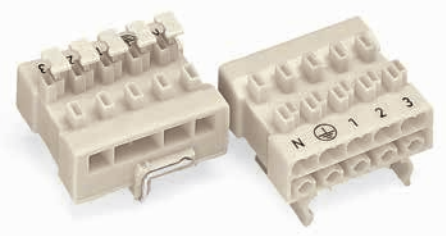
Drilled hole drawings of scale 1 : 1

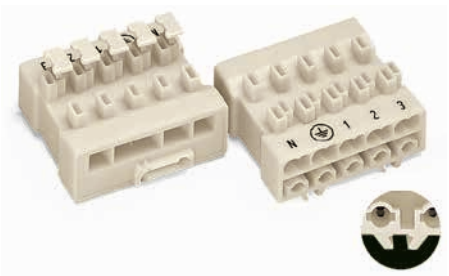
Connection System with Phase Selection for Fluorescent Lighting Fixtures
Power Supply Connectors
293 Series

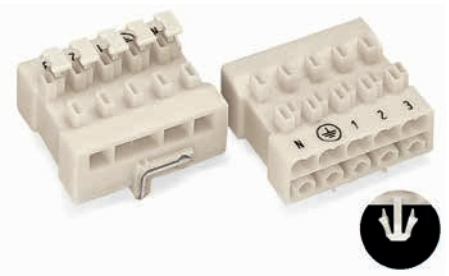
0.5 - 2.5 mm² "s" ❶	AWG 20 - 14 "s"	
0.5 - 0.75 mm² "s" ❶	AWG 20 - 18 "s"	
2.5 mm² "s" ❷	AWG 12 "s"	
500 V/4 kV/2 ❸		
I_N 20 A		
8 - 9 mm / 0.33 in ❹		

0.5 - 2.5 mm² "s" ❶	AWG 20 - 14 "s"	
0.5 - 0.75 mm² "s" ❶	AWG 20 - 18 "s"	
2.5 mm² "s" ❷	AWG 12 "s"	
500 V/4 kV/2 ❸		
I_N 20 A		
8 - 9 mm / 0.33 in ❹		

0.5 - 2.5 mm² "s" ❶	AWG 20 - 14 "s"	
0.5 - 0.75 mm² "s" ❶	AWG 20 - 18 "s"	
2.5 mm² "s" ❷	AWG 12 "s"	
500 V/4 kV/2 ❸		
I_N 20 A		
8 - 9 mm / 0.33 in ❹		



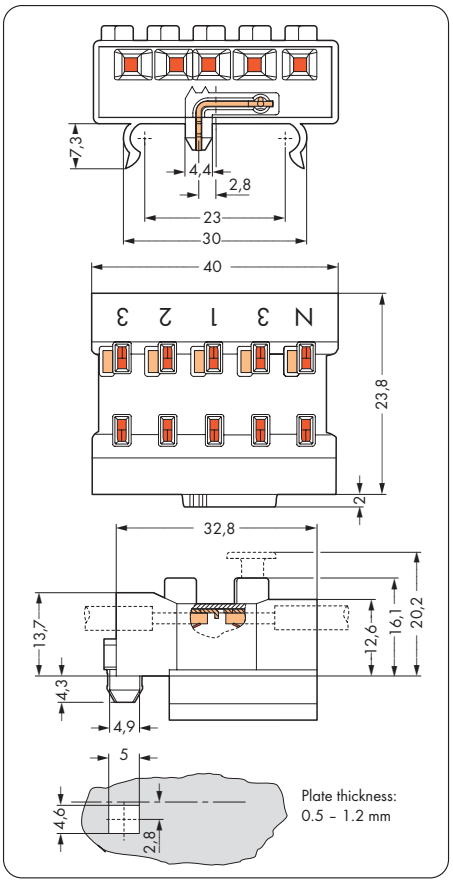




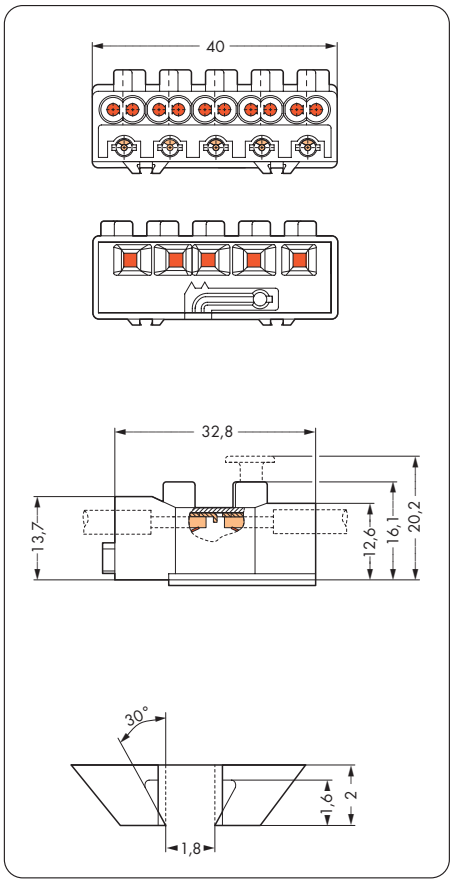
Pole No.	Item No.	Pack. Unit
Terminal block for field connection with snap-in foot and direct ground contact,		
white,		
with push-buttons on the field side		
◯ 5	**293-325**	250
without push-button		
◯ 5	**293-225**	250

Pole No.	Item No.	Pack. Unit
Terminal block for field connection with dovetail and without direct ground contact,		
white,		
with push-buttons on the field side		
◯ 5	**293-220**	250
without push-button		
◯ 5	**293-219**	250

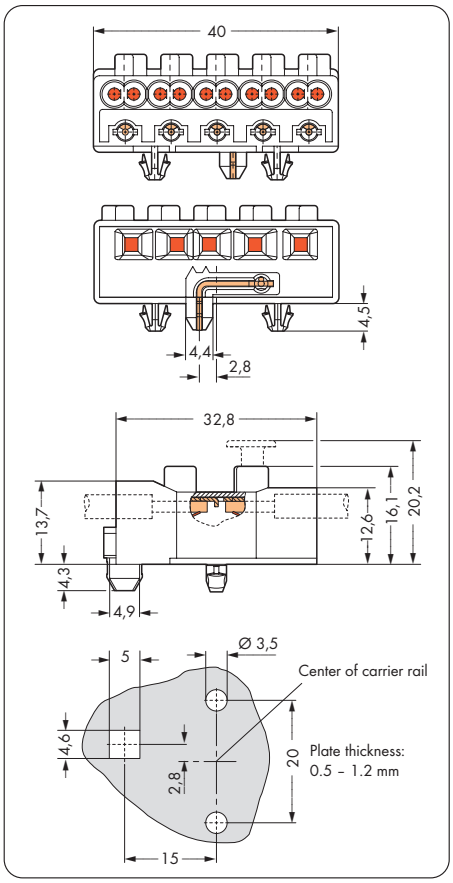
Pole No.	Item No.	Pack. Unit
Terminal block for field connection with snap-in mounting feet and direct ground contact,		
white,		
with push-buttons on the field side		
◯ 5	**293-222**	250
without push-button		
◯ 5	**293-221**	250



Dimensions in mm



Dimensions in mm



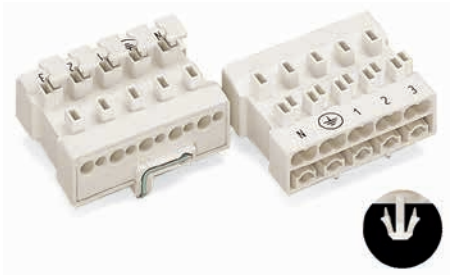
Dimensions in mm

Metal plate cutout for direct ground contact must be free of varnish and oxide films.
Equipped with varnished metal plates upon request.

Metal plate cutout for direct ground contact must be free of varnish and oxide films.
Equipped with varnished metal plates upon request.

Certification organizations can be found in the overview on pages 622 and 623.

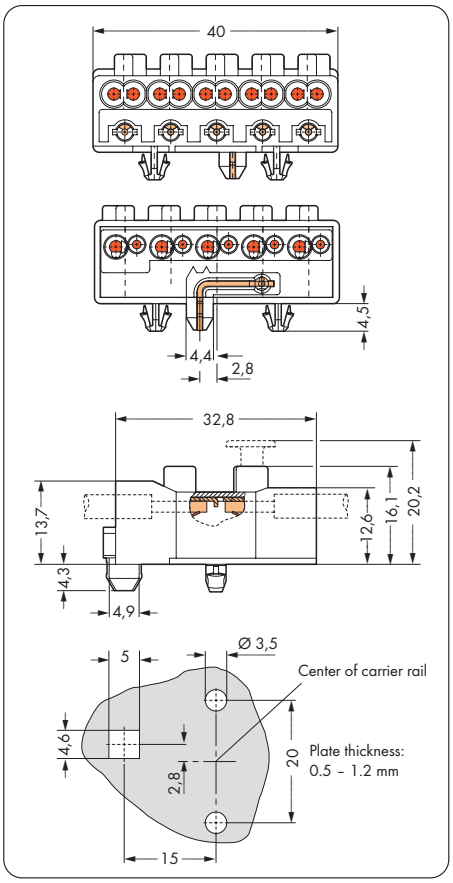
0.5 - 2.5 mm² "s" ❶	AWG 20 - 14 "s"
0.5 - 0.75 mm² "s" ❶	AWG 20 - 18 "s"
2.5 mm² "s" ❷	AWG 12 "s"
500 V/4 kV/2 ❸	
I_N 20 A	
8 - 9 mm / 0.33 in ❹	



Power supply connector with custom foot, with and without direct ground contact, white,
with and without push-buttons on the power supply side

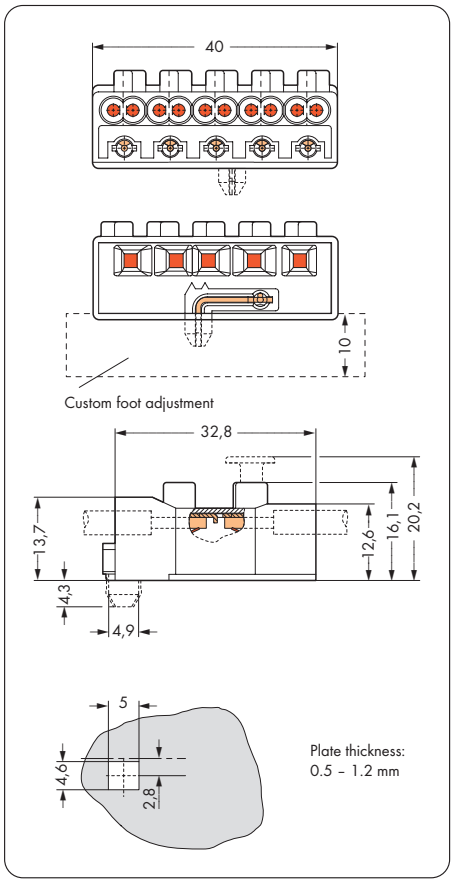
❶ Power supply side
❷ Lighting side
❸ 500 V = rated voltage
4 kV = rated surge voltage
2 = pollution degree
(also see Section 14)
❹ Strip length, see packaging or instructions.

Pole No.	Item No.	Pack. Unit
Terminal block for field connection (round conductor entry) with snap-in mounting feet and direct ground contact, white,		
with push-buttons on the field side		
◯ 5	**293-230**	250
without push-button		
◯ 5	**293-228**	250



Dimensions in mm

Metal plate cutout for direct ground contact must be free of varnish and oxide films.
Equipped with varnished metal plates upon request.



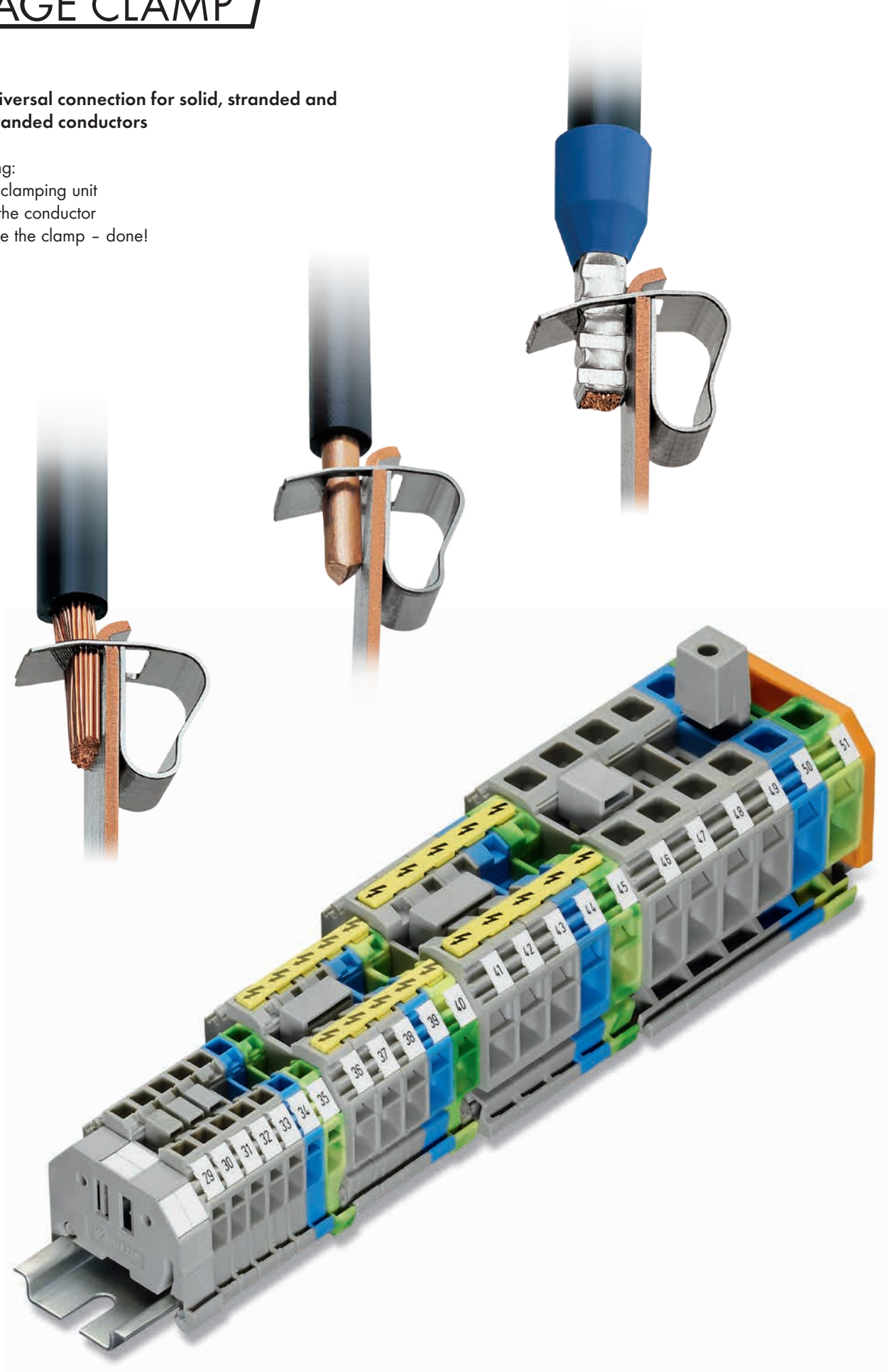
Dimensions in mm

Metal plate cutout for direct ground contact must be free of varnish and oxide films.
Equipped with varnished metal plates upon request.

CAGE CLAMP®

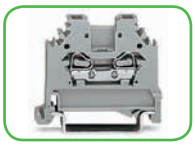
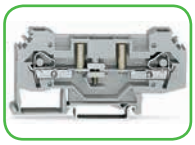
The universal connection for solid, stranded and fine-stranded conductors

Handling:
- Open clamping unit
- Insert the conductor
- Release the clamp – done!



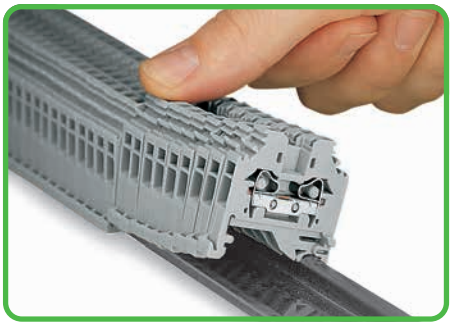
Rail-Mounted Terminal Blocks, Classic

Side-Entry Wiring

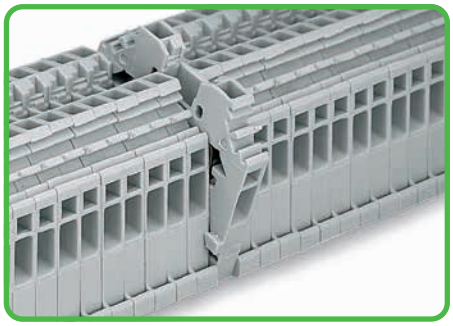
			Page
	**Through and Ground Conductor Terminal Blocks** 0.08 mm² to 16 mm² (28–6 AWG)	279 to 283 Series	450
	**Disconnect/Test Terminal Blocks, Ground Conductor Disconnect Terminal Blocks** 0.2 mm² to 6 mm² (24–10 AWG)	282 Series	454
	**Fuse Terminal Blocks** 0.2 mm² to 6 mm² (24–10 AWG)	282 Series	456
	**Accessories for Rail-Mounted Terminal Blocks** – Step-Down Jumpers for Through Terminal Blocks		453

Rail-Mounted Terminal Blocks, Side-Entry
279 to 284 Series

Assembly

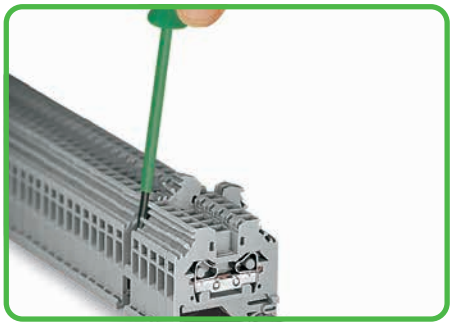


Snapping side-entry rail-mounted terminal blocks onto the carrier rail.



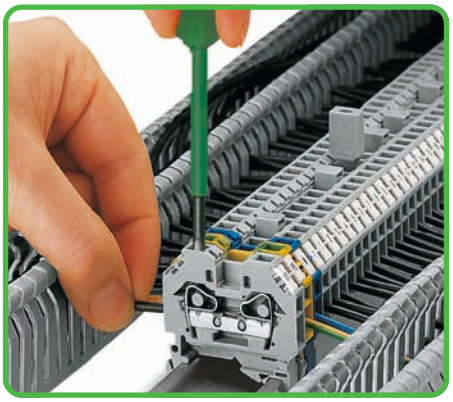
Quick assembly keys prevent reverse mounting.

Removal

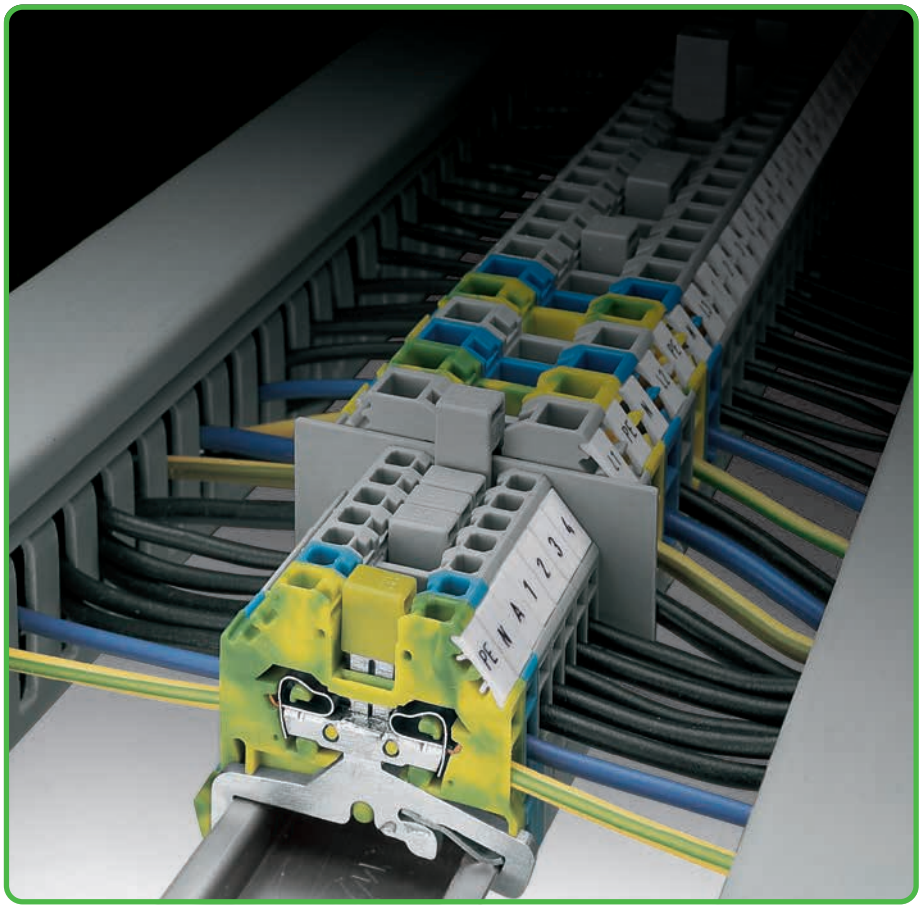


Removal from the carrier rail.

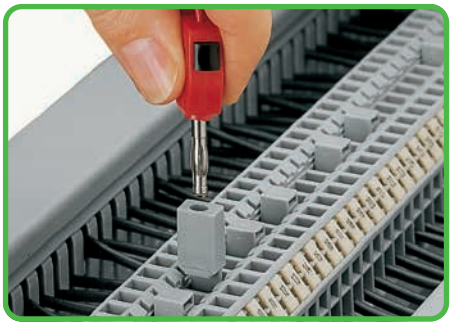
CAGE CLAMP® connection



Conductor termination

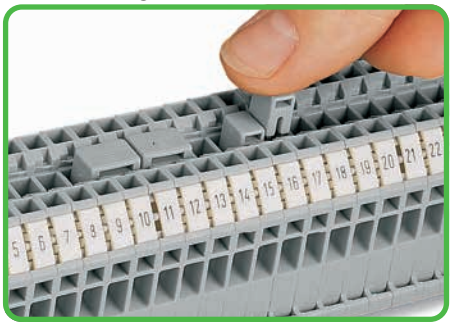


Testing



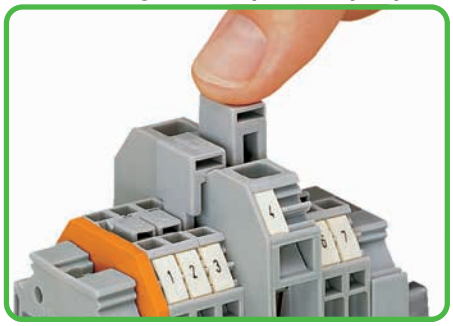
Testing with test plug adapter.

Commoning



Commoning with adjacent jumpers.

Commoning with step-down jumpers



Commoning side-entry rail-mounted terminal blocks with step-down jumpers.



CAGE CLAMP® clamps the following copper conductors:*

solid



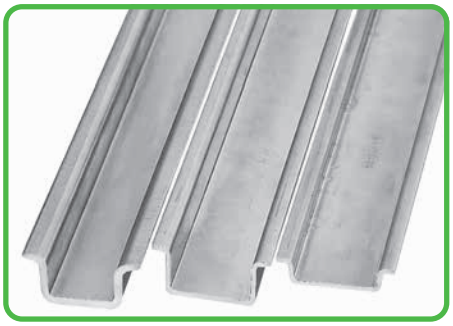
stranded



fine-stranded, also with tinned single strands

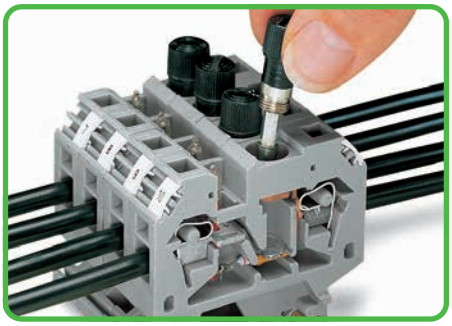
* For aluminum conductors, see notes in Section 14.

– Description and Handling –



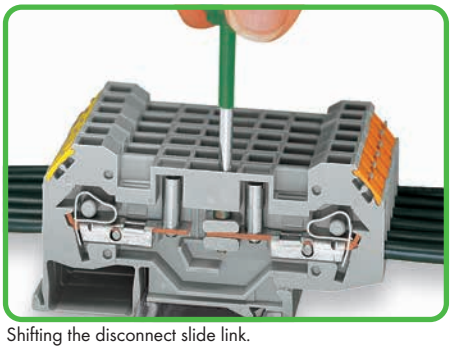
Suitable for all DIN 35 rails.

Fuse terminal blocks

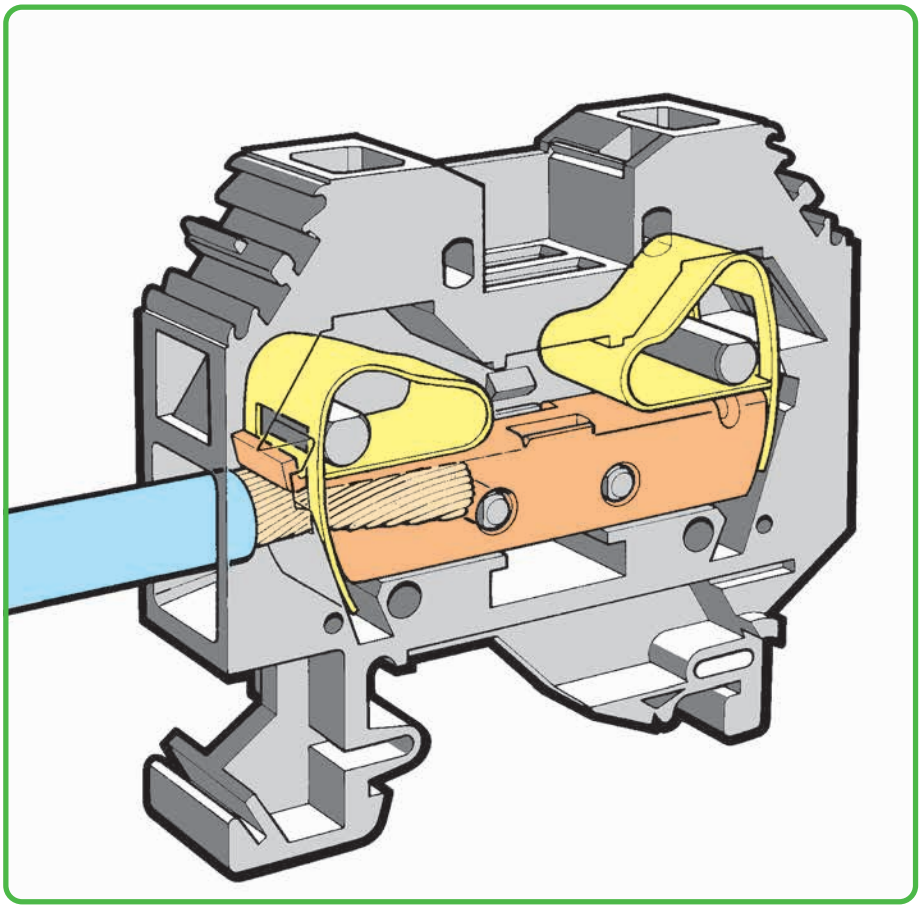


Replacing a fuse.

Disconnect terminal blocks for test and measurement



Shifting the disconnect slide link.



Marking



Marking with WMB Multi marking system.



fine-stranded,
tip-bonded



fine-stranded,
with ferrule ❶
(gastight crimped)



fine-stranded,
with pin terminal
(gastight crimped)

❶ When using ferruled conductors, it is necessary to use a terminal block one size larger than the nominal cross section of the wire.

Through and Ground Conductor Terminal Blocks 1.5 mm² to 6 mm²
279 to 282 Series

0.08 - 1.5 mm²	AWG 28 - 16
800 V/8 kV/3 ❶	600 V, 10 A
I_N 18 A	600 V, 15 A

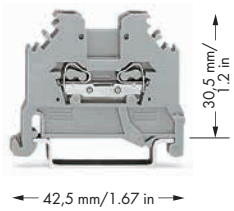
Terminal block width 4 mm / 0.157 in
8 - 9 mm / 0.33 in ❷

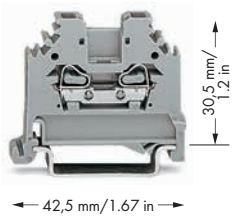
0.08 - 2.5 mm²	AWG 28 - 12 *
800 V/8 kV/3 ❶	600 V, 20 A
I_N 24 A	600 V, 20 A

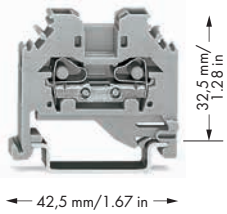
Terminal block width 5 mm / 0.197 in
8 - 9 mm / 0.33 in ❷

0.08 - 4 mm²	AWG 28 - 12
800 V/8 kV/3 ❶	600 V, 20 A
I_N 32 A	600 V, 25 A

Terminal block width 6 mm / 0.236 in
9 - 10 mm / 0.37 in ❷







	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**279-101**	100
blue	**279-104** ❸	100

	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**280-101**	100
blue	**280-104** ❸	100
2-conductor ground terminal block		
green-yellow	**280-107**	100

	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**281-101**	100
blue	**281-104** ❸	100
2-conductor ground terminal block		
green-yellow	**281-107**	100

Item-Specific Accessories

	Item No.	Pack. Unit
End and intermediate plate, 2.5 mm thick		
orange	**280-302**	100 (4x25)
gray	**280-301**	100 (4x25)
Separator, oversized, 2 mm thick		
orange	**280-322**	100 (4x25)
gray	**280-332**	100 (4x25)
Adjacent jumper, insulated,		
I_N 15 A		
gray	**279-402**	200 (8x25)
yellow-green	**279-422**	200 (8x25)
Alternate jumper, insulated,		
I_N 15 A		
gray	**279-409**	100 (4x25)
Step-down jumper, insulated,		
❹ I_N 15 A		
gray	**284-414**	50 (2x25)
Intermediate plate,		
1 mm thick		
gray	**281-333**	100 (4x25)
orange	**281-336**	100 (4x25)
Protective warning marker,		
with high-voltage symbol, black,		
for 5 terminal blocks		
yellow	**279-405**	100 (4x25)
Test plug adapter, 8.3 mm wide,		
for terminal blocks 1.5 - 10 mm²,		
for 4 mm Ø test plug		
gray	**209-170**	50 (2x25)
Test plug adapter, 5 mm wide,		
for terminal blocks 1.5 - 4 mm²,		
for 210-137 test plug 2.3 mm Ø		
gray	**280-404**	100 (4x25)

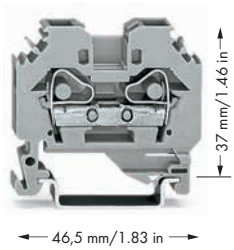
	Item No.	Pack. Unit
End and intermediate plate, 2.5 mm thick		
orange	**280-302**	100 (4x25)
gray	**280-301**	100 (4x25)
Separator, oversized, 2 mm thick		
orange	**280-322**	100 (4x25)
gray	**280-332**	100 (4x25)
Adjacent jumper, insulated,		
$I_N = I_N$ terminal block		
gray	**280-402**	200 (8x25)
yellow-green	**280-422**	200 (8x25)
Alternate jumper, insulated,		
$I_N = I_N$ terminal block		
gray	**280-409**	100 (4x25)
Step-down jumper, insulated,		
❹ I_N 15 A		
gray	**284-414**	50 (2x25)
Intermediate plate,		
1 mm thick		
gray	**281-333**	100 (4x25)
orange	**281-336**	100 (4x25)
Protective warning marker,		
with high-voltage symbol, black,		
for 5 terminal blocks		
yellow	**280-405**	100 (4x25)
Test plug adapter, 8.3 mm wide,		
for terminal blocks 1.5 - 10 mm²,		
for 4 mm Ø test plug		
gray	**209-170**	50 (2x25)
Test plug adapter, 5 mm wide,		
for terminal blocks 1.5 - 4 mm²,		
for 210-137 test plug 2.3 mm Ø		
gray	**280-404**	100 (4x25)

	Item No.	Pack. Unit
End and intermediate plate, 3 mm thick		
orange	**281-302**	100 (4x25)
gray	**281-301**	100 (4x25)
Separator, oversized, 2 mm thick		
orange	**281-322**	100 (4x25)
gray	**281-332**	100 (4x25)
Adjacent jumper, insulated,		
$I_N = I_N$ terminal block		
gray	**281-402**	200 (8x25)
yellow-green	**281-422**	200 (8x25)
Alternate jumper, insulated,		
$I_N = I_N$ terminal block		
gray	**281-409**	100 (4x25)
Step-down jumper, insulated,		
❹ I_N 15 A		
gray	**284-414**	50 (2x25)
Intermediate plate,		
1 mm thick		
gray	**281-333**	100 (4x25)
orange	**281-336**	100 (4x25)
Step-down jumper, insulated,		
I_N 30 A		
gray	**284-413**	50 (2x25)
Step-down jumper, insulated,		
I_N 32 A		
gray	**283-414**	50 (2x25)
Protective warning marker,		
with high-voltage symbol, black,		
for 5 terminal blocks		
yellow	**281-405**	100 (4x25)
Test plug adapter, 8.3 mm wide,		
for terminal blocks 1.5 - 10 mm²,		
for 4 mm Ø test plug		
gray	**209-170**	50 (2x25)

Certification organizations can be found in the overview on pages 622 and 623.

0.2 - 6 mm²	AWG 24 - 10
800 V/8 kV/3 ❶	600 V, 30 A
I_N 41 A	600 V, 10 A

Terminal block width 8 mm / 0.315 in
12 - 13 mm / 0.49 in ❷



Carrier rail	Item No.	Curre [A]	Acc. to mm²/AWG Cu
DIN 35 x 7.5 (steel)			
slotted	210-112	76	16/6
unslotted	210-113	76	16/6
DIN 35 x 15 (steel)			
1.5 mm thick	210-114	125	35/2
2.3 mm thick	210-118	125	35/2
DIN 35 x 7.5 (Al)			
unslotted	210-196	76	16/6
DIN 35 x 15 (Cu)			
2.3 mm thick	210-198	309	150/6/0
Current applies to rails of 1 m/3'3" length			

If required to use standard carrier rails as ground conductor busbars, please refer to insert space between the **maximum current capacities** listed above.
According to EN 60947-7-2 (VDE 0611, part 3), steel carrier rails shall not be used for PEN applications.

* AWG 12: THHN, THWN

❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

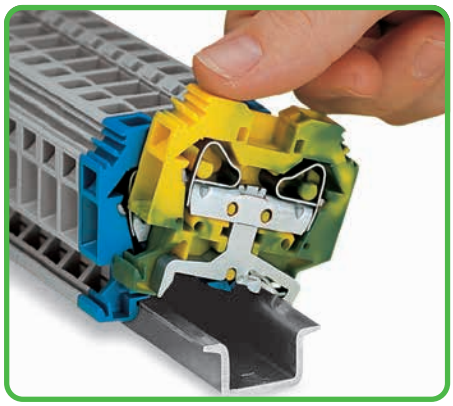
❸ Suitable for Ex i applications

❹ See application notes for:
Step-down jumper, page 453
Test plug module, page 291

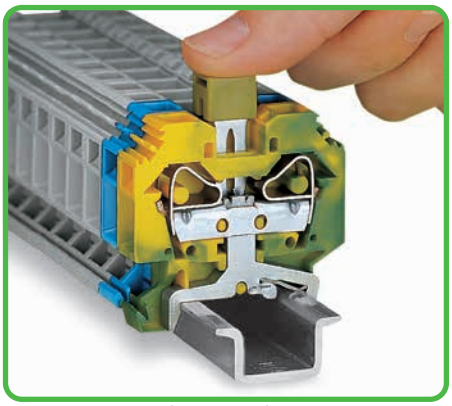
	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**282-101**	50
blue	**282-104** ❸	50
2-conductor ground terminal block		
green-yellow	**282-107**	50

Item-Specific Accessories

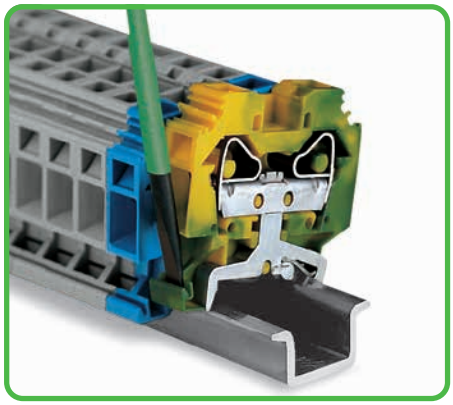
End and intermediate plate, 4 mm thick			
	orange	**282-302**	100 (4x25)
	gray	**282-301**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**282-322**	100 (4x25)
	gray	**282-332**	100 (4x25)
Adjacent jumper, insulated,			
	I_N 41 A		
	gray	**282-402**	100 (4x25)
	yellow-green	**282-422**	100 (4x25)
Alternate jumper, insulated,			
	I_N 41 A		
	gray	**282-409**	100 (4x25)
Step-down jumper, insulated,			
❹	I_N 30 A		
	gray	**284-413**	50 (2x25)
Cover plate,			
	1 mm thick		
	gray	**284-333**	100 (4x25)
	orange	**284-343**	100 (4x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**282-405**	100 (4x25)
Test plug adapter, 8.3 mm wide,			
	for terminal blocks 1.5 - 10 mm²,		
	for 4 mm Ø test plug		
	gray	**209-170**	50 (2x25)
B-type test plug module,			
❹	can be snapped together,		
	8 mm wide		
	gray	**709-310**	100 (4x25)
B-type spacer module,			
	can be snapped together,		
	8 mm wide		
	gray	**709-311**	100 (4x25)



Snapping a terminal block onto the carrier rail.
Ground conductor terminal blocks snap onto the rail in the same way as through terminal blocks, but automatically make a direct electrical connection to the rail.
Sliding on the rail is not then possible.



Push jumper down firmly until fully inserted.
Commoning ground conductor terminal blocks with through terminal blocks is possible in one direction only (via rear side of terminal block) using adjacent jumpers. In addition to the required marking of these blocks, use yellow-green adjacent jumpers.



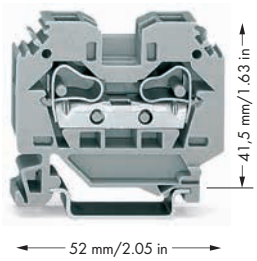
Removal from the carrier rail.
When mounting on the rail, ensure that open sides of terminal blocks face in the same direction.
Both mounting feet and removal slots are on the same side for all terminal blocks, making it possible to visually ensure blocks are facing in same direction.

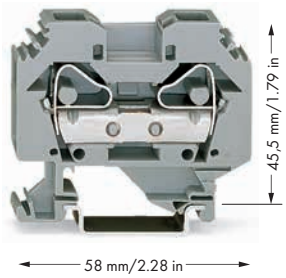
Through and Ground Conductor Terminal Blocks 10 mm² and 16 mm² 284 and 283 Series

CAGE CLAMP®

0.2 - 10 mm²	AWG 24 - 8
800 V/8 kV/3 ❶	600 V, 50 A
I_N 57 A	600 V, 65 A
Terminal block width 10 mm / 0.394 in	
12 - 13 mm / 0.49 in ❷	

0.2 - 16 mm²	AWG 24 - 6
800 V/8 kV/3 ❶	600 V, 65 A
I_N 76 A	600 V, 90 A
Terminal block width 12 mm / 0.472 in	
16 - 17 mm / 0.65 in ❷	





❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ See application notes for:
Step-down jumper, page 453
Test plug module, page 291

	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**284-101**	50
blue	**284-104**	50
2-conductor ground terminal block		
green-yellow	**284-107**	50

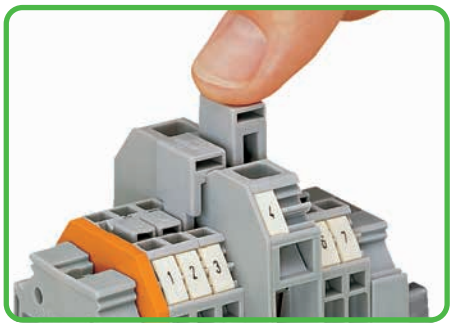
	Item No.	Pack. Unit
2-conductor through terminal block		
gray	**283-101**	50
blue	**283-104**	50
2-conductor ground terminal block		
green-yellow	**283-107**	50

Item-Specific Accessories

End and intermediate plate, 2.5 mm thick			
	orange	**284-302**	100 (4x25)
	gray	**284-301**	100 (4x25)
Separator, oversized, 2 mm thick			
	orange	**284-322**	100 (4x25)
	gray	**284-332**	100 (4x25)
Adjacent jumper, insulated,			
	I_N 57 A		
	gray	**284-402**	100 (4x25)
	yellow-green	**284-422**	100 (4x25)
Alternate jumper, insulated,			
	I_N 57 A		
	gray	**284-409**	50 (2x25)
Step-down jumper, insulated,			
❸	I_N 30 A		
	gray	**284-413**	50 (2x25)
Cover plate,			
	1 mm thick		
	gray	**284-333**	100 (4x25)
	orange	**284-343**	100 (4x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**284-405**	50 (2x25)
Test plug adapter, 8.3 mm wide,			
	for terminal blocks 1.5 - 10 mm²,		
	for 4 mm Ø test plug		
	gray	**209-170**	50 (2x25)
B-type test plug module,			
❸	can be snapped together,		
	8 mm wide		
	gray	**709-310**	100 (4x25)
B-type spacer plate,			
	can be snapped together,		
	2 mm wide		
	gray	**709-312**	100 (4x25)

Item-Specific Accessories

End and intermediate plate, 4 mm thick			
	orange	**283-302**	50 (2x25)
	gray	**283-301**	50 (2x25)
Separator, oversized, 2 mm thick			
	orange	**283-322**	50 (2x25)
	gray	**283-332**	50 (2x25)
Adjacent jumper, insulated,			
	I_N 70 A		
	gray	**283-402**	50 (2x25)
	yellow-green	**283-422**	50 (2x25)
Alternate jumper, insulated,			
	I_N 76 A		
	gray	**283-409**	50 (2x25)
Step-down jumper, insulated,			
❸	I_N 32 A		
	gray	**283-414**	50 (2x25)
Cover plate,			
	1 mm thick		
	gray	**283-333**	100 (4x25)
	orange	**283-335**	100 (4x25)
Protective warning marker,			
	with high-voltage symbol, black,		
	for 5 terminal blocks		
	yellow	**283-405**	50 (2x25)
Test plug adapter, 11.6 mm wide,			
	for 1.5 - 16 mm² terminal blocks, for		
	4 mm Ø test plug		
	gray	**283-404**	25



Step-down jumpers may common terminal blocks of different sizes, without losing a conductor clamping point. This can be beneficial on long conductor runs where voltage drop can be a problem. A large conductor can be easily connected to smaller conductors at the distribution point. Step-down jumpers are simply pushed down for full insertion, similar to adjacent jumpers.
Commoning may be made in either direction using the special thin end plate to cover the open side. Further terminal blocks of the smaller cross section may be commoned using standard adjacent jumpers.
In this case, pay attention that:

1. **The total current flowing does not exceed the rating of the step-down jumper.**
2. The standard or special thin cover plate is installed on the open side of the larger block.

Certification organizations can be found in the overview on pages 622 and 623.

Step-Down Jumpers for Side-Entry Through Terminal Blocks *

Step-down jumper	Step-down jumper





* Terminal blocks for side-entry cannot be commoned with terminal blocks for front-entry.
For commoning terminal blocks, front-entry via step-down jumpers, see pages 196 and 197

❶ Commoning from 10 mm² (284-101) to 2.5 mm² (280-101) or 1.5 mm² (279-101) terminal blocks via terminal block rear side is not possible (see example: terminal block A to 11).

	Item No.	Pack. Unit
Step-down jumper, insulated,		
from 10/6 mm² to 4/2.5/1.5 mm²,		
I_N 15 A		
gray	**284-414**	50 (2x25)
Step-down jumper, insulated,		
from 10/6 mm² to 6/4 mm²,		
I_N 30 A		
gray	**284-413**	50 (2x25)

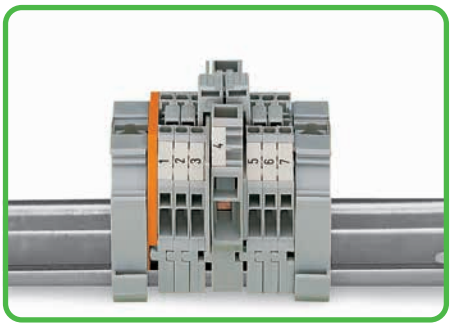
	Item No.	Pack. Unit
Step-down jumper, insulated,		
from 16 mm² to 4 mm²,		
I_N 32 A		
gray	**283-414**	50 (2x25)

Item-Specific Accessories

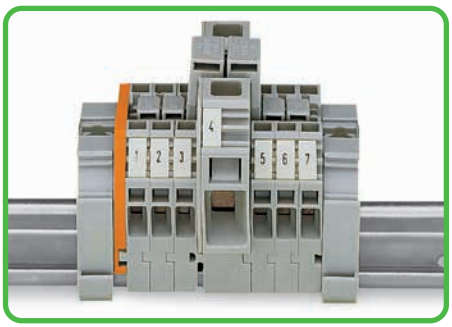
		Item No.	Pack. Unit
Cover plate,			
	1 mm thick		
	gray	**284-333**	100 (4x25)
	orange	**284-343**	100 (4x25)
Intermediate plate,			
	1 mm thick		
	gray	**281-333**	100 (4x25)
	orange	**281-336**	100 (4x25)

Item-Specific Accessories

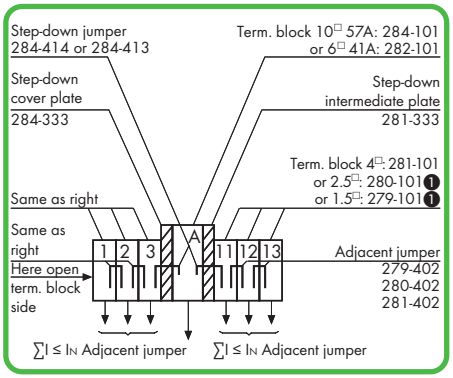
		Item No.	Pack. Unit
Cover plate,			
	1 mm thick		
	gray	**283-333**	100 (4x25)
	orange	**283-335**	100 (4x25)



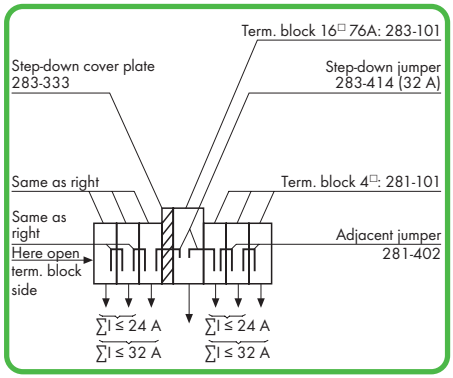
Commoning from 6 mm²/AWG 10 (282 Series) to 1.5 mm²/AWG 16 (279 Series) rail-mount terminal blocks.



Commoning from 16 mm²/AWG 6 (283 Series) to 4 mm²/AWG 12 (281 Series) rail-mount terminal blocks.



Example of assembly: "Commoning from 10/6 mm² (AWG 8/10) to 4/2.5/1.5 mm² (AWG 12/14/16) rail-mount terminal blocks with 284-414 step-down jumper."

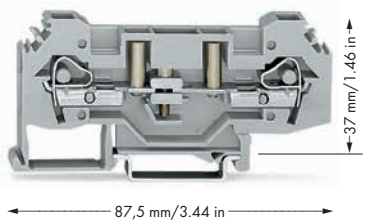


Example of assembly: "Commoning from 16 mm² (AWG 6) to 4 mm² (AWG 12) rail-mount terminal blocks with 283-414 step-down jumper."

Disconnect Terminal Blocks for Test and Measurement, Ground Conductor Disconnect Terminal Blocks 6 mm² 282 Series

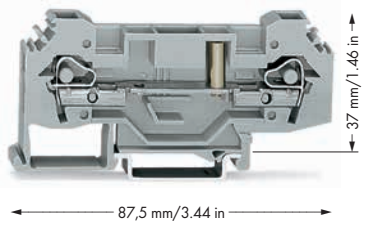
0.2 - 6 mm²	AWG 24 - 10
400 V/6 kV/3 ❶	300 V, 30 A
I_N 41 A	300 V, 40 A

Terminal block width 8 mm / 0.315 in
12 - 13 mm / 0.49 in ❷



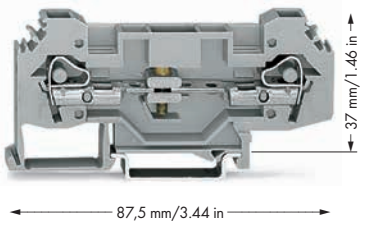
0.2 - 6 mm²	AWG 24 - 10
400 V/6 kV/3 ❶	300 V, 30 A
I_N 41 A	300 V, 40 A

Terminal block width 8 mm / 0.315 in
12 - 13 mm / 0.49 in ❷



0.2 - 6 mm²	AWG 24 - 10
400 V/6 kV/3 ❶	300 V, 30 A
I_N 41 A	300 V, 40 A

Terminal block width 8 mm / 0.315 in
12 - 13 mm / 0.49 in ❷



	Item No.	Pack. Unit
Disconnect terminal block for test and measurement, with test sockets 4 mm ∅		
gray	**282-131**	25

	Item No.	Pack. Unit
Through terminal block		
gray	**282-133**	25

	Item No.	Pack. Unit
Disconnect terminal block for test and measurement, without test sockets		
gray	**282-135**	25

Item-Specific Accessories

Alternate jumper, insulated,



I_N 41 A

gray	**282-409**	100 (4x25)

Lock-out, snap-in type,



prevents reclosing of slide link

orange	**282-137**	100 (4x25)

Item-Specific Accessories

Alternate jumper, insulated,



I_N 41 A

gray	**282-409**	100 (4x25)

Item-Specific Accessories

Alternate jumper, insulated,



I_N 41 A

gray	**282-409**	100 (4x25)

Lock-out, snap-in type,



prevents reclosing of slide link

orange	**282-137**	100 (4x25)

282 Series Accessories

Appropriate marking system:
WMB (see Section 13)

End and intermediate plate, 4 mm thick



orange	**282-315**	50 (2x25)
gray	**282-314**	50 (2x25)

Adjacent jumper, insulated,



I_N 41 A

gray	**282-402**	100 (4x25)

Protective warning marker,



with high-voltage symbol, black,
for 5 terminal blocks

yellow	**282-405**	100 (4x25)

Test plug adapter, 8.3 mm wide,



for terminal blocks 1.5 - 10 mm²,
for 4 mm ∅ test plug

gray	**209-170**	50 (2x25)

Screwless end stop,



for DIN 35 rail,
6 mm wide

gray	**249-116**	100 (4x25)

Screwless end stop,



for DIN 35 rail,
10 mm wide

gray	**249-117**	50 (2x25)

B-type test plug module, ❸



can be snapped together,
8 mm wide

gray	**709-310**	100 (4x25)

B-type spacer module,



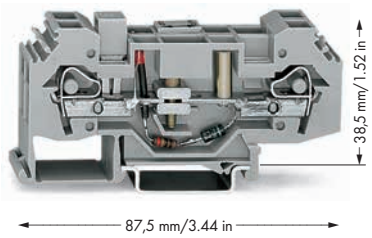
can be snapped together,
8 mm wide

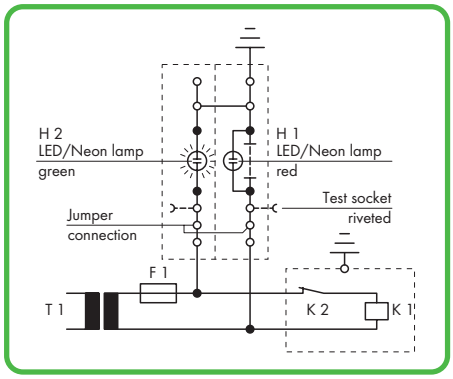
gray	**709-311**	100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

0.2 - 6 mm² | **AWG 24 - 10**

Terminal block width 16 mm / 0.63 in
12 - 13 mm / 0.49 in ❷





Operating condition
Slide link closed, auxiliary circuit grounded, green lamp illuminates.

❶ 400 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ See application notes for:
Test plug module, page 291

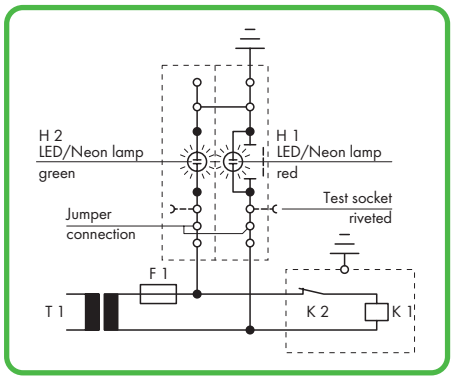
	Item No.	Pack. Unit
Ground conductor disconnect terminal block, gray		
24 V	**282-140**	12
48 V	**282-141**	12
120 V	**282-138**	12
230 V	**282-139**	12

Item-Specific Accessories

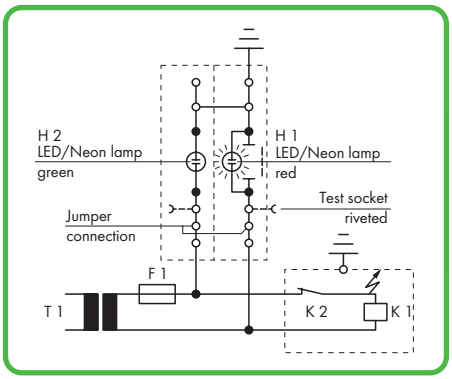
Lock-out, snap-in type,
prevents reclosing of slide link



orange	**282-137**	100 (4x25)

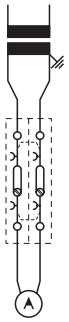


Test condition – no grounding
Slide link open, auxiliary circuit not grounded.

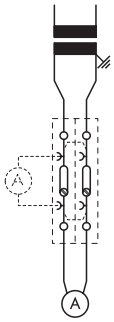


Test condition – grounding
Slide link open, auxiliary circuit not grounded, red lamp illuminates.

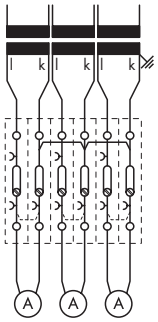
Current transformer circuit with current path separation and commoning possibility



Current transformer circuit with the connection of a second test unit through test sockets



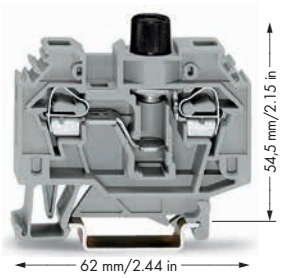
Transformer test circuit, k-conductors of the transformers connected



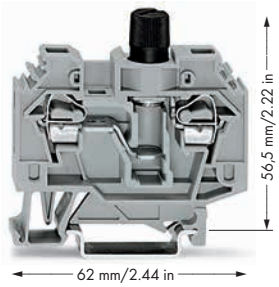
IEC 60204/DIN VDE 0113 "Electrical equipment of industrial machines, part 1: General requirements" 9.4.3.1:
Ground faults on control circuits shall not cause unintentional starting, hazardous movements, or prevent stopping of the machine.
In order to fulfill this requirement, bonding to the protective bonding circuit shall be provided in accordance with 8.2 and the devices shall be connected as described in 9.1.4. Control circuits fed from a transformer and not connected to the protective bonding circuit shall be provided with an insulation monitoring device (e.g., residual current device) which either indicates an ground fault or interrupts the circuit automatically after an ground fault.
In the case of electronic circuits, the connection of one side of the control circuit to the protective bonding circuit in accordance with 9.1.4 can prevent unintentional operation. When this does not help, or if due to other reasons electronic circuits cannot be connected to the protective bonding circuit, other measures shall be taken to achieve the same level of safety.
Where the control circuit is directly connected between the phase conductors of the supply or between a phase conductor and a neutral conductor, which is either not grounded or grounded through a high impedance, multipole control switches which interrupt all live conductors shall be used for start or stop of those machine functions, which can cause a hazardous condition or damage to the machine or to the work in progress, in the event of unintentional starting or failure to stop.

Fuse Terminal Blocks 6 mm²
282 Series

0.2 - 6 mm²	AWG 24 - 10	
500 V/6 kV/3 ❶	600 V, 10 A	
I_N 10 A	250 V, 10 A	
Terminal block width 13 mm / 0.512 in		
12 - 13 mm / 0.49 in ❷		



0.2 - 6 mm²	AWG 24 - 10	
500 V/6 kV/3 ❶		
I_N 10 A	250 V, 10 A	
Terminal block width 13 mm / 0.512 in		
12 - 13 mm / 0.49 in ❷		



0.2 - 6 mm²	AWG 24 - 10	
500 V/6 kV/3 ❶	600 V, 10 A	
I_N 10 A	250 V, 10 A	
Terminal block width 13 mm / 0.512 in		
12 - 13 mm / 0.49 in ❷		



Item No.		Pack. Unit
2-conductor fuse terminal block,		
without indicator,		
for miniature fuses 5 x 20 mm		
gray	**282-122**	40

Item No.		Pack. Unit
2-conductor fuse terminal block,		
without indicator,		
for miniature fuses ¼" x 1"		
gray	**282-120**	40
2-conductor fuse terminal block,		
without indicator,		
for miniature fuses ¼" x 1¼"		
gray	**282-128**	40

Item No.		Pack. Unit
2-conductor fuse terminal block,		
with indicator,		
for miniature fuses		
gray	**282-126**	40

Item-Specific Accessories

Miniature fuse, 5 x 20 mm,
without indicator,
6.3 A/250 V, medium/slow
282-451 200 (20x10)

Item-Specific Accessories

Miniature fuse, ¼" x 1",
without indicator,
10 A/240 V, to BS 1362
282-458 200 (20x10)

Miniature fuse, ¼" x 1¼",
without indicator,
10 A/250 V, medium/slow
282-457 200 (2x100)

Miniature fuse, ¼" x 1¼",
without indicator,
10 A/500 V, very fast acting
282-454 200 (20x10)

Item-Specific Accessories

Miniature fuse, 5 x 25 mm,
with indicator,
6.3 A, medium/slow
282-452 200 (20x10)

Miniature fuse, 5 x 25 mm,
with indicator,
10 A, fast acting
282-453 200 (20x10)

Accessories for Fuse Terminal Blocks

Appropriate marking system:
WMB (see Section 13)

End and intermediate plate, 4 mm thick
orange **282-312** 50 (2x25)
gray **282-311** 50 (2x25)

Adjacent jumper, insulated,
I_N 41 A
gray **282-402** 100 (4x25)

Protective warning marker,
with high-voltage symbol, black,
for 5 terminal blocks
yellow **282-405** 100 (4x25)

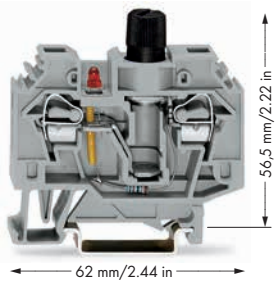
Test plug adapter, 8.3 mm wide,
for terminal blocks 1.5 - 10 mm²,
for 4 mm Ø test plug
gray **209-170** 50 (2x25)

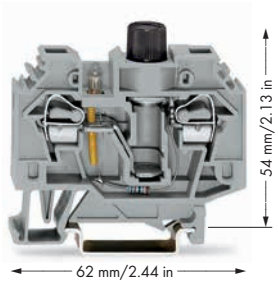
Test plug adapter, 6 mm wide,
with CAGE CLAMP®,
for 0.08 - 2.5 mm²
I_N 24 A **281-407** 100 (4x25)

Plunger,
for 281, 282, 283 and 284 Series
rail-mounted terminal blocks for side-entry
210-141 1

Certification organizations can be found in the overview on pages 622 and 623.

0.2 - 6 mm² | AWG 24 - 10	0.2 - 6 mm² | AWG 24 - 10
Terminal block width 13 mm / 0.512 in 12 - 13 mm / 0.49 in ❷	Terminal block width 13 mm / 0.512 in 12 - 13 mm / 0.49 in ❷



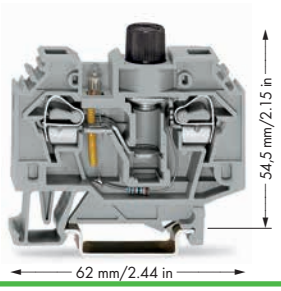


❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)
Electrical ratings are given by the fuse.
For technical information, see pages 254 – 255

❷ Strip length, see packaging or instructions.

Item No.	Pack. Unit
2-conductor fuse terminal block,	
with red LED, 24 VDC,	
for miniature fuses ¼" x 1¼"	
gray **282-128/281-413**	40

Item No.	Pack. Unit
2-conductor fuse terminal block,	
with neon lamp 250 VAC/220 VDC,	
for miniature fuses ¼" x 1¼"	
gray **282-128/281-417**	40
2-conductor fuse terminal block,	
with neon lamp 250 VAC/220 VDC,	
for miniature fuses 5 x 20 mm	
gray **282-124**	40
2-conductor fuse terminal block,	
with neon lamp 120 V AC/DC,	
for miniature fuses ¼" x 1¼"	
gray **282-128/281-418**	40



Dimensions
Item No. **282-124**

Item-Specific Accessories

Miniature fuse, ¼" x 1¼",
without indicator,
10 A/250 V, medium/slow
282-457 200 (2x100)

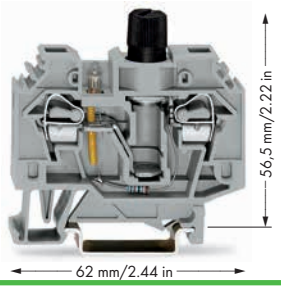
Miniature fuse, ¼" x 1¼",
without indicator,
10 A/500 V, very fast acting
282-454 200 (20x10)

Item-Specific Accessories

Miniature fuse, 5 x 20 mm,
without indicator,
6.3 A/250 V, medium/slow
282-451 200 (20x10)

Miniature fuse, ¼" x 1¼",
without indicator,
10 A/250 V, medium/slow
282-457 200 (2x100)

Miniature fuse, ¼" x 1¼",
without indicator,
10 A/500 V, very fast acting
282-454 200 (20x10)

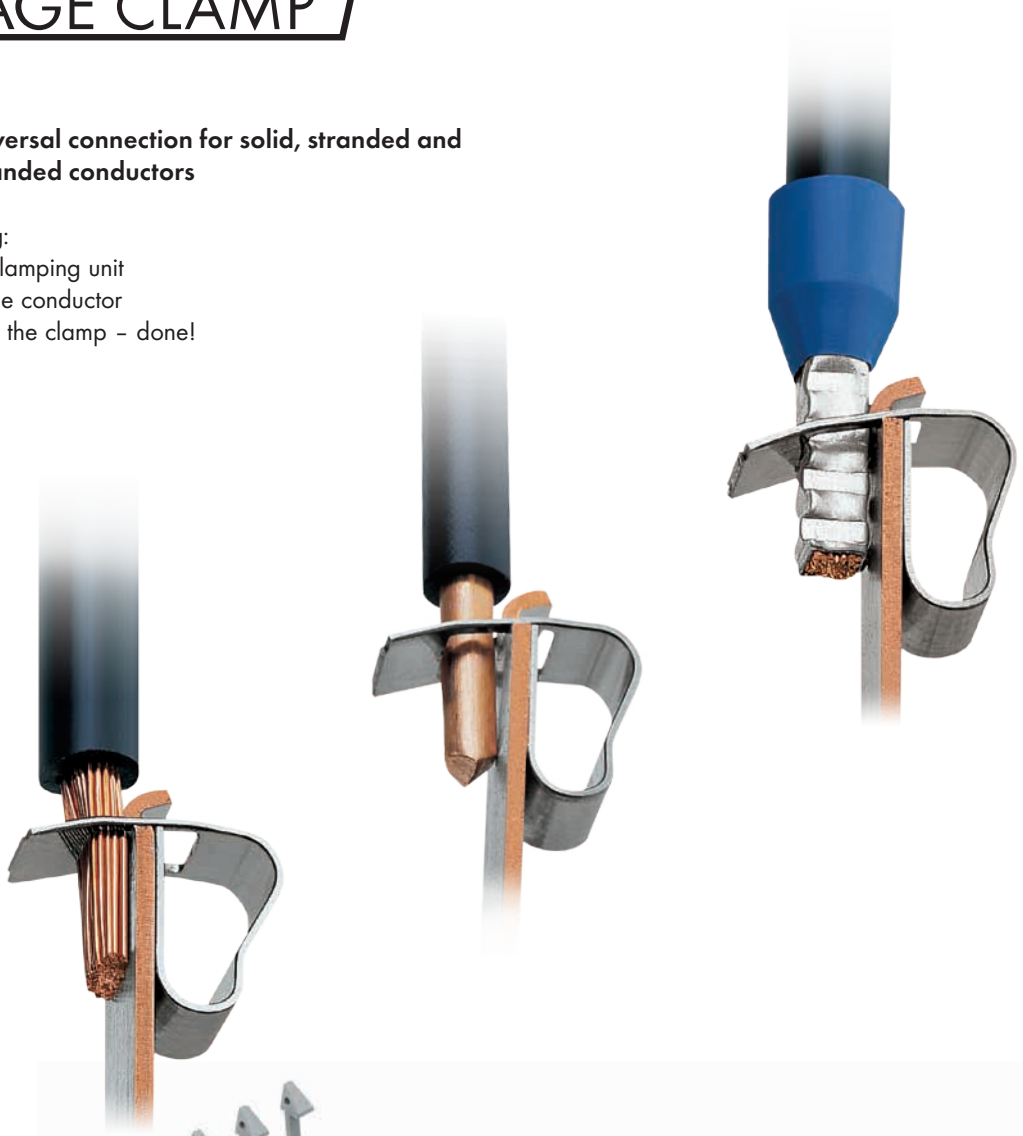


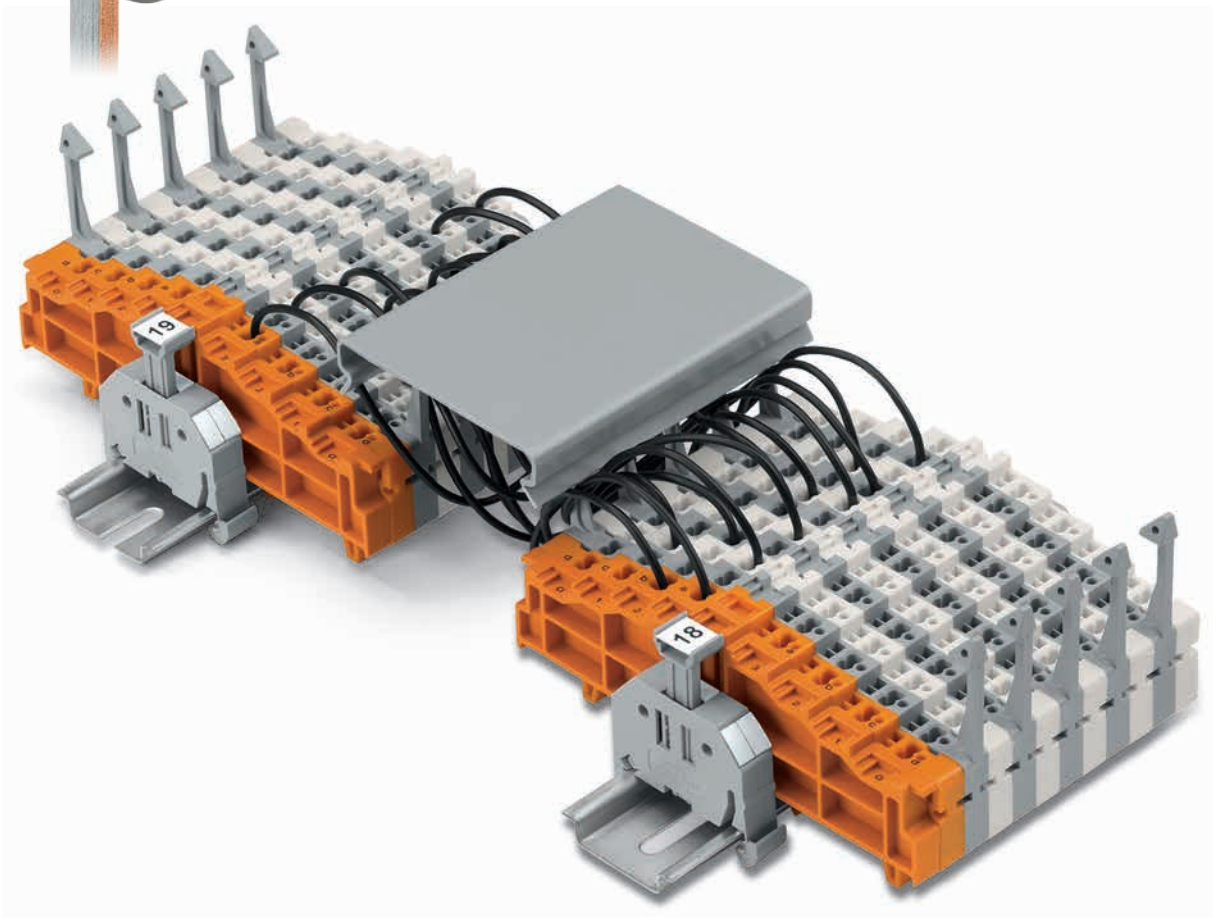
Dimensions
Item No. **282-128/281-418**

CAGE CLAMP®

The universal connection for solid, stranded and fine-stranded conductors

Handling:
- Open clamping unit
- Insert the conductor
- Release the clamp – done!



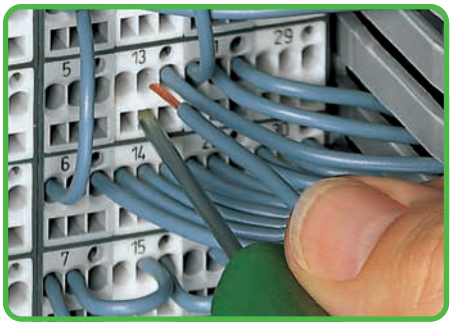


Terminal Blocks for Matrix Patching and Potential Distribution
(Anschlussblöcke für Sammelschienen)

			Page
	**Matrix Patchboards**	726 Series	464
	**Common Potential Matrix Patchboards** **Common Potential Matrix Patchboards Marking on the Supply Side**	726 Series	468
	**Matrix Patchboard Accessories**		468
	**Terminal Blocks for Matrix Patching and Common Potential Terminal Blocks** 1.5 mm² (16 AWG)	727 Series	474
	**3-Conductor, Double-Potential Terminal Blocks** 2.5 mm² (12 AWG)	280 Series	479
	**Busbar Terminal Blocks**	812 Series	481

Matrix Patchboards
726 Series

CAGE CLAMP® connection



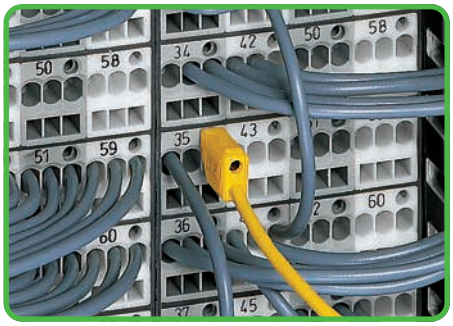
Conductor termination with 210-719 operating tool (2.5 x 0.4) mm.

Marking modules



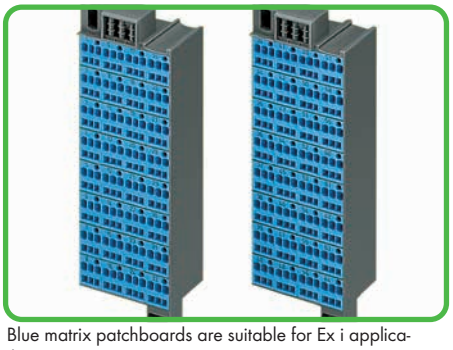
Marking modules (factory marked)
Side 1: 1, 2, 3, 4 . . .

Testing

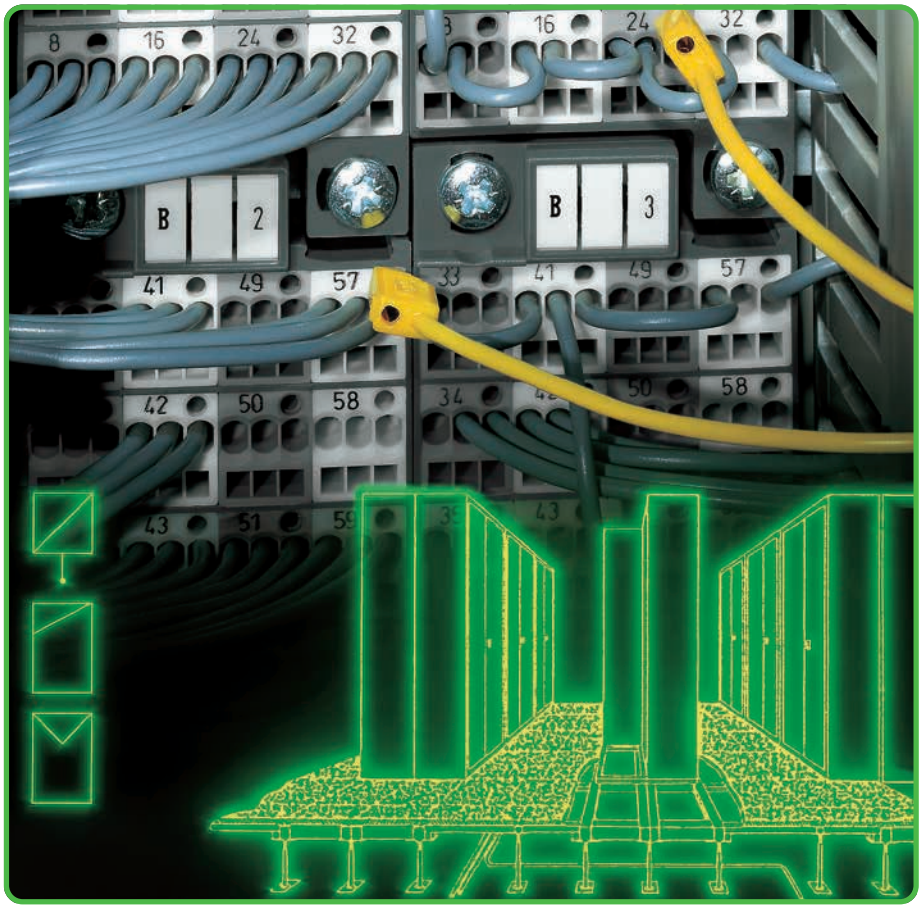


Testing with 2.3 mm Ø test plug (210-137).

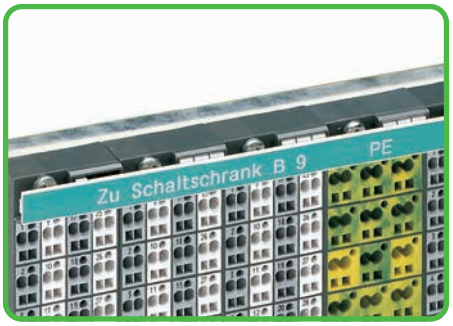
Ex i versions



Blue matrix patchboards are suitable for Ex i applications.



Marking



WFB Continuous marking strip. Fits into the marker slot and the group marker carrier of the matrix patchboard.

Marking



Individual group marking with WSB Quick marking system.

Installation examples



Matrix patchboards in a frame.



Matrix patchboards in 19″ rack



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded

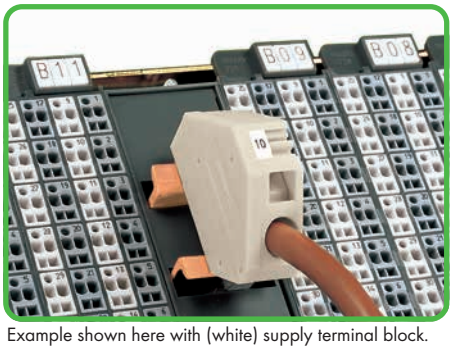


fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

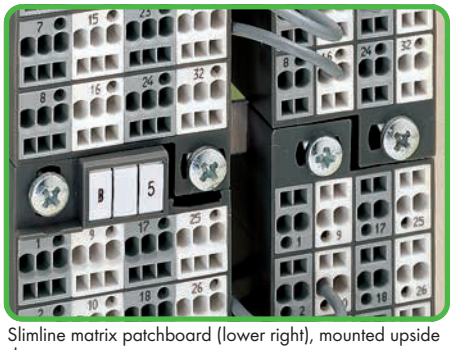
– Description and Handling –

Common potential matrix assembly

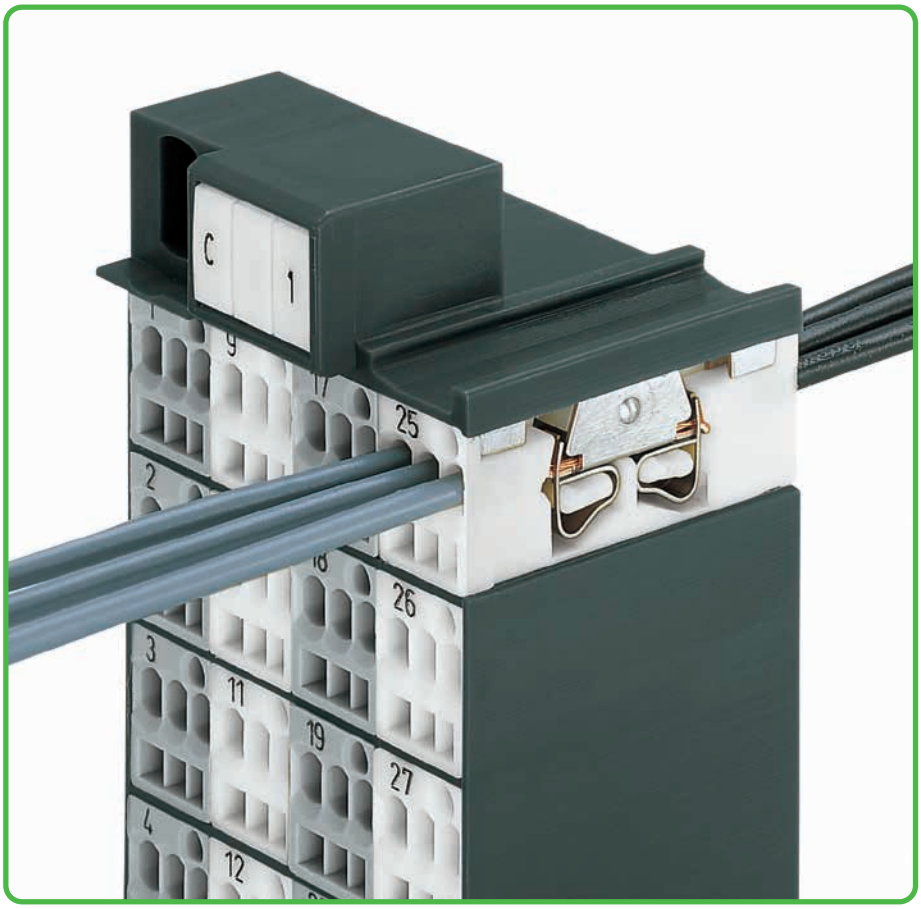


Example shown here with (white) supply terminal block.

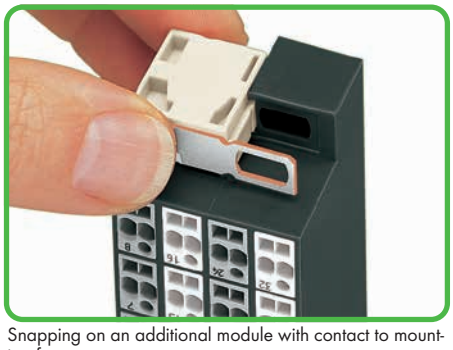
Space saver



Slimline matrix patchboard (lower right), mounted upside down.



Additional module



Snapping on an additional module with contact to mounting frame.

Additional module



Assembly of a matrix patchboard with additional module snapped on.
Direct connection to the mounting frame via contact plate.

Ferrules ❶

	Max. conductor cross section (mm²/AWG) without ferrule	Max. conductor cross section (mm²/AWG) with ferrule			
		insulated		uninsulated	
			Item No./Color		Item No.
Side 2	1.5	0.75	**216-202**/grey	1	**216-123**
Side 1	1.5	0.75	**216-202**/grey	1	**216-123**
Side 2	2.5	1.5	**216-204**/black	1.5	**216-104**
Side 1	1.5	0.75	**216-202**/grey	1	**216-123**



Terminating ferruled conductors.



fine-stranded, tip-bonded



fine-stranded, with ferrule ❶ (gastight crimped)



fine-stranded, with pin terminal (gastight crimped)

Matrix Patchboards, 32-Pole
726 Series

CAGE CLAMP®

Side 1: 3x 0.08 - 1.5 mm²	AWG 28 - 16
Side 2: 3x 0.08 - 1.5 mm²	AWG 28 - 16
500 V/6 kV/3 ❶	300 V, 10 A
I_N 10 A	300 V, 10 A
8 - 10 mm / 0.35 in ❷	

Side 1: 3x 0.08 - 1.5 mm²	AWG 28 - 16
Side 2: 2x 0.08 - 2.5 mm²	AWG 28 - 14
500 V/6 kV/3 ❶	300 V, 10 A
I_N 10 A	300 V, 10 A
8 - 10 mm / 0.35 in ❷	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ See application notes for:
Decade marker carrier, page 468
Insulation stop, page 469

Item No.		Pack. Unit
Matrix patchboard, dark gray frame, white/gray modules, module marking on sides 1 and 2 arranged vertically		
marking 1-32	**726-121**	20
marking 33-64	**726-122**	20
Matrix patchboard, dark gray frame, blue modules, module marking on sides 1 and 2 arranged vertically		
marking 1-32	**726-141** ❸	20
marking 33-64	**726-142** ❸	20

Item No.		Pack. Unit
Matrix patchboard, dark gray frame, white/gray modules, module marking on sides 1 and 2 arranged vertically		
marking 1-32	**726-221**	20
marking 33-64	**726-222**	20
Matrix patchboard, dark gray frame, blue modules, module marking on sides 1 and 2 arranged vertically		
marking 1-32	**726-241** ❸	20
marking 33-64	**726-242** ❸	20

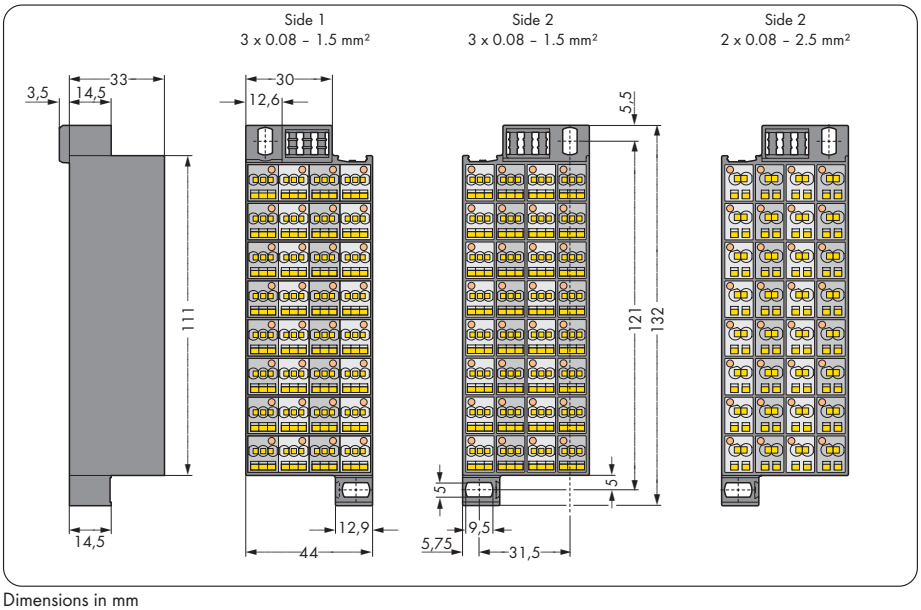
Matrix Patchboard Accessories

Insulation stop, ❹
4 x 3 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **726-901** 200 (8x25)

Insulation stop, ❹
4 x 3 pcs/strip,
0.25 mm² "s" 0.14 - 0.25 mm² "f-st"
light gray **726-906** 200 (8x25)

Insulation stop, ❹
4 x 3 pcs/strip,
0.25 - 0.5 mm² "s+f-st"
dark gray **726-907** 200 (8x25)

Test plug,
with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50



Dimensions in mm

Matrix Patchboard Accessories

Wire commoning chain, insulated,
31 connections, I_N 6 A,
max. 50 V, 0.5 mm²
gray **709-107** 1

Group marker carrier for side 2
dark gray **726-902** 50

WFB continuous marking strip,
1000 mm long
transparent **210-612** 10

Carrier for WFB continuous marking strip,
to be snapped into the marker slot
209-185 200 (8x25)

WSB Quick marking system,
10 strips with 10 markers per card,
for terminal widths 5 - 17.5 mm
plain **209-501** 5

WSB Quick marking system,
10 strips with 10 markers per card,
horizontal marking
1 ... 10 (10x) **209-502** 5

WSB Quick marking system,
10 strips with 10 markers per card,
horizontal marking
1 ... 50 (2x) **209-566** 5

WSB Quick marking system,
10 strips with 10 markers per card,
horizontal marking
X (100x) **209-500/209-035** 5

Decade marker carrier, ❹
for matrix patchboards
dark gray **726-905** 10

Operating tool with partially insulated shaft,
type 1, (2.5 x 0.4) mm blade
210-719 1

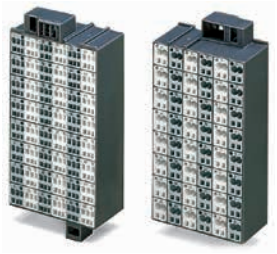
Certification organizations can be found in the overview on pages 622 and 623.

Matrix Patchboards, 48-Pole
726 Series

Side 1: 3x 0.08 - 1.5 mm²	AWG 28 - 16
Side 2: 3x 0.08 - 1.5 mm²	AWG 28 - 16
500 V/6 kV/3 ❶	300 V, 10 A
I_N 10 A	300 V, 10 A
8 - 10 mm / 0.35 in ❷	

Side 1: 3x 0.08 - 1.5 mm²	AWG 28 - 16
Side 2: 2x 0.08 - 2.5 mm²	AWG 28 - 14
500 V/6 kV/3 ❶	300 V, 10 A
I_N 10 A	300 V, 10 A
8 - 10 mm / 0.35 in ❷	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ See application notes for:
Decade marker carrier, page 468
Insulation stop, page 469

Item No.		Pack. Unit
Matrix patchboard, dark gray frame, white/gray modules, module marking on sides 1 and 2 arranged vertically		
marking 1-48	**726-421**	10
Matrix patchboard, dark gray frame, blue modules, module marking on sides 1 and 2 arranged vertically		
marking 1-48	**726-441** ❸	10

Item No.		Pack. Unit
Matrix patchboard, dark gray frame, white/gray modules, module marking on sides 1 and 2 arranged vertically		
marking 1-48	**726-521**	10
Matrix patchboard, dark gray frame, blue modules, module marking on sides 1 and 2 arranged vertically		
marking 1-48	**726-541** ❸	10

Matrix Patchboard Accessories

Insulation stop, ❹
4 x 3 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **726-901** 200 (8x25)

Insulation stop, ❹
4 x 3 pcs/strip, 0.25 mm² "s" 0.14 - 0.25 mm² "f-st"
light gray **726-906** 200 (8x25)

Insulation stop, ❹
4 x 3 pcs/strip, 0.25 - 0.5 mm² "s+f-st"
dark gray **726-907** 200 (8x25)

Test plug,
with 500 mm cable, 2.3 mm Ø
yellow **210-137** 50

Wire commoning chain, insulated,
31 connections, I_N 6 A, max. 50 V, 0.5 mm²
gray **709-107** 1

Group marker carrier for side 2
dark gray **726-902** 50

Matrix Patchboard Accessories

WFB continuous marking strip,
1000 mm long
transparent **210-612** 10

Carrier for WFB continuous marking strip,
to be snapped into the marker slot
209-185 200 (8x25)

WSB Quick marking system,
10 strips with 10 markers per card, for terminal widths 5 - 17.5 mm
plain **209-501** 5

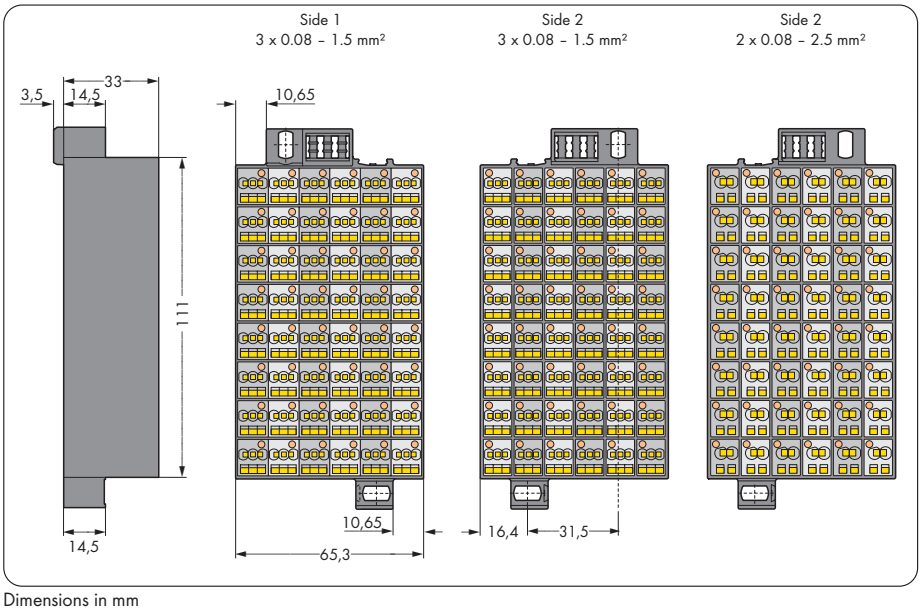
WSB Quick marking system,
10 strips with 10 markers per card, horizontal marking
1 ... 10 (10x) **209-502** 5

WSB Quick marking system,
10 strips with 10 markers per card, horizontal marking
1 ... 50 (2x) **209-566** 5

WSB Quick marking system,
10 strips with 10 markers per card, horizontal marking
X (100x) **209-500/209-035** 5

Decade marker carrier, ❹
for matrix patchboards
dark gray **726-905** 10

Operating tool with partially insulated shaft,
type 1, (2.5 x 0.4) mm blade
210-719 1



Dimensions in mm

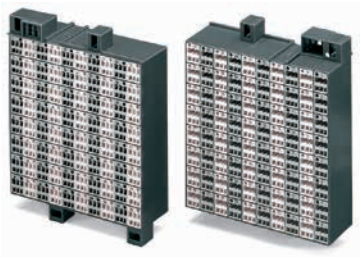
Certification organizations can be found in the overview on pages 622 and 623.

