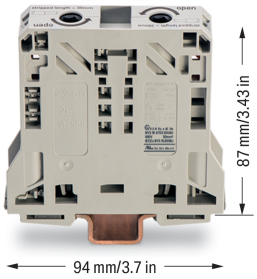
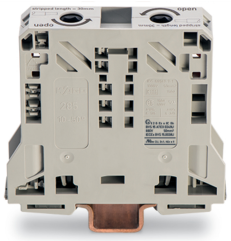
# Data Sheet | Item Number: 285-950

2-conductor through terminal block; 50 mm²; suitable for Ex e II applications; lateral marker slots; only for DIN 35 x 15 rail; POWER CAGE CLAMP; 50,00 mm²; light gray

https://www.wago.com/285-950



Color: light gray

High-current terminal block, 285 Series, t-wrench und 8 mm

Our through terminal block (item number 285-950) is designed for seamless electrical installations. Ensure that the strip lengths are 32 mm when connecting conductors to this through terminal block. This product features conductor terminals and utilizes POWER CAGE CLAMP. 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 ideal for conductor cross sections ranging from 10 mm² to 50 mm².

This product is designed for specific Ex applications (please refer to the product datasheet).

## Electrical data

| Ratings per | IEC/EN 60947-7-1 | | |
|---|---|---|---|
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | - | - | - |
| Rated impulse withstand voltage | - | - | - |
| Rated current | - | - | - |

| Approvals per | UL 1059 | | |
|---|---|---|---|
| Use group | B | C | D |
| Rated voltage | 600 V | 600 V | - |
| Rated current | 150 A | 150 A | - |

| Approvals per | CSA 22.2 No 158 | | |
|---|---|---|---|
| Use group | B | C | D |
| Rated voltage | 600 V | - | 600 V |
| Rated current | 150 A | - | 150 A |

| Ex information | |
|---|---|
| Reference to hazardous areas | See "Downloads – Documentation – Additional Information: Technical Section; Technical Explications" |
| Ratings per | ATEX: PTB 98 ATEX 3134 U (Ex eb IIC Gb) |
| Rated voltage EN (Ex e II) | 880 V |
| Rated current (Ex e II) | 134 A |

## Power Loss

| | |
|---|---|
| Power loss, per pole (potential) | 3.7708 W |
| Rated current $I_N$ for power loss specification | 134 A |
| Resistance value for specified, current-dependent power loss | 0.0001 Ω |

## General information

| | |
|---|---|
| Wiring direction | Side-entry wiring |

## 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 | T-wrench; 8 mm |
| Connectable conductor materials | Copper |
| Nominal cross-section | 50 mm² |
| Solid conductor | 10 … 50 mm² / 8 … 1/0 AWG |
| Stranded conductor | 10 … 70 mm² / 8 … 2/0 AWG |
| Fine-stranded conductor | 10 … 70 mm² / 8 … 2/0 AWG |
| Fine-stranded conductor; with insulated ferrule | 10 … 50 mm² / 8 … 1/0 AWG |
| Fine-stranded conductor; with uninsulated ferrule | 10 … 50 mm² / 8 … 1/0 AWG |
| Strip length | 32 mm / 1.26 inches |
| Wiring direction | Side-entry wiring |

## Physical data

| | |
|---|---|
| Width | 20 mm / 0.787 inches |
| Height | 94 mm / 3.701 inches |
| Depth from upper-edge of DIN-rail | 87 mm / 3.425 inches |

## Mechanical data

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

## Material data

| | |
|---|---|
| Note (material data) | Information on material specifications can be found here |
| Color | light gray |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 1.918 MJ |
| Weight | 158.7 g |


Continued on next page

## Environmental requirements

| | |
|---|---|
| Processing temperature | -35 … +85 °C |
| Continuous operating temperature | -60 … +105 °C |

## Commercial data

| | |
|---|---|
| PU (SPU) | 5 (1) pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4066966253139 |
| Customs tariff number | 85369010000 |

## Product Classification

| | |
|---|---|
| UNSPSC | 39121410 |
| eCl@ss 10.0 | 27-14-11-20 |
| eCl@ss 9.0 | 27-14-11-20 |
| ETIM 9.0 | EC000897 |
| ETIM 10.0 | EC000897 |
| ECCN | NO US CLASSIFICATION |

## 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>CSA Group | C22.2 | 1151144 |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947 | 71-105562 |
| UL<br>Underwriters Laboratories Inc. | UL 1059 | 20190731-E45172 |

### Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|---|---|
| ATEX-Attestation of Conformity<br>WAGO GmbH & Co. KG | - | - |
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |

