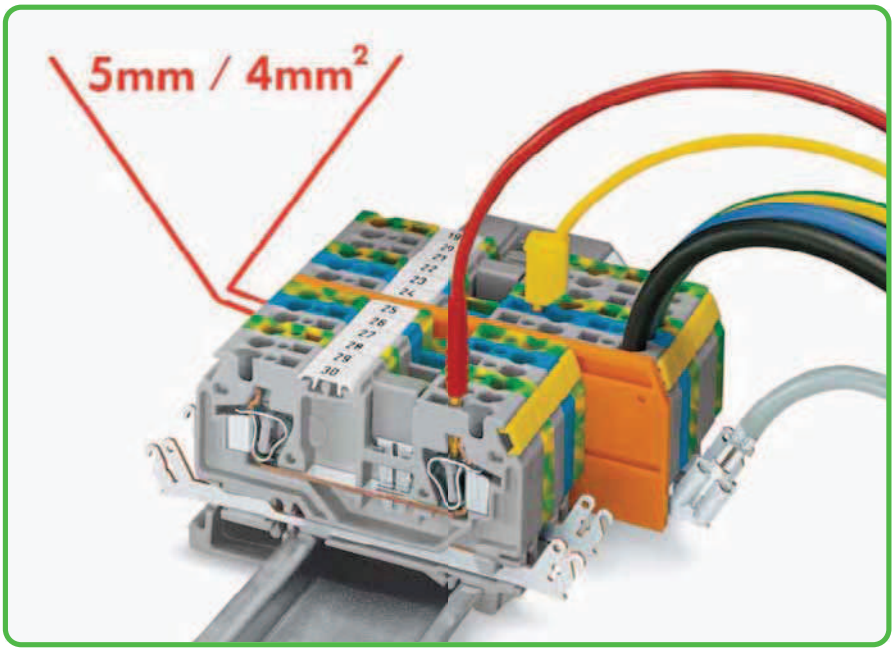
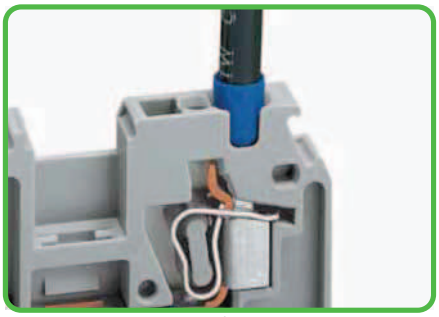
# 880 Series Features




With/without shield contact

**Features**
- 2-, 3- and 4-conductor terminal blocks, only 5 mm/0.197 in 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 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

## 880 Series Accessories

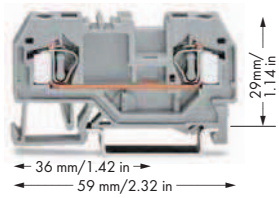
| | | | |
|---|---|---|---|
| **Test plug,** | | | |
|  | with 500 mm cable, 2.3 mm Ø | | |
| | yellow | **210-137** | 50 |
| **Test plug,** | | | |
|  | with 500 mm cable, 2 mm Ø | | |
| | red | **210-136** | 50 |
| **Test plug adapter,** 5 mm wide, | | | |
|  | for terminal blocks 1.5 - 4 mm², for 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 test plug 4 mm Ø | | |
| | 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) |

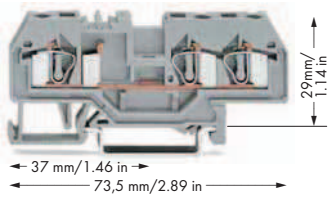
# Through/Ground Conductor/Shield and Ex Terminal Blocks 4 mm²
# 281 Series

