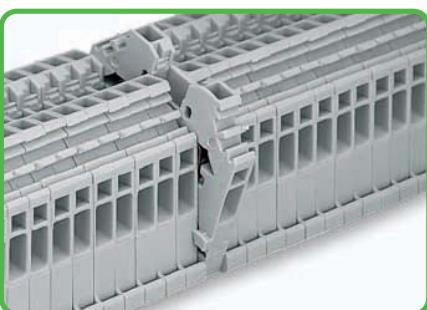


Rail-Mounted Terminal Blocks, Side-Entry 279 to 284 Series

Assembly



Snapping side-entry rail-mounted terminal blocks onto the carrier rail.



Quick assembly keys prevent reverse mounting.

Removal

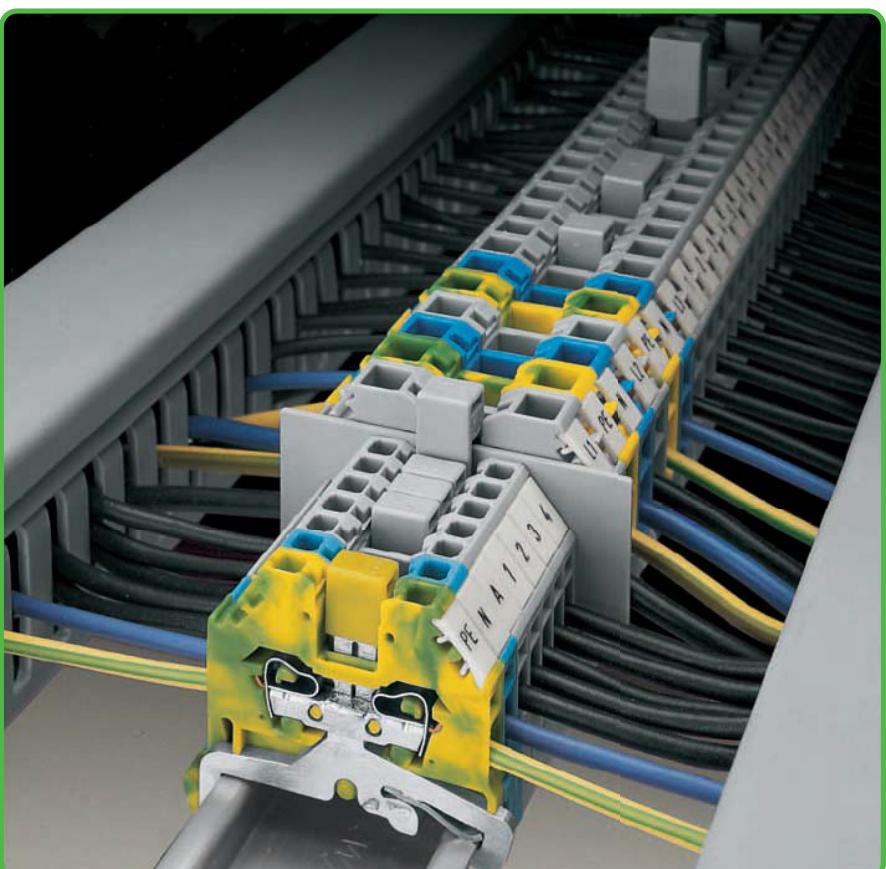


Removal from the carrier rail.

CAGE CLAMP® connection



Conductor termination

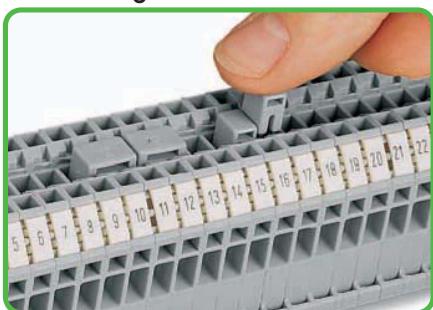


Testing



Testing with test plug adapter.

Commoning



Commoning with adjacent jumpers.



