

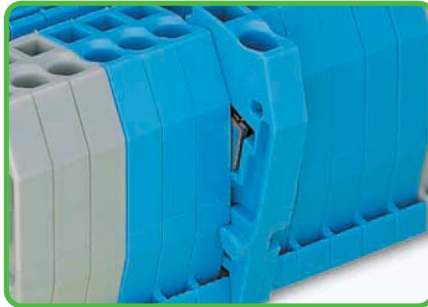
# Rail-Mounted Terminal Blocks 279 to 285 Series and 880 Series

## Assembly



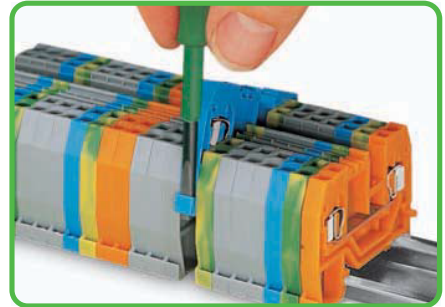
By snapping a ground conductor terminal block onto the carrier rail, a direct electrical connection is automatically made to the rail.

## Assembly



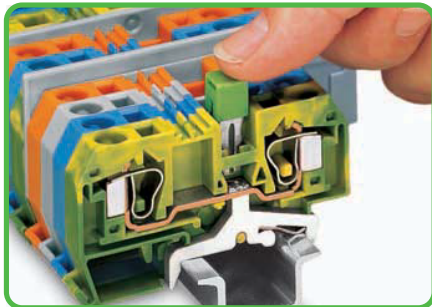
Quick assembly keys prevent reverse mounting.

## Removal



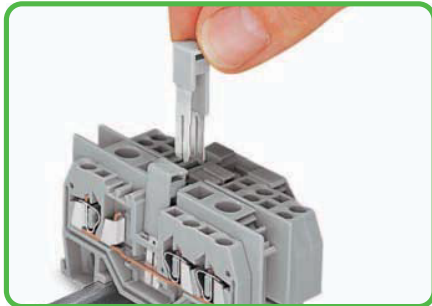
Removing a terminal block from the assembly.

## Commoning



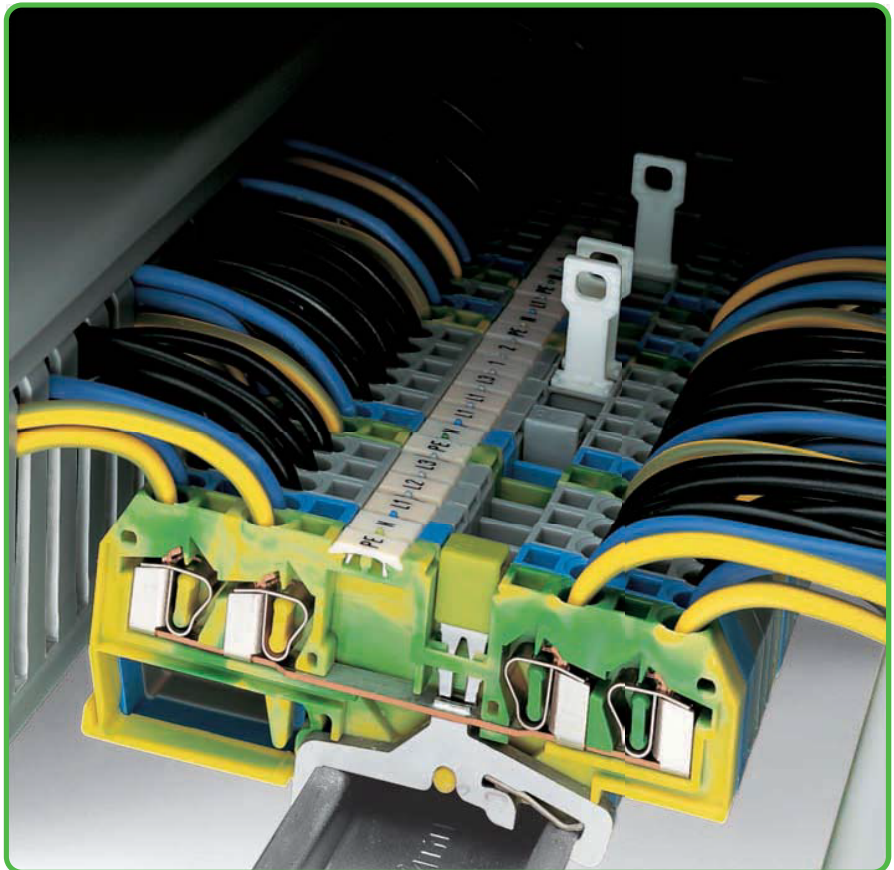
Commoning ground conductor terminal blocks with through terminal blocks is possible in one direction only (via rear side of terminal block) using adjacent jumpers. In addition to the required marking of these blocks, use yellow-green adjacent jumpers.

