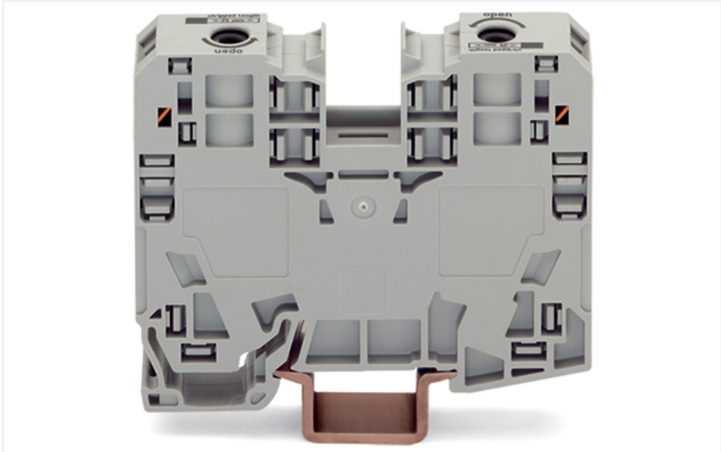




Color: ■ red                      Similar to illustration

Through terminal block, 285 Series, operating tool

Easily, quickly and safely connect conductors with this through terminal block (item number 285-133). Conductors can only be connected to this through terminal block if their strip length is 25 mm. Featuring conductor terminals along with POWER CAGE CLAMP, this product delivers reliable performance. The POWER CAGE CLAMP is perfect for connecting large conductor cross-sections. This universal connector is both reliable and maintenance-free. What's more, you can use it to connect all types of conductors and the clamping point can be locked open, making it easier to use. You do not need to use a torque wrench or prepare the conductor. For example, crimping ferrules is not necessary. Depending on the conductor type, this through terminal block is suitable for conductor cross sections ranging from 6 mm² to 35 mm². It has one level. You can connect a single potential using the two clamping points. The red housing is made of polyamide (PA66) for insulation. These high-current terminal blocks are mounted using DIN-rails 35 x 15..

| Electrical data                                              |  |                  |       |    |
|--------------------------------------------------------------|--|------------------|-------|----|
| Ratings per                                                  |  | IEC/EN 60947-7-1 |       |    |
| Overvoltage category                                         |  | III              | III   | II |
| Pollution degree                                             |  | 3                | 2     | 2  |
| Nominal voltage                                              |  | 1000 V           | -     | -  |
| Rated surge voltage                                          |  | 8 kV             | -     | -  |
| Rated current                                                |  | 125 A            | -     | -  |
| Approvals per                                                |  | UL 1059          |       |    |
| Use group                                                    |  | B                | C     | D  |
| Rated voltage                                                |  | 600 V            | 600 V | -  |
| Rated current                                                |  | 115 A            | 115 A | -  |
| Approvals per                                                |  | CSA 22.2 No 158  |       |    |
| Use group                                                    |  | B                | C     | D  |
| Rated voltage                                                |  | 600 V            | 600 V | -  |
| Rated current                                                |  | 115 A            | -     | -  |
| Power Loss                                                   |  |                  |       |    |
| Power loss, per pole (potential)                             |  | 4.0625 W         |       |    |
| Rated current I <sub>N</sub> for specified power loss        |  | 125 A            |       |    |
| Resistance value for specified, current-dependent power loss |  | 0.00026 Ω        |       |    |

| Connection data                                 |                            |
|-------------------------------------------------|----------------------------|
| Clamping units                                  | 2                          |
| Total number of potentials                      | 1                          |
| Number of levels                                | 1                          |
| Number of jumper slots                          | 2                          |
| Connection 1                                    |                            |
| Connection technology                           | POWER CAGE CLAMP           |
| Actuation type                                  | Operating tool             |
| Connectable conductor materials                 | Copper                     |
| Nominal cross-section                           | 35 mm²                     |
| Solid conductor                                 | 6 ... 35 mm² / 8 ... 2 AWG |
| Stranded conductor                              | 6 ... 35 mm² / 8 ... 2 AWG |
| Fine-stranded conductor                         | 6 ... 35 mm² / 8 ... 2 AWG |
| Fine-stranded conductor; with insulated ferrule | 6 ... 35 mm² / 8 ... 2 AWG |



| Connection 1                                      |                            |
|---------------------------------------------------|----------------------------|
| Fine-stranded conductor; with uninsulated ferrule | 6 ... 35 mm² / 8 ... 2 AWG |
| Strip length                                      | 25 mm / 0.98 inches        |
| Wiring direction                                  | Side-entry wiring          |

| Physical data                     |                      |
|-----------------------------------|----------------------|
| Width                             | 16 mm / 0.63 inches  |
| Height                            | 86 mm / 3.386 inches |
| Depth from upper-edge of DIN-rail | 63 mm / 2.48 inches  |

| Mechanical data |                                    |
|-----------------|------------------------------------|
| Mounting type   | DIN-rail 35 x 15                   |
| Mounting (note) | only suitable for DIN 35 x 15 rail |
| Marking level   | Side marking                       |