Commoning 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 –



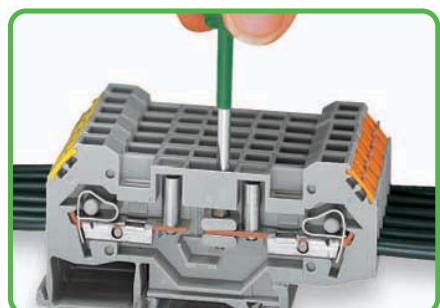
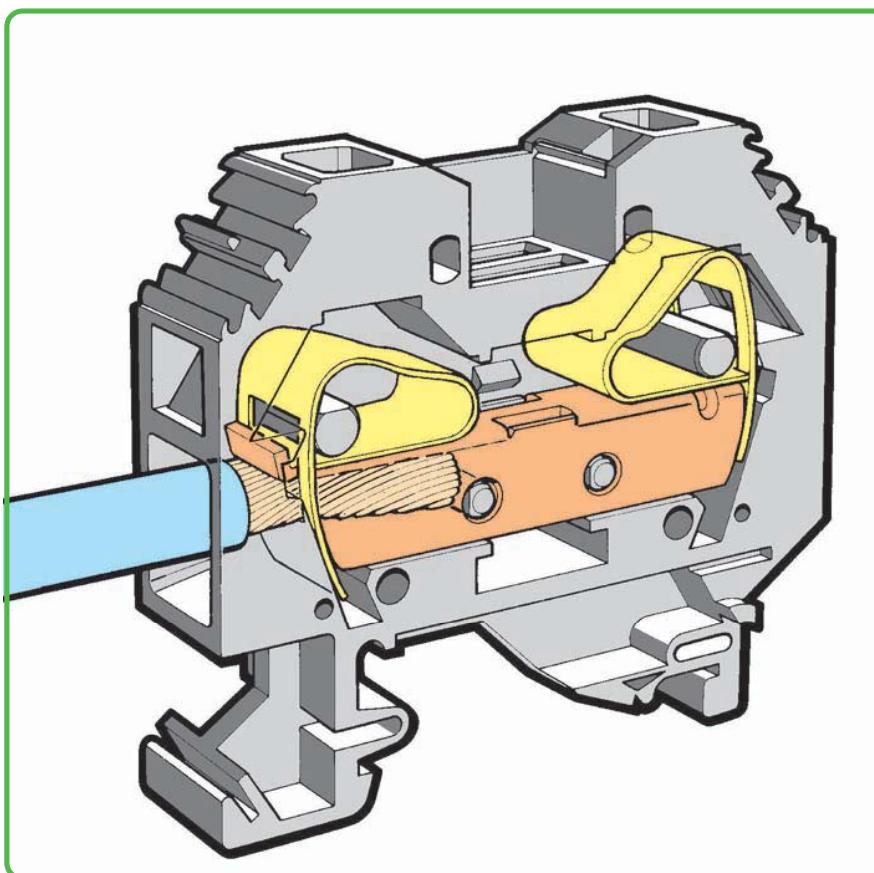
Suitable for all DIN 35 rails.

Fuse terminal blocks



Replacing a fuse.

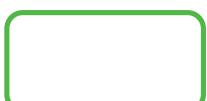
Disconnect terminal blocks for test and measurement



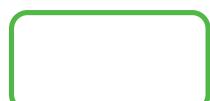
Marking



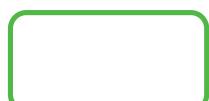
Marking with WMB Multi marking system.



fine-stranded,
tip-bonded



fine-stranded,
with ferrule ①
(gastight crimped)

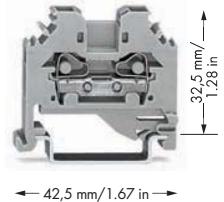
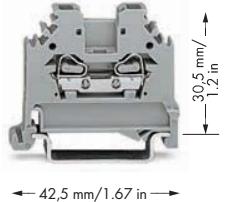
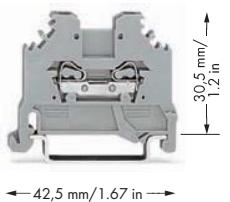


fine-stranded,
with pin terminal
(gastight crimped)

① When using ferruled conductors, it is necessary to use a terminal block one size larger than the nominal cross section of the wire.