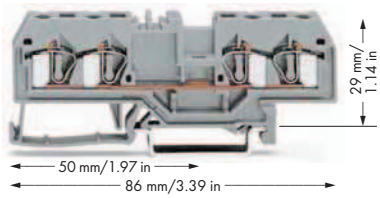
| | | |
|---|---|---|
| 0.08 - 4 mm² | AWG 28 - 12 | |
| 800 V/8 kV/3 ❶ | 600 V, 20 A | |
| $I_N$ 32 A | 600 V, 25 A | |
| Terminal block width 6 mm / 0.236 in | | |
| 9 - 10 mm / 0.37 in ❷ | | |

| | | |
|---|---|---|
| 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 | | |

| | | |
|---|---|---|
| 0.08 - 4 mm² | AWG 28 - 12 | |
| 800 V/8 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 | | |




| | 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 258 |
| Disconnect | **281-912** | Page 208 |
| Carrier | **281-916** | Page 230 |

| | 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 258 |
| Disconnect | **281-683** | Page 208 |
| Carrier | **281-610** | Page 230 |

| | 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 258 |
| Disconnect | **281-659** | Page 208 |
| Disc., test & meas. | **281-666** | Page 208 |
| Carrier | **281-656** | Page 230 |

## 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) |

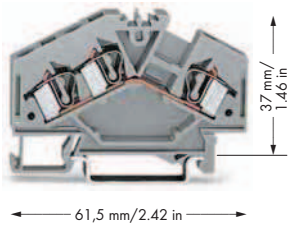
| | | | |
|---|---|---|---|
| **Insulation stop,** | | | |
| ❺ | 5 pcs/strip, | | |
| | 0.25 - 0.5 mm² | | |
| | light gray | **281-471** | 200 (8x25) |

| | | | |
|---|---|---|---|
| **Insulation stop,** | | | |
| ❺ | 5 pcs/strip, | | |
| | 0.25 - 1.5 mm² | | |
| | dark gray | **281-472** | 200 (8x25) |

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

| | |
|---|---|
| 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 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
Step-down jumper, pages 178 – 179



| | 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,
width 6 mm/0.236 in,
$I_N$ 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 test plug 4 mm Ø

| | | |
|---|---|---|
| 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

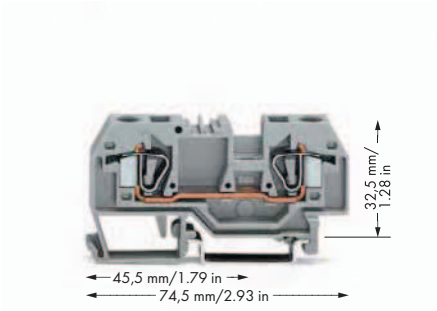
CAGE CLAMP®

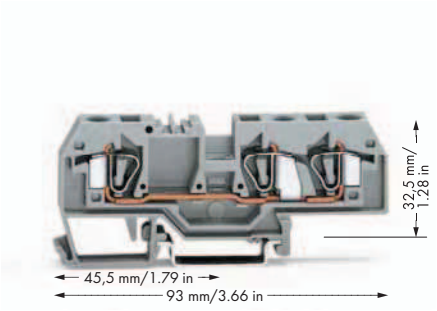
| | |
|---|---|
| 0.2 - 6 mm² | AWG 24 - 10 |
| 800 V/8 kV/3 ❶ | 600 V, 30 A |
| $I_N$ 41 A | 600 V, 40 A |

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.

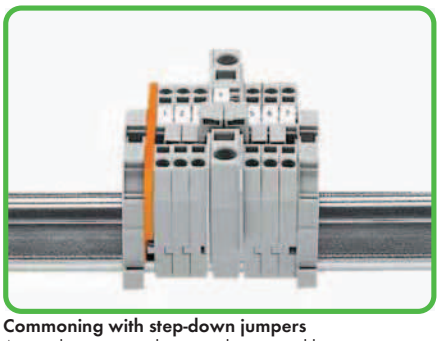
❸ Suitable for Ex i applications

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 197
Banana plug, page 198
Step-down jumper, pages 178 – 179

| | 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.



