

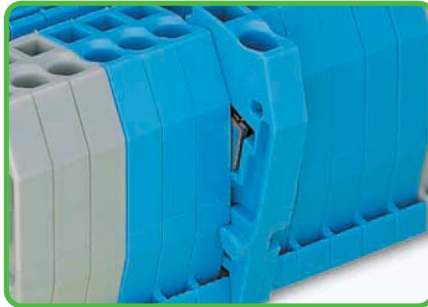
Rail-Mounted Terminal Blocks 279 to 285 Series and 880 Series

Assembly



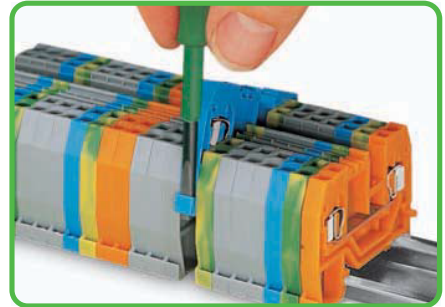
By snapping a ground conductor terminal block onto the carrier rail, a direct electrical connection is automatically made to the rail.

Assembly



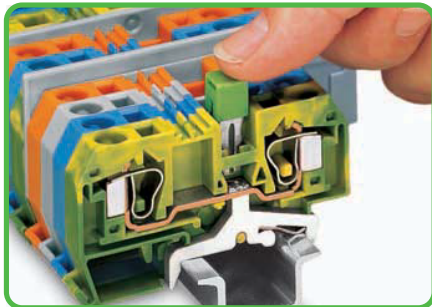
Quick assembly keys prevent reverse mounting.

Removal



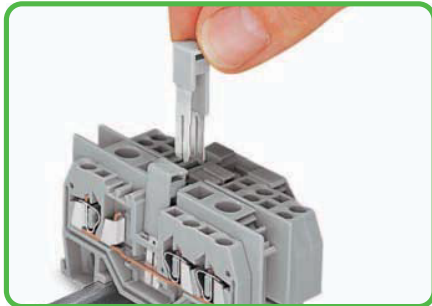
Removing a terminal block from the assembly.

Commoning



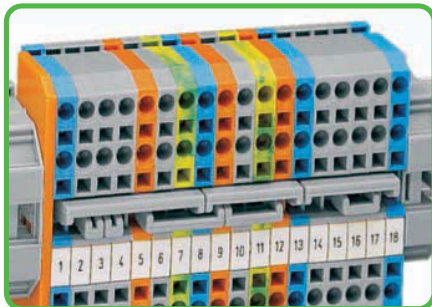
Commoning ground conductor terminal blocks with through terminal blocks is possible in one direction only (via rear side of terminal block) using adjacent jumpers. In addition to the required marking of these blocks, use yellow-green adjacent jumpers.

Commoning with step-down jumpers



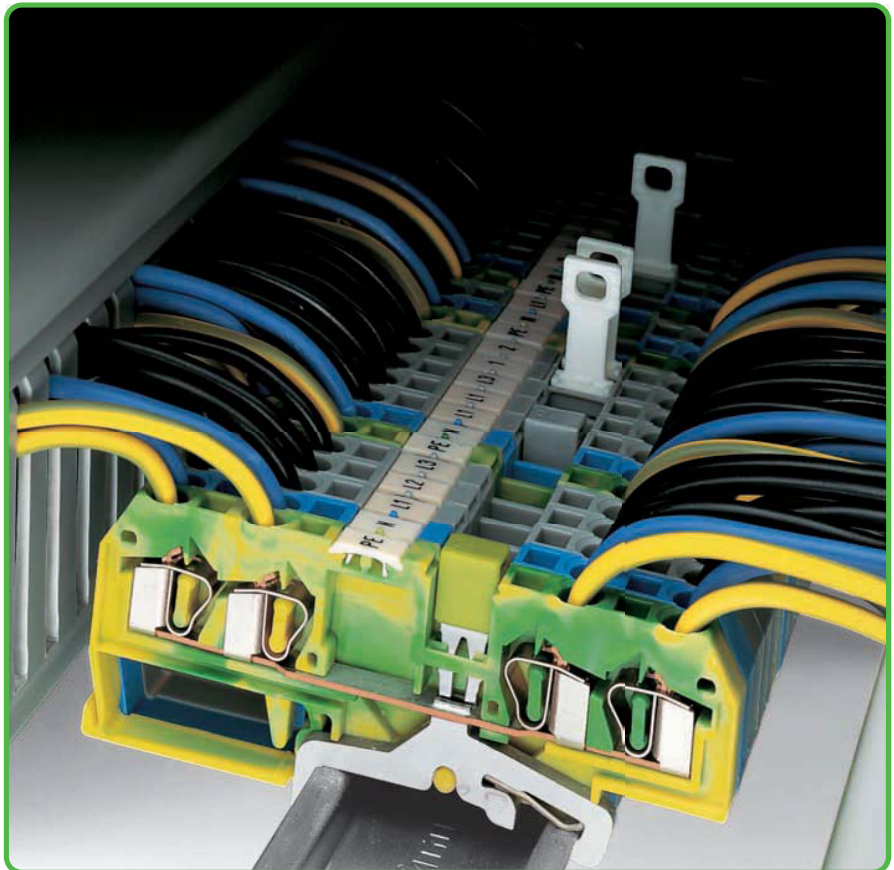
Commoning terminal blocks of different sizes – step down.
For application notes, see page 178.