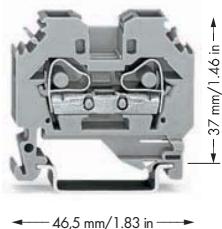
Through and Ground Conductor Terminal Blocks 1.5 mm² to 6 mm² 279 to 282 Series

| | | | | | |
|--|---|---|---|---|---|
| 0.08 - 1.5 mm ² 800 V/8 kV/3 ① I _N 18 A | AWG 28 - 16 600 V, 10 A 600 V, 15 A | 0.08 - 2.5 mm ² 800 V/8 kV/3 ① I _N 24 A | AWG 28 - 12 * 600 V, 20 A 600 V, 20 A | 0.08 - 4 mm ² 800 V/8 kV/3 ① I _N 32 A | AWG 28 - 12 600 V, 20 A 600 V, 25 A |
| <p>Terminal block width 4 mm / 0.157 in 8 - 9 mm / 0.33 in ②</p> <p>Terminal block width 5 mm / 0.197 in 8 - 9 mm / 0.33 in ②</p> <p>Terminal block width 6 mm / 0.236 in 9 - 10 mm / 0.37 in ②</p> | | | | | |



| Item No. | Pack. Unit | Item No. | Pack. Unit | Item No. | Pack. Unit |
|---|------------|---|------------|--|------------|
| 2-conductor through terminal block | | 2-conductor through terminal block | | 2-conductor through terminal block | |
| gray 279-101 100 | | gray 280-101 100 | | gray 281-101 100 | |
| blue 279-104 ③ 100 | | blue 280-104 ③ 100 | | blue 281-104 ③ 100 | |
| | | 2-conductor ground terminal block | | 2-conductor ground terminal block | |
| | | green-yellow 280-107 100 | | green-yellow 281-107 100 | |
| Item-Specific Accessories | | | | | |
| End and intermediate plate, 2.5 mm thick | | End and intermediate plate, 2.5 mm thick | | End and intermediate plate, 3 mm thick | |
| orange 280-302 100 (4x25) | | orange 280-302 100 (4x25) | | orange 281-302 100 (4x25) | |
| gray 280-301 100 (4x25) | | gray 280-301 100 (4x25) | | gray 281-301 100 (4x25) | |
| Separator, oversized, 2 mm thick | | Separator, oversized, 2 mm thick | | Separator, oversized, 2 mm thick | |
| orange 280-322 100 (4x25) | | orange 280-322 100 (4x25) | | orange 281-322 100 (4x25) | |
| gray 280-332 100 (4x25) | | gray 280-332 100 (4x25) | | gray 281-332 100 (4x25) | |
| Adjacent jumper, insulated, I _N 15 A | | Adjacent jumper, insulated, I _N = I _N terminal block | | Adjacent jumper, insulated, I _N = I _N terminal block | |
| gray 279-402 200 (8x25) | | gray 280-402 200 (8x25) | | gray 281-402 200 (8x25) | |
| yellow-green 279-422 200 (8x25) | | yellow-green 280-422 200 (8x25) | | yellow-green 281-422 200 (8x25) | |
| Alternate jumper, insulated, I _N 15 A | | Alternate jumper, insulated, I _N = I _N terminal block | | Alternate jumper, insulated, I _N = I _N terminal block | |
| gray 279-409 100 (4x25) | | gray 280-409 100 (4x25) | | gray 281-409 100 (4x25) | |
| Step-down jumper, insulated, ④ I _N 15 A | | Step-down jumper, insulated, ④ I _N 15 A | | Step-down jumper, insulated, ④ I _N 15 A | |
| gray 284-414 50 (2x25) | | gray 284-414 50 (2x25) | | gray 284-414 50 (2x25) | |
| Intermediate plate, 1 mm thick | | Intermediate plate, 1 mm thick | | Intermediate plate, 1 mm thick | |
| gray 281-333 100 (4x25) | | gray 281-333 100 (4x25) | | gray 281-333 100 (4x25) | |
| orange 281-336 100 (4x25) | | orange 281-336 100 (4x25) | | orange 281-336 100 (4x25) | |
| Protective warning marker, with high-voltage symbol, black, for 5 terminal blocks | | Protective warning marker, with high-voltage symbol, black, for 5 terminal blocks | | Step-down jumper, insulated, I _N 30 A | |
| yellow 279-405 100 (4x25) | | yellow 280-405 100 (4x25) | | gray 284-413 50 (2x25) | |
| Test plug adapter, 8.3 mm wide, for terminal blocks 1.5 - 10 mm ² , for test plug 4 mm Ø | | Test plug adapter, 8.3 mm wide, for terminal blocks 1.5 - 10 mm ² , for test plug 4 mm Ø | | Step-down jumper, insulated, I _N 32 A | |
| gray 209-170 50 (2x25) | | gray 209-170 50 (2x25) | | gray 283-414 50 (2x25) | |
| Test plug adapter, 5 mm wide, for terminal blocks 1.5 - 4 mm ² , for 210-137 test plug 2.3 mm Ø | | Test plug adapter, 5 mm wide, for terminal blocks 1.5 - 4 mm ² , for 210-137 test plug 2.3 mm Ø | | Protective warning marker, with high-voltage symbol, black, for 5 terminal blocks | |
| gray 280-404 100 (4x25) | | gray 280-404 100 (4x25) | | yellow 281-405 100 (4x25) | |
| | | | | Test plug adapter, 8.3 mm wide, for terminal blocks 1.5 - 10 mm ² , for test plug 4 mm Ø | |
| | | | | gray 209-170 50 (2x25) | |