**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.**

## 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 |

## 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) |

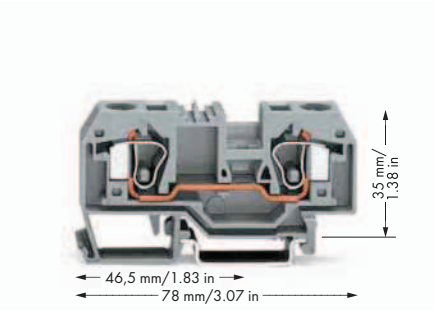
| | | | |
|---|---|---|---|
| **Step-down jumper,** insulated, | | | |
| | $I_N$ 30 A | | |
| | gray | **284-413** | 50 (2x25) |
| **Test plug adapter,** 8.3 mm wide, | | | |
| | for terminal blocks 1.5 - 10 mm², | | |
| | for test plug 4 mm Ø | | |
| | gray | **209-170** | 50 (2x25) |
| **Banana plug,** | | | |
| 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) |

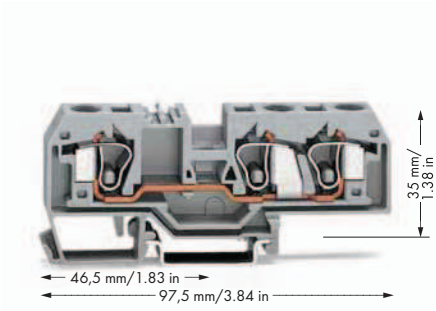
For list of approvals and user guide, see pages 634 to 637.

# 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 197
Banana plug, page 198
Step-down jumper, pages 178 – 179

| | Item No. | Pack. Unit |
|---|---|---|
| **2-conductor through terminal block** | | |
| gray | **284-901** | 25 |
| blue | **284-904** | 25 |
| orange | **284-902** | 25 |
| light gray | **284-992** ❸ | 25 |
| **2-conductor ground terminal block** | | |
| green-yellow | **284-907** | 25 |
| green-yellow | **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 | **284-993** ❸ | 25 |
| **3-conductor ground terminal block** | | |
| green-yellow | **284-687** | 25 |
| green-yellow | **284-687/999-950** ❸ | 25 |



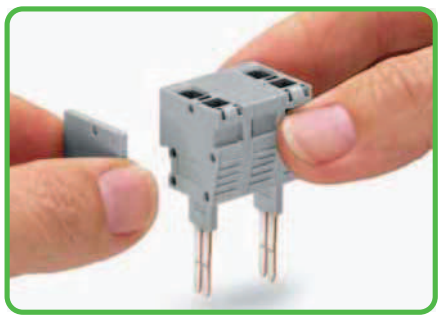
Inserting a finger guard seals unused conductor entries.

## 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 test plug 4 mm Ø | | |
| | 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) |

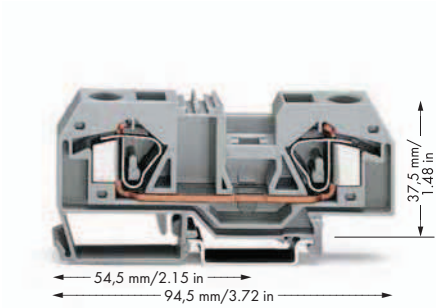
For list of approvals and user guide, see pages 634 to 637.

# 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)

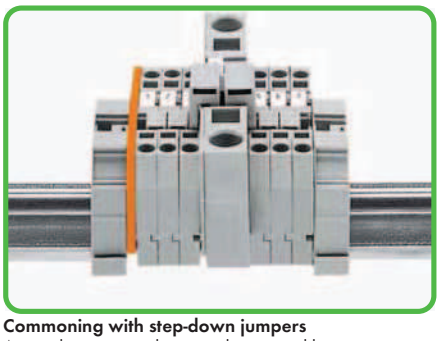
❹ See application notes for:
Banana plug, page 198
Step-down jumper, pages 178 – 179

| | Item No. | Pack. Unit |
|---|---|---|
| **2-conductor through terminal block** | | |
| gray | **283-901** | 20 |
| blue | **283-904** | 20 |
| orange | **283-902** | 20 |
| light gray | **283-992** ❸ | 20 |
| **2-conductor ground terminal block** | | |
| green-yellow | **283-907** | 20 |
| green-yellow | **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 test plug 4 mm Ø | | |
| | gray | **283-404** | 25 |
| **Banana plug,** | | | |
| ❹ | for socket 4 mm Ø, color mixed | | |
| | | **215-111** | 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) |