| Material data                      |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | red                                                                      |
| Material group                     | I                                                                        |
| Insulation material (main housing) | Polyamide (PA66)                                                         |
| Flammability class per UL94        | V0                                                                       |
| Fire load                          | 0.184 MJ                                                                 |
| Weight                             | 81.6 g                                                                   |

| Environmental requirements       |                 |
|----------------------------------|-----------------|
| Processing temperature           | -35 ... +85 °C  |
| Continuous operating temperature | -60 ... +105 °C |

| Commercial data       |               |
|-----------------------|---------------|
| PU (SPU)              | 15 pcs        |
| Packaging type        | Box           |
| Country of origin     | PL            |
| GTIN                  | 4055143762755 |
| Customs tariff number | 85369010000   |

| Product classification |          |
|------------------------|----------|
| UNSPSC                 | 39121410 |

| Environmental Product Compliance |                         |
|----------------------------------|-------------------------|
| RoHS Compliance Status           | Compliant, No Exemption |



Approvals / Certificates

General approvals



| Approval                              | Standard      | Certificate Name |
|---------------------------------------|---------------|------------------|
| CCA<br>DEKRA Certification B.V.       | EN 60947      | NTR NL-7707      |
| CSA<br>DEKRA Certification B.V.       | C22.2 No. 158 | 154112           |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947      | 71-105562        |
| UL<br>Underwriters Laboratories Inc.  | UL 1059       | E45172           |

Declarations of conformity and manufacturer's declarations

| Approval                                                | Standard | Certificate Name |
|---------------------------------------------------------|----------|------------------|
| EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |
| UK-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |

Downloads

Environmental Product Compliance

| Compliance Search                           |
|---------------------------------------------|
| Environmental Product<br>Compliance 285-133 |



Documentation

| Additional Information |
|------------------------|
| Technical Section      |

pdf  
2246.92 KB



CAD/CAE-Data

| CAD data             |
|----------------------|
| 2D/3D Models 285-133 |



1 Compatible Products

1.1 Optional Accessories

1.1.1 Cover

1.1.1.1 Cover



[Item No.: 285-421](#)  
Finger guard; touchproof cover protects  
unused conductor entries; for 35 mm²  
high-current tbs; yellow



1.1.2 DIN-rail

1.1.2.1 Mounting accessories



**Item No.: 210-198**  
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored



**Item No.: 210-508**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored



**Item No.: 210-197**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



**Item No.: 210-506**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored



**Item No.: 210-114**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



**Item No.: 210-118**  
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

1.1.3 Ferrule

1.1.3.1 Ferrule



**Item No.: 216-413**  
Ferrule; Sleeve for 25 mm² / AWG 4; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



**Item No.: 216-414**  
Ferrule; Sleeve for 35 mm² / AWG 2; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored

1.1.4 Installation

1.1.4.1 Mounting accessories



**Item No.: 249-117**  
Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray



**Item No.: 249-197**  
Screwless end stop; 14 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

1.1.5 Jumper

1.1.5.1 Jumper



**Item No.: 285-435**  
Jumper; insulated; gray



**Item No.: 285-430**  
Step-down jumper; from 285 (35mm²) to 2016/2010 series; insulated; gray

1.1.6 Marking

1.1.6.1 Group marker carrier



[Item No.: 249-105](#)  
Group marker carrier; gray

1.1.6.2 Marker



[Item No.: 793-5501/000-006](#)  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue



[Item No.: 793-5501/000-014](#)  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; brown



[Item No.: 793-5501/000-007](#)  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray



[Item No.: 793-5501/000-023](#)  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green



[Item No.: 793-5501/000-017](#)  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green



[Item No.: 793-5501/000-012](#)  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange



[Item No.: 793-5501/000-005](#)  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red



[Item No.: 793-5501/000-024](#)  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet



[Item No.: 793-5501](#)  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white



[Item No.: 793-5501/000-002](#)  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



[Item No.: 793-501/000-006](#)  
WMB marking card; as card; not stretchable; plain; snap-on type; blue



[Item No.: 793-501/000-007](#)  
WMB marking card; as card; not stretchable; plain; snap-on type; gray



[Item No.: 793-501/000-023](#)  
WMB marking card; as card; not stretchable; plain; snap-on type; green



[Item No.: 793-501/000-017](#)  
WMB marking card; as card; not stretchable; plain; snap-on type; light green



[Item No.: 793-501/000-012](#)  
WMB marking card; as card; not stretchable; plain; snap-on type; orange



[Item No.: 793-501/000-005](#)  
WMB marking card; as card; not stretchable; plain; snap-on type; red



[Item No.: 793-501/000-024](#)  
WMB marking card; as card; not stretchable; plain; snap-on type; violet



[Item No.: 793-501](#)  
WMB marking card; as card; not stretchable; plain; snap-on type; white



[Item No.: 793-501/000-002](#)  
WMB marking card; as card; not stretchable; plain; snap-on type; yellow