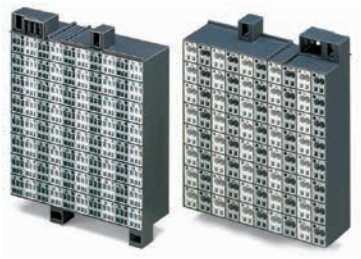
Matrix Patchboards, 80-Pole
726 Series

CAGE CLAMP®

Side 1: 3x 0.08 - 1.5 mm²	AWG 28 - 16
Side 2: 3x 0.08 - 1.5 mm²	AWG 28 - 16
500 V/6 kV/3 ❶	300 V, 10 A
I_N 10 A	300 V, 10 A
8 - 10 mm / 0.35 in ❷	

Side 1: 3x 0.08 - 1.5 mm²	AWG 28 - 16
Side 2: 2x 0.08 - 2.5 mm²	AWG 28 - 14
500 V/6 kV/3 ❶	300 V, 10 A
I_N 10 A	300 V, 10 A
8 - 10 mm / 0.35 in ❷	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ See application notes for:
Decade marker carrier, page 468
Insulation stop, page 469

Item No.		Pack. Unit
Matrix patchboard, dark gray frame, white/gray modules, module marking on sides 1 and 2 arranged vertically		
marking 1-80	**726-721**	8
Matrix patchboard, dark gray frame, blue modules, module marking on sides 1 and 2 arranged vertically		
marking 1-80	**726-741** ❸	8

Item No.		Pack. Unit
Matrix patchboard, dark gray frame, white/gray modules, module marking on sides 1 and 2 arranged vertically		
marking 1-80	**726-821**	8
Matrix patchboard, dark gray frame, blue modules, module marking on sides 1 and 2 arranged vertically		
marking 1-80	**726-841** ❸	8

Matrix Patchboard Accessories

Insulation stop, ❹
4 x 3 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **726-901** 200 (8x25)

Insulation stop, ❹
4 x 3 pcs/strip,
0.25 mm² "s" 0.14 - 0.25 mm² "f-st"
light gray **726-906** 200 (8x25)

Insulation stop, ❹
4 x 3 pcs/strip,
0.25 - 0.5 mm² "s+f-st"
dark gray **726-907** 200 (8x25)

WFB continuous marking strip,
1000 mm long
transparent **210-612** 10

Carrier for WFB continuous marking strip,
to be snapped into the marker slot
209-185 200 (8x25)

WSB Quick marking system,
10 strips with 10 markers per card,
for terminal widths 5 - 17.5 mm
plain **209-501** 5

Matrix Patchboard Accessories

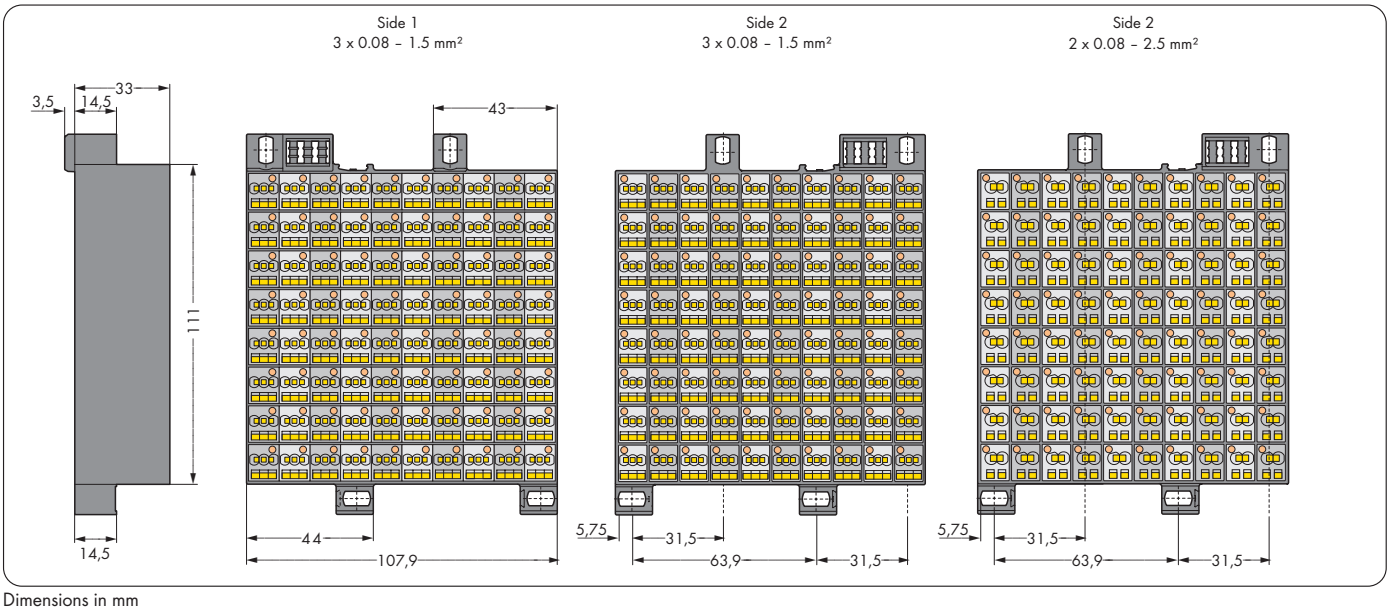
WSB Quick marking system,
10 strips with 10 markers per card,
horizontal marking
1 ... 10 (10x) **209-502** 5

WSB Quick marking system,
10 strips with 10 markers per card,
horizontal marking
1 ... 50 (2x) **209-566** 5

WSB Quick marking system,
10 strips with 10 markers per card,
horizontal marking
X (100x) **209-500/209-035** 5

Decade marker carrier, ❹
for matrix patchboards
dark gray **726-905** 10

Operating tool with partially insulated shaft,
type 1, (2.5 x 0.4) mm blade
210-719 1



Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

Matrix Patchboards, 32-Pole – Slimline Version, for 19" Racks
726 Series

Side 1: 2x 0.08 - 1.5 mm²	AWG 28 - 16
Side 2: 2x 0.08 - 1.5 mm²	AWG 28 - 16
500 V/6 kV/3 ❶	300 V, 10 A
I_N 10 A	300 V, 10 A
8 - 10 mm / 0.35 in ❷	

Side 1: 2x 0.08 - 1.5 mm²	AWG 28 - 16
Side 2: 2x 0.08 - 1.5 mm²	AWG 28 - 16
500 V/6 kV/3 ❶	300 V, 10 A
I_N 10 A	300 V, 10 A
8 - 10 mm / 0.35 in ❷	





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications

❹ See application notes for:
Decade marker carrier, page 468
Insulation stop, page 469

Item No.		Pack. Unit
Matrix patchboard, dark gray frame, white/gray modules, module marking on sides 1 and 2 arranged vertically		
marking 1-32	**726-321**	24
marking 33-64	**726-322**	24
Matrix patchboard, dark gray frame, blue modules, module marking on sides 1 and 2 arranged vertically		
marking 1-32	**726-341** ❸	24
marking 33-64	**726-342** ❸	24

Item No.		Pack. Unit
Matrix patchboard, mounted upside down, dark gray frame, white/gray modules, module marking on sides 1 and 2 arranged vertically		
marking 1-32	**726-325**	24
marking 33-64	**726-326**	24
Matrix patchboard, mounted upside down, dark gray frame, blue modules, module marking on sides 1 and 2 arranged vertically		
marking 1-32	**726-345** ❸	24
marking 33-64	**726-346** ❸	24

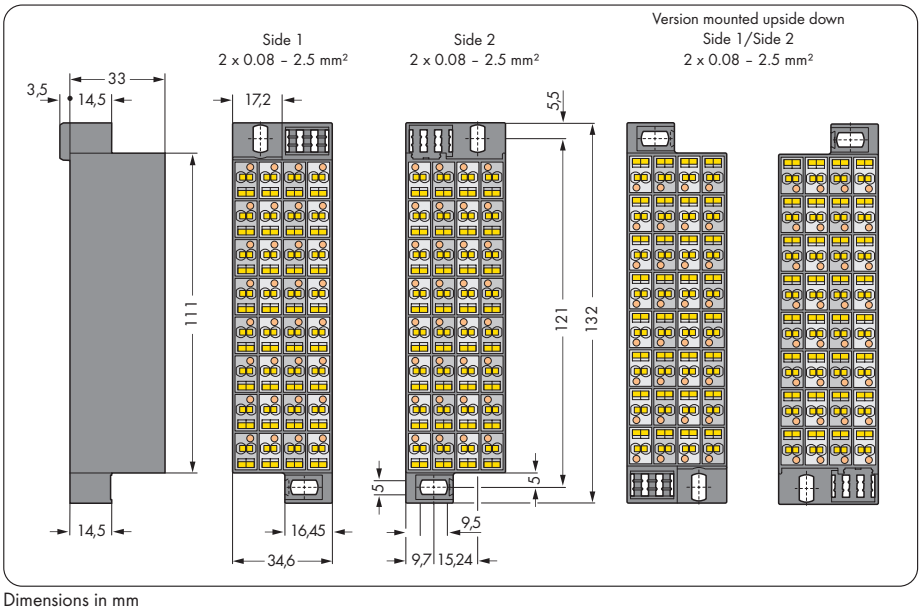
Matrix Patchboard Accessories

Insulation stop, ❹
4 x 3 pcs/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **726-901** 200 (8x25)

Insulation stop, ❹
4 x 3 pcs/strip,
0.25 - 0.5 mm² "s+f-st"
dark gray **726-907** 200 (8x25)

Insulation stop, ❹
4 x 3 pcs/strip,
0.25 mm² "s" 0.14 - 0.25 mm² "f-st"
light gray **726-906** 200 (8x25)

WFB continuous marking strip,
1000 mm long
transparent **210-612** 10



Dimensions in mm

Matrix Patchboard Accessories

Carrier for WFB continuous marking strip,
to be snapped into the marker slot
209-185 200 (8x25)

WSB Quick marking system,
10 strips with 10 markers per card,
for terminal widths 5 - 17.5 mm
plain **209-501** 5

WSB Quick marking system,
10 strips with 10 markers per card,
horizontal marking
1 ... 10 (10x) **209-502** 5

WSB Quick marking system,
10 strips with 10 markers per card,
horizontal marking
1 ... 50 (2x) **209-566** 5

WSB Quick marking system,
10 strips with 10 markers per card,
horizontal marking
X (100x) **209-500/209-035** 5

Decade marker carrier, ❹
for matrix patchboards
dark gray **726-905** 10

Operating tool with partially insulated shaft,
type 1, (2.5 x 0.4) mm blade
210-719 1

Certification organizations can be found in the overview on pages 622 and 623.

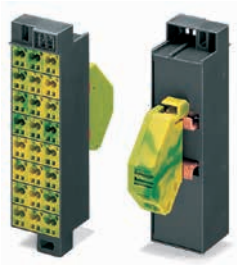
Common Potential Matrix Patchboards – Slimline Version, for 19" Racks
726 Series

CAGE CLAMP®

Side 1: I_N 24 A 24x 2x 0.08 - 2.5 mm² 8 - 10 mm / 0.35 in Side 2: I_N 76 A 1x or 2x 0.2 - 16 mm² 16 - 17 mm / 0.65 in	300 V, 10 A AWG 28 - 14 AWG 24 - 6	Side 1: I_N 24 A 24x 2x 0.08 - 2.5 mm² 8 - 10 mm / 0.35 in Side 2: I_N 76 A 1x or 2x 0.2 - 16 mm² 16 - 17 mm / 0.65 in	300 V, 10 A AWG 28 - 14 AWG 24 - 6	Side 1: I_N 24 A 24x 2x 0.08 - 2.5 mm² 8 - 10 mm / 0.35 in Side 2: I_N 76 A 1x or 2x 0.2 - 16 mm² 16 - 17 mm / 0.65 in	AWG 28 - 14 AWG 24 - 6







Item No.	Pack. Unit
Common potential matrix patchboard, dark gray frame, gray module, module marking on sides 1 and 2 arranged vertically, 1-24 marking, with 1 supply terminal block incl. end plate	
726-601	10
Common potential matrix patchboard, dark gray frame, gray module, module marking on sides 1 and 2 arranged vertically, 1-24 marking, with 2 input terminal blocks incl. end plate	
726-602	10

Item-Specific Accessories

Additional supply terminal block



gray **283-611** 25

Operating tool with partially insulated shaft,



type 3, (5.5 x 0.8) mm blade **210-721** 1

Item No.	Pack. Unit
Common potential matrix patchboard, dark gray frame, white module, module marking on sides 1 and 2 arranged vertically, 1-24 marking, with 1 supply terminal block incl. end plate	
726-611	10
Common potential matrix patchboard, dark gray frame, white module, module marking on sides 1 and 2 arranged vertically, 1-24 marking, with 2 input terminal blocks incl. end plate	
726-612	10

Item-Specific Accessories

Additional supply terminal block



white **283-610** 25

Operating tool with partially insulated shaft,



type 3, (5.5 x 0.8) mm blade **210-721** 1

Item No.	Pack. Unit
Common potential matrix patchboard for ground conductor, dark gray frame, green-yellow module, module marking on sides 1 and 2 arranged vertically, 1-24 marking, with 1 supply terminal block incl. end plate	
726-621	10
Common potential matrix patchboard for ground conductor, dark gray frame, green-yellow module, module marking on sides 1 and 2 arranged vertically, 1-24 marking, with 2 input terminal blocks incl. end plate	
726-622	10

Item-Specific Accessories

Additional supply terminal block

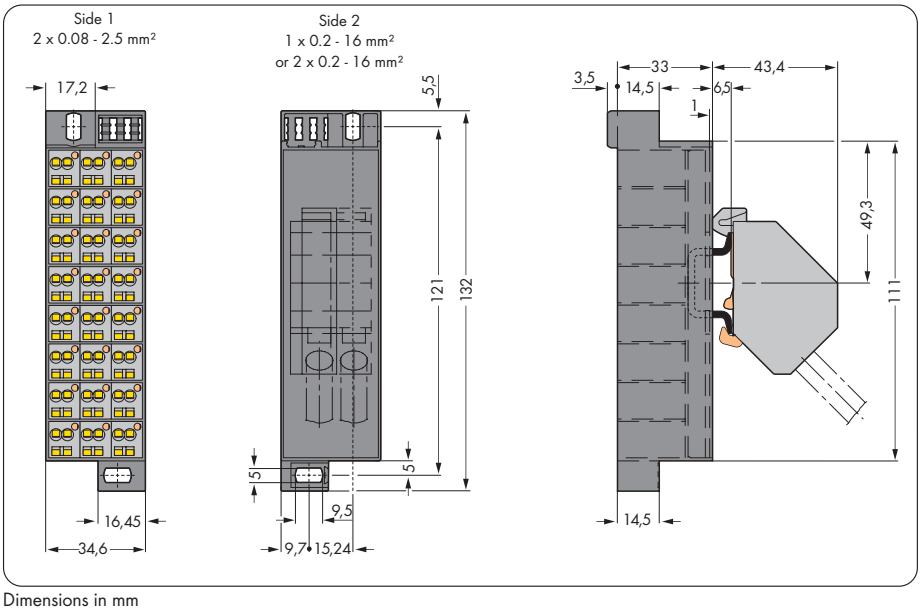


green-yellow **283-609** 25

Operating tool with partially insulated shaft,



type 3, (5.5 x 0.8) mm blade **210-721** 1



Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

Common Potential Matrix Patchboards – Slimline Version, for 19" Racks, Supply Side/Patchboard Side 726 Series

Side 1: I_N 76 A 1x or 2x 0.2 - 16 mm² 16 - 17 mm / 0.65 in Side 2: I_N 24 A 24x 2x 0.08 - 2.5 mm² 8 - 10 mm / 0.35 in	300V, 10A AWG 24 - 6 AWG 28 - 14	Side 1: I_N 76 A 1x or 2x 0.2 - 16 mm² 16 - 17 mm / 0.65 in Side 2: I_N 24 A 24x 2x 0.08 - 2.5 mm² 8 - 10 mm / 0.35 in	300V, 10A AWG 24 - 6 AWG 28 - 14	Side 1: I_N 76 A 1x or 2x 0.2 - 16 mm² 16 - 17 mm / 0.65 in Side 2: I_N 24 A 24x 2x 0.08 - 2.5 mm² 8 - 10 mm / 0.35 in	AWG 24 - 6 AWG 28 - 14







Item No.	Pack. Unit
Common potential matrix patchboard, dark gray frame, with 1 supply terminal block incl. end plate, gray module, module marking on sides 1 and 2 arranged vertically, 1-24 marking	
726-651	10
Common potential matrix patchboard, dark gray frame, with 2 input terminal blocks incl. end plate, gray module, module marking on sides 1 and 2 arranged vertically, 1-24 marking	
726-652	10

Item No.	Pack. Unit
Common potential matrix patchboard, dark gray frame, with 1 supply terminal block incl. end plate, white module, module marking on sides 1 and 2 arranged vertically, 1-24 marking	
726-661	10
Common potential matrix patchboard, dark gray frame, with 2 input terminal blocks incl. end plate, white module, module marking on sides 1 and 2 arranged vertically, 1-24 marking	
726-662	10

Item No.	Pack. Unit
Common potential matrix patchboard for ground conductor, dark gray frame, with 1 supply terminal block incl. end plate, green-yellow module, module marking on sides 1 and 2 arranged vertically, 1-24 marking	
726-671	10
Common potential matrix patchboard for ground conductor, dark gray frame, with 2 input terminal blocks incl. end plate, green-yellow module, module marking on sides 1 and 2 arranged vertically, 1-24 marking	
726-672	10

Item-Specific Accessories

Additional supply terminal block



gray **283-611** 25

Operating tool with partially insulated shaft,



type 3, (5.5 x 0.8) mm blade **210-721** 1

Item-Specific Accessories

Additional supply terminal block



white **283-610** 25

Operating tool with partially insulated shaft,



type 3, (5.5 x 0.8) mm blade **210-721** 1

Item-Specific Accessories

Additional supply terminal block

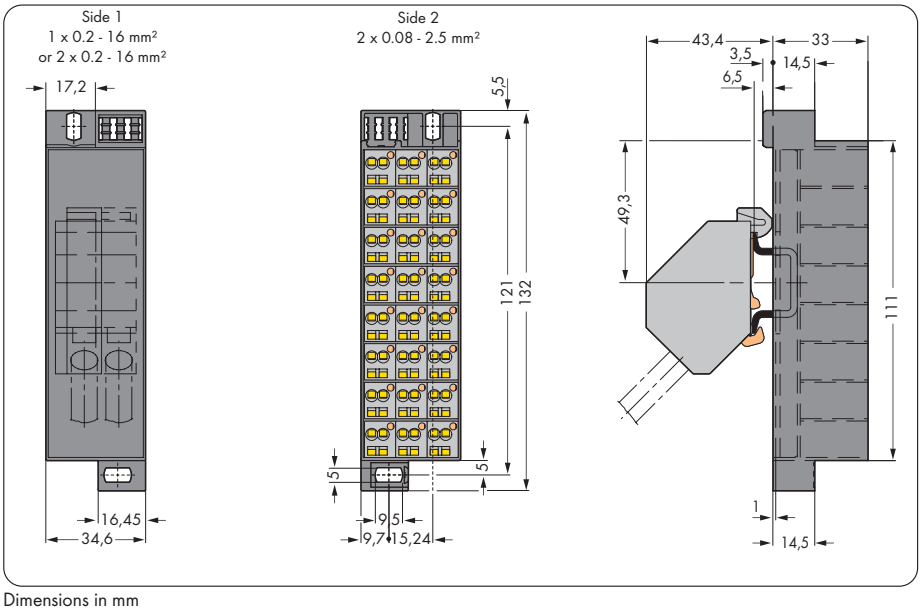


green-yellow **283-609** 25

Operating tool with partially insulated shaft,



type 3, (5.5 x 0.8) mm blade **210-721** 1



Dimensions in mm



Common potential matrix patchboard

Certification organizations can be found in the overview on pages 622 and 623.

Additional Modules and Decade Marker Carriers
726 Series

CAGE CLAMP®

0.08 - 4 mm² / AWG 28 - 12 0.08 - 2.5 mm² / AWG 28 - 14 500 V/4 kV/3 ❶ I_N 10 A 9 mm / 0.35 in ❷	**Decade marker carrier**





❶ 500 V = rated voltage
6 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

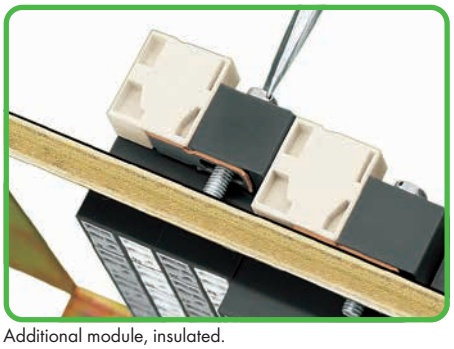
❷ Strip length, see packaging or instructions.

	Item No.	Pack. Unit
Additional modules for matrix patchboards,		
for snap-on fixing to the lower fixing element,		
with CAGE CLAMP®,		
additional module with contact to mounting frame		
○ white	**726-903**	25
Additional modules for matrix patchboards,		
for snap-on fixing to the lower fixing element,		
with CAGE CLAMP®		
● gray	**726-904**	25

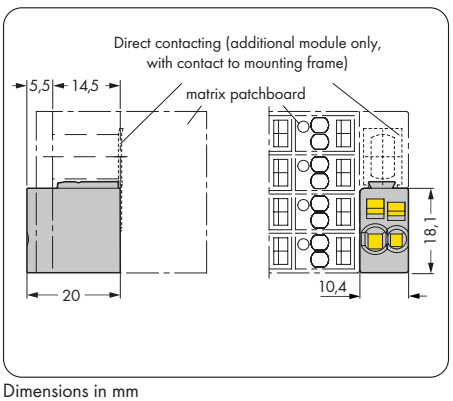
	Item No.	Pack. Unit
Decade marker carrier, for matrix patchboards		
● dark gray	**726-905**	10



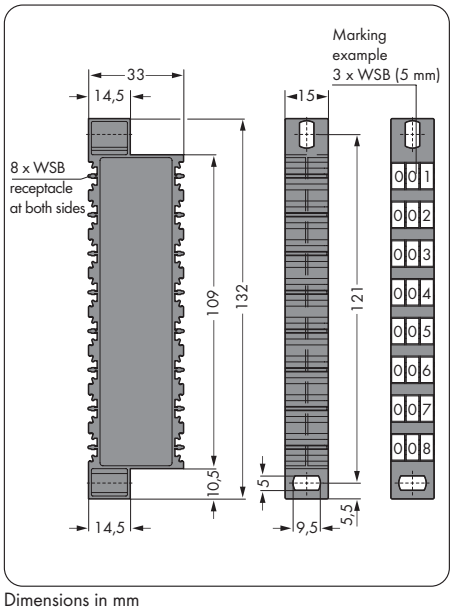
Snapping on an additional module with contact to mounting frame.



Additional module, insulated.



Dimensions in mm



Dimensions in mm

Insulation Stops for Matrix Patchboards
726 Series

Insulation stop



	Item No.	Pack. Unit
Insulation stop,		
4 x 3 pcs/strip,		
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
◯ white	**726-901**	200 (8x25)
Insulation stop,		
4 x 3 pcs/strip,		
0.25 mm² "s" 0.14 - 0.25 mm² "f-st"		
◯ light gray	**726-906**	200 (8x25)
Insulation stop,		
4 x 3 pcs/strip,		
0.25 - 0.5 mm² "s+f-st"		
● dark gray	**726-907**	200 (8x25)
Suitable for patchboard side (side 1) of 1.5mm² matrix patchboards (front side differs from back side).		



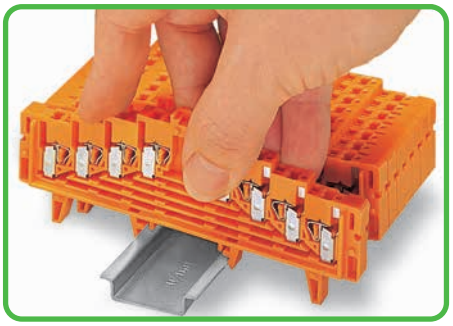
Insert insulation stop into conductor entry holes of matrix patchboard.



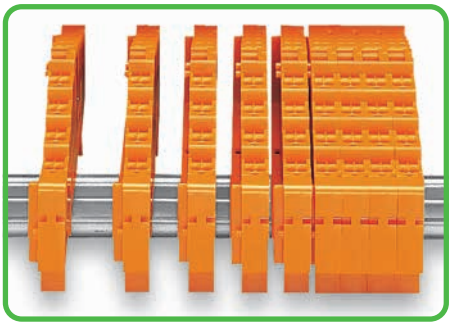
Inserted insulation stop.

Terminal Blocks for Matrix Patching and Common Potential Terminal Blocks 727 Series

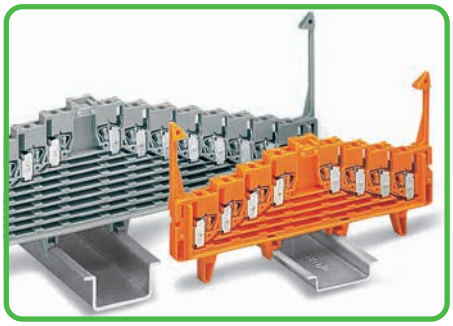
Assembly



Snap individual 4- or 8-level terminal blocks onto the carrier rail.

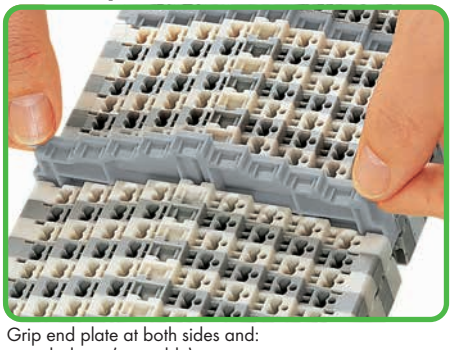


Terminal blocks slide together.

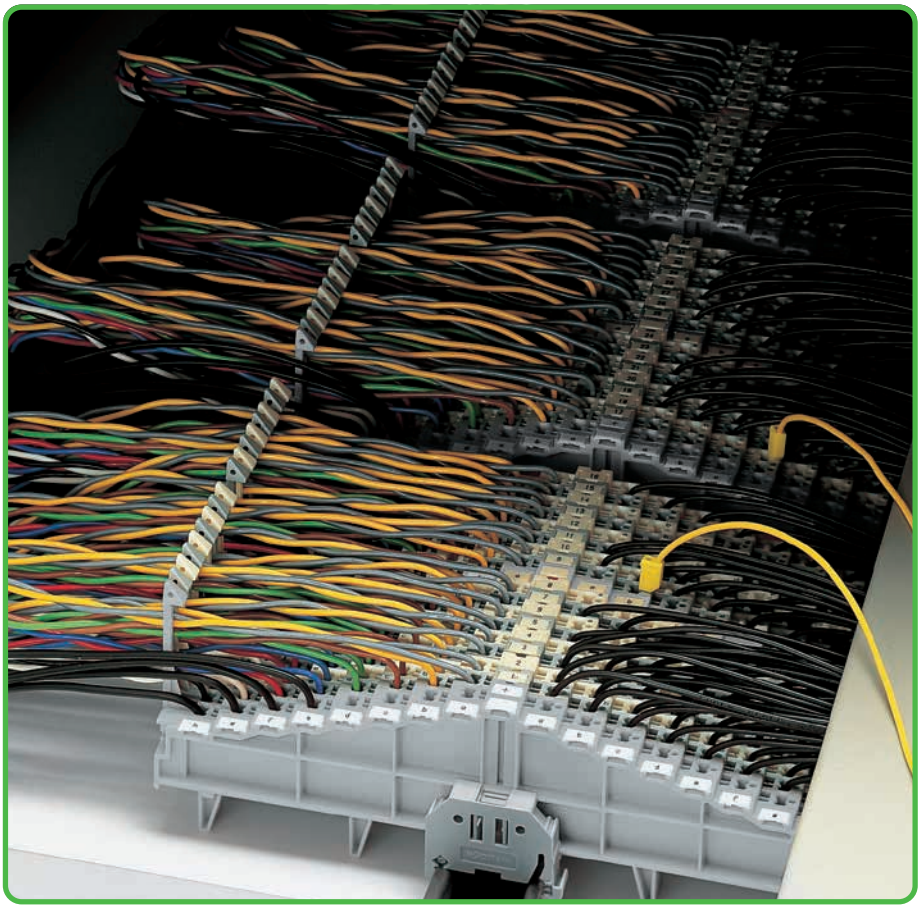


Terminal blocks for DIN 35 x 7.5 mm or DIN 35 x 15 mm rails are available.

Assembly / Removal



Grip end plate at both sides and:
– push down (assembly)
– pull up (removal)

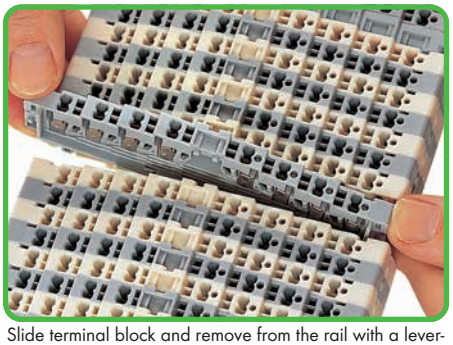


Removal



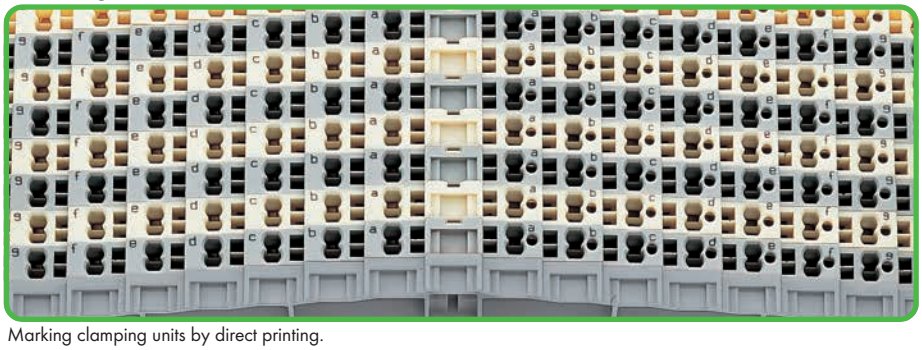
Open the assembly by laterally sliding a block via (2.5 x 0.4) mm operating tool.

Removal



Slide terminal block and remove from the rail with a levering action.

Marking



Marking clamping units by direct printing.



CAGE CLAMP® clamps the following copper conductors:*

solid



stranded

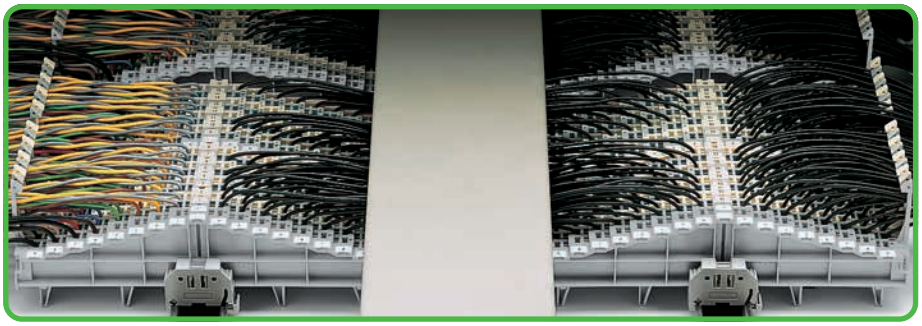


fine-stranded, also with tinned single strands

* For aluminum conductors, see notes in Section 14.

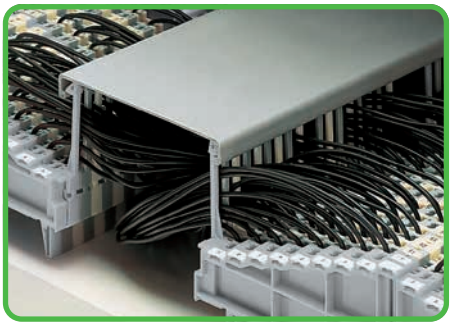
– Description and Handling –

Matrix patching assembly



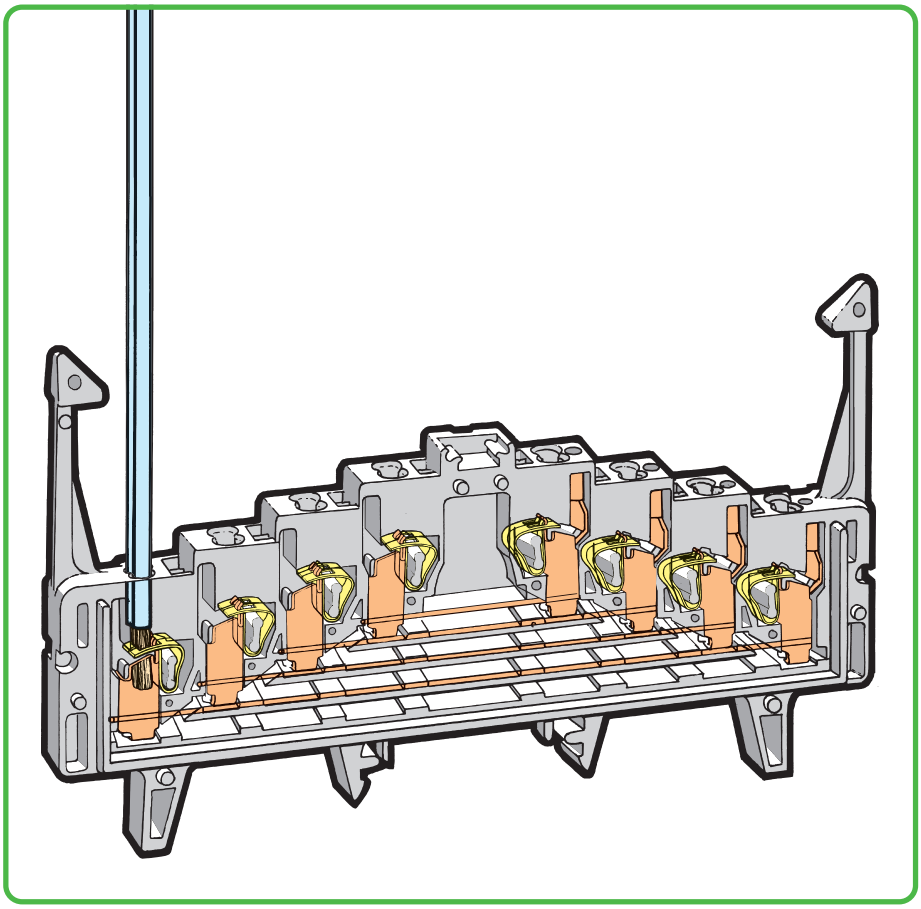
Example
left: Main cables fed through locking clips on the field side
right: Control cables fed between locking clips
center: Wiring of the patching sides

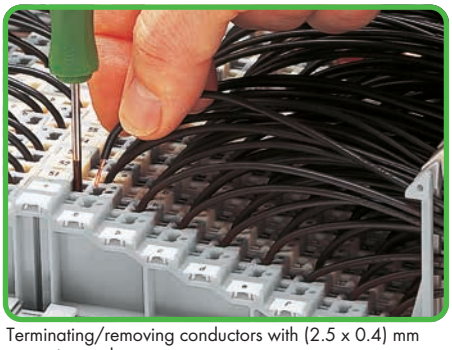
Wiring space



Using terminal blocks with locking clips, the wiring space between the terminal strips can be covered with a wiring duct cover.

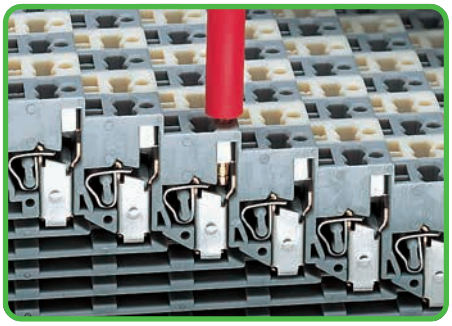
CAGE CLAMP® connection





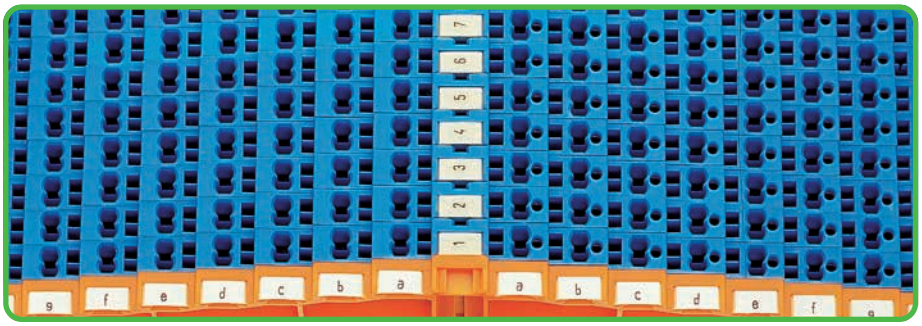
Terminating/removing conductors with (2.5 x 0.4) mm operating tool.

Testing

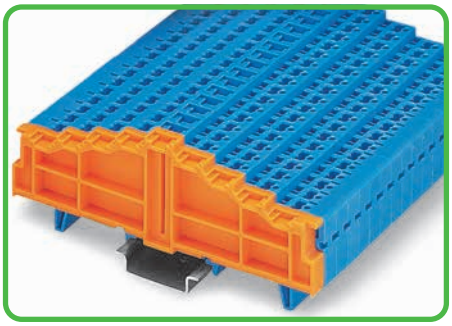


Special test contact for test plug 2.3 mm Ø.

Ex i versions



Marking coordinates via WMB Multi marking system.



Blue terminal blocks for matrix patching are suitable for Ex i applications.



fine-stranded, tip-bonded



fine-stranded, with ferrule ❶ (gastight crimped)



fine-stranded, with pin terminal (gastight crimped)

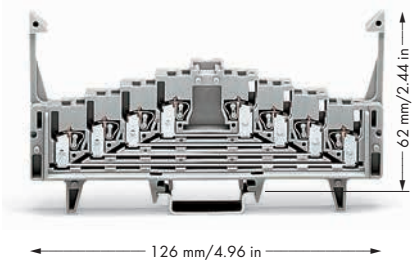
❶ Max. cross section for uninsulated ferrules 1 mm²/AWG 18, for insulated ferrules 0.75 mm²/AWG 20.

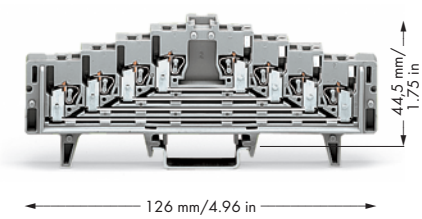
4-Level Terminal Blocks for Matrix Patching 1.5 mm²
727 Series

CAGE CLAMP®

0.08 - 1.5 mm²	AWG 28 - 16
250 V/4 kV/3 ❶	300 V, 10 A
I_N 12 A	300 V, 10 A
Terminal block width 7.62 mm / 0.3 in	
8 - 10 mm / 0.35 in ❷	

0.08 - 1.5 mm²	AWG 28 - 16
250 V/4 kV/3 ❶	300 V, 10 A
I_N 12 A	300 V, 10 A
Terminal block width 7.62 mm / 0.3 in	
8 - 10 mm / 0.35 in ❷	





❶ 250 V = rated voltage
4 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications
60 V = peak value (table 4, EN 50020)
if approved by the works expert

❹ See application notes for:
Wire harness support, page 476

	Item No.	Pack. Unit
4-level terminal block for matrix patching with locking clips,		
4 x pairs of contacts on each level,		
for DIN 35 x 7.5 rail acc. to EN 60715		
gray	**727-219**	50
white	**727-221**	50
blue	**727-223** ❸	50
4-level terminal block for matrix patching with locking clips,		
4 x pairs of contacts on each level,		
for DIN 35 x 15 rail acc. to EN 60715		
gray	**727-229**	50
white	**727-231**	50
blue	**727-233** ❸	50
Item no. suffixes for terminal blocks with marking:		
0-1-2-3–3-2-1-0	**.../021-000**	
a-b-c-d–d-c-b-a	**.../022-000**	
3-2-1-0–0-1-2-3	**.../023-000**	
d-c-b-a–a-b-c-d	**.../024-000**	

	Item No.	Pack. Unit
4-level terminal block for matrix patching without locking clips,		
4 x pairs of contacts on each level,		
for DIN 35 x 7.5 rail acc. to EN 60715		
gray	**727-220**	50
white	**727-222**	50
blue	**727-224** ❸	50
4-level terminal block for matrix patching without locking clips,		
4 x pairs of contacts on each level,		
for DIN 35 x 15 rail acc. to EN 60715		
gray	**727-230**	50
white	**727-232**	50
blue	**727-234** ❸	50
Item no. suffixes for terminal blocks with marking:		
0-1-2-3–3-2-1-0	**.../021-000**	
a-b-c-d–d-c-b-a	**.../022-000**	
3-2-1-0–0-1-2-3	**.../023-000**	
d-c-b-a–a-b-c-d	**.../024-000**	

727 Series Accessories

Appropriate marking system:
WMB (see Section 13)

4-level end plate, 7.62 mm thick,

without marking
orange **727-217** 25

4-level end plate, 7.62 mm thick,

numeric marking,
marking: 0-1-2-3–3-2-1-0
orange **727-205** 25

4-level end plate, 7.62 mm thick,

alphanumeric marking,
marking: a-b-c-d–d-c-b-a
orange **727-206** 25

4-level end plate, 7.62 mm thick,

numeric marking,
marking: 3-2-1-0–0-1-2-3
orange **727-207** 25

4-level end plate, 7.62 mm thick,

alphanumeric marking,
marking: d-c-b-a–a-b-c-d
orange **727-208** 25

Insulation stop,

8 pieces/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **727-197** 200 (8x25)

Insulation stop,

8 pieces/strip,
0.25 mm² "s" 0.14 - 0.25 mm² "s+f-st"
light gray **727-198** 200 (8x25)

Insulation stop,

8 pieces/strip,
0.25 - 0.5 mm² "s+f-st"
dark gray **727-199** 200 (8x25)

Wire commoning chain, insulated,

31 connections, I_N 6 A,
max. 50 V, 0.5 mm²
gray **709-107** 1

Test plug,

with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

Step-down test plug,

from 4 mm socket to 2 mm plug
red **210-297** 100 (4x25)

Wire harness support
❹ 
gray **249-109** 50

Accessories

Double marker carrier, 4 mm wide,

for I/O markings in the terminal block center
gray **209-128** 200 (2x100)

Screwless end stop,

for DIN 35 rail,
6 mm wide
gray **249-116** 100 (4x25)

Screwless end stop,

for DIN 35 rail,
10 mm wide
gray **249-117** 50 (2x25)

Operating tool with partially insulated shaft,

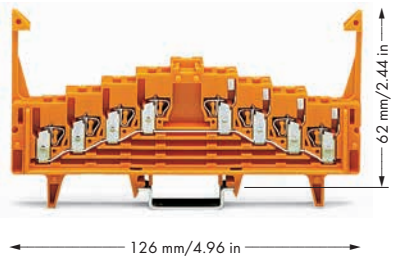
type 1, (2.5 x 0.4) mm blade
210-719 1

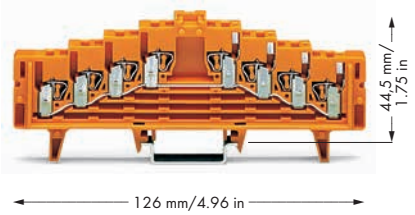
Certification organizations can be found in the overview on pages 622 and 623.

4-Level Common Potential Terminal Blocks 1.5 mm² 727 Series

0.08 - 1.5 mm²	AWG 28 - 16
250 V/4 kV/3 ❶	300 V, 10 A
I_N 18 A	300 V, 10 A
Terminal block width 7.62 mm / 0.3 in	
8 - 10 mm / 0.35 in ❷	

0.08 - 1.5 mm²	AWG 28 - 16
250 V/4 kV/3 ❶	300 V, 10 A
I_N 18 A	300 V, 10 A
Terminal block width 7.62 mm / 0.3 in	
8 - 10 mm / 0.35 in ❷	





❶ 250 V = rated voltage
4 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ See application notes for:
Wire harness support, page 476

	Item No.	Pack. Unit
4-level common potential terminal block with locking clips, all clamping units are connected to the same current bar, for DIN 35 x 7.5 rail acc. to EN 60715		
orange	**727-225**	50
light gray	**727-227**	50
4-level common potential terminal block with locking clips, all clamping units are connected to the same current bar, for DIN 35 x 15 rail acc. to EN 60715		
orange	**727-235**	50
light gray	**727-237**	50
Item no. suffixes for terminal blocks with marking:		
0-1-2-3–3-2-1-0	**.../021-000**	
a-b-c-d–d-c-b-a	**.../022-000**	
3-2-1-0–0-1-2-3	**.../023-000**	
d-c-b-a–a-b-c-d	**.../024-000**	

	Item No.	Pack. Unit
4-level common potential terminal block without locking clips, all clamping units are connected to the same current bar, for DIN 35 x 7.5 rail acc. to EN 60715		
orange	**727-226**	50
light gray	**727-228**	50
4-level common potential terminal block without locking clips, all clamping units are connected to the same current bar, for DIN 35 x 15 rail acc. to EN 60715		
orange	**727-236**	50
light gray	**727-238**	50
Item no. suffixes for terminal blocks with marking:		
0-1-2-3–3-2-1-0	**.../021-000**	
a-b-c-d–d-c-b-a	**.../022-000**	
3-2-1-0–0-1-2-3	**.../023-000**	
d-c-b-a–a-b-c-d	**.../024-000**	

727 Series Accessories

Appropriate marking system:
WMB (see Section 13)

4-level end plate, 7.62 mm thick,
without marking
orange **727-217** 25

4-level end plate, 7.62 mm thick,
numeric marking,
marking: 0-1-2-3–3-2-1-0
orange **727-205** 25

4-level end plate, 7.62 mm thick,
alphanumeric marking,
marking: a-b-c-d–d-c-b-a
orange **727-206** 25

4-level end plate, 7.62 mm thick,
numeric marking,
marking: 3-2-1-0–0-1-2-3
orange **727-207** 25

4-level end plate, 7.62 mm thick,
alphanumeric marking,
marking: d-c-b-a–a-b-c-d
orange **727-208** 25

Insulation stop,
8 pieces/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **727-197** 200 (8x25)

Insulation stop,
8 pieces/strip,
0.25 mm² "s" 0.14 - 0.25 mm² "s+f-st"
light gray **727-198** 200 (8x25)

Insulation stop,
8 pieces/strip,
0.25 - 0.5 mm² "s+f-st"
dark gray **727-199** 200 (8x25)

Wire commoning chain, insulated,
31 connections, I_N 6 A,
max. 50 V, 0.5 mm²
gray **709-107** 1

Test plug,
with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

Step-down test plug,
from 4 mm socket to 2 mm plug
red **210-297** 100 (4x25)

Wire harness support ❸
gray **249-109** 50

Accessories

Double marker carrier, 4 mm wide,
for I/O markings in the terminal block center
gray **209-128** 200 (2x100)

Screwless end stop,
for DIN 35 rail,
6 mm wide
gray **249-116** 100 (4x25)

Screwless end stop,
for DIN 35 rail,
10 mm wide
gray **249-117** 50 (2x25)

Operating tool with partially insulated shaft,
type 1, (2.5 x 0.4) mm blade
210-719 1

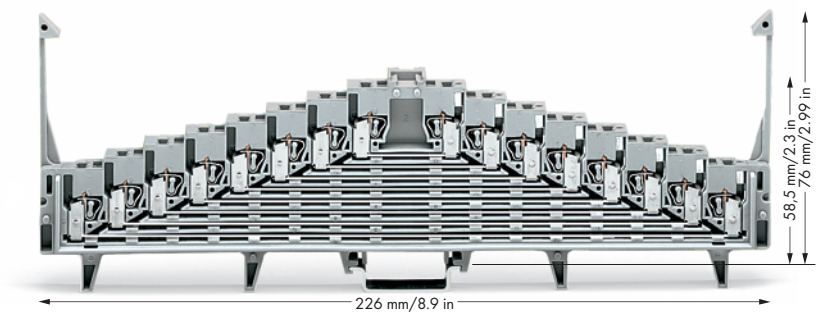
Certification organizations can be found in the overview on pages 622 and 623.

8-Level Terminal Blocks for Matrix Patching 1.5 mm² 727 Series

CAGE CLAMP®

0.08 - 1.5 mm²	AWG 28 - 16
250 V/4 kV/3 ❶	300 V, 10 A
I_N 10 A	300 V, 10 A
Terminal block width 7.62 mm / 0.3 in	
8 - 10 mm / 0.35 in ❷	

0.08 - 1.5 mm²	AWG 28 - 16
250 V/4 kV/3 ❶	300 V, 10 A
I_N 10 A	300 V, 10 A
Terminal block width 7.62 mm / 0.3 in	
8 - 10 mm / 0.35 in ❷	



❶ 250 V = rated voltage
4 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ Suitable for Ex i applications
60 V = peak value (table 4, EN 50020)
if approved by the works expert

❹ See application notes for:
Wire harness support, page 476

Note: Only combine terminal blocks and end plates that are colored gray/white/light gray or orange/blue!

	Item No.	Pack. Unit
8-level terminal block for matrix patching with locking clips,		
8 x pairs of contacts on each level,		
for DIN 35 x 7.5 rail acc. to EN 60715		
gray	**727-119**	25
white	**727-121**	25
blue	**727-123** ❸	25
8-level terminal block for matrix patching with locking clips,		
8 x pairs of contacts on each level,		
for DIN 35 x 15 rail acc. to EN 60715		
gray	**727-129**	25
white	**727-131**	25
blue	**727-133** ❸	25
Item no. suffixes for terminal blocks with marking:		
0-1-2-3-4-5-6-7–7-6-5-4-3-2-1-0	**.../001-000**	
a-b-c-d-e-f-g-h–h-g-f-e-d-c-b-a	**.../002-000**	
7-6-5-4-3-2-1-0–0-1-2-3-4-5-6-7	**.../003-000**	
h-g-f-e-d-c-b-a–a-b-c-d-e-f-g-h	**.../004-000**	

	Item No.	Pack. Unit
8-level terminal block for matrix patching without locking clips,		
8 x pairs of contacts on each level,		
for DIN 35 x 7.5 rail acc. to EN 60715		
gray	**727-120**	25
white	**727-122**	25
blue	**727-124** ❸	25
8-level terminal block for matrix patching without locking clips,		
8 x pairs of contacts on each level,		
for DIN 35 x 15 rail acc. to EN 60715		
gray	**727-130**	25
white	**727-132**	25
blue	**727-134** ❸	25
Item no. suffixes for terminal blocks with marking:		
0-1-2-3-4-5-6-7–7-6-5-4-3-2-1-0	**.../001-000**	
a-b-c-d-e-f-g-h–h-g-f-e-d-c-b-a	**.../002-000**	
7-6-5-4-3-2-1-0–0-1-2-3-4-5-6-7	**.../003-000**	
h-g-f-e-d-c-b-a–a-b-c-d-e-f-g-h	**.../004-000**	

727 Series Accessories

Appropriate marking system:
WMB (see Section 13)

8-level end plate, 7.62 mm thick,



without marking		
orange	**727-117**	25
gray	**727-113**	25
blue	**727-114**	25
white	**727-115**	25
light gray	**727-116**	25

8-level end plate, 7.62 mm thick,



numeric marking,		
marking: 7-6-5-4-3-2-1-0–0-1-2-3-4-5-6-7		
orange	**727-107**	25
gray	**727-157**	25
blue	**727-161**	25
white	**727-165**	25
light gray	**727-169**	25

8-level end plate, 7.62 mm thick,



numeric marking,		
marking: 0-1-2-3-4-5-6-7–7-6-5-4-3-2-1-0		
orange	**727-105**	25
gray	**727-155**	25
blue	**727-159**	25
white	**727-163**	25
light gray	**727-167**	25

8-level end plate, 7.62 mm thick,



alphanumeric marking,		
marking: h-g-f-e-d-c-b-a–a-b-c-d-e-f-g-h		
orange	**727-108**	25
gray	**727-158**	25
blue	**727-162**	25
white	**727-166**	25
light gray	**727-170**	25

8-level end plate, 7.62 mm thick,



alphanumeric marking,		
marking: a-b-c-d-e-f-g-h–h-g-f-e-d-c-b-a		
orange	**727-106**	25
gray	**727-156**	25
blue	**727-160**	25
white	**727-164**	25
light gray	**727-168**	25

Insulation stop,



8 pieces/strip,
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")
white **727-197** 200 (8x25)

Insulation stop,



8 pieces/strip,
0.25 mm² "s" 0.14 - 0.25 mm² "s+f-st"
light gray **727-198** 200 (8x25)

Accessories

Insulation stop,



8 pieces/strip,
0.25 - 0.5 mm² "s+f-st"
dark gray **727-199** 200 (8x25)

Wire commoning chain, insulated,



31 connections, I_N 6 A,
max. 50 V, 0.5 mm²
gray **709-107** 1

Test plug,



with 500 mm cable,
2.3 mm Ø
yellow **210-137** 50

Step-down test plug,



from 4 mm socket to 2 mm plug
red **210-297** 100 (4x25)

Wire harness support

❹ 

gray **249-109** 50

Double marker carrier, 4 mm wide,



for I/O markings in the terminal block center
gray **209-128** 200 (2x100)

WMB Multi marking system,



for terminal widths 5 - 17.5 mm,
for PLC input marking
white **793-933** 5

Screwless end stop,



for DIN 35 rail,
6 mm wide
gray **249-116** 100 (4x25)

Screwless end stop,



for DIN 35 rail,
10 mm wide
gray **249-117** 50 (2x25)

Operating tool with partially insulated shaft,



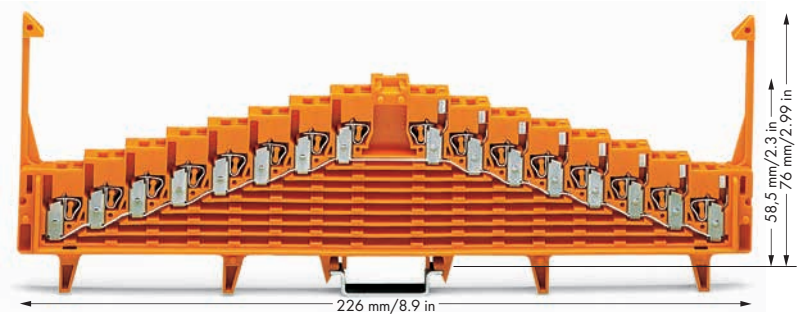
type 1, (2.5 x 0.4) mm blade
210-719 1

Certification organizations can be found in the overview on pages 622 and 623.

8-Level Common Potential Terminal Blocks 1.5 mm² 727 Series

0.08 - 1.5 mm²	AWG 28 - 16
250 V/4 kV/3 ❶	300 V, 10 A
I_N 18 A	300 V, 10 A
Terminal block width 7.62 mm / 0.3 in	
8 - 10 mm / 0.35 in ❷	

0.08 - 1.5 mm²	AWG 28 - 16
250 V/4 kV/3 ❶	300 V, 10 A
I_N 18 A	300 V, 10 A
Terminal block width 7.62 mm / 0.3 in	
8 - 10 mm / 0.35 in ❷	



❶ 250 V = rated voltage
4 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

❸ See application notes for:
Wire harness support, page 476

Note: Only combine terminal blocks and end plates that are colored gray/white/light gray or orange/blue!

	Item No.	Pack. Unit
8-level common potential terminal block with locking clips, all clamping units are connected to the same current bar, for DIN 35 x 7.5 rail acc. to EN 60715		
orange	**727-125**	25
light gray	**727-127**	25
8-level common potential terminal block with locking clips, all clamping units are connected to the same current bar, for DIN 35 x 15 rail acc. to EN 60715		
orange	**727-135**	25
light gray	**727-137**	25
Item no. suffixes for terminal blocks with marking:		
0-1-2-3-4-5-6-7–7-6-5-4-3-2-1-0	**.../001-000**	
a-b-c-d-e-f-g-h–h-g-f-e-d-c-b-a	**.../002-000**	
7-6-5-4-3-2-1-0–0-1-2-3-4-5-6-7	**.../003-000**	
h-g-f-e-d-c-b-a–a-b-c-d-e-f-g-h	**.../004-000**	

	Item No.	Pack. Unit
8-level common potential terminal block without locking clips, all clamping units are connected to the same current bar, for DIN 35 x 7.5 rail acc. to EN 60715		
orange	**727-126**	25
light gray	**727-128**	25
8-level common potential terminal block without locking clips, all clamping units are connected to the same current bar, for DIN 35 x 15 rail acc. to EN 60715		
orange	**727-136**	25
light gray	**727-138**	25
Item no. suffixes for terminal blocks with marking:		
0-1-2-3-4-5-6-7–7-6-5-4-3-2-1-0	**.../001-000**	
a-b-c-d-e-f-g-h–h-g-f-e-d-c-b-a	**.../002-000**	
7-6-5-4-3-2-1-0–0-1-2-3-4-5-6-7	**.../003-000**	
h-g-f-e-d-c-b-a–a-b-c-d-e-f-g-h	**.../004-000**	

727 Series Accessories

Appropriate marking system:
WMB (see Section 13)

8-level end plate, 7.62 mm thick,			
without marking			
orange	**727-117**	25	
gray	**727-113**	25	
blue	**727-114**	25	
white	**727-115**	25	
light gray	**727-116**	25	
8-level end plate, 7.62 mm thick,			
numeric marking,			
marking: 0-1-2-3-4-5-6-7–7-6-5-4-3-2-1-0			
orange	**727-105**	25	
gray	**727-155**	25	
blue	**727-159**	25	
white	**727-163**	25	
light gray	**727-167**	25	
8-level end plate, 7.62 mm thick,			
alphanumeric marking,			
marking: a-b-c-d-e-f-g-h–h-g-f-e-d-c-b-a			
orange	**727-106**	25	
gray	**727-156**	25	
blue	**727-160**	25	
white	**727-164**	25	
light gray	**727-168**	25	

8-level end plate, 7.62 mm thick,			
numeric marking,			
marking: 7-6-5-4-3-2-1-0–0-1-2-3-4-5-6-7			
orange	**727-107**	25	
gray	**727-157**	25	
blue	**727-161**	25	
white	**727-165**	25	
light gray	**727-169**	25	
8-level end plate, 7.62 mm thick,			
alphanumeric marking,			
marking: h-g-f-e-d-c-b-a–a-b-c-d-e-f-g-h			
orange	**727-108**	25	
gray	**727-158**	25	
blue	**727-162**	25	
white	**727-166**	25	
light gray	**727-170**	25	
Insulation stop,			
8 pieces/strip,			
0.08 - 0.2 mm² "s" (0.14 mm² "f-st")			
white	**727-197**	200 (8x25)	
Insulation stop,			
8 pieces/strip,			
0.25 mm² "s" 0.14 - 0.25 mm² "s+f-st"			
light gray	**727-198**	200 (8x25)	

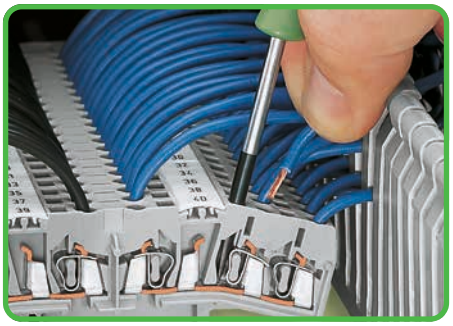
Accessories

Insulation stop,			
8 pieces/strip,			
0.25 - 0.5 mm² "s+f-st"			
dark gray	**727-199**	200 (8x25)	
Wire commoning chain, insulated,			
31 connections, I_N 6 A,			
max. 50 V, 0.5 mm²			
gray	**709-107**	1	
Test plug,			
with 500 mm cable,			
2.3 mm Ø			
yellow	**210-137**	50	
Step-down test plug,			
from 4 mm socket to 2 mm plug			
red	**210-297**	100 (4x25)	
Wire harness support			
❸ gray	**249-109**	50	
Double marker carrier, 4 mm wide,			
for I/O markings in the terminal block center			
gray	**209-128**	200 (2x100)	
Screwless end stop,			
for DIN 35 rail,			
6 mm wide			
gray	**249-116**	100 (4x25)	
Screwless end stop,			
for DIN 35 rail,			
10 mm wide			
gray	**249-117**	50 (2x25)	
Operating tool with partially insulated shaft,			
type 1, (2.5 x 0.4) mm blade			
	210-719	1	

Certification organizations can be found in the overview on pages 622 and 623.

Rail-Mounted Terminal Blocks for Matrix Patching, 280 Series – Description and Handling –

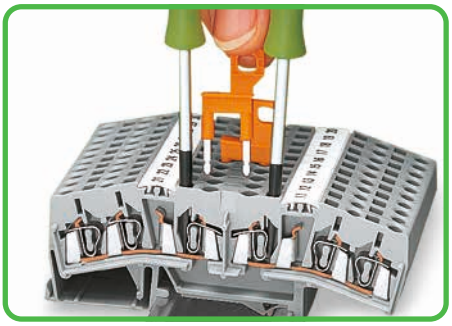
CAGE CLAMP®



Terminal blocks for matrix patching.
Conductor termination/removal on the terminal block's side-entry.

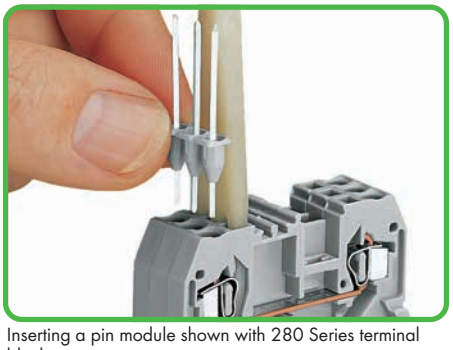


Terminal blocks for matrix patching.
Conductor termination/removal in center of the terminal block.

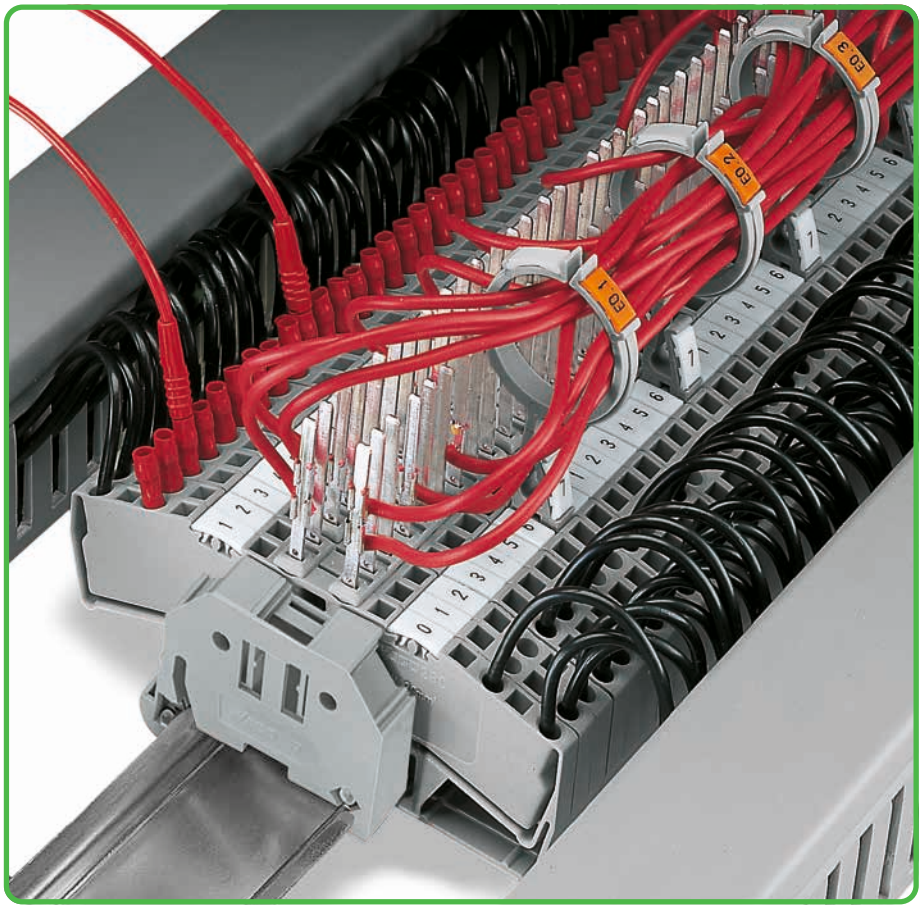


Used as disconnect terminal block.
Inserting disconnect jumpers.

Pin modules



Inserting a pin module shown with 280 Series terminal blocks.

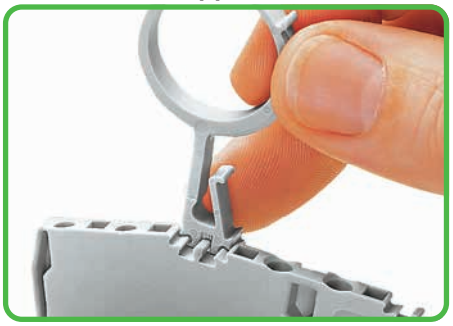


Comb-style jumper bars

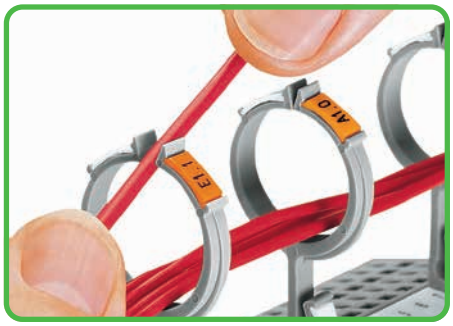


Used as potential multiplication.
Inserting a 10-way, comb-style jumper bar (only possible in the center).

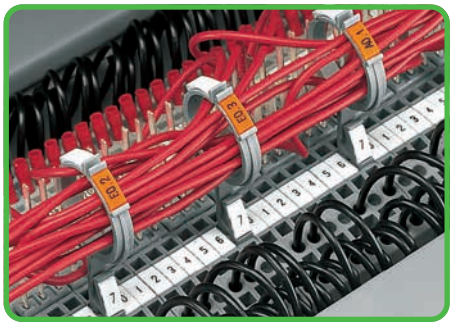
Wire harness support



Clipping wire harness support onto the marker slot.



Inserting a cable into the wire harness support.



2 x group marking on top
1 x terminal block marking at the bottom

CAGE CLAMP® clamps the following copper conductors:*

solid	stranded	fine-stranded, also with tinned single strands	fine-stranded, tip-bonded	fine-stranded, with ferrule ❶ (gastight crimped)	fine-stranded, with pin terminal (gastight crimped)

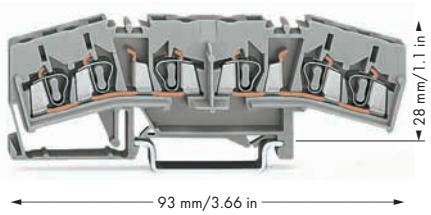
* For aluminum conductors, see notes in Section 14.

❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

Rail-Mounted Terminal Blocks for Matrix Patching 2.5 mm² 280 Series

0.08 - 2.5 mm²	AWG 28 - 12 *
800 V/8 kV/3 ❶	600 V, 10 A
I_N 18 A	
Terminal block width 5 mm / 0.197 in	
8 - 9 mm / 0.33 in ❷	

In measurement and control technology, matrix patchboards are essential to process automation systems. Particularly beneficial to these applications is the use of the WAGO wire harness support, which simplifies wiring. WAGO 280 Series 3-conductor, front-entry, double-potential terminal blocks (with or without the addition of Wire-Wrap® or TERMI-POINT® pins) are also ideal for this type of application. They can be used for linking incoming field wires from items such as measuring devices or servos etc., with central process controllers, e.g., control consoles, panelboards or PLCs via matrix connections.
The WAGO wire harness support elements are pushed into the terminal blocks (approx. every 8th unit) to form an additional "cable-duct" above the wiring level of the terminal blocks. Two marker slots are provided in each, the top ones may be used for group marking, and the lower slot for marking the terminal block.



* AWG 12: THHN, THWN

❶ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)
500 V/6 kV/3 between both current bars
(if used as disconnect terminal block or potential multiplier)

❷ Strip length, see packaging or instructions.

❸ See application notes for:
Isolierungsstopp Seite 293
Brückungskamm Seite 294
Betätigungswerkzeug Seite 294

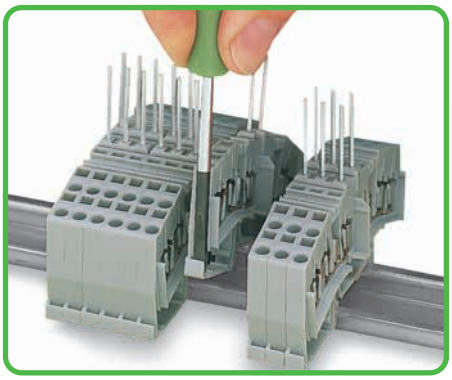
Item No.		Pack. Unit
3-conductor double-potential terminal block		
or		
Rail-mounted terminal block for matrix patching,		
Notice: This 3-conductor double-potential terminal block cannot be commoned via adjacent jumpers!		
gray	**280-675**	50

Accessories

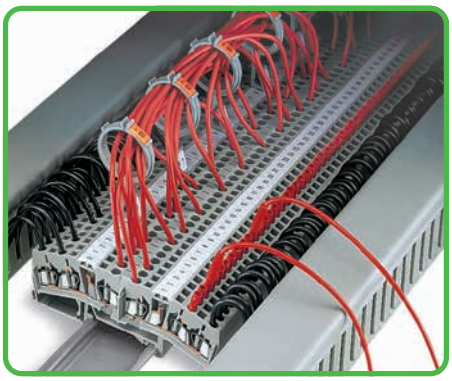
Appropriate marking system:
WMB (see Section 13)

End and intermediate plate, 5 mm thick		
orange	**280-333**	25
gray	**280-325**	25
Seperator, 3 mm oversized, 1 mm thick		
orange	**280-394**	100 (4x25)
gray	**280-395**	100 (4x25)
Insulation stop, ❸ 5 pcs/strip, 0.08 - 0.2 mm² "s" (0.14 mm² "f-st")		
white	**280-470**	200 (8x25)
Insulation stop, ❸ 5 pcs/strip, 0.25 - 0.5 mm²		
light gray	**280-471**	200 (8x25)
Insulation stop, ❸ 5 pcs/strip, 0.75 - 1 mm²		
dark gray	**280-472**	200 (8x25)
Alternate comb-style jumper bar, insulated, I_N = I_N terminal block		
2-way	**280-492**	200 (8x25)
Comb-style jumper bar, insulated, ❸ I_N = I_N terminal block		
2-way	**280-482**	200 (8x25)
3-way	**280-483**	200 (8x25)
Comb-style jumper bar, insulated, I_N = I_N terminal block		
10-way	**280-490**	50 (2x25)
Disconnect jumper with pull-tab, orange, I_N = I_N of terminal block		
2-way	**280-494**	200 (8x25)
Operating tool, of insulating material		
2-way	**280-432**	1
3-way	**280-433**	1

Operating tool, of insulating material		
10-way	**280-440**	1
Protective warning marker, with high-voltage symbol, black, for 5 terminal blocks		
yellow	**280-415**	100 (4x25)
Pin module, 2-pole, for assembly on all front-entry 280 Series rail-mounted terminal blocks, for Wire-Wrap®, 1 x 1 mm		
	280-477	100
Pin module, 2-pole, for TERMI-POINT®, 0.8 x 1.6 mm		
	280-475	100
Pin module, 2-pole, for TERMI-POINT®, 0.8 x 2.4 mm		
	280-473	100
Pin module, 3-pole, for Wire-Wrap®, 1 x 1 mm		
	280-478	100
Pin module, 3-pole, for TERMI-POINT®, 0.8 x 1.6 mm		
	280-476	100
Pin module, 3-pole, for TERMI-POINT®, 0.8 x 2.4 mm		
	280-474	100
Wire harness support		
gray	**249-109**	50



Removal: Separate terminal strip, slide terminal block to disconnect and then remove from the carrier rail.

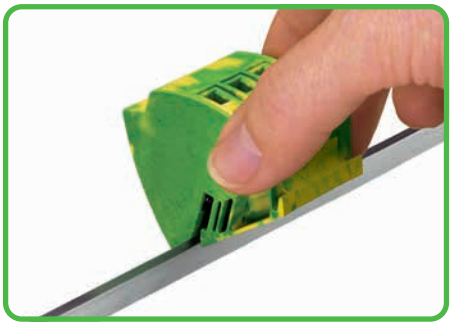


For 5 mm wide double-potential front-entry terminal blocks, two 3-conductor through terminal blocks are offered in one insulating housing on one level. On each side of the terminal block are marker slots for WAGO markers. Via of the available accessories, these terminal blocks can also be used as 4-conductor disconnect terminal blocks or multipliers of potential. During mounting/dismounting using DIN carrier rail, please note that due to the protruding webs, the terminal blocks can only be inserted or removed from the assembly after having displaced the adjacent terminal blocks (also see picture above).

Certification organizations can be found in the overview on pages 622 and 623.

Busbar Terminal Blocks, 812 Series
– Description and Handling –

CAGE CLAMP®S
CAGE CLAMP®



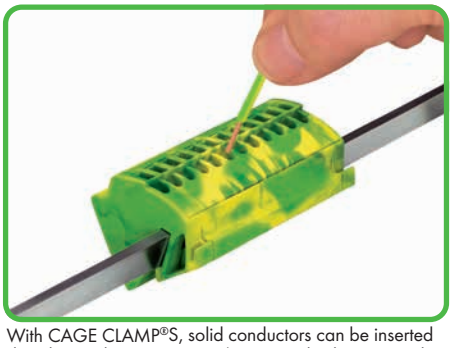
Snapping a ground busbar terminal block onto the N-busbar.



Unlock right and left positions to remove the ground busbar terminal block. Then pull up the block from the busbar.

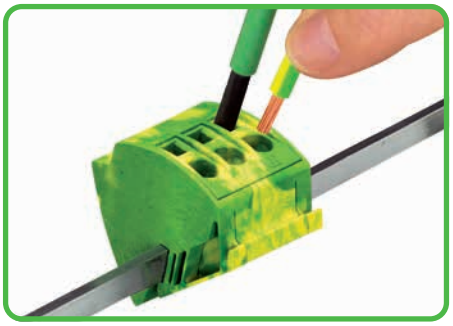
Using the 812 Series Busbar Terminal Blocks in switchgear cabinets and distribution boards permits simple and safe potential distribution on standard 10 x 3 mm busbars. Tool-free snapping of self-locking busbar terminal blocks onto the busbar enables quick and easy assembly, as well as subsequent extension. The busbar terminal blocks are available in two different versions for conductors 1.5 - 16 mm² (AWG 16 - 6).
Current-carrying capacity: With a maximum total current of 96A, the clamping units of the busbar terminal block can be loaded with the rated current of the conductor cross sections approved. This only applies when 10 x 3 mm busbars are used.

4 mm²/AWG 12 conductor termination



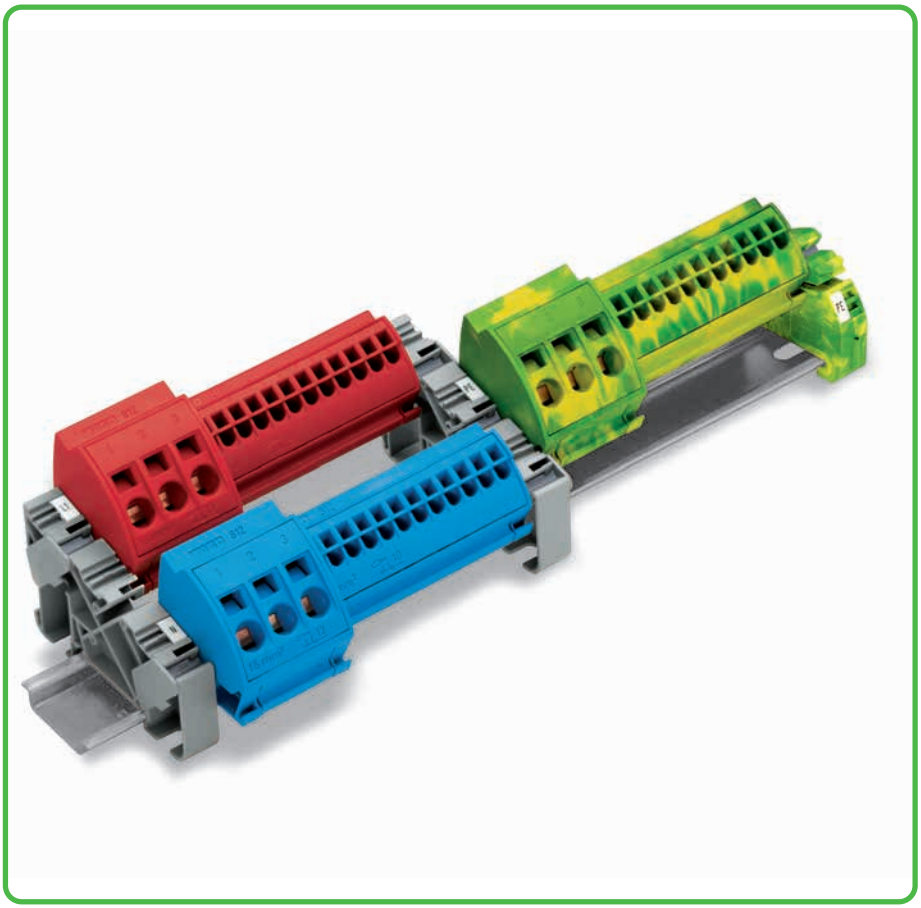
With CAGE CLAMP®S, solid conductors can be inserted directly into the 12 x 4 mm²/AWG 12 busbar terminal block, significantly reducing wiring time.

16 mm²/AWG 6 conductor termination

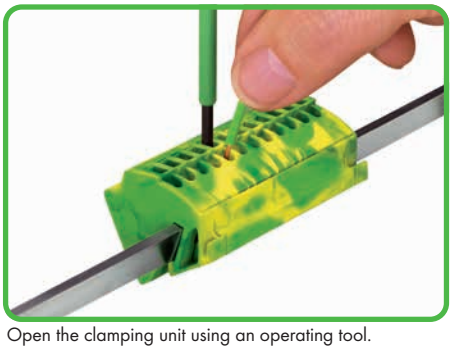


Open the clamping unit with an operating tool when terminating solid, stranded and fine-stranded conductors.

Mixed 4 mm² (AWG 12) and 16 mm² (AWG 6) busbar terminal blocks

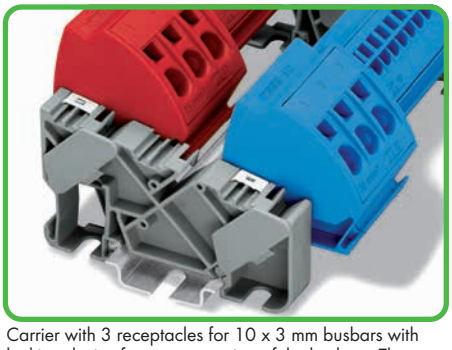


4 mm²/AWG 12 and 16 mm²/AWG 6 conductor removal



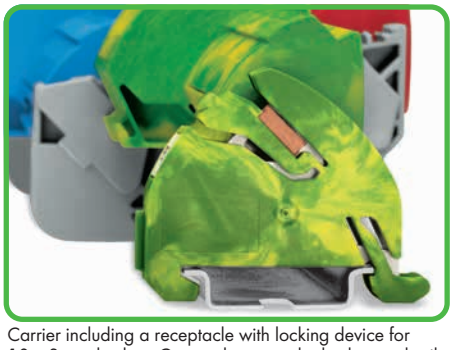
Open the clamping unit using an operating tool.

812-140 Busbar Carrier



Carrier with 3 receptacles for 10 x 3 mm busbars with locking device for easy mounting of the busbars. The carriers can be snapped onto DIN 35 rail or screwed on a panel.

812-141 Ground Busbar Carrier



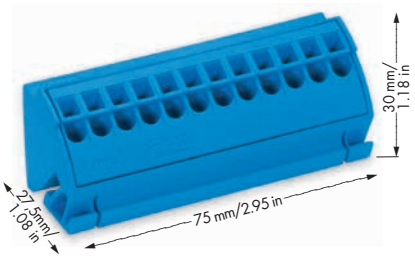
Carrier including a receptacle with locking device for 10 x 3 mm busbar. Contact between the busbar and rail is made automatically by simply snapping the carrier onto the DIN 35 rail. One end of the busbar is mounted onto the ground busbar carrier, the other end is inserted into the middle position of the insulated busbar carrier.

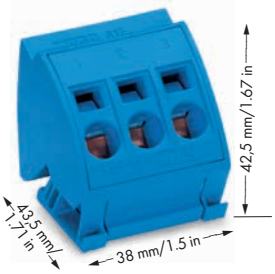
CAGE CLAMP® and CAGE CLAMP®S clamps the following copper conductors:*			
solid	stranded	fine-stranded, also with tinned single strands	fine-stranded, tip-bonded

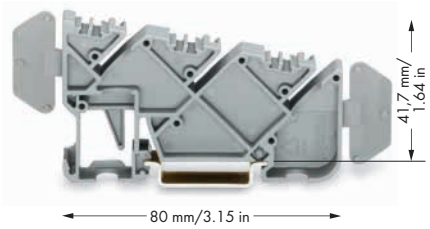
* For aluminum conductors, see notes in Section 14.

Busbar Terminal Blocks 4 mm² and 16 mm² 812 Series

0.5 - 4 mm² **1000 V/6 kV/3** **I_N 96 A**	**AWG 20 - 12** **600 V, 20 A** **600 V, 95 A**	**1.5 - 16 mm²** **1000 V/6 kV/3** **I_N 96 A**	**AWG 14 - 6** **600 V, 20 A** **600 V, 95 A**	**Insulated busbar carrier**
Terminal block width 75 mm / 2.953 in **11 mm / 0.43 in**		**Terminal block width 38 mm / 1.496 in** **12 mm / 0.47 in**		







	Item No.	Pack. Unit
Busbar terminal block 4 mm²/AWG 12, with CAGE CLAMP®S		
blue	**812-104**	10
light gray	**812-101**	10
dark gray	**812-102**	10
red	**812-103**	10

	Item No.	Pack. Unit
Busbar terminal block 16 mm²/AWG 6, with CAGE CLAMP®		
blue	**812-114**	12
light gray	**812-111**	12
dark gray	**812-112**	12
red	**812-113**	12

	Item No.	Pack. Unit
Insulated busbar carrier, 12 mm wide		
gray	**812-140**	25

Item-Specific Accessories

Busbar, tin-plated,



Cu 10 x 3 mm, 1000 mm long
I_N 140 A **210-133** 1

Item-Specific Accessories

Busbar, tin-plated,

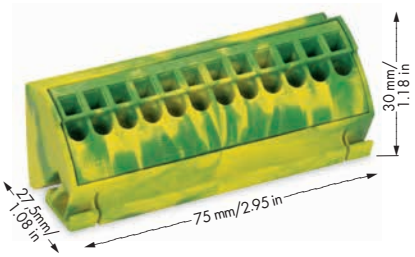


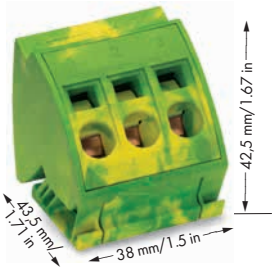
Cu 10 x 3 mm, 1000 mm long
I_N 140 A **210-133** 1

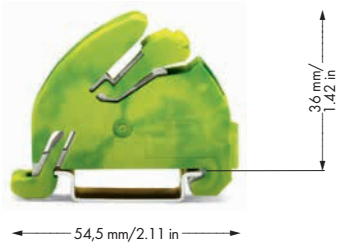
Finger guard,



touchproof cover protects unused conductor entries
yellow **284-400** 100 (4x25)







	Item No.	Pack. Unit
Ground busbar terminal block 4 mm²/AWG 12, with CAGE CLAMP®S		
green-yellow	**812-100**	10

	Item No.	Pack. Unit
Ground busbar terminal block 16 mm²/AWG 6, with CAGE CLAMP®		
green-yellow	**812-110**	12

	Item No.	Pack. Unit
Ground busbar carrier with contact to DIN 35 rail, 11 mm wide		
green-yellow	**812-141**	25

Item-Specific Accessories

Busbar, tin-plated,



Cu 10 x 3 mm, 1000 mm long
I_N 140 A **210-133** 1

Item-Specific Accessories

Busbar, tin-plated,



Cu 10 x 3 mm, 1000 mm long
I_N 140 A **210-133** 1

Finger guard,



touchproof cover protects unused conductor entries
yellow **284-400** 100 (4x25)

Certification organizations can be found in the overview on pages 622 and 623.

PUSH WIRE®

PUSH WIRE® connection for solid and stranded conductors (depending on model used)

Handling:
Tool-free, twist-free terminations for solid and rigid stranded conductors – simply push into unit.



Lighting Connectors, PUSH WIRE® Connectors for Junction Boxes, Lever-Actuated Splicing Connectors

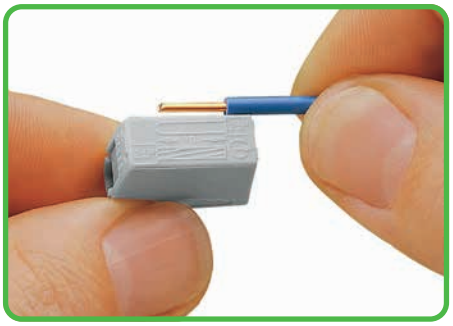
Installation Connectors

			Page
	**Lighting Connectors and Luminaire Disconnect Connectors**	224 and 873 Series	483
	**MICRO PUSH WIRE® Connectors for Junction Boxes** 0.8 mm Ø (20 AWG)	243 Series	488
	**COMPACT PUSH WIRE® Connectors for Junction Boxes** 2.5 mm² (14 AWG)	2273 Series	491
	**CLASSIC PUSH WIRE® Connectors for Junction Boxes** 1.5 mm² (16 AWG) / 2.5 mm² (12 AWG) and 4 mm² (10 AWG)	273 Series	494
	**PUSH WIRE® Connectors for Junction Boxes** 2.5 mm² (12 AWG) and 6 mm² (10 AWG)	773 Series	498
	**Ex PUSH WIRE® Connectors for Junction Boxes** 2.5 mm² (12 AWG) and 6 mm² (10 AWG)	773 Series	500
	**CLASSIC Splicing Connectors for All Conductor Types** 2.5 mm² (14 AWG)	222 Series	503
	**COMPACT Splicing Connectors for All Conductor Types** 4 mm² (12 AWG)	221 Series	507

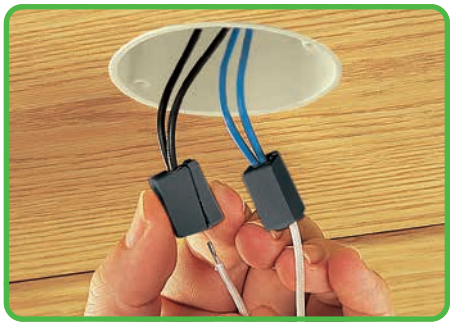
Lighting Connectors, 224 Series
– Description and Handling –

PUSH WIRE®
CAGE CLAMP®

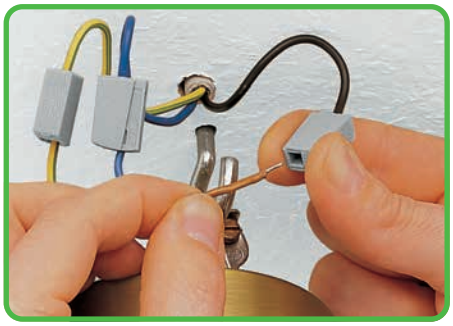
Lighting side



Strip conductor to 9 - 11 mm.

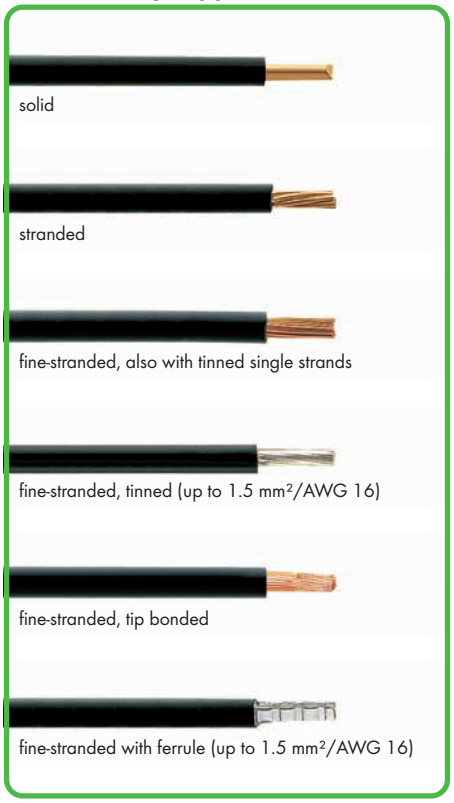


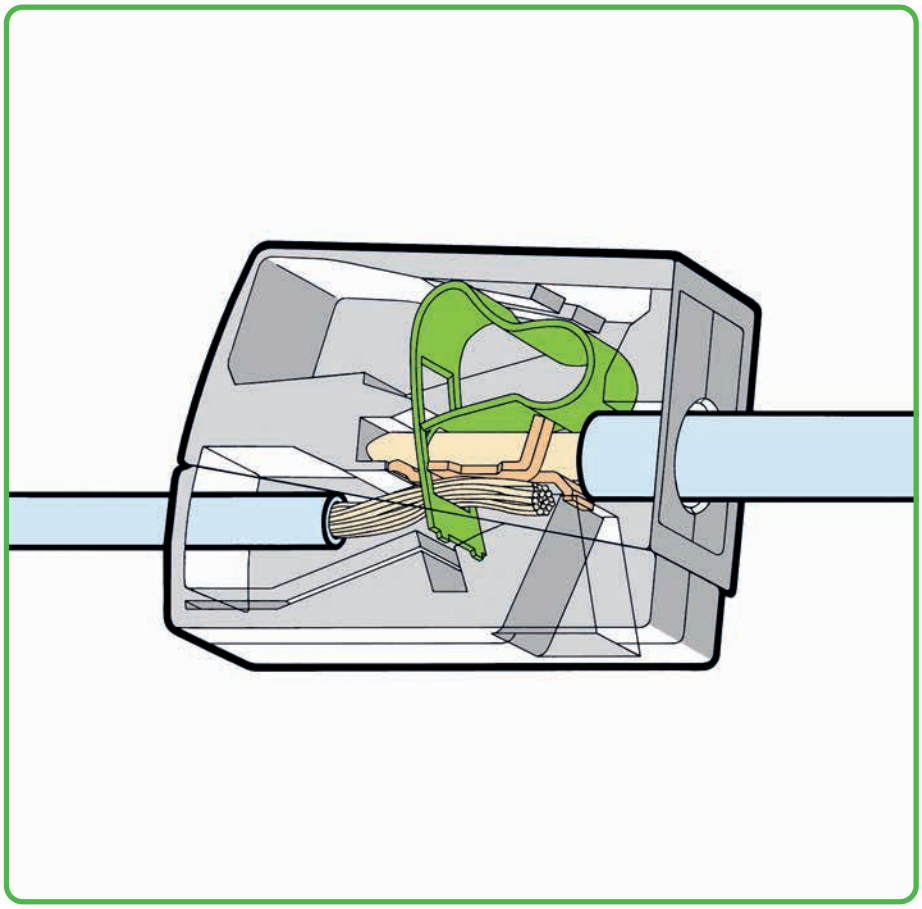
To connect: Press button fully and insert stripped conductor into square entry until it hits backstop and release.



To remove: Press button and withdraw conductor.

CAGE CLAMP® clamps the following copper conductors: *

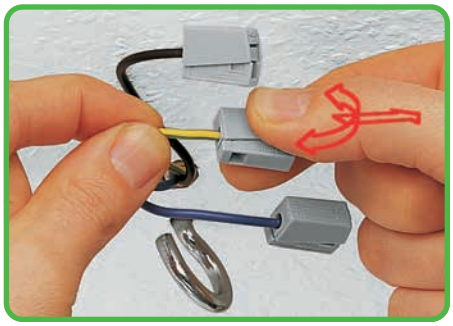




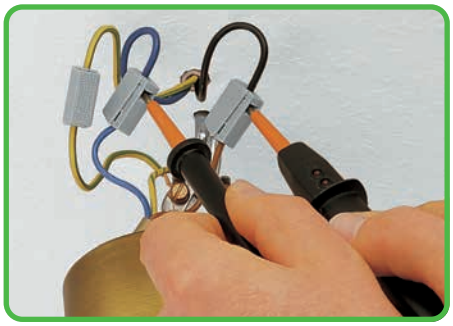
Installation side



To connect: Insert stripped solid conductor into circular entry and push until it hits the backstop.



To remove: Hold conductor to be removed and twist alternately left and right while pulling the connector.



Testing through separate test slot.