**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.

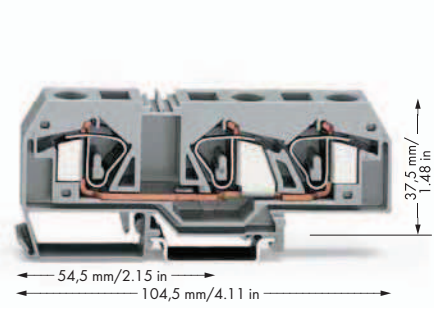
Note:
**The total current flowing shall not exceed the rating of the step-down jumper.**

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

# 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.

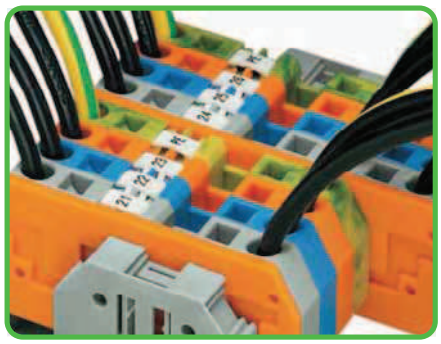
❸ Suitable for Ex e II applications
0.5 mm² - 16 mm²/AWG 20 - 6
550 V, 68 A
(also see Section 14)

| | Item No. | Pack. Unit |
|---|---|---|
| **3-conductor through terminal block** | | |
| gray | **283-671** | 20 |
| blue | **283-674** | 20 |
| orange | **283-672** | 20 |
| light gray | **283-998** ❸ | 20 |
| **3-conductor ground terminal block** | | |
| green-yellow | **283-677** | 20 |
| green-yellow | **283-677/999-950** ❸ | 20 |
| **Notice:** | | |
| **These terminal blocks cannot be commoned using adjacent jumpers** | | |

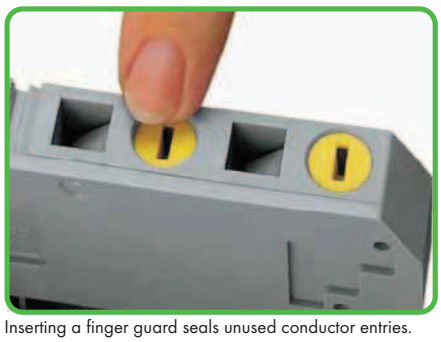
## 283 Series Accessories

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.

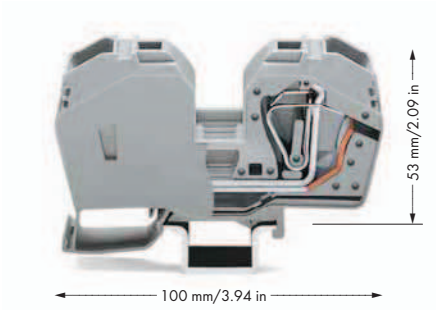
For list of approvals and user guide, see pages 634 to 637.

# 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.

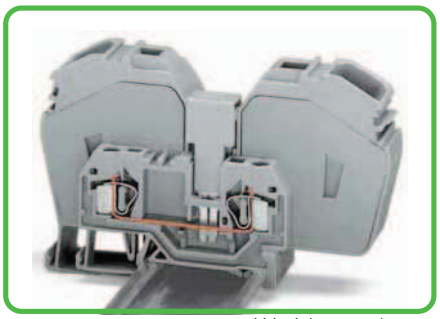
❶ 1000 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)

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.