## Commoning with step-down jumpers

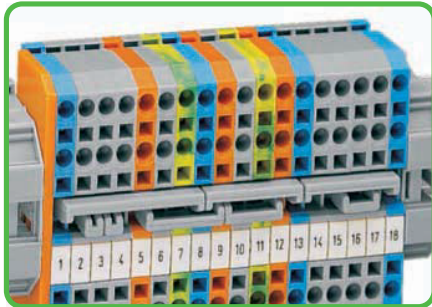


Commoning terminal blocks of different sizes – step down.  
For application notes, see page 178.

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

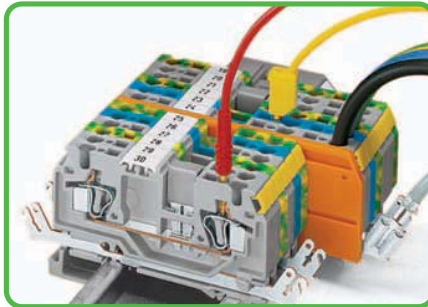


## Commoning



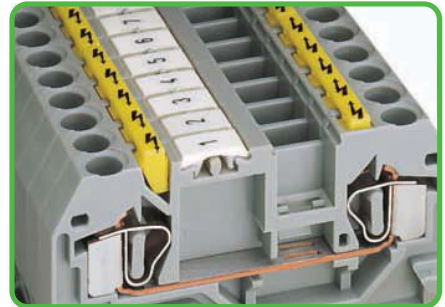
Staggered jumpers for sophisticated circuit requirements. Push jumpers down firmly until fully inserted. For additional notes, see page 201.

## Testing - 880 Series

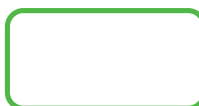


880 Series terminal blocks have an additional test slot for 2 mm Ø or 2.3 mm Ø test plugs.

## Protective warning marker

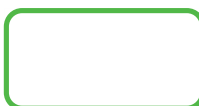


Protective warning markers inserted into the operating slots.

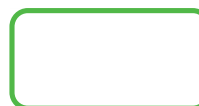


**CAGE CLAMP®**  
clamps the following  
copper conductors:\*

solid



stranded

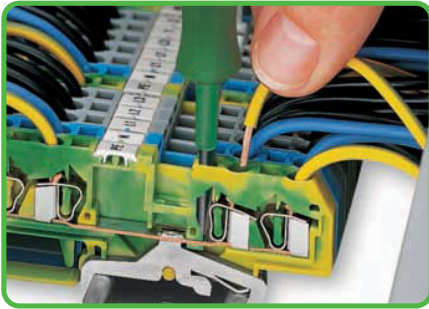


fine-stranded,  
also with tinned  
single strands

\* For aluminum conductors, see notes in Section 14.