PUSH WIRE® clamps the following copper conductors:*

solid

*** Use contact paste "Alu-Plus" when connecting aluminum conductors Item No. 249-130**

Lighting and "Service" Connectors
224 Series

Installation side 1 - 2.5 mm² "s" | AWG 14 - 12 Lighting side 0.5 - 2.5 mm² "s+f-st" | AWG 20 - 16 400 V/4 kV/2; 24 A | 300 V, 20 A 9 - 11 mm / 0.39 in	Installation side 1 - 2.5 mm² "s" | AWG 14 - 12 Lighting side 0.5 - 2.5 mm² "s+f-st" | AWG 20 - 16 400 V/4 kV/2; 24 A | 300 V, 20 A 9 - 11 mm / 0.39 in	0.5 - 2.5 mm² "s+f-st" | AWG 20 - 16 400 V/4 kV/2 | 300 V, 20 A I_N 24 A 9 - 11 mm / 0.39 in







Color	Item No.	Pack. Unit
Lighting connector,		
standard version,		
continuous service temperature 105 °C		
gray	**224-101**	1000 (10x100)
Lighting connector,		
version for increased continuous service temperature of		
120 °C		
black	**224-104**	100

Color	Item No.	Pack. Unit
2-conductor lighting connector,		
standard version,		
continuous service temperature 105 °C		
white	**224-112**	1000 (10x100)
2-conductor lighting connector,		
version for increased continuous service temperature of		
120 °C		
black	**224-114**	100

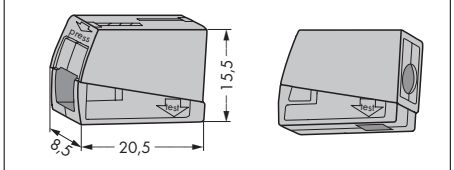
Color	Item No.	Pack. Unit
"Service" connector		
gray	**224-201**	50

224 Series Accessories

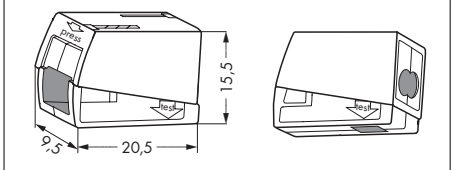
Syringe,



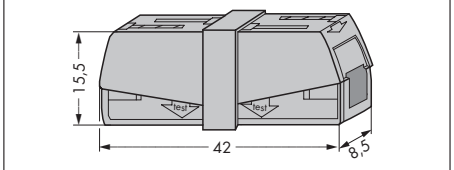
contents: 20 ml "Alu-Plus" contact paste
249-130 20 (4x5)



Dimensions in mm



Dimensions in mm



Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

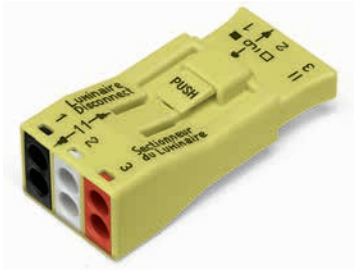
Luminaire Disconnect Connectors (US Version Only)
873 Series

PUSH WIRE®

2-conductor plug ❶	1-conductor socket ❷
AWG 18 - 12 “s”	AWG 18 “s”
AWG 16 - 12 “st”	600 V, 6 A
11 - 13 mm / 0.47 in ❶	
9 - 11 mm / 0.39 in ❷	

2-conductor plug ❶	1-conductor socket ❷
AWG 18 - 12 “s”	AWG 18 “s”
AWG 16 - 12 “st”	600 V, 6 A
11 - 13 mm / 0.47 in ❶	
9 - 11 mm / 0.39 in ❷	





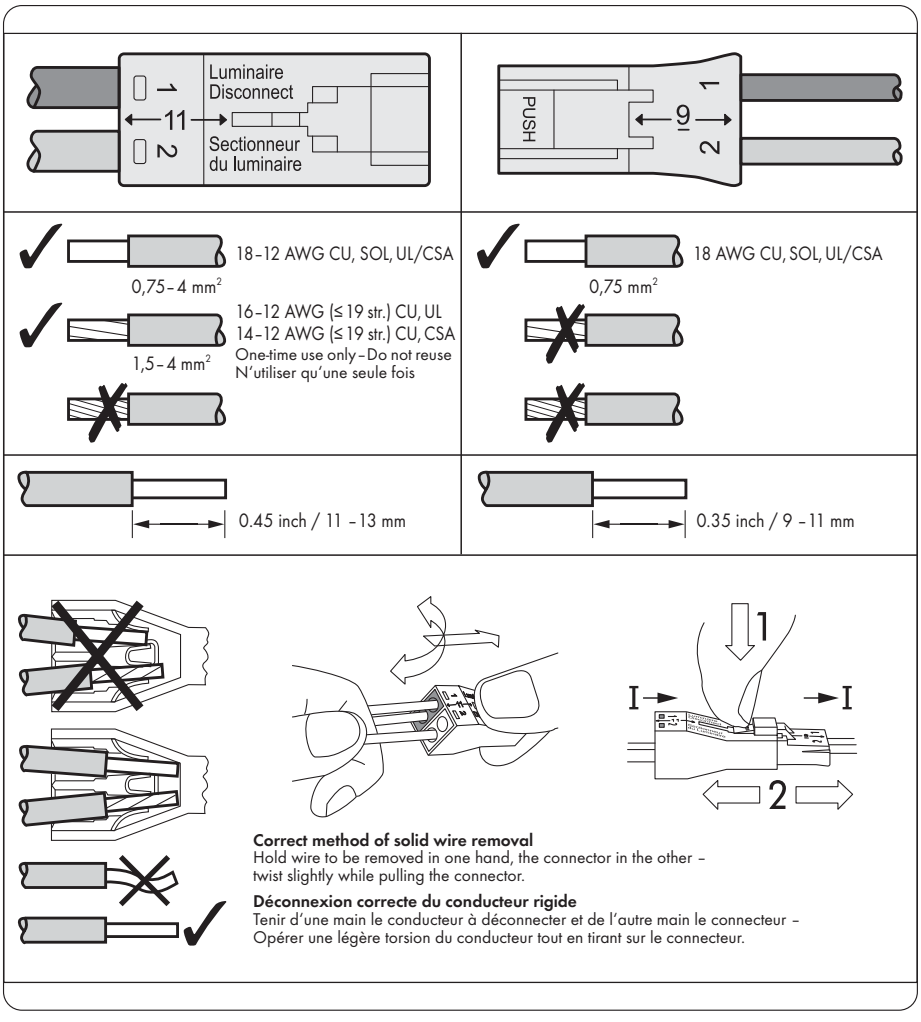
❶ 2-conductor plug
❷ 1-conductor socket

Pole No.	Item No.	Pack. Unit
Luminaire disconnect connector		
2	**873-902**	40

Pole No.	Item No.	Pack. Unit
Luminaire disconnect connector		
3	**873-903**	20

Touchproof connectors are required for ballast supply cables in the USA and Canada.
When exchanging a ballast:
1. The touchproof plug-in connection is disconnected first
2. The ballast is replaced
3. Network connection is restored by plugging the connection.

This streamlines ballast replacement while enhancing safety by safeguarding the installer from electric shock.
The 873 Series connectors are approved according to UL 2459 and CSA 22.2 for this type of application.



Correct method of solid wire removal
Hold wire to be removed in one hand, the connector in the other – twist slightly while pulling the connector.

Déconnexion correcte du conducteur rigide
Tenir d'une main le conducteur à déconnecter et de l'autre main le connecteur – Opérer une légère torsion du conducteur tout en tirant sur le connecteur.

The 873 Series is approved to:

EN 60998
0.2 mm² – 0.5 mm² solid, 6A for female part
1.5 mm² – 4 mm² solid, 32A for male part
400 V/4 kV/2

EN 61984
0.75 mm² solid, 6A for female part
0.75 mm² – 4 mm² solid, 32A for male part
400 V/4 kV/2

Certification organizations can be found in the overview on pages 622 and 623.

Luminaire Disconnect Connectors (US Version Only)
873 Series

2-conductor plug ❶	1-conductor socket ❷
AWG 18 - 12 “s”	AWG 18 “s”
AWG 16 - 12 “st”	600 V, 6 A
11 - 13 mm / 0.47 in ❶	
9 - 11 mm / 0.39 in ❷	

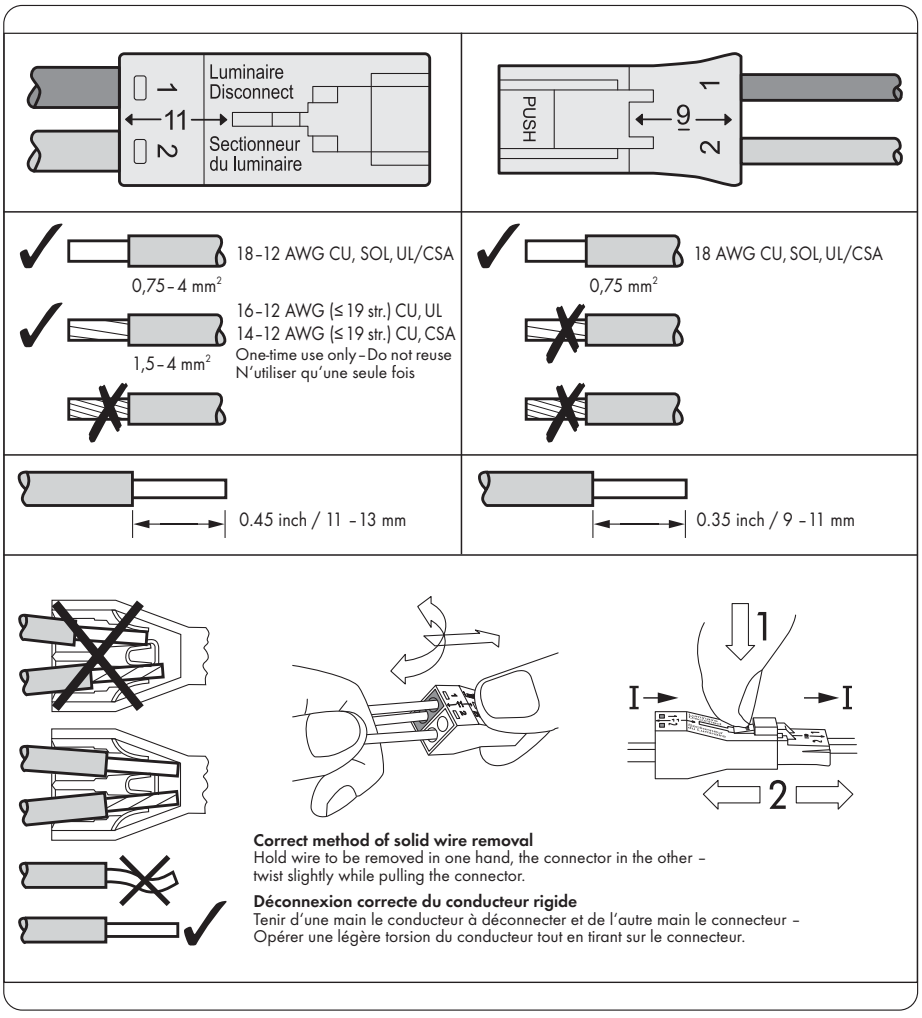


❶ 2-conductor plug
❷ 1-conductor socket

Pole No.	Item No.	Pack. Unit	
Luminaire disconnect connector,			
preceding ground contact in center position			
3	**873-953**	500	

Touchproof connectors are required for ballast supply cables in the USA and Canada.
When exchanging a ballast:
1. The touchproof plug-in connection is disconnected first
2. The ballast is replaced
3. Network connection is restored by plugging the connection.

This streamlines ballast replacement while enhancing safety by safeguarding the installer from electric shock.
The 873 Series connectors are approved according to UL 2459 and CSA 22.2 for this type of application.



Correct method of solid wire removal
Hold wire to be removed in one hand, the connector in the other – twist slightly while pulling the connector.

Déconnexion correcte du conducteur rigide
Tenir d'une main le conducteur à déconnecter et de l'autre main le connecteur – Opérer une légère torsion du conducteur tout en tirant sur le connecteur.

873 Series approvals acc. to EN:

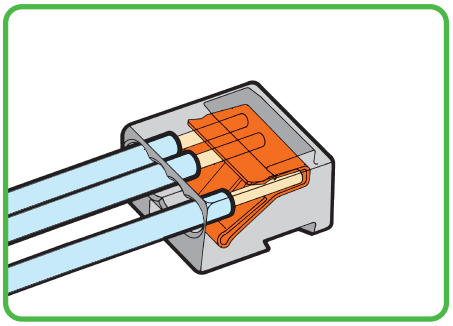
EN 60998
0.2 mm² – 0.5 mm² solid, 6A for female part
1.5 mm² – 4 mm² solid, 32A for male part
400 V/4 kV/2

EN 61984
0.75 mm² solid, 6A for female part
0.75 mm² – 4 mm² solid, 32A for male part
400 V/4 kV/2

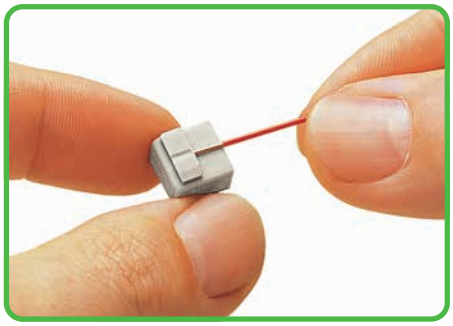
Certification organizations can be found in the overview on pages 622 and 623.

MICRO PUSH WIRE® Connectors for Junction Boxes, 243 Series – Description and Handling –

PUSH WIRE®



Strip length



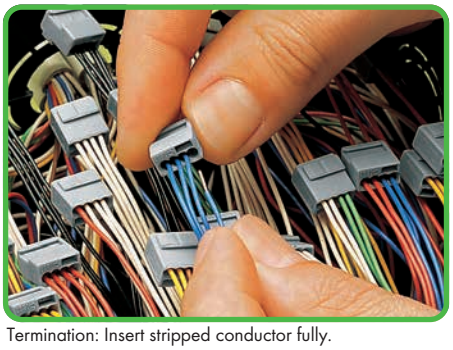
Strip solid conductor to 5 - 6 mm.

Connector strips



Assembly of modular connectors to connector strips.

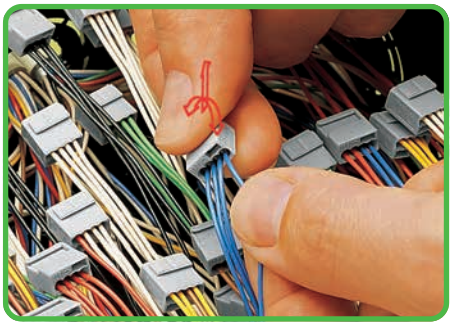
PUSH WIRE® connection



Termination: Insert stripped conductor fully.



PUSH WIRE® connection



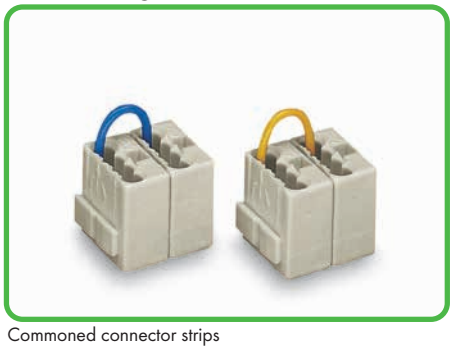
Removal: Hold conductor to be removed and twist alternately left and right while pulling the connector.

Testing



Testing

Commoning



Commoned connector strips

Packing units



Box for use on site (example) contents of 243 Series:
50 pcs 8-conductor
100 pcs 4-conductor



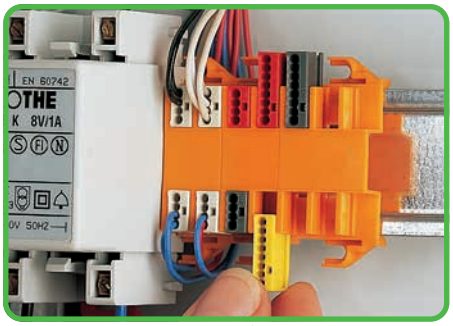
PUSH WIRE®
clamps the following copper conductors:*

solid

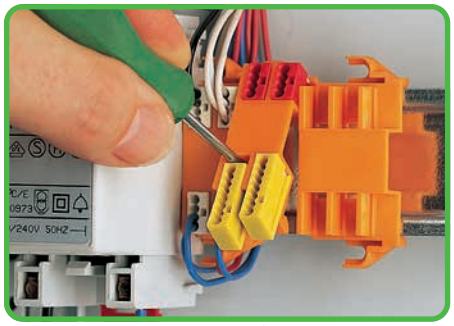
*** Use contact paste "Alu-Plus" when connecting aluminum conductors Item No. 249-130, see Section 14**

For push-in connectors for junction boxes for EIB applications, see Volume "Connectors and PCB Terminal Blocks."

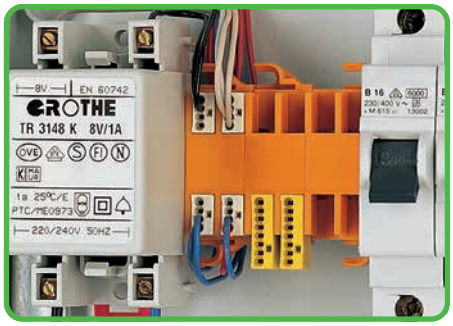
Mounting Carrier for MICRO PUSH WIRE® Connectors for DIN 35 Rail or Screw Mount, 243 Series



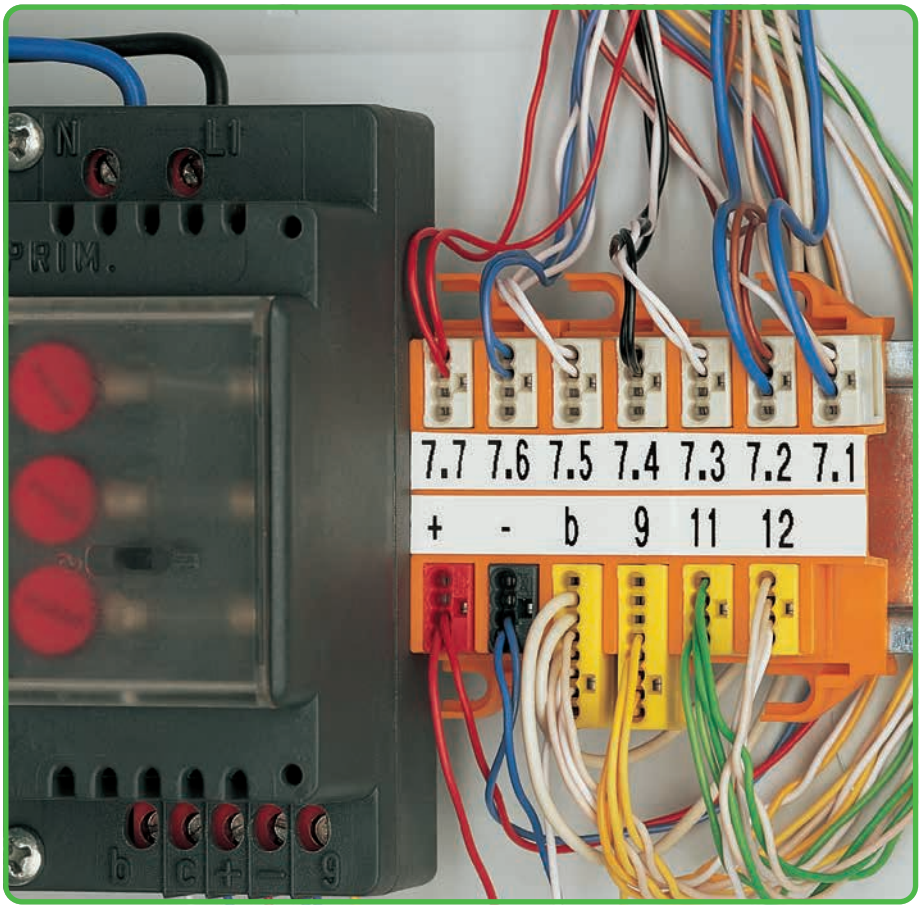
Inserting a MICRO PUSH WIRE® connector for junction boxes into the carrier.



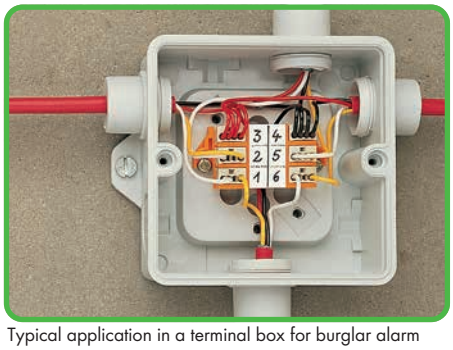
Removing a MICRO PUSH WIRE® connector from the carrier.



Example of residential door bell application – mounted on DIN 35 rail



Example of residential (home) communication application



Typical application in a terminal box for burglar alarm – screw mount

Quick fix mounting

Realizing MICRO PUSH WIRE® connectors are ideal for DIN-rail mount panel applications, electrical installers have requested the ability to use them in distribution panels. MICRO PUSH WIRE® connectors provide easy connections for smaller conductors used in low-current applications. They are well-suited to terminating telephone-style conductors for connecting alarms, bells, door sensors, communication systems, etc.

The mounting carrier WAGO´s Professional Solution. It is available with mounting slots for 4 or 6 connectors.

Depending on the number of conductors, each mounting slot can accommodate a 4- or 8-conductor MICRO connector. The connectors simply snap into the mounting slots and are removable, allowing conductors to be exchanged during changeover.

The carrier is designed for easy mounting directly to the DIN 35 rail, or to a panel, via the screw-mount flanges provided. A large marking surface is provided for clear circuit identification. This may be directly marked with a felt-tip pen, or via pre-printed self-adhesive marker strips.

MICRO PUSH WIRE® Connectors for Junction Boxes Ø 0.8 mm
243 Series

PUSH WIRE®

0.6 - 0.8 mm Ø "s" ❶ 100 V/1.5 kV/2 ❷ I_N 6 A	AWG 22 - 20 "s" 150 V, 7 A 150 V, 7 A
5 - 6 mm / 0.22 in ❸	

0.6 - 0.8 mm Ø "s" ❶ 100 V/1.5 kV/2 ❷ I_N 6 A	AWG 22 - 20 "s" 150 V, 7 A 150 V, 7 A
5 - 6 mm / 0.22 in ❸	





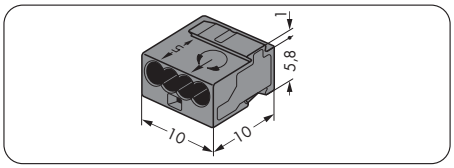
❶ When using conductors of exclusively the same diameter, 0.5 mm/AWG 24 or 1 mm/AWG 18 diameters are also possible.

❷ 100 V = rated voltage
1.5 kV = rated surge voltage
2 = pollution degree
(also see Section 14)

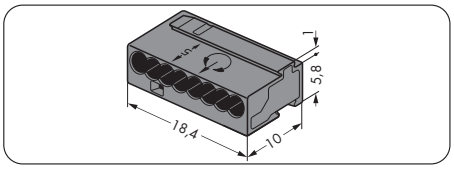
❸ Strip length, see packaging or instructions.

Color	Item No.	Pack. Unit
MICRO PUSH WIRE® connector for junction boxes,		
4-conductor connector		
dark gray	**243-204**	1000 (10x100)
red	**243-804**	1000 (10x100)

Color	Item No.	Pack. Unit
MICRO PUSH WIRE® connector for junction boxes,		
8-conductor connector		
dark gray	**243-208**	500 (10x50)
red	**243-808**	500 (10x50)



Dimensions in mm



Dimensions in mm

The 243 Series of WAGO PUSH WIRE® connectors can be used in both communication and alarm systems according to the VdS (German Association of Property Insurers) guidelines.

No general approval is given to push-wire connectors by the VdS association. The connectors must be tested together with the different parts of the system.

The requirements for connectors are specified in the VdS guidelines for junction boxes (VdS 2116) in section 8.7: "The junction box connectors must be designed to guarantee a reliable and stable connection".

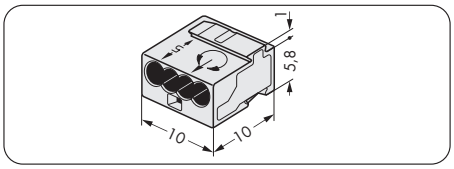
The verification of the fulfillment of these requirements is documented in the VDE test report No. 2574-1440-4031 for the 243 Series of insulated PUSH WIRE® connectors.



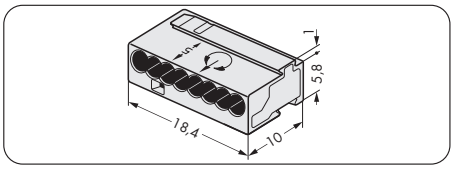


Color	Item No.	Pack. Unit
MICRO PUSH WIRE® connector for junction boxes,		
4-conductor connector		
light gray	**243-304**	1000 (10x100)
yellow	**243-504**	1000 (10x100)

Color	Item No.	Pack. Unit
MICRO PUSH WIRE® connector for junction boxes,		
8-conductor connector		
light gray	**243-308**	500 (10x50)
yellow	**243-508**	500 (10x50)



Dimensions in mm



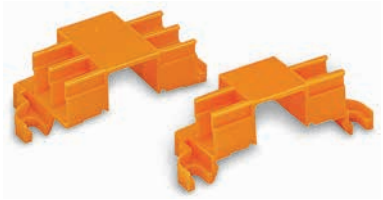
Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

MICRO PUSH WIRE® Connectors for Junction Boxes Ø 0.5 mm and Mounting Carriers for DIN 35 Rail or Screw Mount
243 Series

0.4 - 0.5 mm Ø "s" | AWG 26 - 24 "s" 100 V/1.5 kV/2 ❶ I_N 6 A 5 - 6 mm / 0.22 in ❷	Mounting carrier





❶ 100 V = rated voltage
1.5 kV = rated surge voltage
2 = pollution degree
(also see Section 14)

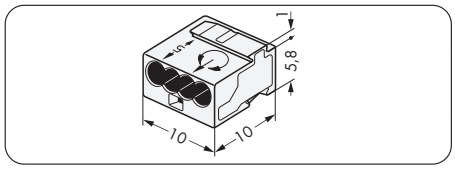
❷ Strip length, see packaging or instructions.

Color	Item No.	Pack. Unit
MICRO PUSH WIRE® connector for junction boxes,		
4-conductor connector		
transparent	**243-144**	1000 (10x100)

Color	Item No.	Pack. Unit
Mounting carrier,		
for 4 MICRO PUSH WIRE® connectors		
orange	**243-112**	50 (5x10)
Mounting carrier,		
for 6 MICRO PUSH WIRE® connectors		
orange	**243-113**	50 (5x10)

Item-Specific Accessories

Self-adhesive marking strips, plain,			
	Height of marking strip: 7 mm, 6 self-adhesive strips per card		
	white	**243-110**	1



Dimensions in mm

Quick fix mounting

Realizing MICRO PUSH WIRE® connectors are ideal for DIN-rail mount panel applications, electrical installers have requested the ability to use them in distribution panels. MICRO PUSH WIRE® connectors provide easy connections for smaller conductors used in low-current applications. They are well-suited to terminating telephone-style conductors for connecting alarms, bells, door sensors, communication systems, etc.

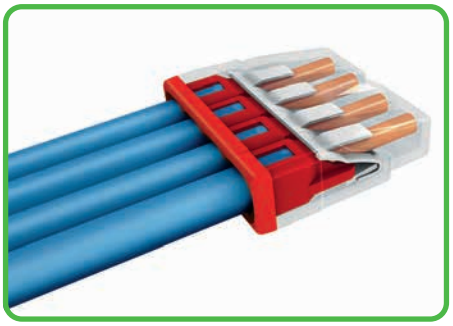
The mounting carrier WAGO´s Professional Solution. It is available with mounting slots for 4 or 6 connectors.

Depending on the number of conductors, each mounting slot can accommodate a 4- or 8-conductor MICRO connector. The connectors simply snap into the mounting slots and are removable, allowing conductors to be exchanged during changeover.

The carrier is designed for easy mounting directly to the DIN 35 rail, or to a panel, via the screw-mount flanges provided. A large marking surface is provided for clear circuit identification. This may be directly marked with a felt-tip pen, or via pre-printed self-adhesive marker strips.

Certification organizations can be found in the overview on pages 622 and 623.

COMPACT PUSH WIRE® Connectors for Junction Boxes and Solid Conductors – Series 2273 Series

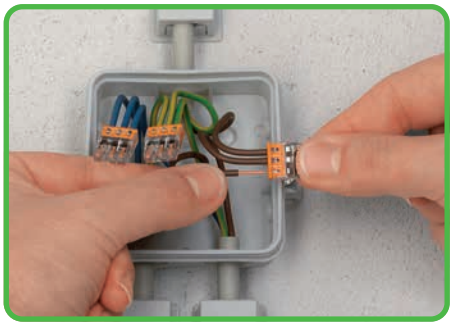


Stripped length



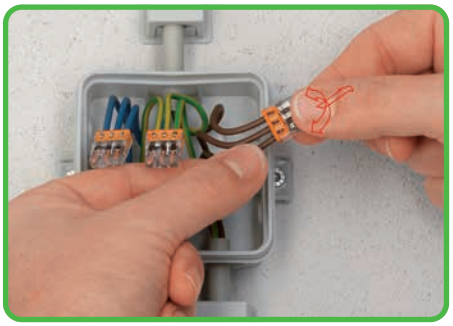
Strip solid conductor to 11 mm (see marking). Conductors are correctly stripped if the clear port shows no bare conductor on the unprinted connector side. Picture shows center conductor with exceeded strip length.

PUSH WIRE® connection



Termination: Insert stripped conductor until it hits backstop.

PUSH WIRE® connection



Removal: Hold conductor to be removed and alternately twist left and right while pulling the connector.

Mounting carrier

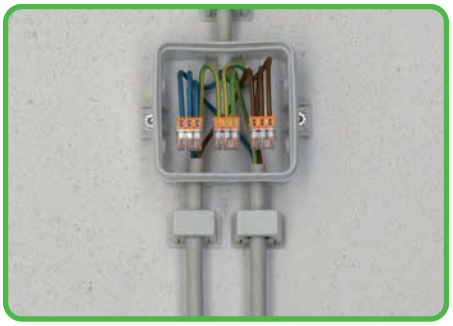


The mounting carrier is suitable for both connector profiles.



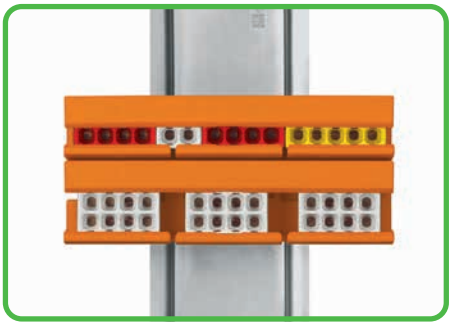
To adjust the mounting carrier, unlock the latch via 5.5 mm operating tool and move the clamping slide to the required width by rotating the tool.

Visual wiring inspection



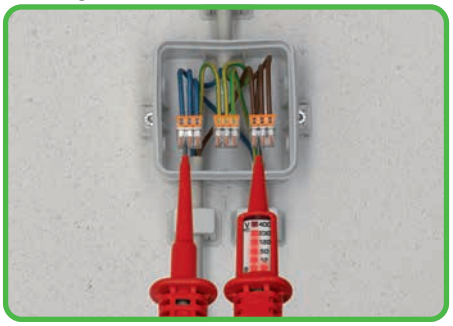
The transparent housing shows if conductors are fully inserted; within the colored base, a clear port shows if the conductor's strip length is correct.

Mounting carrier



In the mounting carrier, connectors may be commoned in longitudinal direction using 862-482 jumpers. Please note that jumpers cannot be removed.

Testing



Testing via test port opposite to conductor entry.

Convenient wiring via extremely compact design.
For conductors ranging from 0.5 to 2.5 mm² (AWG 18 - 14).
Any combination of conductor sizes is possible.
PUSH WIRE® clamps solid conductors ("sol.").
Push-in termination of up to 8 solid conductors.

Packing unit



Wholesale package with 10 boxes for use on site



PUSH WIRE® clamps the following copper conductors:*

solid

*** Use contact paste "Alu-Plus" when connecting aluminum conductors Item No. 249-130, see Section 14**

COMPACT PUSH WIRE® Connectors for Junction Boxes and Mounting Carrier
2273 Series

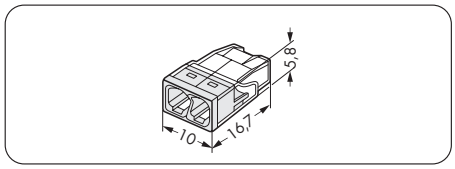
0.5 - 2.5 mm² "s" | AWG 18 - 14 "s" 450 V/4 kV/2 I_N 24 A 11 mm / 0.43 in	0.5 - 2.5 mm² "s" | AWG 18 - 14 "s" 450 V/4 kV/2 I_N 24 A 11 mm / 0.43 in	0.5 - 2.5 mm² "s" | AWG 18 - 14 "s" 450 V/4 kV/2 I_N 24 A 11 mm / 0.43 in



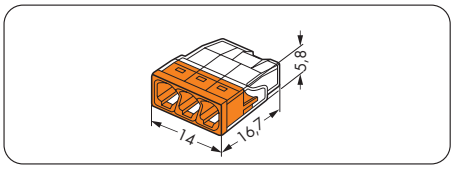




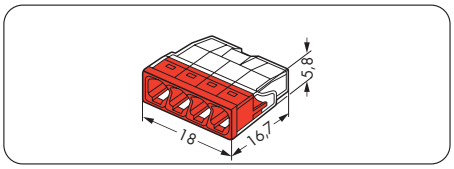
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
COMPACT PUSH WIRE® connector for junction boxes,		**COMPACT PUSH WIRE® connector for junction boxes,**		**COMPACT PUSH WIRE® connector for junction boxes,**	
2-conductor connector,		3-conductor connector,		4-conductor connector,	
transparent housing, white cover		transparent housing, orange cover		transparent housing, red cover	
2273-202	1000 (10x100)	**2273-203**	1000 (10x100)	**2273-204**	1000 (10x100)



Dimensions in mm



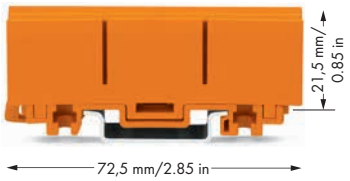
Dimensions in mm



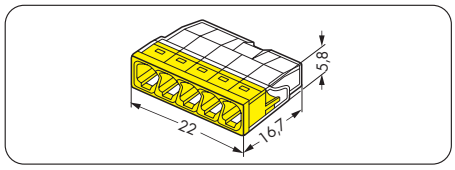
Dimensions in mm



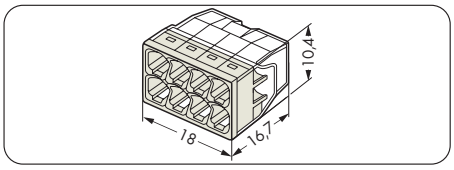




Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
COMPACT PUSH WIRE® connector for junction boxes,		**COMPACT PUSH WIRE® connector for junction boxes,**		**Mounting carrier,**	
5-conductor connector,		8-conductor connector,		for single- (14 mm) and double-row (18.5 mm) connectors	
transparent housing, yellow cover		transparent housing, white cover			
2273-205	1000 (10x100)	**2273-208**	500 (10x50)	orange **2273-500**	50 (5x10)



Dimensions in mm

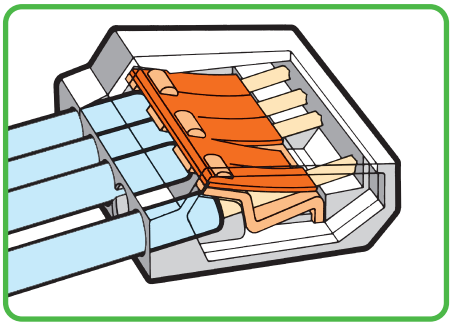


Dimensions in mm

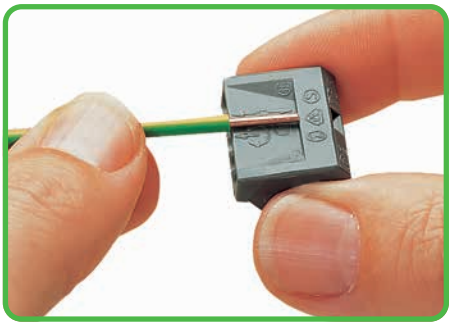
Certification organizations can be found in the overview on pages 622 and 623.

PUSH WIRE® Connectors for Junction Boxes, 273 Series – Description and Handling –

PUSH WIRE®



Strip length



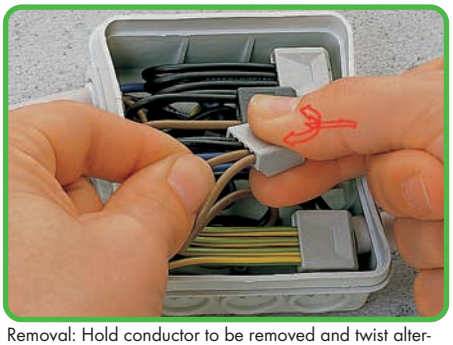
Strip solid conductor to 10 - 13 mm.

PUSH WIRE® connection

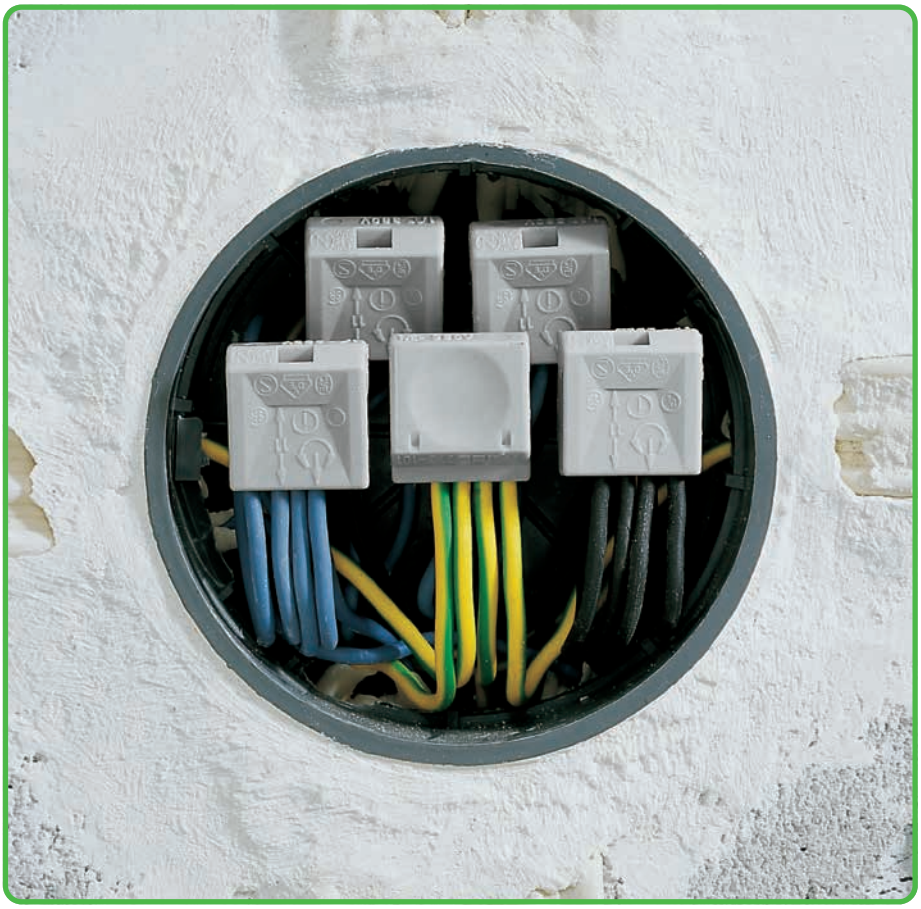


Termination: Insert stripped solid conductor fully.

PUSH WIRE® connection



Removal: Hold conductor to be removed and twist alternately left and right while pulling the connector.

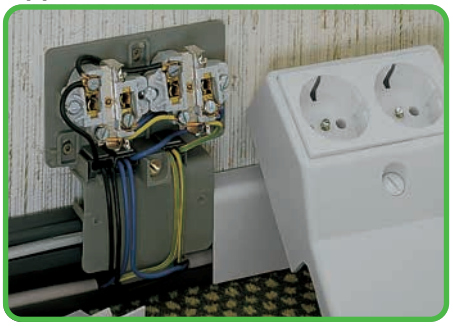


Testing

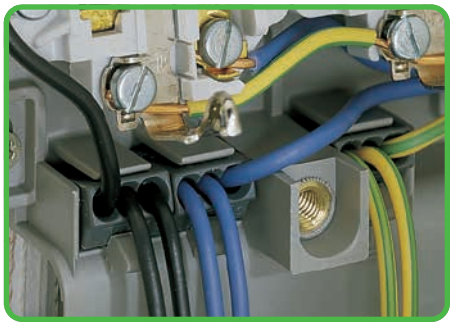


Testing

Applications



PUSH WIRE® connectors used in a cable duct with double power outlet



Packing unit



Wholesale package with 10 boxes for use on site

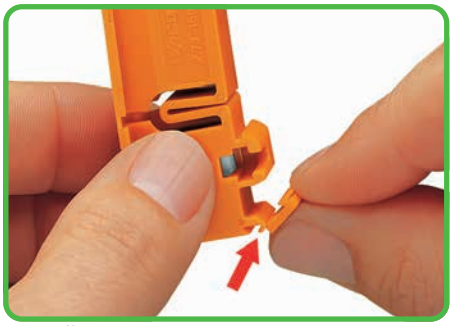


PUSH WIRE®
clamps the following copper conductors:*

solid

*** Use contact paste "Alu-Plus" when connecting aluminum conductors Item No. 249-130, see Section 14**

Mounting Carrier for PUSH WIRE® Connectors for DIN 35 Rail or Screw Mount 273 Series



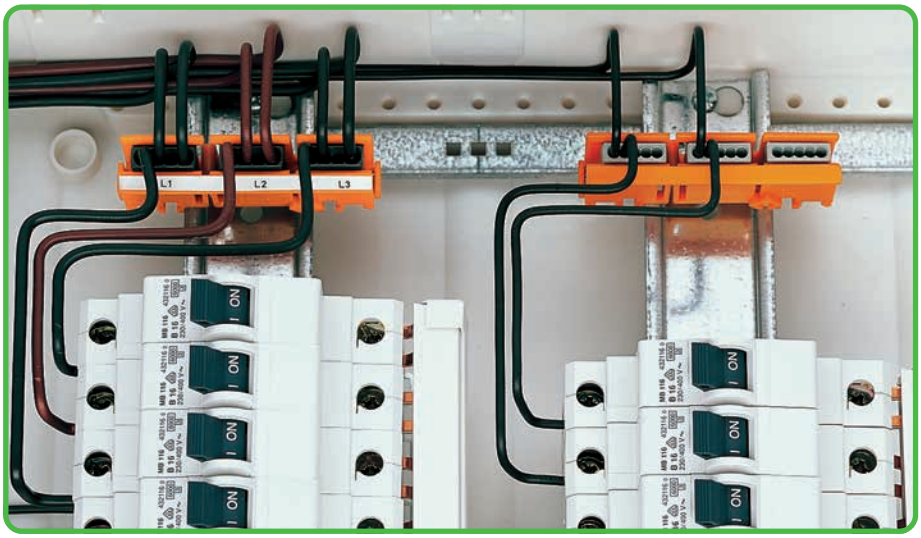
Snap **off** cover.

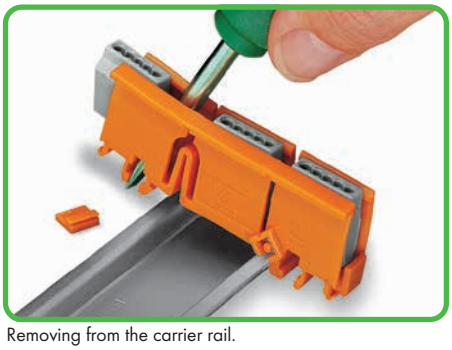


Cover use as end plate.



Snapping on to carrier rail.





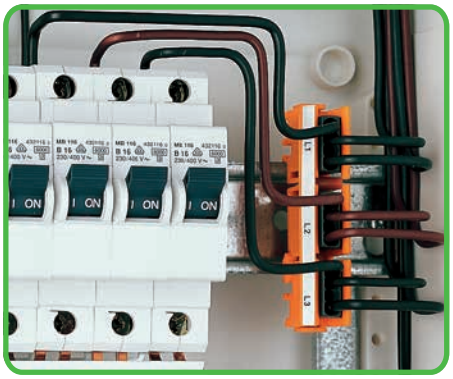
Removing from the carrier rail.

PUSH WIRE® connectors in distribution boxes

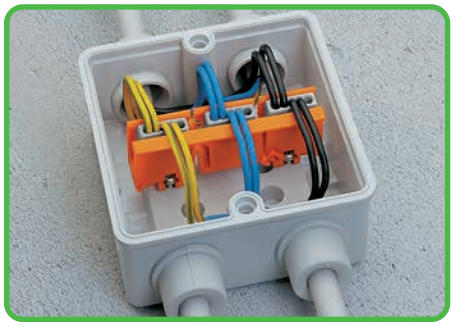
During junction box changes or expansions, conductors often require extensions or additional clamping points. Individual PUSH WIRE® connectors (e.g., 222, 243, 273 and 773 Series) are approved as interconnect components for building wiring according to EN 60998. Application standards for building installation (e.g., parts 510 and 520 from DINVDE 0100) also place the following requirements on connectors for junction boxes:

- They must be arranged so that operation, inspection, maintenance and access to the removable connectors is made easy.
- It must be possible to test them.
- Conductors connected from outside must be clearly and permanently assigned to their associated circuits.

These requirements cannot be met with PUSH WIRE® connectors alone. In combination with WAGO mounting carriers, the PUSH WIRE® connectors clearly meet these requirements, making them comparable to terminal blocks. Using PUSH WIRE® connectors with mounting carriers in junction boxes is accepted by testing authorities.



FIXED IN POSITION – on a DIN 35 rail



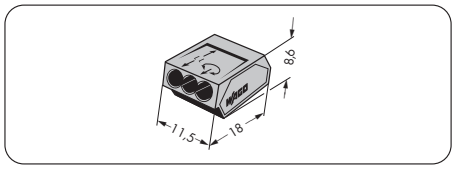
FIXED IN POSITION – screw fixing

PUSH WIRE® Connectors for Junction Boxes
273 Series

0.75 - 1.5 mm² "s" ❶	AWG 18 - 16 "s"
400 V/4 kV/2 ❸	600 V, 20 A
I_N 18 A	600 V, 10 A
10 - 13 mm / 0.45 in ❹	



Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes,		
3-conductor connector		
gray	**273-100**	1000 (10x100)
transparent	**273-153**	1000 (10x100)

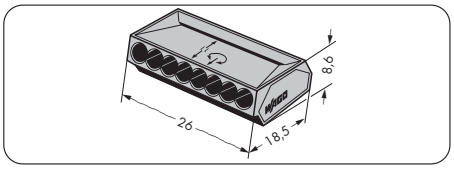


Dimensions in mm

0.75 - 1.5 mm² "s" ❶	AWG 18 - 16 "s"
400 V/4 kV/2 ❸	600 V, 20 A
I_N 18 A	600 V, 10 A
10 - 13 mm / 0.45 in ❹	



Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes,		
8-conductor connector		
gray	**273-108**	500 (10x50)
transparent	**273-158**	500 (10x50)

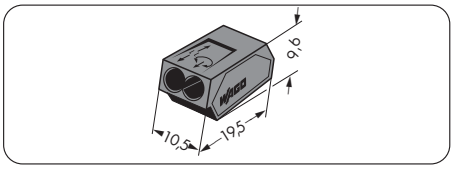


Dimensions in mm

1 - 2.5 mm² "s" ❷	AWG 14 - 12 "s"
400 V/4 kV/2 ❸	600 V, 20 A
I_N 24 A	600 V, 20 A
10 - 13 mm / 0.45 in ❹	



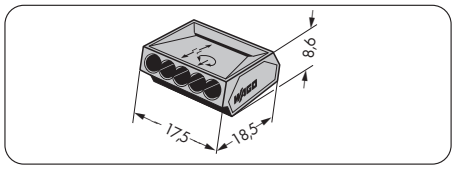
Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes,		
2-conductor connector		
dark gray	**273-112**	1000 (10x100)
transparent	**273-252**	1000 (10x100)



Dimensions in mm



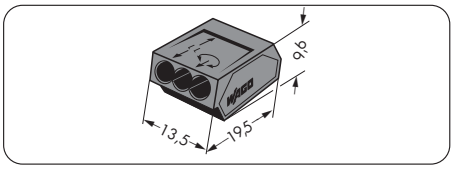
Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes,		
5-conductor connector		
gray	**273-101**	1000 (10x100)
transparent	**273-155**	1000 (10x100)



Dimensions in mm



Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes,		
3-conductor connector		
dark gray	**273-104**	1000 (10x100)
transparent	**273-253**	1000 (10x100)



Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

1 - 2.5 mm² "s" ❷ 400 V/4 kV/2 ❸ I_N 24 A	AWG 14 - 12 "s" 600 V, 20 A 600 V, 20 A
10 - 13 mm / 0.45 in ❹	

1.5 - 4 mm² "s" 400 V/4 kV/2 ❸ I_N 32 A	AWG 14 - 10 "s" 600 V, 20 A 600 V, 30 A
12 - 15 mm / 0.53 in ❹	





❶ When using conductors of exclusively the same diameter, 0.5 mm/AWG 20 cross section is also possible.

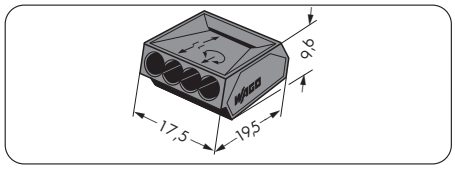
❷ When using conductors of exclusively the same diameter, 0.75 mm²/AWG 18 cross section is also possible.

❸ in grounded power lines
400 V = rated voltage
4 kV = rated surge voltage
2 = pollution degree
(also see Section 14)

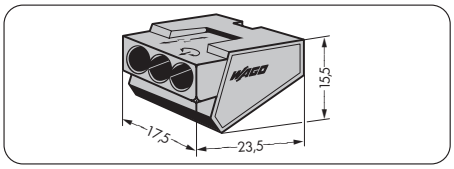
❹ Strip length, see packaging or instructions.

Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes,		
4-conductor connector		
dark gray	**273-102**	1000 (10x100)
transparent	**273-254**	1000 (10x100)

Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes,		
3-conductor connector		
gray	**273-403**	500 (10x50)
transparent	**273-453**	500 (10x50)



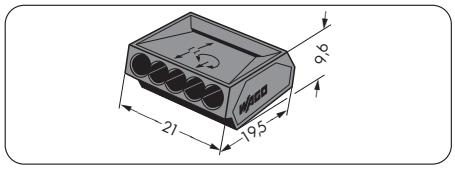
Dimensions in mm



Dimensions in mm



Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes,		
5-conductor connector		
dark gray	**273-105**	1000 (10x100)
transparent	**273-255**	1000 (10x100)



Dimensions in mm

273 Series Accessories

Syringe,



contents: 20 ml "Alu-Plus"" contact paste
249-130 20 (4x5)

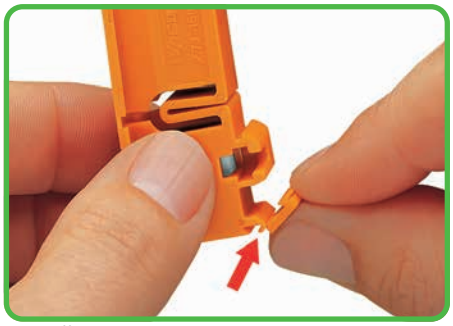
Mounting carrier



orange **273-150** 50 (5x10)

Mounting Carrier for PUSH WIRE® Connectors for DIN 35 Rail or Screw Mount 273 Series

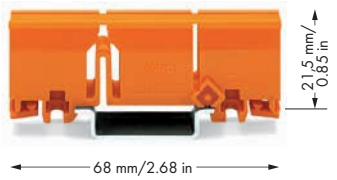
Mounting carrier



Snap **off** cover.



Cover use as end plate.



Color	Item No.	Pack. Unit
Mounting carrier		
orange	**273-150**	50 (5x10)

Item-Specific Accessories

Self-adhesive marking strips, plain,



Height of marking strip: 5 mm, 48 self-adhesive strips per card

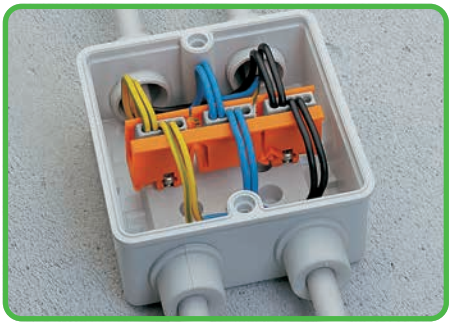
white	**210-334**	1



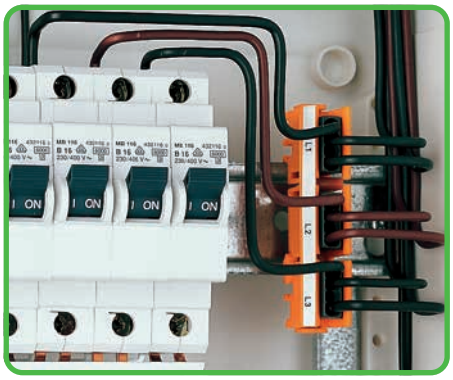
Snapping on to carrier rail.



Removing from the carrier rail.



FIXED IN POSITION – screw fixing



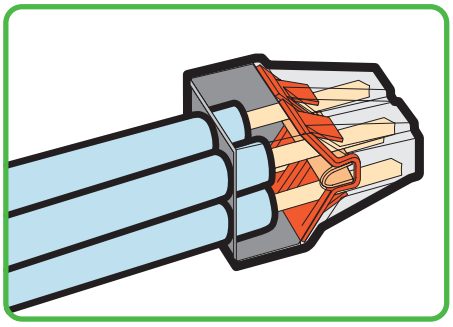
FIXED IN POSITION – on a DIN 35 rail

One single carrier can hold up to 15 clamping units in a very narrow space. Previously, this was only possible using rail-mount terminal blocks.

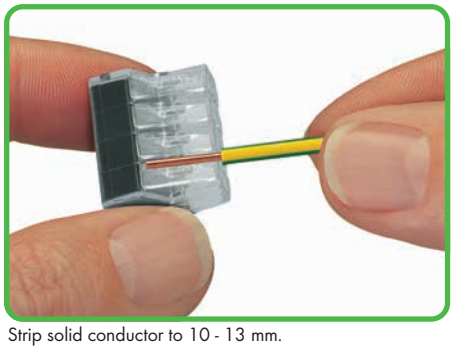
The advantages for you are:

- The carriers are DIN 35 rail- or screw-mounted easily and quickly.
- A carrier can hold up to three 1.5 mm² (AWG 16) or 2.5 mm² (AWG 12) 273 Series connectors (excluding the 8 x 1.5 mm² version).
- The connectors can be easily exchanged.
- Large marking area for self-adhesive marker strips or for direct marking with permanent felt-tip pen.

PUSH WIRE® Connectors for Junction Boxes, 773 Series – Description and Handling –

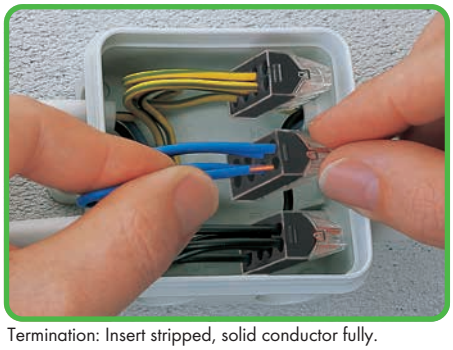


Stripped length



Strip solid conductor to 10 - 13 mm.

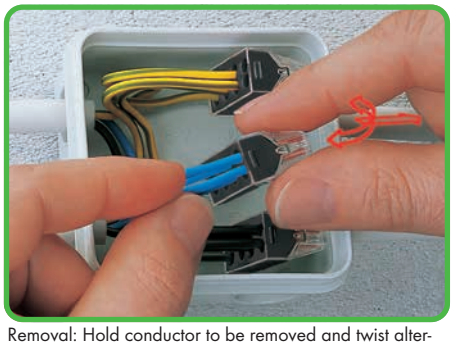
PUSH WIRE® connection



Termination: Insert stripped, solid conductor fully.



PUSH WIRE® connection



Removal: Hold conductor to be removed and twist alternately left and right while pulling the connector.

Testing





PUSH WIRE® clamps the following copper conductors:*

solid



stranded

*** Use contact paste “Alu-Plus” when connecting aluminum conductors Item No. 249-130, see Section 14**

PUSH WIRE® Connectors for Junction Boxes
773 Series

PUSH WIRE®

0.75 - 2.5 mm² "s" ❶	AWG 18 - 12 "s"	0.75 - 2.5 mm² "s"	AWG 18 - 12 "s"	2.5 - 6 mm² "s+st"	AWG 14 - 10 "s+st"
1.5 - 2.5 mm² "st"	AWG 16 - 12 "st"	1.5 - 2.5 mm² "st"	AWG 16 - 12 "st"	400 V/4 kV/2 ❷	600 V, 20 A
400 V/4 kV/2 ❷	600 V, 20 A	400 V/4 kV/2 ❷	600 V, 20 A	I_N 41 A	600 V, 30 A
I_N 24 A	600 V, 20 A	I_N 24 A	600 V, 20 A		
12 mm / 0.47 in ❸		12 mm / 0.47 in ❸		12 - 13 mm / 0.49 in ❸	







Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes,		**PUSH WIRE® connector for junction boxes,**			**PUSH WIRE® connector for junction boxes,**	
8-conductor connector,		4-conductor connector,			3-conductor connector,	
transparent housing,		continuous service temperature 150°C			transparent housing,	
dark gray cover					red cover	
773-108	500 (10x50)	● black	**773-514**	1000 (10x100)	**773-173**	500 (10x50)

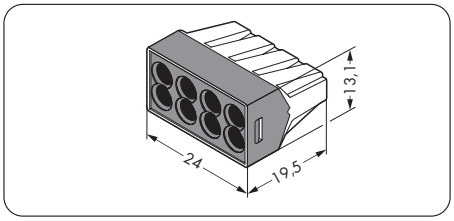
773 Series Accessories

Syringe,

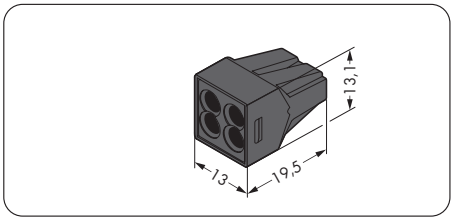


contents: 20 ml "Alu-Plus"" contact paste

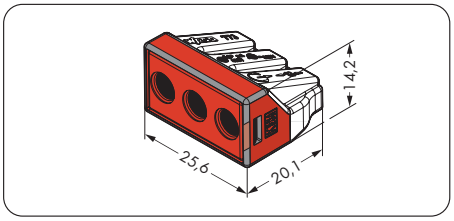
249-130 20 (4x5)



Dimensions in mm



Dimensions in mm

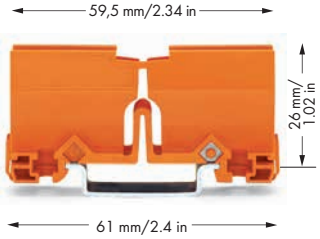


Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

Mounting Carrier for PUSH WIRE® Connectors for DIN 35 Rail or Screw Mount 773 Series

Mounting carrier





Snapping onto the carrier rail.

❶ When using conductors of exclusively the same diameter, 0.75 mm²/AWG 18 cross section is also possible.

❷ in grounded power lines
400 V = rated voltage
4 kV = rated surge voltage
2 = pollution degree
(also see Section 14)

❸ Strip length, see packaging or instructions.

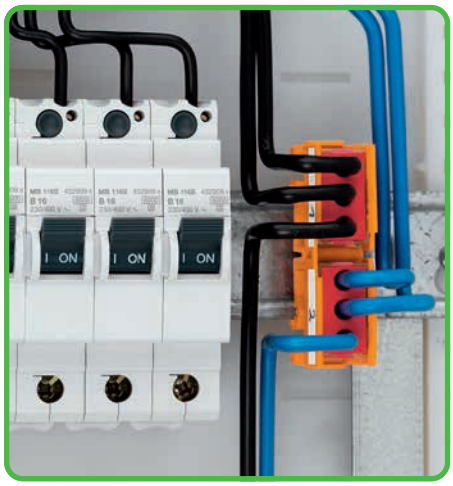
Color	Item No.	Pack. Unit
Mounting carrier for all PUSH WIRE® connectors 773 Series		
orange	**773-332**	50 (5x10)

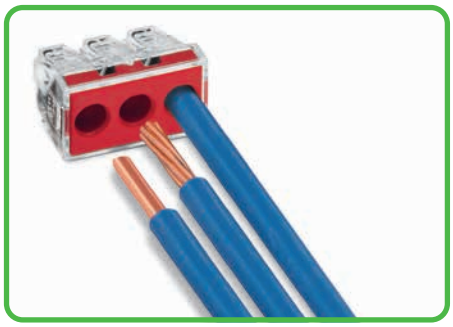
Item-Specific Accessories

Self-adhesive marking strips, plain,



Height of marking strip: 5 mm, 48 self-adhesive strips per card		
white	**210-334**	1





Terminating solid and stranded 6 mm²/AWG 10 conductors.

A mounting carrier (see accessories) suits applications where the connectors must be marked and fixed in position. The carrier fits up to two connectors on DIN 35 carrier rails or screw mounting on level surfaces.

Using this PUSH WIRE® connector, a large range of wiring applications can be achieved in distribution or junction boxes, for example. To mention just a few: potential multiplication of an 6 mm²/AWG 10 conductor in a junction box, changing from or to 6 mm²/AWG 10 conductor size.

Ex PUSH WIRE® Connectors for Junction Boxes
773 Series

PUSH WIRE®

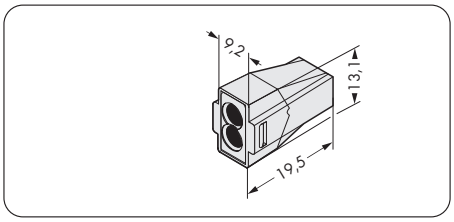
0.75 - 2.5 mm² "s" | AWG 18 - 14 "s" AWG 16 - 12 "st"	0.75 - 2.5 mm² "s" | AWG 18 - 14 "s" AWG 16 - 12 "st"	2.5 - 6 mm² "s" | AWG 14 - 10 "s"
550 V ❶	550 V ❶	550 V ❶
I_N 24 A	I_N 24 A	I_N 42 A
12 mm / 0.47 in ❷	12 mm / 0.47 in ❷	12 - 15 mm / 0.53 in ❷





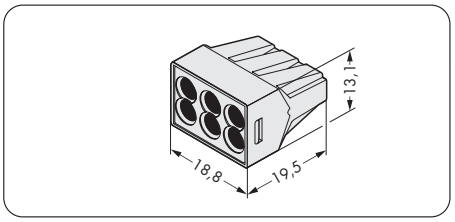


Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes,		
2-conductor connector		
◯ light gray Ex	**773-492** ❸	1000 (10x100)



Dimensions in mm

Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes,		
6-conductor connector		
◯ light gray Ex	**773-496** ❸	500 (10x50)



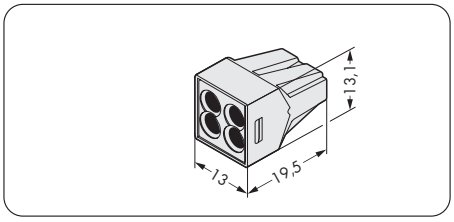
Dimensions in mm

Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes,		
3-conductor connector		
◯ light gray Ex	**773-493** ❸	500 (10x50)



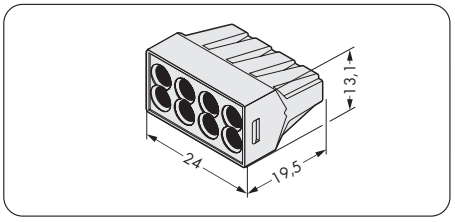


Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes,		
4-conductor connector		
◯ light gray Ex	**773-494** ❸	1000 (10x100)

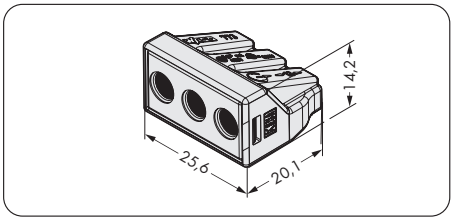


Dimensions in mm

Color	Item No.	Pack. Unit
PUSH WIRE® connector for junction boxes,		
8-conductor connector		
◯ light gray Ex	**773-498** ❸	500 (10x50)



Dimensions in mm

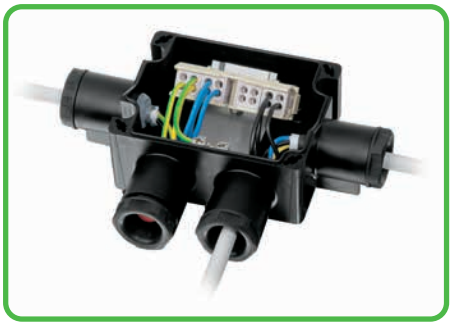


Dimensions in mm

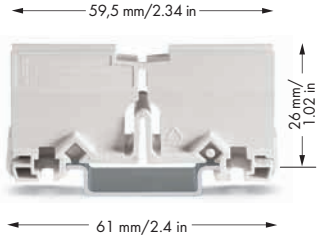
Certification organizations can be found in the overview on pages 622 and 623.

Mounting Carrier for PUSH WIRE® Connectors for DIN 35 Rail or Screw Mount 773 Series

Mounting carrier



Wiring example in an Ex e housing



1. 275 V at a distance < 10 mm to parts of other potentials
2. Strip length, see packaging or instructions.
3. To be used only in conjunction with 773-331 mounting carrier.

Color	Item No.	Pack. Unit
Mounting carrier		
light gray	**773-331**	50 (5x10)

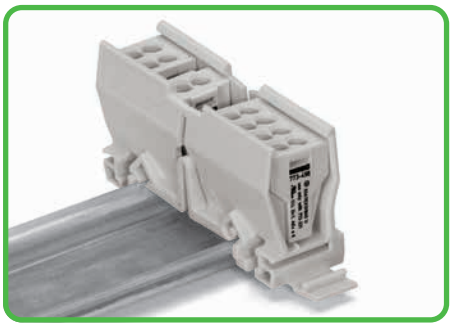
Item-Specific Accessories

Self-adhesive marking strips, plain,

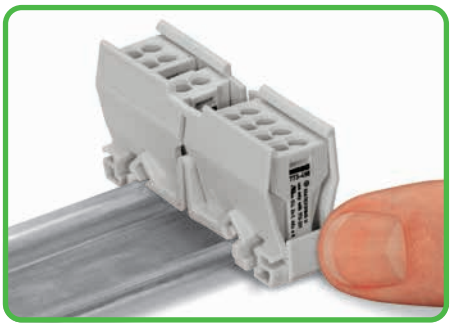


Height of marking strip: 5 mm, 48 self-adhesive strips per card

white	**210-334**	1



Insert the connectors into the carrier.



Snap in the end plate.



Snapping onto the carrier rail.

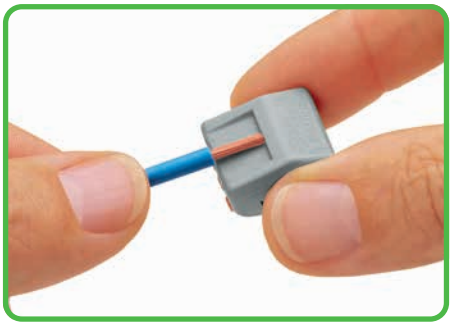


Removing from the carrier rail.

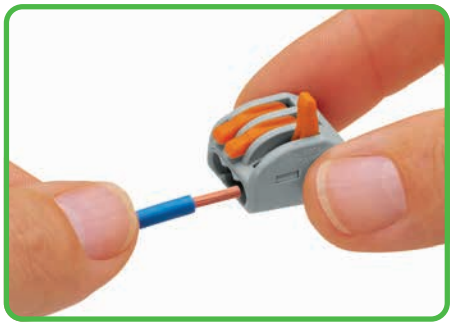
WAGO Ex PUSH WIRE® connectors are ideal for distribution and junction boxes, as well as control and operating systems. When used in hazardous areas, they offer the following advantages over traditional connectors:

- Time- and cost-saving PUSH WIRE® connection
- Vibration-proof, maintenance-free connections
- 100% touch-proof
- Connectors can be fixed in position using appropriate mounting carriers
- One single carrier equipped with 2-, 4-, 6- and 8-conductor connectors holds up to 16 clamping units according to user requirements, offering material and cost-saving advantages.

Splicing Connectors, 222 Series
– Description and Handling –



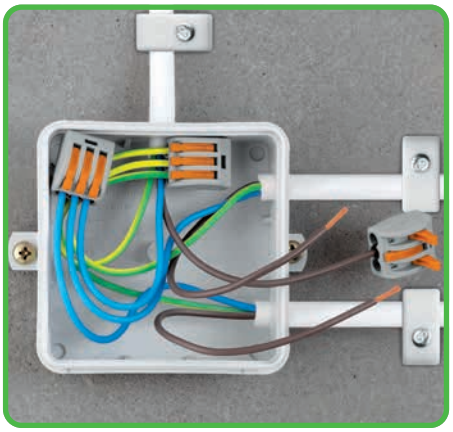
Strip conductor to 9 - 10 mm.



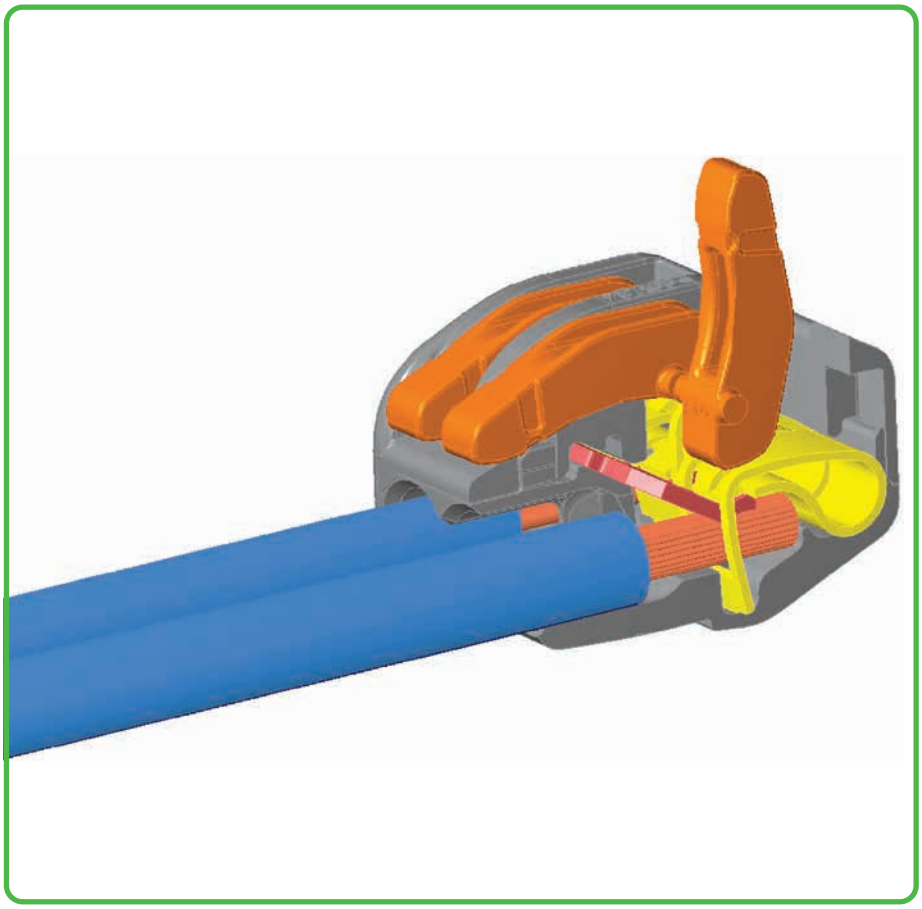
Conductor termination: Open clamping unit using the lever and insert conductor.

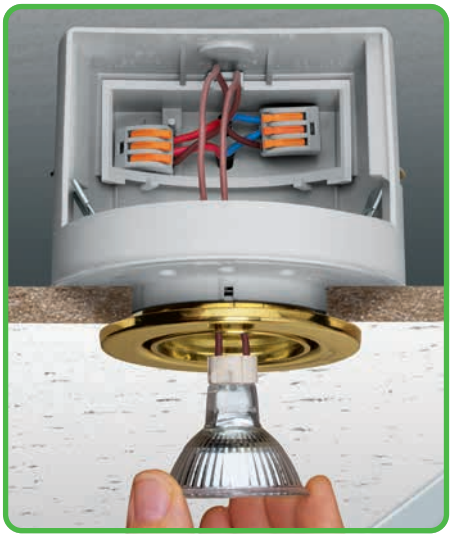


Then lower lever to close the clamp.

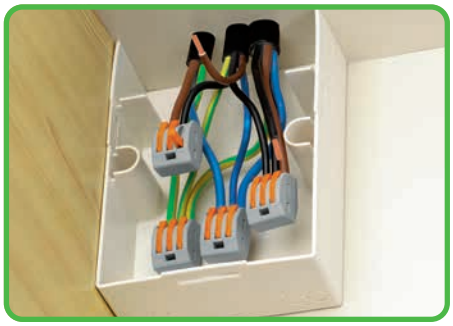


Wiring fine-stranded conductors in a junction box.





Individual design of low-voltage lighting systems.



Connecting pre-wired and pre-fabricated components; e.g., modular assemblies used in mobile homes.



Lighting fixture connected with flexible power feed.

CAGE CLAMP® clamps the following copper conductors:*

solid	stranded	fine-stranded, also with tinned single strands	fine-stranded, tip-bonded	fine-stranded, with ferrule ❶ (gastight crimped)	fine-stranded, with pin terminal (gastight crimped)

* For aluminum conductors, see notes in Section 14.

❶ When using ferrules, the max. conductor cross section accommodated is one size smaller than max. rating of terminal block.

COMPACT Splicing Connectors for All Conductor Types
222 Series

0.08-2.5 mm² "s+st" 0.08-4 mm² "f-st" 400 V/4 kV/2 ❶ I_N 32 A 9 - 10 mm / 0.37 in ❷	AWG28-14 "s+f-st" AWG28-12 "f-st" 600 V, 20 A
0.08-2.5 mm² "s+st" 0.08-4 mm² "f-st" 400 V/4 kV/2 ❶ I_N 32 A 9 - 10 mm / 0.37 in ❷	AWG28-14 "s+f-st" AWG28-12 "f-st" 600 V, 20 A

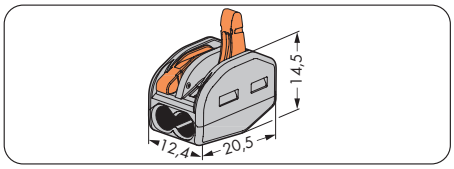




❶ in grounded power lines
400 V = rated voltage
4 kV = rated surge voltage
2 = pollution degree
(also see Section 14)

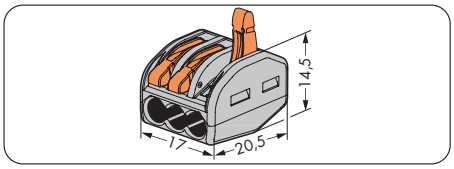
❷ Strip length, see packaging or instructions.

Color	Item No.	Pack. Unit
COMPACT splicing connector,		
2-conductor connector,		
with levers,		
max. continuous service temperature 85 °C		
gray	**222-412**	500 (10x50)



Dimensions in mm

Color	Item No.	Pack. Unit
COMPACT splicing connector,		
3-conductor connector,		
with levers,		
max. continuous service temperature 85 °C		
gray	**222-413**	500 (10x50)



Dimensions in mm



COMPACT splicing connectors
Tool-free connection of up to 5 stripped fine-stranded conductors from 0.08 to 4 mm²/AWG 28 - 12, solid or stranded conductors up to 2.5 mm²/AWG 14.

This is how it works:
Open the clamping unit using the integrated orange lever actuator so that the lever engages and keeps the clamp in its opened position. The conductor can now be inserted, then the lever can be returned to its rest position, flush with the connector housing.

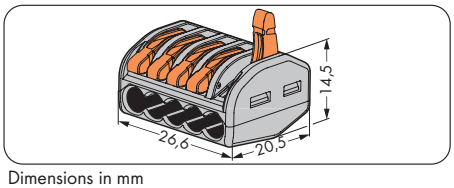
The safety:
The specially designed rest position of the lever reliably prevents accidental unclamping of a connected conductor. Application safety, for any type of conductor (solid, stranded, fine-stranded), is confirmed by approvals like ENEC and UL.

ENEC is the European mark for electrical products that demonstrates compliance with European safety standards. The ENEC mark is subjected to the same EN standards as the VDE mark.

While the VDE mark is only permitted in Germany, the ENEC mark is accepted in more than 20 European countries.



Color	Item No.	Pack. Unit
COMPACT splicing connector,		
5-conductor connector,		
with levers,		
max. continuous service temperature 85 °C		
gray	**222-415**	400 (10x40)



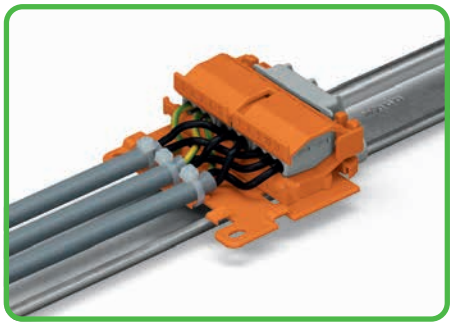
Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

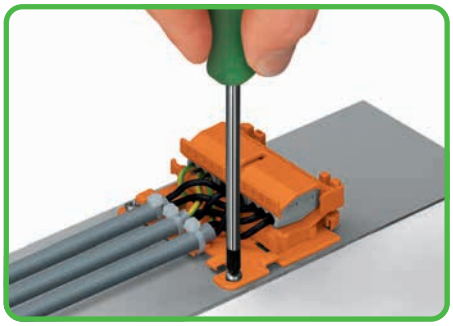
Types of Assembly Mounting Carrier 222 Series



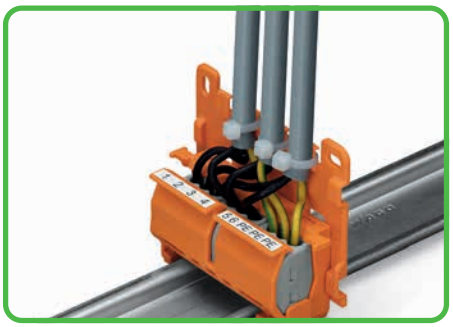
Horizontal mounting on DIN 35 rail using angled DIN-rail adapter.



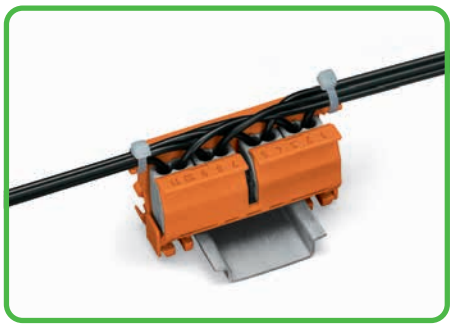
Horizontal mounting with strain relief plate on DIN 35 rail using angled DIN-rail adapter.



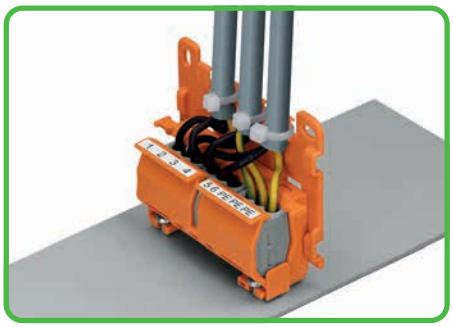
Horizontal mounting with strain relief plate on level surfaces.



Vertical mounting with strain relief plate on DIN 35 rail. Marking clamping units via marker strips.



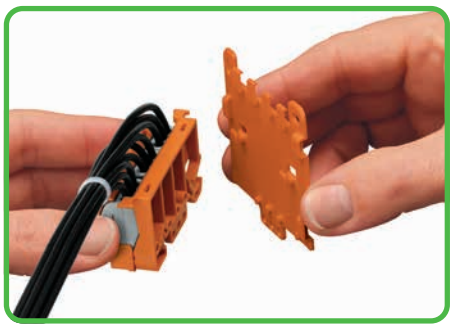
Strain relief by cable tie on the carrier, transverse to the connector's wiring direction. Molded marking clamping units.



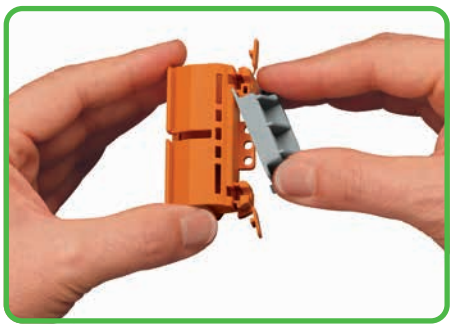
Mounting carrier with strain relief plate mounted vertically on a plate. Round cable fixed via strain relief lug.



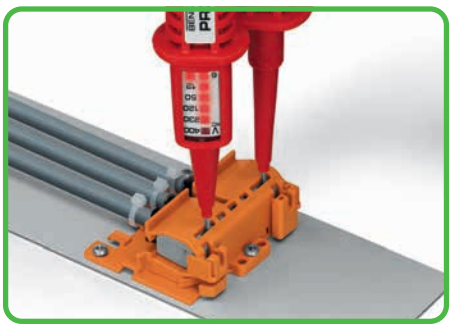
Snapping of lateral connector safety lock.



Mounting of strain relief plate to the mounting carrier.



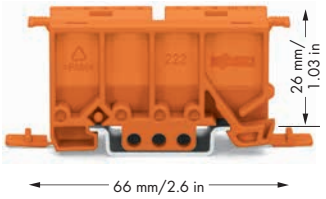
Snapping the angled DIN-rail adapter on the mounting carrier.

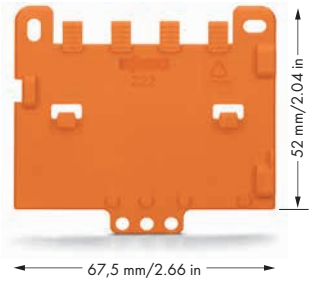


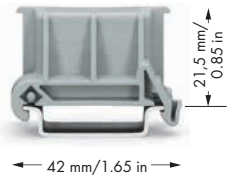
Testing connectors via test slots on top of the carrier.

Mounting Carrier
222 Series

Mounting carrier	Strain relief plate	Angled DIN-rail adapter







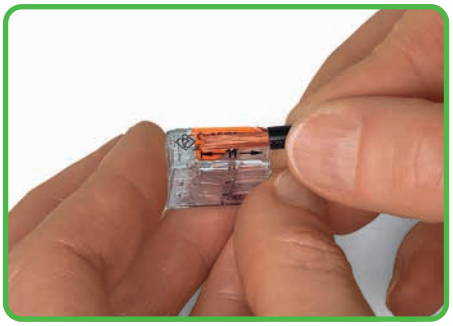
Color	Item No.	Pack. Unit
Mounting carrier, 22 mm wide, for 2-, 3-, 5-conductor compact splicing connectors		
orange	**222-500**	50 (5x10)
Item-Specific Accessories		
Self-adhesive marking strips, plain, Height of marking strip: 5 mm, 48 self-adhesive strips per card		
white	**210-334**	1

Color	Item No.	Pack. Unit
Strain relief plate, 4 mm thick, for snap-on fixing to 222-500 mounting carrier		
orange	**222-505**	50 (5x10)

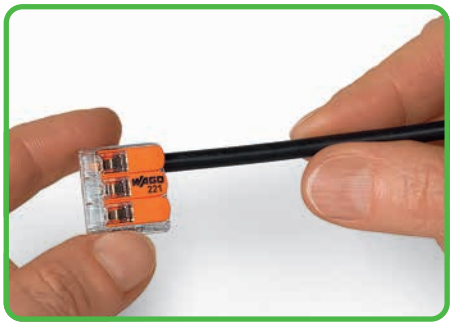
Color	Item No.	Pack. Unit
Angled DIN-rail adapter, 18.5 mm wide, in combination with 222-500 mounting carrier for DIN 35 rail mounting		
gray	**222-510**	50 (5x10)

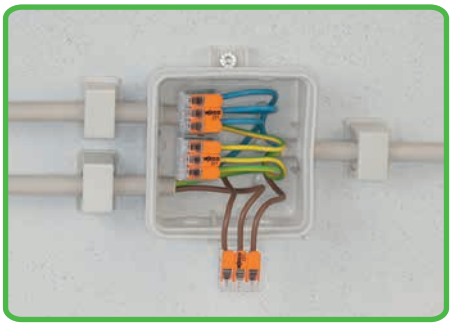
COMPACT Splicing Connectors for All Conductor Types 221 Series
– Description and Handling –

CAGE CLAMP®


Strip wire to 11 mm / 0.43 in.


Termination: Open clamping unit using the lever and insert conductor.


Then lower lever to close the clamp.


Wiring fine-stranded conductors in a junction box.


Individual design of low-voltage lighting systems.




Lighting distribution in ceiling canopy


Pendant light connection in suspended ceilings

CAGE CLAMP®
clamps the following copper conductors:*

solid

stranded

fine-stranded, also with tinned single strands

fine-stranded, tip-bonded

* For aluminum conductors, see notes in Section 14.

COMPACT Splicing Connectors for All Conductor Types
221 Series

0.2 - 4 mm² "s+st" 0.14 - 4 mm² "f-st" 450 V/4 kV/2 ❶ I_N 32 A 11 mm / 0.43 in ❷	AWG 24 - 12
0.2 - 4 mm² "s+st" 0.14 - 4 mm² "f-st" 450 V/4 kV/2 ❶ I_N 32 A 11 mm / 0.43 in ❷	AWG 24 - 12



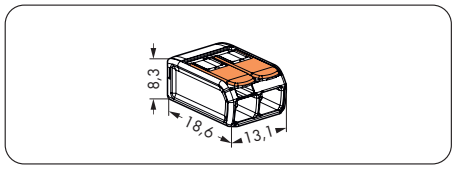


❶ in grounded power lines
450 V = rated voltage
4 kV = rated surge voltage
2 = pollution degree
(also see Section 14)

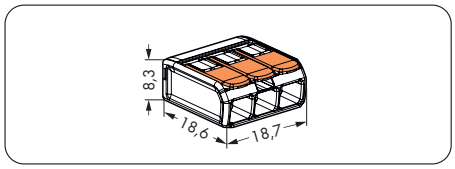
❷ Strip length, see packaging or instructions.

Item No.	Pack. Unit
COMPACT splicing connector for all conductor types, 2-conductor connector, with levers, max. continuous service temperature 105 °C	
221-412	1000 (10x100)

Item No.	Pack. Unit
COMPACT splicing connector for all conductor types, 3-conductor connector, with levers, max. continuous service temperature 105 °C	
221-413	500 (10x50)



Dimensions in mm



Dimensions in mm



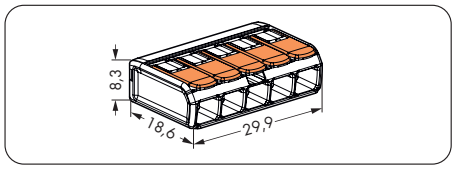
COMPACT splicing connectors
Tool-free connection of up to 5 stripped fine-stranded conductors from 0.14 to 4 mm²/AWG 24 - 12, solid or stranded conductors from 0.2 to 4 mm²/AWG 24 - 12.

This is how it works:
Open the clamping point using one of the orange operating levers until the lever is in vertical position. The conductor can now be inserted, then the lever can be returned to its rest position, flush with the connector housing.

The safety:
The specially designed rest position of the lever reliably prevents accidental unclamping of a connected conductor. Application safety, for any type of conductor (solid, stranded, fine-stranded), is confirmed by approvals like ENEC and UL.



	Item No.	Pack. Unit
	COMPACT splicing connector for all conductor types, 5-conductor connector, with levers, max. continuous service temperature 105 °C	
	221-415	400 (10x40)



Dimensions in mm

Certification organizations can be found in the overview on pages 622 and 623.

ACCESSORIES





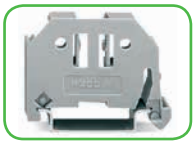
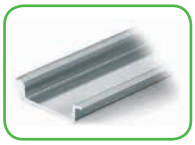




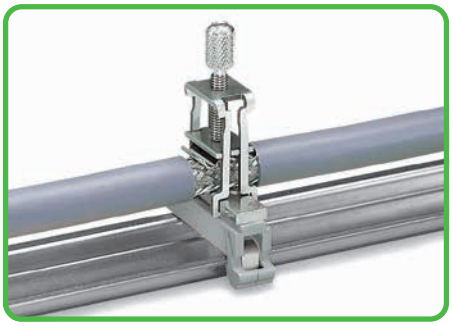




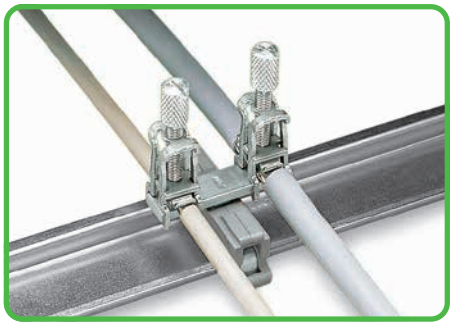
Shield Connecting Systems, Marking, Accessories und Tools

			Page
	**Shield Connecting System**	790 and 791 Series	512
	**Marking Systems**		542
	**Group Marker Carriers and Marker Cards with Self-Adhesive Marking Strips**		545
	**Wire Marking**		554
	**End Stops for DIN 35 and DIN 15 Rails**		544
	**Carrier Rails, Collective Carriers for Jumpers and Covers for Rail-Mounted Terminal Blocks**		558
	**Operating Tools**		564
	**Stripping Tools**		567
	**Crimping Tools for Ferrules**		568
	**Cable Cutter**		573
	**Test and Measurement Tools**		574
	**Testboy**		575

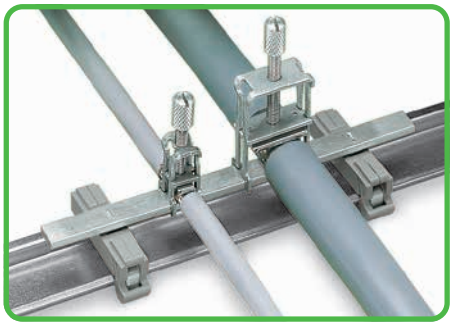
Shield Connecting System, 790 Series
– Description and Handling –



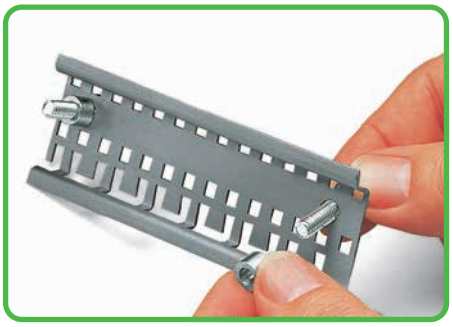
Carrier with grounding foot*
45 mm long, busbar 90° to the rail
Item No. 790-113



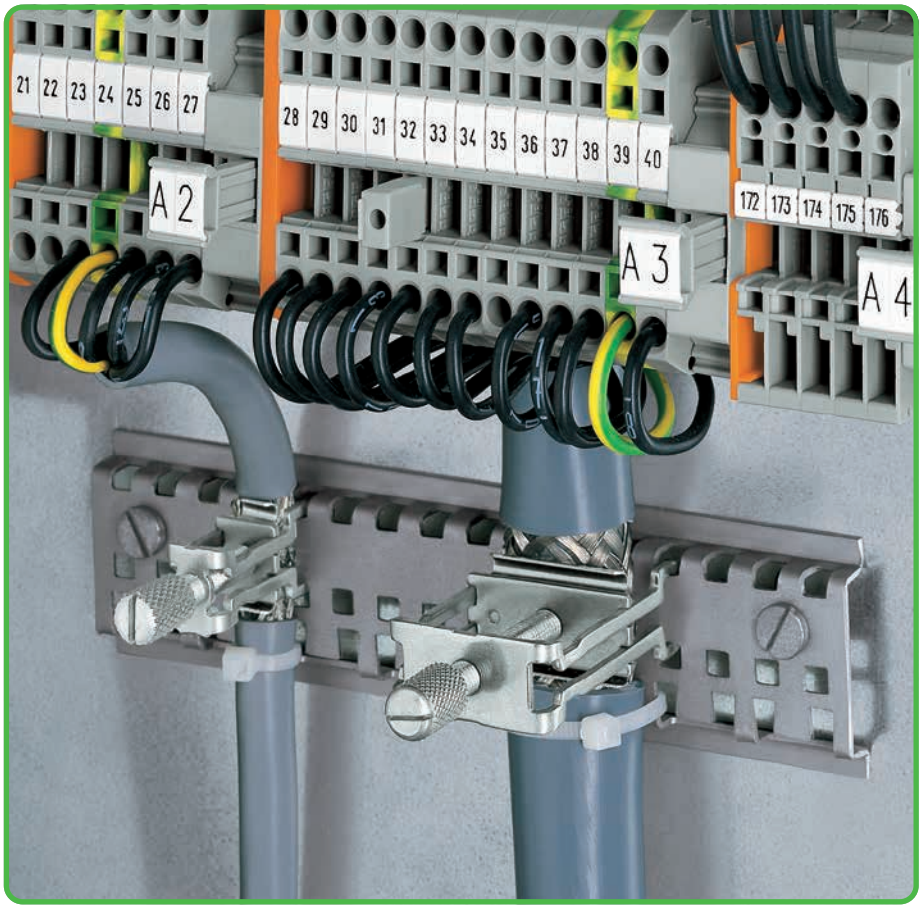
Carrier with grounding foot*
45 mm long, busbar parallel to the rail
Item No. 790-114

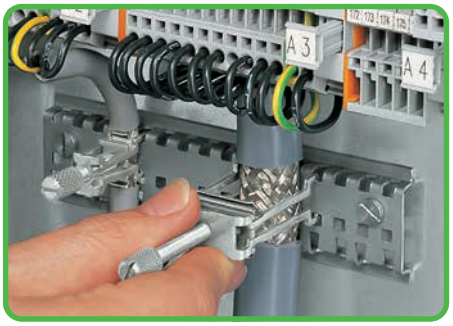


Carrier with 2 grounding feet*
125 mm long, busbar parallel to the rail
Item No. 790-115
* for all sizes of shield clamping saddles

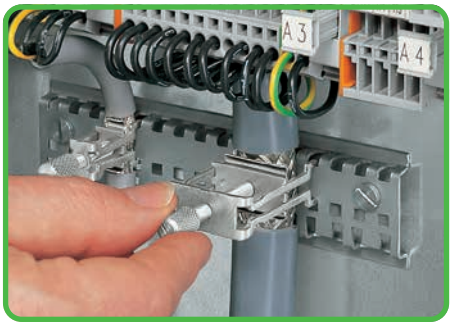


Fitting spacer sleeve to a specialty slotted carrier rail.