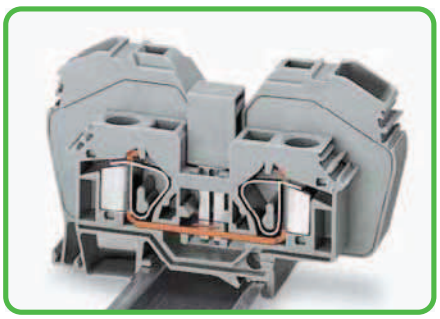

Commoning a 285 Series terminal block (35 mm²/AWG 2) with a 281 Series terminal block (4 mm²/AWG 12) using a 283-414 step-down jumper.
Step-down jumpers are simply pushed down for full insertion, similar to adjacent jumpers.
Note:
**The total current flowing shall not exceed the rating of the step-down 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 |
| **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.

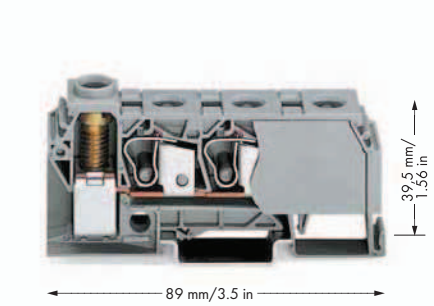

285 Series terminal blocks can be commoned with 283 Series terminal blocks: 285-635 or 285-634 with 283-601 or 283-604
(for terminal blocks with side marking, see www.wagocatalog.com).
Jumper required: 285-435.

**Please note that the nominal current of adjacent jumper shall not exceed 63A.**

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

# 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.

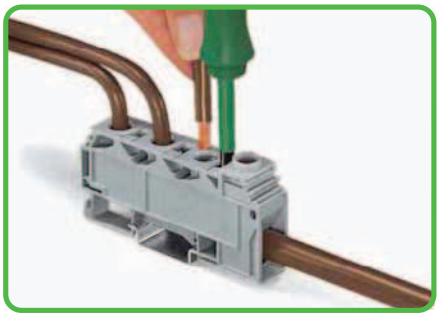
❶ CAGE CLAMP® connection
❷ Screw clamp termination
❸ 800 V = rated voltage
8 kV = rated surge voltage
3 = pollution degree
(also see Section 14)
❹ Strip length, see packaging or instructions.
❺ Individual arrangement: 125 A
Two jumpers combined in one clamping unit: 100 A

| | 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 |

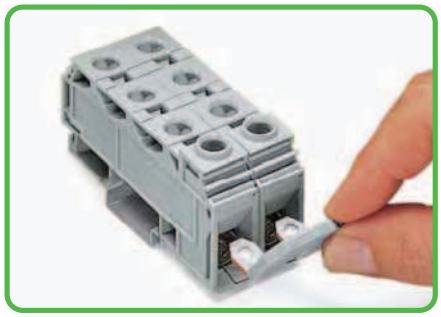
## Accessories for Distribution Terminal Blocks

Appropriate marking system: WMB

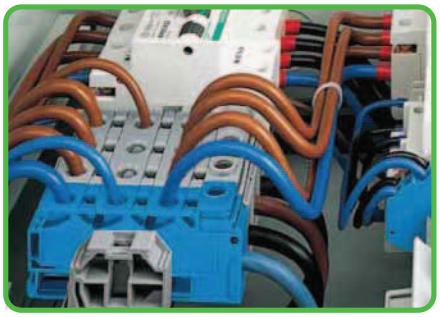
| | | | |
|---|---|---|---|
| **Comb-style jumper bar,** insulated, | | | |
| ❺ | $I_N$ 125 A for 1 jumper, | | |
| | $I_N$ 100 A for 2 jumpers | | |
| | gray | **284-412** | 100 (4x25) |
| **Screwless end stop,** | | | |
| | for DIN 35 rail, | | |
| | 6 mm wide | | |
| | gray | **249-116** | 100 (4x25) |
| **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.

