

Rail-Mounted Terminal Blocks

279 to 285 Series and 880 Series

Assembly



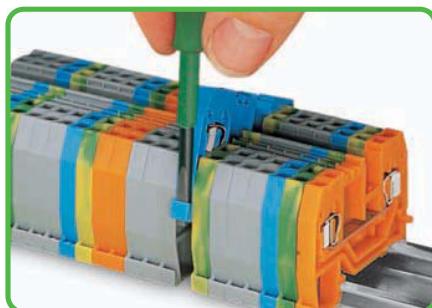
By snapping a ground conductor terminal block onto the carrier rail, a direct electrical connection is automatically made to the rail.

Assembly



Quick assembly keys prevent reverse mounting.

Removal



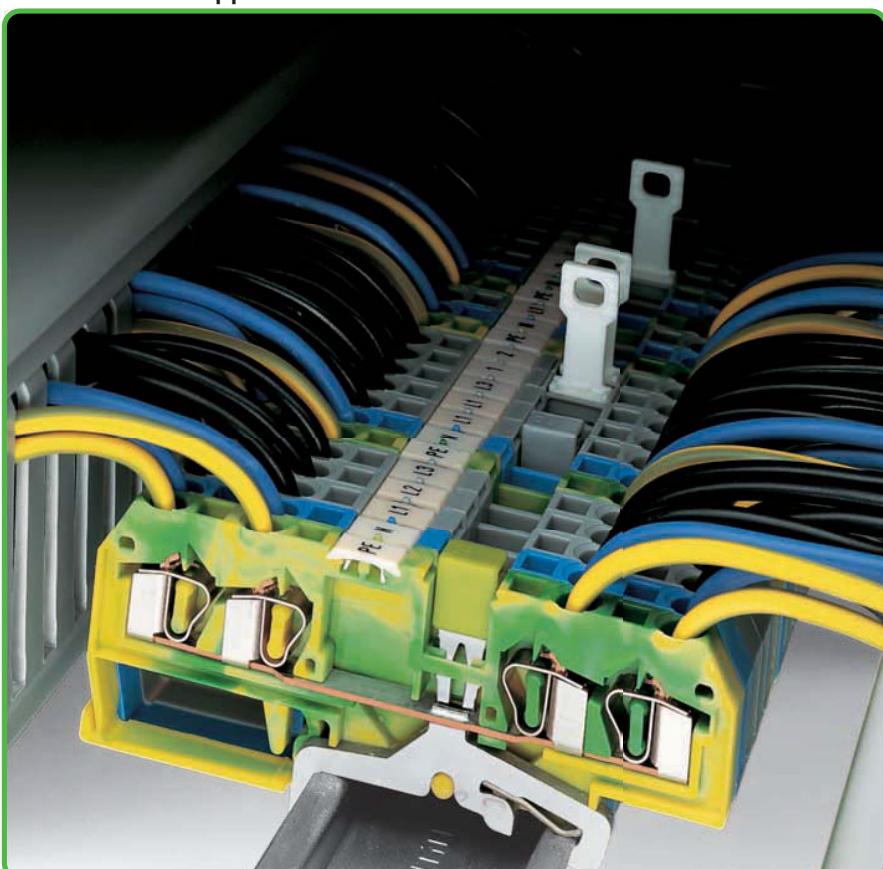
Removing a terminal block from the assembly.

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.

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

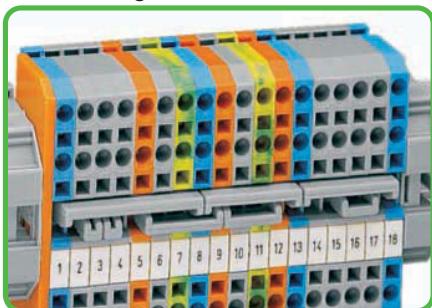


Commoning with step-down jumpers



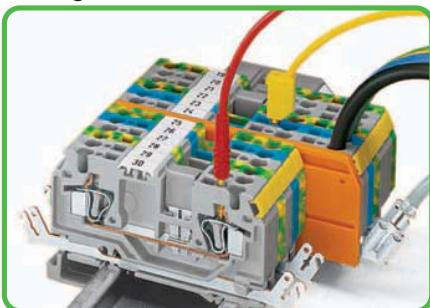
Commoning terminal blocks of different sizes – step down.
For application notes, see page 178.

Commoning



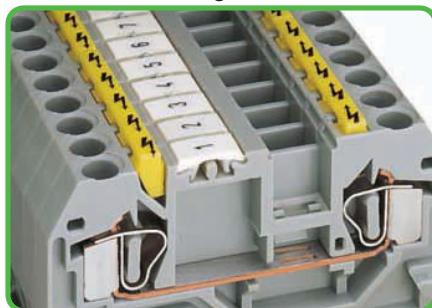
Staggered jumpers for sophisticated circuit requirements. Push jumpers down firmly until fully inserted. For additional notes, see page 201.