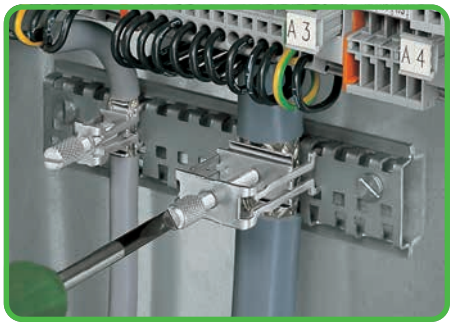




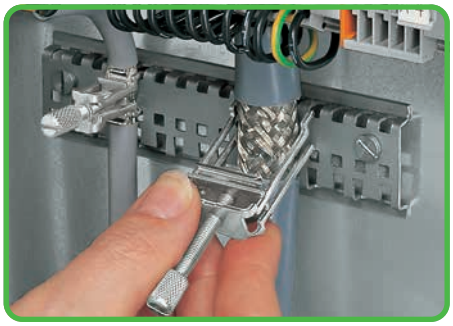
Fitting an additional clamping saddle.



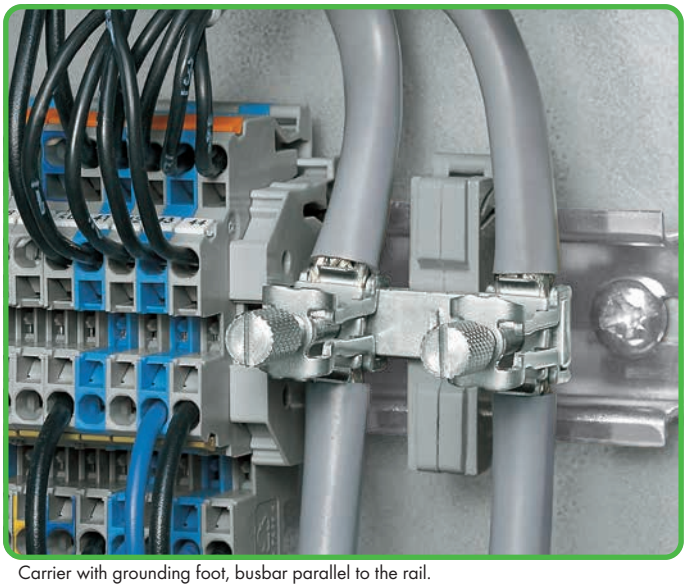
Tightening/Removing a clamping saddle.



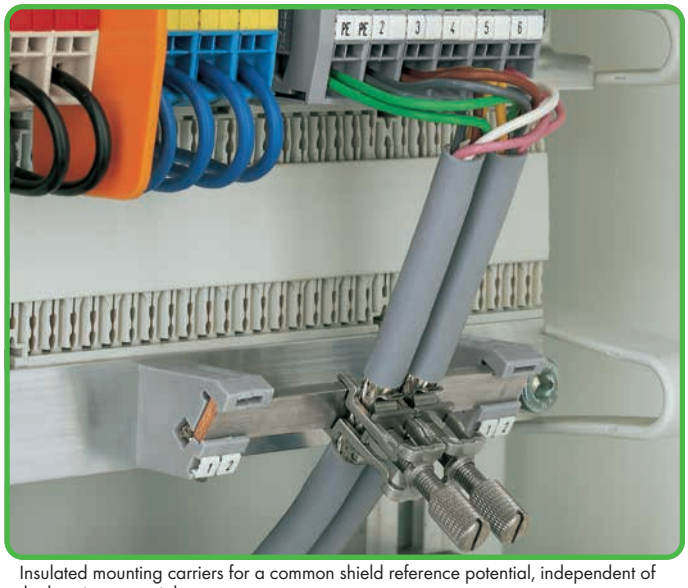
After connection, tighten the knurled screw to complete the installation.
Recommended tightening torque: 0.5 Nm



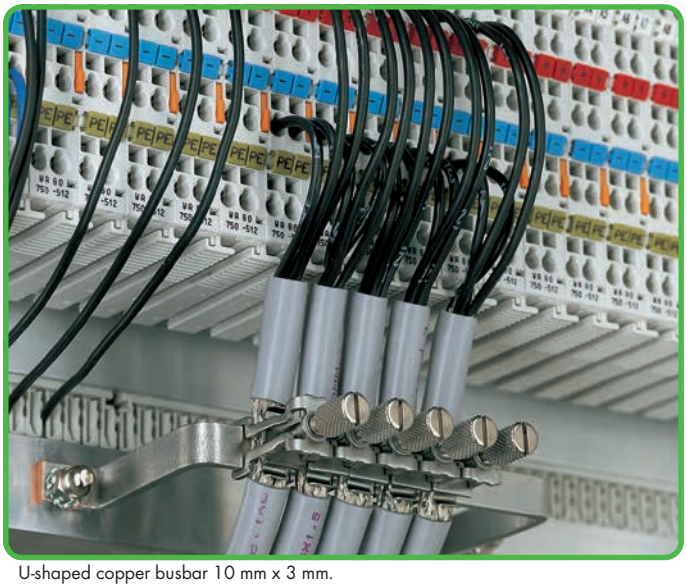
To remove the clamping saddle, unscrew until ratcheted mechanism is released, then slightly tip saddle and remove the clamping saddle.



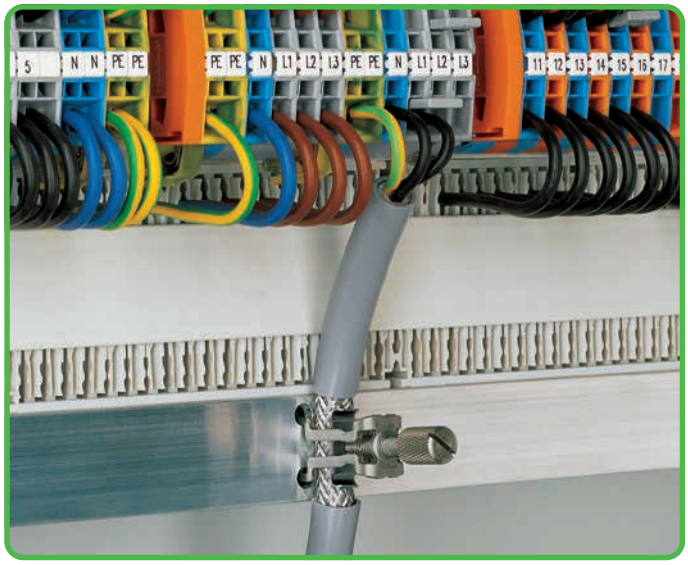
Carrier with grounding foot, busbar parallel to the rail.



Insulated mounting carriers for a common shield reference potential, independent of the housing potential.

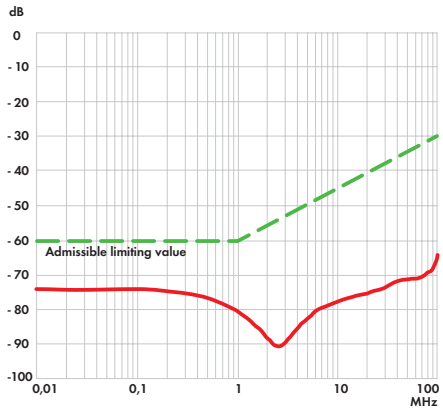


U-shaped copper busbar 10 mm x 3 mm.



Snap into any metal plate up to max. thickness 3 mm.

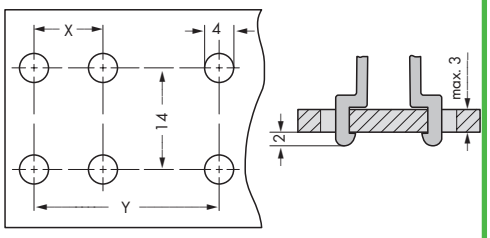
Negative shield attenuation



Hole dimensions for panel mounting
The WAGO shield connecting system is highly effective because the clamping unit can be brought very close to the unshielded part of the cable.

Hole dimensions for panel mounting

Shield (screen) clamping saddle size	
Distance	X
11 mm	9.5 mm
Distance	Y
19 mm	17.5 mm
27 mm	25.5 mm
43 mm	41.5 mm



Additionally, the spring material is part of the clamping saddle, providing a good electrical connection (the system also acts as a partial strain relief). The spring element integrated in the shield clamping saddle compensates deformation and settling that results from a connected shield.

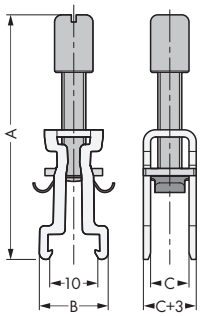
Shield Clamping Saddles

Shield clamping saddle diameter of compatible conductor up to 8 mm	Shield clamping saddle diameter of compatible conductor 7 to 16 mm	Shield clamping saddle diameter of compatible conductor 6 to 24 mm
		
Item No. **Pack. Unit** **Shield clamping saddle,** 11 mm wide, Note: Cannot be used for connecting ground conductors. **790-108** 50 (5x10)	**Item No.** **Pack. Unit** **Shield clamping saddle,** 19 mm wide, Note: Cannot be used for connecting ground conductors. **790-116** 50 (5x10)	**Item No.** **Pack. Unit** **Shield clamping saddle,** 27 mm wide, Note: Cannot be used for connecting ground conductors. **790-124** 50 (5x10)

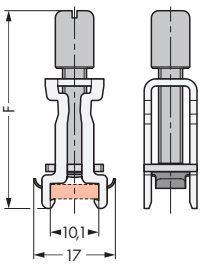
Accessories for Shield Clamping Saddles

Carrier with grounding foot,  parallel to the rail, Cu 10 x 3 mm, 15 mm long, suitable for 790-108 shield clamping saddle **790-110** 25	**Carrier with grounding foot,**  90° to carrier rail, Cu 10 x 3 mm, 45 mm long, suitable for 790 Series shield clamping saddles **790-113** 25	**Carrier with 2 grounding feet,**  parallel to the rail, Cu 10 x 3 mm, 125 mm long **790-115** 25
Carrier with grounding foot,  parallel to the rail, Cu 10 x 3 mm, 25 mm long, suitable for 790-108 and 790-116 shield clamping saddles, as well as for 791-111 and 791-117 shield clamps **790-112** 25	**Carrier with grounding foot,**  parallel to the rail, Cu 10 x 3 mm, 45 mm long, suitable for 790 Series shield clamping saddles and 791 Series shield clamps **790-114** 25	**Busbar,** tin-plated,  Cu 10 x 3 mm, 1000 mm long **210-133** 1 **Busbar,** tin-plated,  Cu 10 x 3 mm, 30 mm long **790-133** 20
Carrier rail, with special perforations, Tin-plated,  1000 mm long (Special lengths upon request) **790-145** 1	**Spacer sleeve,** for specialty slotted carrier rail,  use M5-size screw **790-144** 200 (2x100)	**Busbar,** tin-plated,  Cu 10 x 3 mm, 50 mm long **790-134** 20

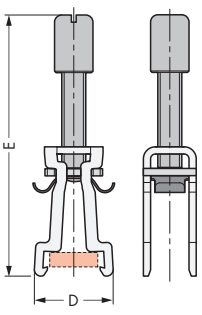
Installation position
delivery state



Closed position



Removal position



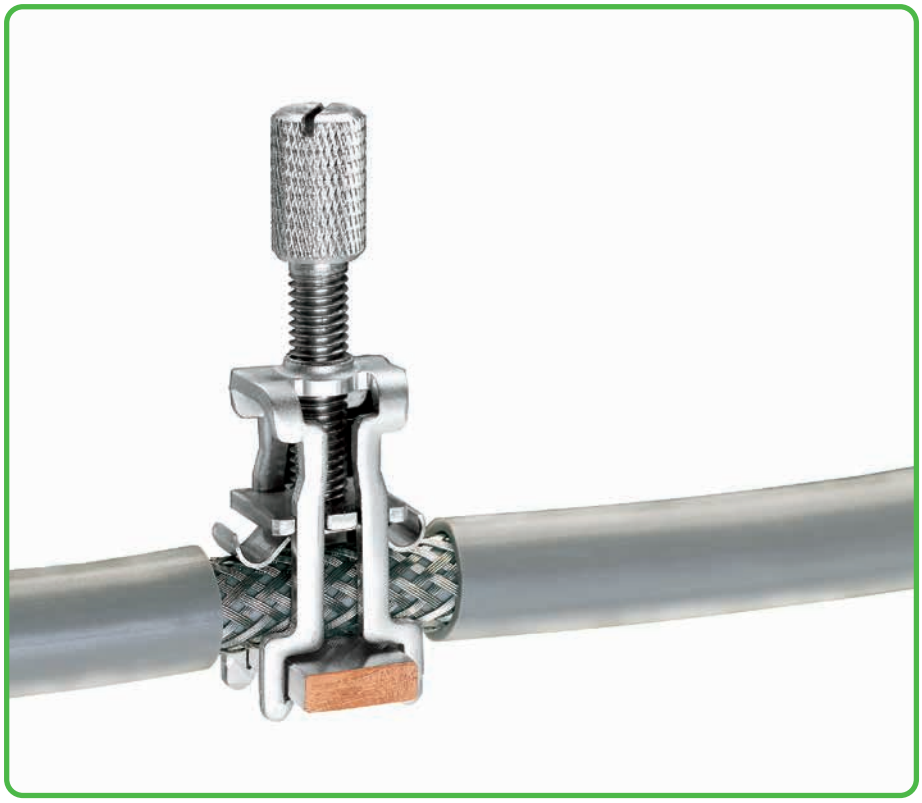
Dimensions in mm

Item No.	A	B	C	D	E	F
790-108	51	15	8	16	55	42
790-116	53	15	16	16	57	45
790-124	78	15	24	16	83	58
790-140	97	15	40	16	100	73

Dimensions in mm

Shield clamping saddle
diameter of compatible conductor
22 to 40 mm





Item No.		Pack. Unit
Shield clamping saddle,		
43 mm wide,		
Note: Cannot be used for connecting ground conductors.		
	790-140	50 (5x10)

Accessories for Shield Clamping Saddles

Insulated mounting foot,			
	for busbar with screw M4 x 8 mm		
	gray	**790-100**	50 (2x25)
Insulated mounting foot,			
	for busbar with sheet metal screw (3.5 x 9) mm		
	gray	**790-101**	50 (2x25)
U-shaped busbar,			
	Cu 10 x 3 mm, suitable for 750 Series I/O modules		
	for 5 I/O	**790-190**	25 (5x5)
U-shaped busbar,			
	Cu 10 x 3 mm, suitable for 750 Series I/O modules		
	for 8 I/O	**790-191**	25
U-shaped busbar,			
	Cu 10 x 3 mm, suitable for 750 Series I/O modules		
	for 5 I/O	**790-192**	25
U-shaped busbar,			
	Cu 10 x 3 mm, suitable for 750 Series I/O modules		
	for 8 I/O	**790-193**	25



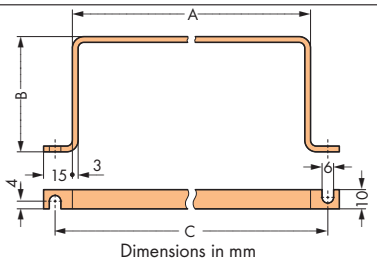
Assembly

The shield clamping saddle is shipped ready for direct connection to the busbar 10 mm x 3 mm or to a drilled mounting plate. After connection, tighten the knurled screw to complete the installation.
Maximum tightening torque: 0.5 Nm



Removal

To remove the clamping saddle, unscrew until ratcheted mechanism is released, then slightly tip saddle and remove the clamping saddle.



Dimensions in mm

Item No.	A	B	C	Item No.	A	B	C
suitable for I/O module series 750 (5 E/A)							
790-190	63	60	83	**790-192**	63	35	83
suitable for I/O module series 750 (8 E/A)							
790-191	100	60	118	**790-193**	100	35	118

Dimensions in mm

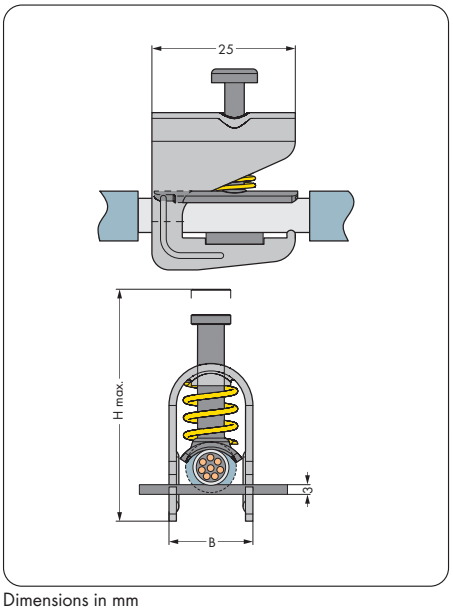
Shield Clamps and Shield Termination
791 and 709 Series

Shield clamp	Shield termination



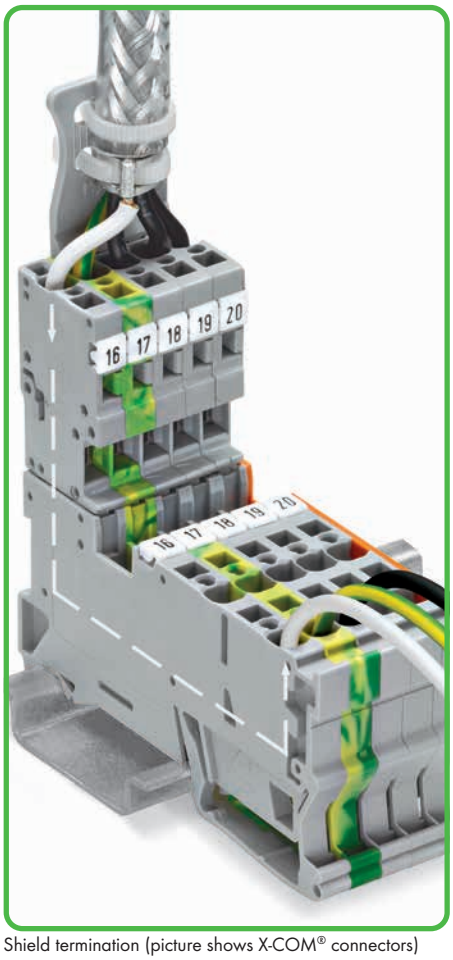


Item No.	Pack. Unit
Shield clamp,	
diameter of compatible conductor 10 to 17 mm, height	
max. 63 mm, 23 mm wide,	
Note: Cannot be used for connecting ground conductors.	
791-117	50
Shield clamp,	
diameter of compatible conductor 1.5 mm to 6.5 mm,	
height max. 40 mm, 10 mm wide,	
Note: Cannot be used for connecting ground conductors.	
791-107	50
Shield clamp,	
diameter of compatible conductor 5 to 11 mm, height	
max. 47 mm, 17 mm wide,	
Note: Cannot be used for connecting ground conductors.	
791-111	50
Shield clamp,	
diameter of compatible conductor 16 to 24 mm, height	
max. 78 mm, 30 mm wide,	
Note: Cannot be used for connecting ground conductors.	
791-124	50



Dimensions in mm

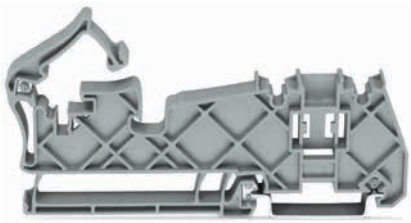
Item No.		Pack. Unit
Shield termination,		
includes cable ties for shield 5 mm and 10 mm Ø		
55 mm long	**709-350**	100 (4x25)
Shield termination,		
includes cable ties for shield 5 mm and 10 mm Ø		
150 mm long	**709-352**	100 (4x25)

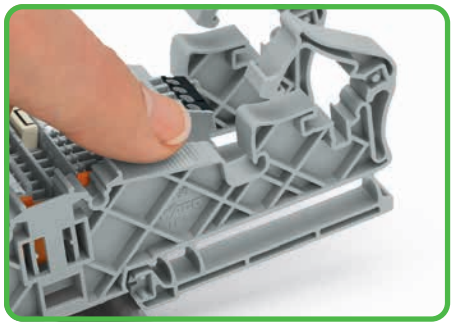


Shield termination (picture shows X-COM® connectors)

Busbar Carriers
790 Series

Busbar carrier



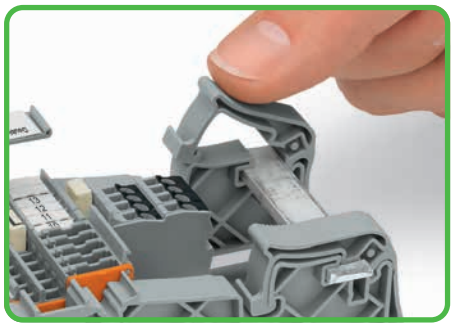


Snapping the busbar carrier onto DIN 35 rail.

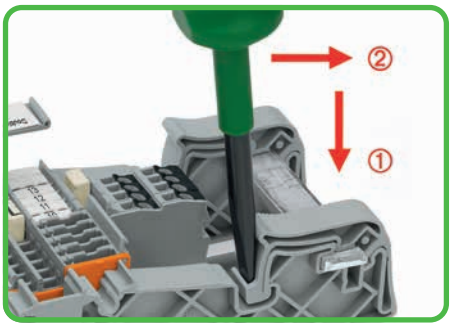


Placing the busbar in the carrier holder.

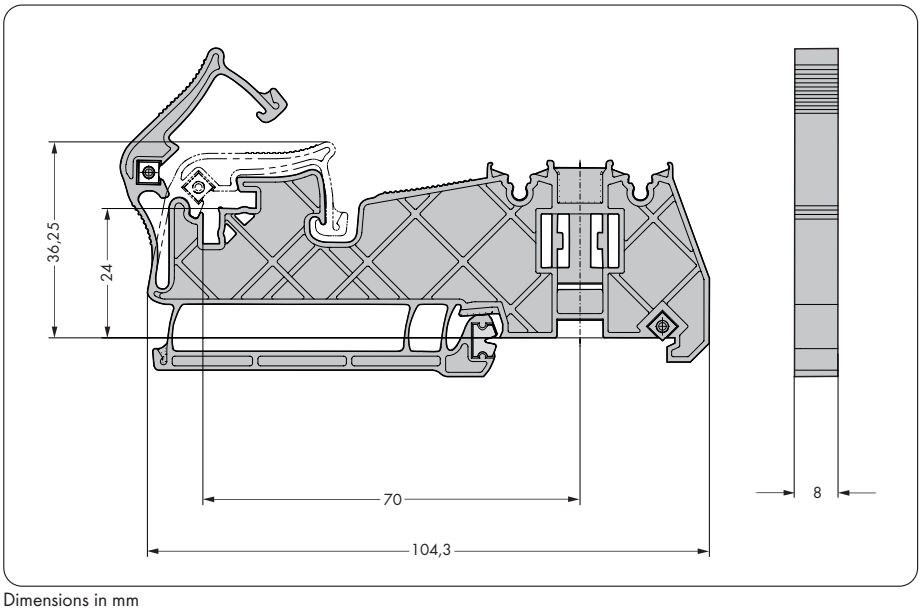
Item No.	Pack. Unit
Busbar carrier, insulated,	
for busbars Cu 10 mm x 3 mm,	
no contact to DIN rail	
790-400	20



Snapping the fixing bracket into position.



Release the fixing braket by pushing the operating tool down ① and then forward ②.



Dimensions in mm

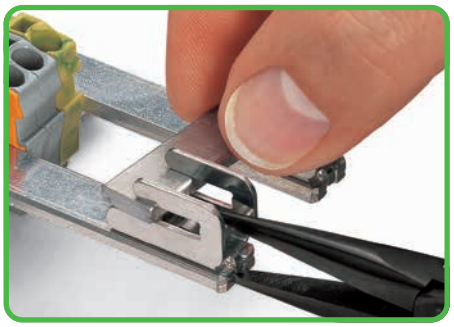
Busbar Carriers
790 Series

Busbar carrier	Busbar carrier





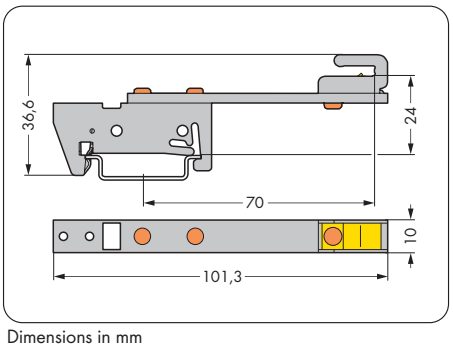
Item No.	Pack. Unit	Item No.	Pack. Unit
Busbar carrier, single side, straight, for busbars Cu 10 mm x 3 mm, distance between center of DIN rail and busbar carrier: 70 mm		**Busbar carrier,** single side, angled, for busbars Cu 10 mm x 3 mm, distance between center of DIN rail and busbar carrier: 70 mm	
790-300	10	**790-301**	10
Busbar carrier, single side, straight, for busbars Cu 10 mm x 3 mm, distance between center of DIN rail and busbar carrier: 80 mm			
790-302	10		



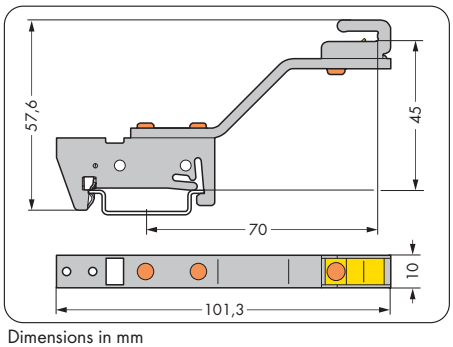
To remove the busbar, compress the spring using pliers.



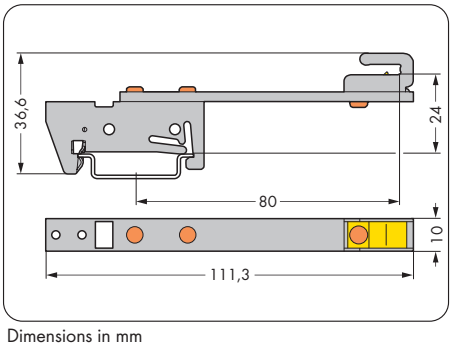
Remove the busbar carrier using an operating tool, type 3, blade (5.5 x 0.8) mm.



Dimensions in mm



Dimensions in mm



Dimensions in mm

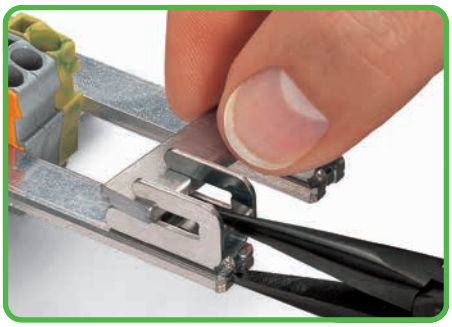
Busbar Carriers
790 Series

Busbar carrier	Busbar carrier

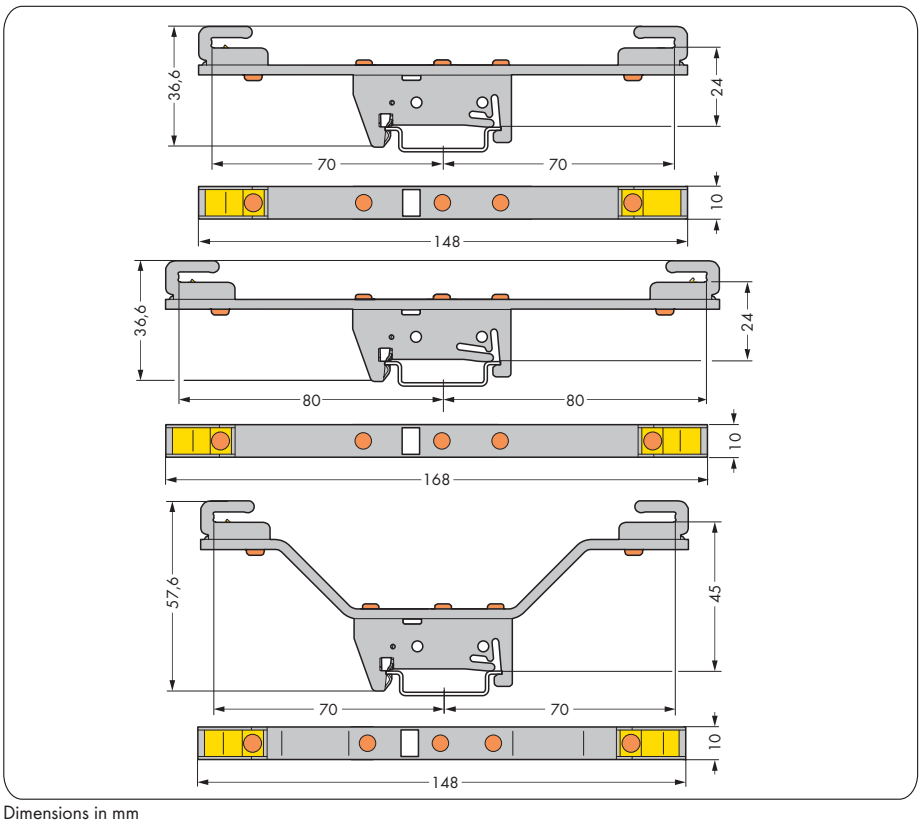




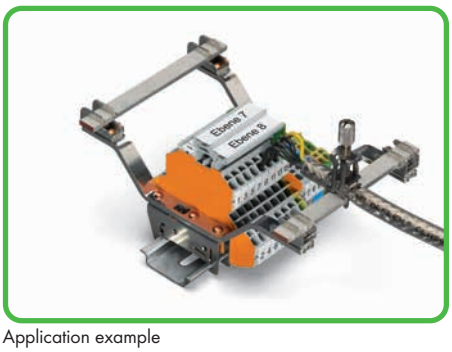
Item No.	Pack. Unit	Item No.	Pack. Unit
Busbar carrier, both sides, straight, for busbars Cu 10 mm x 3 mm, distance between center of DIN rail and busbar carrier: 70 mm		**Busbar carrier,** both sides, angled, for busbars Cu 10 mm x 3 mm, distance between center of DIN rail and busbar carrier: 70 mm	
790-310	10	**790-311**	10
Busbar carrier, both sides, straight, for busbars Cu 10 mm x 3 mm, distance between center of DIN rail and busbar carrier: 80 mm			
790-312	10		



To remove the busbar, compress the spring using pliers.



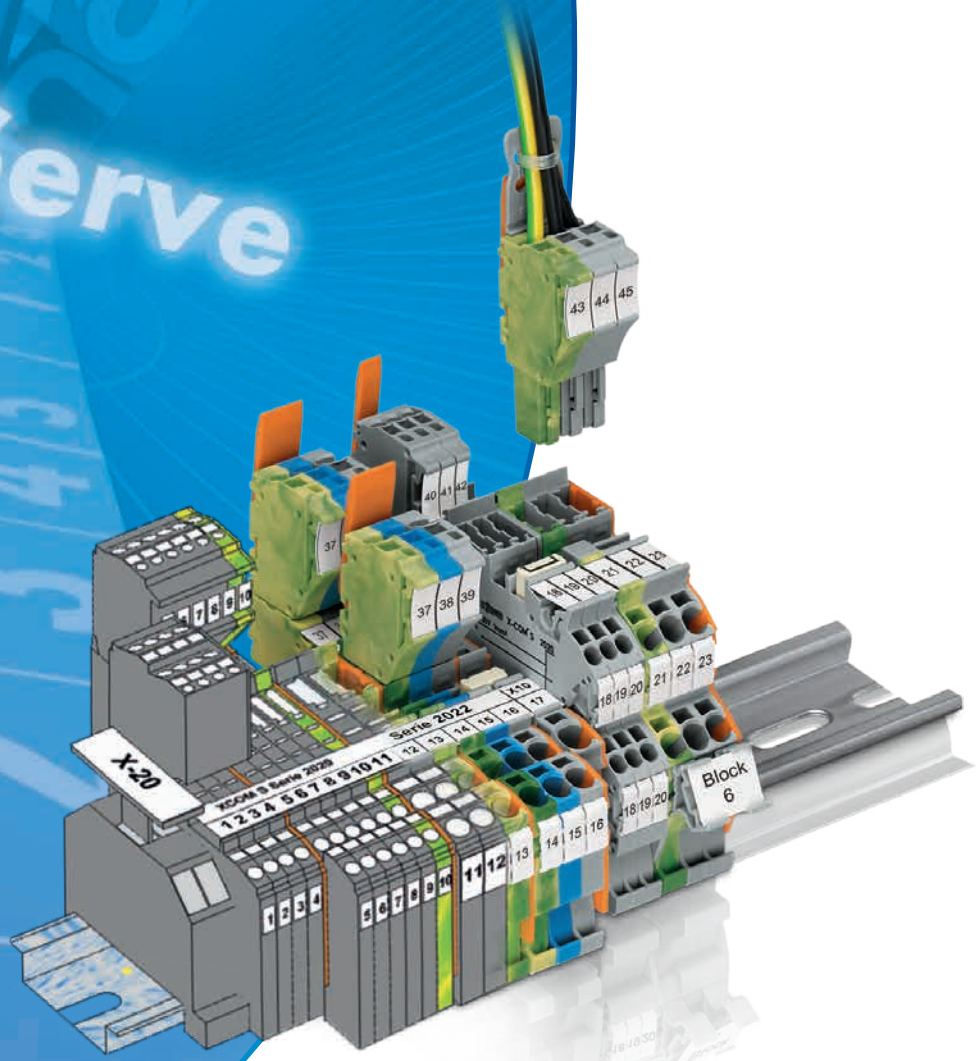
Dimensions in mm



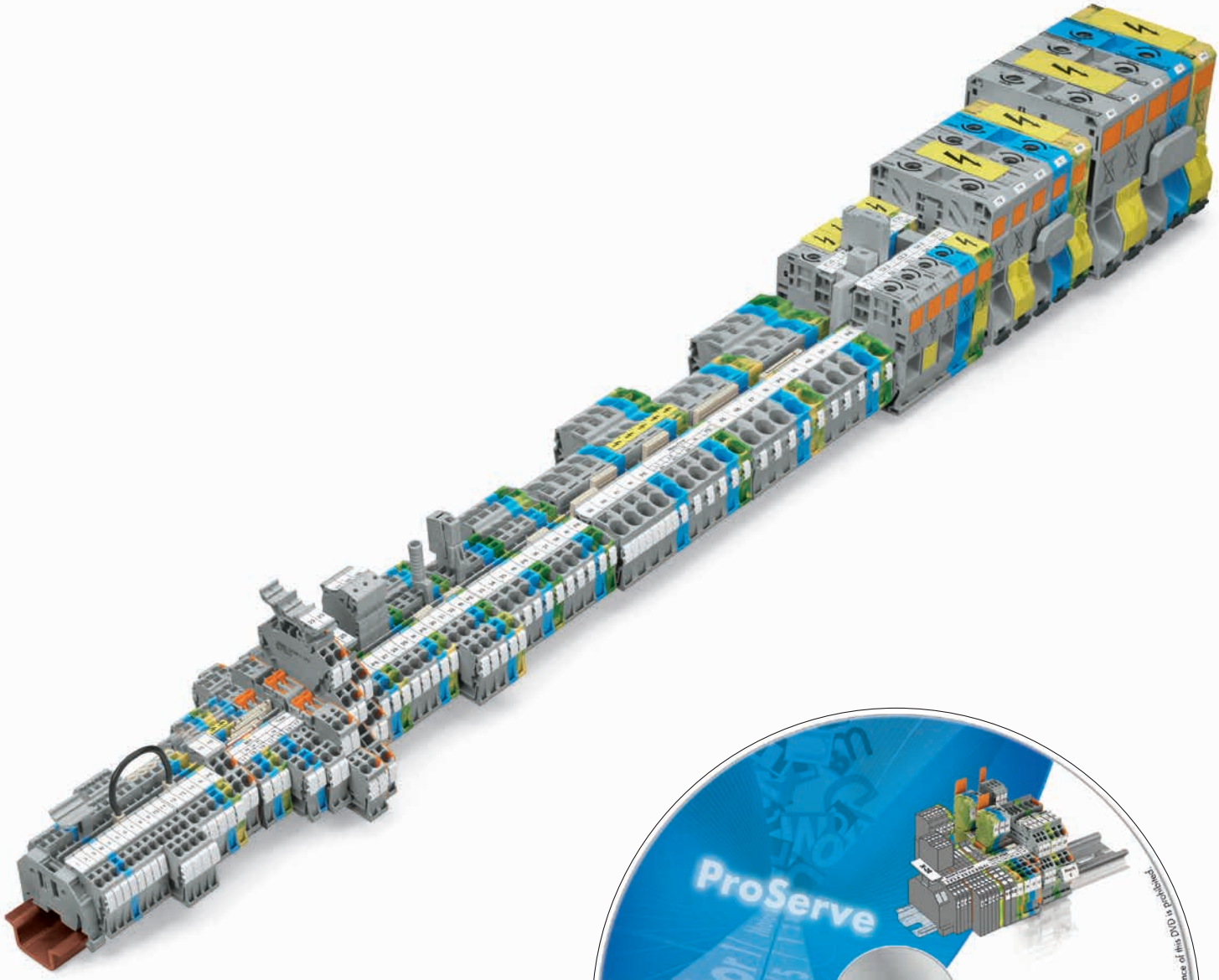
Application example

WAGO ProServe®

Designing, Assembling and Marking



WAGO®





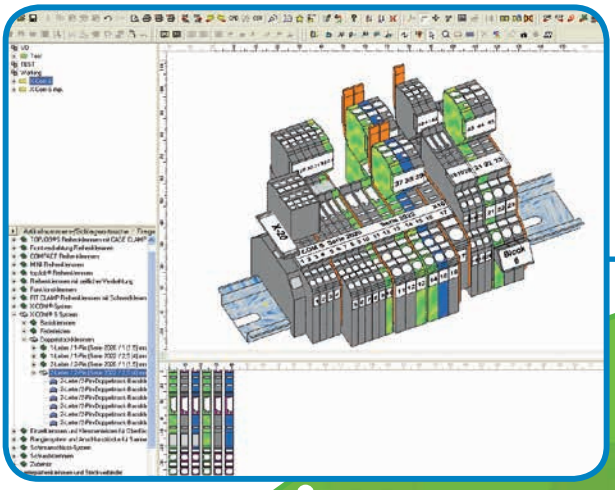
The advantages of ProServe are at your disposal every day. With unique features such as AutoAudit accuracy checking, ProServe performs much of the work for you, saving time and money.

Immediate access to professional and sophisticated features allows for error-free applications, greater flexibility in your daily business and better customer service. With 50 years of WAGO expertise at your disposal, put ProServe to work for you in your next application.

Benefits:

- Quick design
- Quick ordering
- User-friendly
- Extensive and user-specific documentation
- Network compatibility
- Different software products on a single CD (smartDESIGNER, productLOCATOR, smartSCRIPT)
- A price list is included

...all for free!



ProServe® – Planning at a New Level

smart DESIGNER

smartDESIGNER

productLOCATOR

product LOCATOR

WSCAD electronic GmbH

see electrical CADdy++

RUPLAN

ePLAN

Engineering Base

promis engine sigraph.CAE

AutoCAD ecscad

E3 series

ELEKTROCAD

ELCAD

Comos®

smartDESIGNER and productLOCATOR

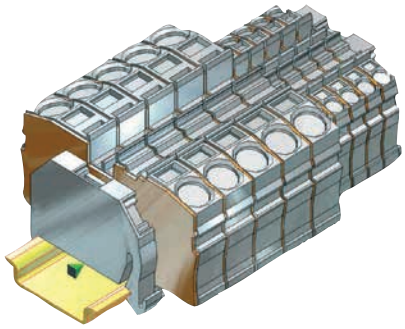
- Interfaces to CAE and M-CAD programs
- Output in PDF and HTML
- Different search functions provide quick item selection
- Creation of part lists including product pictures and custom part numbers
- Complex rail assemblies can be easily designed in 3D
- Easy creation of custom part numbers
- Creation of custom items to design third-party products
- Default parts (favorites) can be defined individually, streamlining design time
- Intelligent, user-optimized accuracy check features
- 18 languages available
- 25.000 sales items

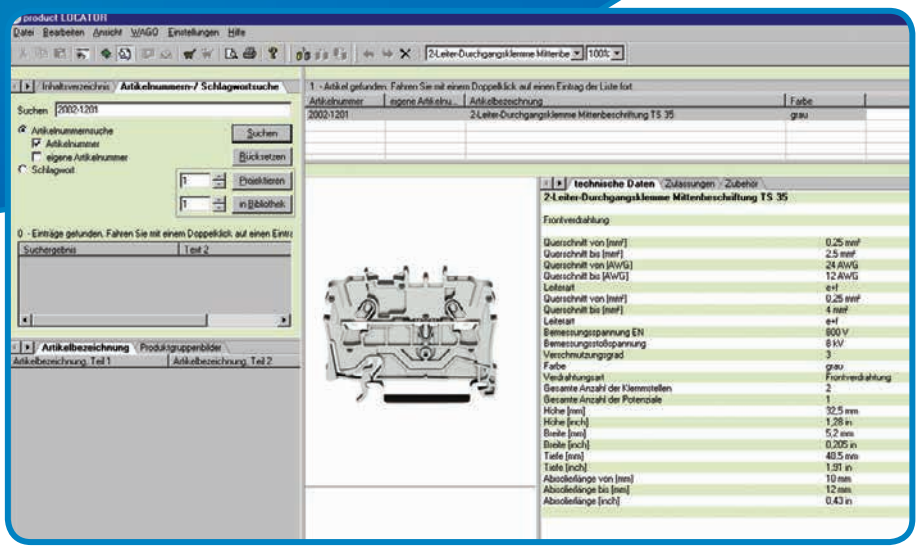
Marking:

- Direct creation and output of marking data to plotter or thermal transfer printer

CAD

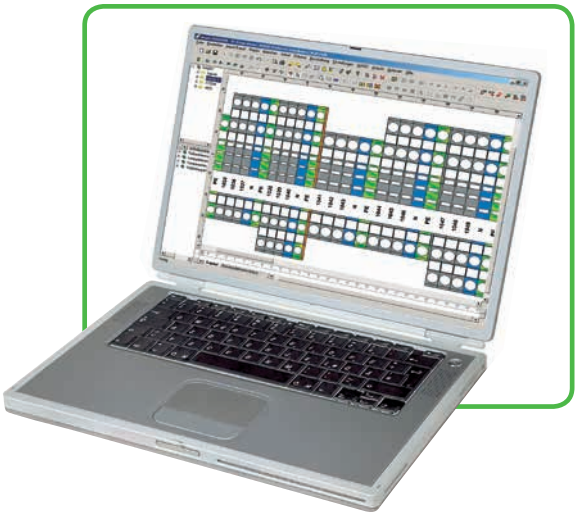
STEP – IGES –
DXF – DWG





ProServe: Planning at a New Level

Configuration and marking of rail assemblies and I/O nodes, stand-alone or combined with CAE systems.



Designing:

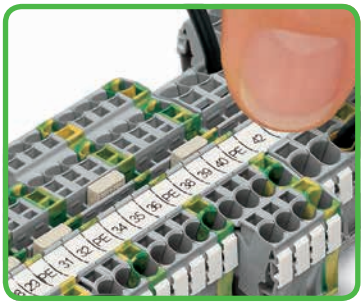
Both custom rail assembly and marking can be easily designed via WAGO ProServe® Software.

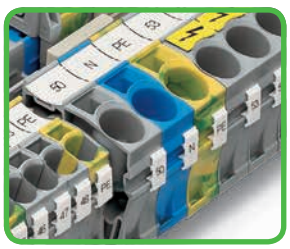




Snapping:

The marking strip is snapped into the center marker receptacle profile.





Combining marking strips with individual WMB markers

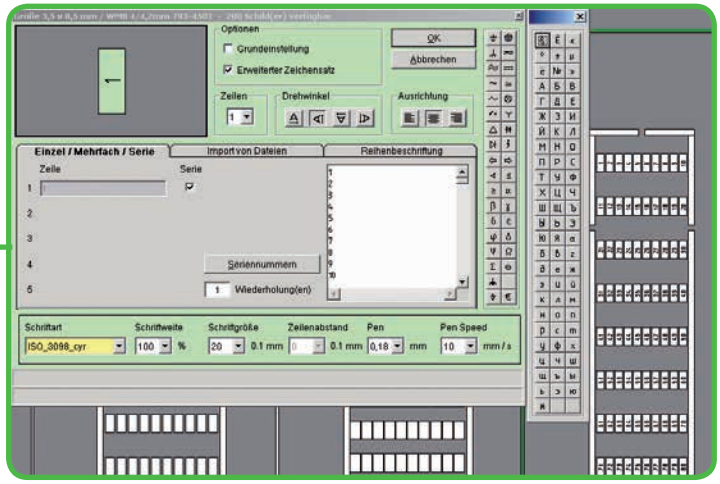


Alternative:
Miniature WSB markers can be printed on a plotter



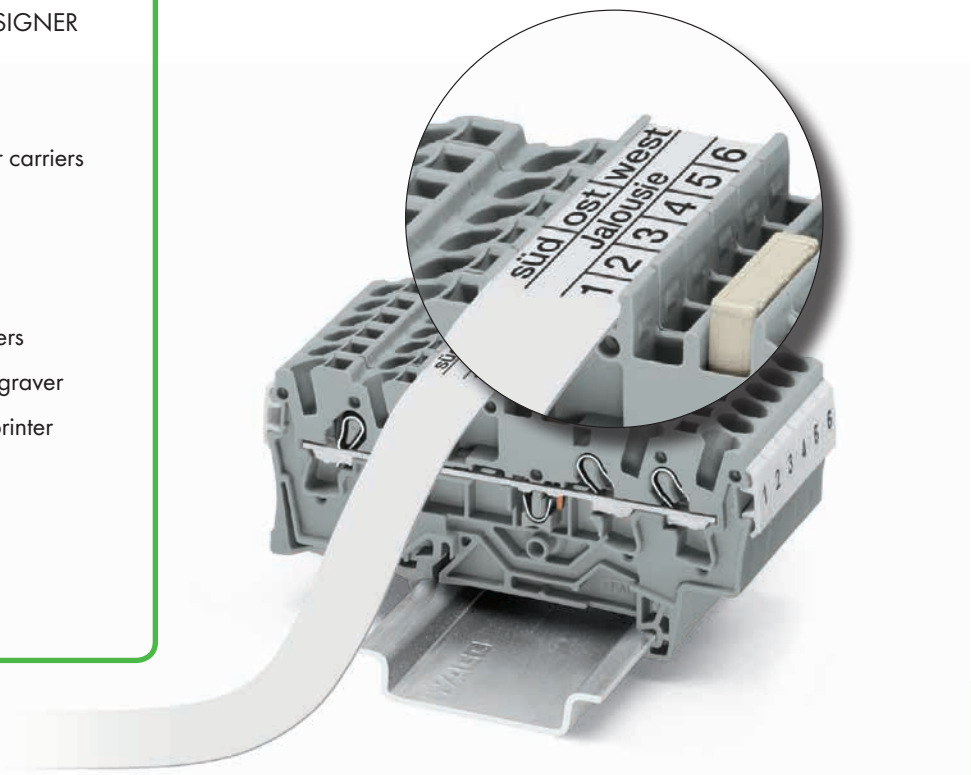
WMB Inline markers on continuous reel can be used in three positions:
In the center and on each side





smartMARKING

- Extensive import functions from CAE systems, MS Office and WAGO smartDESIGNER
- WYSIWYG marking
- Automatic plotter calibration
- Extensive library including marker carriers
- Symbol library
- Text length verification
- Several languages available
- Output of East European characters
- Fully compatible with EG 450 Engraver
- Direct output to thermal transfer printer
- Creation of custom markers for engraver/plotter



Printing:

Marking strips (2009 Series) or WMB Inline markers on continuous reel are printed on a thermal transfer printer.

Three-Line Printing:

... for clear marking.
This makes it immediately clear which function corresponds with each terminal block.

Thermal Transfer Printer
*smart*PRINTER



Description	Item No.	Pack. Unit
smartPRINTER		
includes:		
- Power supply unit and cable		
- USB cable		
- 1 x marking strip roll and WMB Inline markers		
- 2 x rollers		
- 1 x roll holder		
- 1 x ink ribbon		
- ***smart***SCRIPT marking software and driver		
	258-5000	1

Accessories

Ink ribbon for *smart*PRINTER		
	**258-5005**	1
Roller for *marking*STRIP		
	**258-5006**	1
Roller for WMB Inline		
	**258-5007**	1
Roller for Mini-WSB Inline		
	**258-5008**	1
Carrying case for *smart*PRINTER		
light gray, with foam padding for printer		
Dimensions (W x H x D): 50 x 26 x 33 cm		
	**258-5015**	1

Technical Data

Printing method	Thermal transfer
Print head	Glass layer, spring-mounted
Print speed	max. 127 mm/s
	(WAGO recommends 50.8 mm/s)
Print width (max.)	47 mm
Print length (max.)	762 mm
Print resolution	300 dpi (12 pixels/mm)
Transmissive/Reflective sensor	yes, centrally fixed
Operating display	Color TFT LCD with navigation button
Memory	8 MB Flash, 16 MB SDRAM
Interfaces	USB, RS-232, ETHERNET 10/100 Mbps
Operating voltage	100 ... 240 VAC, 50 ... 60 Hz
	(automatic adjustment)
Dimensions (W x H x D)	135 x 175 x 245 mm
Weight	2,000 g (without printing material)
Operating temperature	5 °C ... 40 °C (41 °F ... 104 °F)
Storage temperature	-20 °C ... 50 °C (-4 °F ... 122 °F)
Safety approvals	CE (EMC)
Ink ribbon	External roll diameter: 40 mm;
	Internal core diameter: 0.5" (12.7 mm);
	Max. length: 110 m; Max. width: 58 mm

Thermal Transfer Printer
WAGO TP 298



Description	Item No.	Pack. Unit
TP 298 Thermal Transfer Printer		
Resolution 300 dpi,		
incl. ProServe software		
and 258-178 print roller		
for WMB Inline and 2009 and 709 Series marking strips		
	258-298	1

Technical Data	
Printing method	Thermal/thermal transfer
Printhead system	Thick-film
Print resolution	300 dpi
Print speed	100 mm/sec.
Print width	108.4 mm
See-through/reflective sensor	standard
Processor 32 Bit ColdFire/clock rate	64 MHz
RAM memory	8 MB RAM
Program memory	4 MB Flash
Slot for memory card	CompactFlash Type 1
Interfaces	ETHERNET 10/100 Base T, RS-232 (COM), USB
Accessories (optional)	Cutter, external unwinder, external rewinder, CompactFlash memory card 16-512 MB
Operating voltage	100 V ... 240 V AC / 50 Hz ... 60 Hz, PFC
Dimensions (W x H x D)	242 x 274 x 446 mm
Weight	10000 g
Operating temperature	10°C ... 35°C
Rel. humidity	30 % ... 85 %
Safety approvals	CE, FCC class 1
Ink ribbon	1 x USB cable; 1 x serial cable; marking strips (1 x 2009-110); ink ribbon (1 x 258-149)

Application table for ink ribbon/marking accessories/printer

Item No.	Width	Ink Ribbon	Marking Accessories	Printer
258-143	60 mm	resin/wax	Labels (paper)	all types
258-144	100 mm	resin/wax	Labels (paper) for cable marking 211-155 / 211-156	all types
258-145	38 mm	resin	2009 Series marking strip 2009-xxx 709 Series marking strip 709-xx WMB Inline	TP 298+
258-149	50 mm	resin	2009 Series marking strip 2009-xxx 709 Series marking strip 709-xx WMB Inline	TP 298+
258-150	76 mm	resin	Marking cards for wire marking 211-111 and 211-121 Labels (polyester) up to 76 mm	all types
258-157	100 mm	resin	Labels (polyester) up to 100 mm	all types

Flatbed Plotter
IP 200



- Rugged, aluminum construction
- Plotting area, A4: 220 mm x 305 mm
- Easy replacement of marker receptacles
- Auto calibration
- Up to 10.5 mm wide markers can be plotted
- Spacial solutions for up to 15 mm wide markers are available
- Universal power supply, 100-240 VAC
- Neat plotting right from the very first marker
- PC interfaces: USB ports
- Command language: HPGL
- IP200 firmware can be updated via PC and Internet

Description	Item No.	Pack. Unit
IP200 Flatbed Plotter	**258-200**	1

Technical Data	
Plotting area	200 mm x 305 mm
Interfaces	USB level 1.1
Language	Based on HP-GL 7475A
Data buffer	16 MB
Speed	max. 40 mm/s
Drive system	Two-phase step motor
Plotter Pen	Special plotter pens with HP receptacle
Adressable resolution	0.01 mm
Repeat accuracy	0.05 mm
Repeat accuracy after pen change	0.05 mm with optimum pen
Power supply	Separate power supply with exchangeable plug adapters
Operating voltage	AC 100 V ... 240 V / 50 Hz ... 60 Hz
Current consumption (internal)	0.7 A max. at 220 V AC
Dimensions (mm) W x H x L	125 x 440 x 440
Operating temperature	10 °C ... 35 °C
Rel. humidity	35 % ... 75 %
Safety approvals	EN 60950-1
Immunity to interference	EN 55022 B
Included:	IP200 Plotter, power supply, USB data cable, operating manual + ProServe software

Mobile Printer
DYMO RHINO 6000





Print-out preparation:
First, insert the label cartridge. To do this, open the cover on the device and insert the cartridge as shown. Ensure the cartridge visibly and audibly locks into place. The two blue catches must latch on to the top edge of the cartridge. Then close the cover.
Note: You can also work with the unit while it ist charging.
Please use the tatest driver.
Download: www.wago.com under SERVICE / Download / ProServe



Description	Item No.	Pack. Unit
DYMO RHINO 6000 Mobile Printer Includes: Hard carrying case, AC adapter, battery, RHINO CONNECT software and two marking cartridges with 9 mm and 24 mm adhesive strips	**258-6000**	1
WAGO supplementary set for DYMO RHINO 6000 Includes: ProServe CD, ProServe flyer and quick installation guide for adding on to an existing manual printer	**258-6100**	1

Technical Data	
Resolution	180 dpi
Tape sizes	9 mm, 11 mm, 19 mm, 24 mm (other sizes upon request)
Tape styles	Permanent polyester, flexible nylon, vinyl, heat shrink tube
Keyboard style	ABC
Tape cutter	yes
Shock protection	yes
Memory	1000 labels (1 MB)
Symbols	yes
Barcodes	yes (e.g. Code 39, Code 128, EAN 8 + 13)
Number of font styles	4
Number of font sizes	7
Number of printed lines	5
Print preview	yes
PC connection	USB
Display	65 mm x 35 mm
Weight	3500 g
Operating time	8 hours
Battery charge indicator	yes

Accessories

Accessories for DYMO RHINO 6000

Marking strips



Self-adhesive marking



Self-adhesive marking



Heat shrink tube



Heat shrink tube



Description		Item No.
Marking strips	white, 11 mm width x 5.5 m	**258-611**
Self-adhesive marking	white, 9 mm width x 7 m	**258-612**
Self-adhesive marking	white, 19 mm width x 7 m	**258-613**
Heat shrink tube	white, 9 mm width x 1.5 m	**258-614**
Heat shrink tube	white, 19 mm width x 1.5 m	**258-615**

Ink ribbon for labels



Ink ribbon for marker strips



Description		Item No.
Ink ribbon for marker strips and WMB Inline	resin, 38 mm x 300 m	**258-145**
	resin, 50 mm x 300 m	**258-149**
Ink ribbon for cable marking	76 mm wide x 300 m	**258-150**
	100 mm wide x 300 m	**258-157**
Ink ribbon for labels	resin/wax, width 60 mm x 300 m	**258-143**
	resin/wax, width 100 mm x 300 m	**258-144**

All ink ribbons are suitable for TP 298 printer. For detailed ordering information, please refer to the **"Application table for ink ribbon/marking accessories/printer"**

External coil mounting system



Cutter TP 298



Spare roller TP 298



Description		Item No.
External coil mounting system	for 8.000 WMB Inline markers (2009-135)	**258-169**
Cutter TP 298		**258-161**
Spare roller TP 298 for labels	(up to device series no. 40,000)	**258-162**
Spare roller TP 298 for labels	(from device series no. 40,000)	**258-177**
Spare roller TP 298 for WMB Inline	(up to device series no. 40,000)	**258-166**
Spare roller TP 298 for WMB Inline	(from device series no. 40,000)	**258-178**
Carrying case for TP 298		**258-171**
Retractable handle for carrying case TP 298		**258-173**

WMB Inline



Marking strips



Description		Item No.
WMB Inline, pitch 4 mm , strechable 4 mm ... 4.2 mm, on roll	white, 2,000 markers	**2009-114**
WMB Inline, pitch 5 mm , strechable 5 mm ... 5.2 mm, on roll	white, 1,500 markers	**2009-115**
WMB Inline, pitch 5 mm , strechable 5 mm ... 5.2 mm, on roll	white, 8,000 markers	**2009-135**
Marking strips for TOPJOB®S Series, white, plain, 11 mm wide	50 m coil	**2009-110**
Marking strips for 870, 869, 862, 270 Series, white, plain, 7.5 mm wide	50 m coil	**709-178**
Marking strips for 870, 869, 862, 270 Series, transparent, plain, 7,5 mm wide	50 m coil	**709-177**

Accessories

Marker card



Marker card (12 mm) for plotters



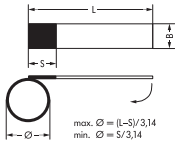
Labels on roll



Labels on DIN A4 sheets



Dimensions of self-laminating label



Description		Item No.
Marker card for therminal printer	12 mm	**211-111**
	23 mm	**211-121**
Marker card for TT Printer	12 mm	**211-110**
(258-370 carrier plates are required for plotting)	23 mm	**211-120**
Labels on roll for therminal transfer printer	Marker surface: "S"=8 mm, ","B"=18 mm, "L"=35 mm for max. 9 mm cable Ø, 9,000 labels per roll	**211-155**
	Marker surface: "S"=13 mm, ","B"=23 mm, "L"=51 mm for max. 12 mm cable Ø, 5,000 labels per roll	**211-156**
Labels on DIN A4 sheets for laser printer	Marker surface: "S"=9 mm, ","B"=17 mm, "L"=35 mm for max. 8 mm cable Ø, 70 labels per roll	**211-150**
(258-383 carrier plates are required for plotting)	Marker surface: "S"=13 mm, ","B"=21 mm, "L"=56 mm for max. 14 mm cable Ø, 70 labels per roll	**211-151**
Marking sleeve 12 mm, for wire Ø	1.6 mm ... 3.2 mm or 0.25 mm² ... 1.5 mm²	**211-112**
	2.2 mm ... 4.5 mm or 0.5 mm² ... 4 mm²	**211-113**
	3.7 mm ... 5.9 mm or 2.5 mm² ... 6 mm²	**211-114**
	4.8 mm ... 7.5 mm or 6 mm² ... 16 mm²	**211-115**
Marking sleeve 23 mm, for wire Ø	1.6 mm ... 3.2 mm or 0.25 mm² ... 1.5 mm²	**211-122**
	2.2 mm ... 4.5 mm or 0.5 mm² ... 4 mm²	**211-123**
	3.7 mm ... 5.9 mm or 2.5 mm² ... 6 mm²	**211-124**
	4.8 mm ... 7.5 mm or 6 mm² ... 16 mm²	**211-125**
Marking sleeve for cable tie	23 mm, for 10 mm² wires and larger	**211-129**
Cable tie (2.5 x 100) mm		**807-090/101-100**
Label for I/O Marking	Plotter, 12 x 7 mm	**211-211**
(258-371 carrier plates are required for plotting)		
Marking strips	15 mm, white 50 m roll	**210-701**
Receptacle for marking strips	transp. 1 m long	**709-120**
Carrier through element	adjustable in height	**709-118**
Carrier end element	adjustable in height	**709-119**
Contonuous label	3 mm, white 12 lengths at 25 m	**210-732**
Label roll	70 x 100 mm, white 500 labels/reel	**210-703**
Label roll	70 x 100 mm, silver 500 labels/reel	**210-704**
Label roll	6 x 15 mm, white 3000 labels/reel	**210-705**
Label roll	6 x 15 mm, yellow 3000 labels/reel	**210-705/000-002**
Label roll	9 x 15 mm, white 3000 labels/reel	**210-706**
Label roll	9 x 15 mm, yellow 3000 labels/reel	**210-706/000-002**
Label roll	8 x 20 mm, white 3000 labels/reel	**210-707**
Label roll	8 x 20 mm, yellow 3000 labels/reel	**210-707/000-002**
Label roll	9.5 x 25 mm, white 3000 labels/reel	**210-708**
Label roll	35 x 5 mm, white 4000 labels/reel	**210-710**

More labels at www.marschll-pw.de.

Accessories

WAGO plotter pen (disposable) 0.18 mm line width



WAGO plotter pen (disposable) 0.25 mm line width



WAGO plotter pen (disposable) 0.35 mm line width



Service Kit



Graver set



Description		Item No.
WAGO plotter pen (disposable)	0.18 mm line width	**258-226**
	0.25 mm line width	**258-227**
	0.,35 mm line width	**258-228**
	0.5 mm line width	**258-229**
WAGO ink cartridges	black, for permanent marking, not refillable (5 x 1 ml)	**258-141**
WAGO plotter pen	0.18 mm line width	**258-326**
	0.25 mm line width	**258-327**
	0.35 mm line width	**258-328**
	0.5 mm line width	**258-329**
Cover		**258-146**
Service kit	(4 spare pen stations)	**258-147**
Cleaning set	suitable for cleaning all EK pens	**258-139**
WAGO pen cleaner		**258-140**
Calibration aid		**258-453**
Graver set	0.2/0.3/0.4/0.5/0.7/1 mm line width	**258-452**
Graver	0.2 mm graver width	**258-452/000-002**
	0.3 mm graver width	**258-452/000-003**
	0.4 mm graver width	**258-452/000-004**
	0.5 mm graver width	**258-452/000-005**
	0.7 mm graver width	**258-452/000-007**
	1 mm graver width	**258-452/000-010**
Vacuum cleaner bag for Engraver EG 450		**258-457**
Graver (stainless steel)	0.2 mm graver width	**258-458/000-002**
	0.4 mm graver width	**258-458/000-004**
WAGO plotter pen (disponable, black)	0.18 mm line width, for inside marking only	**258-426**
WAGO plotter pen (disponable, black)	0.25 mm line width, for inside marking only	**258-427**
WAGO plotter pen (disponable, black)	0.35 mm line width, for inside marking only	**258-428**
WAGO plotter pen (disponable, black)	0.5 mm line width, for inside marking only	**258-429**
WAGO plotter pen (disponable, red)	0.18 mm line width, for inside marking only	**258-426/000-005**
WAGO plotter pen (disponable, red)	0.25 mm line width, for inside marking only	**258-427/000-005**
WAGO plotter pen (disponable, red)	0.35 mm line width, for inside marking only	**258-428/000-005**
WAGO plotter pen (disponable, red)	0.5 mm line width, for inside marking only	**258-429/000-005**

Accessories

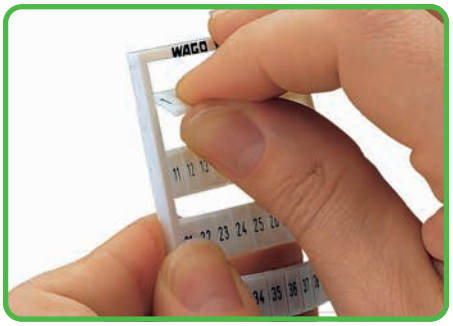
Marker card carrier plates for plotter IP 350



Description		Item No.
Carrier plates for marker cards	WSB 5 mm/0.197 in (209-501)	**258-361**
	WSB 4 mm/0.157 in (209-701)	**258-362**
	Miniature WSB (248-501)	**258-363**
	WCB (249-200)	**258-366**
	WMB 5/5.2 mm (793-5501); WMB 4/4.2 mm (793-4501); WMB 3.5 mm (793-3501)	**258-368**
	T-marking strips 209-290	**258-365**
	Marking strips (2009-110 + 2009-130 and 790-...)	**258-410**
	WTB (799-501)	**258-367**
	Group marking carriers (209-112)	**258-364**
	Marker tags (209-199 + 209-200)	**258-369**
Carrier plates for murrplastik	MP-400; KS 4/12, 4/18, 4/23, 4/30	**258-370**
	MP-401; KES, KLG, KMR, KPX, KS 15x17/27/49/67, KSA, KSF, KSI, KSK, KSO, KSS, KTE, KWI, SKS, WGO, KAB	**258-371**
	BS 5/6	**258-397**
	KSEX; 10/500	**258-470**
	KPX	**258-396**
	KSEX; 18/500	**258-471**
Universal engraver and plotter carrier plates	90 mm x 100 mm x 3	**258-454**
	60 mm x 100 mm x 4	**258-455**
	30 mm x 100 mm x 9	**258-456**
Carrier plates for Phoenix	ZBM	**258-372**
	ZB	**258-373**
	ZBN	**258-374**
	ZBFM	**258-375**
	BNZ	**258-377**
	BN-ZB	**258-378**
	SS-ZB	**258-379**
	LBHZ	**258-380**
	PAB	**258-381**
	GPE	**258-382**
Universal engraver and plotter carrier plates	DIN A4	**258-383**
	DIN A3	**258-472**
Carrier plates for Weidmüller	MC Universal	**258-387**
	MC SF4-6	**258-388**
Carrier plates for Wörtz/Allen Bradley	Universal	**258-389**
Carrier plates for Möller	XB M22-XST	**258-390**
Carrier plates for Partex	PA+1	**258-391**
	PA+2	**258-392**
Carrier plates for ABB Entrelec	Universal	**258-394**
	Siemens SPS	**258-473**
Carrier plates for Contra-Clip	Universal	**258-398**
	PK2 PVC	**258-393**
	PA+ 2	**258-399**

Marking Accessories
– Description and Handling –

WMB Multi marking system



Separating a strip from the WMB or WMB marker card.

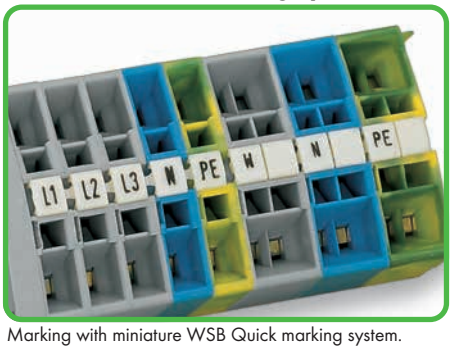


Stretching a strip.

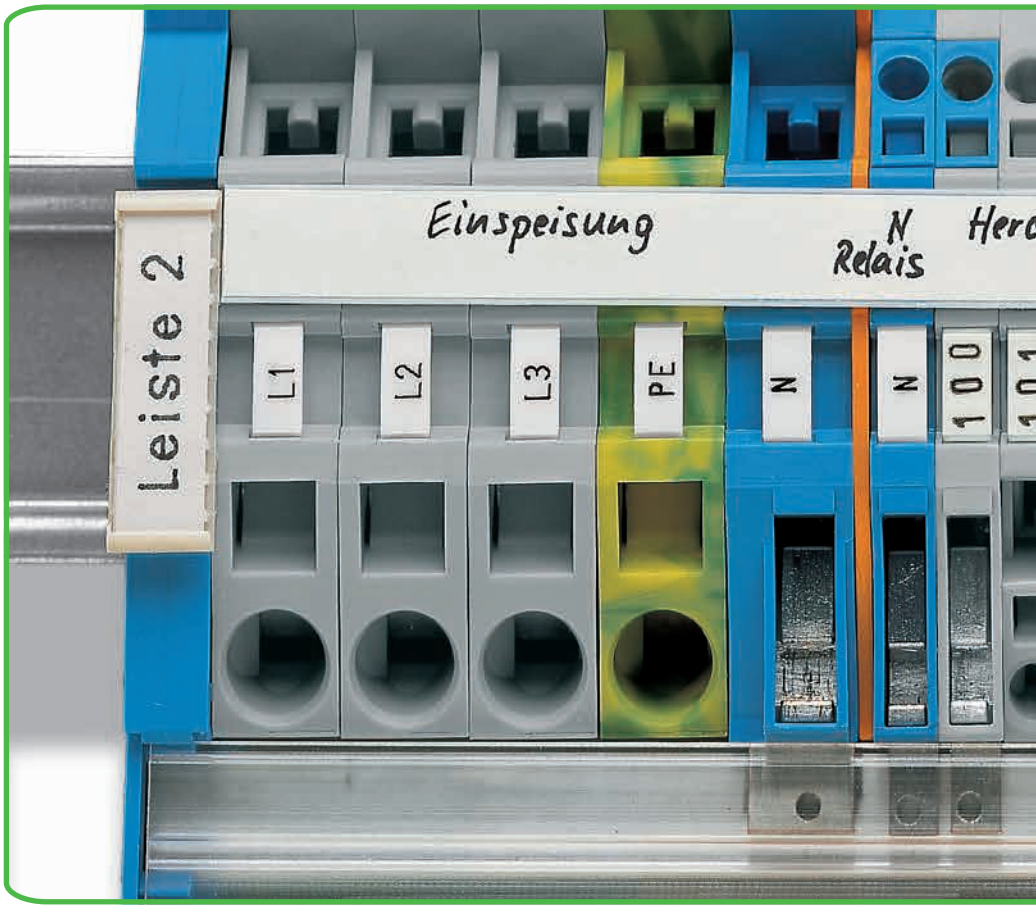


Separating an individual marker from the strip, for larger terminal blocks.

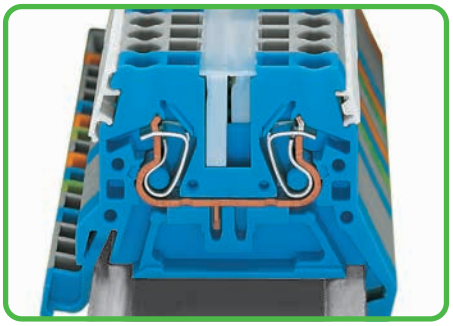
Miniature WSB (WAGO Quick marking system)



Marking with miniature WSB Quick marking system.



Miniature WSB or WMB marking



WMB markers in miniature WSB marker receptacles
Marking strips, translucent
Miniature WSB markers

WFB (WAGO continuous marking strips)



Customized ink pen marking



Carrier for WFB Continuous marking strip; to be secures every 10th terminal block.

Group marking



Group marking on N-busbar carrier used as end stop

WMB Multi marking system



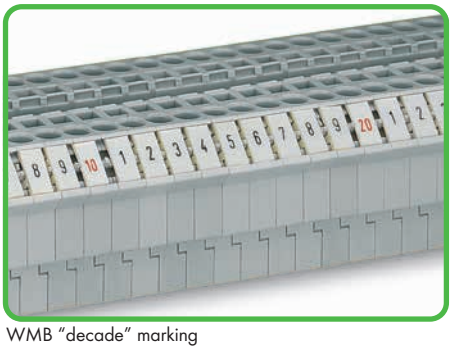
Snapping a strip into the marker slot.

Double marker carrier

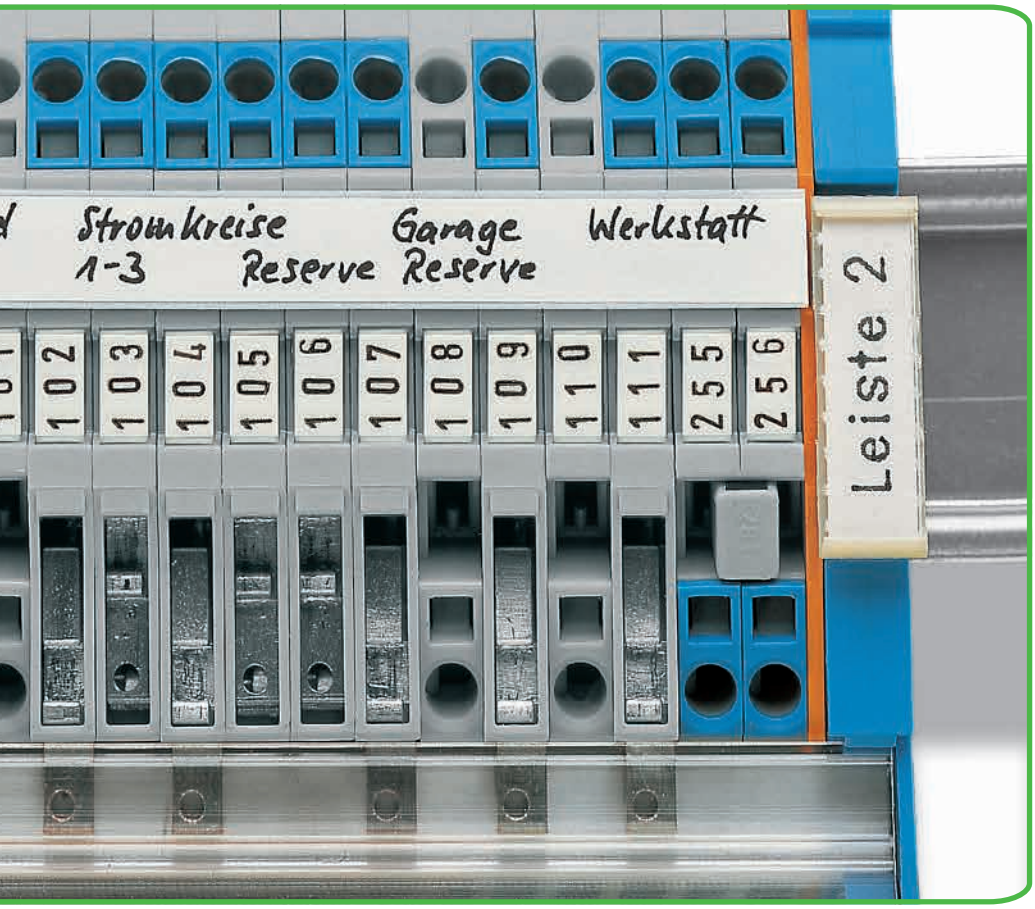


Snapping a strip into the marker slot of the double marker carrier.

"Decade" marking



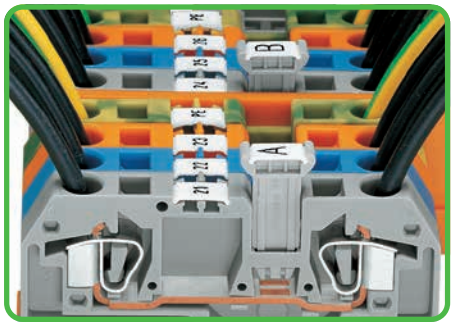
WMB "decade" marking



Group marker carriers

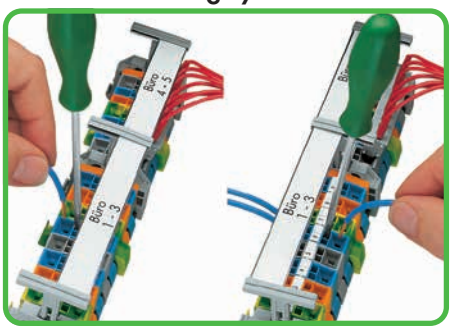


Group marker carrier adjustable in height



Additional group marking

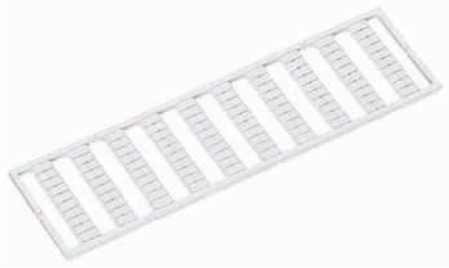
Movable marking system

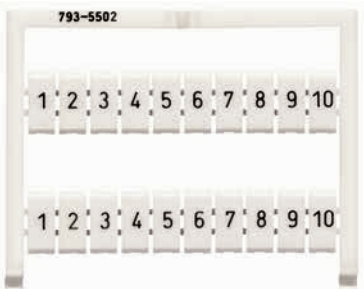


Additional continuous marking strips

WAGO WMB Multi Marking System
for Terminal Block Width 3.5 mm, 4 – 4.2 mm, 5 mm and Higher

	horizontal marking **consecutive numbers on each strip** **10 strips with 10 markers per card** **for terminal widths 5 - 17.5 mm and** **5 - 5.2 mm and 4 - 4.2 mm and 3.5 mm**



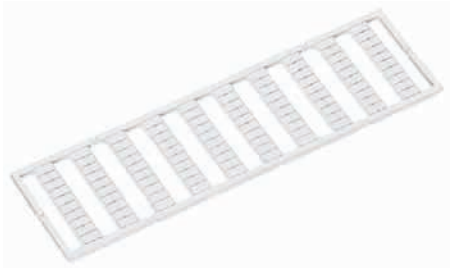


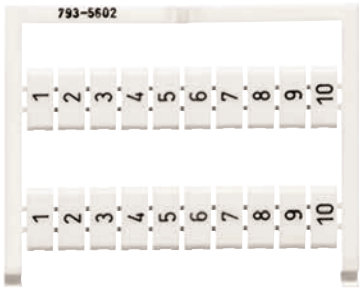
❶ For continuous marking of 270, 280, 780, 869, 870 and 880 Series terminal blocks
Individual marking of 281 – 285, 781 – 785, 2002, 2003, 2022, 2004, 2006, 2010 and 2016 Series terminal blocks
❷ For continuous marking of 270, 280, 780, 869, 870, 880, 2002, 2003 and 2022 Series terminal blocks
Individual marking of terminal blocks larger than 5 / 5.2 mm
❸ For continuous marking of 279 and 2001 Series terminal blocks
❹ For continuous marking of 2000 and 2020 Series terminal blocks

Marking	Marker Width 5 mm ❶	Marker Width 5 – 5.2 mm ❷	Marker Width 4 – 4.2 mm ❸	Marker Width 3.5 mm ❹
1 ... 10 (10x)	**793-502**	**793-5502**	**793-4502**	**793-3502**
11 ... 20 (10x)	**793-503**	**793-5503**	**793-4503**	**793-3503**
21 ... 30 (10x)	**793-504**	**793-5504**	**793-4504**	**793-3504**
31 ... 40 (10x)	**793-505**	**793-5505**	**793-4505**	**793-3505**
41 ... 50 (10x)	**793-506**	**793-5506**	**793-4506**	**793-3506**
51 ... 60 (10x)	**793-569**	**793-5569**	**793-4569**	
61 ... 70 (10x)	**793-570**	**793-5570**	**793-4570**	
71 ... 80 (10x)	**793-571**	**793-5571**	**793-4571**	
81 ... 90 (10x)	**793-572**	**793-5572**	**793-4572**	
91 ... 100 (10x)	**793-573**	**793-5573**	**793-4573**	
1 ... 50 (2x)	**793-566**	**793-5566**	**793-4566**	**793-3566**
51 ... 100 (2x)	**793-507**	**793-5507**	**793-4507**	**793-3507**
101 ... 150 (2x)	**793-508**	**793-5508**	**793-4508**	**793-3508**
151 ... 200 (2x)	**793-509**	**793-5509**	**793-4509**	**793-3509**
201 ... 300 (1x)	**793-510**	**793-5510**	**793-4510**	**793-3510**
301 ... 400 (1x)	**793-511**	**793-5511**	**793-4511**	
401 ... 500 (1x)	**793-512**	**793-5512**	**793-4512**	
501 ... 600 (1x)	**793-513**	**793-5513**	**793-4513**	
601 ... 700 (1x)	**793-514**	**793-5514**	**793-4514**	
701 ... 800 (1x)	**793-515**	**793-5515**	**793-4515**	
801 ... 900 (1x)	**793-516**	**793-5516**	**793-4516**	
901 ... 1000 (1x)	**793-517**	**793-5517**	**793-4517**	
1 ... 9 (10x)	**793-565**	**793-5565**	**793-4565**	**793-3565**
for double-deck terminal blocks,				
1, 3, 5, ..., 99 and 2, 4, 6, ..., 100 (1x)	**793-599**	**793-5599**	**793-4599**	**793-3599**
for triple-deck terminal blocks,				
1, 4, 7, ... , 88 and 2, 5, 8, ... , 89 and 3, 6, 9, ... , 90 and 91, 94, 97, 92, 95, 98, 93, 96, 99, ; (1x)	**794-557**	**794-5557**		
100, 103, 106, ... , 187 and 101, 104, 107, ... , 188 and 102, 105, 108, ... , 189 and 190, 193, 196, 191, 194, 197, 192, 195, 198, ; (1x)	**794-558**	**794-5558**		

WAGO WMB Multi Marking System
for Terminal Block Width 3.5 mm, 4 – 4.2 mm, 5 mm and Higher

	vertical marking **consecutive numbers on each strip** **10 strips with 10 markers per card** **for terminal widths 5 - 17.5 mm and** **5 - 5.2 mm and 4 - 4.2 mm and 3.5 mm**



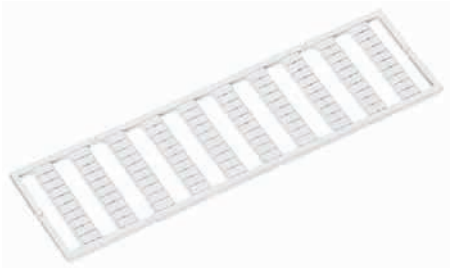


❶ For continuous marking of 270, 280, 780, 869, 870 and 880 Series terminal blocks
Individual marking of 281 – 285, 781 – 785, 2002, 2003, 2022, 2004, 2006, 2010 and 2016 Series terminal blocks
❷ For continuous marking of 270, 280, 780, 869, 870, 880, 2002, 2003 and 2022 Series terminal blocks
Individual marking of terminal blocks larger than 5 / 5.2 mm
❸ For continuous marking of 279 and 2001 Series terminal blocks
❹ For continuous marking of 2000 and 2020 Series terminal blocks

Marking	Marker Width 5 mm ❶	Marker Width 5 – 5.2 mm ❷	Marker Width 4 – 4.2 mm ❸	Marker Width 3.5 mm ❹
1 ... 10 (10x)	**793-602**	**793-5602**	**793-4602**	upon request
11 ... 20 (10x)	**793-603**	**793-5603**	**793-4603**	
21 ... 30 (10x)	**793-604**	**793-5604**	**793-4604**	
31 ... 40 (10x)	**793-605**	**793-5605**	**793-4605**	
41 ... 50 (10x)	**793-606**	**793-5606**	**793-4606**	
51 ... 60 (10x)	**794-601**	**794-5601**	**794-4601**	
61 ... 70 (10x)	**794-602**	**794-5602**	**794-4602**	
71 ... 80 (10x)	**794-603**	**794-5603**	**794-4603**	
81 ... 90 (10x)	**794-604**	**794-5604**	**794-4604**	
91 ... 100 (10x)	**794-605**	**794-5605**	**794-4605**	
1 ... 50 (2x)	**793-666**	**793-5666**	**793-4666**	
51 ... 100 (2x)	**793-607**	**793-5607**	**793-4607**	
101 ... 150 (2x)	**793-608**	**793-5608**	**793-4608**	
151 ... 200 (2x)	**793-609**	**793-5609**	**793-4609**	
201 ... 300 (1x)	**793-610**	**793-5610**	**793-4610**	
301 ... 400 (1x)	**793-611**	**793-5611**	**793-4611**	
401 ... 500 (1x)	**793-612**	**793-5612**	**793-4612**	
501 ... 600 (1x)	**793-613**	**793-5613**	**793-4613**	
601 ... 700 (1x)	**793-614**	**793-5614**	**793-4614**	
701 ... 800 (1x)	**793-615**	**793-5615**	**793-4615**	
801 ... 900 (1x)	**793-616**	**793-5616**	**793-4616**	
901 ... 1000 (1x)	**793-617**	**793-5617**	**793-4617**	
1001 ... 1100 (1x)	**793-688**	**793-5688**	**793-4688**	
1101 ... 1200 (1x)	**793-669**	**793-5669**	**793-4669**	
1201 ... 1300 (1x)	**793-670**	**793-5670**	**793-4670**	
1301 ... 1400 (1x)	**793-671**	**793-5671**	**793-4671**	
1401 ... 1500 (1x)	**793-672**	**793-5672**	**793-4672**	
1501 ... 1600 (1x)	**793-901**	**793-5901**	**793-4901**	
1601 ... 1700 (1x)	**793-902**	**793-5902**	**793-4902**	
1701 ... 1800 (1x)	**793-903**	**793-5903**	**793-4903**	
1801 ... 1900 (1x)	**793-912**	**793-5912**	**793-4912**	
1901 ... 2000 (1x)	**793-913**	**793-5913**	**793-4913**	
101, 101, 101, 102, ..., 130, 130, 130 (1x)	**793-667**	**793-5667**	**793-4667**	
131, 131, 131, 132, ..., 160, 160, 160 (1x)	**793-668**	**793-5668**	**793-4668**	
for double-deck terminal blocks,				
1, 3, 5, ..., 99 and 2, 4, 6, ..., 100 (1x)	**793-699**	**793-5699**	**793-4699**	
101, 103, 105, ..., 149 and 102, 104, 106, ..., 150 (2x)	**793-900**	**793-5900**	**793-4900**	
for triple-deck terminal blocks,				
1, 4, 7, ... , 88 and 2, 5, 8, ... , 89 and 3, 6, 9, ... , 90 and 91, 94, 97, 92, 95, 98, 93, 96, 99, ; (1x)	**794-657**	**794-5657**		
100, 103, 106, ... , 187 and 101, 104, 107, ... , 188 and 102, 105, 108, ... , 189 and 190, 193, 196, 191, 194, 197, 192, 195, 198, ; (1x)	**794-658**	**794-5658**		

WAGO WMB Multi Marking System for Terminal Block Width 3.5 mm, 4 – 4.2 mm, 5 mm and Higher

	horizontal marking **same numbers per strip** **10 strips with 10 markers per card** **for terminal widths 5 - 17.5 mm and** **5 - 5.2 mm and 4 - 4.2 mm and 3.5 mm**



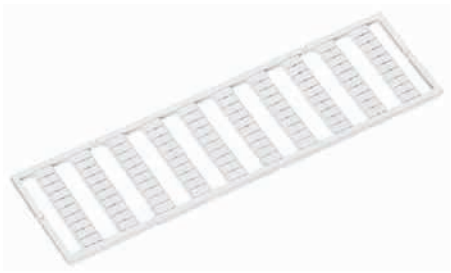


❶ For continuous marking of 270, 280, 780, 869, 870 and 880 Series terminal blocks
Individual marking of 281 – 285, 781 – 785, 2002, 2003, 2022, 2004, 2006, 2010 and 2016 Series terminal blocks
❷ For continuous marking of 270, 280, 780, 869, 870, 880, 2002, 2003 and 2022 Series terminal blocks
Individual marking of terminal blocks larger than 5 / 5.2 mm
❸ For continuous marking of 279 and 2001 Series terminal blocks
❹ For continuous marking of 2000 and 2020 Series terminal blocks

Marking	Marker Width 5 mm ❶	Marker Width 5 – 5.2 mm ❷	Marker Width 4 – 4.2 mm ❸	Marker Width 3.5 mm ❹
1/2 (50 each)	**793-518**	**793-5518**	**793-4518**	upon request
3/4 (50 each)	**793-519**	**793-5519**	**793-4519**	
5/6 (50 each)	**793-520**	**793-5520**	**793-4520**	
7/8 (50 each)	**793-521**	**793-5521**	**793-4521**	
9/10 (50 each)	**793-522**	**793-5522**	**793-4522**	
11/12 (50 each)	**793-523**	**793-5523**	**793-4523**	
13/14 (50 each)	**793-524**	**793-5524**	**793-4524**	
15/16 (50 each)	**793-525**	**793-5525**	**793-4525**	
17/18 (50 each)	**793-526**	**793-5526**	**793-4526**	
19/20 (50 each)	**793-527**	**793-5527**	**793-4527**	
21/22 (50 each)	**793-528**	**793-5528**	**793-4528**	
23/24 (50 each)	**793-529**	**793-5529**	**793-4529**	
25/26 (50 each)	**793-530**	**793-5530**	**793-4530**	
27/28 (50 each)	**793-531**	**793-5531**	**793-4531**	
29/30 (50 each)	**793-532**	**793-5532**	**793-4532**	
31/32 (50 each)	**793-533**	**793-5533**	**793-4533**	
33/34 (50 each)	**793-534**	**793-5534**	**793-4534**	
35/36 (50 each)	**793-535**	**793-5535**	**793-4535**	
37/38 (50 each)	**793-536**	**793-5536**	**793-4536**	
39/40 (50 each)	**793-537**	**793-5537**	**793-4537**	
41/42 (50 each)	**793-538**	**793-5538**	**793-4538**	
43/44 (50 each)	**793-539**	**793-5539**	**793-4539**	
45/46 (50 each)	**793-540**	**793-5540**	**793-4540**	
47/48 (50 each)	**793-541**	**793-5541**	**793-4541**	
49/50 (50 each)	**793-542**	**793-5542**	**793-4542**	
51/52 (50 each)	**793-400**	**793-5400**	**793-4400**	
53/54 (50 each)	**793-401**	**793-5401**	**793-4401**	
55/56 (50 each)	**793-402**	**793-5402**	**793-4402**	
57/58 (50 each)	**793-403**	**793-5403**	**793-4403**	
59/60 (50 each)	**793-404**	**793-5404**	**793-4404**	
61/62 (50 each)	**793-405**	**793-5405**	**793-4405**	
63/64 (50 each)	**793-406**	**793-5406**	**793-4406**	
65/66 (50 each)	**793-407**	**793-5407**	**793-4407**	
67/68 (50 each)	**793-408**	**793-5408**	**793-4408**	
69/70 (50 each)	**793-409**	**793-5409**	**793-4409**	
71/72 (50 each)	**793-410**	**793-5410**	**793-4410**	
73/74 (50 each)	**793-411**	**793-5411**	**793-4411**	
75/76 (50 each)	**793-412**	**793-5412**	**793-4412**	
77/78 (50 each)	**793-413**	**793-5413**	**793-4413**	
79/80 (50 each)	**793-414**	**793-5414**	**793-4414**	
81/82 (50 each)	**793-415**	**793-5415**	**793-4415**	
83/84 (50 each)	**793-416**	**793-5416**	**793-4416**	
85/86 (50 each)	**793-417**	**793-5417**	**793-4417**	
87/88 (50 each)	**793-418**	**793-5418**	**793-4418**	
89/90 (50 each)	**793-419**	**793-5419**	**793-4419**	
91/92 (50 each)	**793-420**	**793-5420**	**793-4420**	
93/94 (50 each)	**793-421**	**793-5421**	**793-4421**	
95/96 (50 each)	**793-422**	**793-5422**	**793-4422**	
97/98 (50 each)	**793-423**	**793-5423**	**793-4423**	
99/100 (50 each)	**793-424**	**793-5424**	**793-4424**	

WAGO WMB Multi Marking System
for Terminal Block Width 3.5 mm, 4 – 4.2 mm, 5 mm and Higher

	vertical marking **same numbers per strip** **10 strips with 10 markers per card** **for terminal widths 5 - 17.5 mm and** **5 - 5.2 mm and 4 - 4.2 mm and 3.5 mm**