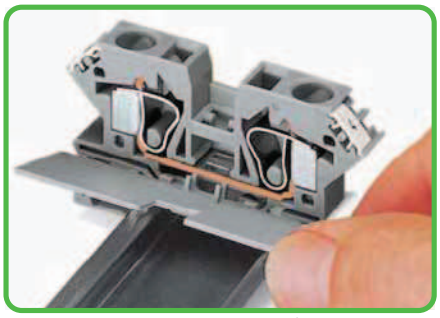


Rail-mounted distribution terminal block with 35 mm²/AWG 2 screw clamp connection (front-entry) and 3 x 10 mm²/AWG 8 front-entry CAGE CLAMP® connection.
Snaps onto DIN 35 carrier rails per EN 60675. The terminal block enclosed on both sides, an end or intermediate plate is not necessary.

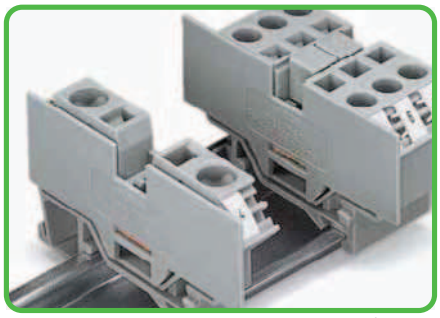
**In case of maximum wiring with 3 x 10 mm²/AWG 8 on the distribution side the nominal current of 125A shall not be exceeded.**

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

# 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



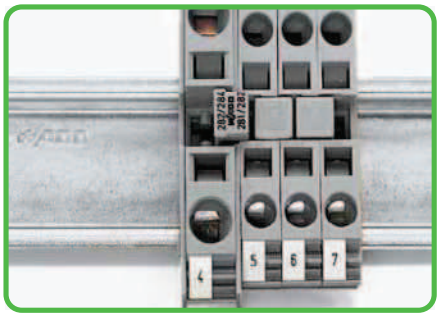
Cover plate snapped onto open side of terminal block.



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.



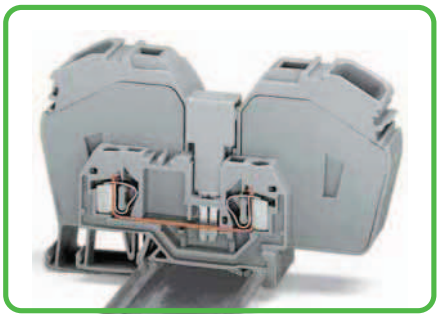
Step-down jumper commoning from 10/6 mm² (AWG 8/10) to with 4/2.5/1.5 mm² (AWG 12/14/16) terminal blocks.
$I_N$ 15 A **284-414**



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**

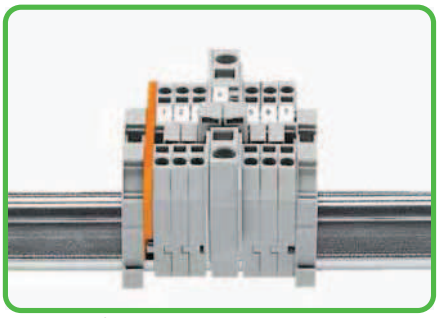


Step-down jumper commoning from 16 mm² (AWG 6) to 4 mm² (AWG 12) terminal blocks.
$I_N$ 32 A **283-414**



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 176.

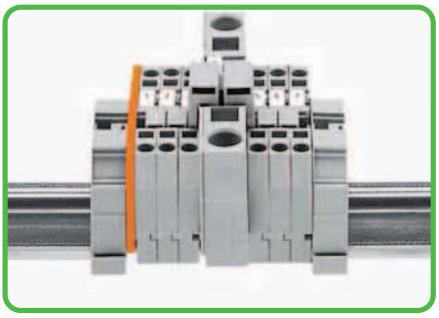
# Examples of Assembly



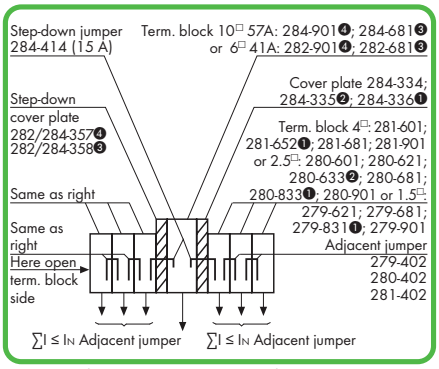
Commoning from 6 mm²/AWG 10 (282 Series) to 1.5 mm²/AWG 16 (279 Series) rail-mount terminal blocks.