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

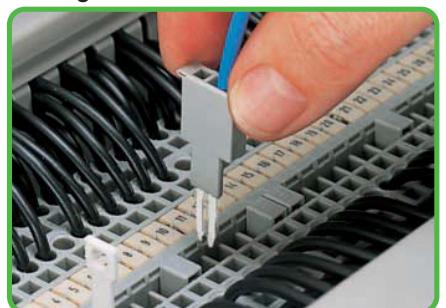
CAGE CLAMP® connection



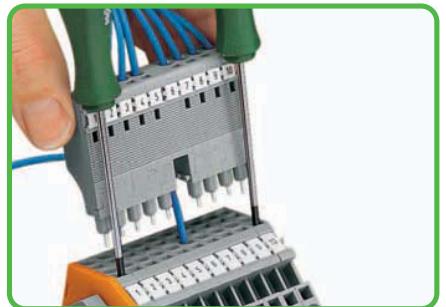
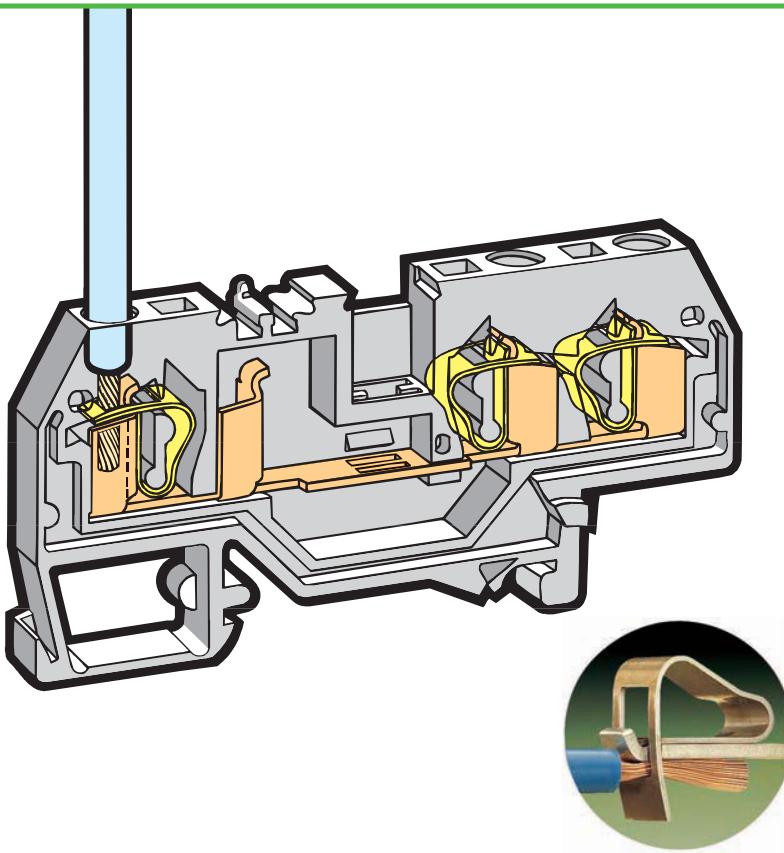
Conductor termination

① 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®.

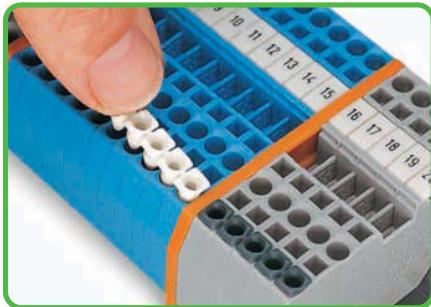
Testing

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

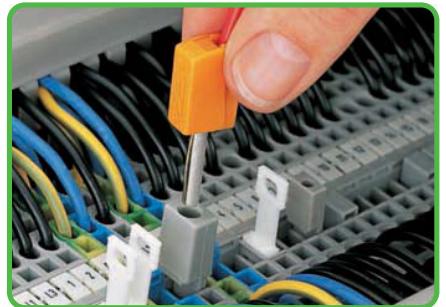
Marking

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 **①**
(gastight crimped)

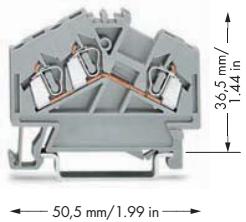
fine-stranded,
with pin terminal
(gastight crimped)

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

280 Series

CAGE CLAMP®

0.08 - 2.5 mm ²	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 ③	



* 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 e 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					
gray 280-641	100				
blue 280-651 ③	100				
orange 280-654	100				
light gray ④ 280-998 ④	100				
3-conductor ground terminal block					
green-yellow 280-637	100				
green-yellow ④ 280-637/999-950 ④	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, 5 pcs/strip, 0.08 - 0.2 mm ² "s" (0.14 mm ² "f-st")					
white 280-470	200 (8x25)				
Insulation stop, 5 pcs/strip, 0.25 - 0.5 mm ²					
light gray 280-471	200 (8x25)				
Insulation stop, 5 pcs/strip, 0.75 - 1 mm ²					
dark gray 280-472	200 (8x25)				
Adjacent jumper, insulated, I _N = I _N terminal block					
gray 280-402	200 (8x25)				
Push-in type wire jumper,					
⑤ insulated, I _N 9 A, wire size 0.75 mm ²					
L = 60 mm 249-125		10			
L = 110 mm 249-126		10			
L = 250 mm 249-127		10			
Comb-style jumper bar, insulated,					
⑤ 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,					
⑤ 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)					
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)					