Commoning

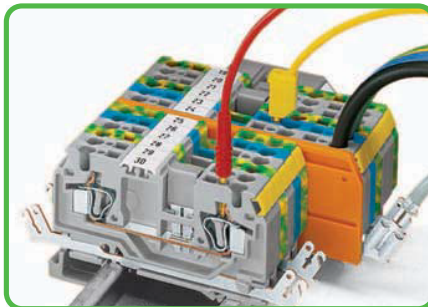


Staggered jumpers for sophisticated circuit requirements. Push jumpers down firmly until fully inserted. For additional notes, see page 201.

According to EN 60947-7-2 (VDE 0611, part 3), steel carrier rails shall not be used for PEN applications

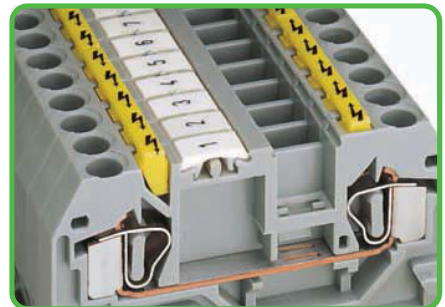


Testing - 880 Series



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

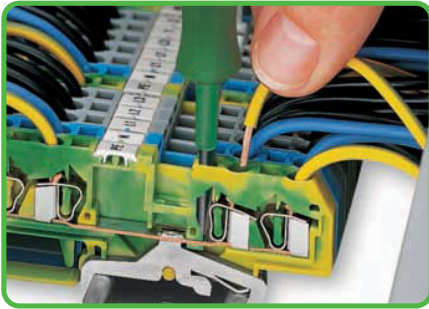
stranded

fine-stranded,
also with tinned
single strands

* For aluminum conductors, see notes in Section 14.