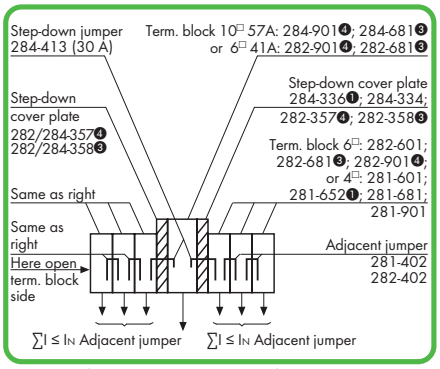
Commoning from 10 mm²/AWG 8 (284 Series) to 6 mm²/AWG 10 (282 Series) rail-mount terminal blocks.



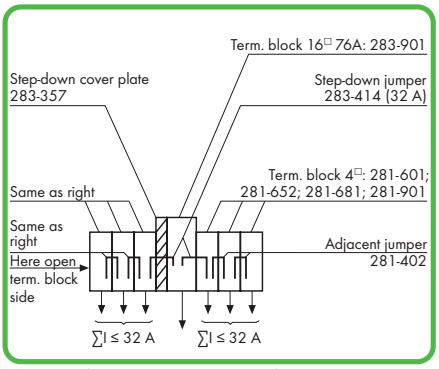
Commoning from 16 mm²/AWG 6 (283 Series) to 4 mm²/AWG 12 (281 Series) rail-mount terminal blocks.



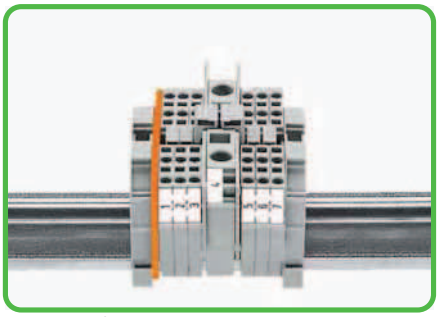

Example of assembly: "Commoning from 10/6 mm² (AWG 8/10) to 4/2.5/1.5 mm² (AWG 12/14/16) rail-mount terminal blocks with 284-414 step-down jumper."




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."



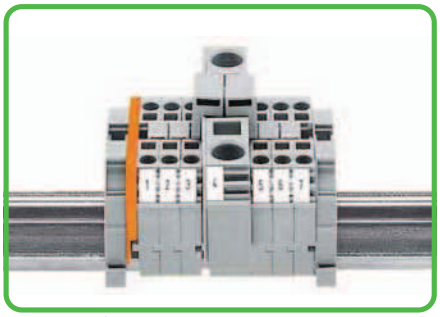

Example of assembly: "Commoning from 16 mm² (AWG 6) to 4 mm² (AWG 12) rail-mount terminal blocks with 284-414 step-down jumper."



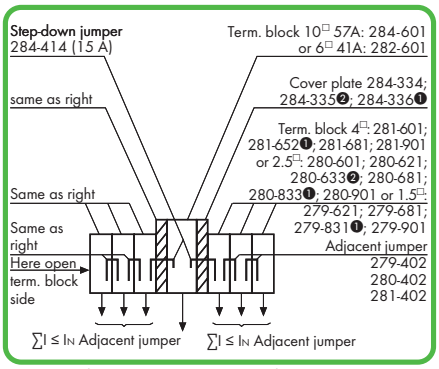
Commoning from 6 mm²/AWG 10 (282 Series) to 1.5 mm²/AWG 16 (279 Series) rail-mount terminal blocks.