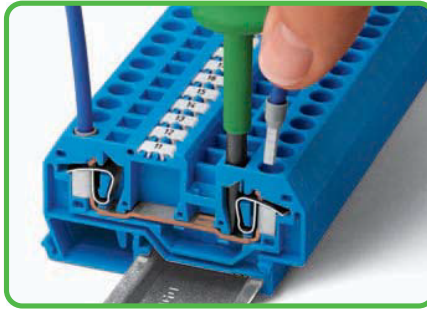
- Description and Handling -

CAGE CLAMP® connection



Conductor termination

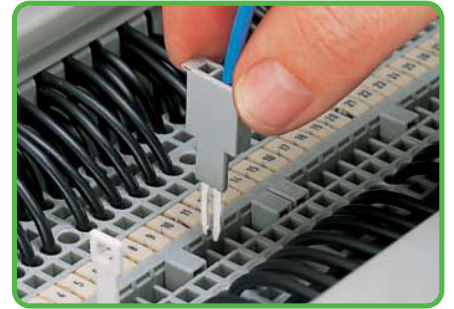
CAGE CLAMP® connection



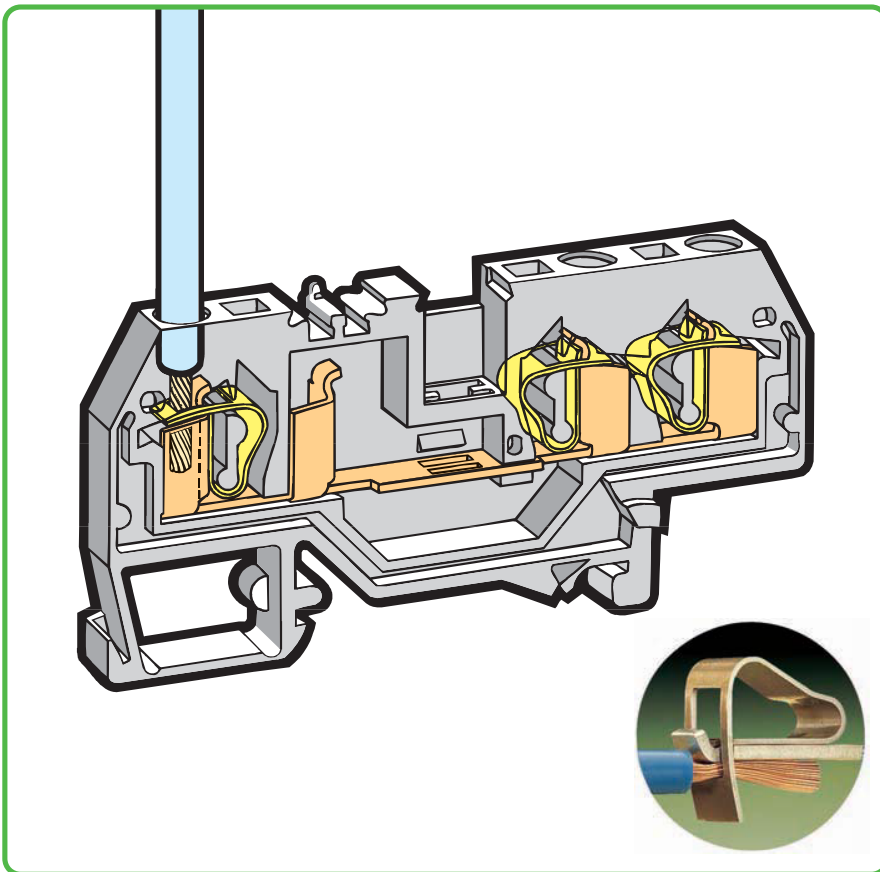
Conductor termination

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

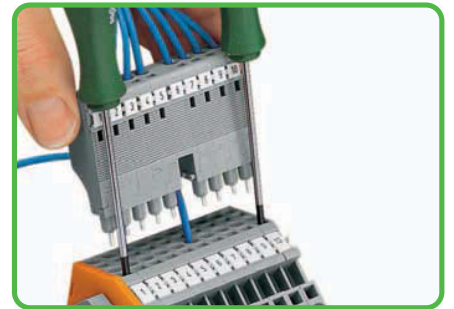
Testing



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

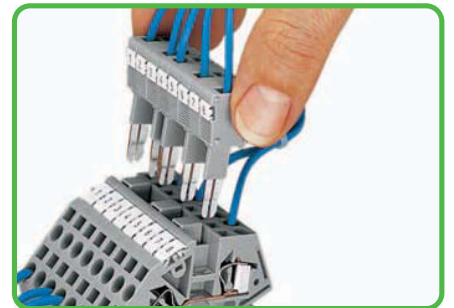


Testing



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

Testing



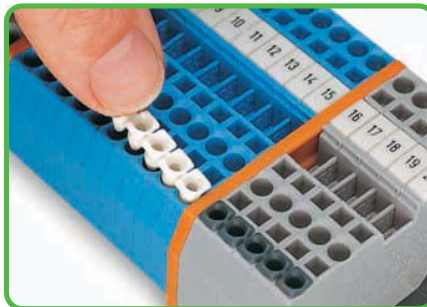
B-type test plug modules fitted with CAGE CLAMP®.  
For application notes, see page 195.

Marking



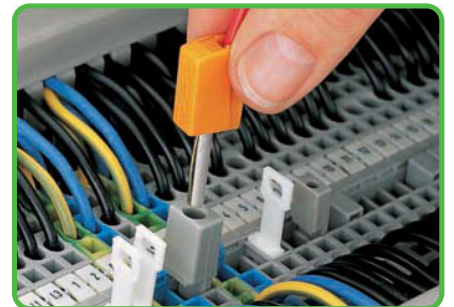
Marking with WMB Multi marking system.  
For additional systems, see Section 13.