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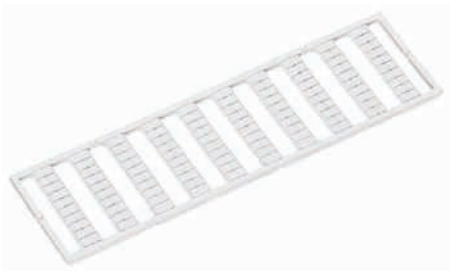
Individual marking of 281 – 285, 781 – 785, 2002, 2003, 2022, 2004, 2006, 2010 and 2016 Series terminal blocks
❷ For continuous marking of 270, 280, 780, 869, 870, 880, 2002, 2003 and 2022 Series terminal blocks
Individual marking of terminal blocks larger than 5 / 5.2 mm
❸ For continuous marking of 279 and 2001 Series terminal blocks
❹ For continuous marking of 2000 and 2020 Series terminal blocks

Marking	Marker Width 5 mm ❶	Marker Width 5 – 5.2 mm ❷	Marker Width 4 – 4.2 mm ❸	Marker Width 3.5 mm ❹
1/2 (50 each)	**793-618**	**793-5618**	**793-4618**	upon request
3/4 (50 each)	**793-619**	**793-5619**	**793-4619**	
5/6 (50 each)	**793-620**	**793-5620**	**793-4620**	
7/8 (50 each)	**793-621**	**793-5621**	**793-4621**	
9/10 (50 each)	**793-622**	**793-5622**	**793-4622**	
11/12 (50 each)	**793-623**	**793-5623**	**793-4623**	
13/14 (50 each)	**793-624**	**793-5624**	**793-4624**	
15/16 (50 each)	**793-625**	**793-5625**	**793-4625**	
17/18 (50 each)	**793-626**	**793-5626**	**793-4626**	
19/20 (50 each)	**793-627**	**793-5627**	**793-4627**	
21/22 (50 each)	**793-628**	**793-5628**	**793-4628**	
23/24 (50 each)	**793-629**	**793-5629**	**793-4629**	
25/26 (50 each)	**793-630**	**793-5630**	**793-4630**	
27/28 (50 each)	**793-631**	**793-5631**	**793-4631**	
29/30 (50 each)	**793-632**	**793-5632**	**793-4632**	
31/32 (50 each)	**793-633**	**793-5633**	**793-4633**	
33/34 (50 each)	**793-634**	**793-5634**	**793-4634**	
35/36 (50 each)	**793-635**	**793-5635**	**793-4635**	
37/38 (50 each)	**793-636**	**793-5636**	**793-4636**	
39/40 (50 each)	**793-637**	**793-5637**	**793-4637**	
41/42 (50 each)	**793-638**	**793-5638**	**793-4638**	
43/44 (50 each)	**793-639**	**793-5639**	**793-4639**	
45/46 (50 each)	**793-640**	**793-5640**	**793-4640**	
47/48 (50 each)	**793-641**	**793-5641**	**793-4641**	
49/50 (50 each)	**793-642**	**793-5642**	**793-4642**	

WAGO WMB Multi Marking System
for Terminal Block Width 3.5 mm, 4 – 4.2 mm, 5 mm and Higher

	horizontal marking **same letters/symbols each strip** **10 strips with 10 markers per card** **for terminal widths 5 - 17.5 mm and** **5 - 5.2 mm and 4 - 4.2 mm and 3.5 mm**





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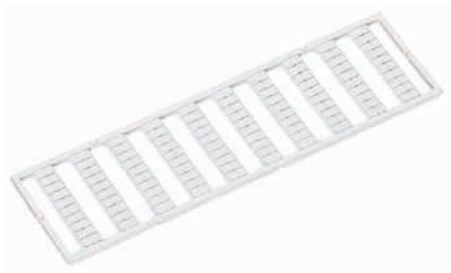
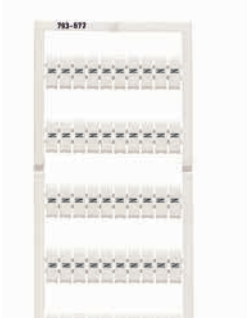
Individual marking of 281 – 285, 781 – 785, 2002, 2003, 2022, 2004, 2006, 2010 and 2016 Series terminal blocks
❷ For continuous marking of 270, 280, 780, 869, 870, 880, 2002, 2003 and 2022 Series terminal blocks
Individual marking of terminal blocks larger than 5 / 5.2 mm
❸ For continuous marking of 279 and 2001 Series terminal blocks
❹ For continuous marking of 2000 and 2020 Series terminal blocks

Marking	Marker Width 5 mm ❶	Marker Width 5 – 5.2 mm ❷	Marker Width 4 – 4.2 mm ❸	Marker Width 3.5 mm ❹
L1 (100x)	**793-574**	**793-5574**	**793-4574**	upon request
L2 (100x)	**793-575**	**793-5575**	**793-4575**	
L3 (100x)	**793-576**	**793-5576**	**793-4576**	
N (100x)	**793-577**	**793-5577**	**793-4577**	
PE (100x)	**793-578**	**793-5578**	**793-4578**	
PEN (100x)	**793-579**	**793-5579**	**793-4579**	
Ground (100x)	**793-580**	**793-5580**	**793-4580**	
R (100x)	**793-581**	**793-5581**	**793-4581**	
S (100x)	**793-582**	**793-5582**	**793-4582**	
T (100x)	**793-583**	**793-5583**	**793-4583**	
+/- (50x)	**793-552**	**793-5552**	**793-4552**	
a, b, c, e, u, v, w, x, y, z (10x)	**793-543**	**793-5543**	**793-4543**	
R, S, T, U, V, W, X, Y, Z, Mp (10x)	**793-544**	**793-5544**	**793-4544**	**793-3544**
A, B, P, N, PE, PEN, L1, L2, L3, Ground (10x)	**793-545**	**793-5545**	**793-4545**	**793-3545**
U, V, W, N, PE, U, V, W, N, PE (10x)	**793-474**	**793-5474**	**793-4474**	
L1, L2, L3, N, PE, L1, L2, L3, N, PE (10x)	**793-472**	**793-5472**	**793-4472**	
U1, V1, W1, U1, V1, W1, U1, V1, W1,... (10x)	**793-487**	**793-5487**	**793-4487**	
U2, V2, W2, U2, V2, W2, U2, V2, W2,... (10x)	**793-494**	**793-5494**	**793-4494**	
U3, V3, W3, U3, V3, W3, U3, V3, W3,... (10x)	**793-495**	**793-5495**	**793-4495**	
U4, V4, W4, U4, V4, W4, U4, V4, W4,... (10x)	**793-496**	**793-5496**	**793-4496**	
U5, V5, W5, U5, V5, W5, U5, V5, W5,... (10x)	**793-497**	**793-5497**	**793-4497**	
U6, V6, W6, ..., U6, V6, W6,... to U9, V9, W9, ..., U9, V9, W9, (2 each)	**793-498**	**793-5498**	**793-4498**	
R1, S1, T1, U1, V1, W1, X1, Y1, Z1,SL (10x)	**793-546**	**793-5546**	**793-4546**	
R2, S2, T2, U2, V2, W2, X2, Y2, Z2,SL (10x)	**793-547**	**793-5547**	**793-4547**	
R3, S3, T3, U3, V3, W3, X3, Y3, Z3,SL (10x)	**793-548**	**793-5548**	**793-4548**	
R4, S4, T4, ..., Y4, Z4, SL and R5, S5, T5, ..., Y5, Z5, SL (5 each)	**793-549**	**793-5549**	**793-4549**	
R6, S6, T6, ..., Y6, Z6, SL to R10, S10, T10, ..., Y10, Z10, SL (2 each)	**793-550**	**793-5550**	**793-4550**	
"decade" marking with red printing,				
2 strips, with same numbers				
10, 20 ... 50 (20 each)	**793-553**	**793-5553**	**793-4553**	
60, 70 ... 100 (20 each)	**793-554**	**793-5554**	**793-4554**	
110, 120 ... 150 (20 each)	**793-555**	**793-5555**	**793-4555**	
160, 170 ... 200 (20 each)	**793-556**	**793-5556**	**793-4556**	
1 strip, each with same numbers				
210, 220 ... 300 (10 each)	**793-557**	**793-5557**	**793-4557**	
310, 320 ... 400 (10 each)	**793-558**	**793-5558**	**793-4558**	
410, 420 ... 500 (10 each)	**793-559**	**793-5559**	**793-4559**	
510, 520 ... 600 (10 each)	**793-560**	**793-5560**	**793-4560**	
610, 620 ... 700 (10 each)	**793-561**	**793-5561**	**793-4561**	
710, 720 ... 800 (10 each)	**793-562**	**793-5562**	**793-4562**	
810, 820 ... 900 (10 each)	**793-563**	**793-5563**	**793-4563**	
910, 920 ... 1000 (10 each)	**793-564**	**793-5564**	**793-4564**	

WAGO WMB Multi Marking System
for Terminal Block Width 3.5 mm, 4 – 4.2 mm, 5 mm and Higher

	vertical marking **same letters/symbols each strip** **10 strips with 10 markers per card** **for terminal widths 5 - 17.5 mm and** **5 - 5.2 mm and 4 - 4.2 mm and 3.5 mm**





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Individual marking of 281 – 285, 781 – 785, 2002, 2003, 2022, 2004, 2006, 2010 and 2016 Series terminal blocks
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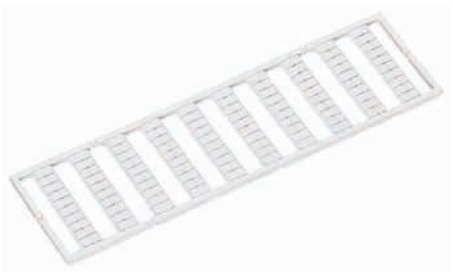
Individual marking of terminal blocks larger than 5 / 5.2 mm
❸ For continuous marking of 279 and 2001 Series terminal blocks
❹ For continuous marking of 2000 and 2020 Series terminal blocks

Marking	Marker Width 5 mm ❶	Marker Width 5 – 5.2 mm ❷	Marker Width 4 – 4.2 mm ❸	Marker Width 3.5 mm ❹
L1 (100x)	**793-674**	**793-5674**	**793-4674**	upon request
L2 (100x)	**793-675**	**793-5675**	**793-4675**	
L3 (100x)	**793-676**	**793-5676**	**793-4676**	
N (100x)	**793-677**	**793-5677**	**793-4677**	
PE (100x)	**793-678**	**793-5678**	**793-4678**	
PEN (100x)	**793-679**	**793-5679**	**793-4679**	
Erde (100x)	**793-580**	**793-5680**	**793-4680**	
R (100x)	**793-681**	**793-5681**	**793-4681**	
S (100x)	**793-682**	**793-5682**	**793-4682**	
T (100x)	**793-683**	**793-5683**	**793-4683**	
+/- (50x)	**793-652**	**793-5652**	**793-4652**	
a, b, c, e, u, v, w, x, y, z (10x)	**793-643**	**793-5643**	**793-4643**	
R, S, T, U, V, W, X, Y, Z, Mp (10x)	**793-644**	**793-5644**	**793-4644**	
A, B, P, N, PE, PEN, L1, L2, L3, Ground (10x)	**793-645**	**793-5645**	**793-4645**	
U, V, W, N, PE, U, V, W, N, PE (10x)	**794-674**	**794-5674**	**794-4674**	
L1, L2, L3, N, PE, L1, L2, L3, N, PE (10x)	**794-672**	**793-5672**	**794-4672**	
U1, V1, W1, U1, V1, W1, U1, V1, W1,... (10x)	**793-687**	**793-5687**	**793-4687**	
U2, V2, W2, U2, V2, W2, U2, V2, W2,... (10x)	**793-694**	**793-5694**	**793-4694**	
U3, V3, W3, U3, V3, W3, U3, V3, W3,... (10x)	**793-695**	**793-5695**	**793-4695**	
U4, V4, W4, U4, V4, W4, U4, V4, W4,... (10x)	**793-696**	**793-5696**	**793-4696**	
U5, V5, W5, U5, V5, W5, U5, V5, W5,... (10x)	**793-697**	**793-5697**	**793-4697**	
U6, V6, W6, ..., U6, V6, W6,... to U9, V9, W9, ..., U9, V9, W9, (2 each)	**793-698**	**793-5698**	**793-4698**	
R1, S1, T1, U1, V1, W1, X1, Y1, Z1,SL (10x)	**793-646**	**793-5646**	**793-4646**	
R2, S2, T2, U2, V2, W2, X2, Y2, Z2,SL (10x)	**793-647**	**793-5647**	**793-4647**	
R3, S3, T3, U3, V3, W3, X3, Y3, Z3,SL (10x)	**793-648**	**793-5648**	**793-4648**	
R4, S4, T4, ..., Y4, Z4, SL and R5, S5, T5, ..., Y5, Z5, SL (5 each)	**793-649**	**793-5649**	**793-4649**	
R6, S6, T6, ..., Y6, Z6, SL to R10, S10, T10, ..., Y10, Z10, SL (2 each)	**793-650**	**793-5650**	**793-4650**	
"decade" marking with red printing,				
2 strips, with same numbers				
10, 20 ... 50 (20 each)	**793-653**	**793-5653**	**793-4653**	
60, 70 ... 100 (20 each)	**793-654**	**793-5654**	**793-4654**	
110, 120 ... 150 (20 each)	**793-655**	**793-5655**	**793-4655**	
160, 170 ... 200 (20 each)	**793-656**	**793-5656**	**793-4656**	
1 strip, each with same numbers				
210, 220 ... 300 (10 each)	**793-657**	**793-5657**	**793-4657**	
310, 320 ... 400 (10 each)	**793-658**	**793-5658**	**793-4658**	
410, 420 ... 500 (10 each)	**793-659**	**793-5659**	**793-4659**	
510, 520 ... 600 (10 each)	**793-660**	**793-5660**	**793-4660**	
610, 620 ... 700 (10 each)	**793-661**	**793-5661**	**793-4661**	
710, 720 ... 800 (10 each)	**793-662**	**793-5662**	**793-4662**	
810, 820 ... 900 (10 each)	**793-663**	**793-5663**	**793-4663**	
910, 920 ... 1000 (10 each)	**793-664**	**793-5664**	**793-4664**	

WAGO WMB Multi Marking System
for Terminal Block Width 3.5 mm, 4 – 4.2 mm, 5 mm and Higher

	horizontal marking **10 strips with 10 markers per card for terminal widths 5 - 17.5 mm and 5 - 5.2 mm and 4 - 4.2 mm and 3.5 mm**





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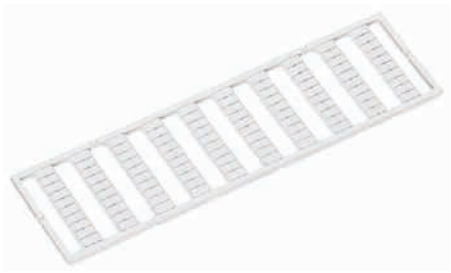
❹ For continuous marking of 2000 and 2020 Series terminal blocks

Marking	Marker Width 5 mm ❶	Marker Width 5 – 5.2 mm ❷	Marker Width 4 – 4.2 mm ❸	Marker Width 3.5 mm ❹
for subdistribution boxes (power stations),				
horizontal marking				
1A, 1B, ..., 1G, 1H, ... to 10A, 10B, ..., 10G, 10H, , ; (1				
each)	**793-458**	**793-5458**	**793-4458**	upon request
0, 2, 4, 6, , , 0, 2, 4, 6; (5x)/1, 3, 5, 7, , ,1, 3, 5, 7; (5x)				
vertical marking	**793-500/793-134**			
1A, 1B, ..., 1G, 1H, ... to 10A, 10B, ..., 10G, 10H, , ; (1				
each)				
0, 2, 4, 6, , , 0, 2, 4, 6; (5x)/1, 3, 5, 7, , ,1, 3, 5, 7; (5x)	**793-958**	**793-5958**	**793-4958**	
Symbol for shield terminal blocks per DIN 40771 (10x)	**793-600/793-073**			
for relay	**793-993**	**793-5993**	**793-5993**	
A1, A2, A2, 11, 12, 14, A1, A2, A2,; (5x)				
12, A1, A2, 24, 11, 14, 21, 22, , ;(10x)				
A1, A1, A2, A2, 12, 11, 11, 14, ; (10x)	**793-994**	**793-5994**	**793-5994**	
Iin, Iin, , Iout, Iout, 24V, 11, 12, 14, 0V; (10x)	**793-995**	**793-5995**	**793-5995**	
A1, A2, A1, A2, RL, - , RL, -, , ; (10x)	**793-996**	**793-5996**	**793-5996**	
	793-997	**793-5997**	**793-5997**	
for fuse terminal blocks 281-6..,	**793-998**	**793-5998**	**793-5998**	
vertical marking				
F1, ..., F10 (10x)				
F11, ..., F20 (10x)				
F21, ..., F30 (10x)				
F31, ..., F40 (10x)	**794-615**	**794-5615**	**794-4615**	
F41, ..., F50 (10x)	**794-616**	**794-5616**	**794-4616**	
	794-617	**794-5617**	**794-4617**	
	794-618	**794-5618**	**794-4618**	
	794-619	**794-5619**	**794-4619**	

WAGO WMB Multi Marking System
for Terminal Block Width 3.5 mm, 4 – 4.2 mm, 5 mm and Higher

	vertical marking **for PLC input and output marking** **10 strips with 10 markers per card** **for terminal widths 5 - 17.5 mm and** **5 - 5.2 mm and 4 - 4.2 mm and 3.5 mm**





❶ For continuous marking of 270, 280, 780, 869, 870 and 880 Series terminal blocks
Individual marking of 281 – 285, 781 – 785, 2002, 2003, 2022, 2004, 2006, 2010 and 2016 Series terminal blocks
❷ For continuous marking of 270, 280, 780, 869, 870, 880, 2002, 2003 and 2022 Series terminal blocks
Individual marking of terminal blocks larger than 5 / 5.2 mm
❸ For continuous marking of 279 and 2001 Series terminal blocks
❹ For continuous marking of 2000 and 2020 Series terminal blocks

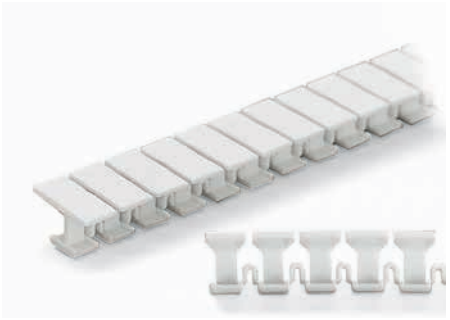
Marking	Marker Width 5 mm ❶	Marker Width 5 – 5.2 mm ❷	Marker Width 4 – 4.2 mm ❸	Marker Width 3.5 mm ❹
for PLC input marking				
E0.0, E0.1, ..., E9.6, E9.7 (1 each)	**793-933**	**793-5933**	**793-4933**	upon request
E10.0, E10.1, ..., E19.6, E19.7 (1 each)	**793-934**	**793-5934**	**793-4934**	
E20.0, E20.1, ..., E29.6, E29.7 (1 each)	**793-935**	**793-5935**	**793-4935**	
E30.0, E30.1, ..., E39.6, E39.7 (1 each)	**793-936**	**793-5936**	**793-4936**	
E40.0, E40.1, ..., E49.6, E49.7 (1 each)	**793-937**	**793-5937**	**793-4937**	
E50.0, E50.1, ..., E59.6, E59.7 (1 each)	**793-938**	**793-5938**	**793-4938**	
E60.0, E60.1, ..., E69.6, E69.7 (1 each)	**793-939**	**793-5939**	**793-4939**	
E70.0, E70.1, ..., E79.6, E79.7 (1 each)	**793-940**	**793-5940**	**793-4940**	
E80.0, E80.1, ..., E89.6, E89.7 (1 each)	**793-941**	**793-5941**	**793-4941**	
E90.0, E90.1, ..., E99.6, E99.7 (1 each)	**793-942**	**793-5942**	**793-4942**	
E100.0, E100.1, ..., E109.6, E109.7 (1 each)	**793-943**	**793-5943**		
E110.0, E110.1, ..., E119.6, E119.7 (1 each)	**793-944**	**793-5944**	**793-4944**	
E120.0, E120.1, ..., E129.6, E129.7 (1 each)	**793-945**	**793-5945**	**793-4945**	
E130.0, E130.1, ..., E139.6, E139.7 (1 each)	**793-946**	**793-5946**	**793-4946**	
E140.0, E140.1, ..., E149.6, E149.7 (1 each)	**793-947**	**793-5947**	**793-4947**	
E150.0, E150.1, ..., E159.6, E159.7 (1 each)	**793-948**	**793-5948**	**793-4948**	
E160.0, E160.1, ..., E169.6, E169.7 (1 each)	**793-949**	**793-5949**	**793-4949**	
E170.0, E170.1, ..., E179.6, E179.7 (1 each)	**793-950**	**793-5950**	**793-4950**	
E180.0, E180.1, ..., E189.6, E189.7 (1 each)	**793-959**	**793-5959**	**793-4959**	
E190.0, E190.1, ..., E199.6, E199.7 (1 each)	**793-960**	**793-5960**	**793-4960**	
E200.0, E200.1, ..., E209.6, E209.7 (1 each)	**793-961**	**793-5961**	**793-4961**	
for PLC output marking				
A0.0, A0.1, ..., A9.6, A9.7 (1 each)	**793-967**	**793-5967**	**793-4967**	
A10.0, A10.1, ..., A19.6, A19.7 (1 each)	**793-968**	**793-5968**	**793-4968**	
A20.0, A20.1, ..., A29.6, A29.7 (1 each)	**793-969**	**793-5969**	**793-4969**	
A30.0, A30.1, ..., A39.6, A39.7 (1 each)	**793-970**	**793-5970**	**793-4970**	
A40.0, A40.1, ..., A49.6, A49.7 (1 each)	**793-971**	**793-5971**	**793-4971**	
A50.0, A50.1, ..., A59.6, A59.7 (1 each)	**793-972**	**793-5972**	**793-4972**	
A60.0, A60.1, ..., A69.6, A69.7 (1 each)	**793-973**	**793-5973**	**793-4973**	
A60.0, A60.1, ..., A69.6, A69.7 (1 each)	**793-974**	**793-5974**	**793-4974**	
A80.0, A80.1, ..., A89.6, A89.7 (1 each)	**793-975**	**793-5975**	**793-4975**	
A90.0, A90.1, ..., A99.6, A99.7 (1 each)	**793-976**	**793-5976**	**793-4976**	
A100.0, A100.1, ..., A109.6, A109.7 (1 each)	**793-977**	**793-5977**	**793-4977**	
A110.0, A110.1, ..., A119.6, A119.7 (1 each)	**793-978**	**793-5978**	**793-4978**	
A120.0, A120.1, ..., A129.6, A129.7 (1 each)	**793-979**	**793-5979**	**793-4979**	
A130.0, A130.1, ..., A139.6, A139.7 (1 each)	**793-980**	**793-5980**	**793-4980**	
A140.0, A140.1, ..., A149.6, A149.7 (1 each)	**793-981**	**793-5981**	**793-4981**	
A150.0, A150.1, ..., A159.6, A159.7 (1 each)	**793-982**	**793-5982**	**793-4982**	
A160.0, A160.1, ..., A169.6, A169.7 (1 each)	**793-983**	**793-5983**	**793-4983**	
A170.0, A170.1, ..., A179.6, A179.7 (1 each)	**793-984**	**793-5984**	**793-4984**	
A180.0, A180.1, ..., A189.6, A189.7 (1 each)	**793-985**	-	**793-4985**	
A190.0, A190.1, ..., A199.6, A199.7 (1 each)	**793-986**	**793-5986**	**793-4986**	
A200.0, A200.1, ..., A209.6, A209.7 (1 each)	**793-987**	**793-5987**	**793-4987**	
A210.0, A210.1, ..., A219.6, A219.7 (1 each)	**793-988**	**793-5988**	**793-4988**	
A220.0, A220.1, ..., A229.6, A229.7 (1 each)	**793-989**	**793-5989**	**793-4989**	
A230.0, A230.1, ..., A239.6, A239.7 (1each)	**793-990**	**793-5990**	**793-4990**	
A240.0, A240.1, ..., A249.6, A249.7 (1 each)	**793-991**	**793-5991**	**793-4991**	
A250.0, A250.1, ..., A259.6, A259.7 (1 each)	**793-992**	**793-5992**	**793-4992**	

WAGO Miniature WSB Quick Marking System and T Marker Tag for Terminal Blocks with Miniature WSB Marker Slots

Miniature WSB Quick marking system horizontal marking 10 strips with 10 markers per card		T marker tag plain







	Item No.	Pack. Unit
Miniature WSB Quick marking system		
◯ 1 ... 10 (10x)	**248-502**	5
◯ 11 ... 20 (10x)	**248-503**	5
◯ 21 ... 30 (10x)	**248-504**	5
◯ 31 ... 40 (10x)	**248-505**	5
◯ 41 ... 50 (10x)	**248-506**	5
◯ 51 ... 60 (10x)	**248-569**	5
◯ 61 ... 70 (10x)	**248-570**	5
◯ 71 ... 80 (10x)	**248-571**	5
◯ 81 ... 90 (10x)	**248-572**	5
◯ 91 ... 100 (10x)	**248-573**	5
Miniature WSB Quick marking system		
◯ 1 ... 50 (2x)	**248-566**	5
Miniature WSB Quick marking system		
◯ U, V, W, N, PE, U, V, W, N, PE (10x)	**248-474**	5
Miniature WSB Quick marking system		
◯ L1, L2, L3, N, PE, L1, L2, L3, N, PE (10x)	**248-472**	5
Miniature WSB Quick marking system		
◯ 1, , 2, , 3, , 4, , 5, ; to 46, , 47, , 48, , 49, , 50, ; (1 each)	**264-900**	5
◯ U, , V, , W, , N, , PE, ; (10x)	**264-901**	5
◯ L1, , L2, , L3, , N, , PE, ; (10x)	**264-902**	5
◯ 1, , 1, , 1, , 1, , 1, ; (10x)	**264-903**	5
◯ 2, , 2, , 2, , 2, , 2, ; (10x)	**264-904**	5
◯ 3, , 3, , 3, , 3, , 3, ; (10x)	**264-905**	5

	Item No.	Pack. Unit
Mini-WSB Inline, plain, stretchable 5 - 5.2 mm, 1,700 WMB markers, 5 mm, on roll		
◯ white	**2009-145**	1

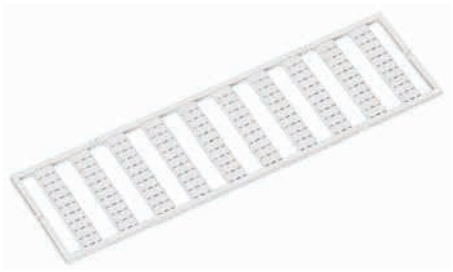
	Item No.	Pack. Unit
T marker tag, 30 markers each tag, up to 6 characters per marker , stretchable from 5 mm to 6 mm, factory inkjet marking upon request		
◯ plain	**209-290**	50

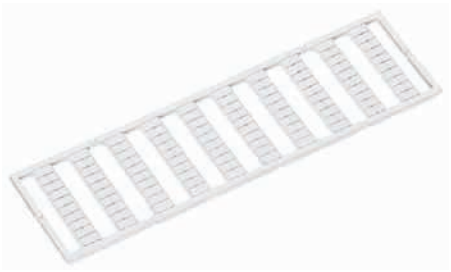


6 characters per marker
The T marker tag fulfills customer requests for larger marking areas for 264 Series terminal strips.
The T marker can be marked with up to 6 characters per marker and is snapped into the miniature WSB marker slot.
Terminal strips in any combination of 2- and 4-conductor terminal blocks can be marked easily by stretching the tag.

Marker Cards, Plain
Marking Strips

WMB Multi marking system	WMB Multi marking system	WMB Inline and marking strips



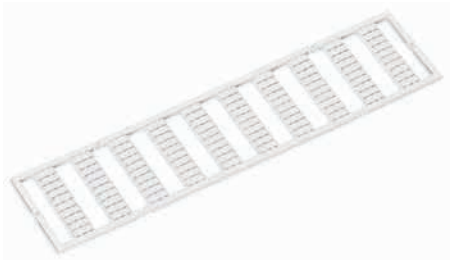


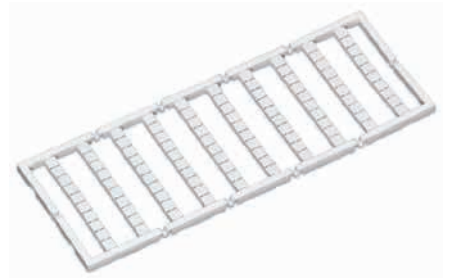


	Item No.	Pack. Unit
WMB Multi marking system, for terminal widths 5 - 17.5 mm, 10 strips with 10 markers per card		
◯ plain	**793-501**	5
Marker cards in different colors:		
yellow	**793-501/000-002**	5
red	**793-501/000-005**	5
blue	**793-501/000-006**	5
gray	**793-501/000-007**	5
orange	**793-501/000-012**	5
light green	**793-501/000-017**	5
green	**793-501/000-023**	5
violet	**793-501/000-024**	5

	Item No.	Pack. Unit
WMB Multi marking system, stretchable 5 - 5.2 mm, 10 strips with 10 markers per card		
◯ plain	**793-5501**	5
Marker cards in different colors:		
yellow	**793-5501/000-002**	5
red	**793-5501/000-005**	5
blue	**793-5501/000-006**	5
gray	**793-5501/000-007**	5
orange	**793-5501/000-012**	5
light green	**793-5501/000-017**	5
green	**793-5501/000-023**	5
violet	**793-5501/000-024**	5

	Item No.	Pack. Unit
WMB Inline, plain, stretchable 5 - 5.2 mm, 1,500 WMB markers, 5 mm, on roll		
◯ white	**2009-115**	1
WMB Inline, plain, stretchable 5 - 5.2 mm, 8,000 WMB markers, 5 mm, on roll		
◯ white	**2009-135**	1
WMB Inline, plain, stretchable 4 - 4.2 mm, 2,000 WMB markers, 4 mm, on roll		
◯ white	**2009-114**	1







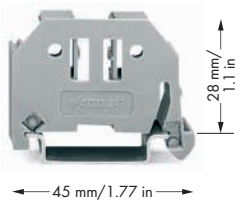
	Item No.	Pack. Unit
WMB Multi marking system, stretchable 4 - 4.2 mm, 10 strips with 10 markers per card		
◯ plain	**793-4501**	5
Marker cards in different colors:		
yellow	**793-4501/000-002**	5
red	**793-4501/000-005**	5
blue	**793-4501/000-006**	5
gray	**793-4501/000-007**	5
orange	**793-4501/000-012**	5
light green	**793-4501/000-017**	5
green	**793-4501/000-023**	5
violet	**793-4501/000-024**	5

	Item No.	Pack. Unit
Miniature WSB Quick marking system, 5 mm wide markers, 10 strips with 10 markers per card		
◯ plain	**248-501**	5
Marker cards in different colors:		
yellow	**248-501/000-002**	5
red	**248-501/000-005**	5
blue	**248-501/000-006**	5
gray	**248-501/000-007**	5
orange	**248-501/000-012**	5
light green	**248-501/000-017**	5
green	**248-501/000-023**	5
violet	**248-501/000-024**	5

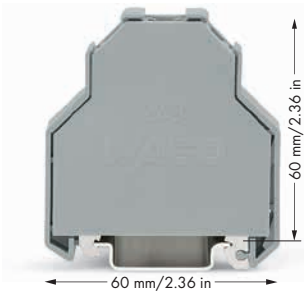
	Item No.	Pack. Unit
Marking strip, plain, 11 mm wide, white		
◯ 50 m roll	**2009-110**	1

End Stops for DIN 35 Rail

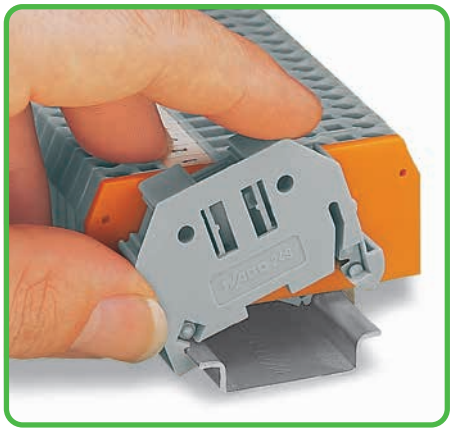
Screwless end stop



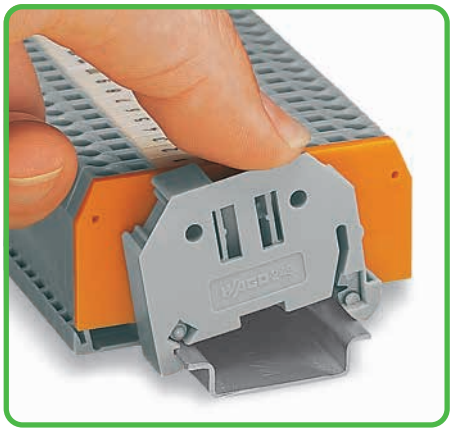
	Item No.	Pack. Unit
Screwless end stop, for DIN 35 rail, 6 mm wide		
gray	**249-116**	100 (4x25)
Screwless end stop, for DIN 35 rail, 10 mm wide		
gray	**249-117**	50 (2x25)

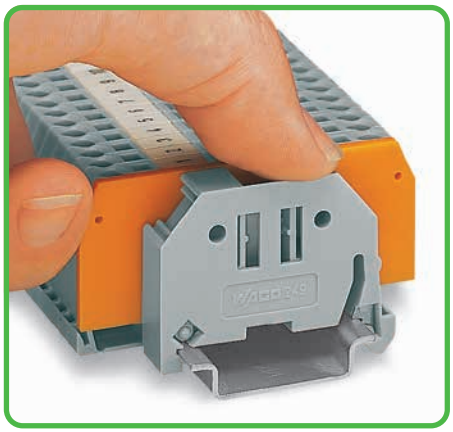


	Item No.	Pack. Unit
Screwless end stop, for DIN 35 rail, 14 mm wide		
gray	**249-197**	10

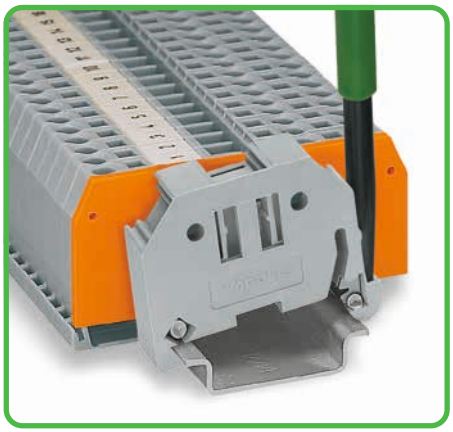


Snap on





That's it!



Remove a end stop from the rail.

Fit – and forget! Assembling the new WAGO screwless end stop is as simple and quick as snapping a WAGO rail-mount terminal block onto the rail.

Without any tools!

This allows rail-mount terminal blocks to be safely secured, at low cost, against any movement on all DIN 35 carrier rails acc. to DIN EN 50022 (35 x 7.5 mm; 35 x 15 mm).

Entirely without screws!

The "secret" of the excellent tight fit lies in the two small clamping plates which keep the end stop in position, even if the rails are mounted vertically.

Simply snap on and forget!

In addition, costs are significantly reduced when using large numbers of end stops.

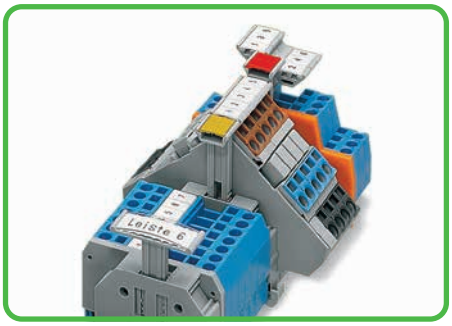
Additional benefit: Three marker slots for all WAGO rail-mount terminal block markers and one snap-in hole for WAGO adjustable height group marker carriers offer individual marking options.

Group Marker Carriers (Height-Adjustable) and Movable Marking System

Height-adjustable group marker carrier	Carrier-through element







Receptacles for:
1 x marker
2 x WMB (Multi marking) or
3 x WCB (Combi marking) or
1 x WFB (Continuous marking strips)

	Item No.	Pack. Unit
Height-adjustable group marker carrier,		
snap-on type and height-adjustable from 43.5 mm to 59.5 mm in 249-116 and 249-117 end stops, for 1 marker or self-adhesive label and transparent protection covers, 10 mm wide		
gray	**249-119**	50 (2x25)
snap-on type and height-adjustable from 43.5 mm to 59.5 mm in 249-116 and 249-117 end stops, for 2 WMB markers or 1 x continuous strip, 10 mm wide		
gray	**249-118**	100 (4x25)
snap-on type and height-adjustable from 42.2 mm to 58.2 mm in 249-116 and 249-117 end stops, with marker surface, 6 mm wide		
white	**249-120**	50 (2x25)
snap-on type and height-adjustable from 45 mm to 61 mm in 249-116 and 249-117 end stops, for 2 WMB markers or 1 x TOPJOB®S marking strips, 12.2 mm wide		
gray	**2009-163**	50 (2x25)

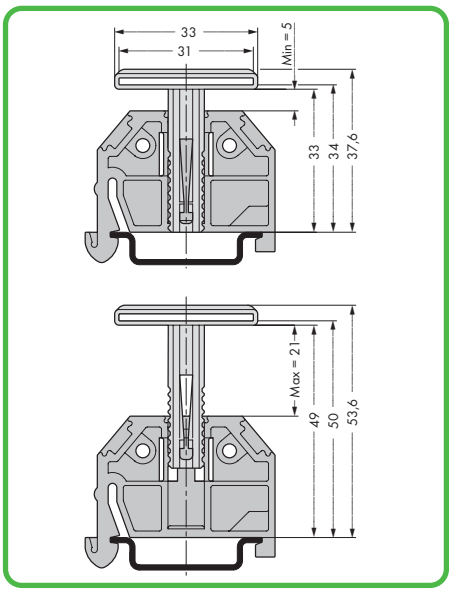
	Item No.	Pack. Unit
Carrier-through element, height-adjustable		
gray	**709-118**	50 (2x25)
Carrier-end element, height-adjustable		
gray	**709-119**	50 (2x25)

Item-Specific Accessories

Marking strip carrier, folded, 1 m long, 16 mm wide, 1.7 mm thick	transparent	**709-120**	1
Marking card, with 14 marking strips, DIN A4	plain	**709-193**	1

This system can be used as an additional group marker carrier or continuous marking strip carrier for terminal strips or single-deck rail-mount terminal blocks, for example:

- 264 Series terminal strips for DIN 35 rails
- 279 to 284 Series single-deck rail-mount terminal blocks, with a maximum height of 49 mm from the upper edge of the carrier rail (please observe conductor radius).



Dimensions in mm

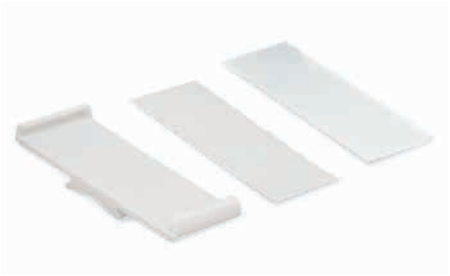


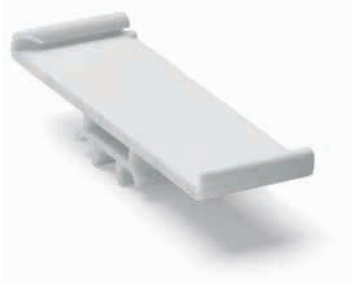
Height-adjustable group marker carrier for TOPJOB®S marking strips

Group Marker Carriers

Group marker carrier	Group marker carrier	Group marker carrier



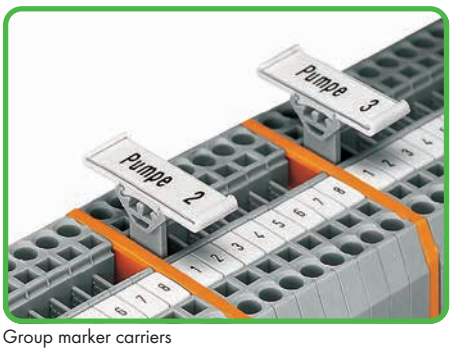




	Item No.	Pack. Unit
Group marker carrier,		
to insert into jumper slots of terminal blocks, for terminal block width of 4 - 6 mm, for up to 3 WMB markers or 8 marker tags, 15 mm wide		
◯ gray	**209-140**	50 (2x25)
for up to 2 WMB markers or 5 marker tags, 10 mm wide		
◯ gray	**209-141**	50 (2x25)
for up to 1 WMB marker or 2 marker tags, 5 mm wide		
◯ gray	**209-142**	50 (2x25)

	Item No.	Pack. Unit
Group marker carrier,		
for snapping into screwless end stops; for center or side mounting, 10 mm wide		
◯ white	**209-112**	100 (2x50)
Marker,		
from white cardboard, for self-marking, 100 markers per sheet		
◯ white	**209-113**	1
Self-adhesive label,		
for self-marking, 7 x 25 labels per sheet		
◯ white	**210-345**	1
Protection cover		
transparent	**209-114**	50

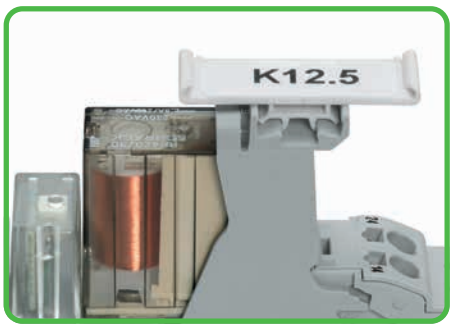
	Item No.	Pack. Unit
Group marker carrier,		
for WMB and miniature WSB marker receptacles, 10 mm wide		
◯ white	**209-145**	100 (2x50)



Group marker carriers

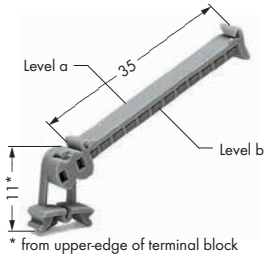


Group marker carrier with marker and protection cover



Group Marker Carrier (Pivoting)
WFB Continuous Marking Strip
Mounting Carrier

Pivoting group marker carrier	WFB continuous marking strip	Mounting carrier







	Item No.	Pack. Unit
Pivoting group marker carrier		
gray	**249-105**	50 (2x25)
Marker card, 4 x 30 markers per sheet		
white	**209-183**	1
Protection cover		
transparent	**209-184**	50

	Item No.	Pack. Unit
WFB continuous marking strip,		
for self-marking, e.g., with felt-tip pen,		
1000 mm long		
transparent	**210-612**	10
Carrier for WFB continuous marking strip,		
to be snapped into the marker slot		
gray	**209-185**	200 (8x25)

Item-Specific Accessories

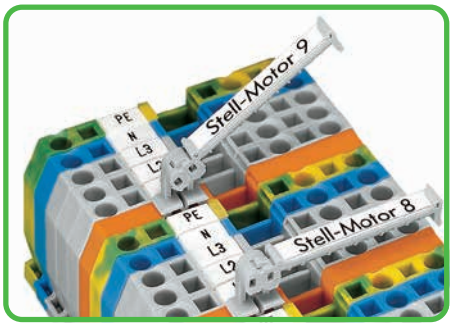
Felt-tip pen,



for permanent marking

210-110 1

	Item No.	Pack. Unit
Mounting carrier,		
for isolated mounting on DIN 35 rails		
gray	**209-106**	25

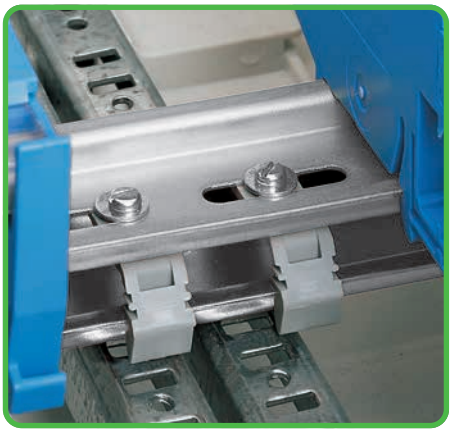


This pivoting group marker carrier has been developed for group marking of rail-mount terminal blocks and readily satisfies several customer requirements.

- Can be used in all multiprofile marker slots for rail-mount terminal bocks from 5 mm/0.197 in on or in spacer housings as shown in the picture
- Can be pivoted in 7 different stable positions, providing the best visual angle in case of difficult mounting conditions
- Two levels for different marking systems
  Level a: for marker (4 x 34) mm (see picture)
  Level b: for 12 WCB-Combi markers
  (see www.wagocatalog.com)



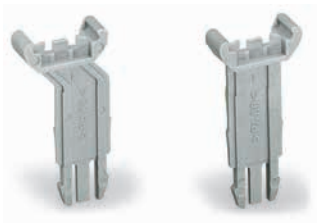
Carrier for WFB Continuous marking strip; to be secures every 10th terminal block.



Isolated mounting of a carrier rail in a distribution box for protection class 2.

Marker Branches and Double Marker Carrier

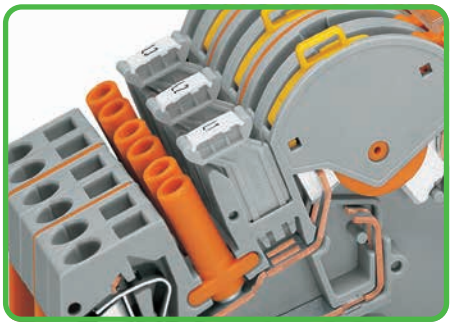
Group marker carrier	Double marker carrier





	Item No.	Pack. Unit
Group marker carrier,		
angled, e.g., for 282 Series transformer terminal blocks		
◯ gray	**209-144**	50 (2x25)
Group marker carrier,		
straight, e.g., for 282 Series 2- and 3-conductor terminal blocks		
◯ gray	**209-143**	50 (2x25)

	Item No.	Pack. Unit
Double marker carrier,		
suitable for WSB and WMB markers, for I/O markings in the terminal block center,		
4 mm wide		
◯ gray	**209-128**	200 (2x100)



Group marker carriers make it possible to mark subgroups in confined spaces.
They can be snapped into the jumper slots of the terminal blocks.
Marking system: WMB markers



Snapping a strip into the marker slot of the double marker carrier.

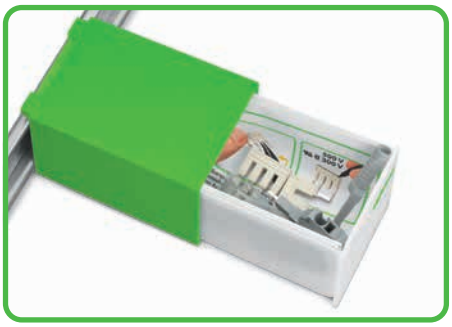
Switchgear Cabinet Drawer

Switchgear cabinet drawer	

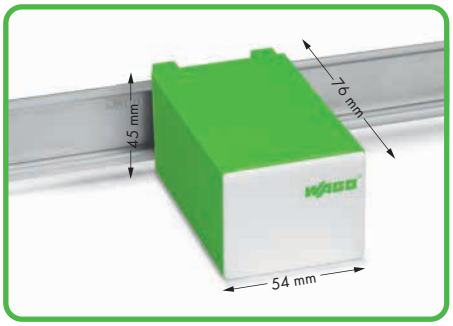




Item No.	Pack. Unit	
Switchgear cabinet drawer,		
DIN 35-rail mount drawer		
709-591	1	



The switchgear cabinet drawer is the ideal place to store small parts that are not constantly used (e.g., instructions, test plug adapters, jumpers, spare fuses).

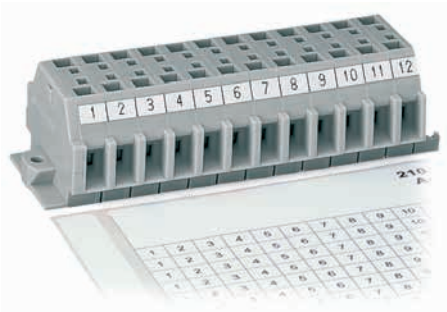


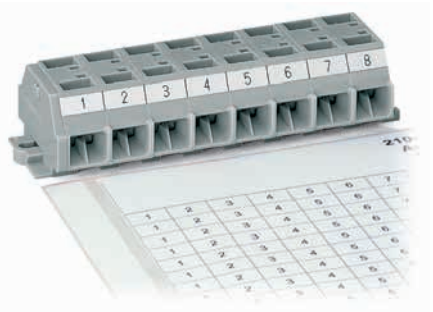
Dimensions in mm
Height from upper-edge of DIN 35 rail

Marker Cards – Self-Adhesive Marking Strips

Self-adhesive marker strips computer-marked 40 self-adhesive strips per card Height of marking strip: 6 mm	Self-adhesive marker strips computer-marked 40 self-adhesive strips per card Height of marking strip: 6 mm	Self-adhesive marker strips computer-marked 40 self-adhesive strips per card Height of marking strip: 6 mm







Marking	Item No.	Pack. Unit
for 260 Series 2-conductor terminal strips		
1 - 10 (120x)	**210-333/500-002**	1
11 - 20 (120x)	**210-333/500-003**	1
21 - 30 (120x)	**210-333/500-004**	1
31 - 40 (120x)	**210-333/500-005**	1
41 - 50 (120x)	**210-333/500-006**	1
51 - 60 (120x)	**210-333/500-007**	1
61 - 70 (120x)	**210-333/500-008**	1
71 - 80 (120x)	**210-333/500-009**	1
81 - 90 (120x)	**210-333/500-010**	1
91 - 100 (120x)	**210-333/500-011**	1
1 - 50 (20x)	**210-333/500-021**	1
L1 (1440x)	**210-333/500-074**	1
L2 (1440x)	**210-333/500-075**	1
L3 (1440x)	**210-333/500-076**	1
N (1440x)	**210-333/500-077**	1
PE (1440x)	**210-333/500-078**	1
PEN (1440x)	**210-333/500-079**	1
only with grid spacing	**210-333/500-001**	1
for 260 Series 4-conductor terminal strips		
1 - 10 (80x)	**210-333/800-002**	1
11 - 20 (80x)	**210-333/800-003**	1
21 - 30 (80x)	**210-333/800-004**	1
31 - 40 (80x)	**210-333/800-005**	1
41 - 50 (80x)	**210-333/800-006**	1
51 - 60 (80x)	**210-333/800-007**	1
61 - 70 (80x)	**210-333/800-008**	1
71 - 80 (80x)	**210-333/800-009**	1
81 - 90 (80x)	**210-333/800-010**	1
91 - 100 (80x)	**210-333/800-011**	1
1 - 40 (20x)	**210-333/800-209**	1
L1 (880x)	**210-333/800-074**	1
L2 (880x)	**210-333/800-075**	1
L3 (880x)	**210-333/800-076**	1
N (880x)	**210-333/800-077**	1
PE (880x)	**210-333/800-078**	1
PEN (880x)	**210-333/800-079**	1
only with grid spacing	**210-333/800-001**	1

Marking	Item No.	Pack. Unit
for 261 Series 2-conductor terminal strips		
1 - 12 (80x)	**210-333/600-103**	1
13 - 24 (80x)	**210-333/600-104**	1
25 - 36 (80x)	**210-333/600-105**	1
37 - 48 (80x)	**210-333/600-106**	1
41 - 50 (80x)	**210-333/600-006**	1
51 - 60 (80x)	**210-333/600-007**	1
61 - 70 (80x)	**210-333/600-008**	1
71 - 80 (80x)	**210-333/600-009**	1
81 - 90 (80x)	**210-333/600-010**	1
91 - 100 (80x)	**210-333/600-011**	1
1 - 50 (20x)	**210-333/600-021**	1
L1 (1200x)	**210-333/600-074**	1
L2 (1200x)	**210-333/600-075**	1
L3 (1200x)	**210-333/600-076**	1
N (1200x)	**210-333/600-077**	1
PE (1200x)	**210-333/600-078**	1
PEN (1200x)	**210-333/600-079**	1
only with grid spacing	**210-333/600-001**	1
for 261 Series 4-conductor terminal strips		
1 - 16 (40x)	**210-333/1000-202**	1
17 - 32 (40x)	**210-333/1000-204**	1
33 - 48 (40x)	**210-333/1000-206**	1
49 - 64 (40x)	**210-333/1000-110**	1
65 - 80 (40x)	**210-333/1000-111**	1
81 - 96 (40x)	**210-333/1000-112**	1
97 - 112 (40x)	**210-333/1000-113**	1
1 - 36 (20x)	**210-333/1000-208**	1
L1 (720x)	**210-333/1000-074**	1
L2 (720x)	**210-333/1000-075**	1
L3 (720x)	**210-333/1000-076**	1
N (720x)	**210-333/1000-077**	1
PE (720x)	**210-333/1000-078**	1
PEN (720x)	**210-333/1000-079**	1
only with grid spacing	**210-333/1000-001**	1

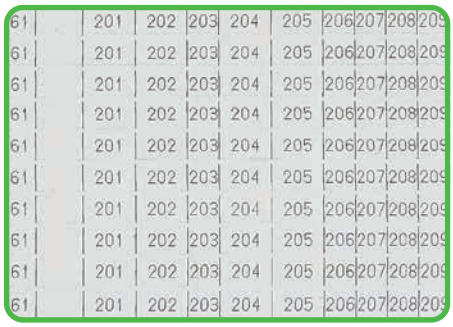
Marking	Item No.	Pack. Unit
for 262 Series 2-conductor terminal strips		
1 - 20 (40x)	**210-333/700-020**	1
21 - 40 (40x)	**210-333/700-108**	1
41 - 60 (40x)	**210-333/700-109**	1
1 - 50 (20x)	**210-333/700-021**	1
L1 (1040x)	**210-333/700-074**	1
L2 (1040x)	**210-333/700-075**	1
L3 (1040x)	**210-333/700-076**	1
N (1040x)	**210-333/700-077**	1
PE (1040x)	**210-333/700-078**	1
PEN (1040x)	**210-333/700-079**	1
only with grid spacing	**210-333/700-001**	1
for 262 Series 4-conductor terminal strips		
1 - 12 (40x)	**210-333/1200-103**	1
13 - 24 (40x)	**210-333/1200-104**	1
25 - 36 (40x)	**210-333/1200-105**	1
37 - 48 (40x)	**210-333/1200-106**	1
49 - 60 (40x)	**210-333/1200-107**	1
1 - 24 (20x)	**210-333/1200-203**	1
L1 (600x)	**210-333/1200-074**	1
L2 (600x)	**210-333/1200-075**	1
L3 (600x)	**210-333/1200-076**	1
N (600x)	**210-333/1200-077**	1
PE (600x)	**210-333/1200-078**	1
PEN (600x)	**210-333/1200-079**	1
only with grid spacing	**210-333/1200-001**	1

Marker Cards – Self-Adhesive Marking Strips
Plain

Self-adhesive marking strips



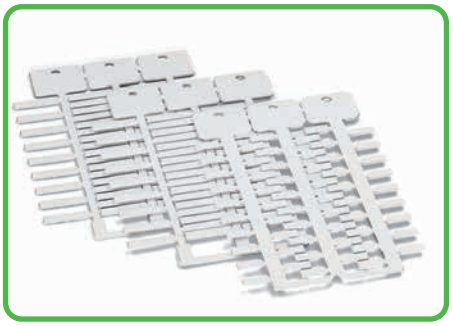
	Item No.	Pack. Unit
Self-adhesive marking strips,		
plain,		
grid adjustable,		
Length of marking strip: 182 mm,		
Height of marking strip: 2.3 mm,		
100 self-adhesive strips per card		
◯	**210-331**	1
Height of marking strip: 3 mm,		
80 self-adhesive strips per card		
◯	**210-332**	1
Height of marking strip: 5 mm,		
48 self-adhesive strips per card		
◯	**210-334**	1
Height of marking strip: 9 mm,		
25 self-adhesive strips per card		
◯	**210-335**	1
Height of marking strip: 6 mm,		
40 self-adhesive strips per card		
◯	**210-333**	1



Other markings with different spacings for 2- and 4-conductor terminal blocks are available upon request.

Wire and Cable Marking
– Description and Handling –

Wire marking



The following markers are available:
Markers for plotter marking.



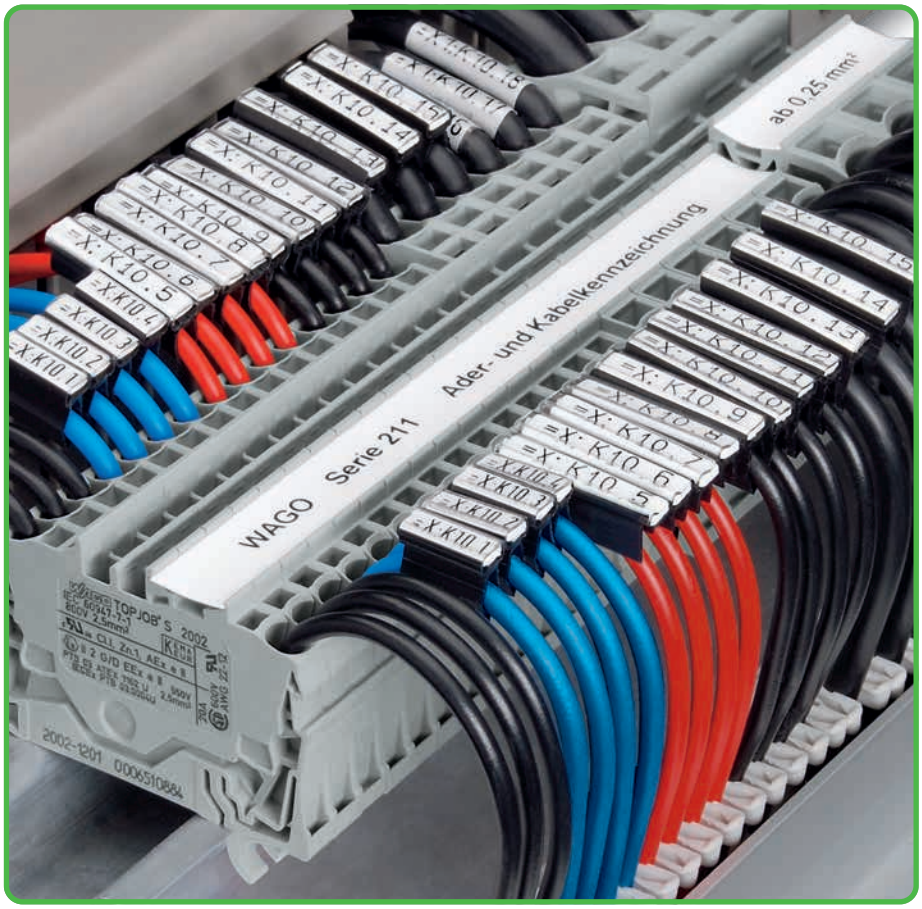
Markers on roll for thermal transfer printing.

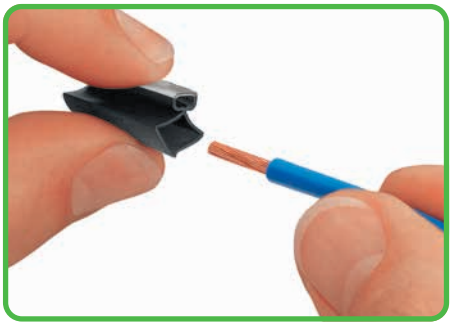


Remove the printed marker from the roll.



Slide the plotted marker into the marking sleeve receptacle. Exchanging the marker is also possible after the conductor has been terminated.

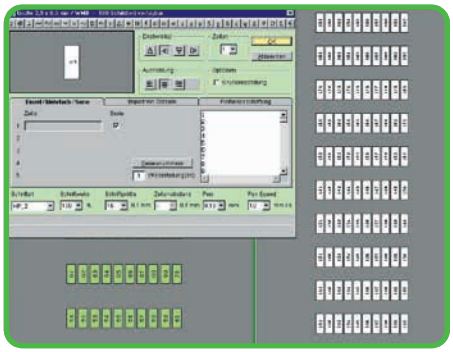




Compress the sleeve and slide it onto the conductor to be marked.



smartPrinter



WAGO smartMarking Software



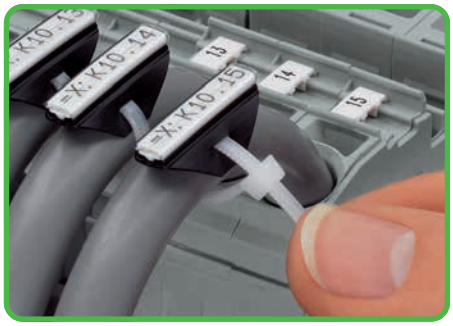
TP 298+ Thermal Transfer Printer



Slide it through the marker receptacle up to the end of the sleeve.



Then remove the rest of the marker by twisting it off.



Attach the 211-129 marking sleeve to individual cables or conductors via cable ties.

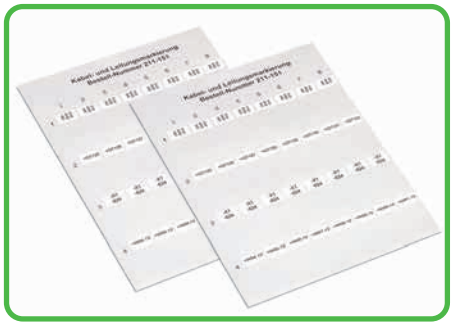


Wire marking



Wire marker for thread-on mounting for 2.5 - 6 mm²

Wire marking



Self-laminating labels are available on A4 sheets for laser printers (plotters) are supplied on roll for thermal transfer printers.



Remove the printed label from the sheet or roll.



Wrap it around the conductor or cable.



The transparent laminate protects the marking.

Wire and Cable Marking
for Conductors from 0.25 to 25 mm²

Marking sleeve



Item No.	Pack. Unit
Marking sleeve, 12 mm long, halogene-free, for one marker, to be fitted prior to conductor termination, for wire Ø 1.6 - 3.2 mm or 0.25 - 1.5 mm²	
211-112	2000
for wire Ø 2.2 - 4.5 mm or 0.5 - 4 mm²	
211-113	2000
for wire Ø 3.7 - 5.9 mm or 2.5 - 6 mm²	
211-114	1000
for wire Ø 5.5 - 10 mm or 10 - 25 mm²	
211-115	1000

Item-Specific Accessories

Markers on roll, for thermal transfer printer,



3,000 markers per roll, 12 mm long, white **211-111** 1

Marker card, for plotter,



57 markers per card, 12 mm long, white **211-110** 18

Marking sleeve



Item No.	Pack. Unit
Marking sleeve, 23 mm long, halogene-free, for one marker, to be fitted prior to conductor termination, for wire Ø 1.6 - 3.2 mm or 0.25 - 1.5 mm²	
211-122	2000
for wire Ø 2.2 - 4.5 mm or 0.5 - 4 mm²	
211-123	2000
for wire Ø 3.7 - 5.9 mm or 2.5 - 6 mm²	
211-124	1000
for wire Ø 5.5 - 10 mm or 10 - 25 mm²	
211-125	1000

Item-Specific Accessories

Markers on roll, for thermal transfer printer,



3,000 markers per roll, 23 mm long, white **211-121** 1

Marker card, for plotter,

34 markers per card, 23 mm long, white **211-120** 30

Marking sleeve



Item No.	Pack. Unit
Marking sleeve, 23 mm long, halogene-free, for cable tie, can also be fitted after install, for one marker, for wires from 10 mm²	
211-129	1000

Item-Specific Accessories

Markers on roll, for thermal transfer printer,



3,000 markers per roll, 23 mm long, white **211-121** 1

Marker card, for plotter,

34 markers per card, 23 mm long, white **211-120** 30

Cable tie,



2.5 mm x 100 mm **807-090/101-100** 1

211 Series Accessories

TP 298+ Thermal Transfer Printer,



300 dpi print resolution **258-298** 1

Ink ribbon for wire marker,



76 mm wide x 300 m **258-150** 1

DIN A3 plotter,



IP 350 (110 V/230 V) **258-350** 1

Ink pen,



0.35 mm line width **258-228** 1

WAGO disposable plotter pen,



0.35 mm line width **258-328** 1

Carrier plate for marker cards for IP350 plotter

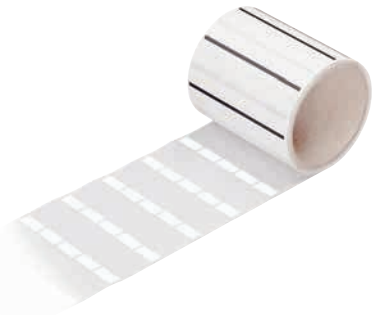


258-370 1

Self-Laminating Labels for Cable Marking
Wire Marker for Thread-On Mounting

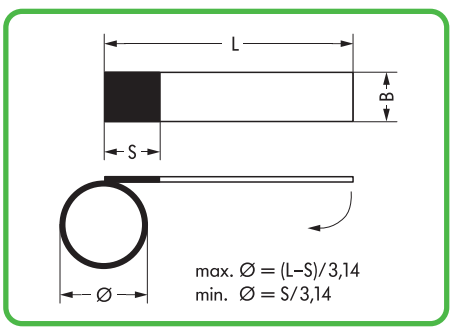
Labels on DIN A4 sheets	Labels on roll	Wire marker for thread-on mounting







Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Labels on DIN A4 sheets,		**Labels on roll,**		**Wire marker for thread-on mounting,**	
for laser printer		for thermal transfer printer		for 0.75 - 1.5 mm²,	
Marking surface: S = 9 mm B = 17 mm L = 35 mm,		Marking surface: S = 8 mm B = 18 mm L = 35 mm,		2,000 markers per roll	
for max. cable diameter 8 mm,		for max. cable diameter 9 mm,			
70 labels per sheet		9,000 labels per roll			
211-150	20	**211-155**	1	white **211-161**	1
Marking surface: S = 13 mm B = 21 mm L = 56 mm,		Marking surface: S = 13 mm B = 23 mm L = 51 mm,		**Wire marker for thread-on mounting,**	
for max. cable diameter 14 mm,		for max. cable diameter 12 mm,		for 2.5 - 6 mm²,	
32 labels per sheet		5,000 labels per roll		2,000 markers per roll	
211-151	25	**211-156**	1	white **211-162**	1



Dimensions of self-laminating label (in mm)



Self-laminating labels are supplied on roll for thermal transfer printers.



Wire marker for thread-on mounting

Markers, Cable Marking and Lables

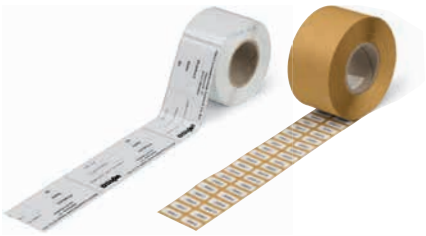
Cable Marking



Cable Marking



Label Rolls and Type Plates



Similiar to picture

	Item No.	Pack. Unit
Marker for marking sleeve		
12 x 4 mm		
2,500 pieces per roll		
white	**211-811**	1
Marking sleeve		
Sleeve length: 12 mm		
500 pcs		
for 1.4–5 mm wire diameter		
transparent	**211-812**	1
for 5–11 mm wire diameter		
transparent	**211-813**	1
Marker for marking sleeve		
23 x 4 mm		
2,500 pieces per roll		
white	**211-821**	1
Marking sleeve		
Sleeve length: 23 mm		
500 pcs		
for 1.4–5 mm wire diameter		
transparent	**211-823**	1
200 pcs		
for 5–11 mm wire diameter		
transparent	**211-824**	1
Marking sleeve		
Sleeve length: 23 mm		
Mounting via cable tie		
200 pcs		
transparent	**211-829**	1

	Item No.	Pack. Unit
Cable tie marker		
500 pieces per roll		
25 x 20 mm		
25 x 10 mm write-on surface		
white	**211-835**	1
800 pieces per roll		
Inner wrap (write-on surface on the inner side)		
117.5 x 15 mm		
100 x 15 mm write-on surface		
white	**211-836**	1
Self-laminating labels (no illustration)		
1,000 pieces per roll		
9 x 18 mm write-on surface		
white	**211-855**	1
Self-laminating labels (no illustration)		
1,000 pieces per roll		
15 x 22 mm write-on surface		
white	**211-856**	1
500 pieces per roll		
18 x 14 mm write-on surface		
white	**211-857**	1
Wire marker for thread-on mounting		
1,000 pieces per roll		
0.75 ... 1.5 mm²		
white	**211-861**	1
2.5 ... 6 mm²		
white	**211-862**	1
6 ... 16 mm²		
white	**211-863**	1

	Item No.	Pack. Unit
Label roll		
Polyester, self-adhesive		
3,000 labels per roll		
15 x 6 mm		
white	**210-805**	1
yellow	**210-805/000-002**	1
15 x 9 mm		
white	**210-806**	1
yellow	**210-806/000-002**	1
20 x 8 mm		
white	**210-807**	1
yellow	**210-807/000-002**	1
9.5 x 25 mm		
white	**210-808**	1
5 x 35 mm		
white	**210-810**	1
Type plates		
Polyester		
500 markers per roll		
44 x 99 mm		
white	**210-801**	1
silver	**210-802**	1
44 x 99 mm		
white	**210-803**	1
silver	**210-804**	1
Label roll		
Fabric, self-adhesive		
3,000 labels per roll		
20 x 7 mm		
white	**210-811**	1
yellow	**210-811/000-002**	1

Lables and Push-Button Markers

Continuous Labels



	Item No.	Pack. Unit
Continuous labels		
Polyester, self-adhesive		
9 lengths at 25 m		
Width: 2.3 mm		
white	**210-831**	1
Width: 3 mm		
white	**210-832**	1
5 lengths at 25 m		
Width: 5 mm		
white	**210-834**	1
Width: 6 mm		
white	**210-833**	1

Push-Button Markers



	Item No.	Pack. Unit
Push-button markers		
semi-permanent adhesive		
1000 markers per roll		
26.5 x 18 mm		
silver	**210-850**	1
Plastic cover		
100 covers		
26.5 x 18 mm		
transparent	**210-851**	1
Push-button markers		
semi-permanent adhesive		
1000 markers per roll		
27.5 x 17.5 mm		
silver	**210-856**	1
Plastic cover		
100 covers		
27.5 x 17.5 mm		
transparent	**210-857**	1
Push-button markers		
semi-permanent adhesive		
1000 markers per roll		
22 x 22 mm		
silver	**210-858**	1
Plastic cover		
100 covers		
22 x 22 mm		
transparent	**210-859**	1
Push-button markers		
semi-permanent adhesive		
1000 markers per roll		
27 x 27 mm		
silver	**210-860**	1
Plastic cover		
100 covers		
27 x 27 mm		
transparent	**210-861**	1

Push-Button Markers

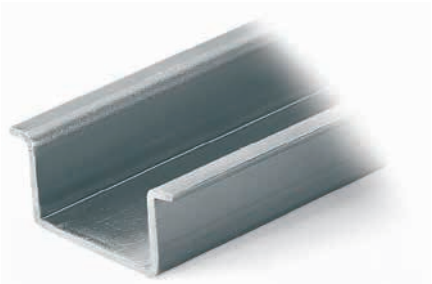


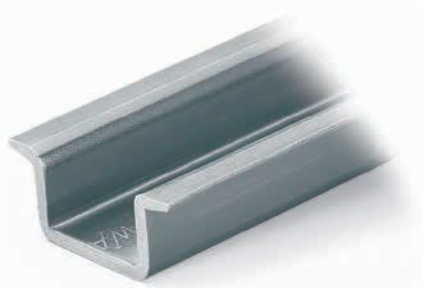
	Item No.	Pack. Unit
Push-button markers		
semi-permanent adhesive		
1000 markers per roll		
27 x 12.5 mm		
silver	**210-862**	1
Plastic cover		
100 covers		
27 x 12.5 mm		
transparent	**210-863**	1
Push-button markers		
permanent adhesive		
350 markers per roll		
27 x 19 mm		
silver	**210-852**	1
Universal push-button frame		
for 210-852 and 210-855		
100 pcs per bag		
27 x 19 mm		
black	**210-853**	1
Push-button markers		
permanent adhesive		
350 markers per roll		
27 x 18 mm		
silver	**210-855**	1
Label roll DD (device designation)		
Polyester		
500 labels per roll		
28 x 28 mm		
175 µm thick		
silver	**210-854**	1

Mounting Accessories
Carrier Rails, Rail End Cap, Angled Support Brackets and Collective Carriers

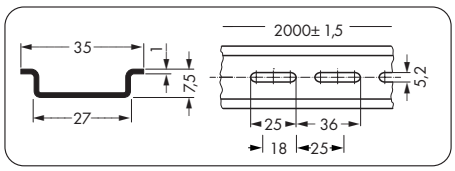
Carrier rail acc. to EN 60715	Carrier rail acc. to EN 60715	Carrier rail acc. to EN 60715





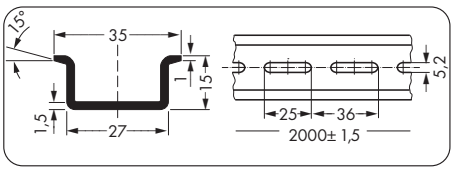


Item No.		Pack. Unit
Steel carrier rail, I_N 76 A (reference length of 1m/3'3"), 35 x 7.5 mm, 1 mm, 2 m/6'6" long		
unslotted	**210-113**	10
Hole width 25 mm; hole spacing 36 mm		
slotted	**210-112**	10 (10x1)
Hole width 18 mm; hole spacing 25 mm		
slotted	**210-115**	1



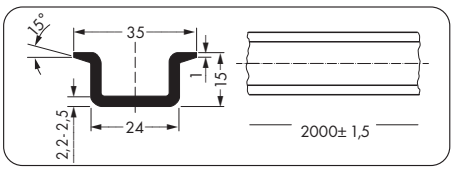
Dimensions in mm

Item No.		Pack. Unit
Steel carrier rail, I_N 125 A (reference length of 1m/3'3"), 35 x 15 mm, 1.5 mm, 2 m/6'6" long		
unslotted	**210-114**	10
slotted	**210-197**	10



Dimensions in mm

Item No.		Pack. Unit
Steel carrier rail, I_N 125 A (reference length of 1m/3'3"), 35 x 15 mm, 2.3 mm, 2 m/6'6" long		
unslotted	**210-118**	10



Dimensions in mm



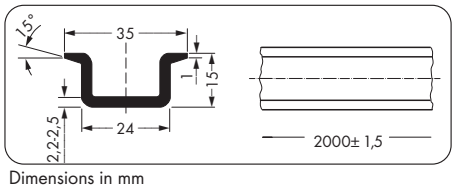




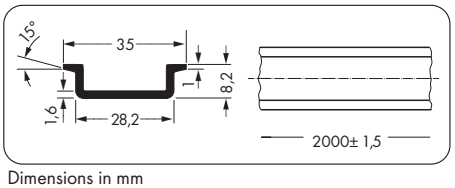
Item No.		Pack. Unit
Copper carrier rail, I_N 309 A (reference length of 1m/3'3"), 35 x 15 mm, 2.3 mm, 2 m/6'6" long		
unslotted	**210-198**	10

Item No.		Pack. Unit
Aluminum carrier rail, I_N 76 A (reference length of 1m/3'3"), 35 x 8.2 mm, 1.6 mm, 2 m/6'6" long		
unslotted	**210-196**	10

Item No.		Pack. Unit
Rail end cap, for DIN 35 rail (7.5 mm high)		
gray	**209-109**	50 (2x25)



Dimensions in mm

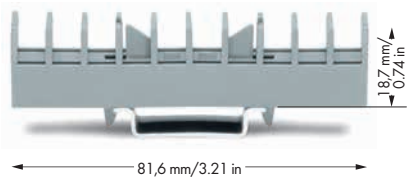


Dimensions in mm

Carrier rail acc. to EN 60715	Angled support bracket	Collective carrier for jumpers



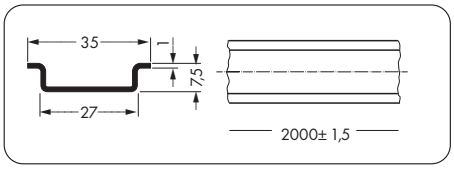




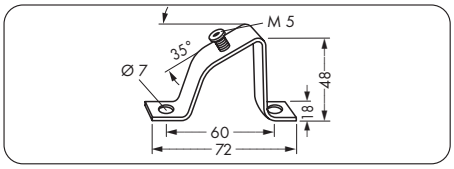
	Item No.	Pack. Unit
Steel carrier rail, I_N 76 A (reference length of 1m/3'3"), 35 x 7.5 mm, 1 mm, 2 m/6'6" long		
unslotted	**210-505**	1
slotted	**210-504**	1

	Item No.	Pack. Unit
Angled support bracket, without screw		
	210-148	10
Screw M 5 x 8		
	210-149	100 (5x20)

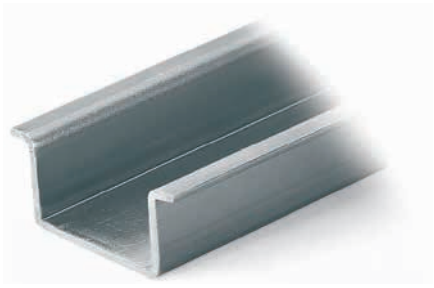
	Item No.	Pack. Unit
Collective carrier for jumpers, for DIN 35 rail, for jumpers for transverse switching terminal block (282-811) and longitudinal switching disconnect terminal block (282-821)		
gray	**282-369**	25
The collective carrier can be snapped onto DIN 35 rails. It holds jumpers, e. g., during maintenance.		

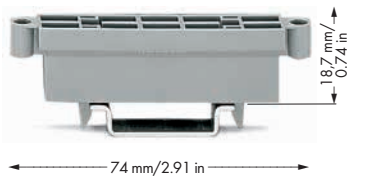


Dimensions in mm



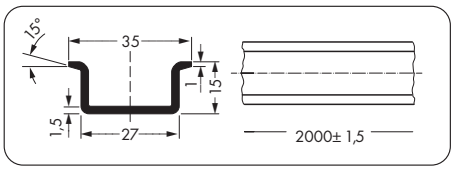
Dimensions in mm





	Item No.	Pack. Unit
Steel carrier rail, I_N 125 A (reference length of 1m/3'3"), 35 x 15 mm, 1.5 mm, 2 m/6'6" long		
unslotted	**210-506**	1
slotted	**210-508**	1

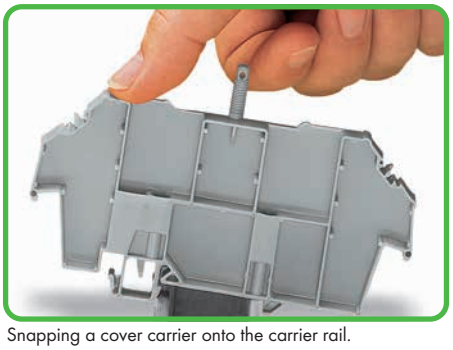
	Item No.	Pack. Unit
Collective carrier for adjacent jumpers, for DIN 35 rail, for 279, 280, 281, 282 and 284 Series adjacent jumpers, as well as 215 Series banana plugs		
gray	**209-100**	50 (2x25)
The collective carrier can be snapped onto DIN 35 rails. It holds adjacent jumpers and banana plugs, e. g., during maintenance.		



Dimensions in mm

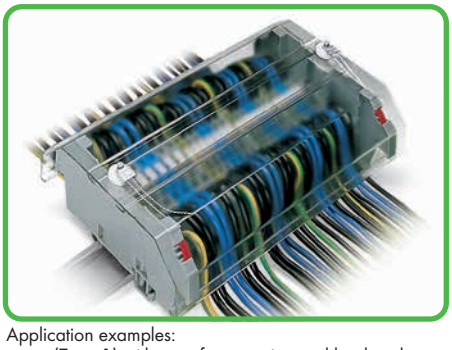
Transparent Covers for Rail-Mounted Terminal Blocks, Usable with Lead Seals – Description and Handling –

Assembly



Snapping a cover carrier onto the carrier rail.

Application

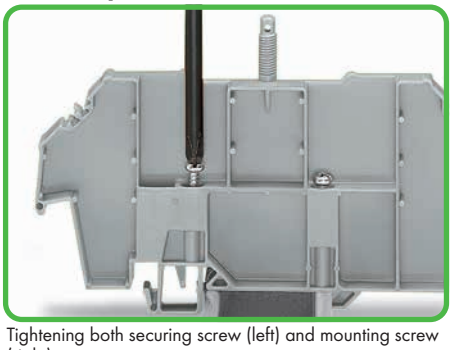


Application examples:
cover (Type 1) without safety warning and lead seals.



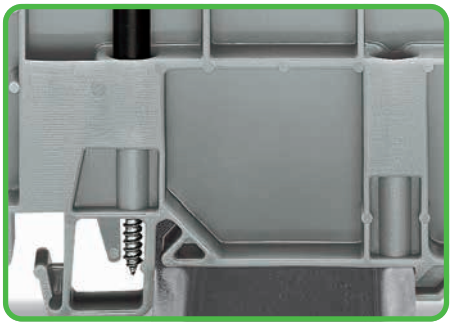
Cover with safety warning and lead seals.

Assembly



Tightening both securing screw (left) and mounting screw (right).

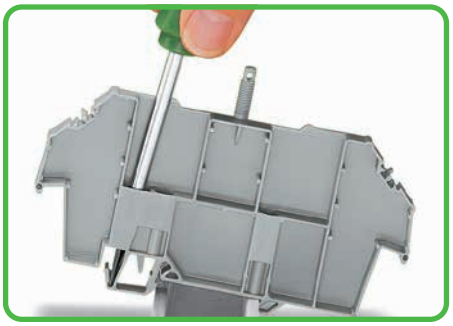
Assembly



Securing screw – prevents lifting off from rail.
Mounting screw – prevents the cover carrier from being moved on the rail.



Removal



Removing a cover carrier from the carrier rail.

Marking



Inserting a marking strip into the cover.

Lead seal



Cover with lead seals.
Using covers without lead seals, the thread dome-head can be broken off.

Transparent Covers for Rail-Mounted Terminal Blocks, Usable with Lead Seals
709 Series

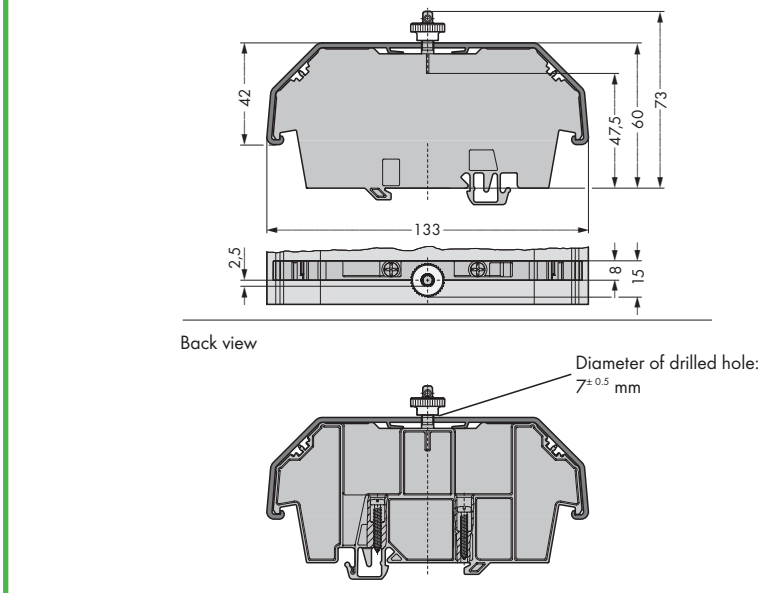
Cover and cover carrier, type 1



	Item No.	Pack. Unit
Cover, type 1,		
suitable for cover carrier, type 1,		
1 m/3'3'' long		
transparent	**709-153**	10



	Item No.	Pack. Unit
Cover carrier, type 1,		
incl. mounting/securing screws and knurled nut,		
for 279 to 282 Series and 880 Series rail-mount terminal blocks,		
for 264 Series miniature terminal blocks,		
for 270 Series sensor and acuator blocks		
gray	**709-167**	10



Dimensions in mm

Accessories

Marking card with 6 marking strips,			
	for group marking or safety instructions		
	plain	**709-183**	1
Spare mounting/securing screw,			
	for cover		
		209-196	200 (8x25)
Spare knurled nut,			
	for cover		
		210-549	100 (4x25)

Transparent Covers for Rail-Mounted Terminal Blocks, Usable with Lead Seals 709 Series

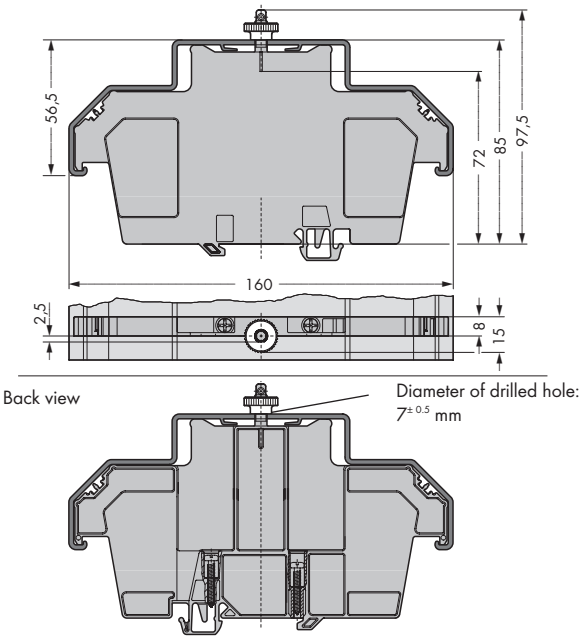
Cover and cover carrier, type 2



	Item No.	Pack. Unit
Cover, type 2,		
suitable for cover carrier, type 2,		
1 m/3'3'' long		
transparent	**709-154**	1



	Item No.	Pack. Unit
Cover carrier, type 2,		
incl. mounting/securing screws and knurled nut,		
for 283 to 285 Series rail-mount terminal blocks,		
for 279 to 281 Series double- and triple-deck blocks,		
for 780 to 785, 775, 776 and 777 Series TOPJOB® terminals,		
for 280 Series sensor and actuator blocks,		
for 282 Series disconnect terminals for test and measurement for transformer circuits		
gray	**709-168**	10



Dimensions in mm

Accessories

Marking card with 6 marking strips,



for group marking or safety instructions

plain	**709-183**	1

Spare mounting/securing screw,



for cover

209-196	200 (8x25)

Spare knurled nut,



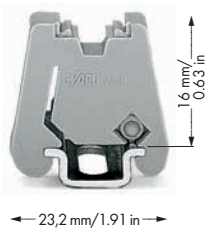
for cover

210-549	100 (4x25)

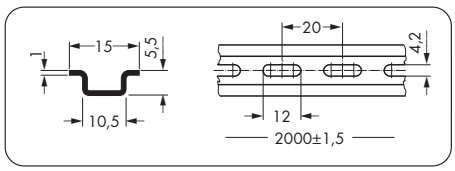
Carrier rail acc. to EN 60715	Carrier rail acc. to EN 60715	Screwless end stop





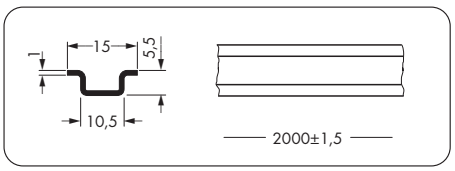


Item No.		Pack. Unit
Steel carrier rail, I_N 57 A (reference length of 1m/3'3"), 15 x 5.5 mm, 1 mm, 2 m/6'6" long		
slotted	**210-111**	1



Dimensions in mm

Item No.		Pack. Unit
Steel carrier rail, I_N 57 A (reference length of 1m/3'3"), 15 x 5.5 mm, 1 mm, 2 m/6'6" long		
unslotted	**210-295**	1

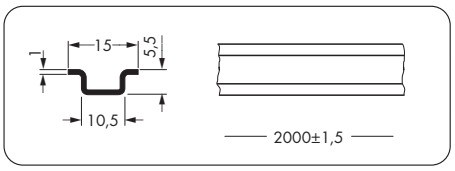


Dimensions in mm

Item No.		Pack. Unit
Screwless end stop, for DIN 15 rail, 6 mm wide		
gray	**249-101**	25



Item No.		Pack. Unit
Aluminum carrier rail, I_N 57 A (reference length of 1m/3'3"), 15 x 5.5 mm, 1 mm, 2 m/6'6" long		
unslotted	**210-296**	10



Dimensions in mm

Operating Tools

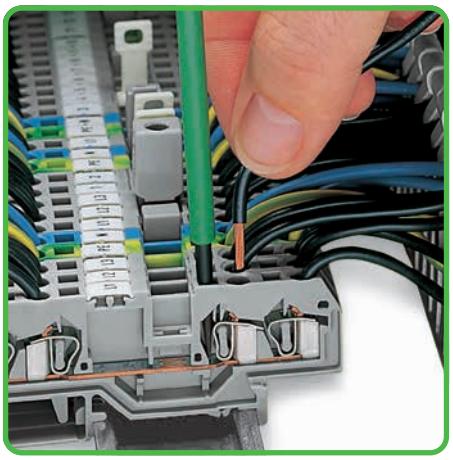
Operating tool with partially insulated shaft	Operating tool set with partially insulated shafts	Operating tool with partially insulated shaft







Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Operating tool with partially insulated shaft,		**Operating tool set with partially insulated shafts,**		**Operating tool with partially insulated shaft,**	
type 1, (2.5 x 0.4) mm blade,		type 1, (2.5 x 0.4) mm blade, type 2, (3.5 x 0.5) mm		(2.5 x 0.4) mm blade, short,	
for 279, 726, 727, 2000, 2001 and 2020 Series		blade, type 3, (5.5 x 0.8) mm blade		for 279, 726, 727, 2000, 2001 and 2020 Series	
210-719	1	**210-722**	1	**210-647**	1
Operating tool with partially insulated shaft,				**Operating tool with partially insulated shaft,**	
type 2, (3.5 x 0.5) mm blade,				(2.5 x 0.4) mm blade, short angled,	
for 260, 261, 262, 264, 270, 280, 281, 290, 775,				for 279, 2000, 2001 and 2020 Series	
776, 777, 769, 780, 781, 869, 870, 880, 2002, 2003,					
2004, 2005 and 2022 Series					
210-720	1			**210-648**	1
Operating tool with partially insulated shaft,					
type 3, (5.5 x 0.8) mm blade,					
for 282, 283, 284, 285, 782, 783, 784, 785, 2006,					
2010 and 2016 Series					
210-721	1				



The blade dimensions of the above-listed operating tools with partially insulated shaft are ideal for easy operation of front-entry terminal blocks.



Set of operating tools

Operating Tools

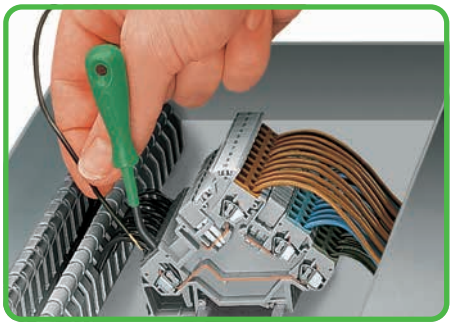
Operating tool with partially insulated shaft	Operating tool	Operating pliers







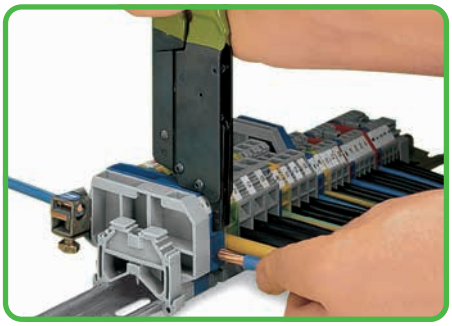
Item No.	Pack. Unit	Item No.		Pack. Unit	Item No.	Pack. Unit
Operating tool with partially insulated shaft,		**Operating tool,** of insulating material,			**Operating pliers,**	
(3.5 x 0.5) mm blade, short,		for 279 Series rail-mounted terminal blocks			for 279 and 280 Series rail-mounted terminal blocks for	
for 260, 261, 262, 264, 270, 280, 281, 869, 870, 880					side-entry	
Series						
210-657	1	1-way	**209-129**	1	**210-143**	1
		2-way	**279-432**	1		
		3-way	**279-433**	1		
		10-way	**279-440**	1		
Operating tool with partially insulated shaft,		**Operating tool,** of insulating material,			**Operating pliers,**	
(3.5 x 0.5) mm blade, short angled,		for 264 (1- and 2-way only), 280, 281 (up to 3-way only)			for 281, 282, 283 and 284 Series rail-mounted terminal	
ideal for 280 Series actuator and sensor terminal blocks,		Series rail-mounted terminal blocks			blocks for side-entry	
along with 260, 261, 262, 264, 280, 281, 869, 870,						
880, 2002 and 2004 Series						
210-658	1	1-way	**209-130**	1	**210-141**	1
		2-way	**280-432**	1		
		3-way	**280-433**	1		
		4-way	**280-434**	1		
		5-way	**280-435**	1		
		6-way	**280-436**	1		
		7-way	**280-437**	1		
		8-way	**280-438**	1		
		9-way	**280-439**	1		
		10-way	**280-440**	1		
		for 281 Series rail-mounted terminal blocks			The operating pliers is placed into the upper operating slot	
		5-way	**281-440**	1	of the side-entry rail-mount terminal block and the clamp is	
					hooked into the lateral operating slot. The contact is fully	
					opened by pressing the handles together until they	
					engage – both hands are then free for conductor prepara-	
					tion and insertion into the terminal block.	