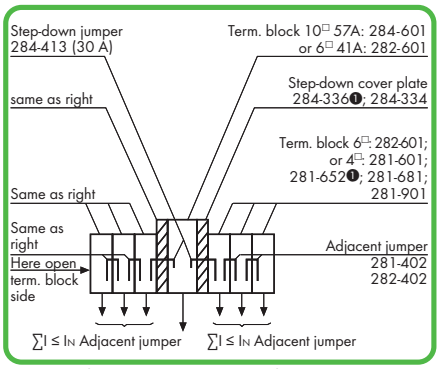
Commoning from 10 mm²/AWG 8 (284 Series) to 6 mm²/AWG 10 (282 Series) rail-mount terminal blocks.



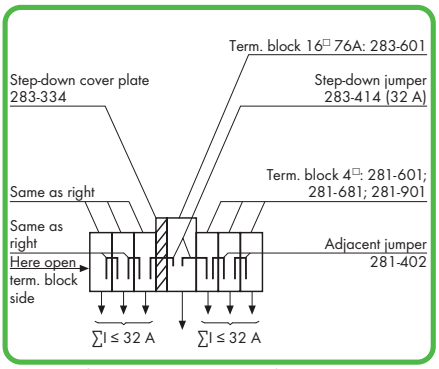
Commoning from 16 mm²/AWG 6 (283 Series) to 4 mm²/AWG 12 (281 Series) rail-mount terminal blocks.




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."



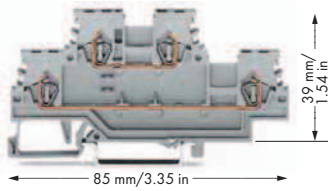

Example of assembly: "Commoning from 10/6 mm² (AWG 8/10) to 6 mm² (AWG 10) rail-mount terminal blocks with 284-413 step-down jumper."

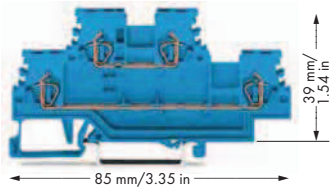


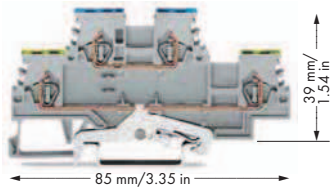

Example of assembly: "Commoning from 16 mm² (AWG 6) to 4 mm² (AWG 12) rail-mount terminal blocks with 284-414 step-down jumper."

# Double-Deck Terminal Blocks 1.5 mm²
# 279 Series

| | | |
|---|---|---|
| 0.08 - 1.5 mm² \| AWG 28 - 16<br>500 V/6 kV/3 ❶ \| 300 V, 10 A<br>$I_N$ 18 A<br>Terminal block width 4 mm / 0.157 in<br>8 - 9 mm / 0.33 in ❷ | 0.08 - 1.5 mm² \| AWG 28 - 16<br>500 V/6 kV/3 ❶ \| 300 V, 10 A<br>$I_N$ 18 A<br>Terminal block width 4 mm / 0.157 in<br>8 - 9 mm / 0.33 in ❷ | 0.08 - 1.5 mm² \| AWG 28 - 16<br>500 V/6 kV/3 ❶<br>$I_N$ 18 A<br>Terminal block width 4 mm / 0.157 in<br>8 - 9 mm / 0.33 in ❷ |



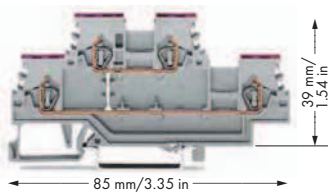



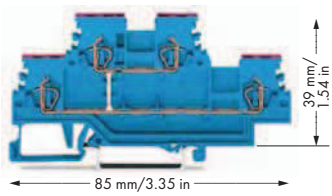



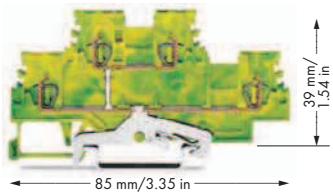

| | Item No. | Pack. Unit |
|---|---|---|
| **Through/through terminal block,** | | |
| gray housing | | |
| L/L | **279-501** | 50 |
| N/L | **279-512** | 50 |
| L/N | **279-513** | 50 |

| | 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 |

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