Insulation stop

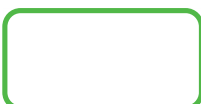


Insertion of insulation stop.  
For application notes, see page 199.

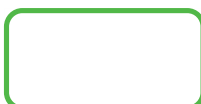
Testing



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



fine-stranded,  
tip-bonded



fine-stranded,  
with ferrule ❶  
(gastight crimped)




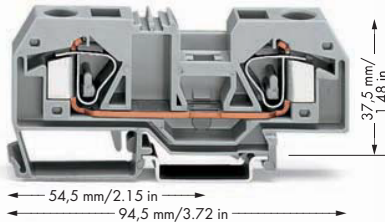
fine-stranded,  
with pin terminal  
(gastight crimped)

# Through/Ground Conductor and Ex Terminal Blocks 16 mm<sup>2</sup> 283 Series

CAGE CLAMP®

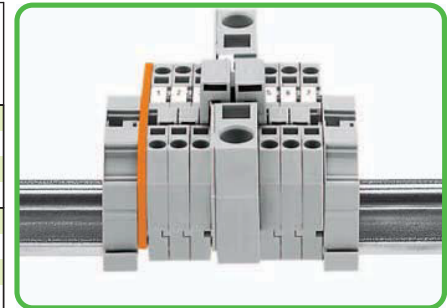
0.2 - 16 mm<sup>2</sup> AWG 24 - 6  
 800 V/8 kV/3 ① 600 V, 65 A<sup>NA</sup>  
 I<sub>N</sub> 76 A 600 V, 70 A<sup>Ⓢ</sup>

Terminal block width 12 mm / 0.472 in  
 16 - 17 mm / 0.65 in ②



- 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 II applications  
0.5 mm<sup>2</sup> - 16 mm<sup>2</sup>/AWG 20 - 6  
550 V, 68 A  
Jumper 63 A  
(also see Section 14)
- ④ See application notes for:  
Banana plug, page 198  
Step-down jumper, pages 178 - 179

Item No.	Pack. Unit	283 Series Accessories			
		Appropriate marking systems (see Section 13)			
<b>2-conductor through terminal block</b>		<b>End and intermediate plate, 2.5 mm thick</b>			
gray	283-901	20	orange	283-328	50 (2x25)
blue	283-904	20	gray	283-325	50 (2x25)
orange	283-902	20	light gray	283-330	50 (2x25)
light gray	283-992	20	<b>Separator, oversized, 2 mm thick</b>		
			orange	283-329	50 (2x25)
			gray	283-326	50 (2x25)
			light gray	283-331	50 (2x25)
<b>2-conductor ground terminal block</b>		<b>Adjacent jumper, insulated,</b>			
green-yellow	283-907	20	I <sub>N</sub> 70 A		
green-yellow	283-907/999-950	20	gray	283-402	50 (2x25)
			yellow-green	283-422	50 (2x25)
			<b>Alternate jumper, insulated,</b>		
			I <sub>N</sub> 76 A		
			gray	283-409	50 (2x25)
			<b>Protective warning marker,</b>		
			with high-voltage symbol, black,		
			for 5 terminal blocks		
			yellow	283-415	50 (2x25)
			<b>Finger guard,</b>		
			touchproof cover protects unused		
			conductor entries		
			yellow	283-400	100 (4x25)
			<b>Step-down jumper, insulated,</b>		
			④ I <sub>N</sub> 32 A		
			gray	283-414	50 (2x25)
			<b>Cover plate,</b>		
			1 mm thick		
			gray	283-357	25
			orange	283-367	25
			<b>Test plug adapter, 11.6 mm wide,</b>		
			for 1.5 - 16 mm <sup>2</sup> terminal blocks, for test		
			plug 4 mm Ø		
			gray	283-404	25
			<b>Banana plug,</b>		
			④ for socket 4 mm Ø,		
			color mixed		
				215-111	50
			<b>Screwless end stop,</b>		
			for DIN 35 rail,		
			6 mm wide		
			gray	249-116	100 (4x25)
			<b>Screwless end stop,</b>		
			for DIN 35 rail,		
			10 mm wide		
			gray	249-117	50 (2x25)



### 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 mm<sup>2</sup>/AWG 6 terminal blocks with 4 mm<sup>2</sup>/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.**