| | |
|---|----------------------|
| 0.2 - 6 mm² | AWG 24 - 10 |
| 800 V/8 kV/3 ① | 600 V, 30 A ② |
| I_N 41 A | 600 V, 10 A ③ |
| Terminal block width 8 mm / 0.315 in | |
| 12 - 13 mm / 0.49 in ② | |



| Carrier rail | Item No. | Current [A] | Acc. to mm ² /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

① 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree

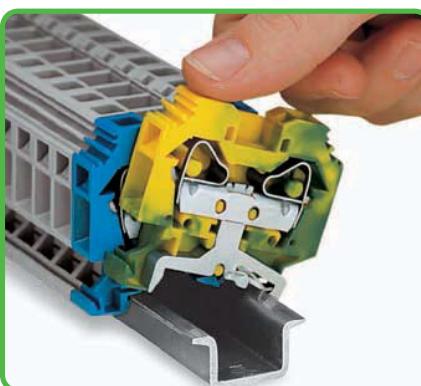
(also see Section 14)

② Strip length, see packaging or instructions.

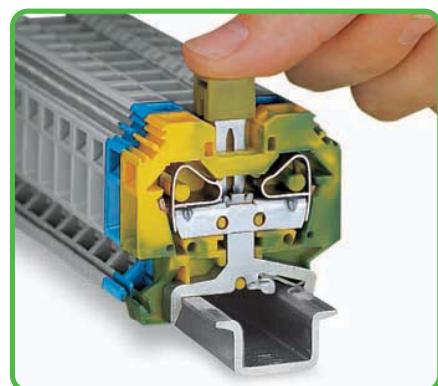
③ Suitable for Ex i applications

④ See application notes for:
Step-down jumper, page 309
Test plug module, page 197

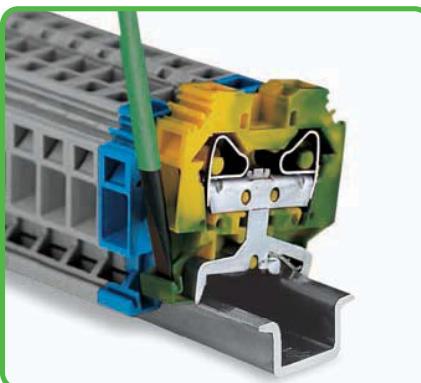
| Item No. | Pack. Unit |
|--|---------------------------|
| 2-conductor through terminal block | |
| gray | 282-101 50 |
| blue | 282-104 ③ 50 |
| 2-conductor ground terminal block | |
| green-yellow | 282-107 50 |
| Item-Specific Accessories | |
| End and intermediate plate, 4 mm thick | |
| orange | 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, ④ 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 mm ² , for test plug 4 mm Ø | |
| gray | 209-170 50 (2x25) |
| B-type test plug module, ④ 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.



Push jumper down firmly until fully inserted.
Connecting 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.