[Item No.: 2009-115/000-006](#)  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



[Item No.: 2009-115/000-007](#)  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



[Item No.: 2009-115/000-023](#)  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



[Item No.: 2009-115/000-017](#)  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green



[Item No.: 2009-115/000-012](#)  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



[Item No.: 2009-115/000-005](#)  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



[Item No.: 2009-115/000-024](#)  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



[Item No.: 2009-115](#)  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



[Item No.: 2009-115/000-002](#)  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.1.6.3 Marker carrier



[Item No.: 285-442](#)  
Adaptor; gray

1.1.6.4 Marking strip



Item No.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.1.7 Power tap

1.1.7.1 Power tap



Item No.: 285-427

Power tap; for 35 mm² high-current tbs; Module width 8 mm; 6,00 mm²; gray



Item No.: 283-407

Power tap; with 500 mm cable; for 16 mm² (283/783 Series) and 35 mm²; gray

1.1.8 Protective warning marker

1.1.8.1 Cover



Item No.: 285-420

Protective warning marker; with high-voltage symbol, black; yellow

1.1.9 Test and measurement

1.1.9.1 Testing accessories



Item No.: 283-404

Test plug adapter; 11.6 mm wide; for 4 mm Ø test plugs; gray

1.1.10 Tool

1.1.10.1 Operating tool

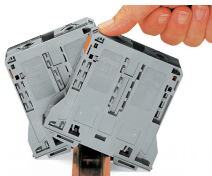


Item No.: 210-721

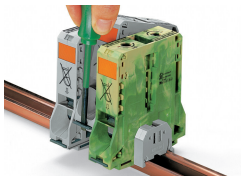
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

Installation

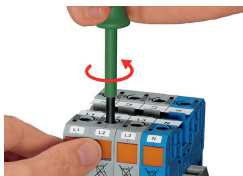


Snapping a terminal block onto DIN-rail (to the left or to the right).

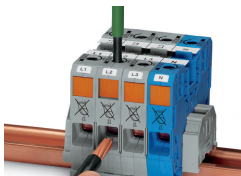


Removing a terminal block from the assembly (to the left or to the right).

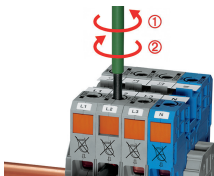
Conductor termination



**Conductor termination – step 1:**  
Rotate the operating tool (5.5 mm blade width) counter-clockwise. Next, push in the orange locking tab. The clamp is locked open for hands-free wiring.



**Conductor termination – step 2:**  
Insert a stripped conductor into the clamping unit until it hits the backstop. Hold in this position.

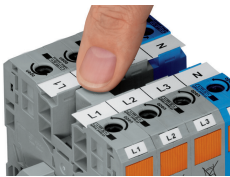


**Conductor termination – step 3:**  
A short counter-clockwise rotation closes the clamp, securing the conductor. When unlocked, allow the operating tool to rotate clockwise to securely terminate the conductor.

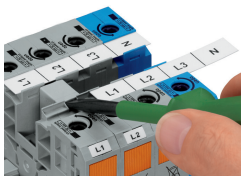


Side-entry wiring means that even larger conductors, which have limited flexibility, can be easily connected.

Commoning

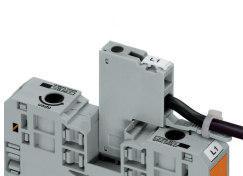


Commoning adjacent terminal blocks using a centrally positioned push-in jumper.

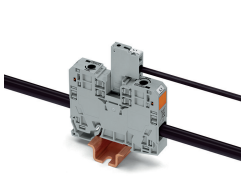


Slide the marking strip laterally to remove the jumper.

Power tap



The power tap is inserted into the jumper contact slot. It can be fitted with a strain relief plate.

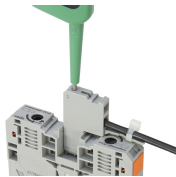


Power tap inserted in a jumper contact slot

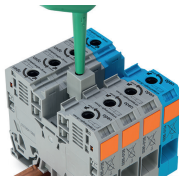


Always push voltage tap (Item No. 283-407) down into the terminal block until fully inserted!

Testing

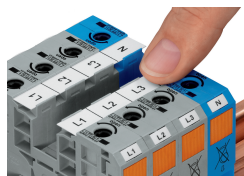


**Testing**  
Voltage measurements can be performed, e.g., using a 2-pole voltage tester (Item No. 206-707).

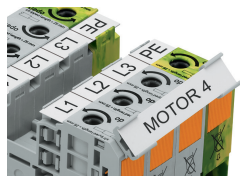


**Testing**  
Testing with test plug adapter (Item No. 283-404).

## Marking



WMB markers or self-adhesive, printable marking strips can be accommodated on 35, 50 and 95 mm<sup>2</sup> high-current terminal blocks.



Marker carrier (Item No. 285-442) for marking strips (Item No. 2009-110) or 2 WMB markers for 285-13x, 285-15x and 285-19x Terminal Blocks