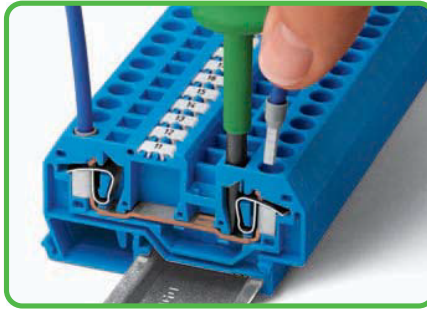
- Description and Handling -

CAGE CLAMP® connection



Conductor termination

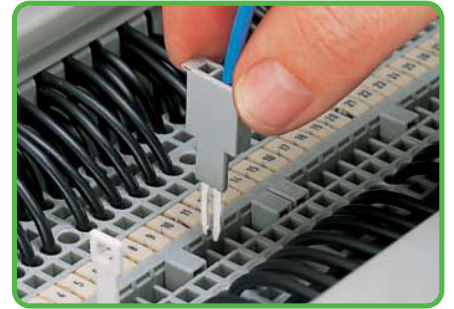
CAGE CLAMP® connection



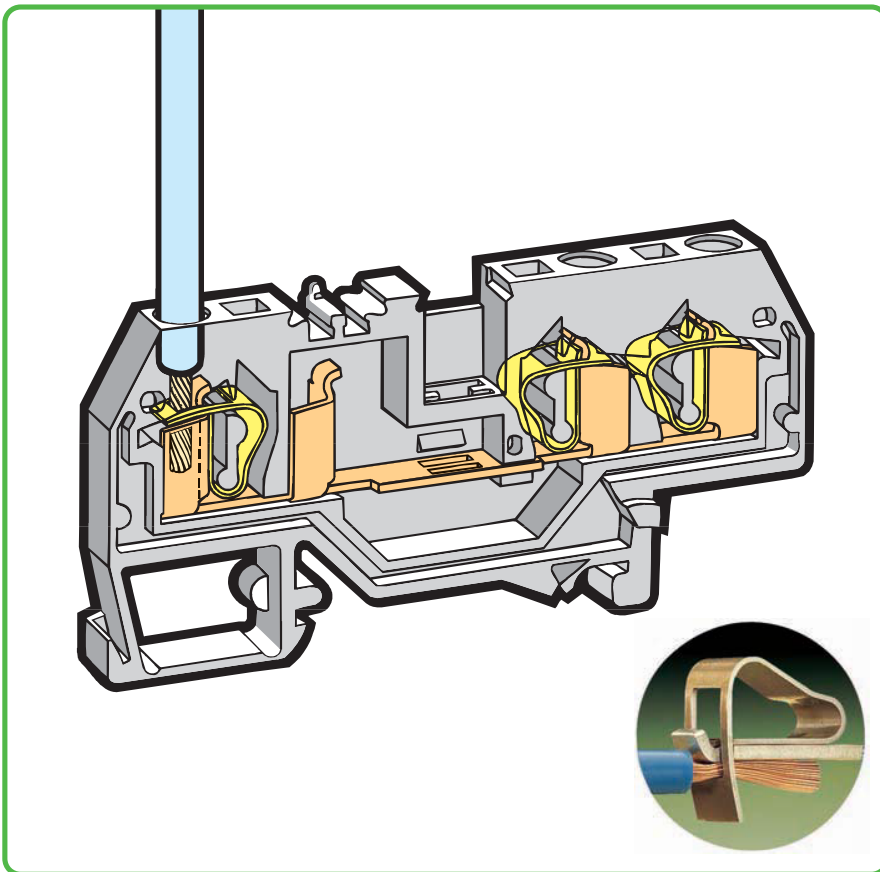
Conductor termination

❶ When using ferruled conductors, it is necessary to use a terminal block one size larger than the nominal cross section of the wire.

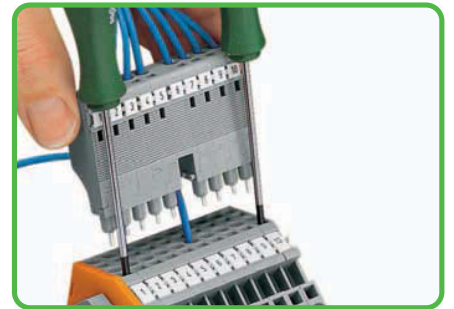
Testing



Testing with test plug.
Test plug fitted with CAGE CLAMP®.

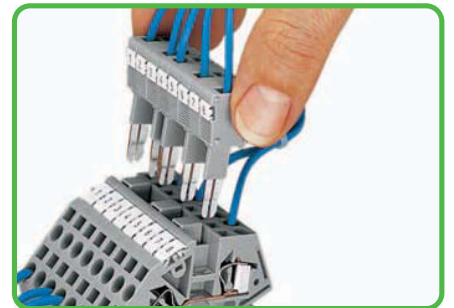


Testing



L-type test plug modules fitted with CAGE CLAMP®.
For application notes, see page 194.

Testing



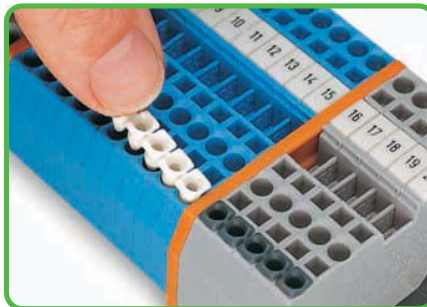
B-type test plug modules fitted with CAGE CLAMP®.
For application notes, see page 195.

Marking



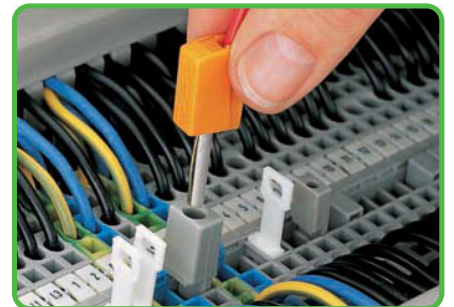
Marking with WMB Multi marking system.
For additional systems, see Section 13.

Insulation stop

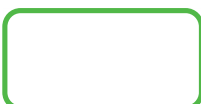


Insertion of insulation stop.
For application notes, see page 199.