The blade dimensions of the above-listed operating tool (DIN 5264) are ideal for easy operation of 280 Series front-entry sensor and actuator terminal blocks.



Commoning front-entry disconnect terminal blocks with comb-style jumper bars via 10-way operating tool.



When operating the handles beyond the locked position, the ratchet allows the tool to open and be removed from the terminal block.

Cable Strippers

Cable stripper for round cables with an outer Ø from 2.5 mm to 11 mm	Cable stripper for round cables with an outer Ø from 4.5 mm to 45 mm



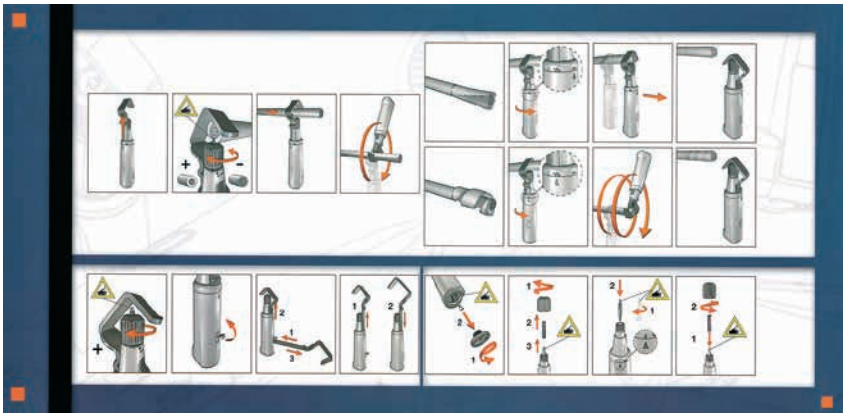




Item No.	Pack. Unit	Item No.	Pack. Unit
Cable stripper,		**Cable stripper,**	
for round cables with an outer Ø from 2.5 mm to 11 mm		for round cables with an outer Ø from 4.5 mm to 45 mm	
206-171	1	**206-174**	1
Item-Specific Accessories		**Item-Specific Accessories**	
Replacement blade,		**Replacement blade,**	
 from 2.5 mm to 11 mm **206-170**	1	 from 4.5 mm to 45 mm **206-173**	1







Operating instructions for 206-171 cable stripper (top) and 206-174 cable stripper (bottom)

206-171 Cable Stripper
- 10-position adjustment wheel ensures repeatable stripping results
- Fine adjustability via 10-position blade cutting depth adjustment
- Strips the sheath from multi-core and fiber optic cables up to 11 mm diameter
- Safe and easy to use through closed stripping cavity

206-174 Cable Stripper
- Safe and easy to use: Three locking positions for circular, longitudinal and spiral cuts
- High cable stripping capacity of up to 40 mm diameter
- Well balanced, ergonomic design features rests for thumb, index and pinky fingers to ease raising of the cable retention hook.
- Spare blades can be stored within the tool body

Stripping Tools

"Quickstrip 10" wire stripper 0.02 mm² - 10 mm² "f-st" (6 mm² "s") Cutter for conductors up to 10 mm² "f-st" (1.5 mm² "s")	"Quickstrip 16" wire stripper 4 mm² - 16 mm² Cutter for conductors up to 10 mm² "f-st" (1.5 mm² "s")	





Item No.	Pack. Unit	Item No.	Pack. Unit	
"Quickstrip 10" wire stripper		"Quickstrip 16" wire stripper		
206-124	1	206-125	1	
Item-Specific Accessories		**Item-Specific Accessories**		
"Standard" blade cassette,		"Standard" blade cassette,		
 0.02 mm² to 10 mm²		 4 mm² - 16 mm²		
206-126	1	206-128	1	
"V" blade cassette,				
 0.1 mm² to 4 mm² for PTFE				
206-127	1			



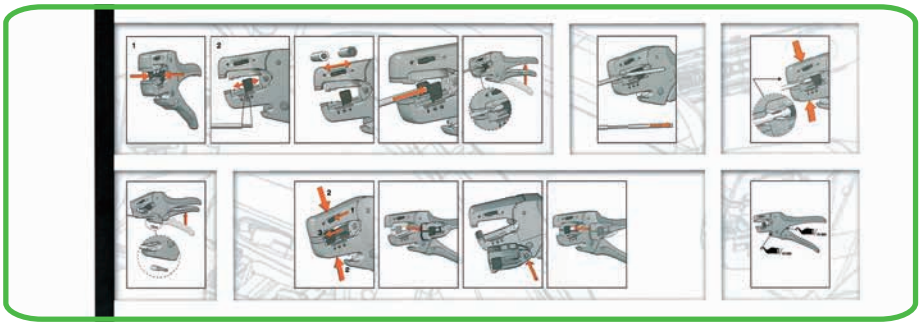
Cutting



Stripping

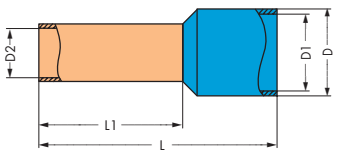
- Automatically adjusts to conductor size.
- No damage to conductor strands.
- Gripping pressure of jaws automatically adjusts to conductor insulation diameter.
- Clamping jaws and stripping blades automatically open once the stripping process is completed, ensuring no damage to the conductor strands.
- Exact strip length may be set by sliding red setting stop.
- Stripping blades can be replaced.
- Self-sharpening, fully protected cutter, also replaceable.*
- The complete body is made of glass fiber-reinforced polyamide.

* applies for Microstrip


Handling description included

Insulated Ferrules and Crimping Tools

Ferrule, insulated, tin plated, electrolytic copper, gastight crimped	Variocrimp 4 crimping tool for insulated and uninsulated ferrules 0.25 mm² - 4 mm²/AWG 24 - 12	Variocrimp 16 crimping tool for insulated and uninsulated ferrules 6 mm² - 16 mm²/AWG 10 - 6







	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Ferrule, insulated,			**Variocrimp 4 crimping tool,**		**Variocrimp 16 crimping tool,**	
according to DIN 46228, part 4/09.90			0.25 mm² - 4 mm²/AWG 24 - 12		6 mm² - 16 mm²/AWG 10 - 6	
yellow	**216-321**	1000	**206-204**	1	**206-216**	1
yellow	**216-301**	1000				
green	**216-322**	1000				
green	**216-302**	1000				
white	**216-221**	1000				
white	**216-201**	1000				
gray	**216-222**	1000				
gray	**216-202**	1000				
red	**216-223**	1000				
red	**216-203**	1000				
black	**216-224**	1000				
black	**216-204**	1000				
yellow	**216-205**	1000				
blue	**216-206**	1000				
gray	**216-207**	1000				
yellow	**216-208**	100				
red	**216-209**	100				
blue	**216-210**	100				

Ferrules

Technical Data

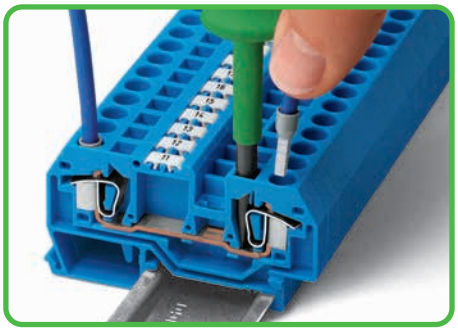
Ferrule, insulated,	**Ferrule, insulated,**	**Ferrule, insulated,**
sleeve for 0.25 mm²/AWG 24, 7 mm strip length, L: 10.5 mm, L1: 6 mm, D: 2.5 mm, D1: 2 mm, D2: 0.8 mm yellow **216-321**	sleeve for 0.34 mm²/AWG 24, 9 mm strip length, L: 12.5 mm, L1: 8 mm, D: 2.5 mm, D1: 2 mm, D2: 0.8 mm green **216-302**	sleeve for 0.75 mm²/AWG 20, 8 mm strip length, L: 12 mm, L1: 6 mm, D: 3.3 mm, D1: 2.8 mm, D2: 1.3 mm gray **216-222**
Ferrule, insulated,	**Ferrule, insulated,**	**Ferrule, insulated,**
sleeve for 0.25 mm²/AWG 24, 9 mm strip length, L: 12.5 mm, L1: 8 mm, D: 2.5 mm, D1: 2 mm, D2: 0.8 mm yellow **216-301**	sleeve for 0.5 mm²/AWG 22, 7 mm strip length, L: 11.5 mm, L1: 6 mm, D: 3 mm, D1: 2.5 mm, D2: 1.1 mm white **216-221**	sleeve for 0.75 mm²/AWG 20, 10 mm strip length, L: 14 mm, L1: 8 mm, D: 3.3 mm, D1: 2.8 mm, D2: 1.3 mm gray **216-202**
Ferrule, insulated,	**Ferrule, insulated,**	**Ferrule, insulated,**
sleeve for 0.34 mm²/AWG 24, 7 mm strip length, L: 10.5 mm, L1: 6 mm, D: 2.5 mm, D1: 2 mm, D2: 0.8 mm green **216-322**	sleeve for 0.5 mm²/AWG 22, 9 mm strip length, L: 13.5 mm, L1: 8 mm, D: 3 mm, D1: 2.5 mm, D2: 1.1 mm white **216-201**	sleeve for 1 mm²/AWG 18, 8 mm strip length, L: 12 mm, L1: 6 mm, D: 3.6 mm, D1: 3 mm, D2: 1.5 mm red **216-223**

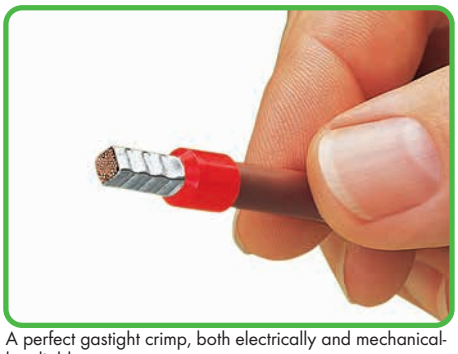
Application notes:
- With "Variocrimp 4," the built-in crimping pressure control automatically adjusts force to the conductor cross section used. With "Variocrimp 16," it is necessary to select the wire gauge on the tool before crimping.
- Only one crimping station is needed to handle the specified conductor size range.
- Uniform compact crimping from all four sides for high conductor retention.
- No need to center the conductor into the ferrule.
- Conductor and ferrule insertion possible from both sides (for left- and right-handers).
- Built-in ratchet mechanism ensures gastight crimp connection.
- Crimping tools open automatically after crimping operation is complete.
- Comfortable handles for operator.

Ferrules

Technical Data

Ferrule, insulated,	**Ferrule, insulated,**
 sleeve for 1 mm²/AWG 18, 10 mm strip length, L: 14 mm, L1: 8 mm, D: 3.6 mm, D1: 3 mm, D2: 1.5 mm red **216-203**	 sleeve for 6 mm²/AWG 10, 14 mm strip length, L: 20 mm, L1: 12 mm, D: 6.8 mm, D1: 6.2 mm, D2: 3.5 mm yellow **216-208**
Ferrule, insulated,	**Ferrule, insulated,**
 sleeve for 1.5 mm²/AWG 16, 8 mm strip length, L: 12 mm, L1: 6 mm, D: 4 mm, D1: 3.4 mm, D2: 1.8 mm black **216-224**	 sleeve for 10 mm²/AWG 8, 16 mm strip length, L: 21 mm, L1: 12 mm, D: 8.1 mm, D1: 7.5 mm, D2: 4.6 mm red **216-209**
Ferrule, insulated,	**Ferrule, insulated,**
 sleeve for 1.5 mm²/AWG 16, 10 mm strip length, L: 14 mm, L1: 8 mm, D: 4 mm, D1: 3.4 mm, D2: 1.8 mm black **216-204**	 sleeve for 16 mm²/AWG 6, 23 mm strip length, L: 29 mm, L1: 18 mm, D: 9.6 mm, D1: 8.8 mm, D2: 5.8 mm blue **216-210**
Ferrule, insulated,	
 sleeve for 2.08 mm²/AWG 14, 10 mm strip length, L: 14.5 mm, L1: 8 mm, D: 4.2 mm, D1: 3.6 mm, D2: 2.05 mm yellow **216-205**	
Ferrule, insulated,	
 sleeve for 2.5 mm²/AWG 14, 10 mm strip length, L: 15 mm, L1: 8 mm, D: 4.8 mm, D1: 4.2 mm, D2: 2.3 mm blue **216-206**	
Ferrule, insulated,	
 sleeve for 4 mm²/AWG 12, 12 mm strip length, L: 16.8 mm, L1: 9.5 mm, D: 5.4 mm, D1: 4.8 mm, D2: 2.9 mm gray **216-207**	

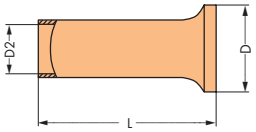




A perfect gastight crimp, both electrically and mechanically reliable.

Uninsulated Ferrules

Ferrule, uninsulated,
tin plated,
electrolytic copper,
gastight crimped



Item No.	Pack. Unit
Ferrule, uninsulated, according to DIN 46228, part 1/08.92	
216-151	1000
216-131	1000
216-152	1000
216-132	1000
216-121	1000
216-101	1000
216-122	1000
216-102	1000
216-123	1000
216-103	1000
216-124	1000
216-104	1000
216-106	1000
216-107	1000
216-108	250
216-109	250
216-110	250

Ferrules

Technical Data

Ferrule, uninsulated,
sleeve for 0.25 mm²/AWG 24,
5 mm strip length,
L: 5 mm,
D: 1.7 mm, D2: 0.75 mm
216-151

Ferrule, uninsulated,
sleeve for 0.25 mm²/AWG 24,
7 mm strip length,
L: 7 mm,
D: 1.7 mm, D2: 0.75 mm
216-131

Ferrule, uninsulated,
sleeve for 0.34 mm²/AWG 24,
5 mm strip length,
L: 5 mm,
D: 1.7 mm, D2: 0.85 mm
216-152

Ferrules

Technical Data

Ferrule, uninsulated,
sleeve for 0.34 mm²/AWG 24,
7 mm strip length,
L: 7 mm,
D: 1.7 mm, D2: 0.85 mm
216-132

Ferrule, uninsulated,
sleeve for 0.5 mm²/AWG 22,
6 mm strip length,
L: 6 mm,
D: 2.1 mm, D2: 1 mm
216-121

Ferrule, uninsulated,
sleeve for 0.5 mm²/AWG 22,
8 mm strip length,
L: 8 mm,
D: 2.1 mm, D2: 1 mm
216-101

Ferrule, uninsulated,
sleeve for 0.75 mm²/AWG 20,
6 mm strip length,
L: 6 mm,
D: 2.3 mm, D2: 1.2 mm
216-122

Ferrule, uninsulated,
sleeve for 0.75 mm²/AWG 20,
8 mm strip length,
L: 8 mm,
D: 2.3 mm, D2: 1.2 mm
216-102

Ferrule, uninsulated,
sleeve for 1 mm²/AWG 18,
6 mm strip length,
L: 6 mm,
D: 2.5 mm, D2: 1.4 mm
216-123

Ferrule, uninsulated,
sleeve for 1 mm²/AWG 18,
8 mm strip length,
L: 8 mm,
D: 2.5 mm, D2: 1.4 mm
216-103

Ferrule, uninsulated,
sleeve for 1.5 mm²/AWG 16,
6 mm strip length,
L: 6 mm,
D: 2.8 mm, D2: 1.7 mm
216-124

Ferrule, uninsulated,
sleeve for 1.5 mm²/AWG 16,
8 mm strip length,
L: 8 mm,
D: 2.8 mm, D2: 1.7 mm
216-104

Ferrule, uninsulated,
sleeve for 2.5 mm²/AWG 14,
10 mm strip length,
L: 10 mm,
D: 3.4 mm, D2: 2.2 mm
216-106

Ferrule, uninsulated,
sleeve for 4 mm²/AWG 12,
10 mm strip length,
L: 10 mm,
D: 4 mm, D2: 2.8 mm
216-107

Ferrule, uninsulated,
sleeve for 6 mm²/AWG 10,
12 mm strip length,
L: 12 mm,
D: 4.7 mm, D2: 3.5 mm
216-108

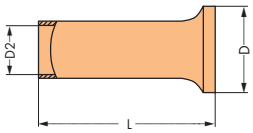
Ferrules

Technical Data

Ferrule, uninsulated,	Ferrule, uninsulated,
 sleeve for 10 mm²/AWG 8,	 sleeve for 16 mm²/AWG 6,
12 mm strip length,	12 mm strip length,
L: 12 mm,	L: 15 mm,
D: 5.8 mm, D2: 4.5 mm	D: 7.5 mm, D2: 5.8 mm
216-109	**216-110**



Only for "Variocrimp 16":
Adjust conductor cross section with crimping tool in open position.



For dimensions of uninsulated ferrules, see technical data.

Crimping Tools

Crimping tool 25 for insulated and uninsulated ferrules crimping range: 10 mm²/AWG 8, 16 mm²/AWG 6 and 25 mm²/AWG 4	Crimping tool 50 for insulated and uninsulated ferrules crimping range: 35 mm²/AWG 2 and 50 mm²/AWG 1/0

Application notes
- Improved crimping for higher conductor retention
- The crimping can be done from either side (for left- or right-handed users)
- Built-in ratchet mechanism ensures gastight crimp connection
- The crimping tool automatically opens once the crimping process is completed
- Ergonomically designed handles





Item No.	Pack. Unit	Item No.	Pack. Unit
Crimping tool 25,		**Crimping tool 50,**	
crimping range: 10 mm²/AWG 8, 16 mm²/AWG 6 and 25 mm²/AWG 4		crimping range: 35 mm²/AWG 2 and 50 mm²/AWG 1/0	
206-225	1	**206-250**	1



Insert ferruled conductor into crimping station.



Squeeze handles until ratchet mechanism is released.

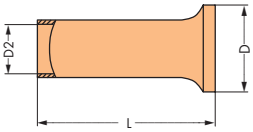
What is “gas-tight?”
In a gas-tight connection, the conductor and the ferrule are compressed together, eliminating all spaces. Under normal atmospheric conditions, neither a liquid nor a gaseous medium can penetrate into the crimped connection.
Oxidation between crimped single conductors is prevented, ruling out nearly any increase in the crimped connection resistance.
In some exceptional cases, minute, isolated spaces may be present.
These instances can be considered as closed off due to twisted wires, however.
Inadequate crimping can allow the conductor to be pulled out of the connection. Hollow spaces also remain in which oxidation can form and lead to an increase in contact resistance.

Elevated resistance is detrimental for signal transmission, as the signal flow is damped (weakened), and for power transmission, as power loss and, hence a temperature increase due to contact (risk of fire) can result.
Crimping tools with built-in ratchets are recommended, such as the WAGO Variocrimp tools.
These tools only open after the crimping process has been fully completed. Space-saving crimping from all four sides is ideal for spring clamp termination.
Cross section data for ferruled conductors indicated for WAGO products is based on this crimping method.

Cable Cutter and Uninsulated Ferrules

Cable cutter	Ferrule, uninsulated, tin plated, electrolytic copper, gastight crimped





Item No.	Pack. Unit	Item No.	Pack. Unit
Cable cutter,		**Ferrule, uninsulated**	
cutting Cu and Al conductors up to 35 mm²			
206-118	1	**216-413**	50
		216-414	50
		216-424	50
		216-425	50
		216-435	50

Ferrules

Technical Data

Ferrule, uninsulated,



sleeve for 25 mm²/AWG 4,
25 mm strip length,
L: 25 mm,
D: 9.5 mm, D2: 7.3 mm

216-413

Ferrule, uninsulated,



sleeve for 35 mm²/AWG 2,
25 mm strip length,
L: 25 mm,
D: 11 mm, D2: 8.3 mm

216-414

Ferrule, uninsulated,



sleeve for 35 mm²/AWG 2,
30 mm strip length,
L: 30 mm,
D: 11 mm, D2: 8.3 mm

216-424

Ferrule, uninsulated,



sleeve for 50 mm²/AWG 1,
30 mm strip length,
L: 30 mm,
D: 13 mm, D2: 10.3 mm

216-425

Ferrule, uninsulated,



sleeve for 50 mm²/AWG 1,
35 mm strip length,
L: 35 mm,
D: 13 mm, D2: 10.3 mm

216-435



Cutting a conductor.



A perfect gastight crimp, both electrically and mechanically reliable.

Test and Measurement Tools

Profi LCD+	Profi LED+





Item No.	Pack. Unit
Profi LCD+,	
2-pole voltage tester with LCD display,	
removable test probes, 4 mm Ø	
Measuring range: 6 V ... 1000 V AC/DC	
Degree of protection: IP65	
Resistance measurement: up to 2000 Ω	
206-807	1

Item No.	Pack. Unit
Profi LED+,	
2-pole voltage tester with LED display,	
removable test probes, 4 mm Ø	
Measuring range: 6 V ... 1000 V AC/DC	
Degree of protection: IP65	
Resistance measurement: up to 2000 Ω	
206-806	1

Item-Specific Accessories

Spare test probes,



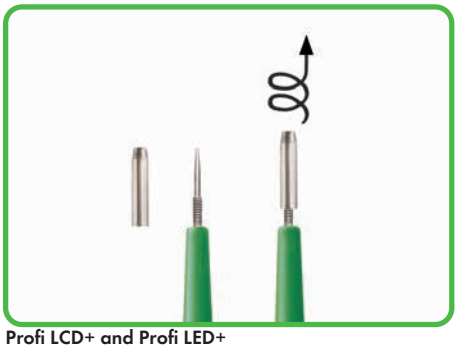
4 mm Ø (2 pieces)
206-808 25

Item-Specific Accessories

Spare test probes,



4 mm Ø (2 pieces)
206-808 25



Profi LCD+ and Profi LED+
- Improved socket contact via 4 mm Ø test probes
- Removable test probes for small test ports (suitable for all WAGO terminal blocks)



Additional product features for Profi LCD+:
- Automatic measurement range selection
- Single-pole phase testing AC >100 V
- Two-pole sequence testing (R and L)
- Continuity testing
- FI/RCD testing (30 mA) via buttons
- One-hand operation for SCHUKO and CEE sockets
- LED torch lamp function
- Automatic backlight
- Auto power-Off function
- CAT IV 1000 V
- IEC/EN 61243-3 (DIN VDE 0682-401)



Additional product features for Profi LED+:
- Automatic measurement range selection
- Single-pole phase testing AC >100 V
- Two-pole sequence testing (R and L)
- Continuity testing
- FI/RCD testing (30 mA) via buttons
- One-hand operation for SCHUKO and CEE sockets
- LED torch lamp function
- CAT IV 1000 V
- TÜV/GS tested and approved
- IEC/EN 61243-3 (DIN VDE 0682-401)

Test and Measurement Tools and Testboy

Multi-Tester	Clamp-Multi-Tester	Testboy







Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Multi-Tester,		**Clamp-Multi-Tester,** digital clamp meter		**Testboy,** with integrated flashlight	
Digital multimeter with contact-less voltage tester,		DC and AC current up to 600 A		Voltage range: 12 - 1000 V AC	
Includes: carrying case		- True RMS and min./max. value measurement			
Measuring range: AC/DC 600 V AC/DC 10 A		- DC and AC voltage up to 600 V			
Resistance measurement: up to 20 MΩ		- Manual or automatic selection of measurement range			
		- Resistance up to 60 MΩ, Capacitance measurement			
		- Acoustical continuity test			
		- Diode test, Data hold function			
		- Large LCD with backlight, LED measuring point lighting			
		- CAT III 600 V overvoltage protection, IEC/EN 61010-1			
		(DIN VDE 0411)			
		- Including batteries			
		- measurement leads and carrying bag			
206-810	1	**206-816**	1	**206-804**	1
Item-Specific Accessories					
Replacement test leads,					
red/black					
206-811	1				



Additional product features for Multi Tester:
- Contact-less voltage test AC >100 V (optical and acoustical)
- Resistance measurement up to 20 MΩ
- Acoustical continuity test
- Diode test
- Data hold function
- Auto power-off function
- LED torch lamp function
- CAT IV 600 V
- TÜV/GS tested and approved
- IEC/EN 61010-1 (DIN VDE 0411)



Voltage testing in switchgear cabinet

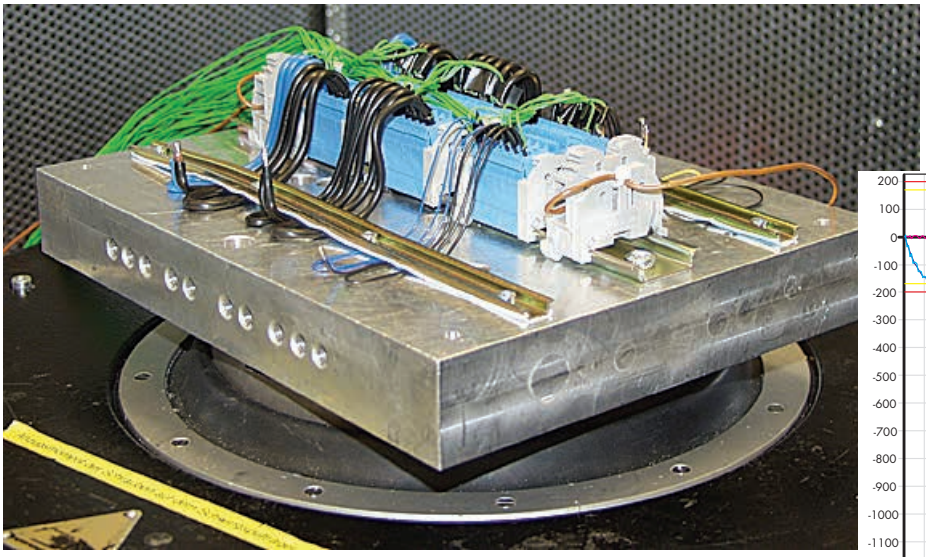


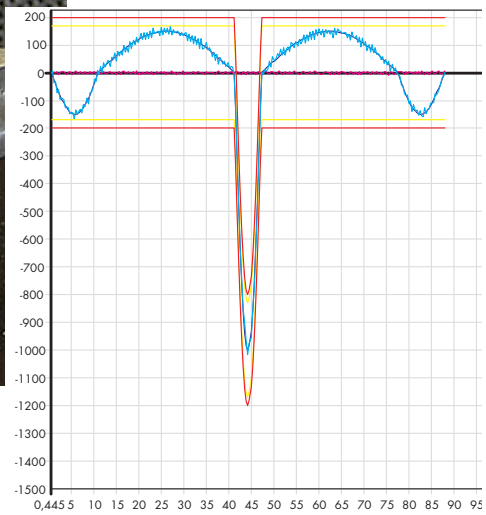
Current measurement in switchgear cabinet



A device that will reliably detect AC voltage in cables, sockets, fuses, switches, outlets, etc.

Testboy can detect the following:
- live conductors
- cable breaks
- blown fuses (in cartridge or holder)
- defective switches
- defective lamps

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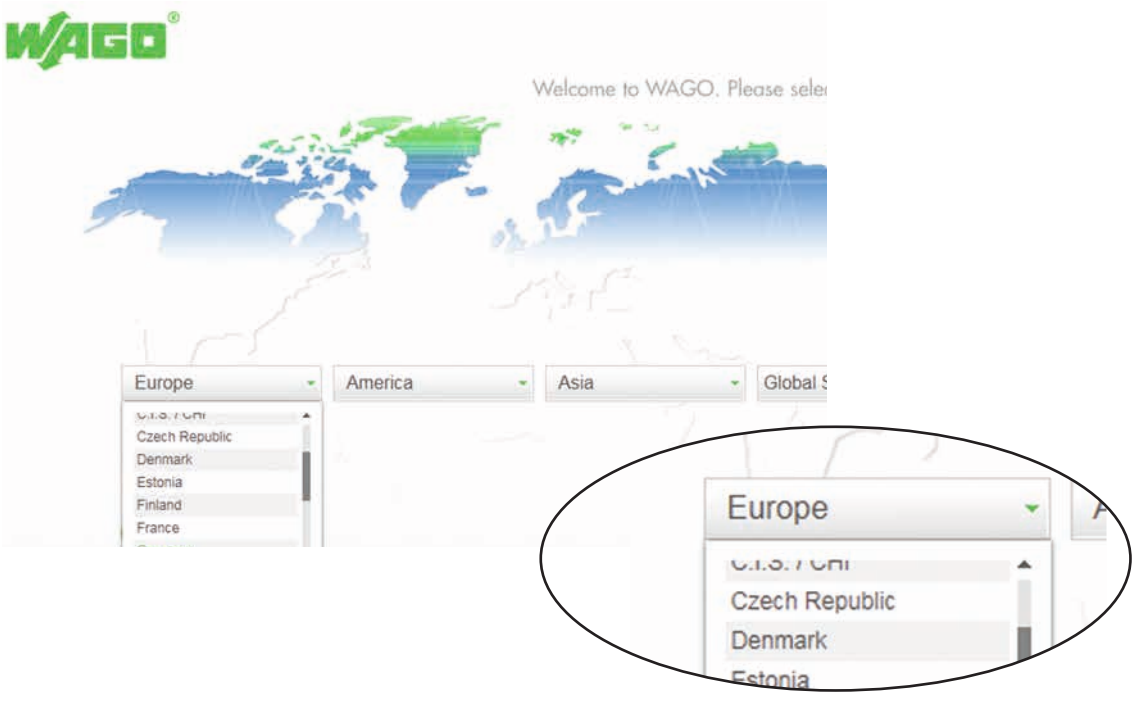
WAGO
Welcome to WAGO. Please sele
Europe
America
Asia
Global
Czech Republic
Denmark
Estonia
Finland
France
Europe
Czech Republic
Denmark
Estonia

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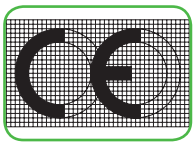
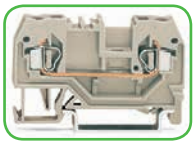
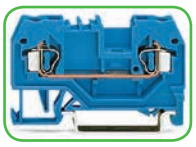
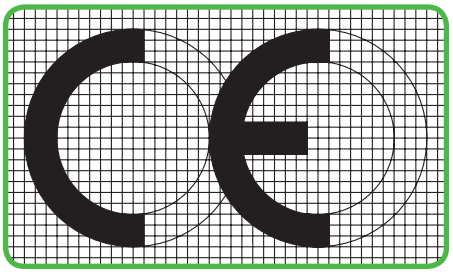
	**Technical Information** **CE Marking and EC Directives**	578
	Tests and Testing Procedures Mechanical, Electrical, Material and Environmental Tests	580
	Material Specifications Insulation Materials, Contact Plating, Contact Materials and Clamping Spring Material	606
	UL Specifications — Underwriters Laboratories, USA Tests and Testing Procedures per UL Standards	600
	**General Technical Information for Electrical Equipment in Hazardous Environments**	610
	**All terminal blocks used in hazardous environments "Ex e II" have their item nos. marked with the Ex symbol.**	
	**All terminal blocks used in intrinsically safe current circuits "Ex i" have their item nos. marked with a blue circle.**	
	International Certification Organizations — Overview	622
	Electrical Engineering Laboratory: **Product Safety for Our Customers**	609

CE Marking and EC Directives

CE Conformity Marking:

The CE conformity marking consists of the characters "CE" with the following script:



Communauté Européenne
(European Community)

EC directives are legally binding specifications for the European Community. Their goal is aligning legal and administrative specifications in the various EC member countries, in order to prevent trading hindrances arising from different national specifications.

In order to launch a product on the market, it must comply with the relevant directives. Several directives may apply for one single product, for example EMC and low voltage directives.

For WAGO products the following **EC directives** apply**:**

2006/95/EG
– Low Voltage Directive

This directive covers "complete" electrical equipment designed for use with a voltage rating between 50 and 1000V for alternating current and between 75 and 1500V for direct current.

This directive applies to products such as rail-mounted terminal blocks, terminal blocks, modular terminal blocks, terminal strips, etc. which comply with the specifications of the coordinated European standards and their specific parts (e.g., EN 60947 for rail-mounted terminal blocks and EN 60998 for terminal blocks).

The CE conformity marking must be applied to all electrical equipment, or, should this not be possible, to the smallest packing unit. With the CE marking, manufacturers attest conformity of their products to relevant directives.

In addition to the CE marking, the manufacturer provides an EC "Declaration of Conformity" for the product. The manufacturer must retain this declaration of conformity and present it on request to a national surveillance authority.

2004/108/EC
– EMC Directive

This directive applies to any apparatuses, equipment and systems containing electric or electronic components. The BAPT (Bundesamt für Post und Telekommunikation / Federal Office for Post and Telecommunications) is authorized to draw a distinction between elementary and complex components. Elementary components such as resistors, transformers, ICs, relays, etc. are not provided with marking. For complex components, such as electro-motors, electronic cards, thermostats, etc., the EMC directives apply only if these components are sold directly to the end user.

All products subject to the application range of the EMC directive must display the CE marking on their housing. This marking proves conformity with the corresponding standards.

2006/42/EG
– Machinery Directive

This directive applies to complete machines or equipment.

The manufacturers of machines or equipment are, however, obliged to use components which meet the corresponding EC directives (e.g., low voltage or EMC directives).
Fulfillment and conformity with these directives is required for the free exchange of goods within Europe.

94/9/EC Ex Protection Directive, ATEX 100 a

General technical information on electrical equipment used in hazardous environments.

IEC/EN Specifications

In particular, the following standards apply to the design and application of the terminal blocks and connectors contained in this catalog:

IEC 60364-1
VDE 0100-100
/.. Erection of power installations with nominal voltages up to 1000V
- Fundamental principles, assessment of general characteristics, definitions

EN 50110-1
VDE 0105 Part 1
/ Operation of electrical installations

IEC 61140
EN 61140
VDE 0140 Part 1
/ Protection against electric shock
- Common aspects for installation and equipment

VDE 0100-482
HD 384.4.48251
/Erection of power installations with nominal voltages up to 1000V
Fire protection for special risks or hazards

VDE 0100 Part 710
/- Requirements for special installations or locations
Part 710: Medically used areas

VDE 0100-718
/- Requirements for special installations or locations
Part 718: Institutional facilities

IEC 60664-1
EN 60664-1
VDE 0110 Part 1
/ Insulation coordination for equipment within low-voltage systems
- Principles, requirements and tests

IEC 60204-1
EN 60204-1
VDE 0113 Part 1
/ Safety of machinery - Electrical equipment of machines
- General requirements

VDE 0118 Part 1
/ Installation of electrical equipment in mines
- General requirements

IEC 60079-0
EN 60079-0
VDE 0170 Part 1
/ Electrical apparatus for potentially explosive atmospheres
- General requirements

IEC 60079-7
EN 60079-7
VDE 0170 Part 6
/ Electrical apparatus for potentially explosive atmospheres
- Increased safety “e”

IEC 60079-11
EN 60079-11
VDE 0170 Part 7
/ Electrical apparatus for potentially explosive atmospheres
- Intrinsic safety “i”

IEC 60079-14
EN 60079-14
VDE 0165 Part 1
/ Erection of electrical installations in hazardous areas

IEC 60079-15
EN 60079-15
VDE 0170 Part 16
/ Electrical apparatus for potentially explosive atmospheres
- Type of protection “n”

IEC 60038
HD 472 S1
VDE 0175
/ IEC standard voltages

DIN VDE 0298 Part 4
/ Application of cables and flexible cords in power installations
- Recommended values for current carrying capacities of cables for fixed installation and for flexible cables

IEC 60112
EN 60112
VDE 0303 Part 11
/ Method for determining the comparative and the proof tracking indices of solid insulating materials

IEC 60529
EN 60529
VDE 0470 Part 1
/ Degrees of protection provided by enclosures (IP code)
- Testing equipment and testing method

IEC 61439-1
EN 61439-1
VDE 0660 Part 600
/ Low-voltage switchgear and control-gear assemblies
- General requirements

IEC 60439-3
EN 60439-3
VDE 0660 Part 504
/- Particular requirements for low-voltage switchgear and control gear assemblies intended to be installed in places where unskilled persons have access
- Distribution boards

IEC 61643-1
EN 61643-11
VDE 0675 Part 6-11
/ Surge protective devices connected to low-voltage power distribution systems, - Performance requirements and testing methods

IEC 60335-1
EN 60335-1
VDE 0700 Part 1
/ Safety of household and similar electrical appliances
- General requirements

IEC 60598-1
EN 60598-1
VDE 0711 Part 1
/ Lighting fixtures
- General requirements and tests

IEC 60715
EN 60715
/- Standardized carrier rails for mechanical attachment of electrical devices in switchgear units

IEC 60999-1
EN 60999-1
VDE 0609 Part 1
/ Connecting devices - Electrical copper conductors; Safety requirements for screw-type and screwless-type clamping units
- General requirements and particular requirements for clamping units for conductors 0.2 mm² up to 35 mm² (included)

IEC 60999-2
EN 60999-2
/- General requirements and particular requirements for clamping units for conductors from 35 mm² up to 300 mm² (included)

IEC 60998-1
EN 60998-1
VDE 0613 Part 1
/ Connecting devices for low-voltage circuits for household and similar purposes
- General requirements

IEC 60998-2-1
EN 60998-2-1
VDE 0613 Part 2-1
/- Special requirements for connecting devices as standalone devices with screw-type terminals

IEC 60998-2-2
EN 60998-2-2
VDE 0613 Part 2-2
/- Special requirements for connecting devices as standalone devices with screwless-type terminals

IEC 60998-2-3
EN 60998-2-3
VDE 0613 Part 2-3
/- Special requirements for connecting devices as standalone devices with insulation piercing clamping units

IEC 60947-1
EN 60947-1
VDE 0660 Part 100
/ Low-voltage switchgear and controlgear
- General rules

IEC 60947-7-1
EN 60947-7-1
VDE 0611 Part 1
/- Ancillary equipment;
Terminal blocks for copper conductors

IEC 60947-7-2
EN 60947-7-2
VDE 0611 Part 3
/- Ancillary equipment; Ground (earth) conductor terminal blocks

DIN VDE 0611 Part 4
/ Rail-mounted terminal blocks for connection of copper conductors;
- Multi-level distribution rail-mounted terminal blocks up to 6 mm²

IEC 60947-7-3
EN 60947-7-3
VDE 0611 Part 6
/- Ancillary equipment; Safety requirements for fuse terminal blocks

IEC 61984
EN 61984
VDE 0627
/ Connectors - Safety requirements and tests

Tests and Testing Procedures per IEC/EN Standards

Products such as connecting devices, rail-mounted terminal blocks and connectors, etc., have their own product-specific test specifications. The following sections with the most important tests are limited to a description of the test procedures and an explanation of the test purpose. The data shown (e.g., voltages, temperatures, forces) only serve as illustration and may differ depending on the test.

Mechanical Tests

All WAGO products meet requirements for the following mechanical tests:

• Termination Requirements

Conductor Termination
Two WAGO connection systems are proven in the field of Spring Pressure Connection termination Technology:
The **PUSH WIRE® connection** for applications requiring solid conductors (e.g., for lighting and building wiring, telecommunications, house communication or alarm systems).
Conductor sizes:
AWG 24 – 12 (0.28 – 4 mm²)
The **universal CAGE CLAMP® spring connection** for solid, stranded and fine-stranded conductors, designed for a variety of industrial, electrical and electronic applications (e.g., fine-stranded conductors in the elevator industry, in power stations, in the chemical and automotive industry, and aboard ships).
Conductor sizes:
AWG 28 – 2 (0.08 – 35 mm²)

The **CAGE CLAMP®S** connection is a further development of the universal CAGE CLAMP® spring connection, allowing the termination of AWG 24 – 6 (0.2 – 16 mm²) solid, stranded and fine-stranded conductors (AWG 4/25 mm² only "f-st") and offering all the benefits and safety of the original CAGE CLAMP®. Furthermore, the CAGE CLAMP®S connection technology allows solid and stranded conductors from 20 to 6 AWG (0.5 – 16 mm²), as well as AWG 20 – 6 (0.5 – 16 mm²) ferruled stranded conductors to be connected by simply pushing them in.

The conductor entry hole is perfectly suited for the insulation diameter of the rated conductor cross-section, thus providing good conductor guidance.

This is particularly important for vibration-prone applications.

Fine-stranded conductors of small or very small size are highly flexible, and they deform when pushed against the conductor stop in terminal blocks. As a result, the conductor insulation – not the copper conductor – may be clamped, causing intermittent contact or no contact at all. In order to prevent conductor insulation from being inserted into the clamp, insulation stops are available for WAGO rail-mounted terminal blocks up to AWG 12 (4 mm²), even providing protection for AWG 28 (0.08 mm²) conductors (see Section 5).

Rated Cross-Sections and Connectable Conductors
I. According to IEC 60999-1 / EN 60999-1 / VDE 0609 Part 1, Table 1:

Rated Cross Section	Theoretical Diameter of Largest Conductor							Connectable Conductors	
	Metric			AWG					
	Rigid		Flexible	Rigid			Flexible	Rigid	Flexible
	Solid	Stranded			[b] Solid	[b] Class B Stranded	[c] Class I, K, M Stranded	To be defined in the corresponding product standard	
mm²	mm	mm	mm	Cond. Cross Section	mm	mm	mm		
0.2	0.51	0.53	0.61	24	0.54	0.61	0.64		
0.34	0.63	0.66	0.8	22	0.68	0.71	0.8		
0.5	0.9	1.1	1.1	20	0.85	0.97	1.02		
0.75	1	1.2	1.3	18	1.07	1.23	1.28		
1	1.2	1.4	1.5	–	–	–	–		
1.5	1.5	1.7	1.8	16	1.35	1.55	1.6		
2.5	1.9	2.2	2.3[a]	14	1.71	1.95	2.08		
4	2.4	2.7	2.9[a]	12	2.15	2.45	2.7		
6	2.9	3.3	3.9[a]	10	2.72	3.09	3.36		
10	3.7	4.2	5.1	8	3.34	3.89	4.32		
16	4.6	5.3	6.3	6	4.32	4.91	5.73		
25	–	6.6	7.8	4	5.45	6.18	7.26		
35	–	7.9	9.2	2	6.87	7.78	9.02		

NOTE: The diameters of the largest rigid and flexible conductors are based on Table 1 in accordance with IEC 60228 A and IEC 60344 and on ASTM B172-71 [4], IECA Publication S-19-81 [5], IECA Publication S-66-524 [6] and IECA Publication S-66-516 [7] for AWG conductors.
a) Dimensions for class 5 flexible conductors only, according to IEC 60228 A.
b) Nominal diameter + 5 %
c) Largest diameter for conductors of classes I, K, M + 5 %
In practical use, the conductor cross sections are approx. 5% below the values stated in the table!

The IEC 60999-1/EN 60999-1/VDE 0609 clamping unit specification, part 1, contains the following requirement in Section 7.1:

Clamping units must be suitable for connecting unprepared conductors.

Under normal operating conditions, direct clamping (i.e., direct conductor connection to the current bar of the terminal block) provides optimal contact quality since all risk factors arising from anti-splaying methods are avoided. Occasionally, due to wire handling on site, conductor anti-splaying methods may be necessary. Various methods may be used for this (as illustrated below).

For applications in special areas with extremely corrosive atmospheres, special conditions apply.

In this case, we recommend using either solid copper conductors or fine-stranded copper conductors with properly crimped, tin-coated copper ferrules or copper pin terminals.
As with solid copper conductors, the fine strands are crimped to a dense inner core. This prevents ingress of the aggressive atmosphere (depending on the ppm concentration), which can diffuse into the conductor bundle along the individual strands and cause corrosion deposits between the individual wires and the clamping point.

II. According to IEC 60999-2, Table 1:

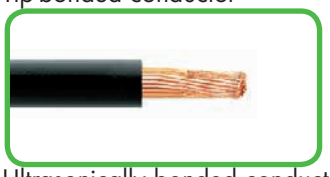
Rated Cross Section	Theoretical Diameter of Largest Conductor					Connectable Conductors	
	Metric		AWG/kcmil				
	Rigid Stranded	Fine-stranded[a)]	Gage	Rigid Stranded	Fine-stranded		
mm^2	mm	mm		mm	mm	Rigid	Flexible
50	9.1	11	1/0	9.64	12.08	To be defined in the corresponding product standard.	
70	11	13.1	2/0	11.17	13.54		
95	12.9	15.1	3/0	12.54	15.33		
–	–	–	4/0	14.08	17.22		
120	14.5	17	250	15.34	19.01		
150	16.2	19	300	16.8	20.48		
185	18	21	350	18.16	22.05		
–	–	–	400	19.42	24.05		
240	20.6	24	500	21.68	26.57		
300	23.1	27	600	23.82	30.03		

a) Dimensions for class 5 flexible conductors only, according to IEC 60228A.

NOTE: The diameters of the largest rigid and flexible conductors are based on Table 1 and Table 3 of IEC 60228 A and, on ASTM B 172-71 [1], IECA Publication S-19-81 [2], IECA Publication S-66-524 [3] and IECA Publication S-66-516 [7] for AWG conductors.



Tip-bonded conductor



Ultrasonically bonded conductor



Crimped pin terminal (gas-tight), preferably made of copper with a tin-plated surface.



Tin-plated copper ferrule (gas-tight crimped)
Anti-splaying methods require a terminal block one size larger than the nominal cross-section of the conductor to be terminated.
The cross section values assigned to the individual products with ferrules are based on the WAGO Variocrimp method from all sides.Gas-tight, crimped twin ferrules may be used, provided the ferrule is inserted all the way into the clamping unit and that there is a sufficient clearance and creepage distance between adjacent potentials.

One Conductor per Clamping Unit
A number of VDE specifications specify that **only one conductor must be connected to each clamping unit** (e.g., DIN VDE 0611, Part 4, 02.91, Section 3.1.9). The same applies to the recommendations of the German Automotive Industry Association (VDA) "Supply specification for the electrical equipment of machines, mechanical installations and buildings in the automotive industry" according to Section 15.1.1.3; Draft 8.93.

Other VDE and EN specifications likewise recommend the connection of **only one conductor per clamping unit**, unless the clamping unit is specifically tested and approved for the connection of several conductors, for example:
VDE 0609, Part 1, 12.00/
EN 60999-1:2000, Section 7.1
VDE 0660, Part 600, 06.10/
EN 61439-1:2009
Section 8.6.3
VDE 0113, Part 1, 06.07/
EN 60204-1:2006, Section 13.1.1
One conductor per clamping unit is therefore recommended to meet the safety requirements of these relevant specifications. This WAGO principle is the basis for a number of other technical and economic advantages:

- Each conductor may be terminated or removed without affecting previously connected conductors.
- Where re-wiring is required, only the conductor to be changed is removed from the clamping point, all other conductors remain safely clamped.
- Each conductor is clamped independently.
- Any combination of conductor cross-section can be connected.

WAGO rail-mounted terminal blocks offer different solutions to increase the number of clamping units:
The most common way of increasing the number of clamping points is by branching one conductor into two or three conductors.
WAGO offers 3- and 4-conductor terminal blocks, making additional jumpers unnecessary.

Tests and Testing Procedures per IEC/EN Standards (continued)
Mechanical Tests (continued)

- Pull-Out Test to IEC/EN 60947-7-1, IEC/EN 60998-2-2, IEC/EN 60999-1

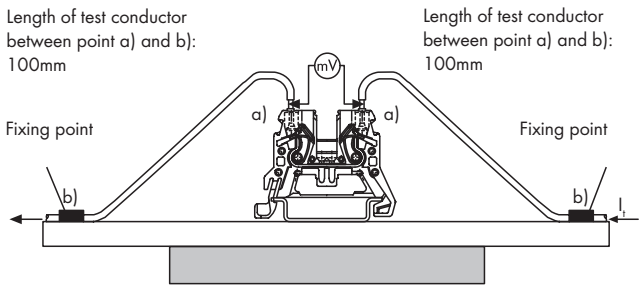
This test simulates the mechanical stress on the clamping unit when, for example, the installer pushes the conductor aside to better access/operate the adjacent clamping unit, or verifies if the conductor is connected properly by briefly pulling on it.
During the test, a pulling force is applied without jerking, for one minute, to the connected conductor. The pulling force is selected according to the cross-sectional area. The larger the cross section of the conductor, the higher the pull-out force that is selected. For example, the pulling force is 40N for a conductor having a cross-section of 1.5mm² (AWG 16) and 100N for a conductor with a cross-section of 16mm² (AWG 6). The values specified by the standard are the same for both screw-clamp and spring-clamp terminal blocks. During the test, the conductor must neither slip out of the clamping unit, nor break near the clamping unit.

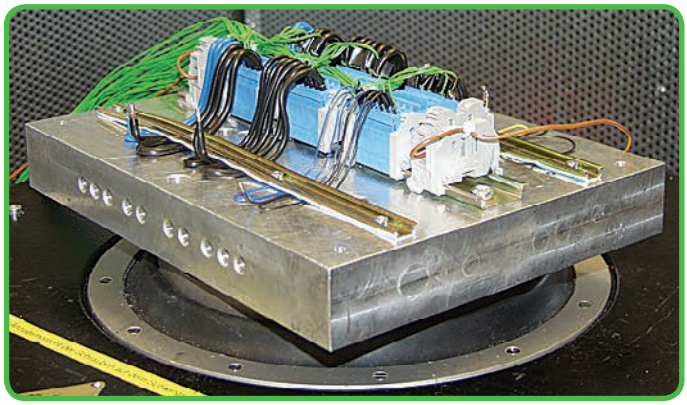
Conductor Pull-Out Forces
The clamping units of screwless terminal blocks must withstand the pull-out forces as follows:
IEC 60947-1/EN 60947-1/VDE 0660, Part 100, Table 5: Low-voltage switch-gear and controlgear - General rules
IEC 60947-7-1/EN 60947-7-1/ VDE 0611,
Part 1: Rail-mounted terminal blocks for copper conductors
IEC 60998-2-1/EN 60998-2-1/ VDE 0613,
Part 2-1, Table 104
IEC 60998-2-2/ EN 60998-2-2/VDE 0613,
Part 2-2, Table 103:
Connecting devices for low-voltage cir-cuits for household and similar purposes. Particular requirements for connecting devices as separate entities with screw-clamp or screwless terminal blocks.
IEC 60999-1/EN 60999-1/VDE 0609, Part 1, Table 3:
IEC 60999-2/EN 60999-2/VDE 0609, Part 101,
Table 2:
Safety requirements for screw-clamp and screwless clamping units for electrical copper conductors.

Rated Cross-Sectional Area		Pull-Out Forces per IEC/EN		
mm²	AWG/kcmil	60947-7-1 N	60998-2-2 N	60999-1/ -2 N
0.2 0.34	24 22	10 15	10 15	10 15
0.5 0.75	20 18	20 30	20 30	20 30
1 1.5	– 16	35 40	35 40	35 40
2.5 4	14 12	50 60	50 60	50 60
6 10	10 8	80 90	80 90	80 90
16 25	6 4	100 135	100 135	100 135
– 35	3 2	156 190	190	190
– 50	1 1/0	236 236		236
70 95	2/0 3/0	285 351		285 351
– 120	4/0 250	427 427		427 427
150 185	300 350	427 503		427 503
– 240	400 500	503 578		503 578
300	600	578		578

• Shock Test to IEC/EN 60068-2-27; Railway Applications IEC/EN 61373

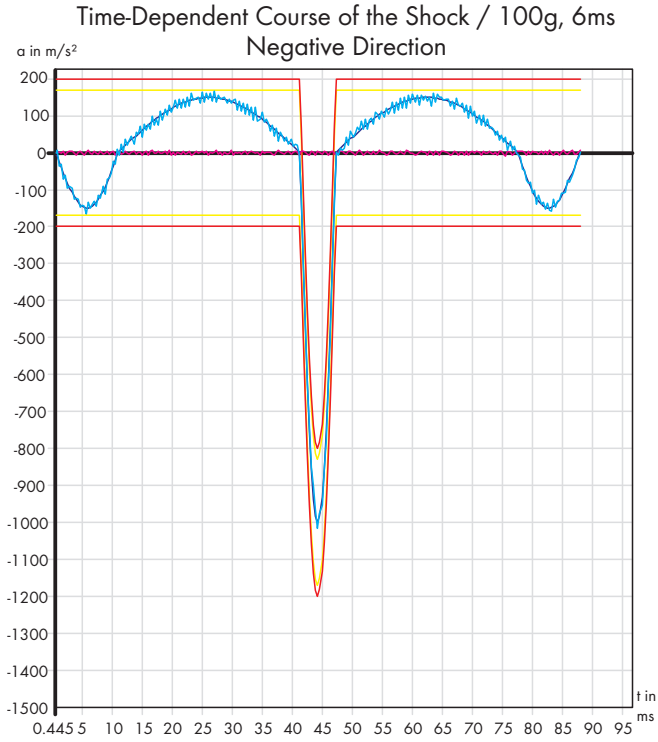
The shock test is similar to the vibration test except that, instead of continuous vibrations, single shocks are applied to the test specimen. Shock tests are usually carried out with an acceleration of 20g, for example, over a period of 11ms. Tests for special requirements often call for much higher values. Like the vibration tests, shock tests are primarily used to test the voltage drop variation or contact breaks, etc.

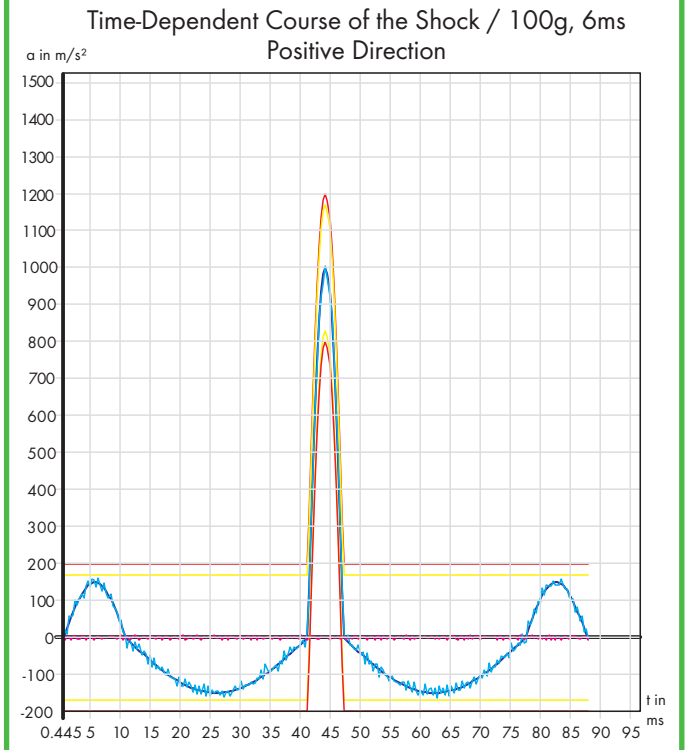




E.g. shock requirement

acc. to IEC/EN 60068-2-27
Half-sine shock
100g acceleration 6ms duration Shock direction: 3 axes
(3 shock in positive direction and 3 shocks in negative direction)





Tests and Testing Procedures per IEC/EN Standards (continued)
Mechanical Tests (continued)

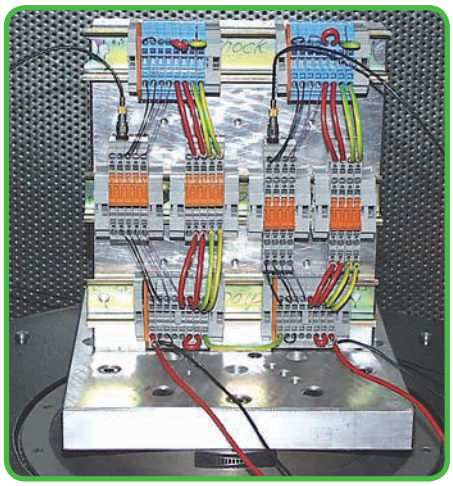
- Vibration Test to IEC/EN 60068-2-6; Shipbuilding GL, LR, DNV; Railway Applications EN 61373

This test determines whether vibrations, such as those produced in the vicinity of machines or in vehicles, will permanently affect the electrical connection, or if contact breaks will occur during vibrations. Using a vibration table, the test specimen is subjected to vibration in each of the X, Y and Z axes (see pictures). The amplitude, acceleration and, in particular the frequency of the vibration must vary during the test.

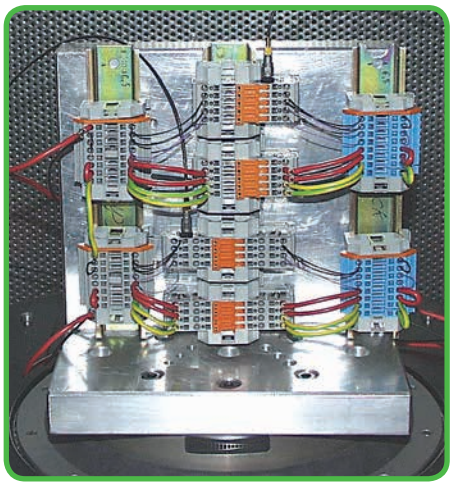
In a common test procedure, for example, a wide frequency band is continuously run up to 2000Hz, at different accelerations up to 20g and different amplitudes up to 20mm. Test duration is 90 minutes per axis.



Other test types are performed using a single fixed frequency. The exact test procedure shall vary considerably, depending on how the product is to be used. Some test specifications require the determination of possible resonant frequencies, i.e., determining if resonance occurs within the frequency spectrum to be passed through. Analysis of specimen behavior under the influence of resonant frequencies is performed via special testing procedure.



Beyond the standardized testing mentioned above, each market segment performs additional testing. Examples include a railway company testing on rolling electrical equipment, or by testing by shipping classification societies such as Germanischen Lloyd, Lloyd's Register of Shipping, Det Norske Veritas.
Though the requirements of such test procedures are particularly demanding, test arrangements are identical for all of them. During vibrations, possible contact breaks are monitored on an oscilloscope. Voltage drop is measured before and after the test to detect permanent failures, i.e., checking if electrical resistance at the clamping unit has not increased beyond the permissible limit. The smaller this value is, the smaller the contact resistance of the clamping unit.



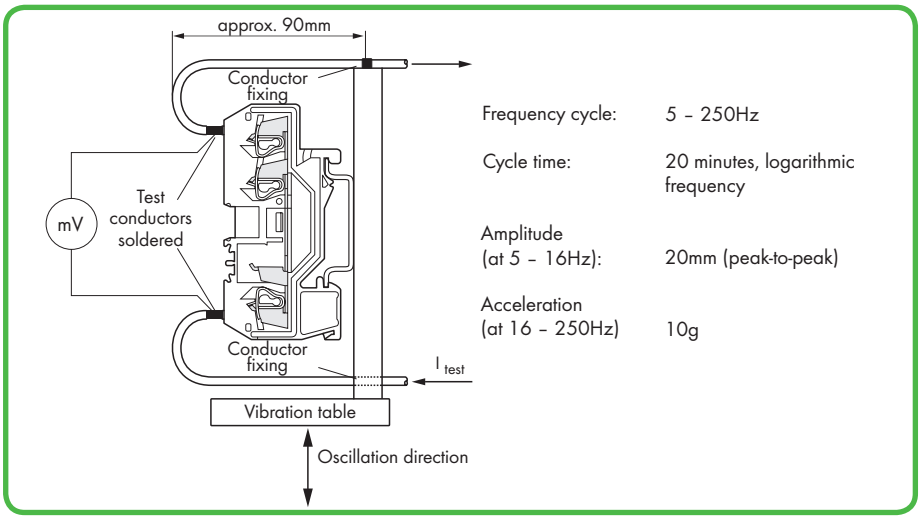
The test is passed if:

- the conductor has neither slipped out of the terminal block nor been damaged,
- the maximum permissible voltage drop has not been exceeded
- and neither contact breaks have occurred nor a defined break time has been exceeded.

The test specimen must not be damaged in any way that might affect future use.

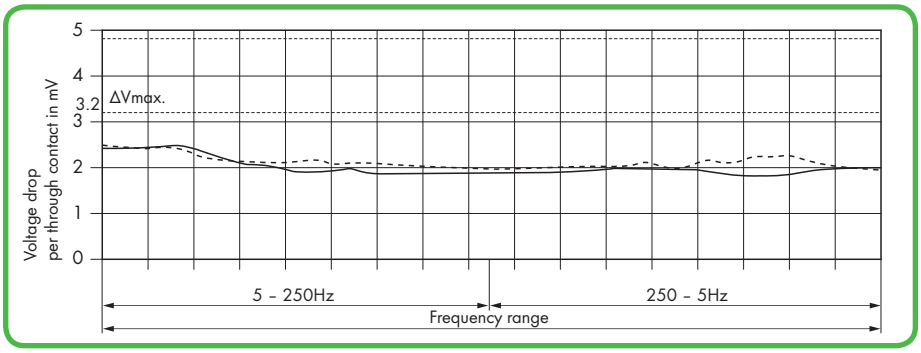
Since their inception, CAGE CLAMP® and CAGE CLAMP®S connections have been routinely tested for their resistance to shock/ vibration in connection with approval tests.

Additionally, WAGO conducts special self-resonance behavior tests on clamping systems, using different terminal block and conductor arrangements.
In these tests, a wide frequency band up to 2000Hz, at different accelerations up to 20g and different amplitudes up to 20mm, is passed continuously. The figure provides an example of a self-resonance vibration test configuration.



Self-resonance vibration test set-up

All WAGO spring clamp connections meet these test requirements.



Frequency cycle

Rail-mounted terminal block: Item no. 280-681
Test current: 1/10 I_N = 2.4 A

———— Test specimen no. 1
- - - - - - - - - Test specimen no. 2

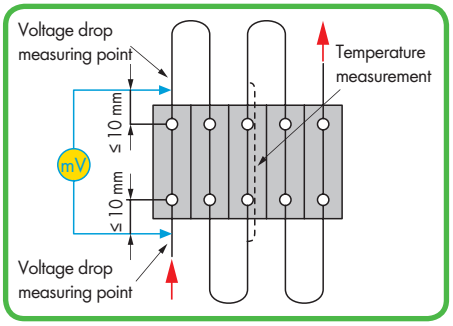
Tests and Testing Procedures per IEC/EN Standards (continued)

Electrical Tests

All WAGO products meet requirements for the following electrical tests:

• Temperature-Rise Test to IEC/EN 60947-7-1

The Temperature Rise Test examines the clamping point, including surrounding insulation, at rated current, over-current and short-circuit current levels.
Unless otherwise specified in the related equipment specification, e.g., by specifying the nominal currents of the equipment, terminal blocks and connectors are tested with current loads as specified in the respective construction specification.
For rail-mounted terminal blocks according to IEC 60947-7-1/EN 60947-7-1/VDE 0611, Part 1, or terminal blocks according to IEC 60998-1/EN 60998-1/ VDE 0613, Part 1, the temperature rise must not exceed 45 Kelvin.

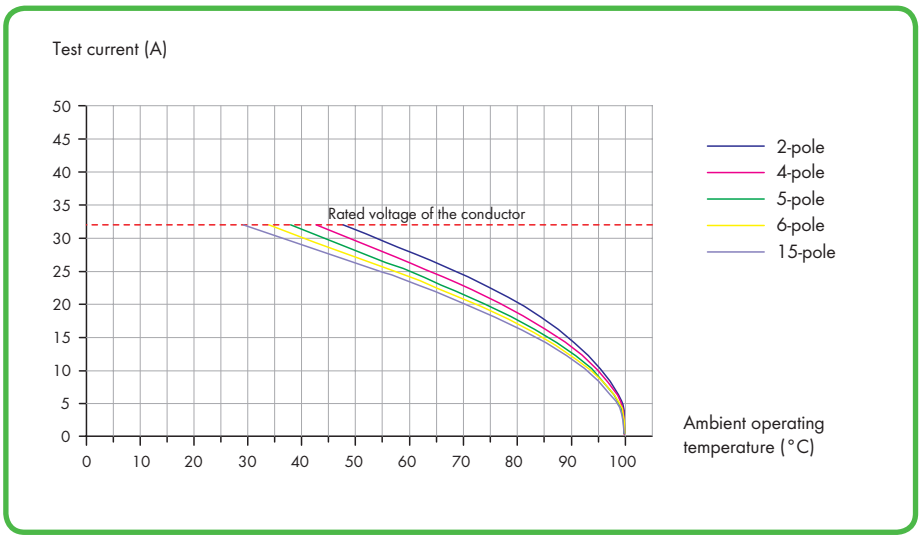


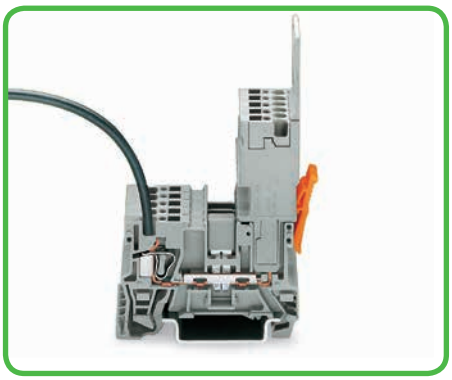
Test arrangement: "Temperature Rise Test"

Rated Cross-Section	Test Current per IEC/EN		Conductor Size	Test Current per IEC/EN 60947-7-1 Table 5
	60947-7-1 Table 4	60998-1 Table 5		
mm²	A	A	AWG/kcmil	A
0.2	4	4	24	4
0.34	5	5	22	6
0.5	6	6	20	8
0.75	9	9	18	10
1	13.5	13.5	-	
1.5	17.5	17.5	16	16
2.5	24	24	14	22
4	32	32	12	29
6	41	41	10	38
10	57	57	8	50
16	76	76	6	67
25	101	101	4	90
35	125	125	2	121
-			1	139
50	150		1/0	162
70	192		2/0	185
95	232		3/0	217
-			4/0	242
120	269		250 kcmil	271
150	309		300 kcmil	309
185	353		350 kcmil	353
240	415		500 kcmil	415
300	520		600 kcmil	520

• Current-Carrying Capacity Curve (Derating Curve) to IEC/EN 60512-5-2

Both the design requirements and the connnector's current-carrying capacity must be checked by the user when selecting connectors.
This data depends on the connected wire size, ambient temperature, number of simultaneously loaded poles, and connector's internal resistance, as well as PCB layout and connector materials if required. In accordance with IEC/EN 60512-5-2, the relationship between current, ambient temperature and temperature rise up to the connector's upper temperature limit is illustrated via current-carrying capacity curve (derating curve). The connector must only be operated up to this temperature limit (sum of the self-generated heat and the ambient temperature) without being damaged or destroyed during operation.
Functioning of a current-carrying capacity curve (derating curve) according to EN 60512-5-2 is shown by an application using a derating curve for the X-COM®-SYSTEM: This application requires each pole of a 4-pole connector be subjected to a load of 32A. Based on the basic curve determined for this number of poles with a conductor cross-section of 4 mm², it has been determined the maximum ambient temperature is 42°C. The current must be reduced at higher ambient temperatures, e.g., to 19A at an ambient temperature of 80°C.



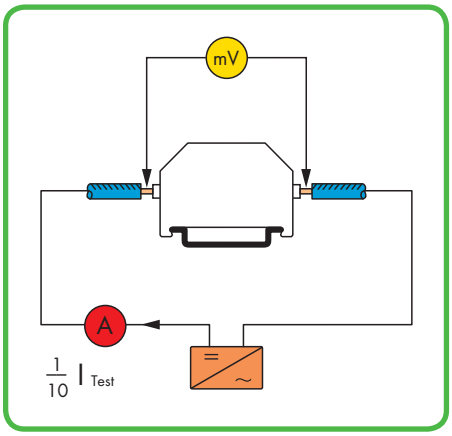


1-conductor/	
1-pin carrier terminal block	769-176
Conductor cross section:	4 mm² "f-st" (AWG 12)
1-conductor female plugs	769-102 to 769-115
Conductor cross-section:	4 mm² "f-st" (AWG 12)
Conductor loop length:	1m

Tests and Testing Procedures per IEC/EN Standards (continued)
Electrical Tests (continued)

• Voltage Drop Test to IEC/EN 60947-7-1

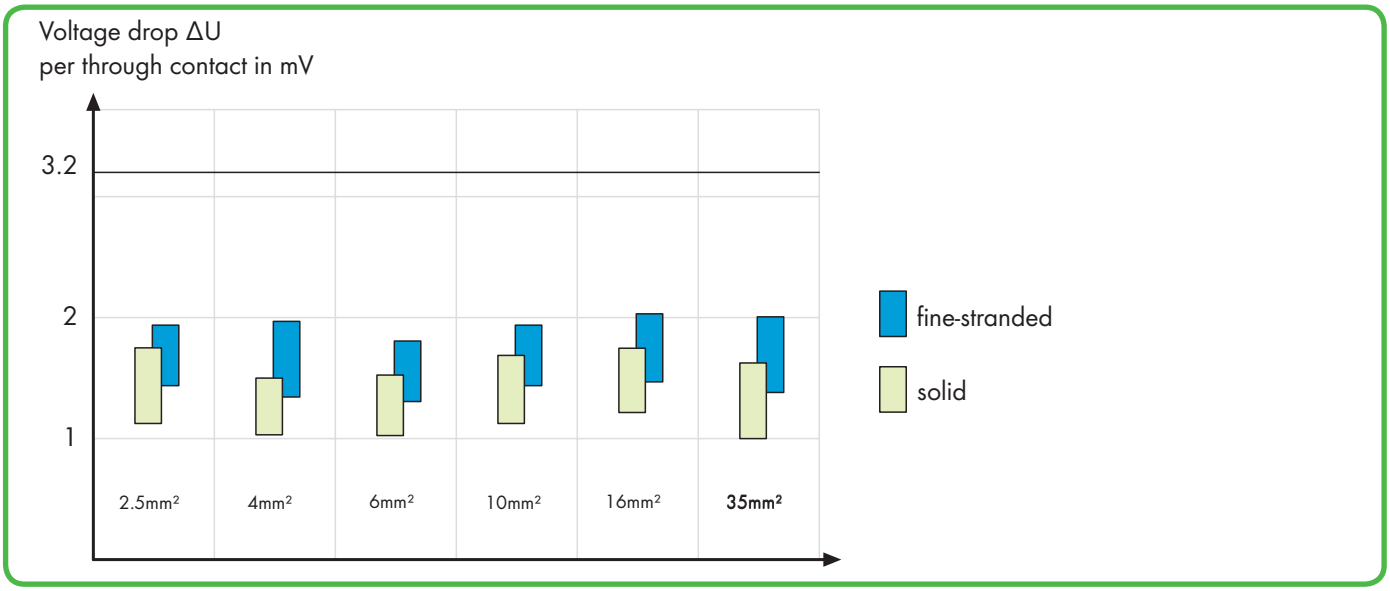
The Voltage Drop Test evaluates clamping point quality under stresses such as vibrations, temperature changes and corrosive influences, in order to verify that the contact point is gas-tight.



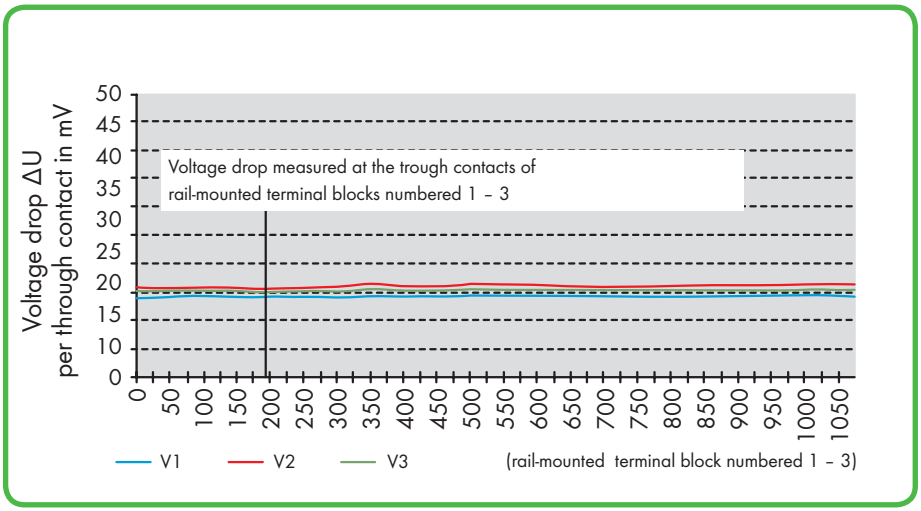
Test arrangement: "Voltage Drop Test"

The CAGE CLAMP® and CAGE CLAMP®S connections enclose and contain flexible conductors. Therefore, a variation of the voltage drop with solid and fine-stranded conductors is so small that its influence may be negligible for the practical application of the terminal blocks.

Typical voltage drop variations for solid and fine-stranded conductors of 280 to 285 Series CAGE CLAMP® rail-mounted terminal blocks:



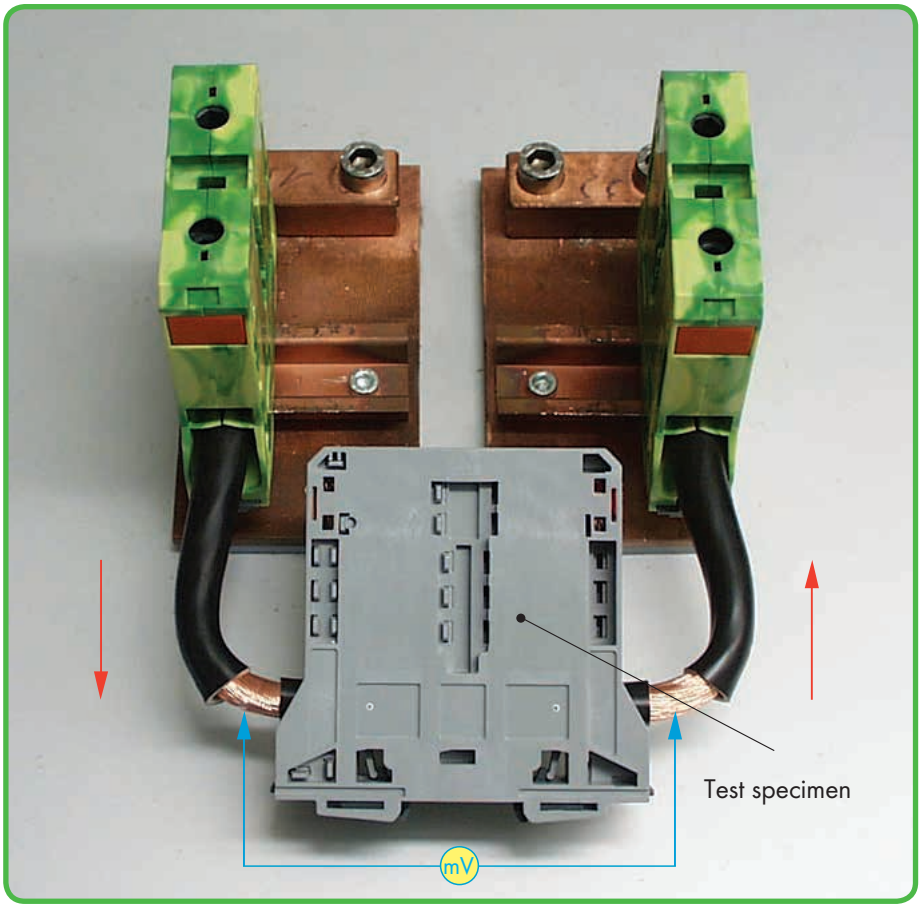
Example: Current load cycling test result for rail-mounted terminal blocks (item no. 285-195) using 95 mm² (AWG 4/0) fine-stranded copper conductors:



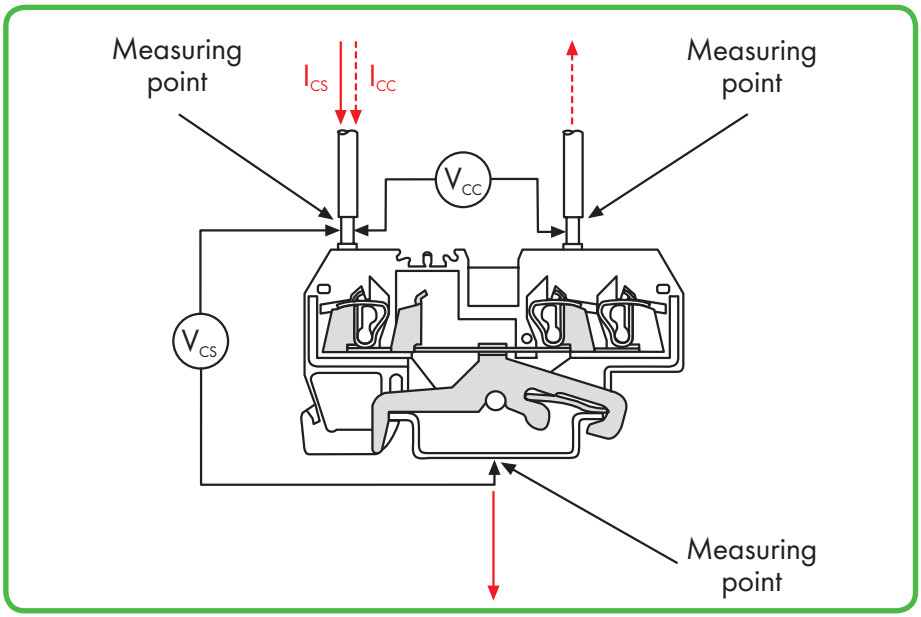
Voltage drop variation over longer periods under current load cycling conditions is shown for WAGO rail-mounted terminal blocks.

• Short-Time Withstand Current Test (Short-Circuit Withstand Capacity) to IEC/EN 60947-7-1

Apart from the rated current which can be constantly applied to an electrical device, operation-related short peak currents consistently occur in electrical installations; e.g., when motors are started. Also, in the event of a short-circuit, a high current can flow for a short time until the fuse element melts. Terminal blocks and connecting devices must be able to withstand such conditions. The short-time withstand capacity is defined in standards such as IEC/EN 60947-7-1 for through rail-mounted terminal blocks, as a current-carrying capacity of 120A per mm² nominal diameter for the duration of 1 second.



The short-circuit current of the 95 mm²/ AWG 4/0 high-current terminal block (item no. 285-195) is **11400 A**.



During the short-time withstand current test, the ground (earth) conductor rail-mounted terminal blocks are subjected three times for 1s each to a current load of 120A/mm².
The pass criterion for the test is the voltage drop (limit value and constancy).

Tests and Testing Procedures per IEC/EN Standards (continued)
Electrical Tests (continued)

• Insulation Parameters to IEC/EN 60664-1

Clearances and Creepage Distances
The following generally applies:
The equipment specification contains data for the measurement of clearances and creepage distances, or refers to the data contained in the basic standard DIN EN 60664-1/VDE 0110, part 1.
DIN EN 60664-1/VDE 0110, part 1, contains the clearances and creepage distances in compliance with insulation coordination requirements. That is, the insulation parameters of equipment are assigned to:

- the anticipated surge voltages,
- the parameters of the protection device against surge voltage
- the anticipated environmental conditions and the protection measures against pollution.

This standard is based on IEC 60604-1.

Overvoltage categories for electrical equipment:
A specific overvoltage category must be defined on the basis of the following, general description:
- Equipment in **overvoltage category I** is intended to be connected to the fixed electrical installations of buildings. Protective means are taken outside the equipment – either in the fixed installation or between the fixed installation and the equipment – to limit transient overvoltages to the specific level.
- Equipment in **overvoltage category II** is to be connected to the fixed electrical installations of buildings.
  Note: Examples of such equipment are household appliances, portable tools and similar loads.
- Equipment in **overvoltage category III** is part of the fixed electrical installations and other equipment where a higher degree of availability is expected.
  Note: Examples of such equipment are distribution boards, circuit breakers, wiring systems (IEV 826-06-01, including cables, bus-bars, junction boxes, switches, socket-outlets) in the fixed installation and equipment for industrial use and other equipment, e.g., stationary motors with permanent connection to the fixed installation.
- Equipment in **overvoltage category IV** is for use at or in the proximity of the origin of the electrical installations of buildings upstream of the main distribution board.
  Note: Examples include electricity meters, primary overcurrent protection devices and ripple control units.

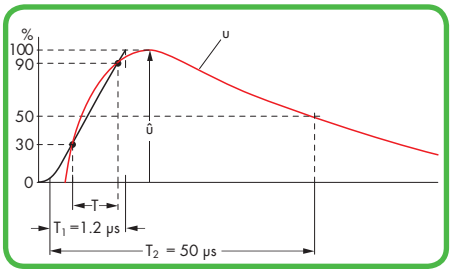
Clearances, Rated Surge Voltages, Overvoltage Categories, Pollution Degrees

Surge voltages (table 1) are a decisive factor in determining air distances.

The basis forms the **overvoltage category**, i.e., the allocation of the equipment to the expected surge voltage, and the **conductor-ground voltage** derived from the rated line voltage in installations with a grounded Y (star) point.

In ungrounded installations, or installations where the conductor is not grounded, the voltage between conductors is applicable in the same way as conductor voltage to ground.

❶ Voltage pulse 1.2/50



acc. to EN 61180-1 / VDE 0432, Part 10

The rated surge voltage shall be selected from Table 1 corresponding to the overvoltage category specified and to the rated voltage of the equipment.
Table F.1- Rated surge voltage for equipment energized directly from the low-voltage mains (DIN EN 60664-1/VDE 0110, Part 1)
❶ Voltage curve: 1.2/50 µs per IEC60060-1/VDE 0432, Part 1.

Nominal voltage of the supply system [1] (mains) based on IEC 60038 [3]		Voltage line to neutral derived from nominal voltage a.c. or d.c. up to and including	Rated surge voltage[2] Overvoltage category[4]			
Three-phase V	Single-phase V	V	I V	II V	III V	IV V
		50	330	500	800	1500
		100	500	800	1500	2500
	120-240	150[5]	800	1500	2500	4000
230/400 277/480		300	1500	2500	4000	6000
400/690		600	2500	4000	6000	8000
1000		1000	4000	6000	8000	12000

[1] See Annex B for application to existing different low-voltage mains and their nominal voltages.
[2] Equipment with these rated overvoltage levels can be used in installations in accordance with IEC 60364-4-443.
[3] The / mark indicates a 4-wire three-phase distribution system. The lower value is the voltage line-to-neutral, while the higher value is the voltage line-to-line. Where only one value is indicated, it refers to 3-wire, three-phase systems and specified the value line-to-line.
[4] See 4.3.3.2.2 fo an explanation of the overvoltage categories.
[5] The nominal voltages for single-phase systems in Japan are 100V or 100 - 200V. The value for the rated surge voltage is, however, derived from the voltage gaps line-to-neutral for a voltage level of 150V (see Annex B)

The nominal supply voltage and the corresponding rated surge voltage values apply for grounded and ungrounded circuits.

Pollution Degrees

Pollution factors are all solid, liquid or gaseous foreign matter which may reduce the dielectric strength or the specific surface resistance. Factors are divided into 4 classes based on expected environmental conditions:

		Examples of pollution degrees for assigned areas:
Pollution degree 1:	No pollution, or only dry, non-conductive pollution occurs. The pollution has no influence.	Open, unprotected insulated equipment in air-conditioned or clean, dry rooms.
Pollution degree 2:	Only non-conductive pollution occurs; occasional, temporary conductivity caused by condensation can also be expected.	Open, unprotected insulated equipment in occupied areas, shops, laboratories, mechanical workshops and medical rooms.
Pollution degree 3:	Conductive pollution occurs, or dry, non-conductive pollution occurs which will become conductive due to condensation.	Open, unprotected insulated equipment in industrial, business and farming areas, e.g., unheated rooms, workshops and boiler rooms.
Pollution degree 4:	The pollution generates persistent conductivity caused by conductive dust, rain or wet conditions.	Open, unprotected insulated equipment for outdoor use.

Table F.2 - Clearances to Withstand Transient Overvoltages

DIN EN 60664-1/ VDE 0110, Part 1

Required impulse withstand voltage[1)5)]	Minimum clearances in air up to 2000 m above sea level					
	Case A (inhomogeneous field, see 3.15)			Case B homogeneous field (see 3.14)		
	Degree of pollution[6]			Degree of pollution[6]		
	1	2	3	1	2	3
kV	mm	mm	mm	mm	mm	mm
0.33[2)]	0.01	0.2[3)4)]	0.8[4)]	0.01	0.2[3)4)]	0.8[4)]
0.40	0.02			0.02		
0.50[2)]	0.04			0.04		
0.60	0.06			0.06		
0.80[2)]	0.10			0.10		
1	0.15			0.15		
1.2	0.25	0.25		0.2		
1.5[2)]	0.5	0.5		0.3	0.3	
2	1	1	1	0.45	0.45	
2.5[2)]	1.5	1.5	1.5	0.60	0.60	
3	2	2	2	0.80	0.80	
4.0[2)]	3	3	3	1.2	1.2	1.2
5	4	4	4	1.5	1.5	1.5
6.0[2)]	5.5	5.5	5.5	2	2	2
8.0[2)]	8	8	8	3	3	3
10	11	11	11	3.5	3.5	3.5
12[2)]	14	14	14	4.5	4.5	4.5
15	18	18	18	5.5	5.5	5.5
20	25	25	25	8	8	8
25	33	33	33	10	10	10
30	40	40	40	12.5	12.5	12.5
40	60	60	60	17	17	17
50	75	75	75	22	22	22
60	90	90	90	27	27	27
80	130	130	130	35	35	35
100	170	170	170	45	45	45

Dimensioning of Clearances

per DIN EN 60664-1/ VDE 0110,

Part 1, Table F.2.
Select the minimum clearances in accordance with the rated surge voltages and pollution degree. For the operating life of the equipment, do not go below these minimum clearances.
Table F.2 contains a list of information for Case A, the inhomogeneous field and for Case B, the homogeneous field.
This involves an electric field with essentially constant (Case B) or non-constant (Case A) voltage gradients between the electrodes.
Equipment with a clearance in accordance with Case A, in other words rated for the most unfavorable case, can be employed without evidence of surge voltage testing.
Equipment whose clearances are dimensioned acc. to Case B, or between A and B, requires verification by the surge voltage test.

The clearances shown in Table F.2 are applicable for an installation height of up to 2000m above sea level.

Values for clearances above 2000m must be multiplied by a high correction factor in accordance with Table A.2.

[1)] This voltage is
- for functional insulation: the maximum surge voltage expected to occur across the clearance (see 5.1.5);
- for basic insulation directly exposed to or significantly influenced by transient overvoltages from the low-voltage mains (see 4.3.3.3, 4.3.3.4.1 and 5.1.6): and the rated surge voltage for the equipment;
- for other basic insulation (see 4.3.3.4.2): the highest surge voltage that can occur in the circuit.
for reinforced insulation, see 5.1.6.

[2)] Preferred values specified in 4.2.3.

[3)] For printed wiring material, the values for pollution degree 1 apply except that the value must not be less than 0.04mm, as specified in Table F.4.

[4)] The minimum clearances given for pollution degree 2 and 3 are based on the reduced withstand characteristics of the associated creepage distance under humidity conditions (see IEC 60664-5).

[5)] For parts or circuit within equipment subject to surge voltages according to 4.3.3.4.2 interpolation of values is allowed. However, standardization is achieved by using the preferred series of surge voltage values based on 4.2.3.

[6)] The dimensions for pollution degree 4 are as specified for pollution degree 3, except that the minimum clearance is 1.6mm.

Tests and Testing Procedures per IEC/EN Standards (continued)
Electrical Tests (continued)

• Insulation Parameters to IEC/EN 60664-1 (continued)

Creepage Distances, Rated Voltages, Material Groups

Criteria for dimensioning creepage distances are the rated voltages, pollution degrees and material groups.
The pollution degrees specified for the clearances, and its quoted allocation to locations, is also applicable for creepage distances.
Tables F.3 a and F.3 b of DIN EN 60664-1/ VDE 0110, Part 1 contain the rated voltages which have to be considered for dimensioning the minimum creepage distance.

Table F.3a - Single-Phase, 3- or 2-Wire, AC or DC Systems

Nominal voltage of the supply system (mains)* V	Voltages for Table F.4	
	For insulation line-to-line[1]	For insulation line-to-earth[1]
	All systems V	Three-wire systems mid-point grounded V
12.5	12.5	
24 25	25	
30	32	
42 48 50**	50	
60	63	
30 - 60	63	32
100**	100	
110 120	125	
150**	160	
200	200	
110 - 200	200	100
220	250	
110 - 220 120 - 240	250	
300**	320	
220 - 440	500	250
600**	630	
480 - 960	1000	500
1000**	1000	

[1] Line-to-earth insulation level for non-grounded or impedance-grounded systems equals that for line-to-line, as the operating voltage to ground of any line can, in practice, approach full line-to-line voltage. This is because the actual voltage to ground is determined by the insulation resistance and capacitive reactance of each line to ground; thus, low (but acceptable) insulation resistance of one line can in effect ground it and raise the other two to full line-to-line voltage to ground.

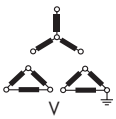
* For the relationship to rated voltage see 4.3.2.

**These values correspond to the values given in Table F.1.

Table A.2: Height Correction Factors (DIN EN 60664-1/VDE 0110, Part 1)

Height (elevation) m	Standard air pressure kPa	Multiplier for distance
2000	80	1
3000	70	1.14
4000	62	1.29
5000	54	1.48
6000	47	1.7
7000	41	1.95
8000	35.5	2.25
9000	30.5	2.62
10000	26.5	3.02
15000	12	6.67
20000	5.5	14.5

Table F.3b - Single-Phase, 4- or 3-Wire AC Systems

Nominal voltage of the supply system (mains)*	Voltages for Table F.4		
	For insulation line-to-line[1]	For insulation line-to-ground[1]	
	All systems	Three-phase 4-wire systems neutral grounded[2] 	Three-phase 3-wire systems non-grounded[1] or corner grounded 
V	V	V	V
60	63	32	63
110 120 127	125	80	125
150**	160		160
200	200		200
208	200	125	200
220 230 240	250	160	250
300**	320		320
380 400 415	400	250	400
440	500	250	500
480 500	500	320	500
575	630	400	630
600**	630		630
660 690	630	400	630
720 830	800	500	800
960	1000	630	1000
1000**	1000		1000

[1] Line-to-earth insulation level for non-grounded or impedance-grounded systems equals that for line-to-line, as the operating voltage to ground of any line can, in practice, approach full line-to-line voltage. This is because the actual voltage to ground is determined by the insulation resistance and capacitive reactance of each line to ground; thus, low (but acceptable) insulation resistance of one line can in effect ground it and raise the other two to full line-to-line voltage to ground.

[2] For equipment used on both three-phase 4-wire and three-phase 3-wire systems, grounded and non-grounded, use only the values for 3-wire systems.

* For the relationship to rated voltage see 4.3.2.

** These values correspond to the values given in Table F.1.

Material Groups

Insulating materials are classified into four groups according to their CTI (Comparative Tracking Index) as follows:

Material group I: 600 ≤ CTI
Material group II: 400 ≤ CTI < 600
Material group III a: 175 ≤ CTI < 400
Material group III b: 100 ≤ CTI < 175

The CTI values above refer to values obtained in accordance with DIN EN 60664-1 / VDE 0110, Part 1 on samples specially made for this purpose and tested with Solution A.