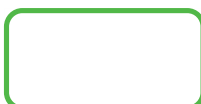
Testing



Testing with test plug.
Using 209-170 test plug adapter.



fine-stranded,
tip-bonded



fine-stranded,
with ferrule ❶
(gastight crimped)

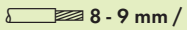


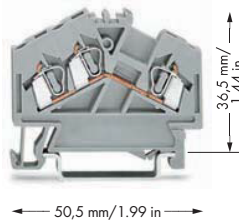
fine-stranded,
with pin terminal
(gastight crimped)

Through/Ground Conductor/Shield and Ex Terminal Blocks 2.5 mm² 280 Series

CAGE CLAMP®





















0.08 - 2.5 mm² | AWG 28 - 12 *
 800 V/8 kV/3 ① | 600 V, 20 A ②
 I_N 24 A

Terminal block width 5 mm / 0.197 in
 8 - 9 mm / 0.33 in ②



* AWG 12: THHN, THWN

- ① 800 V = rated voltage
 8 kV = rated surge voltage
 3 = pollution degree
 (also see Section 14)
- ② Strip length, see packaging or instructions.
- ③ Suitable for Ex i applications
- ④ 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.
- ⑤ See application notes for:
 Test plug modules, pages 194 - 196
 Banana plug, page 198
 Insulation stop, page 199
 Comb-style jumper bar, page 200
 Operating tool, page 200
 Staggered jumper, page 201
 Push-in type wire jumper, page 201

Item No.	Pack. Unit	280 Series Accessories		
Appropriate marking systems: WMB/WMB Inline/WFB (see Section 13)				
3-conductor through terminal block		Alternate jumper, insulated,		
 gray	280-641	100	Test plug, with 500 mm cable, 2 mm Ø red 210-136 50	
 blue	280-651 ③	100		
 orange	280-654	100		
 light gray ④	280-998 ④	100		
3-conductor ground terminal block		Staggered jumper,		
 green-yellow	280-637	100	Test plug, with 500 mm cable, 2.3 mm Ø yellow 210-137 50	
 green-yellow ⑤	280-637/999-950 ④	100		
3-conductor shield terminal block		Test plug adapter, 5 mm wide,		
 white	280-640	100		for terminal blocks 1.5 - 4 mm ² , for 210-137 test plug 2.3 mm Ø gray 280-404 100 (4x25)
280 Series Accessories		Test plug adapter, 8.3 mm wide,		
End and intermediate plate, 2.5 mm thick		for terminal blocks 1.5 - 10 mm ² , for test plug 4 mm Ø gray 209-170 50 (2x25)		
 orange	280-313	100 (4x25)	Banana plug,	
 gray	280-312	100 (4x25)		for socket 4 mm Ø, color mixed 215-111 50
 light gray	280-354	100 (4x25)		
Separator, oversized, 2.5 mm thick		Test plug adapter, 6 mm wide,		
 orange	280-318	100 (4x25)	with CAGE CLAMP®, for 0.08 - 2.5 mm ² I _N 24 A 281-407 100 (4x25)	
 gray	280-348	100 (4x25)	WMB Multi marking system,	
 light gray	280-355	100 (4x25)		10 strips with 10 markers per card, stretchable 5 - 5.2 mm plain 793-5501 5
Ex e/Ex i separator, orange,		WMB Multi marking system, plain,		
 3 mm thick	120 mm 209-191	50 (2x25)	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	
Spacer of same shape,		Comb-style jumper bar, insulated,		
 5 mm thick	orange 280-654/056-000	100 (4x25)		I _N = I _N terminal block 2-way 280-482 200 (8x25) 3-way 280-483 200 (8x25)
Insulation stop,		Alternate comb-style jumper bar,		
 5 pcs/strip, 0.08 - 0.2 mm ² "s" (0.14 mm ² "fst") white 280-470	200 (8x25)	insulated, I _N = I _N terminal block 2-way 280-492 200 (8x25)		
Insulation stop,		Operating tool, of insulating material		
 5 pcs/strip, 0.25 - 0.5 mm ² light gray 280-471	200 (8x25)	2-way 280-432 1 3-way 280-433 1		
Insulation stop,		Protective warning marker,		
 5 pcs/strip, 0.75 - 1 mm ² dark gray 280-472	200 (8x25)	with high-voltage symbol, black, for 5 terminal blocks yellow 280-415 100 (4x25)		
Adjacent jumper, insulated,		Test plug module,		
 I _N = I _N terminal block gray 280-402	200 (8x25)	can be snapped together, 5 mm wide gray 280-418 100 (4x25)		
Spacer module,		Screwless end stop,		
 can be snapped together, 5 mm wide gray 280-419	100 (4x25)	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)		

For list of approvals and user guide, see pages 634 to 637.