Tests and Testing Procedures per IEC/EN Standards (continued)
Electrical Tests (continued)

• Insulation Parameters to IEC/EN 60664-1 (continued)

Table F.4 - Creepage Distances to Avoid Failure due to Tracking
DIN EN 60664-1/ VDE 0110, Part 1

Voltage[1] rms	Minimum Creepage Distances								
	Printed Wiring Material		Pollution Degree						
	Pollution Degree								
	1 All Material Groups	2 All Mat. Gr. except IIIb	1 All Material Groups	2 Material Group I	2 Material Group II	2 Material Group III	3 Material Group I	3 Material Group II	3 Material Group III[2]
V	mm	mm	mm	mm	mm	mm	mm	mm	mm
10	0.025	0.040	0.080	0.400	0.400	0.400	1.000	1.000	1.000
12.5	0.025	0.040	0.090	0.420	0.420	0.420	1.050	1.050	1.050
16	0.025	0.040	0.100	0.450	0.450	0.450	1.100	1.100	1.100
20	0.025	0.040	0.110	0.480	0.480	0.480	1.200	1.200	1.200
25	0.025	0.040	0.125	0.500	0.500	0.500	1.250	1.250	1.250
32	0.025	0.040	0.14	0.53	0.53	0.53	1.30	1.30	1.30
40	0.025	0.040	0.16	0.56	0.80	1.10	1.40	1.60	1.80
50	0.025	0.040	0.18	0.60	0.85	1.20	1.50	1.70	1.90
63	0.040	0.063	0.20	0.63	0.90	1.25	1.60	1.80	2.00
80	0.063	0.100	0.22	0.67	0.95	1.30	1.70	1.90	2.10
100	0.100	0.160	0.25	0.71	1.00	1.40	1.80	2.00	2.20
125	0.160	0.250	0.28	0.75	1.05	1.50	1.90	2,10	2.40
160	0.250	0.400	0.32	0.80	1.10	1.60	2.00	2.20	2.50
200	0.400	0.630	0.42	1.00	1.40	2.00	2.50	2.80	3.20
250	0.560	1.00	0.56	1.25	1.80	2.50	3.20	3.60	4.00
320	0.75	1.60	0.75	1.60	2.20	3.20	4.00	4.50	5.00
400	1.0	2.0	1.0	2.0	2.8	4.0	5.0	5.6	6.3
500	1.3	2.5	1.3	2.5	3.6	5.0	6.3	7.1	8.0 (7.9)[4]
630	1.8	3.2	1.8	3.2	4.5	6.3	8.0 (7.9)[4]	9.0 (8.4)[4]	10.0 (9.0)[4]
800	2.4	4.0	2.4	4.0	5.6	8.0	10.0 (9.0)[4]	11.0 (9.6)[4]	12.5 (10.2)[4]
1000	3.2	5.0	3.2	5.0	7.1	10.0	12.5 (10.2)[4]	14.0 (11.2)[4]	16.0 (12.8)[4]
1250			4.2	6.3	9.0	12.5	16.0 (12.8)[4]	18.0 (14.4)[4]	20.0 (16.0)[4]
1600			5.6	8.0	11.0	16.0	20.0 (16.0)[4]	22.0 (17.6)[4]	25.0 (20.0)[4]
2000			7.5	10.0	14.0	20.0	25.0 (20.0)[4]	28.0 (22.4)[4]	32.0 (25.6)[4]
2500			10.0	12.5	18.0	25.0	32.0 (25.6)[4]	36.0 (28.8)[4]	40.0 (32.0)[4]
3200			12.5	16.0	22.0	32.0	40.0 (32.0)[4]	45.0 (36.0)[4]	50.0 (40.0)[4]
4000			16.0	20.0	28.0	40.0	50.0 (40.0)[4]	56.0 (44.8)[4]	63.0 (50.4)[4]
5000			20.0	25.0	36.0	50.0	63.0 (50.4)[4]	71.0 (56.8)[4]	80.0 (64.0)[4]
6300			25.0	32.0	45.0	63.0	80.0 (64.0)[4]	90.0 (72.0)[4]	100.0 (80.0)[4]
8000			32.0	40.0	56.0	80.0	100.0 (80.0)[4]	110.0 (88.0)[4]	125.0 (100.0)[4]
10000			40.0	50.0	71.0	100.0	125.0 (100.0)[4]	140.0 (112.0)[4]	160.0 (128.0)[4]
12500			50.0[3]	63.0[3]	90.0[3]	125.0[3]			
16000			63.0[3]	80.0[3]	110.0[3]	160.0[3]			
20000			80.0[3]	100.0[3]	140.0[3]	200.0[3]			
25000			100.0[3]	125.0[3]	180.0[3]	250.0[3]			
32000			125.0[3]	160.0[3]	220.0[3]	320.0[3]			
40000			160.0[3]	200.0[3]	280.0[3]	400.0[3]			
50000			200.0[3]	250.0[3]	360.0[3]	500.0[3]			
63000			250.0[3]	320.0[3]	450.0[3]	600.0[3]			

[1] This voltage for:
- functional insulation; the working voltage;
- basic and supplementary insulation of the circuit energized directly from the mains (see 4.3.2.2.1): for the voltage rationalized through Table F.3a or F.3b, based on the rated voltage of the equipment, or the rated insulation voltage;
- basic and supplementary insulation of systems, equipment and internal circuits not energized directly from the mains (see 4.3.2.2.2.): the highest rms voltage which can occur in the system, equipment or internal circuit when supplied at rated voltage and under the most onerous combination of operation conditions within equipment rating.

[2] Material group IIIb is not recommended for applications in pollution degree 3 above 630V.

[3] Provisional data based on extrapolation. Technical committees who have other information based on experience may use their dimensions.

[4] The values in brackets shall only be applied for reducing creepage distances if a rib is used (see 5.2.5).

The high degree of accuracy of the creepage distances given in the table does not imply that the measuring accuracy must be of the same quality.

Based on the application, WAGO terminal blocks and connectors are suitable for pollution degrees 2 or 3 and for overvoltage categories II or III.

Example:
WAGO rail-mounted through terminal blocks
per IEC 60947-7-1/
EN 60947-7-1/VDE 0611, Part 1,
have the following ratings:

800V/8kV/3,
i.e.

Rated voltage	800V
Rated surge voltage	8kV
Pollution degree	3
Overvoltage category	III

WAGO connectors for household and similar fixed installations are rated in accordance with IEC 60998-1/ EN 60998-1/ VDE 0613, Part 1, Table 3.

Example:
WAGO PUSH WIRE® connectors for junction boxes
According to this standard,
these connectors are rated for:
* 400V/4kV/2
* grounded circuits,

i.e.

Rated voltage	400V
Rated surge voltage	4kV
Pollution degree	2
Overvoltage category	II

Table 4: Clearances and Creepage Distances
(IEC/EN 60998-1)

Rated Insulation Voltage V	Creepage Distances, Clearances mm
≤ 130	1.5
> 130 and ≤ 250	3.0
> 250 and ≤ 450	4.0
> 450 and ≤ 750	6.0
> 750	8.0

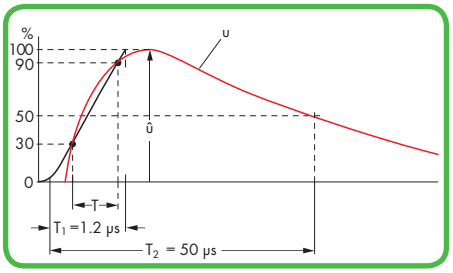
Tests and Testing Procedures per IEC/EN Standards (continued)
Electrical Tests (continued)

• Power-Frequency Withstand Voltage Test to IEC/EN 60998-1

This test procedure verifies creepage distances. Creepage distances, i.e., the distances of creeping currents, are caused by conductive impurities on the surface of the insulation housing. Apart from the amount of impurities to which a terminal block is subjected, for example, the plastic material and housing design are also involved in generating creeping currents. The insulation material of the housing may be carbonized by a creeping current, which increases conductivity even more.
The specimen is tested using a power-frequency withstand voltage for a short time. For example, a rail-mounted terminal block designed to operate at 800V nominal voltage is usually tested using 2000V alternating voltage for one minute. The test is considered to be passed if no flashovers or breakdowns have occurred.

• Rated Impulse Withstand Voltage Test to IEC/EN 60664-1

This test verifies the clearances of a product. In simplified terms, a clearance is the distance between two poles of a terminal block. If this distance is too small, voltage peaks may cause flashovers or breakdowns. The arrangement of the rated impulse withstand voltage test is identical to that of the power frequency withstand voltage test; the test voltages, however, are comparatively higher and the testing times shorter, e.g., 7.3kV over 50µs (see figure).



Voltage pulse; measurement curve (red) and auxiliary curve (black) for calculating the rate of rise of the pulse and the resulting (virtual) peak of the curve.

T	Time interval for calculating the rate of rise
T_1	Front time (duration between start of impulse and reaching the peak)
T_2	Total pulse duration

The test values are the values at sea level as specified in the relevant test specification.
The values indicated in the catalog correspond to an altitude of 2000m.
The test is considered to be passed if no flashovers or breakdowns have occurred.

• IP Ratings for Electrical Equipment to IEC/EN 60529

Alphanumeric nomenclature for type of protection		
Code letters IP	Protection against touch and solid objects or water	IP (Ingress Protection)
First digit 0 to 6	Indicates degrees of protection against touch or solid objects.	If indicating the degree of protection requires only one digit, the other (second) digit must be substituted for with an X.
Second digit 0 to 8	Indicates degree of protection against water.	

First digit:		Second digit:	
IP0X	No protection against touch, or solid objects	IPX0	No protection against water
IP1X	Protected against solid objects > 50 mm	IPX1	Protected against vertically falling water
IP2X	Protection against solid objects > 12 mm (e.g. finger)	IPX2	Protected against dripping water - 15° angle
IP3X	Protected against solid objects > 2.5 mm	IPX3	Protected against water spray
IP4X	Protected against solid objects > 1 mm	IPX4	Protection against water splash
IP5X	Dust-protected (limited ingress, no harmful deposits)	IPX5	Protected against water jet, e.g., from a nozzle
IP6X	Dust-tight (totally protected against dust)	IPX6	Protected against flooding
		IPX7	Protected against temporary immersion
		IPX8	Protected against continuous immersion

IP vs. NEMA	
IP Code	NEMA
10	1
11	2
54	3
14	3R
54	3S
55	4&4X
52	5
67	6&6P
52	12&12K
54	13

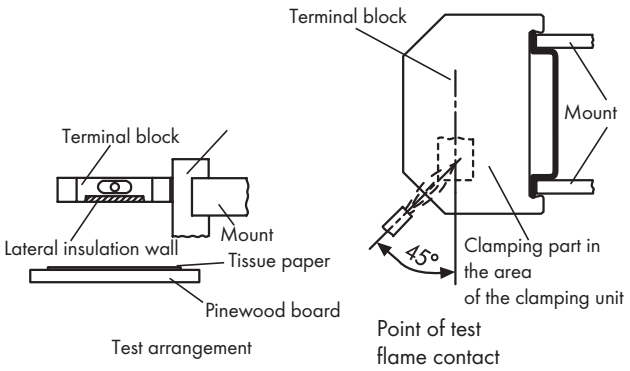
Tests and Testing Procedures per IEC/EN Standards (continued)

Material Tests

All WAGO products meet requirements for the following material tests:

• Needle Flame Test to IEC/EN 60947-1

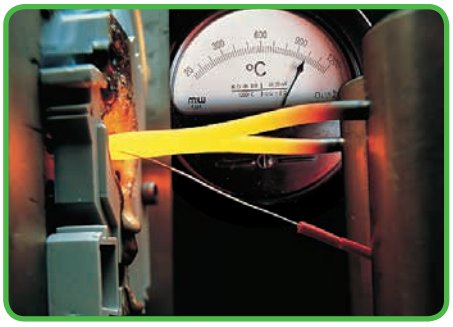
This test simulates flames that may arise under certain conditions (e.g, fault current over a creepage distance, overloading parts or components). Nearby parts can also be affected by such flames. Not only is the ignition of the test specimen resulting from an intrinsic defect tested, but also its behavior when other parts are ignited.



Flames shall not be further fed by the insulation materials used, creating a larger fire. The test specimen is exposed to a standard gas flame during a defined time period (e.g.,10 seconds). After the test flame has been removed, the specimen must self-extinguish within 30 seconds. Furthermore, a layer of tissue paper located beneath the specimen shall not be ignited by glowing particles falling from the specimen.

• Glow-Wire Test to IEC/EN 60998-1, IEC/EN 60695-2-11

In the event of failure, a high current may cause a conductor to glow.



However, the glowing conductor shall not cause ignition of the product involved (e.g., a rail-mounted terminal block). For the glow-wire test, the tip of the glow-wire is pressed against a surface of the test specimen (see picture).
The position of the test specimen, surface to be tested, test duration, and glow-wire temperature (e.g., 960°C over 30 seconds, or 850°C over 5 seconds) are specified in the standards.

The test is to be passed if there are no visible flames or permanent glowing, or if flames or glowing extinguish within 30 seconds after removal of the glow-wire. Furthermore, a layer of tissue paper located beneath the specimen shall not be ignited by glowing particles falling from the specimen.

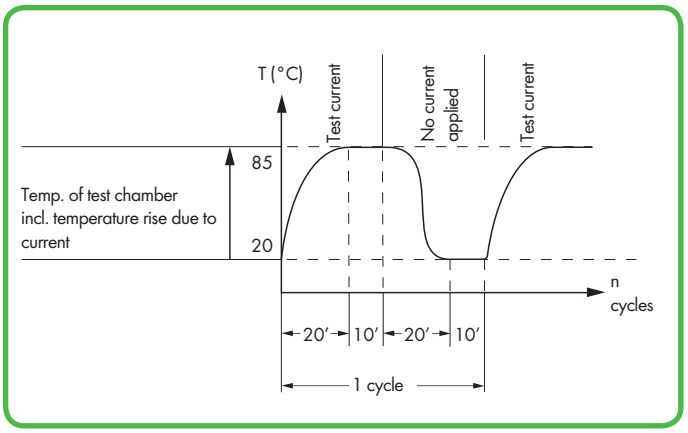
Tests and Testing Procedures per IEC/EN Standards (continued)

Environmental Tests

The following tests show how a product reacts when exposed to an aggressive environment. Frequently occurring industrial atmospheres capable of influencing the long-term consistency of clamping points, are simulated in the thermal chamber for climatic tests.

All WAGO products meet requirements for the following environmental tests:

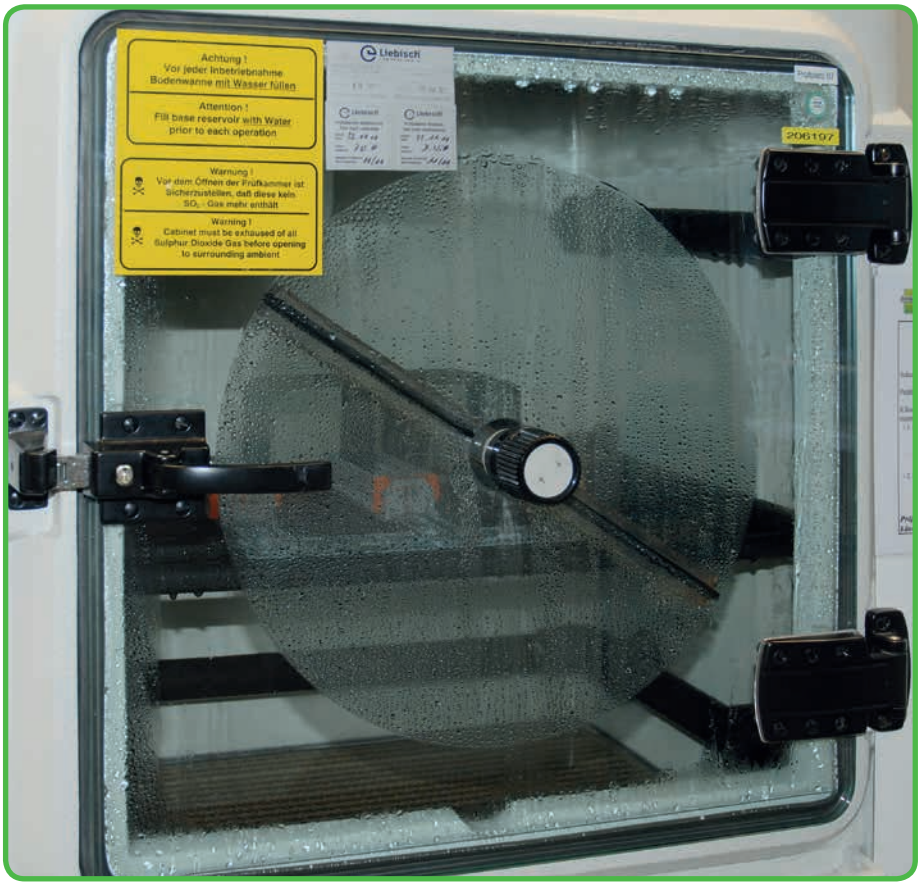
• Temperature Cycling Test to IEC/EN 60947-7-1, IEC/EN 60998-2-2



The rated current is applied to the test specimen during temperature rise and when the temperature has reached its maximum value; during the second half of the cycle the current is zero. Voltage drop is measured every 24 cycles, and may not exceed a maximum value or vary greatly. The voltage drop measured at the end of the 192nd cycle may not exceed 1.5 times the value measured after the 24th cycle. After the test, an inspection shall show no changes impairing further product use.

• Industrial Atmospheres to EN ISO 6988, IEC/EN 60068-2-42, IEC/EN 60068-2-60

Sulfur and its combustion products are particularly aggressive pollutants commonly found in industrial environments.
A test procedure simulating such corrosive conditions consists of exposing a test specimen to water condensation in variable atmospheres containing sulfur dioxide.



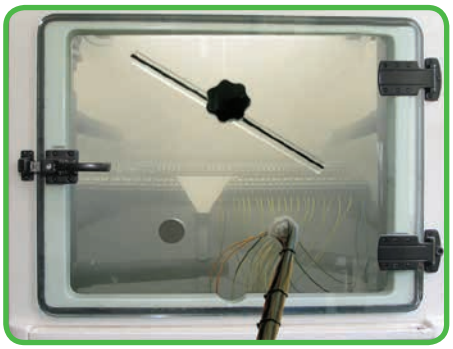
A humid atmosphere is first created in a climatic chamber by heating an aqueous sulfur dioxide solution. After less than half an hour, the test specimen is fully saturated by the condensing vapors and exposed to this atmosphere for eight hours.

After exposure to humid atmosphere, the test specimen is subjected to dry and cooler conditions at room temperature for 16 hours. Depending on the test severity, the specimen is exposed to both these conditions several times. The gas-tightness of the clamping unit is checked by measuring the voltage drop.

In other test procedures, products are exposed to a dry corrosive gas atmosphere containing, sulfide, nitrogen and sulfur oxides or chloride gas. These tests can be performed over a period of 4 to 21 days.

• Salt Spray Test to IEC/EN 60068-2-11; Shipbuilding GL, LR, DNV

This test is similar to the test performed in water condensation alternating atmospheres, except that instead of industrial atmospheres, salt mist conditions will be simulated in a heated test chamber (see picture).



Depending on the test procedure being used, the test specimen is sprayed with salt mist for up to 96 hours.

Salt spray tests are widely used, especially for ship approvals.

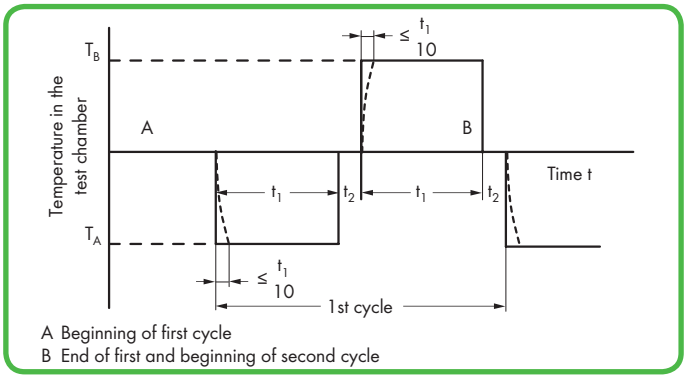
However, this test is performed differently than the test procedures described previously for general applications:
During a typical test, the test specimen is sprayed with a salt solution for two hours and is then stored for seven days in an atmosphere with a relative humidity between 90 and 95%.

This procedure is repeated four times.

Voltage drop measurements are used as an evaluation criterion.

• Quick Change of Temperature to IEC/EN 60068-2-14

Without air-conditioning, distribution panels and terminal boxes are exposed to seasonal (and ever-changing) temperature extremes - especially on the open field side.
In process technology, for example, a terminal block is exposed to even quicker changes in temperature.



A Beginning of first cycle
B End of first and beginning of second cycle

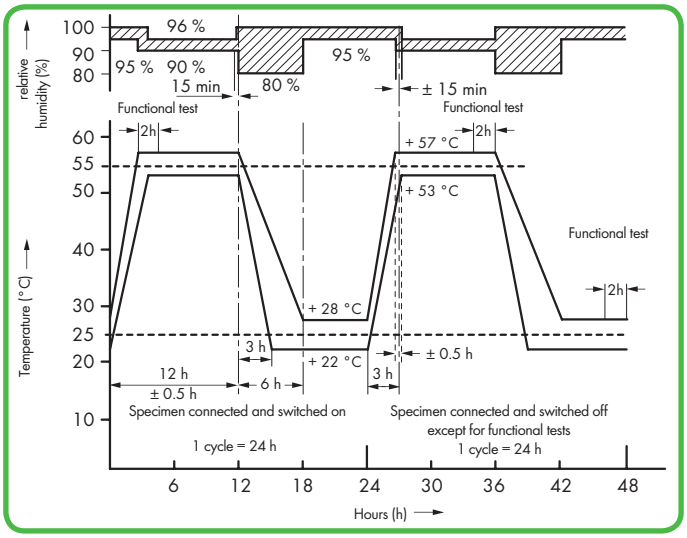
To simulate such conditions, the test specimen is exposed to repeated temperature changes, for example, between T_A -40°C and T_B +70°C.

The dwell time t_1 depends on the thermal capacity of the test specimen and should be between maximum 3 h and minimum 10 min. and the transition time t_2 2 - 3 min., 20 – 30 s or less than 10 seconds.

The mechanical and electrical properties of the product are checked at the end of the test.

• Damp Heat, Cyclic (12 + 12 Hour Cycle) to IEC/EN 60068-2-30; Shipbuilding GL, LR, DNV

This test determines the suitability of electrical equipment for use and storage under conditions of high relative humidity when combined with cyclic temperature changes and, in general, producing condensation on the surface of the specimen.



In addition to the salt spray tests, the damp heat test is also used for ship approvals.

For this test, the specimens are subjected to temperatures varying cyclically between +25°C (77°F) and +55°C (131°F) with a relative humidity of 95% (for tolerances see figure).

Functional tests are performed at defined times during the storage period.

The mechanical and electrical properties of the product are checked at the end of the test.

UL Specifications – Underwriters Laboratories, USA

WAGO terminal blocks and connectors are tested by Underwriters Laboratories Inc. according to one or more of the relevant following UL standards:

– The 273 Series PUSH WIRE® connectors for junction boxes or the 224 Series lighting connectors are "splicing wire connectors" and are certified to UL 486C. These stand-alone devices carry the **UL Listing Mark** ⓤL.	UL 486 C	Splicing wire connectors
– Rail-mounted terminal blocks or modular terminal blocks (e.g., 280 Series, TOPJOB®S or 260 to 262 Series terminal blocks) are approved as non-stand-alone components according to UL 1059 in connection with UL 486E.	UL 1059	Standard for terminal blocks
	UL 486 E	Equipment wiring terminals for use with aluminum and/or copper conductors
– X-COM® connectors are approved as "terminal blocks" according to UL 1059 in connection with UL 486E. They are defined for "field and factory wiring" with a voltage of 300V.		
– Furthermore, these connectors are approved as "connectors for use in data, signal, control and power applications" per UL 1977 for "factory wiring" with 600V (i.e., the clamping unit shall be wired under controlled manufacturing conditions).	UL 1977	Component connectors for use in data, signal, control and power applications
– Ex e II terminal blocks are approved to UL 60079-7.	UL 60079-7	Electrical apparatus for explosive gas atmospheres – Part 7: Increased safety
– Ground terminal blocks are tested for grounding and bonding applications in accordance with UL 467. Components bearing the **UL Recognition Mark** are "recognized products." Additionally, after being mounted in their special applications, these components are submitted to an end-product test according to the relevant device or equipment standard.	UL 467	Grounding and bonding equipment
– Insulating materials are tested for flammability and performance in accordance with UL 94.	UL 94	Tests for flammability of plastic materials for parts in devices and appliances

Tests and Testing Procedures per UL Standards

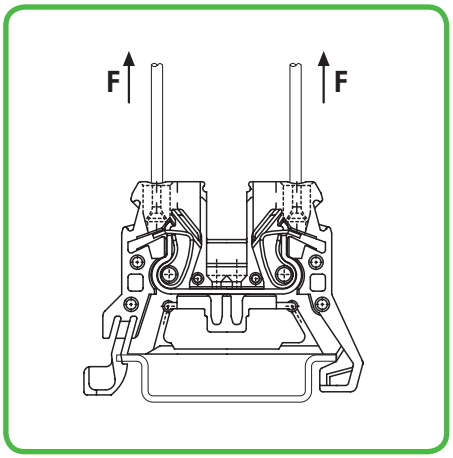
All WAGO products meet requirements for the following tests:

- Pull-Out Test to UL 1059, UL 486 E (Rail-Mounted Terminal Blocks), UL 486 C (Splicing Wire Connectors)

In this test, the connected wires are subjected to the appropriate pull-out forces specified in the following table without jerking for a period of one minute. Different test arrangements are specified for rail-mounted terminal blocks and splicing wire connectors.

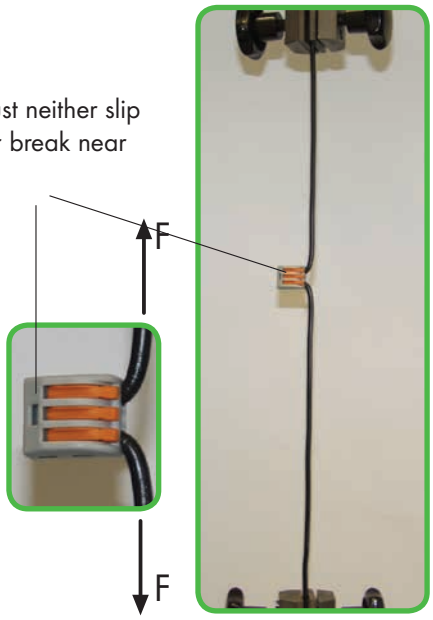
Wire Size		Pull-Out Force, Pounds (N)					
		UL 486 E, Table 22				UL 486 C, Table 20	
AWG or kcmil	(mm^2)	Copper		Aluminum		Copper	
30	(0.05)	0.5	(2.2)	-	-	1.5	(6.7)
28	(0.08)	1	(4.5)	-	-	2	(8.9)
26	(0.13)	2	(8.9)	-	-	3	(13.4)
24	(0.20)	3	(13.4)	-	-	5	(22.3)
22	(0.32)	4.5	(20)	-	-	8	(35.6)
20	(0.52)	6.75	(30)	-	-	10	(44.5)
18	(0.82)	6.75	(30)	-	-	10	(44.5)
16	(1.3)	9	(40)	-	-	15	(66.7)
14	(2.1)	11.5	(50)	-	-	25	(111)
12	(3.3)	13.5	(60)	10	(44)	35	(155)
10	(5.3)	18	(80)	10	(44)	40	(178)
8	(8.4)	20.5	(90)	10	(44)	45	(200)
6	(13.3)	21	(94)	28	(124)	50	(222)
4	(21.2)	30	(133)	36	(160)		
3	(26.7)	35	(156)	42	(187)		
2	(33.6)	42	(186)	50	(222)		
1	(42.4)	53	(236)	61	(271)		
1/0	(53.5)	64	(285)	72	(320)		
2/0	(67.4)	64	(285)	78	(347)		
3/0	(85.0)	79	(351)	97	(432)		
4/0	(107)	96	(427)	116	(516)		
250	(127)	96	(427)	116	(516)		
300	(156)	99	(441)	116	(516)		

Test Arrangement to UL 1059, UL 486 E:



Test Arrangement to UL 486 C:

During the test, the wires must neither slip out of the clamping unit, nor break near the clamping unit.



UL Specifications – Underwriters Laboratories, USA (continued)
Tests and Testing Procedures per UL Standards (continued)

• Heat Cycling Test to UL 1059, UL 486 C, UL 486 E

Tests performed:

to UL 1059

Test performed with maximum rated cross sectional area
Test current: 150% of the max. rated current

84 cycles of: 3 1/2 h "ON" / 1/2 h "OFF"

The temperature rise is measured after the first and the 84th cycle.

The temperature rise shall not exceed 5°C (41°F) after the 84th cycle, compared to the temperature measured after the first cycle.

to UL 486 C (splicing wire connectors),
UL 486 E (equipment wiring terminals)

Test performed with maximum rated cross sectional area
Test current: increased test current to UL 486 C, Table 6
UL 486 E, Table 4

500 cycles of: 1 h "ON" / 1 h "OFF"
1 1/2 h "ON" / 1 1/2 h "OFF"
(from AWG 4/0 up to 400 kcmil per UL 486 E)

The temperature rises at the terminal blocks and control wires are measured and recorded after: 1, 25, 50, 75, 100, 125, 175, 225, 275, 350, 425 and 500 cycles.

The temperature rise shall not exceed 125°C (257°F) and the stability factor "S" shall not exceed ± 10.

Wire Size		Test Current for Copper Wires in A									
		UL 486 E, Table 4							UL 486 C, Table 6		
AWG or kcmil	(mm^2)	Assigned Maximum Ampere Rating[b]	Static Heating[a,c,g]		Heating Cycling Temperature Rating[a] 75°C[d,g]		90°C[e,g]		Static Heating	Cyclic Heating
30	(0.05)	-		3		3.5		4	3	3.5
28	(0.08)	-		3.5		4		5	3.5	4
26	(0.13)	-		5.5		6		8	5.5	6
24	(0.20)	-		7		8		10	7	8
22	(0.32)	-		9		12		13	9	12
20	(0.52)	-		12		16		17	12	16
18	(0.82)	-		17		19		24	17	19
16	(1.3)	-		18		20		31	18	20
14	(2.1)	15	[20]	30	[22]	33	[27]	40	30	33
12	(3.3)	20	[25]	35	[28]	39	[40]	54	35	38
10	(5.3)	30	[40]	50	[45]	56	[60]	75	50	56
8	(8.4)	50		70		80		100	70	80
6	(13.3)	65		95		105		131	95	105
4	(21.2)	85		125		140		175		
3	(26.7)	100		145		165		205		
2	(33.6)	115		170		190		240		
1	(42.4)	130		195		220		275		
1/0	(53.5)	150		230		255		320		
2/0	(67.4)	175		265		300		370		
3/0	(85.0)	200		310		345		435		
4/0	(107)	230		360		405		505		
250	(127)	255		405		445		565		
300	(152)	285		445		500		625		

[a] See Section 7.2, 8.2 and 9.2 (UL 486 E)
[b] Values are for 75°C (167°F), not more than 3 conductors in raceway or cable ampacities, National Electric Code, ANSI/NFPA 70.
[c] Values are for 75°C (167°F) single wires in free air ampacities, National Electric Code, ANSI/NFPA 70.
[d] Values are approximately 112% of the static heating test currents.
[s] Values for 8 AWG and larger wires are approximately 140% of the static heating test currents.
[f] See Section 9.2.4
[g] Values in parentheses apply to connectors with assigned ampere ratings.

• Conditioning – Temperature-Rise Test to UL 1059, UL 486 C

Tests performed:
to UL 1059 (rail-mounted terminal blocks)

to UL 486 C (splicing wire connectors)

Conditioning:

The clamping units are **pre-wired/pre-inserted 9 times** using a conductor with maximum rated cross section. At the 10th time a new conductor is connected.
After this, a static heating test is performed.

Static Heating Test:

Test current:	Rated current of terminal block
Test duration:	30 days
Max. permissible temperature rise:	30 °C

Test current:	Increased test current (see Table 6)
Test duration:	30 days
Max. permissible temperature rise:	50 °C

• Grounding and Bonding Equipment to UL 467

When used in "grounding and bonding" equipment, e.g., terminal blocks, shall withstand a short circuit test using the test currents and test durations as specified in Table 5.

In the following example, an AWG 2 (35 mm²) ground conductor terminal block (285-635) is tested for 6 seconds at 3,900A.

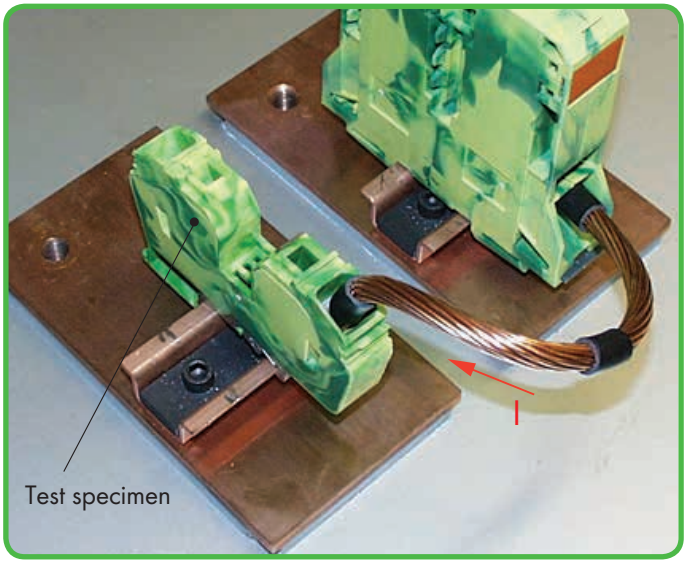


Table 5

Wire Size Copper		Test Duration	Test Current
AWG	mm²	s	A
14	(2.1)	4	300
12	(3.3)	4	470
10	(5.3)	4	750
8	(8.4)	4	1180
6	(13.3)	6	1530
4	(21.2)	6	2450
3	(26.7)	6	3100
2	(33.6)	6	3900
1	(42.4)	6	4900
1/0	(53.5)	9	5050
2/0	(67.4)	9	6400
3/0	(85.0)	9	8030
4/0	(107)	9	10100
250 MCM	(127)	9	12000

After the test, the specimen shall neither show evidence of cracking, breaking or melting, nor any changes in electrical properties.

UL Specifications – Underwriters Laboratories, USA (continued)
Tests and Testing Procedures per UL Standards (continued)

• Insulation Parameters to UL 1059

The table below shows the potential involved and the corresponding clearances and creepage distances required in different applications.

Minimum Acceptable Spacing for Terminal Blocks, UL Standard 1059, Table 8.1

Application	Potential Involved in Volts	Spacing in inches (mm) between uninsulated live parts of opposite polarity, uninsulated live parts and uninsulated grounded parts other than the enclosure			
		Through Air		Over Surfaces	
A. Dead-front switchboards, panelboards, service equipment and similar applications	51 – 150 151 – 300 301 – 600	1/2 3/4 1	(12.7) (19.1) (25.4)	3/4 1–1/4 2	(19.1) (31.8) (50.8)
B. Commercial appliances, including business equipment, electronic data processing equipment and similar applications	51 – 150 151 – 300 301 – 600	1/16[a] 3/32[a] 3/8	(1.6)[a] (2.4)[a] (9.5)	1/16[a] 3/32[a] 1/2	(1.6)[a] (2.4)[a] (12.7)
C. Industrial, general	51 – 150 151 – 300 301 – 600	1/8[a] 1/4 3/8	(3.2)[a] (6.4) (9.5)	1/4 3/8 1/2	(6.4) (9.5) (12.7)
D. Industrial, devices having limited ratings [b]	51 – 150 151 – 300	1/16[a] 3/16[a]	(1.6)[a] (4.8)[a]	1/8[a] 3/8	(3.2)[a] (9.5)
E. Terminal blocks rated 601 - 1500 V[c]	601 – 1000 1001 – 1500	0.55 0.70	(14.0) (17.8)	0.85 1.20	(21.6) (30.5)

Notes:

1 A slot, groove, or similar, 0.013 inches (0.33 mm) wide or less in the contour of the insulating material is to be disregarded.

2 Air space of 0.013 inches (0.33 mm) or less between a live part and an insulating surface is to be disregarded for the purpose of measuring over surface spacing.

[a] The spacing between terminal blocks of opposite polarity and the spacing between a terminal block and a grounded dead metal part shall not be less than 1/4 inch (6.4 mm) if short-circuiting or grounding of such terminal blocks may result from protruding wire strands.

[b] See Section 8.5 (UL 1059)
The spacing values indicated in sub-paragraph D in Table 8.1 are applicable to a terminal block for use only in or with industrial control equipment where the load on any single circuit of the terminal block does not exceed 15A at 51–150V, 10A at 151–300V, 5A at 301–600V, or the maximum ampere rating, whichever is less.

[c] Applies only to terminal blocks investigated to Part II of this standard. See 22.1

• Flammability Test to UL 94

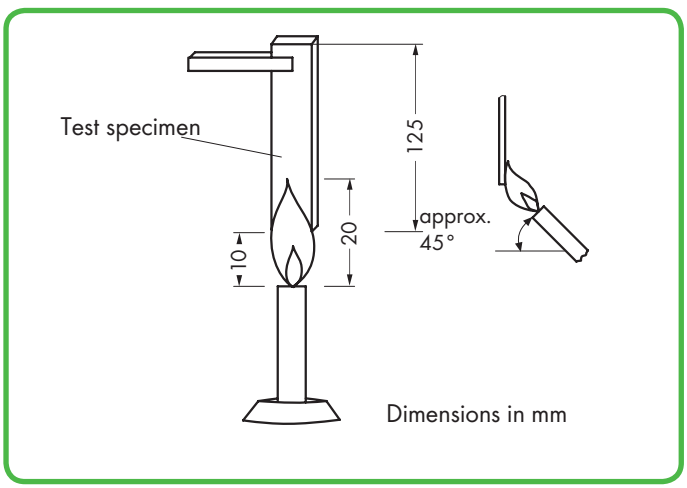
This test provides an indication of the material's ability to extinguish a flame, once ignited.
Several ratings can be applied, based on the rated of burning, time to extinguish, ability to resist dripping, and after-glow extinguishing time. Each material tested may receive several ratings, depending on the wall thickness.
UL 94 rating categories:

V2
- Specimen mounted vertically
- Burning stops within 30 seconds after the flame is removed
- Flaming drips allowed
- After-glow extinguishes within max. 60 seconds

V1
- Specimen mounted vertically
- Burning stops within 30 seconds after the flame is removed
- No flaming drips allowed
- After-glow extinguishes within max. 60 seconds

V0
- Specimen mounted vertically
- Burning stops within 10 seconds after the flame is removed
- No flaming drips allowed
- After-glow extinguishes within max. 30 seconds

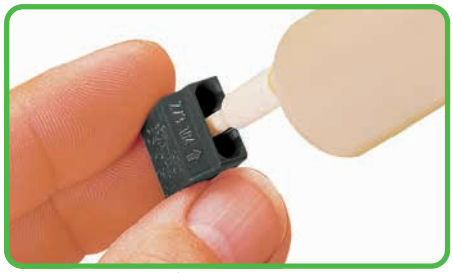
During the test, a 3/4 inch (20 ±1 mm) flame is applied for two 10-second intervals to the specified bar specimen held vertically.



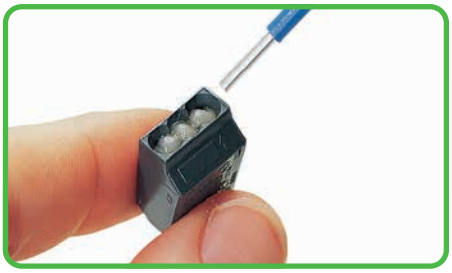
“Alu-Plus” Contact Paste

Syringe



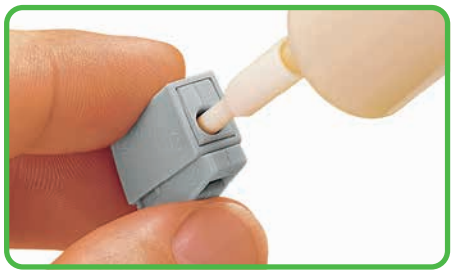


WAGO PUSH WIRE® connectors
Push nozzle of the “Alu-Plus” syringe into the center conductor entry hole of the WAGO PUSH WIRE® connector.



Press plunger until “Alu-Plus” is visible in the other holes.

Item No.	Pack. Unit
Syringe,	
contents: 20 ml “Alu-Plus” contact paste	
249-130	20 (4x5)



WAGO lighting connectors
Push nozzle of the “Alu-Plus” syringe first into the circular and then into the square conductor entry hole of the WAGO lighting connector.



Press plunger down until the “Alu-Plus” has filled both holes.

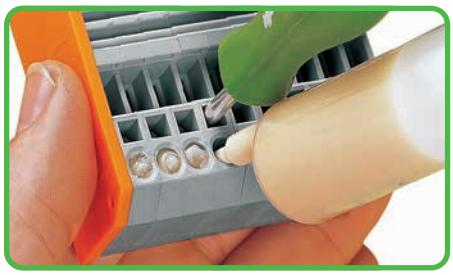
Termination of aluminum conductors
WAGO spring-clamp terminal blocks are suitable for solid aluminum conductors ❶ up to 4 mm²/AWG 12 if contact paste “Alu-Plus” is used for the termination.
“Alu-Plus”
- Automatically destroys the oxide film during clamping
- Prevents fresh oxidation at the clamping point
- Prevents electrolytic corrosion between aluminum and copper conductors (in the same connector)
- Offers permanent protection against corrosion

Using terminal blocks with CAGE CLAMP® Spring Pressure Connection Technology, aluminum conductors must first be cleaned and then immediately be inserted into the clamping units filled with WAGO “Alu-Plus” contact paste.

It is, of course, also possible to apply the “Alu-Plus” directly on the whole surface of the aluminum conductor before clamping.

Please take into account that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors:

2.5 mm²/AWG 14 = 16 A
4 mm²/AWG 12 = 22 A



WAGO rail-mount terminal blocks (only up to 4 mm²/AWG 12)
For each conductor entry: Insert nozzle of the “Alu-Plus” syringe in every open conductor entry hole (one after the other).

“Alu-Plus” in the syringe offers a higher degree of security and cleanliness when terminating solid aluminum conductors. Filling is, for example, very quickly performed on the three following selected connectors (see illustration).



Press plunger down until “Alu-Plus” has filled each of these holes.

❶ Aluminum conductors in accordance with IEC 61545, Class B, Alloy 1370, with a tensile strength of 90 - 180 N/mm² and an elongation of 1 - 4%. Standard values: Tensile strength 90 - 180 MPa, elongation 1 - 4% (acc. to EN 615.4.1)

Material Specifications

Insulation Materials

WAGO primarily uses polyamide (PA 6.6 and PA 4.6) as carriers for current-conducting parts and polycarbonate (PC) as insulating material (see table). These materials have proven their value in WAGO products for more than 40 years and are approved by leading authorities.

Table: Standard Insulating Materials

Material	PA 6.6	PA 6.6 GF	PPA GF	PA 4.6	PC	PC
Flammability UL 94 flammability test ratings	V0	V0	V0	V2	V2	V0
Glow-wire test to IEC 60695-2-12 GWFI IEC 60695-2-13 GWIT	960 °C 775 °C	960 °C 775 °C	960 °C 775 °C (725 °C)	750 °C 725 °C	800 °C 850 °C	960 °C 850 °C
Comparative Tracking Index (CTI) to IEC 60112	600 V	600 V	600 V	375 V	225 V	225 V
RTI impact to UL 746B	105 °C	100 °C	115 °C	115 °C	125 °C	120 °C
Heat deflection temperature (HDT) to ISO 75 (bending stress A*: 1.8 MPa; B: 0.45 MPa)	215 °C	235 °C	285 °C	280 °C	130 °C (1.8 MPa)	130 °C (1.8 MPa)
Surface resistance to 60093	10^{12} Ω	10^{12} Ω	10^{15} Ω	10^{13} Ω	10^{15} Ω	10^{15} Ω
Specific contact resistance to IEC 60093	10^{15} Ω/cm	10^{15} Ω/cm	10^{13} Ω/cm	10^{13} Ω/cm	10^{11} Ω/cm	10^{13} Ω/cm
Dielectric strength to IEC 60243-1	30 kV/mm	40 kV/mm	25 kV/mm	25 kV/mm	25 kV/mm	29 kV/mm

Polyamide (PA 6.6)
WAGO uses modified, halogen-free, flame-retardant polyamides according to IEC 61249-2-2. These materials do not contain any heavy metals, silicone, asbestos or formaldehyde as formulation components.

The materials are corrosion neutral with low-flammability and self-extinguishing characteristics (V0 classification according to UL 94).

Adhering to UL 746C, the polyamides used at WAGO have a continuous operating temperature of 105 °C based on the relative temperature index RTI_{imp} with sudden loading. This ensures that the necessary electrical and mechanical insulating properties are maintained at sufficient, guaranteed levels over a long period of time.

The short-term upper temperature limit is 200 °C.

In lower temperature ranges, it has been determined that no damage to the insulation material occurs during usage down to -35 °C. After installation and wiring, WAGO products can even be used at temperatures down to -60 °C.

Environmental humidity (up to 2.5 % in a standard atmosphere) is absorbed, providing the polyamides with optimum elasticity, strength and durability.

In practical use, basic stabilization of WAGO's polyamides has been proven over many years as sufficient to prevent damage caused by ozone or UV radiation exposure in intended applications.

PA has excellent resilience against the most demanding climates and has proven itself tropical applications worldwide.

Insulating parts made of polyamide are resistant to insects. The material does not provide oxygen or other biogenic elements for microorganisms.

The presence of anaerobic earth bacteria, mold, fungus and enzymes does degrage the material.

Polyamides are resistant to most fuels, greases and oils, as well as the most commonly used cleaners, such as alcohol, Freon, Frigen and carbon tetrachloride.

Acid resistance depends on the acid type and concentration, as well as the exposure time.

The use of insulating materials during in-house production at WAGO only occurs after acceptance of factory test certificates and specified material tests.

Glass Fiber-Reinforced Polyamide (PA 6.6-GF)
WAGO uses glass fiber-reinforced polyamides for components with increased mechanical demands, such as levers, push-buttons or housings exposed to high stresses, because glass-reinforced polyamides have significantly higher characteristic properties than non-reinforced polyamides.

In general, materials are used that have excellent creepage current resistance, flammability ratings and high temperature resistance.

More data can be found in the table.

Polyphthalamide (PPA GF)
The glass fiber-reinforced, high-performance polyamide PPA GF is designated for high-temperature applications, due to the material's high level of thermal dimensional stability, its low dependence on ambient conditions and its excellent strength characteristics. The material's outstanding tracking resistance permits short creepage distances to be incorporated into miniature components. The halogen and heavy-metal-free fire protection equipment (according to IEC 61249-2-2) enables placement into flammability class V0 according to UL 94 – even for extremely thin walls. PPA GF absorbs minute amounts of moisture from the ambient air, making it ideal for THR applications and for thin-walled, dimensionally stable components.

Polyamide (PA 4.6)
In comparison with PA 6.6, PA 4.6 has substantially higher dimensional stability under heat. The relative temperature index RTI_{imp} with sudden loading is 115 °C for PA 4.6.

The reliable short-term temperature for the type used by WAGO is 280 °C.
More data can be found in the table.

Polycarbonate (PC)
Polycarbonate has excellent dimensional stability under heat. The mechanical properties of strength, hardness, rigidity and durability remain intact at extremely high temperatures up to approximately 135 °C. Its excellent electrical insulating properties and dimensional stability are virtually independent of environmental conditions, such as humidity and temperature. Highly precise components can be realized due to the low shrinkage of the material during injection molding.
Polycarbonate has excellent weather resistance and is also highly resistant to high-energy radiation.
If the PC is not colored, then the components are glass-clear.
Thanks to its desirable properties (e.g., dimensional stability, heat resistance, non-flammability, durability and transparency), PC is a proven and widely used material in the electrical industry.

Depending on the demands placed on the finished product, WAGO uses polycarbonates that carry flammability classifications V2 and V0 according to UL 94.

Medium-viscosity PC is used, and features excellent chemical resistance.

Material Specification (continued)

Contact Materials

Hard and extra-hard electrolytic copper (E_{Cu}) as well as extra-hard copper alloys are standard materials used for the current-carrying parts of all WAGO products.

This material combines excellent conductivity and good chemical resistance without the risk of stress-induced cracking.

Contact Plating

The special tin layer, which is the standard layer for all current-carrying parts in WAGO products, ensures perfect long-term protection against corrosive substances. Furthermore, these layers provide a gas-tight contact that ensures a durable transition resistance.

At the clamping unit, the conductor is embedded into the soft tin layer via high contact pressure. This protects the contact area against corrosion.

The thick tin layer also ensures good solderability of both PCB terminal block and connector solder pins.

Clamping Spring Material

All WAGO clamping springs are made of high-quality, accurately tested austenitic chrome nickel steel (CrNi) with high tensile strength, which boasts proven corrosion resistance through long-term usage.

It is resistant to salt sea air, city pollutants and industrial emissions (e.g., sulfur dioxide, hydrogen sulphide).

At room temperatures of approximately 20°C (68°F), the material is resistant to salt solutions up to 30% and dilute phosphoric acids up to 30%.

Even after decades of use, no galvanic corrosion between the chrome nickel spring steel (in connection with the contact materials used by WAGO) and the connected copper conductors has been detected.

The relaxation of the material as a function of time and surrounding temperatures up to 105°C (221°F) can be ignored. Samples loaded with 500 N/mm^2 at a temperature of 250°C showed a relaxation of only 1.5%.

In certain product lines the clamping springs are thermally treated at temperatures between 350°C (662°F) and 420°C (788°F) after production.

This treatment reduces internal stress due to the material's mechanical deformation, which may result in a slight brown discoloration of the spring surface.

WAGO only accepts deliveries of chrome nickel spring steel against certificates of conformity and after select material tests.

Electrical Engineering Laboratory: Product Safety for Our Customers

The WAGO laboratory in Minden is an “accredited test lab for electrical and mechanical tests on terminal blocks and connectors, as well as for environment simulations.”

Accreditation, as ISO/IEC 17011:2004 defines, is a third party-attestation related to a conformity assessment body conveying formal demonstration of its competence to carry out specific conformity assessment tasks.

Accreditation, according to DIN EN ISO/IEC 17025, is granted by the Deutsche Akkreditierungsstelle GmbH DAkkS (German Accreditation Office GmbH DAkkS). This national accreditation office, which was established by the German Federal Ministry for Economics and Technology (BMWi), certifies that our test laboratory is officially recognized as possessing the necessary expertise to conduct defined tests and types of tests independently and objectively.



Visitor center

Through obtaining the accreditation, the following objectives were achieved:

- Customer requirements
- Workflow optimization
- Clearly defined processes
- Clear organization and structure
- Greater transparency
- Consistent, high-quality laboratory testing
- Maximum traceability
- Traceable measurement results
- Sustainable quality awareness

Conductor retention force testing



High-voltage test





Deutsche Gesellschaft für Akkreditierung mbH

Unterzeichner der Multilateralen Abkommen von EA und ILAC zur gegenseitigen Anerkennung

vertreten im

Deutschen AkkreditierungsRat

Akkreditierung

Die **DGA Deutsche Gesellschaft für Akkreditierung mbH** bestätigt hiermit, dass das Prüflaboratorium

WAGO Kontakttechnik GmbH & Co. KG
Hansastraße 27
D-32423 Minden / Germany

die Kompetenz nach DIN EN ISO/IEC 17025 besitzt, Prüfungen in den Bereichen

Elektrische und mechanische Prüfungen an Klemmen und Steckverbinder sowie Umweltsimulation

auszuführen. Die Anlage ist Bestandteil der Urkunde und besteht aus **6** Seiten.

Die Akkreditierung ist gültig vom **2009-12-22** bis **2014-12-21**.

DAR- Registriernummer: **DGA-PL-302/09-00**

Frankfurt, 2009-12-22

Dipl.-Ing. (FH) Ralf Egner
Leiter der Abteilung Elektrotechnik/IT

Mitglied in EA, ILAC, IAF

Siehe Hinweise auf der Rückseite

Vibration- and shock-resistance testing



General Technical Information for Electrical Equipment in Hazardous Areas

A prerequisite for a potentially explosive hazard is the formation of an explosive atmosphere. Such an atmosphere can be produced at any location where flammable gases or liquids are manufactured, processed, transported and/or stored. Such **hazardous environments** can be formed for example in chemical plants, refineries, power plants, paint producing facilities, painting shops, filling stations, vehicles, sewage treatment plants, airports, grain mills or harbor facilities.

THE FOLLOWING APPLY AS A GUIDELINE FOR THE UNDERLYING PRINCIPLE FOR EXPLOSION PROTECTION:

General Provisions

European Standard EN 60079-0 – Classification VDE 0170, Part 1 – contains the "General provisions" for the design and testing of electrical equipment to be used in hazardous areas.
This ensures this equipment does not cause an explosion in the surrounding atmosphere.
EN 60079-0 is supplemented or revised by the European standards indicated on the right which refer to the specifically standardized types of protection.

Electrical Equipment

Electrical equipment includes all objects used in whole or in part with electricity. This includes items for generation, transport, distribution, storage, measurement, control, conversion and consumption of electrical power, as well as telecommunications.

Ex Components

Ex components are elements of electrical equipment for hazardous areas that are marked with the letter "U". These components shall not be used on their own in such areas and require an additional certificate when used in such areas when installed in the electrical equipment.

Ignition Protection Categories

Only explosion-proof (protected) equipment must be used in areas in which an explosive atmosphere may still be expected despite the implementation of prevention measures.
Electrical, explosion protected equipment can have various types of protection in accordance with the construction specifications of the standards series.
Protection used by the manufacturer essentially depends on the type and function of the apparatus. From a safety point of view, all standardized types of protection should be viewed as equal.
The ignition protection category "n" describes exclusively the use of explosion protected electrical components in Zone 2. This zone includes areas where explosive atmospheres can only be expected to occur rarely or for short duration.. This represents a transition between Zone 1, in which explosion protection is required, and the safe area in which, for example, welding may be performed at any time.
Regulations covering these electrical components are being prepared worldwide. Organizations such as KEMA in the Netherlands, or PTB in Germany certify that the devices meet the requirements of the EN 60079-15 European standard.
The ignition protection category "n" additionally requires electrical components to be marked with the following extended identification:

- A – non-sparking (function modules without relays/switches)
- AC – sparking, contacts protected with seals (function modules with relays/ without switches)
- L – limited power (function modules with switches)

The table on the opposite page shows an overview of the standardized ignition protection categories and describes their basic principle, as well as typical applications.

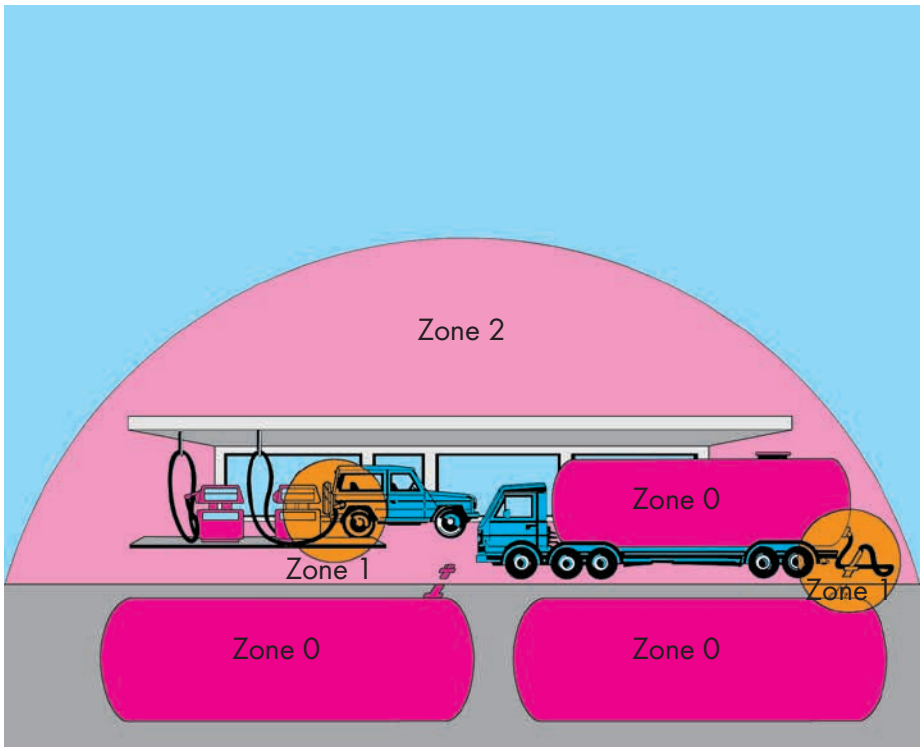
Ignition Protection Categories			
Symbol	**Standard**	**Explanation**	**Application Area**
“o”	**IEC 60079-6 EN 60079-6**	**Oil immersed apparatus:** Electrical equipment or parts of such equipment are immersed in oil.	Zone 1 + 2
“p”	**IEC 60079-2 EN 60079-2**	**Pressurized enclosure:** The ingress of the external (explosive) atmosphere into the electrical equipment housing is prevented by maintaining a protective gas internally at a pressure above that of the external atmosphere.	Zone 1 + 2
“q”	**IEC 60079-5 EN 60079-5**	**Powder-filled apparatus:** Filling the electrical equipment housing with fine grain sand prevents the ignition of a surrounding explosive atmosphere by an electric arc generated in the housing.	Zone 1 + 2
“d”	**IEC 60079-1 EN 60079-1**	**Flameproof enclosure:** The parts that could ignite an explosive atmosphere are encapsulated in a housing, which will withstand the explosion pressure within the housing.	Zone 1 + 2
“e”	**IEC 60079-7 EN 60079-7**	**Increased safety:** Additional measures applied to achieve increased security against the possibility of excessive temperatures and the occurrence of arcs or sparks.	Zone 1 + 2
“i”	**IEC 60079-11 EN 60079-11**	**Intrinsic safety:** Power circuit in which no sparks or thermal effects can occur and cause the ignition of a certain explosive atmosphere.	Zone 1 + 2 following special testing Zone 0
“n”	**IEC 60079-15 EN 60079-15**	**Non-sparking:** Electrical equipment of group II for use in areas in which an explosive mixture of gas, vapor or mist is unlikely to occur during normal operation and, if it does, will be for a short period.	Zone 2
“m”	**IEC 60079-18 EN 60079-18**	**Cast encapsulation:** Dangerous electrical equipment is embedded in a cast mass. This corresponds approximately to the known special Ex s protection type.	Zone 1 + 2
	IEC 60079-25 EN 60079-25	**Intrinsically safe electrical systems “i”:** Assembly of interconnected electrical equipment in which the circuits intended for use, as a whole or in part, in hazardous environments are intrinsically safe. It is documented accordingly in the system description.	Zone 1 + 2 following special testing Zone 0
	IEC / TS 60079-27	**FISCO standard:** Electrical equipment for explosive gas atmospheres – Part 27: Fieldbus intrinsically safe concept (FISCO) and Fieldbus non-incendive concept (FNICO).	

– Continued –
General Technical Information for Electrical Equipment in Hazardous Areas

Harzardous Environments

Hazardous environments are areas in which the atmosphere may become explosive. An explosive atmosphere is a mixture of flammable substances in the form of gases, vapors or mixtures with air under atmospheric conditions in critically mixed ratios such that excessive high temperature, arcs or sparks may cause an explosion. These may take form as gases, vapors or mixtures with air under atmospheric conditions in critically mixed ratios such that excessive high temperature, arcs or sparks may cause an explosion.

According to EN 1127-1 and all other related standards that are commonly known, hazardous areas are divided into zones according to the likelihood of the occurrence of an explosive atmosphere as follows:



Hazardous areas resulting from flammable gases, vapors or mist

Zone 0

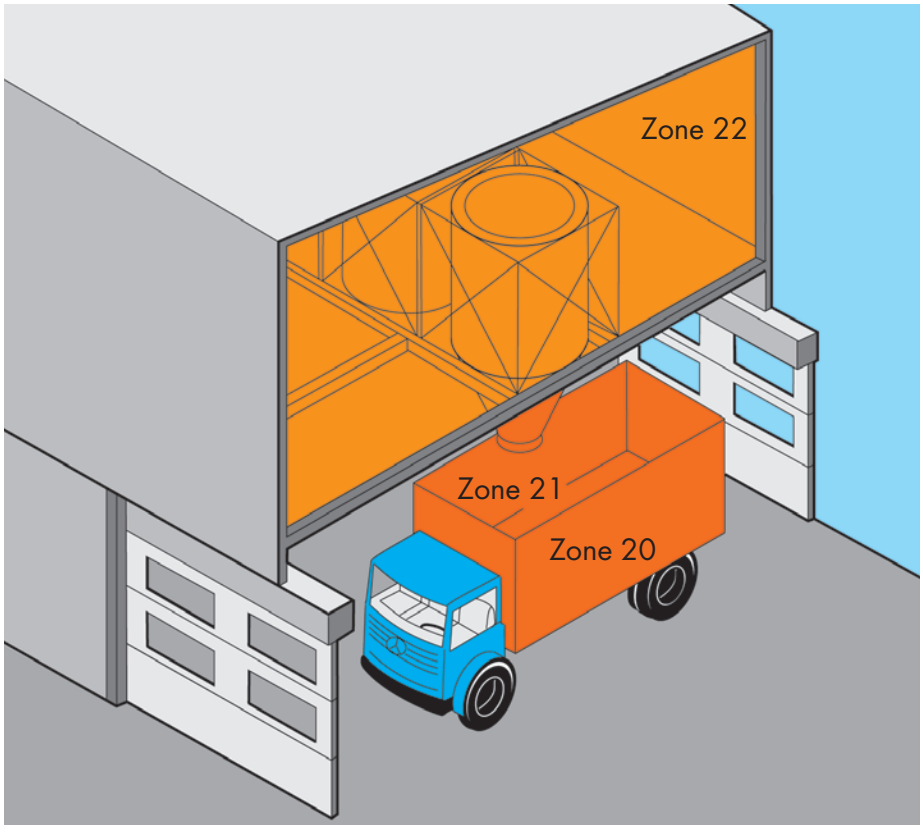
Areas in which a hazardous, potentially explosive atmosphere is present permanently, for long periods or frequently.

Zone 1

Areas in which hazardous, potentially explosive atmospheres are likely to occur "occasionally" during normal operation.

Zone 2

Areas in which hazardous, potentially explosive atmospheres are likely to occur "rarely" or "short-term" during normal operation.



Hazardous areas due to combustible dust

Zone 20

Area in which an explosive dusty atmosphere is present "permanently," for "long periods" or "frequently" and in which deposits of combustible dust of unknown or excessive thickness may be formed. Dust deposits alone do not constitute a Zone 20.

Zone 21

Area in which an explosive dusty atmosphere is present "occasionally" under normal operating conditions and in which deposits or layers of combustible dust can generally be present.

Zone 22

Area in which an explosive dusty atmosphere is not likely to occur during normal operation and, if it occurs, will only exist for a "short period", or in which accumulations or layers of flammable dust are present.

EN 60079-0 also classified electrical equipment for use in hazardous areas into two groups:

Group I:
Electrical equipment for mines susceptible to firedamp.

Group II:
Electrical equipment for potentially explosive areas, except for mines susceptible to firedamp.
As this broad application range encompasses a large number of potentially flammable gases, Group II is broken down into subgroups IIA, IIB and IIC. This breakdown is based on different gases/materials exhibiting differing ignition power levels as parameters. Therefore, representative gases have been allocated to these three sub-groups:

- IIA – Propane
- IIB – Ethylene
- IIC – Hydrogen

Publication of the WBK Mining Authority dated March 1989.

Quote: " . . . terminal blocks that have been certified for the type of protection Ex e II will also be accepted, for example, for Group I – Electrical equipment of the type of protection – Increased safety "e".

This information is also given under Item 12 in the EC Prototype Test Certificates, based on which the terminal blocks have been approved for Group I and Group II.

Temperature Category	Maximum Surface Temperature °C
T1	450
T2	300
T3	200
T4	135
T5	100
T6	85

Depending on the maximum surface temperature, electrical equipment in Group II are classified in temperature categories T1 to T6 protection types. The ambient temperature, which must be accounted for in dimensioning, is defined as 40°C (104°F) (deviations are acceptable under some conditions).

Terminal blocks protection type – Increased safety "e" – are generally assigned to temperature category T6. When terminal blocks are used in equipment of temperature categories T1 to T5, ensure that the highest temperature on the insulating parts does not exceed 85°C (185°F).
The highest measured surface temperature rise shall not exceed 40 K.

Thermal resistance of the insulating material must be at least 20°C greater than the highest operating temperature. Low temperature stability is considered to be sufficient when the insulating material can withstand 24-hour storage at a temperature of -60°C without nullifying the type of protection.

Special Requirements "Increased Safety Ex e"
The European Standard EN 60079-7 – VDE 0170, Part 6 – contains "special requirements" for the design and testing of electrical equipment with protection type – Increased safety "e" – for use in hazardous areas.
This standard is a supplement to EN 60079-0 and applies to equipment or parts thereof that neither generate sparks or arcing under normal operating conditions, nor exhibit hazardous temperatures. This standard describes special measures, which have to be observed to obtain a safety degree according to the type of protection – Increased safety "e" –.
Ex components such as rail-mounted terminal blocks are covered by Section 4.2 "Terminal Blocks for External Conductors."
The following are the most important design requirements for terminal blocks for external electrical conductors:
These must:

- be sufficiently large to permit reliable connection of external conductors with cross section of at least the size required by the nominal current of the equipment.
- be protected against self-loosening and designed such that the external conductors cannot slip out of their clamping units.
- be designed such that adequate contact pressure is ensured without damaging the conductors.
- be designed such that their contact pressure does not change with temperature cycling.
- be equipped with a spring connecting link for the connection of stranded conductors.
- be designed so as to allow safe connection of smaller conductor cross sections for terminal blocks up to 4 mm² / AWG 12.

Minimum Ignition Power of Typical Gases:

Explosion Group	I	IIA	IIB	IIC
Gases	Methane	Propane	Ethylene	Hydrogen
Ignition Power	280	250	82	16

The following table shows a comparison between the current practice based on ElexV, DIN VDE 0165: 1991 and the new EN 1127-1:

Device Group II				
Category	Protection degree	Adequate safety for	Comparable to current practice	New, based on EN 1127
1 Ex atmosphere is very probable, dust in air	Highest	2 protective measures 2 faults	Group II Zone 0 Zone 10	Zone 0 Zone 20
2 Occasional Ex atmosphere	Increased	Equipment failure or fault	Group II Zone 1	Zone 1 Zone 21
3 Low probability of Ex atmosphere, settled dust	Normal	Fault-free operation	Group II Zone 2 Zone 11	Zone 2 Zone 22

– Continued – General Technical Information for Electrical Equipment in Hazardous Environments

It is expressly prohibited to use insulating parts for transferring contact forces. Terminal blocks with sharp edges which could damage the conductor and those types that can be rotated, turned or permanently deformed when fixed in place are not permitted for use. Terminal blocks for internal connections in electrical equipment must not be subjected to excessive mechanical stress. These items must fulfill the requirements for terminal blocks used for external electrical conductors.

Air clearance between conductive parts having different potentials must be at least 3 mm for external connections, as specified in Table 1.

The value of the creepage distances depends on the working voltage, surface geometry of the insulating parts and tracking resistance of the insulation material.

Grooves on the surface may only be considered if they are at least 2.5mm deep and wide, and ribs on the surface only if their height is at least 2.5mm and their width corresponds to the mechanical strength of the material, however not smaller than 1 mm.

Table 1: Creepage Distances and Clearances

Voltage[1] Effective Value for AC Voltage or DC Voltage	Minimum Creepage Distance mm			Minimum Clearance
	Material Group			
V	I	II	III a	mm
10[2]	1.6	1.6	1.6	1.6
12.5	1.6	1.6	1.6	1.6
16	1.6	1.6	1.6	1.6
20	1.6	1.6	1.6	1.6
25	1.7	1.7	1.7	1.7
32	1.8	1.8	1.8	1.8
40	1.9	2.4	3	1.9
50	2.1	2.6	3.4	2.1
63	2.1	2.6	3.4	2.1
80	2.2	2.8	3.6	2.2
100	2.4	3	3.8	2.4
125	2.5	3.2	4	2.5
160	3.2	4	5	3.2
200	4	5	6.3	4
250	5	6.3	8	5
320	6.3	8	10	6
400 (440)*[1]	8	10	12.5	6
500 (550)*[1]	10	12.5	16	8
630 (690)*[1]	12	16	20	10
800	16	20	25	12
1000	20	25	32	14
1250	22	26	32	18
1600	23	27	32	20
2000	25	28	32	23
2500	32	36	40	29
3200	40	45	50	36
4000	50	56	63	44
5000	63	71	80	50
6300	80	90	100	60
8000	100	110	125	80
10000	125	140	160	100

[1] The listed voltages are taken from IEC 60664-1 . The working voltage *) may exceed the voltage indicated in the table by 10%. This is based on the simplification of the supply voltages in accordance with Table 3b in IEC 60664-1.
The listed values for creepage and clearances are based on a maximum limit deviation for supply voltage of ± 10%.

[2] CTI values are not applicable for voltages of 10 V or less. Materials that do not meet the requirements of material group III a can be used.

Classification of insulating materials according to their tracking resistance is based on their Comparative Tracking Index (CTI) and is defined in Table 2 as follows:

This classification applies to insulating parts without ribs or grooves.

If the insulating parts have ribs or grooves sufficiently large to be considered, the minimum creepage distances must be set according to values for the insulating materials in the next-higher level, for example Group I, instead of Group II.

Accounting for the ambient temperature of 40°C (104°F) specified for electrical equipment, the current-carrying capacity of rubber-insulated conductors is reduced to 82%, based on DIN VDE 0298-4: 2003-08, Table 10 and to 87% for PVC-insulated conductors for the current-carrying capacity defined for 30°C (86°F) in accordance with Item 4.3.3 in DIN VDE 0298-4: 2003-08.

Table 2: Tracking Resistance for Insulating Materials

Material Group	Comparative Tracking Index
I	600 ≤ CTI
II	400 ≤ CTI < 600
III a	175 ≤ CTI < 400

Conductor Types and Conductor Preparation

In accordance with EN 60079-14/DIN VDE 0165-1, the ends of stranded and fine-stranded conductors must be protected against splaying (e.g., via cable lugs or ferrules) or by the type of terminal blocks used. Soldering alone is not sufficient.

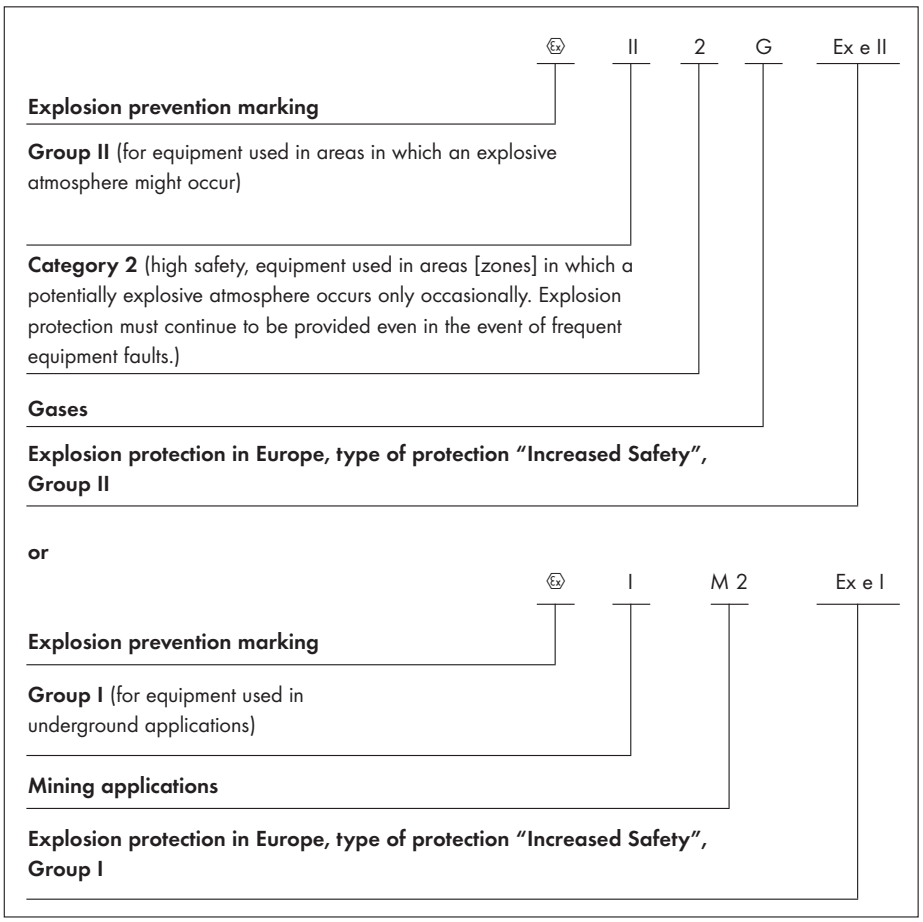
Connecting electrical equipment to terminal blocks having a type of protection – Increased safety "e" – must not lead to a reduction of the creepage and air clearance distances based on EN 60069-7/ DIN VDE 0170 Part 6.

Experience through the application of terminal blocks in aggressive atmospheres in the chemical industry demonstrate that tinned copper ferrules (gastight) or tinned copper pin-type cable sockets/lugs are recommended when connecting fine-stranded conductors to terminal blocks in corrosive atmospheres.

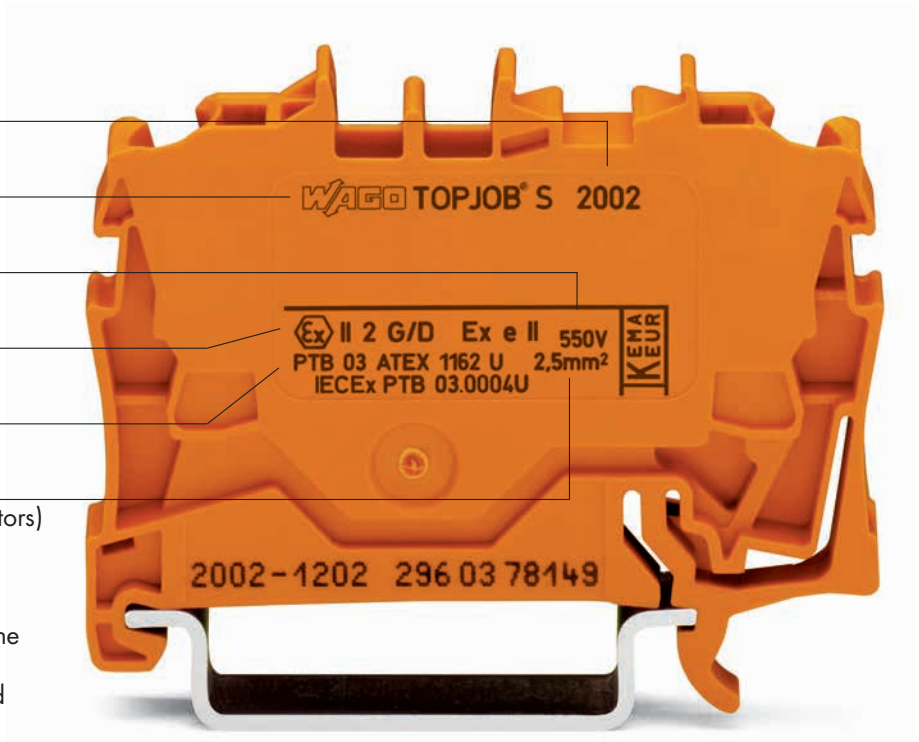
Approvals

Terminal blocks can be used in Zones I and II, provided that the terminal blocks are accommodated in an enclosure that has a minimum IP54 protection and an Ex e certification.
Terminal blocks are considered to be Ex components, as they are a part of the equipment. Part certificates provided by Ex Certification Agencies serve as a basis for issuing the complete conformity declaration for the unit.
In accordance with the Explosion Protection Directive 94/9/EC (ATEX 100 a), an EC-type examination certificate based on ATEX 100 a is issued.
In addition, an IEXEx Certificate may also be obtained from an appropriate, recognized certification agency in accordance with the IECEx Certification Agreement that is accepted throughout Europe and also in countries such as Canada, China and Australia.
These certificates can also be viewed at: www.iecex.com.

The marking of terminal blocks shall appear as follows in accordance with 94/9/EC Ex Safety Guideline ATEX 100 a:



Example of marking (rear):



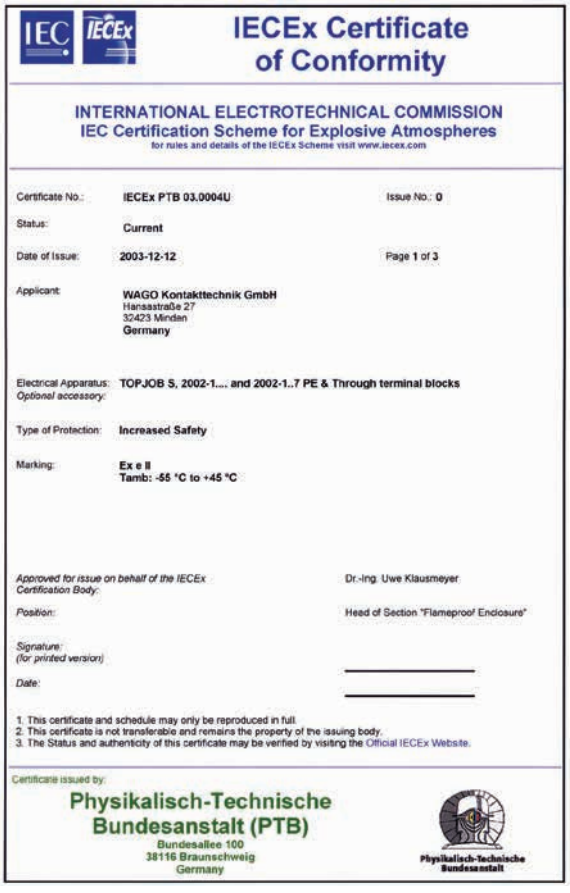
The embossed details on the terminal blocks show the manufacturer's name, the series no., the type of protection Ex e II, the approval no., the approval data and the name of the test house.

– Continued –
General Technical Information for Electrical Equipment in Hazardous Environments

According to UL Standard 60079-7, terminal blocks for “Class I, Zone 1, Ex e II hazardous locations” can be approved for Ex applications.
As a result of international harmonization efforts, the UL certificate can be issued on the basis of EN 60079-0 or EN 60079-7 standards, provided that the terminal blocks have also been approved in accordance with UL 1059 (ordinary location).
If desired by the applicant, the product can simultaneously be approved in accordance with the Canadian Standards E79-0-95 and E79-7-95 and released for use in Canada.
The terminal blocks are marked with c UL us Cl. I, Zn. 1, AEx e II.

EC-type examination certificates have been granted to all WAGO terminal blocks listed in this catalog.
The WAGO terminal blocks approved for the ignition protection type Ex e II are manufactured of flame resistant, self-extinguishing Nylon 6.6. The same applies to the other terminal blocks in the non explosion endangered area.

Tracking resistance with a CTI value of 600 as per IEC 60112 and a constant operating temperature of 105°C/22°F in accordance with IEC 60216-1 and -2 are provided.
Factory part quality tests are performed on all CAGE CLAMP® rail-mounted terminal blocks with Ex e II approval to monitor and ensure the quality features described above.



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx PTB 03.0004U — Issue No.: 0
Status: Current
Date of Issue: 2003-12-12 — Page 1 of 3
Applicant: WAGO Kontakttechnik GmbH, Hansastraße 27, 32423 Minden, Germany
Electrical Apparatus: TOPJOB S, 2002-1.... and 2002-1..7 PE & Through terminal blocks
Optional accessory:
Type of Protection: Increased Safety
Marking: Ex e II, Tamb: -55 °C to +45 °C

Approved for issue on behalf of the IECEx Certification Body: Dr.-Ing. Uwe Klausmeyer
Position: Head of Section "Flameproof Enclosure"
Signature: (for printed version)
Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:
Physikalisch-Technische Bundesanstalt (PTB)
Bundesallee 100
38116 Braunschweig
Germany



Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin

EG-Baumusterprüfbescheinigung

(1)
(2) Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen - **Richtlinie 94/9/EG**
(3) EG-Baumusterprüfbescheinigungsnummer
PTB 05 ATEX 1030 U
(4) Komponente: Durchgangsreihenklemmen Typ TOPJOB S Baureihe 2006-12.. und 2006-13.., Schutzleiterreihenklemmen Typ TOPJOB S Baureihe 2006-1207 und 2006-1307
(5) Hersteller: WAGO Kontakttechnik GmbH
(6) Anschrift: Hansastraße 27, 32423 Minden, Deutschland
(7) Die Bauart dieser Komponente sowie die verschiedenen zulässigen Ausführungen sind in der Anlage und den darin aufgeführten Unterlagen zu dieser Baumusterprüfbescheinigung festgelegt.
(8) Die Physikalisch-Technische Bundesanstalt bescheinigt als benannte Stelle Nr. 0102 nach Artikel 9 der Richtlinie des Rates der Europäischen Gemeinschaften vom 23. März 1994 (94/9/EG) die Erfüllung der grundlegenden Sicherheits- und Gesundheitsanforderungen für die Konzeption und den Bau von Geräten und Schutzsystemen zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen gemäß Anhang II der Richtlinie.
Die Ergebnisse der Prüfung sind in dem vertraulichen Prüfbericht PTB Ex 05-15105 festgehalten.
(9) Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt durch Übereinstimmung mit
EN 60079-0:2004 **EN 60079-7:2003** **EN 50281-1-1:1998**
(10) Das Zeichen "U" hinter der Zertifikatsnummer gibt an, dass dieses Zertifikat nicht mit einem für ein Gerät oder Schutzsystem vorgesehenen Zertifikat verwechselt werden darf. Diese Teilbescheinigung darf nur als Basis für die Bescheinigung eines Gerätes oder Schutzsystems verwendet werden.
(11) Diese EG-Baumusterprüfbescheinigung bezieht sich nur auf Konzeption und Prüfung der festgelegten Komponente gemäß Richtlinie 94/9/EG. Weitere Anforderungen dieser Richtlinie gelten für die Herstellung und das Inverkehrbringen dieser Komponente. Diese Anforderungen werden nicht durch diese Bescheinigung abgedeckt.
(12) Die Kennzeichnung der Komponente muß die folgenden Angaben enthalten:
Ex II 2 G Ex e II bzw. I M 2 Ex e I und Ex II 2 D

Zertifizierungsstelle Explosionsschutz
Im Auftrag
Dr.-Ing. U. Klausmeyer
Direktor und Professor
Braunschweig, 30. Mai 2005

Seite 1/3

EG-Baumusterprüfbescheinigungen ohne Unterschrift und ohne Siegel haben keine Gültigkeit.
Diese EG-Baumusterprüfbescheinigung darf nur unverändert weiterverbreitet werden.
Auszüge oder Änderungen bedürfen der Genehmigung der Physikalisch-Technischen Bundesanstalt.
Physikalisch-Technische Bundesanstalt • Bundesallee 100 • D-38116 Braunschweig

Classifications to NEC 500

The following classifications, as defined in article 500 of the National Electric Code (NEC), are valid for North America.

Divisions

The "Divisions" describe the degree of probability for the dangerous situation occurring. Here, the following assignments apply:

Hazardous areas resulting from flammable gases, vapors or mist	
Division 1	Encompasses areas in which explosive atmospheres are to be expected occasionally (> 10 h ≤ 1000 h/year), as well as continuously and long-term (> 1000 h/year).
Division 2	Encompasses areas in which explosive atmospheres can be expected rarely and short-term (> 0 h ≤ 10 h/year).

Explosion Protection Groups

Electrical components for explosive areas are subdivided in three danger categories:

Class I (gases and fumes):	Group A (Acetylene) Group B (Hydrogen) Group C (Ethylene) Group D (Methane)
Class II (dust):	Group E (Metal dust) Group F (Coal dust) Group G (Flour, starch and cereal dust)
Class III (fibers):	No sub-groups

Temperature Classes

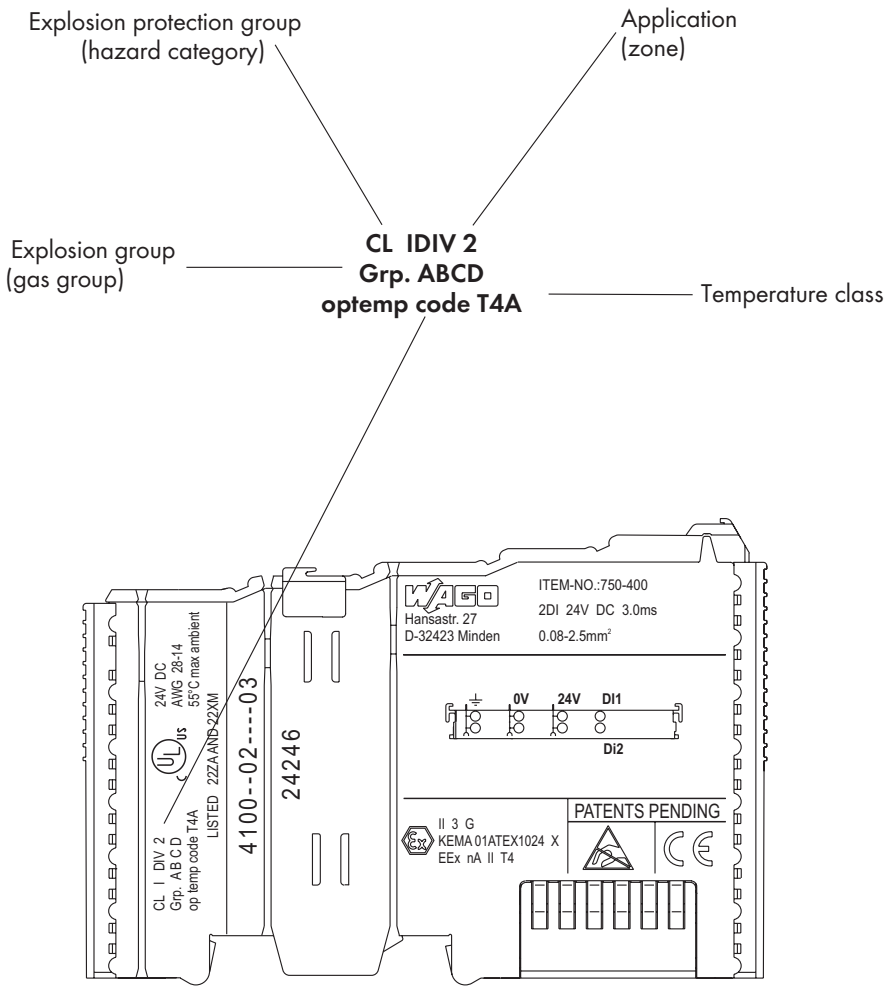
Electrical components for explosive areas are differentiated by temperature classes:

Temperature Class	Maximum Surface Temperature	Ignition Temperature of Combustible Materials
T1	450 °C	> 450 °C
T2	300 °C	> 300 °C ≤ 450 °C
T2A	280 °C	> 280 °C ≤ 300 °C
T2B	260 °C	> 260 °C ≤ 280 °C
T2C	230 °C	> 230 °C ≤ 260 °C
T2D	215 °C	> 215 °C ≤ 230 °C
T3	200 °C	> 200 °C ≤ 215 °C
T3A	180 °C	> 180 °C ≤ 200 °C
T3B	165 °C	> 165 °C ≤ 180 °C
T3C	160 °C	> 160 °C ≤ 165 °C
T4	135 °C	> 135 °C ≤ 160 °C
T4A	120 °C	> 120 °C ≤ 135 °C
T5	100 °C	> 100 °C ≤ 120 °C
T6	85 °C	> 85 °C ≤ 100 °C

– Continued –
General Technical Information for Electrical Equipment in Hazardous Environments

For America
Per NEC 500

Example for side marking of I/O modules
(750-400, 2-channel digital input module 24VDC)



Special Requirements
"Intrinsic safety Ex i"

The European Standard EN 60079-11 – Classification VDE 0170, Part 7 – contains special requirements for the design and testing of electrical equipment with protection type – Intrinsic safety "i" – for use in hazardous areas.

A circuit is designated as "intrinsically safe" when under normal operating conditions and in the event of defined faulted conditions, no sparks and no thermal effects can cause an ignition in a defined potentially explosive atmosphere.

A distinction is made here between:

- intrinsically safe electrical equipment when all circuits are intrinsically safe and
- associated electrical equipment including both intrinsically and non-intrinsically safe circuits, and being designed such that the non-intrinsically safe circuits cannot affect the intrinsically safe ones.

Intrinsically safe electrical equipment and intrinsically safe parts of associated electrical equipment are classified at protection level "ia" or "ib."
Products classified Ex "ia" shall not ignite when current is applied in the following cases:

a) During fault-free operation, with those non-discreet faults present that result in the most adverse condition.
b) During fault-free operation and with a discreet fault, plus those non-discreet faults that result in unfavorable conditions.
c) During fault-free operation with two discreet faults, plus those non-discreet faults that result in the most adverse conditions.

Products classified Ex "ib" shall not ignite when current is applied in the following cases:

a) During fault-free operation, with non-discreet faults present that result in the most adverse condition;
b) During fault-free operation, with a discreet fault present, plus those non-discreet faults that result in the most adverse condition.

No special approval is required for terminal blocks used as simple electrical equipment for protection type "Ex i", as they do not contain a voltage source and precise information is available concerning electrical data and temperature rise performance.
The terminal blocks must be identifiable, for example by their type designation, and the following design requirements must also be upheld:

- The air distance between bare, conducting parts of terminal blocks of different intrinsically safe circuits has to be equal or higher than the values specified in the standard. In addition, the air distances between the terminal blocks must be so that the air distances between bare, conducting parts of the connected external conductors is at least 6 mm for one measurement. Each possible motion of metallic parts that are not rigidly fixed must be considered.
- When a possible connection has not been considered during safety analysis, the minimum clearance between grounded metallic or other conducting parts and the uninsulated conducting parts of the conductors that are connected to the terminal blocks must be 3 mm.
- Terminal block marking must be unique and clearly visible. If a color is used for this, the color must be light blue (similar to RAL 5015).

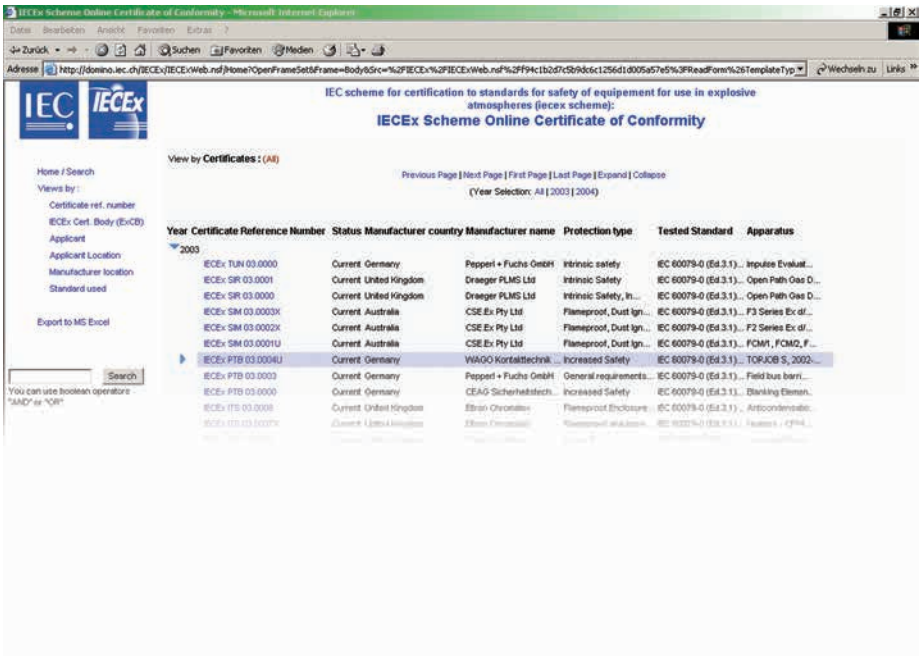
Note also when using terminal blocks: Terminal blocks used for intrinsically safe circuits must be isolated from those used in non-intrinsically safe circuits. This is accomplished by several accepted methods. First, intrinsically safe circuits are separated by at least 50mm of air space from non-intrinsically safe circuits.

Second, intrinsically safe circuits are housed in a separate enclosure. Third, intrinsically safe terminal blocks are separated from non-intrinsically safe terminal blocks by either an insulated partition or grounded metal partition. The partition size must allow for either 1.5mm or less distance from the sides of the housing or provide at least 50mm of creepage distance between the intrinsically and non-intrinsically safe circuits in all directions.

The insulation between an intrinsically safe circuit and the chassis of an electrical equipment or parts, which may be grounded, has to withstand an effective AC voltage corresponding to double the value of the voltage of the intrinsically safe circuit or a minimum of at least 500V, depending on which value is higher.
The insulation between an intrinsically safe and a non-intrinsically safe circuit has to withstand an effective AC voltage of 2 x nominal value (U) +1 kV or a minimum of 1.5 kV, whereby U represents the total of the effective voltages of the intrinsically safe and the non-intrinsically safe circuit.
Short circuit between different intrinsically safe circuits could cause dangerous conditions. The insulation between these circuits should withstand an effective voltage of at least 500VAC or 2UAC where U is the total of the effective voltages for the related circuits.
In accordance with the Electrical Installations Design Guideline DIN EN 60079-14 (VDE 0165-1), stranded and fine-stranded conductors used in intrinsically safe circuits shall be protected against splayed ends (e.g., via ferrules or pin terminals) **or by the type of terminal blocks** used. Tinning the conductor end alone is not permissible.
Gastight tinned copper ferrules or tinned copper pin terminals are recommended when connecting fine-stranded conductors to terminal blocks in corrosive atmospheres.

– Continued –
General Technical Information for Electrical Equipment in Hazardous Environments

IECEx and ATEX 100a Approvals



TOPJOB®S Rail-Mounted Terminal Blocks

The IECEx certificate (approval no. IECEx PTB 03.0004U) awarded to WAGO for the TOPJOB®S rail-mounted terminal blocks, which first debuted at the Hannover Fair 2003, is one of the first ten certificates that have been issued worldwide thus far. It is the fourth certificate of this type (reference no. ...0004U) that has been published online by the German certification body PTB in Braunschweig (publication dated December 15, 2003).

These rail-mounted terminal blocks are also certified for use in Exe applications according to Atex 100a. Both approvals are available for all through terminal blocks, as well as ground conductor terminal blocks.

They provide major cost savings and simplicity to WAGO customers:

- Double inventories are no longer necessary for standard and Exe rail-mounted terminal blocks.
- The time-, cost- and space-saving features of the system automatically apply to EXe applications.
- Project planning is essentially performed using a single range of rail-mounted terminal blocks.
- Enhanced plant safety: Standard terminal blocks cannot be accidentally used in Exe areas.
- The IECEx certificate is valid for the international trade of Ex equipment.

Other WAGO products with IECEx approval are available upon request.

International Certification Organizations – Overview

	Abbreviation for online search
Underwriters Laboratories USA http://www.ul.com	UL
Underwriters Laboratories USA http://www.ul.com	UL
Underwriters Laboratories USA http://www.ul.com	cURus
Underwriters Laboratories USA http://www.ul.com	cULus
Canadian Standards Association Kanada http://www.csa.ca	CSA
VDE-Gutachten mit Fertigungsüberwachung Bundesrepublik Deutschland http://www.vde.de/vde/html/e/home.htm	VDE
VDE – Deutscher Verband für Elektrotechnik Bundesrepublik Deutschland http://www.vde.de	
VDE – Prüfbericht Bundesrepublik Deutschland	
Österreichischer Verband für Elektrotechnik Österreich http://www.ove.at	ÖVE
Schweizerischer Elektrotechnischer Verein Schweiz http://www.sev.ch/	SEV
N.V. tot Keuring van Elektrotechnische Materialien Niederlande http://www.kema.nl	KEMA
CENELEC CERTIFICATION AGREEMENT	
N.V. tot Keuring van Elektrotechnische Materialien Niederlande http://www.cenelec.org	CCA Zul.-Nr. mit NL
Norges Elektriske Materialkontroll Norwegen http://express.nemko.com	NEMKO
Svenska Elektriska Materielkontrollanstalten AB Schweden http://www.semko.com	SEMKO

	Abbreviation for online search
Danmarks Elektriske Materielkontrol Dänemark http://www.demko.dk	DEMKO
CENELEC CERTIFICATION AGREEMENT	
Danmarks Elektriske Materielkontrol Dänemark http://www.cenelec.org	CCA Zul.-Nr. mit DK
SETI – FEMKO Sähkötarkastuskeskus Elinspecktionscentralen Finnland http://www.seti.fi	
Sähkötarkastuskeskus Elinspecktionscentralen Finnland http://www.fimko.com	FIMKO
South African Bureau of Standards Süd-Afrika http://www.sabs.co.za	SABS
RosTesT Russland http://www.rostest.ru	ROSTEST
Departamentul Moldovastandard Moldawien http://www.moldova.md/ro/government/oll/D_STAND/en/strcent2.htm	CSM
Certificate of Registration Großbritannien http://www.astacertification.com	ASTA
Rheinisch-Westfälischer Technischer Überwachungsverein e.V. Bundesrepublik Deutschland http://www.rwtuv.de	RWTÜV
Elektrotechnick ý v ýskumn ý a projektov ý ústav Tschechien http://www.ezu.cz	EZU
Stowarzyszenie Elektrykow Polskich Polen http://www.bbj.pl	BBJ
Stowarzyszenie Elektrykow Polskich Polen http://www.sep.com.pl	SEP

	Abbreviation for online search
Centre National d'Etudes des Télécommunications Frankreich http://www.lannion.cnet.fr	**CNET**
Laboratoire Central des Industries Electriques Frankreich http://www.lcie.fr	LCIE
Fyzikálne Technick ý Zkusební Ústav, Ostrava-Radvanice Tschechien http://www.ftzu.cz	**FTZU**

Shipbuilding approvals

Germanischer Lloyd Bundesrepublik Deutschland http://www.gl-group.com	**GL**
Bureau Veritas Frankreich http://www.bureauveritas.fr	**BV**
Lloyd's Register of Shipping Großbritannien http://www.lloydsregister.com	**LR**
NV – Det Norske Veritas Norwegen http://www.dnv.com	**DNV**
Russian Maritime Register of Shipping GUS http://www.rs-head.spb.ru	**RMR**
Polski Rejestr Statków Polen http://www.prs.pl	**PRS**
Korean Register of Shipping Korea http://www.krs.co.kr	**KR**
American Bureau of Shipping USA http://www.eagle.org	**ABS**

	Abbreviation for online search
Robbanásbiztos Villamos Berendezések Ungarn http://www.bki.hu	**BKI**
CB – TEST CERTIFICATE Indien http://www.ul-europe.com	**CB**
CB – TEST CERTIFICATE China http://www.ul-europe.com	**CB**
UL-International Demko A/S Dänemark http://www.ul-europe.com	**ENEC**

Ex approvals

Physikalisch Technische Bundesanstalt Bundesrepublik Deutschland Ex e II http://www.ptb.de	**PTB**
Underwriters Laboratories USA http://www.ul.com	**cURus-EX**
N.V. tot Keuring van Elektrotechnische Materialien Niederlande http://www.kemaquality.com	**KEMA-EX**
GOSENERGO-Ex GOSENERGONADZOR Russland	**GOSENERGO-EX**
Fyzikálne Technick ý Zkusební Ústav, Ostrava-Radvanice Tschechien http://www.ftzu.cz	**FTZU**
Robbanásbiztos Villamos Berendezések Ungarn http://www.bki.hu	**BKI-EX**



	Page
Item Numbers	626
WAGO Worldwide	642

Item Number Index

Item No.	Page
206 Series	
206-118	573
206-124	567
206-125	567
206-126	567
206-127	567
206-128	567
206-170	566
206-173	566
206-174	566
206-204	568
206-216	568
206-225	572
206-250	572
206-294	441
206-804	575
206-806	574
206-807	574
206-808	574
206-808	574
206-810	575
206-811	575
206-816	575
209 Series	
209-100	559
209-105	152
209-106	547
209-107	225
209-108	225
209-109	558
209-112	546
209-113	546
209-114	546
209-120	402
209-122	392
209-123	402
209-128	548
209-129	565
209-130	565
209-132	402
209-137	342
209-140	546
209-141	546
209-142	546
209-143	548
209-144	233
209-144	548
209-145	546
209-170	181
209-173	359
209-174	359
209-183	547
209-184	547
209-185	215
209-185	547
209-190	12
209-191	12
209-192	29
209-196	561
209-290	542
209-500/209-035	462
209-500/209-035	463
209-500/209-035	464
209-500/209-035	465
209-501	359
209-502	462
209-566	462
209-700/209-124	204
209-700/209-125	204
209-700/209-126	204
209-700/209-127	204
209-701	205
209-701/000-002	205
209-701/000-005	205
209-701/000-006	205
209-701/000-007	205

Item No.	Page
209 Series	
209-701/000-012	205
209-701/000-017	205
209-701/000-023	205
209-701/000-024	205
209-787	204
210 Series	
210-103	85
210-110	547
210-111	563
210-112	558
210-113	558
210-114	558
210-115	558
210-118	558
210-123	85
210-133	152
210-136	10
210-137	10
210-141	565
210-143	565
210-148	559
210-149	559
210-154	392
210-196	558
210-197	558
210-198	558
210-254	72
210-281	152
210-295	563
210-296	563
210-297	217
210-331	551
210-332	551
210-333	551
210-333/1000-001	550
210-333/1000-074	550
210-333/1000-075	550
210-333/1000-076	550
210-333/1000-077	550
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210-333/1000-079	550
210-333/1000-110	550
210-333/1000-111	550
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210-333/1000-113	550
210-333/1000-202	550
210-333/1000-204	550
210-333/1000-206	550
210-333/1000-208	550
210-333/1200-001	550
210-333/1200-074	550
210-333/1200-075	550
210-333/1200-076	550
210-333/1200-077	550
210-333/1200-078	550
210-333/1200-079	550
210-333/1200-103	550
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210-333/1200-106	550
210-333/1200-107	550
210-333/1200-203	550
210-333/500-001	550
210-333/500-002	550
210-333/500-003	550
210-333/500-004	550
210-333/500-005	550
210-333/500-006	550
210-333/500-007	550
210-333/500-008	550
210-333/500-009	550
210-333/500-010	550
210-333/500-011	550
210-333/500-021	550
210-333/500-074	550
210-333/500-075	550
210-333/500-076	550
210-333/500-077	550

Item No.	Page
210 Series	
210-333/500-078	550
210-333/500-079	550
210-333/600-001	550
210-333/600-006	550
210-333/600-007	550
210-333/600-008	550
210-333/600-009	550
210-333/600-010	550
210-333/600-011	550
210-333/600-021	550
210-333/600-074	550
210-333/600-075	550
210-333/600-076	550
210-333/600-077	550
210-333/600-078	550
210-333/600-079	550
210-333/600-103	550
210-333/600-104	550
210-333/600-105	550
210-333/600-106	550
210-333/700-001	550
210-333/700-020	550
210-333/700-021	550
210-333/700-074	550
210-333/700-075	550
210-333/700-076	550
210-333/700-077	550
210-333/700-078	550
210-333/700-079	550
210-333/700-108	550
210-333/700-109	550
210-333/800-001	550
210-333/800-002	550
210-333/800-003	550
210-333/800-004	550
210-333/800-005	550
210-333/800-006	550
210-333/800-007	550
210-333/800-008	550
210-333/800-009	550
210-333/800-010	550
210-333/800-011	550
210-333/800-074	550
210-333/800-075	550
210-333/800-076	550
210-333/800-077	550
210-333/800-078	550
210-333/800-079	550
210-333/800-209	550
210-334	551
210-335	551
210-345	546
210-412	233
210-413	233
210-414	233
210-415	233
210-423	237
210-424	237
210-490	343
210-504	559
210-505	559
210-506	559
210-508	559
210-549	561
210-612	547
210-647	564
210-648	564
210-657	565
210-658	565
210-701	529
210-703	529
210-704	529
210-705	529
210-705/000-002	529
210-706	529
210-706/000-002	529
210-707	529
210-707/000-002	529
210-708	529
210-710	529

Item No.	Page
210 Series	
210-719	564
210-720	564
210-721	564
210-722	564
210-732	529
210-801	556
210-802	556
210-803	556
210-804	556
210-805	556
210-805/000-002	556
210-806	556
210-806/000-002	556
210-807	556
210-807/000-002	556
210-808	556
210-810	556
210-811	556
210-811/000-002	556
210-831	557
210-832	557
210-833	557
210-834	557
210-850	557
210-851	557
210-852	557
210-852	557
210-852	557
210-853	557
210-854	557
210-855	557
210-855	557
210-855	557
210-856	557
210-857	557
210-858	557
210-859	557
210-860	557
210-861	557
210-862	557
210-863	557
211 Series	
211-110	554
211-111	554
211-112	554
211-113	554
211-114	554
211-115	554
211-120	554
211-121	554
211-122	554
211-123	554
211-124	554
211-125	554
211-129	554
211-150	555
211-151	555
211-155	555
211-156	555
211-161	555
211-162	555
211-611	528
211-612	528
211-613	528
211-614	528
211-615	528
211-811	556
211-812	556
211-813	556
211-821	556
211-823	556
211-824	556
211-829	556
211-835	556
211-836	556
211-855	556
211-856	556
211-857	556
211-861	556

Item No.	Page
211 Series	
211-862	556
211-863	556
215 Series	
215-111	292
215-211	292
215-212	292
215-311	292
215-411	292
215-511	292
215-611	292
215-711	292
215-811	292
215-911	292
216 Series	
216-101	570
216-102	570
216-103	570
216-104	570
216-106	570
216-107	570
216-108	570
216-109	570
216-110	570
216-121	570
216-122	570
216-123	570
216-124	570
216-131	570
216-132	570
216-141	426
216-142	426
216-143	426
216-144	426
216-151	570
216-152	570
216-201	568
216-202	568
216-203	568
216-204	568
216-205	568
216-206	568
216-207	568
216-208	110
216-209	568
216-210	110
216-221	568
216-222	568
216-223	568
216-224	568
216-241	110
216-242	110
216-243	110
216-244	110
216-246	110
216-262	110
216-263	110
216-264	110
216-266	110
216-267	110
216-284	110
216-286	110
216-287	110
216-288	110
216-289	110
216-301	568
216-302	568
216-321	568
216-322	568
216-413	573
216-414	573
216-424	573
216-425	573
216-435	573
216-545	253

Item No.	Page
216 Series	
216-546	253
216-547	253
221 Series	
221-412	507
221-413	507
221-415	507
Serie 222	
222-412	503
222-413	503
222-415	503
222-500	505
222-505	505
222-510	505
224 Series	
224-101	483
224-104	483
224-112	483
224-114	483
224-201	483
243 Series	
243-110	489
243-112	489
243-113	489
243-144	489
243-204	488
243-208	488
243-304	488
243-308	488
243-504	488
243-508	488
243-804	488
243-808	488
248 Series	
248-472	542
248-474	542
248-501	543
248-501/000-002	543
248-501/000-005	543
248-501/000-006	543
248-501/000-007	543
248-501/000-012	543
248-501/000-017	543
248-501/000-023	543
248-501/000-024	543
248-502	542
248-503	542
248-504	542
248-505	542
248-506	542
248-566	542
248-569	542
248-570	542
248-571	542
248-572	542
248-573	542
249 Series	
249-101	563
249-105	547
249-106	289
249-107	289
249-109	472
249-116	544
249-117	544

Item No.	Page
249 Series	
249-118	545
249-119	545
249-120	545
249-125	295
249-126	295
249-127	295
249-130	605
249-135	416
249-136	416
249-137	416
249-138	416
249-139	416
249-140	416
249-141	288
249-142	288
249-143	288
249-144	288
249-145	288
249-146	288
249-147	289
249-148	289
249-197	544
258 Series	
258-139	530
258-140	530
258-141	530
258-143	530
258-144	530
258-145	530
258-146	530
258-147	530
258-149	528
258-150	528
258-157	528
258-161	528
258-162	528
258-166	528
258-169	528
258-171	528
258-173	528
258-177	528
258-178	528
258-200	526
258-226	530
258-227	530
258-228	530
258-229	530
258-298	525
258-326	530
258-327	530
258-328	530
258-329	530
258-342	528
258-350	554
258-361	531
258-362	531
258-363	531
258-364	531
258-365	531
258-366	531
258-367	531
258-368	531
258-369	531
258-370	531
258-371	531
258-372	531
258-373	531
258-374	531
258-375	531
258-377	531
258-378	531
258-379	531
258-380	531
258-381	531
258-382	531
258-383	531
258-387	531
258-388	531

Item No.	Page
258 Series	
258-389	531
258-390	531
258-391	531
258-392	531
258-393	531
258-394	531
258-396	531
258-397	531
258-398	531
258-399	531
258-410	531
258-426	530
258-426/000-005	530
258-427	530
258-427/000-005	530
258-428	530
258-428/000-005	530
258-429	530
258-429/000-005	530
258-452	530
258-452/000-002	530
258-452/000-003	530
258-452/000-004	530
258-452/000-005	530
258-452/000-010	530
258-453	530
258-454	531
258-455	531
258-456	531
258-457	530
258-458/000-002	530
258-458/000-004	530
258-470	531
258-471	531
258-472	531
258-473	531
258-5000	524
258-5005	524
258-5006	524
258-5007	524
258-5008	524
258-5015	524
258-6000	527
258-6100	527
260 Series	
260-102	403
260-112	
260-152	403
260-162	
260-202	403
260-212	
260-252	403
260-262	
260-301	402
260-303	402
260-304	402
260-306	402
260-307	402
260-311	402
260-313	402
260-314	402
260-316	402
260-317	402
260-321	402
260-323	402
260-324	402
260-326	402
260-327	402
260-331	402
260-333	402

Item No.	Page
260 Series	
260-334	402
260-336	402
260-337	402
260-341	402
260-343	402
260-344	402
260-346	402
260-347	402
260-351	402
260-353	402
260-354	402
260-356	402
260-357	402
260-361	402
260-371	402
260-402	402
260-404	416
260-405	416
261 Series	
261-102	405
261-112	
261-102/331-000	407
261-112/331-000	
261-102/341-000	409
261-112/341-000	
261-152	405
261-162	
261-152/331-000	407
261-162/331-000	
261-152/341-000	409
261-162/341-000	
261-202	405
261-212	
261-202/332-000	407
261-212/332-000	
261-202/342-000	409
261-212/342-000	
261-252	405
261-262	
261-252/332-000	407
261-262/332-000	
261-252/342-000	409
261-262/342-000	
261-301	404
261-301/331-000	406
261-301/341-000	408
261-303	404
261-303/331-000	406
261-303/341-000	408
261-304	404
261-304/331-000	406
261-304/341-000	408
261-306	404
261-306/331-000	406
261-306/341-000	408
261-307	404
261-307/331-000	406
261-307/341-000	408
261-311	404
261-311/331-000	406
261-311/341-000	408
261-313	404
261-313/331-000	406
261-313/341-000	408
261-314	404

Item No.	Page
261 Series	
261-314/331-000	406
261-314/341-000	408
261-316	404
261-316/331-000	406
261-316/341-000	408
261-317	404
261-317/331-000	406
261-317/341-000	408
261-321	404
261-321/331-000	406
261-321/341-000	408
261-323	404
261-323/331-000	406
261-323/341-000	408
261-324	404
261-324/331-000	406
261-324/341-000	408
261-326	404
261-326/331-000	406
261-326/341-000	408
261-327	404
261-327/331-000	406
261-327/341-000	408
261-331	404
261-331/332-000	406
261-331/342-000	408
261-333	404
261-333/332-000	406
261-333/342-000	408
261-334	404
261-334/332-000	406
261-334/342-000	408
261-336	404
261-336/332-000	406
261-336/342-000	408
261-337	404
261-337/332-000	406
261-337/342-000	408
261-341	404
261-341/332-000	406
261-341/342-000	408
261-343	404
261-343/332-000	406
261-343/342-000	408
261-344	404
261-344/332-000	406
261-344/342-000	408
261-346	404
261-346/332-000	406
261-346/342-000	408
261-347	404
261-347/332-000	406
261-347/342-000	408
261-351	404
261-351/332-000	406
261-351/342-000	408
261-353	404
261-353/332-000	406
261-353/342-000	408
261-354	404
261-354/332-000	406
261-354/342-000	408
261-356	404
261-356/332-000	406
261-356/342-000	408
261-357	404
261-357/332-000	406
261-357/342-000	408
261-361	404
261-371	404
261-402	404
261-404	416
261-405	416
261-410	410
261-411	410
261-411/331-000	410
261-411/341-000	410
261-422	411
261-422/331-000	411
261-422/341-000	411
261-423	411

Item No.	Page
261 Series	
261-423/331-000	411
261-423/341-000	411
261-424	411
261-424/331-000	411
261-424/341-000	411
261-425	411
261-425/331-000	411
261-425/341-000	411
261-426	411
261-426/331-000	411
261-426/341-000	411
261-427	411
261-427/331-000	411
261-427/341-000	411
261-428	411
261-428/331-000	411
261-428/341-000	411
261-429	411
261-429/331-000	411
261-429/341-000	411
261-430	411
261-430/331-000	411
261-430/341-000	411
261-431	411
261-431/331-000	411
261-431/341-000	411
261-432	411
261-432/331-000	411
261-432/341-000	411
262 Series	
262-102	413
262-112	
262-130	414
262-132	415
262-142	
262-152	413
262-162	
262-180	414
262-181	414
262-182	415
262-192	
262-202	413
262-212	
262-230	414
262-232	415
262-242	
262-252	413
262-262	
262-280	414
262-281	414
262-282	415
262-292	
262-301	412
262-304	412
262-306	412
262-307	412
262-311	412
262-314	412
262-316	412
262-317	412
262-321	412
262-324	412
262-326	412
262-327	412
262-331	412
262-334	412
262-336	412
262-337	412
262-341	412
262-344	412

Item No.	Page
262 Series	
262-346	412
262-347	412
262-351	412
262-354	412
262-356	412
262-357	412
262-361	412
262-363	414
262-371	412
262-373	414
262-402	412
264 Series	
264-102	398
264-112	
264-120	369
264-125	368
264-130	396
264-131	396
264-132	398
264-142	
264-152	398
264-162	
264-180	397
264-182	398
264-192	
264-202	398
264-212	
264-220	369
264-225	368
264-230	396
264-231	396
264-232	399
264-242	
264-252	398
264-262	
264-280	397
264-282	399
264-292	
264-301	396
264-304	396
264-306	396
264-307	396
264-311	397
264-314	397
264-316	397
264-317	397
264-321	396
264-324	396
264-326	396
264-327	396
264-331	396
264-334	396
264-336	396
264-337	396
264-341	397
264-344	397
264-346	397
264-347	397
264-351	396
264-354	396
264-356	396
264-357	396
264-361	396
264-363	396
264-364	396
264-367	368
264-367	369
264-368	368
264-369	368

Item No.	Page
264 Series	
264-370	368
264-371	397
264-373	397
264-374	397
264-402	368
264-701	369
264-704	369
264-706	369
264-711	368
264-714	368
264-716	368
264-721	369
264-724	369
264-726	369
264-727	369
264-727/999-950	369
264-731	368
264-734	368
264-736	368
264-737	368
264-737/999-950	368
264-900	542
264-901	542
264-902	542
264-903	542
264-904	542
264-905	542
270 Series	
270-319	383
270-320	381
270-321	383
270-322	381
270-409	381
270-417	381
270-480	381
270-560	382
270-560/281-434	382
270-560/281-507	382
270-564	382
270-564/281-483	382
270-570	381
270-570/281-434	381
270-570/281-507	381
270-572	383
270-572/281-434	383
270-574	381
270-574/281-483	381
270-577	383
270-585	383
270-585/281-507	383
270-586	383
273 Series	
273-100	494
273-101	494
273-102	495
273-104	494
273-105	495
273-108	494
273-112	494
273-150	495
273-153	494
273-155	494
273-158	494
273-252	494
273-253	494
273-254	495
273-255	495
273-403	495
273-453	495

Item No.	Page
279 Series	
279-101	450
279-104	450
279-284	559
279-308	180
279-309	180
279-325	180
279-326	180
279-328	180
279-329	180
279-330	180
279-331	180
279-339	180
279-340	180
279-341	180
279-342	180
279-344	180
279-345	180
279-346	180
279-347	180
279-348	180
279-349	180
279-402	180
279-405	450
279-409	180
279-415	181
279-422	180
279-432	294
279-433	294
279-440	294
279-470	293
279-471	293
279-482	294
279-483	294
279-490	294
279-492	294
279-501	198
279-504	198
279-507	198
279-508	198
279-509	198
279-512	198
279-513	198
279-517	198
279-518	199
279-519	199
279-527	198
279-529	199
279-673/281-410	274
279-673/281-411	274
279-674/281-413	274
279-674/281-434	274
279-681	180
279-682	180
279-683	180
279-684	180
279-685	180
279-686	180
279-687	180
279-687/999-950	180
279-809/281-413	274
279-809/281-434	274
279-815/281-410	274
279-815/281-411	274
279-826	181
279-831	180
279-832	180
279-833	180
279-834	180
279-835	180
279-836	180
279-837	180
279-837/999-950	180
279-838	180
279-901	180
279-902	180

Item No.	Page
279 Series	
279-903	180
279-904	180
279-905	180
279-906	180
279-907	180
279-907/999-950	180
279-915/281-410	274
279-915/281-411	274
279-992	180
279-993	180
279-994	180
279-995	181
279-995	181
280 Series	
280-101	450
280-104	450
280-107	450
280-301	450
280-301	450
280-302	450
280-302	450
280-303	205
280-304	205
280-305	208
280-306	208
280-308	182
280-309	182
280-310	182
280-311	182
280-312	184
280-313	184
280-314	182
280-315	182
280-318	184
280-319	259
280-320	261
280-321	259
280-322	450
280-323	261
280-324	182
280-325	477
280-326	182
280-330	279
280-331	279
280-332	450
280-333	477
280-334	182
280-335	182
280-336	205
280-339	208
280-340	202
280-341	202
280-342	202
280-343	204
280-344	182
280-346	182
280-348	184
280-352	182
280-353	182
280-354	184
280-355	184
280-356	182
280-357	182
280-358	182
280-359	182
280-366	202
280-369	202
280-371	222
280-373	223
280-374	222
280-376	223
280-394	477
280-395	477
280-402	183
280-404	181
280-405	338
280-409	183
280-415	183

Item No.	Page
280 Series	
280-418	290
280-419	290
280-422	183
280-432	294
280-433	294
280-434	565
280-435	565
280-436	565
280-437	565
280-438	565
280-439	565
280-440	294
280-470	293
280-471	293
280-472	293
280-473	477
280-474	477
280-475	477
280-476	477
280-477	477
280-478	477
280-482	294
280-483	294
280-490	294
280-492	294
280-494	477
280-510	205
280-513	203
280-514	204
280-515	273
280-517	202
280-519	202
280-520	202
280-521	203
280-522	203
280-523	202
280-524	202
280-525	203
280-526	203
280-527	202
280-528	204
280-529	202
280-530	202
280-531	204
280-532	204
280-533	202
280-534	202
280-537	202
280-543	203
280-547	208
280-548	208
280-549	208
280-550	208
280-551	208
280-552	208
280-553	258
280-554	267
280-555	267
280-556	267
280-557	208
280-558	208
280-559	258
280-560	258
280-560/281-434	260
280-561	258
280-561/281-413	260
280-562	268
280-562/281-411	268
280-562/281-420	272
280-562/281-434	272
280-563	258
280-564	258
280-564/281-483	260
280-565	268
280-565/280-319	268
280-565/280-321	268
280-566	268
280-566/281-496	260
280-567	258
280-568	268
280-570	262

Item No.	Page
280 Series	
280-570/281-434	261
280-571	262
280-571/281-413	261
280-572	270
280-572/281-411	270
280-572/281-420	272
280-572/281-434	272
280-573	262
280-574	262
280-574/281-483	261
280-575	270
280-575/280-320	270
280-575/280-323	270
280-576	270
280-576/281-496	261
280-577	262
280-577/281-496	261
280-578	270
280-580	264
280-580/281-434	266
280-581/281-413	266
280-582	262
280-583	273
280-584	264
280-584/281-483	266
280-585	273
280-586	273
280-586/281-496	266
280-587	264
280-588	264
280-588/280-320	264
280-588/280-323	264
280-592	268
280-593	270
280-597	208
280-610	250
280-615/281-412	279
280-615/281-428	279
280-637	184
280-637/999-950	184
280-640	184
280-641	184
280-645/281-412	279
280-645/281-412	279
280-646	185
280-650	182
280-650/056-000	182
280-651	184
280-653	182
280-654	184
280-654/056-000	184
280-654/056-000	185
280-656	185
280-671	182
280-672	182
280-673/281-410	276
280-673/281-411	276
280-675	477
280-681	182
280-683	224
280-684	182
280-687	182
280-687/999-950	182
280-801/281-411	284
280-801/281-413	286
280-801/281-414	286
280-801/281-415	286
280-801/281-416	286
280-801/281-417	286
280-801/281-418	286
280-801/281-420	284
280-801/281-421	284
280-803/281-411	285
280-803/281-413	287
280-803/281-414	287
280-803/281-415	287
280-803/281-416	287
280-803/281-417	287
280-803/281-418	287
280-803/281-420	285

Item No.	Page
280 Series	
280-803/281-421	285
280-805	224
280-809/281-413	276
280-809/281-434	276
280-815/281-410	276
280-815/281-411	276
280-816	250
280-826	181
280-829	224
280-830	182
280-831	182
280-832	182
280-833	182
280-834	182
280-835	182
280-835/056-000	182
280-836	182
280-836	224
280-837	182
280-837/999-950	182
280-838	182
280-839	224
280-850	250
280-850/281-413	250
280-852	250
280-852/281-413	250
280-854	250
280-854/281-413	250
280-856	250
280-856/281-413	250
280-868	222
280-869	222
280-870	222
280-871	222
280-874	223
280-875	223
280-876	222
280-879	222
280-880	222
280-881	223
280-882	223
280-883	223
280-884	223
280-885	223
280-889	205
280-891	204
280-901	182
280-902	182
280-902/056-000	182
280-903	182
280-904	182
280-905	182
280-906	182
280-907	182
280-907/999-950	182
280-912	224
280-913	224
280-914	224
280-915/281-410	276
280-915/281-411	276
280-916	250
280-940/281-410	280
280-940/281-411	280
280-941/281-489	280
280-941/281-490	280
280-941/281-491	280
280-941/281-492	280
280-942/281-487	280
280-942/281-488	280
280-943/281-413	280
280-943/281-434	280
280-946	185
280-992	182
280-993	182
280-994	182
280-995	181
280-996	185
280-998	184

Item No.	Page
281 Series	
281-101	450
281-104	450
281-107	450
281-301	450
281-302	450
281-309	245
281-311	245
281-312	189
281-313	189
281-318	189
281-322	450
281-324	188
281-326	188
281-328	188
281-329	188
281-330	188
281-331	188
281-332	450
281-333	453
281-334	188
281-335	188
281-336	453
281-338	188
281-339	188
281-340	206
281-341	206
281-342	206
281-343	206
281-344	188
281-345	188
281-345	226
281-346	188
281-347	188
281-348	189
281-349	188
281-350	188
281-355	188
281-356	188
281-357	189
281-358	189
281-365	210
281-366	210
281-402	189
281-405	450
281-407	183
281-409	189
281-415	189
281-418	290
281-419	290
281-421	203
281-422	189
281-440	294
281-470	293
281-471	293
281-472	293
281-482	294
281-483	294
281-485	294
281-490	294
281-492	294
281-503	76
281-511	248
281-512	248
281-512/281-417	248
281-512/281-418	248
281-512/281-501	248
281-530	210
281-531	210
281-532	210
281-610	248
281-611	244
281-611/281-417	244
281-611/281-418	244
281-611/281-541	244
281-611/281-542	244
281-612	244
281-612/281-417	244
281-612/281-418	244
281-612/281-541	244

Item No.	Page
281 Series	
281-612/281-542	244
281-613	246
281-613/281-417	246
281-613/281-418	246
281-613/281-541	246
281-613/281-542	246
281-616	244
281-619	206
281-620	206
281-622	244
281-622/281-417	244
281-622/281-418	244
281-622/281-541	244
281-622/281-542	244
281-623	246
281-623/281-417	246
281-623/281-418	246
281-623/281-541	246
281-623/281-542	246
281-624	245
281-629	206
281-630	206
281-631	189
281-633/281-410	282
281-633/281-411	282
281-634/281-413	282
281-634/281-434	282
281-635/281-489	282
281-635/281-490	282
281-635/281-491	282
281-635/281-492	282
281-636/281-487	282
281-636/281-488	282
281-637	189
281-637/999-950	189
281-651	189
281-652	188
281-653	188
281-654	188
281-656	248
281-657	188
281-657/999-950	188
281-658	188
281-659	226
281-660	226
281-663	188
281-664	188
281-665/281-400	278
281-665/281-401	278
281-665/281-410	278
281-665/281-411	278
281-666	226
281-668	188
281-672	245
281-673/281-400	278
281-673/281-401	278
281-673/281-410	278
281-673/281-411	278
281-678	188
281-679	188
281-681	188
281-683	188
281-684	188
281-685	188
281-686	188
281-687	188
281-687/999-950	188
281-901	188
281-902	188
281-903	188
281-904	188
281-905	188
281-906	188
281-907	188
281-907/999-950	188
281-912	226
281-915/281-400	278
281-915/281-401	278
281-915/281-410	278
281-915/281-411	278
281-916	248

Item No.	Page
281 Series	
281-992	188
281-993	188
281-994	188
281-998	189
282 Series	
282-101	451
282-104	451
282-107	451
282-120	456
282-122	456
282-124	457
282-126	456
282-128	456
282-128/281-413	457
282-128/281-417	457
282-128/281-418	457
282-131	454
282-133	454
282-135	454
282-137	454
282-138	455
282-139	455
282-140	455
282-141	455
282-301	451
282-302	451
282-308	190
282-309	190
282-311	456
282-312	456
282-314	454
282-315	454
282-322	451
282-325	190
282-326	190
282-328	190
282-329	190
282-330	190
282-331	190
282-332	451
282-333	238
282-334	238
282-339	190
282-340	190
282-341	190
282-342	190
282-357	190
282-358	190
282-360	236
282-361	236
282-365	236
282-366	236
282-367	190
282-368	190
282-369	559
282-370	236
282-372	236
282-373	236
282-374	236
282-384	232
282-385	232
282-386	232
282-387	232
282-390	232
282-391	232
282-392	232
282-402	190
282-405	238
282-409	190
282-415	169
282-422	190
282-424	232
282-432	72
282-432/100-000	72
282-433	72
282-433/100-000	72
282-434	72
282-434/100-000	72

Item No.	Page
282 Series	
282-435	72
282-435/011-000	72
282-436	72
282-436/301-000	72
282-437	72
282-437/011-000	72
282-437/012-000	72
282-438	72
282-438/300-000	72
282-438/301-000	72
282-439	72
282-439/011-000	72
282-440	72
282-440	236
282-442	236
282-443	236
282-444	236
282-445	236
282-446	236
282-451	456
282-452	456
282-453	456
282-454	456
282-457	456
282-458	456
282-638	238
282-639	238
282-640	238
282-641	238
282-681	190
282-682	190
282-684	190
282-687	190
282-687/999-950	190
282-694	238
282-695	238
282-696	238
282-696	240
282-697	238
282-698/281-413	240
282-698/281-429	240
282-698/281-434	240
282-698/281-449	240
282-699	238
282-811	236
282-821	236
282-841	236
282-841/049-000	237
282-860	232
282-865	232
282-866	233
282-870	232
282-881	72
282-882	72
282-883	72
282-884	72
282-885	72
282-886	72
282-887	72
282-888	72
282-901	190
282-902	190
282-904	190
282-907	190
282-907/999-950	190
282-992	190
282-993	190
283 Series	
283-101	452
283-104	452
283-107	452
283-301	452
283-302	452
283-322	452
283-325	192
283-326	192

Item No.	Page
283 Series	
283-328	192
283-329	192
283-330	192
283-331	192
283-332	452
283-333	453
283-335	453
283-350	193
283-351	193
283-352	193
283-353	193
283-354	193
283-355	193
283-357	192
283-367	192
283-400	192
283-402	192
283-404	168
283-405	452
283-407	168
283-409	192
283-414	192
283-415	192
283-422	192
283-609	466
283-610	466
283-611	466
283-671	193
283-672	193
283-674	193
283-677	193
283-677/999-950	193
283-901	192
283-902	192
283-904	192
283-907	192
283-907/999-950	192
283-992	192
283-998	193
284 Series	
284-101	452
284-104	452
284-107	452
284-301	452
284-302	452
284-308	191
284-309	191
284-322	452
284-325	191
284-326	191
284-328	191
284-329	191
284-330	191
284-331	191
284-332	452
284-333	453
284-334	181
284-336	180
284-339	191
284-340	191
284-341	191
284-342	191
284-343	453
284-344	181
284-346	180
284-357	191
284-358	191
284-367	191
284-368	191
284-400	191
284-402	191
284-405	452
284-409	191
284-412	195
284-413	189

Item No.	Page
284 Series	
284-414	181
284-415	172
284-422	191
284-621	195
284-624	195
284-681	191
284-682	191
284-684	191
284-687	191
284-687/999-950	191
284-901	191
284-902	191
284-904	191
284-907	191
284-907/999-950	191
284-992	191
284-993	191
285 Series	
285-134	168
285-135	168
285-137	168
285-139	168
285-150	169
285-154	169
285-157	169
285-159	169
285-169	172
285-170	172
285-172	169
285-194	172
285-195	172
285-197	172
285-197/999-950	172
285-199	172
285-401	194
285-407	172
285-416	194
285-420	168
285-421	168
285-427	168
285-430	168
285-435	168
285-440	169
285-441	169
285-442	169
285-447	169
285-450	169
285-495	172
285-634	194
285-635	194
285-637	194
285-637/999-950	194
285-992	194
285-995	172
285-1169	173
285-1171	173
285-1177	173
285-1178	173
285-1184	173
285-1185	173
285-1187	173
286 Series	
286-304	333
286-312	333
286-336	333
286-364	333
286-508	333
286-516	333
286-570	333
286-571	333

Item No.	Page
286 Series	
286-661	333
286-723	333
286-734	333
286-752	333
286-842	333
286-862/000-300	333
286-862/150-030	333
286-867	333
286-868	333
286-875	333
293 Series	
293-219	444
293-220	444
293-221	444
293-222	444
293-225	444
293-228	445
293-230	445
293-325	444
294 Series	
294-199	441
294-364	441
294-384	441
294-4002	433
294-4003	434
294-4004	436
294-4005	438
294-4006	440
294-4007	440
294-4012	433
294-4013	434
294-4014	436
294-4015	438
294-4022	433
294-4023	434
294-4024	436
294-4025	438
294-4032	433
294-4035	438
294-4042	433
294-4043	434
294-4044	436
294-4045	438
294-4052	433
294-4053	434
294-4055	438
294-4072	433
294-4075	438
294-4213	435
294-4214	437
294-4215	439
294-4223	435
294-4224	437
294-4225	439
294-4235	439
294-4253	435
294-4255	439
294-4275	439
294-4313	435
294-4314	437
294-4315	439
294-4323	435
294-4324	437
294-4325	439
294-4335	439
294-4353	435
294-4355	439
294-4375	439
294-4413	434
294-4414	436

Item No.	Page
294 Series	
294-4415	438
294-4423	434
294-4424	436
294-4425	438
294-4435	438
294-4453	434
294-4455	438
294-4475	438
294-5002	433
294-5003	434
294-5004	436
294-5005	438
294-5012	433
294-5013	434
294-5014	436
294-5015	438
294-5022	433
294-5023	434
294-5024	436
294-5025	438
294-5032	433
294-5035	438
294-5042	433
294-5043	434
294-5044	436
294-5045	438
294-5052	433
294-5053	434
294-5055	438
294-5072	433
294-5075	438
294-5113	434
294-5114	436
294-5123	434
294-5124	436
294-5153	434
294-5155	438
294-5175	438
294-5213	435
294-5214	437
294-5215	439
294-5223	435
294-5224	437
294-5225	439
294-5235	439
294-5253	435
294-5255	439
294-5275	439
294-5313	435
294-5314	437
294-5315	439
294-5323	435
294-5324	437
294-5325	439
294-5335	439
294-5353	435
294-5355	439
294-5375	439
294-5413	434
294-5414	436
294-5415	438
294-5423	434
294-5424	436
294-5425	438
294-5435	430
294-5435	438
294-5453	434
294-5455	438
294-5475	438
709 Series	
709-107	462
709-110	233
709-111	233
709-112	233
709-118	545

Item No.	Page
709 Series	
709-119	545
709-120	545
709-153	561
709-154	562
709-167	561
709-168	562
709-170	225
709-177	210
709-178	422
709-183	561
709-193	545
709-196	375
709-310	291
709-311	291
709-312	291
709-322	291
709-324	291
709-326	291
709-332	291
709-334	291
709-336	291
709-350	514
709-352	514
709-591	549
726 Series	
726-121	462
726-122	462
726-141	462
726-142	462
726-221	462
726-222	462
726-241	462
726-242	462
726-321	465
726-322	465
726-325	465
726-326	465
726-341	465
726-342	465
726-345	465
726-346	465
726-421	463
726-441	463
726-521	463
726-541	463
726-601	466
726-602	466
726-611	466
726-612	466
726-621	466
726-622	466
726-651	467
726-652	467
726-661	467
726-662	467
726-671	467
726-672	467
726-721	464
726-741	464
726-821	464
726-841	464
726-901	469
726-902	462
726-903	468
726-904	468
726-905	468
726-906	469
726-907	469

Item No.	Page
727 Series	
727-105	474
727-106	474
727-107	474
727-108	474
727-113	474
727-114	474
727-115	474
727-116	474
727-117	474
727-119	474
727-120	474
727-121	474
727-122	474
727-123	474
727-124	474
727-125	475
727-126	475
727-127	475
727-128	475
727-129	474
727-130	474
727-131	474
727-132	474
727-133	474
727-134	474
727-135	475
727-136	475
727-137	475
727-138	475
727-155	474
727-155	475
727-156	474
727-156	475
727-157	474
727-157	475
727-158	474
727-158	475
727-159	474
727-159	475
727-160	474
727-161	474
727-162	474
727-163	474
727-164	474
727-165	474
727-166	474
727-167	474
727-168	474
727-169	474
727-170	474
727-197	472
727-198	472
727-199	472
727-205	472
727-206	472
727-207	472
727-208	472
727-217	472
727-219	472
727-220	472
727-221	472
727-222	472
727-223	472
727-224	472
727-225	473
727-226	473
727-227	473
727-228	473
727-229	472
727-230	472
727-231	472
727-232	472
727-233	472
727-234	472
727-235	473
727-236	473
727-237	473
727-238	473

Item No.	Page
734 Series	
734-326	96
734-327	96
734-328	96
734-329	96
734-430	133
734-431	133
769 Series	
769-101 | 769-115	352
769-101/022-000 | 769-115/022-000	355
769-102/021-000 | 769-115/021-000	353
769-103/000-036 | 769-115/000-036	358
769-103/000-037 | 769-115/000-037	358
769-103/000-038 | 769-115/000-038	358
769-103/000-039 | 769-115/000-039	358
769-121 | 769-135	354
769-151	310
769-156	306
769-161	328
769-162/769-313	328
769-163/769-313	328
769-164/769-313	328
769-165/769-313	328
769-171	308
769-171/000-006	308
769-176	304
769-176/000-006	304
769-181	326
769-182/769-314	326
769-183/769-314	326
769-184/769-314	326
769-185/769-314	326
769-191	330
769-192/769-319	330
769-193/769-319	330
769-194/769-319	330
769-195/769-319	330
769-201	310
769-202	317
769-203	317
769-207	310
769-208/281-410	319
769-208/281-411	319
769-209/281-413	321
769-209/281-434	321
769-211	308
769-212	317
769-213	317
769-214	314
769-217	308
769-218/281-410	319
769-218/281-411	319
769-219/281-413	321
769-219/281-434	321
769-221	306
769-222	316
769-223	316
769-227	306
769-228/281-410	318
769-228/281-411	318
769-229/281-413	320
769-229/281-434	320
769-231	304

Item No.	Page
769 Series	
769-232	316
769-233	316
769-237	304
769-238/281-410	318
769-238/281-411	318
769-239/281-413	320
769-239/281-434	320
769-242	324
769-243	324
769-251	312
769-251/000-006	312
769-257	312
769-301	310
769-302	310
769-303	308
769-304	308
769-305	306
769-306	306
769-307	304
769-308	304
769-309	317
769-310	317
769-311	317
769-312	317
769-313	317
769-314	317
769-315	314
769-316	314
769-317	324
769-318	324
769-319	324
769-320	312
769-321	312
769-402	352
769-410	168
769-411	342
769-412	342
769-413	342
769-414	342
769-428	352
769-429	352
769-430	352
769-431	352
769-434	343
769-435	304
769-436	352
769-438	304
769-439	304
769-470	304
769-471	304
769-472	304
769-499	342
769-501	356
769-501/000-006	356
769-501/000-016	356
769-502	356
769-502/000-006	356
769-502/000-016	356
769-503	356
769-503/000-006	356
769-503/000-016	356
769-504	356
769-504/000-006	356
769-504/000-016	356
769-505	356
769-505/000-006	356
769-505/000-016	356
769-506	356
769-506/000-006	356
769-506/000-016	356
769-512	356
769-512/000-006	356
769-512/000-016	356
769-513	356
769-513/000-006	356
769-513/000-016	356
769-515	356
769-515/000-006	356
769-515/000-016	356

Item No.	Page
769 Series	
769-602 | 769-615	342
769-602/001-000 | 769-615/001-000	342
769-602/002-000 | 769-615/002-000	342
769-602/004-000 | 769-615/004-000	343
769-602/005-000 | 769-615/005-000	344
769-602/006-000 | 769-615/006-000	345
769-632 | 769-645	346
769-632/003-000 | 769-645/003-000	347
769-632/003-036 | 769-636/003-036	347
769-632/004-000 | 769-645/004-000	348
769-632/007-000 | 769-645/007-000	350
769-662 | 769-675	346
769-662/003-000 | 769-675/003-000	347
769-662/004-000 | 769-675/004-000	348
769-1602 | 769-1615	359
773 Series	
773-108	498
773-173	498
773-331	501
773-332	499
773-492	500
773-493	500
773-494	500
773-496	500
773-498	500
773-514	498
777 Series	
777-300	217
777-303	151
777-305	215
777-310	213
780 Series	
780-317	213
780-321	217
780-452	295
780-453	295
780-454	295
780-455	295
780-456	295
780-457	295
780-458	295

Item No.	Page
780 Series	
780-601	213
780-601	217
780-602	213
780-604	213
780-607	213
780-607/999-950	213
780-613	217
780-631	213
780-637	213
780-637/999-950	213
780-640	213
780-651	213
780-654	213
780-992	213
780-993	213
781 Series	
781-452	295
781-453	295
781-454	295
781-455	295
781-456	295
781-601	214
781-604	214
781-607	214
781-607/999-950	214
781-613	217
781-623	217
781-631	214
781-637	214
781-637/999-950	214
781-643	217
781-651	214
781-653	217
781-992	214
781-993	214
782 Series	
782-300	218
782-317	215
782-321	218
782-601	215
782-604	215
782-607	215
782-607/999-950	215
782-613	218
782-623	218
782-992	215
783 Series	
783-317	216
783-321	218
783-601	216
783-604	216
783-607	216
783-607/999-950	216
783-613	218
783-623	218
783-992	216
784 Series	
784-601	215
784-604	215
784-607	215
784-607/999-950	215
784-613	218
784-623	218
784-992	215

Item No.	Page
785 Series	
785-601	216
785-604	216
785-607	216
785-613	219
785-623	219
790 Series	
790-100	513
790-101	513
790-108	512
790-110	512
790-112	512
790-113	512
790-114	512
790-115	512
790-116	512
790-124	512
790-133	512
790-134	512
790-140	513
790-144	512
790-145	512
790-190	513
790-191	513
790-192	513
790-193	513
790-300	516
790-301	516
790-302	516
790-310	517
790-311	517
790-312	517
790-400	515
791 Series	
791-107	514
791-111	514
791-117	514
791-124	514
793 Series	
793-400	536
793-401	536
793-402	536
793-403	536
793-404	536
793-405	536
793-406	536
793-407	536
793-408	536
793-409	536
793-410	536
793-411	536
793-412	536
793-413	536
793-414	536
793-415	536
793-416	536
793-417	536
793-418	536
793-419	536
793-420	536
793-421	536
793-422	536
793-423	536
793-424	536
793-458	540
793-472	538
793-474	538
793-487	538
793-494	538
793-495	538
793-496	538
793-497	538
793-498	538
793-500/793-134	540

Item No.	Page
793 Series	
793-501	543
793-501/000-005	543
793-501/000-006	543
793-501/000-007	543
793-501/000-012	543
793-501/000-017	543
793-501/000-023	543
793-501/000-024	543
793-502	534
793-503	534
793-504	534
793-505	534
793-506	534
793-507	534
793-508	534
793-509	534
793-510	534
793-511	534
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793-569	534
793-570	534
793-571	534
793-572	534
793-573	534
793-574	538
793-575	538
793-576	538
793-577	538
793-578	538

Item No.	Page
793 Series	
793-579	538
793-580	538
793-580	539
793-581	538
793-582	538
793-583	538
793-600/793-073	540
793-602	535
793-603	535
793-604	535
793-605	535
793-606	535
793-607	535
793-608	535
793-609	535
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793-668	535
793-669	535
793-670	535
793-671	535
793-672	535
793-674	539
793-675	539
793-676	539
793-677	539
793-678	539

Item No.	Page
793 Series	
793-679	539
793-681	539
793-682	539
793-683	539
793-687	539
793-688	535
793-694	539
793-695	539
793-696	539
793-697	539
793-698	539
793-699	535
793-900	535
793-901	535
793-902	535
793-903	535
793-912	535
793-913	535
793-933	474
793-933	541
793-934	541
793-935	541
793-936	541
793-937	541
793-938	541
793-939	541
793-940	541
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793-958	540
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793-961	541
793-967	541
793-968	541
793-969	541
793-970	541
793-971	541
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793-987	541
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793-991	541
793-992	541
793-993	540
793-994	540
793-995	540
793-996	540
793-997	540
793-998	540
793-3501	10
793-3502	534
793-3503	534
793-3504	534
793-3505	534
793-3506	534
793-3507	534

Item No.	Page
793 Series	
793-3508	534
793-3509	534
793-3510	534
793-3544	538
793-3545	538
793-3565	534
793-3566	534
793-3599	534
793-3652	
793-4400	536
793-4401	536
793-4402	536
793-4403	536
793-4404	536
793-4405	536
793-4406	536
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793-4410	536
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793-4420	536
793-4421	536
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793-4423	536
793-4424	536
793-4458	540
793-4472	538
793-4474	538
793-4487	538
793-4494	538
793-4495	538
793-4496	538
793-4497	538
793-4498	538
793-4501	543
793-4501/000-002	543
793-4501/000-005	543
793-4501/000-006	543
793-4501/000-007	543
793-4501/000-012	543
793-4501/000-017	543
793-4501/000-023	543
793-4501/000-024	543
793-4502	534
793-4503	534
793-4504	534
793-4505	534
793-4506	534
793-4507	534
793-4508	534
793-4509	534
793-4510	534
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793-4521	536
793-4522	536
793-4523	536
793-4524	536
793-4525	536
793-4526	536
793-4527	536
793-4528	536

Item No.	Page
793 Series	
793-4529	536
793-4530	536
793-4531	536
793-4532	536
793-4533	536
793-4534	536
793-4535	536
793-4536	536
793-4537	536
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793-4578	538
793-4579	538
793-4580	538
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793-4583	538
793-4599	534
793-4602	535
793-4603	535
793-4604	535
793-4605	535
793-4606	535
793-4607	535
793-4608	535
793-4609	535
793-4610	535
793-4611	535
793-4612	535
793-4613	535
793-4614	535
793-4615	535
793-4616	535
793-4617	535
793-4618	537
793-4619	537
793-4620	537
793-4621	537
793-4622	537
793-4623	537
793-4624	537
793-4625	537
793-4626	537
793-4627	537
793-4628	537
793-4629	537

Item No.	Page
793 Series	
793-4630	537
793-4631	537
793-4632	537
793-4633	537
793-4634	537
793-4635	537
793-4636	537
793-4637	537
793-4638	537
793-4639	537
793-4640	537
793-4641	537
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793-4650	539
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793-4660	539
793-4661	539
793-4662	539
793-4663	539
793-4664	539
793-4666	535
793-4667	535
793-4668	535
793-4669	535
793-4670	535
793-4671	535
793-4672	535
793-4674	539
793-4675	539
793-4676	539
793-4677	539
793-4678	539
793-4679	539
793-4680	539
793-4681	539
793-4682	539
793-4683	539
793-4687	539
793-4688	535
793-4694	539
793-4695	539
793-4696	539
793-4697	539
793-4698	539
793-4699	535
793-4900	535
793-4901	535
793-4902	535
793-4903	535
793-4912	535
793-4913	535
793-4933	541
793-4934	541
793-4935	541
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793-4937	541
793-4938	541
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793-4941	541
793-4942	541
793-4944	541
793-4945	541
793-4946	541
793-4947	541
793-4948	541
793-4949	541

Item No.	Page
793 Series	
793-4950	541
793-4958	540
793-4959	541
793-4960	541
793-4961	541
793-4967	541
793-4968	541
793-4969	541
793-4970	541
793-4971	541
793-4972	541
793-4973	541
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793-4985	541
793-4986	541
793-4987	541
793-4988	541
793-4989	541
793-4990	541
793-4991	541
793-4992	541
793-5400	536
793-5401	536
793-5402	536
793-5403	536
793-5404	536
793-5405	536
793-5406	536
793-5407	536
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793-5410	536
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793-5424	536
793-5458	540
793-5472	538
793-5474	538
793-5487	538
793-5494	538
793-5495	538
793-5496	538
793-5497	538
793-5498	538
793-5501	543
793-5501/000-002	543
793-5501/000-005	543
793-5501/000-006	543
793-5501/000-007	543
793-5501/000-012	543
793-5501/000-017	543
793-5501/000-023	543
793-5501/000-024	543
793-5502	534
793-5503	534
793-5504	534
793-5505	534
793-5506	534
793-5507	534

Item No.	Page
793 Series	
793-5508	534
793-5509	534
793-5510	534
793-5511	534
793-5512	534
793-5513	534
793-5514	534
793-5515	534
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793-5580	538
793-5581	538
793-5582	538
793-5583	538
793-5599	534
793-5602	535
793-5603	535
793-5604	535
793-5605	535
793-5606	535
793-5607	535
793-5608	535

Item No.	Page
793 Series	
793-5609	535
793-5610	535
793-5611	535
793-5612	535
793-5613	535
793-5614	535
793-5615	535
793-5616	535
793-5617	535
793-5618	537
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793-5682	539
793-5683	539
793-5687	539
793-5688	535
793-5694	539
793-5695	539
793-5696	539
793-5697	539
793-5698	539
793-5699	535

Item No.	Page
793 Series	
793-5900	535
793-5901	535
793-5902	535
793-5903	535
793-5912	535
793-5913	535
793-5933	541
793-5934	541
793-5935	541
793-5936	541
793-5937	541
793-5938	541
793-5939	541
793-5940	541
793-5941	541
793-5942	541
793-5943	541
793-5944	541
793-5945	541
793-5946	541
793-5947	541
793-5948	541
793-5949	541
793-5950	541
793-5958	540
793-5959	541
793-5960	541
793-5961	541
793-5967	541
793-5968	541
793-5969	541
793-5970	541
793-5971	541
793-5972	541
793-5973	541
793-5974	541
793-5975	541
793-5976	541
793-5977	541
793-5978	541
793-5979	541
793-5980	541
793-5981	541
793-5982	541
793-5983	541
793-5984	541
793-5986	541
793-5987	541
793-5988	541
793-5989	541
793-599	534
793-5990	541
793-5991	541
793-5992	541
793-5993	540
793-5993	540
793-5994	540
793-5994	540
793-5995	540
793-5995	540
793-5996	540
793-5996	540
793-5997	540
793-5997	540
793-5998	540
793-5998	540
794 Series	
794-557	534
794-558	534
794-601	535
794-602	535
794-603	535
794-604	535
794-605	535
794-615	540
794-616	540
794-617	540
794-618	540
794-619	540

Item No.	Page
794 Series	
794-657	535
794-658	535
794-672	539
794-674	539
794-4601	535
794-4602	535
794-4603	535
794-4604	535
794-4605	535
794-4615	540
794-4616	540
794-4617	540
794-4618	540
794-4619	540
794-4672	539
794-4674	539
794-5553/000-002	73
794-5554/000-006	73
794-5557	534
794-5558	534
794-5601	535
794-5602	535
794-5603	535
794-5604	535
794-5605	535
794-5615	540
794-5616	540
794-5617	540
794-5618	540
794-5619	540
794-5657	535
794-5658	535
794-5674	539
807 Series	
807-090/101-100	554
811 Series	
811-310	252
811-311	252
811-314	252
811-316	252
811-317	252
811-320	252
811-321	252
811-330	252
811-331	252
811-410	252
811-411	252
811-414	252
811-420	252
811-421	252
811-430	252
811-431	252
811-471	253
811-472	253
811-473	253
811-474	253
811-475	253
811-476	253
811-477	253
811-478	253
811-479	253
811-480	253
811-481	253
811-482	253
811-612	253
812 Series	
812-100	479
812-101	479
812-102	479
812-103	479
812-104	479

Item No.	Page
812 Series	
812-110	479
812-111	479
812-112	479
812-113	479
812-114	479
812-140	478
812-140	478
812-140	479
812-141	478
812-141	478
812-141	479
Serie 834	
834-137	175
834-1102	175
834-1103	175
834-1104	175
834-1105	175
834-1106	175
834-1107	175
834-1108	175
834-1202	175
834-1203	175
834-1204	175
834-1205	175
834-1206	175
834-1207	175
834-1208	175
859 Series	
859-500	115
862 Series	
862-482	422
862-503	423
862-504	424
862-505	425
862-515	425
862-525	425
862-532	422
862-533	423
862-534	424
862-552	422
862-562	422
862-593	423
862-594	424
862-603	423
862-604	424
862-605	425
862-615	425
862-625	425
862-632	422
862-633	423
862-634	424
862-652	422
862-662	422
862-693	423
862-694	424
862-1503	423
862-1503/999-950	423
862-1504	424
862-1504/999-950	424
862-1505	425
862-1505/999-950	425
862-1515	425
862-1515/999-950	425
862-1525	425
862-1525/999-950	425
862-1532	422
862-1532/999-950	422
862-1533	423
862-1533/999-950	423
862-1534	424
862-1534/999-950	424

Item No.	Page
862 Series	
862-1552	422
862-1552/999-950	422
862-1562	422
862-1562/999-950	422
862-1593	423
862-1593/999-950	423
862-1594	424
862-1594/999-950	424
862-1603	423
862-1603/999-950	423
862-1604	424
862-1604/999-950	424
862-1605	425
862-1605/999-950	425
862-1615	425
862-1615/999-950	425
862-1625	425
862-1625/999-950	425
862-1632	422
862-1632/999-950	422
862-1633	423
862-1633/999-950	423
862-1634	424
862-1634/999-950	424
862-1652	422
862-1652/999-950	422
862-1662	422
862-1662/999-950	422
862-1693	423
862-1693/999-950	423
862-1694	424
862-1694/999-950	424
862-2503	423
862-2504	424
862-2505	425
862-2515	425
862-2525	425
862-2532	422
862-2533	423
862-2534	424
862-2552	422
862-2562	422
862-2593	423
862-2594	424
862-2603	423
862-2604	424
862-2605	425
862-2615	425
862-2625	425
862-2632	422
862-2633	423
862-2634	424
862-2652	422
862-2662	422
862-2693	423
862-2694	424
862-8503	423
862-8504	424
862-8505	425
862-8515	425
862-8525	425
862-8533	423
862-8534	424
862-8593	423
862-8594	424
862-8603	423
862-8604	424
862-8605	425
862-8615	425
862-8625	425
862-8633	423
862-8634	424
862-8693	423
862-8694	424
862-9503	423
862-9504	424

Item No.	Page
862 Series	
862-9505	425
862-9515	425
862-9525	425
862-9533	423
862-9534	424
862-9593	423
862-9594	424
862-9603	423
862-9604	424
862-9605	425
862-9615	425
862-9625	425
862-9633	423
862-9634	424
862-9693	423
862-9694	424
869 Series	
869-102	391
869-112	391
869-132	391
869-142	391
869-152	391
869-162	391
869-182	391
869-192	391
869-202	391
869-212	391
869-232	391
869-242	392
869-301	392
869-304	392
869-307	392
869-309	393
869-311	393
869-314	393
869-316	393
869-317	393
869-319	392
869-321	392
869-324	392
869-326	392
869-327	392
869-328	392
869-329	392
869-331	392
869-334	392
869-337	392
869-339	392
869-341	392
869-344	392
869-347	392
869-349	392
869-351	392
869-354	392
869-357	392
869-359	392
869-375	392
869-377	392
869-378	392
869-379	392
869-385	392
869-387	392
869-388	392
869-389	392
869-395	392
869-397	392
869-398	392
869-399	392

Item No.	Page
870 Series	
870-101	334
870-102	334
870-103	334
870-104	334
870-107	334
870-108	334
870-109	334
870-117	334
870-118	334
870-119	334
870-127	334
870-131	338
870-137	338
870-138	338
870-148	338
870-149	338
870-151	336
870-157	336
870-158	336
870-168	336
870-169	336
870-182	377
870-183	377
870-184	377
870-402	334
870-410	379
870-425	379
870-426	379
870-427	379
870-433	334
870-433	336
870-440	374
870-501	374
870-502	374
870-503	374
870-504	374
870-507	374
870-508	374
870-509	374
870-517	374
870-518	374
870-519	374
870-527	374
870-531	375
870-532	375
870-533	375
870-534	375
870-535	375
870-536	375
870-537	375
870-538	375
870-539	375
870-540/281-410	384
870-540/281-411	384
870-541/281-489	384
870-541/281-490	384
870-541/281-491	384
870-541/281-492	384
870-542/281-487	384
870-542/281-488	384
870-543/281-413	384
870-543/281-434	384
870-551	376
870-553	376
870-556	376
870-557	376
870-558	376
870-559	376
870-567	376
870-568	376
870-569	376
870-573	375
870-574	375
870-577	376
870-590/281-410	386
870-590/281-411	386
870-590/281-675	386
870-590/281-676	386

Item No.	Page
870 Series	
870-593/281-413	387
870-593/281-434	387
870-596/281-673	386
870-596/281-674	386
870-681	372
870-682	372
870-684	372
870-687	372
870-826	373
870-831	372
870-832	372
870-834	372
870-837	372
870-901	372
870-902	372
870-904	372
870-907	372
870-907/999-950	372
870-909	372
870-911	373
870-912	373
870-914	373
870-917	373
870-919	373
870-923	372
870-924	372
870-925	372
870-926	372
870-928	372
870-929	372
870-933	372
870-934	372
870-943	372
870-944	372
870-946	372
870-947	372
870-948	372
870-949	372
870-951	376
870-957/999-950	376
870-961	374
870-967/999-950	374
873 Series	
873-902	484
873-903	484
873-953	485
880 Series	
880-308	186
880-309	186
880-325	186
880-326	186
880-328	186
880-329	186
880-339	186
880-340	186
880-344	186
880-345	186
880-346	186
880-347	186
880-681/999-940	186
880-682/999-940	186
880-684/999-940	186
880-687/999-940	186
880-831/999-940	186
880-832/999-940	186
880-834/999-940	186
880-837/999-940	186
880-901/999-940	186
880-902/999-940	186
880-904/999-940	186
880-907/999-940	186

Item No.	Page
2000 Series	
2000-115	10
2000-121	25
2000-402	10
2000-410	
2000-402/000-005	101
2000-410/000-005	
2000-402/000-006	101
2000-410/000-006	
2000-405/011-000	103
2000-406/020-000	103
2000-433	10
2000-440	
2000-492	105
2000-1201	10
2000-1202	10
2000-1203	10
2000-1204	10
2000-1205	10
2000-1206	10
2000-1207	10
2000-1291	10
2000-1292	10
2000-1301	10
2000-1302	10
2000-1303	10
2000-1304	10
2000-1305	10
2000-1306	10
2000-1307	10
2000-1391	10
2000-1392	10
2000-1401	10
2000-1402	10
2000-1403	10
2000-1404	10
2000-1405	10
2000-1406	10
2000-1407	10
2000-1491	10
2000-1492	10
2000-2141	11
2000-2195	11
2000-2196	11
2000-2201	24
2000-2201/099-000	26
2000-2202	24
2000-2202/099-000	26
2000-2203	24
2000-2203/099-000	26
2000-2204	24
2000-2204/099-000	26
2000-2207	24
2000-2207/099-000	26
2000-2208	24
2000-2208/099-000	26
2000-2209	24
2000-2209/099-000	26
2000-2217	24
2000-2217/099-000	26
2000-2218	25
2000-2218/099-000	27
2000-2227	24
2000-2227/099-000	26
2000-2228	25
2000-2228/099-000	27
2000-2231	24
2000-2231/099-000	26
2000-2232	24
2000-2232/099-000	26
2000-2233	24
2000-2233/099-000	26
2000-2234	24

Item No.	Page
2000 Series	
2000-2234/099-000	26
2000-2237	24
2000-2237/099-000	26
2000-2238	24
2000-2238/099-000	26
2000-2239	24
2000-2239/099-000	26
2000-2247	24
2000-2247/099-000	26
2000-2248	25
2000-2248/099-000	27
2000-2257	24
2000-2257/099-000	26
2000-2258	25
2000-2258/099-000	27
2000-2291	25
2000-2292	25
2001 Series	
2001-115	12
2001-171	12
2001-402	12
2001-410	
2001-405/011-000	103
2001-406/020-000	103
2001-433	12
2001-440	12
2001-511	96
2001-549	96
2001-552	96
2001-560	
2001-1201	12
2001-1202	12
2001-1203	12
2001-1204	12
2001-1205	12
2001-1206	12
2001-1207	12
2001-1211/1000-410	80
2001-1211/1000-411	80
2001-1301	12
2001-1302	12
2001-1303	12
2001-1304	12
2001-1305	12
2001-1306	12
2001-1307	12
2001-1311/1000-410	80
2001-1311/1000-411	80
2001-1321/1000-413	80
2001-1321/1000-434	80
2001-1401	12
2001-1402	12
2001-1403	12
2001-1404	12
2001-1405	12
2001-1406	12
2001-1407	12
2001-1408	12
2001-1411/1000-410	80
2001-1411/1000-411	80
2001-1421/1000-413	80
2001-1421/1000-434	80
2001-1441	13
2002 Series	
2002-115	14
2002-116	94
2002-121	29
2002-131	39
2002-161	109

Item No.	Page
2002 Series	
2002-171	14
2002-172	14
2002-191	40
2002-192	40
2002-194	40
2002-400	101
2002-401	106
2002-402	14
2002-410	
2002-402/000-005	101
2002-410/000-005	
2002-402/000-006	101
2002-410/000-006	
2002-405/011-000	103
2002-406/020-000	103
2002-433	14
2002-440	
2002-472	104
2002-482	
2002-473/011-000	15
2002-475/011-000	15
2002-477/011-000	15
2002-479/011-000	15
2002-481/011-000	15
2002-492	105
2002-492/000-012	105
2002-493	105
2002-511	96
2002-541	96
2002-549	96
2002-552	96
2002-560	
2002-611	100
2002-641	100
2002-649	100
2002-800	94
2002-800/1000-410	90
2002-800/1000-411	90
2002-800/1000-541	92
2002-800/1000-542	92
2002-800/1000-836	92
2002-810	94
2002-820	94
2002-880	91
2002-880/1000-411	91
2002-880/1000-541	93
2002-880/1000-542	93
2002-880/1000-836	93
2002-991	52
2002-992	52
2002-1091	37
2002-1092	37
2002-1201	14
2002-1202	14
2002-1203	14
2002-1204	14
2002-1205	14
2002-1206	14
2002-1207	14
2002-1211/1000-410	82
2002-1211/1000-411	82
2002-1291	12
2002-1292	12
2002-1293	12
2002-1294	12
2002-1301	14
2002-1302	14
2002-1303	14

Item No.	Page
2002 Series	
2002-1304	14
2002-1305	14
2002-1306	14
2002-1307	14
2002-1308	14
2002-1311/1000-410	82
2002-1311/1000-411	82
2002-1321/1000-413	82
2002-1321/1000-434	82
2002-1391	12
2002-1392	12
2002-1393	12
2002-1394	12
2002-1401	14
2002-1402	14
2002-1403	14
2002-1404	14
2002-1405	14
2002-1406	14
2002-1407	14
2002-1408	14
2002-1411/1000-410	82
2002-1411/1000-411	82
2002-1421/1000-413	82
2002-1421/1000-434	82
2002-1441	15
2002-1491	12
2002-1492	12
2002-1493	12
2002-1494	12
2002-1601	44
2002-1602	44
2002-1604	44
2002-1611	52
2002-1611/1000-541	52
2002-1611/1000-542	52
2002-1611/1000-836	52
2002-1611/1000-867	52
2002-1661	76
2002-1671	44
2002-1671/401-000	44
2002-1672	44
2002-1672/401-000	44
2002-1674	44
2002-1674/401-000	44
2002-1681	50
2002-1691	44
2002-1692	44
2002-1701	46
2002-1702	46
2002-1704	46
2002-1711	52
2002-1711/1000-541	52
2002-1711/1000-542	52
2002-1711/1000-836	52
2002-1711/1000-867	52
2002-1761	76
2002-1771	46
2002-1771/401-000	46
2002-1772	46
2002-1772/401-000	46
2002-1774	46
2002-1774/401-000	46
2002-1781	50
2002-1791	46
2002-1792	46
2002-1801	48
2002-1802	48
2002-1804	48
2002-1811	52
2002-1811/1000-541	52
2002-1811/1000-542	52
2002-1811/1000-836	52
2002-1811/1000-867	52
2002-1861	76
2002-1871	48
2002-1871/401-000	48
2002-1872	48

Item No.	Page
2002 Series	
2002-1872/401-000	48
2002-1874	48
2002-1874/401-000	48
2002-1881	50
2002-1891	48
2002-1892	48
2002-1901	54
2002-1902	54
2002-1904	54
2002-1907	54
2002-1911	58
2002-1911/1000-541	58
2002-1911/1000-542	58
2002-1911/1000-836	58
2002-1911/1000-867	58
2002-1961	76
2002-1971	54
2002-1971/401-000	54
2002-1972	54
2002-1972/401-000	54
2002-1974	54
2002-1974/401-000	54
2002-1981	57
2002-1981/1000-413	56
2002-1981/1000-414	56
2002-1981/1000-429	56
2002-1981/1000-434	56
2002-1981/1000-435	56
2002-1981/1000-449	56
2002-1991	54
2002-1992	54
2002-2201	28
2002-2201/099-000	30
2002-2202	28
2002-2202/099-000	30
2002-2203	28
2002-2203/099-000	30
2002-2204	28
2002-2204/099-000	30
2002-2207	28
2002-2207/099-000	30
2002-2208	28
2002-2208/099-000	30
2002-2209	28
2002-2209/099-000	30
2002-2211/1000-410	86
2002-2211/1000-411	86
2002-2213/1000-487	86
2002-2213/1000-488	86
2002-2214/1000-489	86
2002-2214/1000-490	86
2002-2214/1000-491	86
2002-2214/1000-492	86
2002-2217	28
2002-2217/099-000	30
2002-2218	29
2002-2218/099-000	31
2002-2221/1000-413	86
2002-2221/1000-434	86
2002-2227	28
2002-2227/099-000	30
2002-2228	29
2002-2228/099-000	31
2002-2231	28
2002-2231/099-000	30
2002-2232	28
2002-2232/099-000	30
2002-2233	28
2002-2233/099-000	30
2002-2234	28
2002-2234/099-000	30
2002-2237	28
2002-2237/099-000	30
2002-2238	28
2002-2238/099-000	30
2002-2239	28
2002-2239/099-000	30
2002-2247	28
2002-2247/099-000	30
2002-2248	29

Item No.	Page
2002 Series	
2002-2248/099-000	31
2002-2257	28
2002-2257/099-000	30
2002-2258	29
2002-2258/099-000	31
2002-2291	29
2002-2292	29
2002-2401	32
2002-2402	32
2002-2403	32
2002-2404	32
2002-2407	32
2002-2408	32
2002-2409	32
2002-2417	32
2002-2418	33
2002-2427	32
2002-2428	33
2002-2431	32
2002-2432	32
2002-2433	32
2002-2434	32
2002-2437	32
2002-2438	32
2002-2439	32
2002-2447	32
2002-2448	33
2002-2457	32
2002-2458	33
2002-2491	33
2002-2492	33
2002-2601	34
2002-2602	34
2002-2603	34
2002-2604	34
2002-2607	34
2002-2608	34
2002-2609	34
2002-2611	37
2002-2611/1000-541	37
2002-2611/1000-542	37
2002-2611/1000-836	37
2002-2612	37
2002-2647	34
2002-2657	34
2002-2661	34
2002-2661	36
2002-2662	36
2002-2667	36
2002-2671	36
2002-2672	36
2002-2691	35
2002-2692	35
2002-2941	156
2002-2951	42
2002-2952	42
2002-2954	42
2002-2958	42
2002-2959	42
2002-2961	76
2002-2963	76
2002-2971	42
2002-2972	42
2002-2974	42
2002-2991	42
2002-2992	42
2002-3201	38
2002-3203	38
2002-3204	38
2002-3207	38
2002-3208	38
2002-3209	38
2002-3211/1000-410	88
2002-3211/1000-411	88
2002-3211/1000-675	88
2002-3211/1000-676	88
2002-3212/1000-673	88
2002-3212/1000-674	88

Item No.	Page
2002 Series	
2002-3217	38
2002-3218	39
2002-3221/1000-413	88
2002-3221/1000-434	88
2002-3227	38
2002-3228	39
2002-3231	38
2002-3233	38
2002-3234	38
2002-3237	38
2002-3238	38
2002-3239	38
2002-3247	38
2002-3248	39
2002-3257	38
2002-3258	39
2002-3291	39
2002-3292	39
2002-4101	40
2002-4111	40
2002-4127	40
2002-4131	40
2002-4141	40
2002-4157	40
2002-4191	40
2002-4192	40
2002-6301	16
2002-6302	16
2002-6303	16
2002-6304	16
2002-6305	16
2002-6306	16
2002-6307	16
2002-6308	16
2002-6391	16
2002-6392	16
2002-6401	17
2002-6402	17
2002-6403	17
2002-6404	17
2002-6405	17
2002-6406	17
2002-6407	17
2002-7111	160
2002-7114	160
2002-7192	160
2002-7211	160
2002-7214	160
2002-7292	160
2003 Series	
2003-499	154
2003-500	154
2003-911	156
2003-911/1000-923	156
2003-6640	154
2003-6641	154
2003-6642	154
2003-6643	154
2003-6644	154
2003-6645	154
2003-6646	154
2003-6649	154
2003-6650	154
2003-6651	154
2003-6660	154
2003-6692	155
2003-6693	154
2003-7300	152
2003-7640	152
2003-7641	152

Item No.	Page
2003 Series	
2003-7642	152
2003-7645	152
2003-7646	152
2003-7649	152
2003-7650	152
2003-7651	152
2003-7659	152
2003-7692	152
2004 Series	
2004-115	18
2004-171	18
2004-172	18
2004-402	18
2004-410	
2004-405/011-000	103
2004-406/020-000	103
2004-433	18
2004-440	
2004-511	98
2004-541	98
2004-549	98
2004-552	98
2004-555	
2004-911	76
2004-911/1000-541	76
2004-911/1000-542	76
2004-911/1000-836	76
2004-911/1000-867	76
2004-1201	18
2004-1202	18
2004-1203	18
2004-1204	18
2004-1205	18
2004-1206	18
2004-1207	18
2004-1211/1000-400	84
2004-1211/1000-401	84
2004-1291	18
2004-1292	18
2004-1293	18
2004-1294	18
2004-1301	18
2004-1302	18
2004-1303	18
2004-1304	18
2004-1305	18
2004-1306	18
2004-1307	18
2004-1311/1000-400	84
2004-1311/1000-401	84
2004-1391	18
2004-1392	18
2004-1393	18
2004-1394	18
2004-1401	18
2004-1402	18
2004-1403	18
2004-1404	18
2004-1405	18
2004-1406	18
2004-1407	18
2004-1408	18
2004-1411/1000-400	84
2004-1411/1000-401	84
2004-1491	18
2004-1492	18
2004-1493	18
2004-1494	18

Item No.	Page
2005 Series	
2005-7300	158
2005-7641	158
2005-7642	158
2005-7645	158
2005-7646	158
2005-7649	158
2005-7692	158
2006 Series	
2006-115	20
2006-191	107
2006-401	106
2006-402	20
2006-405	
2006-405/011-000	20
2006-433	20
2006-435	
2006-499	15
2006-511	98
2006-549	98
2006-911	78
2006-911/1000-541	78
2006-911/1000-542	78
2006-911/1000-836	78
2006-911/1000-867	78
2006-921	78
2006-921/1000-541	78
2006-921/1000-542	78
2006-921/1000-836	78
2006-921/1000-859	78
2006-921/1000-867	78
2006-931	78
2006-931/099-000	78
2006-931/1000-541	78
2006-931/1000-542	78
2006-931/1000-836	78
2006-931/1000-859	78
2006-931/1000-867	78
2006-931/1099-541	79
2006-931/1099-542	79
2006-931/1099-836	79
2006-931/1099-859	79
2006-931/1099-867	79
2006-991	64
2006-992	64
2006-1201	20
2006-1202	20
2006-1204	20
2006-1207	20
2006-1208	20
2006-1291	20
2006-1292	20
2006-1293	20
2006-1294	20
2006-1301	20
2006-1302	20
2006-1304	20
2006-1307	20
2006-1391	20
2006-1392	20
2006-1393	20
2006-1394	20
2006-1601	60
2006-1604	60
2006-1611	64
2006-1611/1000-541	64
2006-1611/1000-542	64
2006-1611/1000-836	64
2006-1611/1000-867	64
2006-1621	64
2006-1621/1000-541	64
2006-1621/1000-542	64

Item No.	Page
2006 Series	
2006-1621/1000-836	64
2006-1621/1000-859	64
2006-1621/1000-867	64
2006-1631	64
2006-1631/099-000	65
2006-1631/1000-541	64
2006-1631/1000-542	64
2006-1631/1000-836	64
2006-1631/1000-859	64
2006-1631/1000-867	64
2006-1631/1099-541	65
2006-1631/1099-542	65
2006-1631/1099-836	65
2006-1631/1099-859	65
2006-1631/1099-867	65
2006-1661	78
2006-1671	60
2006-1671/1000-848	60
2006-1671/1000-849	60
2006-1671/1000-850	60
2006-1671/1000-851	60
2006-1674	60
2006-1681	63
2006-1681/1000-413	62
2006-1681/1000-414	62
2006-1681/1000-429	62
2006-1681/1000-434	62
2006-1681/1000-435	62
2006-1681/1000-449	62
2006-1691	60
2006-1692	60
2006-1695	78
2006-1696	78
2006-7111	160
2006-7114	160
2006-7192	160
2006-7300	160
2006-8401	66
2006-8601	66
2006-8604	66
2006-8661	66
2006-8664	66
2006-8671	66
2006-8674	66
2006-8691	66
2006-8692	66
2007 Series	
2007-8442	72
2007-8443	72
2007-8444	72
2007-8445	72
2007-8446	72
2007-8447	72
2007-8448	72
2007-8801	72
2007-8807	73
2007-8811	72
2007-8821	72
2007-8873	74
2007-8876	75
2007-8891	72
2007-8892	72
2007-8893	72
2007-8894	72
2007-8899	72
2009 Series	
2009-110	543
2009-114	543
2009-115	543
2009-135	543
2009-145	542
2009-163	545
2009-174	10

Item No.	Page
2009 Series	
2009-182	10
2009-191	109
2009-192	109
2009-193	109
2009-196	109
2009-198	109
2009-304	152
2009-305	152
2009-309	153
2009-310	153
2009-402	102
2009-404	102
2009-406	102
2009-412	102
2009-414	102
2009-416	102
2010 Series	
2010-100	21
2010-115	21
2010-402	21
2010-405	
2010-405/011-000	103
2010-433	21
2010-435	
2010-511	98
2010-549	98
2010-1201	21
2010-1202	21
2010-1204	21
2010-1207	21
2010-1208	21
2010-1291	21
2010-1292	21
2010-1301	21
2010-1302	21
2010-1304	21
2010-1307	21
2010-1391	21
2010-1392	21
2016 Series	
2016-100	22
2016-115	22
2016-402	22
2016-405	
2016-405/011-000	103
2016-435	22
2016-435	
2016-499	21
2016-511	99
2016-549	99
2016-1201	22
2016-1202	22
2016-1204	22
2016-1207	22
2016-1208	22
2016-1291	22
2016-1292	22
2016-1301	22
2016-1302	22
2016-1304	22
2016-1307	22
2016-1391	22
2016-1392	22

Item No.	Page
2016 Series	
2016-7111	160
2016-7114	160
2016-7192	160
2016-7601	162
2016-7604	162
2016-7607	162
2016-7692	162
2016-7711	162
2016-7714	162
2016-7792	162
2020 Series	
2020-100	115
2020-102	118
2020-115	
2020-102/122-000	126
2020-102/132-000	126
2020-102/142-000	126
2020-103/000-036	122
2020-115/000-036	
2020-103/000-037	122
2020-115/000-037	
2020-103/000-038	122
2020-115/000-038	
2020-103/000-039	123
2020-115/000-039	
2020-103/122-000	126
2020-103/132-000	126
2020-103/142-000	126
2020-104/124-000	126
2020-109/124-000	
2020-104/133-000	126
2020-106/133-000	
2020-104/143-000	126
2020-106/143-000	
2020-107/134-000	126
2020-109/134-000	
2020-107/144-000	126
2020-109/144-000	
2020-110/125-000	126
2020-115/125-000	
2020-110/135-000	126
2020-115/135-000	
2020-110/145-000	126
2020-115/145-000	
2020-161	120
2020-164	120
2020-167	120
2020-181	120
2020-184	120
2020-187	120
2020-202	118
2020-215	
2020-202/122-000	128
2020-202/132-000	128
2020-202/142-000	128
2020-203/000-036	124
2020-215/000-036	
2020-203/000-037	124
2020-215/000-037	

Item No.	Page
Serie 2020	
2020-203/000-038	124
2020-215/000-038	
2020-203/000-039	125
2020-215/000-039	
2020-203/122-000	128
2020-203/132-000	128
2020-203/142-000	128
2020-204/124-000	128
2020-209/124-000	
2020-204/133-000	128
2020-206/133-000	
2020-204/143-000	128
2020-206/143-000	
2020-207/134-000	128
2020-209/134-000	
2020-207/144-000	128
2020-209/144-000	
2020-210/125-000	128
2020-215/125-000	
2020-210/135-000	128
2020-215/135-000	
2020-210/145-000	128
2020-215/145-000	
2020-261	120
2020-264	120
2020-267	120
2020-281	120
2020-284	120
2020-287	120
2020-1201	115
2020-1204	115
2020-1207	115
2020-1291	115
2020-1292	115
2020-1401	115
2020-1404	115
2020-1407	115
2020-1491	115
2020-1492	115
2020-2201	116
2020-2202	116
2020-2203	116
2020-2204	116
2020-2207	116
2020-2208	116
2020-2209	116
2020-2217	116
2020-2227	116
2020-2231	116
2020-2232	116
2020-2233	116
2020-2234	116
2020-2237	116
2020-2238	116
2020-2239	116
2020-2247	116
2020-2257	116
2020-2291	117
2020-2292	117
2022 Series	
2022-100	130
2022-101	133
2022-115	133
2022-101/000-016	133
2022-101/122-000	140
2022-101/122-006	140

Item No.	Page
2022 Series	
2022-101/122-016	140
2022-101/132-000	140
2022-101/132-006	140
2022-101/132-016	140
2022-101/142-000	140
2022-101/142-006	140
2022-101/142-016	140
2022-102/000-016	133
2022-102/122-000	140
2022-102/132-000	140
2022-102/142-000	140
2022-102/999-953	146
2022-103/000-036	138
2022-115/000-036	
2022-103/000-037	138
2022-115/000-037	
2022-103/000-038	138
2022-115/000-038	
2022-103/000-038/999-953	147
2022-106/000-038/999-953	
2022-103/000-039	139
2022-115/000-039	
2022-103/000-039/999-953	147
2022-106/000-039/999-953	
2022-103/123-000	140
2022-103/133-000	140
2022-103/143-000	140
2022-103/999-953	146
2022-108/999-953	
2022-104/123-000	140
2022-110/123-000	
2022-104/133-000	140
2022-104/143-000	140
2022-105/134-000	140
2022-105/144-000	140
2022-106/134-000	140
2022-106/144-000	140
2022-107/135-000	140
2022-110/135-000	
2022-107/145-000	140
2022-110/145-000	140
2022-111/126-000	140
2022-114/126-000	
2022-111/136-000	140
2022-114/136-000	
2022-111/146-000	140
2022-114/146-000	
2022-115/127-000	140
2022-115/137-000	140
2022-115/147-000	140
2022-141	118
2022-142	118
2022-151	118
2022-152	118
2022-161	136
2022-162	136
2022-164	136
2022-167	136
2022-171	136
2022-172	136
2022-174	136
2022-177	136
2022-181	136
2022-182	136
2022-184	136
2022-187	136
2022-1201	130

Item No.	Page
2022 Series	
2022-1201/999-953	142
2022-1202	130
2022-1204	130
2022-1204/999-953	142
2022-1207	130
2022-1207/999-953	142
2022-1291	130
2022-1292	130
2022-1301	132
2022-1301/999-953	142
2022-1302	132
2022-1304	132
2022-1304/999-953	142
2022-1307	132
2022-1307/999-953	142
2022-1391	132
2022-1392	132
2022-1401	132
2022-1401/999-953	143
2022-1402	132
2022-1404	132
2022-1404/999-953	143
2022-1407	132
2022-1407/999-953	143
2022-1491	132
2022-1492	132
2022-2201	134
2022-2201/999-953	144
2022-2202	134
2022-2203	134
2022-2204	134
2022-2207	134
2022-2207/999-953	144
2022-2208	134
2022-2209	134
2022-2217	134
2022-2227	134
2022-2231	134
2022-2232	134
2022-2233	134
2022-2234	134
2022-2234/999-953	144
2022-2237	134
2022-2238	134
2022-2239	134
2022-2247	134
2022-2257	134
2022-2291	135
2022-2292	135
2273 Series	
2273-202	491
2273-203	491
2273-204	491
2273-205	491
2273-208	491
2273-500	491

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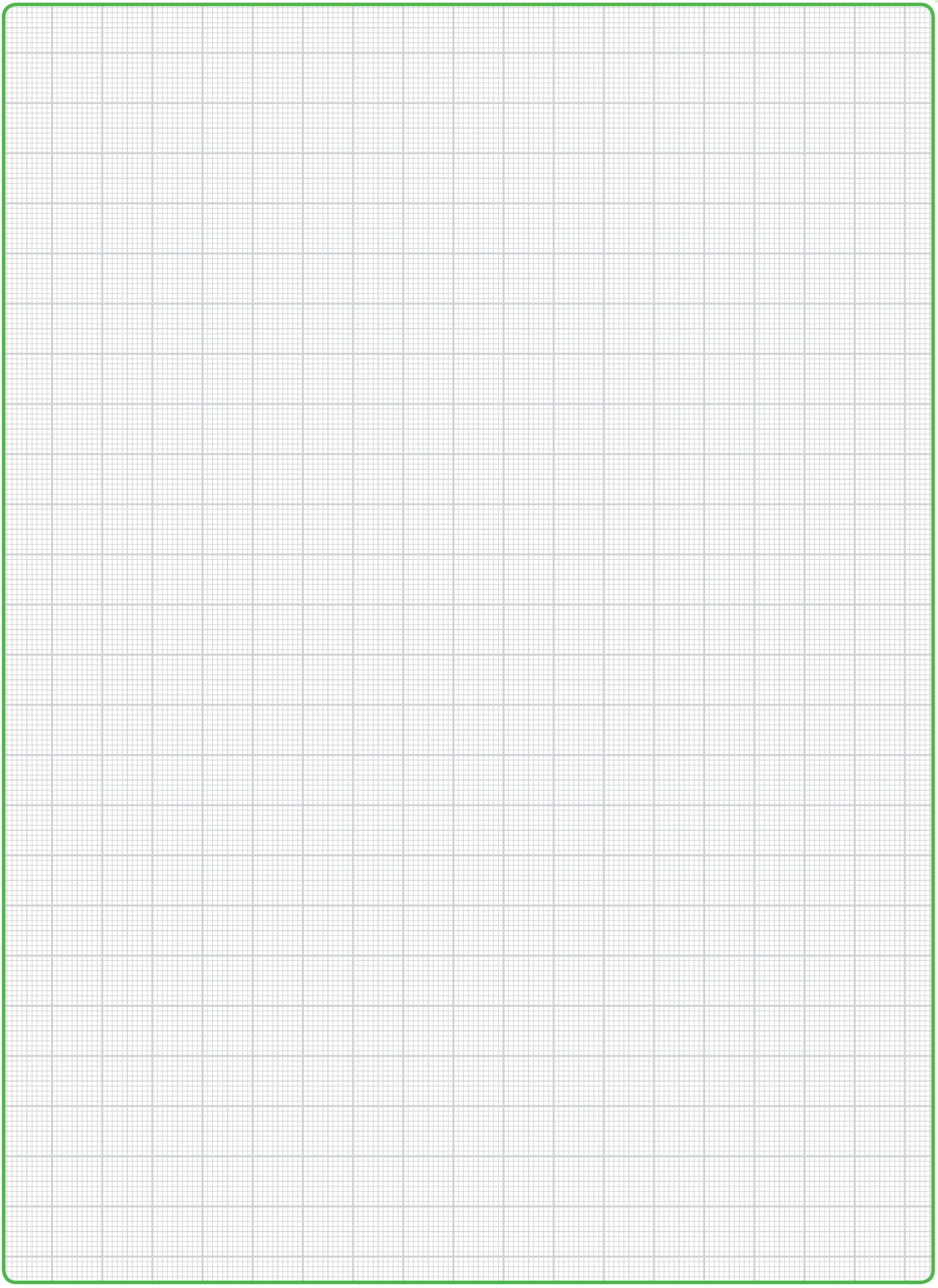

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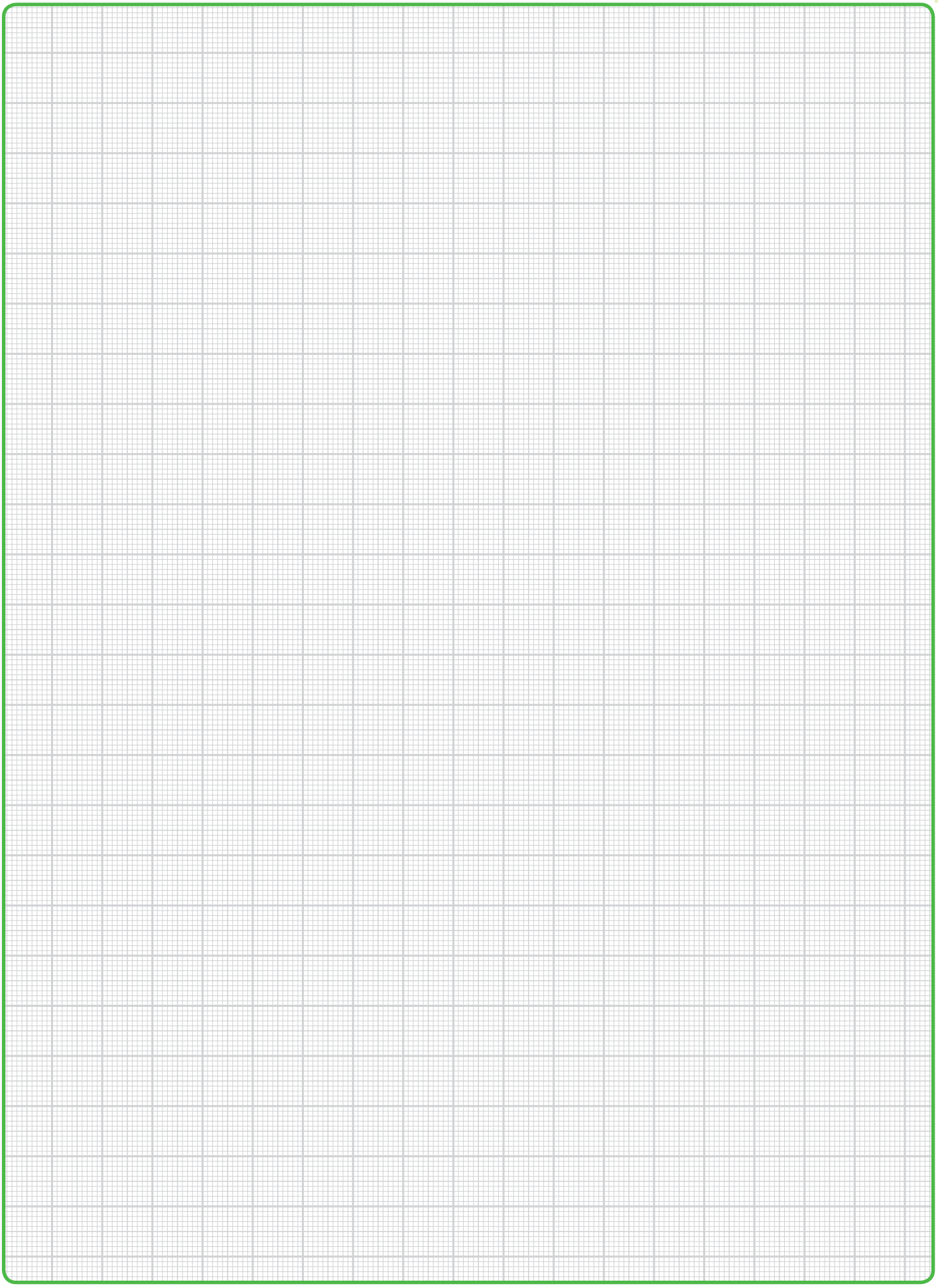

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