### Approvals for hazardous areas

| Approval | Standard | Certificate Name |
|---|---|---|
| ATEX<br>Physikalisch Technische Bundesanstalt | EN 60079-0 | PTB 98 ATEX 3134 U (II 2 G Ex eb IIC Gb or I M 2 Ex eb I Mb) |
| CCC<br>CNEX | GB/T 3836.3 | 2020312313000177 (Ex eb IIC Gb, Ex eb I Mb) |
| IECEx<br>Physikalisch Technische Bundesanstalt | IEC 60079-0 | IECEx PTB 16.0001U (Ex eb IIC Gb or Ex eb I Mb) |


Continued on next page

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 285-950

### Documentation

**Bid Text**

| | | |
|---|---|---|
| 285-950 | 19.02.2019 | xml 3.25 KB |
| 285-950 | 04.01.2018 | doc 23.50 KB |

### CAD/CAE-Data

**CAD data**

2D/3D Models 285-950

**CAE data**

EPLAN Data Portal 285-950

ZUKEN Portal 285-950

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Cover

##### 1.1.1.1 Cover



Item No.: 285-441
Finger guard; touchproof cover protects unused conductor entries and jumper slots; for 50 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

## 1.1.3 Ferrule

### 1.1.3.1 Ferrule



Item No.: 216-424
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



Item No.: 216-425
Ferrule; Sleeve for 50 mm² / AWG 1; uninsulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 1/08.92

## 1.1.4 Installation

### 1.1.4.1 Mounting accessories



Item No.: 285-448
Fixing element; for 50 mm² high-current terminal blocks; orange



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.: 285-450
Jumper; 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


Continued on next page

### 1.1.6.2 Marker



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

## 1.1.7 Power tap

### 1.1.7.1 Power tap



Item No.: 285-447
Power tap; for 50 mm² high-current tbs; Module width 16 mm; gray

## 1.1.8 Protective warning marker

### 1.1.8.1 Cover



Item No.: 285-440
Protective warning marker; with high-voltage symbol, black; yellow



Item No.: 285-449
Protective warning marker; yellow


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## 1.1.9 Tool

### 1.1.9.1 Operating tool



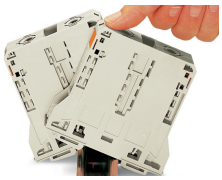
Item No.: 285-172
Allen wrench; with a partially insulated shaft; green



Item No.: 285-173
Allen wrench; with a partially insulated shaft; with anti-rotation protection; green

## 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

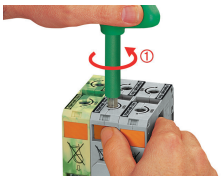


For the optimal clamping force:

- Bend conductor
- Cut conductor to length (conductor end must be straight)
- Strip conductor



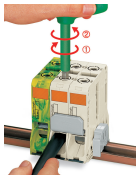
Always observe the on-unit printed strip length guide!



**Conductor termination – step 1:**
Rotate the T-wrench counter-clockwise to the stop . Next, push in the orange locking tab. The clamp is locked open for hands-free wiring.

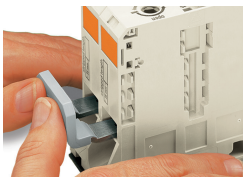


Insert a stripped conductor into the clamping unit until it hits the backstop. Hold in this position.

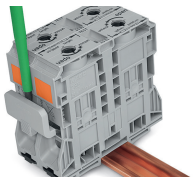


A short counter-clockwise rotation releases the tab. When unlocked, the T-wrench rotates clockwise, securely clamping the conductor.

### Commoning



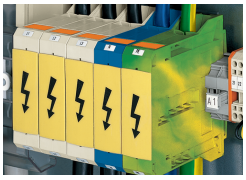
Commoning with an adjacent jumper: insert the jumper above the conductor entry hole – prior to conductor termination. The nominal cross-section remains unchanged.



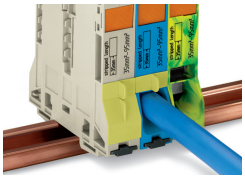
Removing jumper via operating tool.


Continued on next page

## Cover

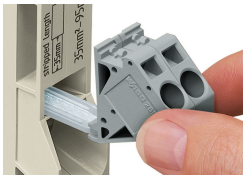


Protective warning marker may indicate:
Notice: Power is still on even after switching off the main switch!



Yellow, detachable finger guards provide touch-proof safety by shielding jumper contact slots and/or unused conductor entries.

## Power tap



Easily and consistently tap directly into the power supply. Insert the unwired tap before opening the clamping unit.

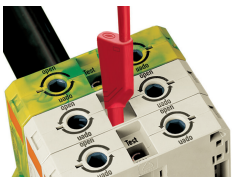


## Security

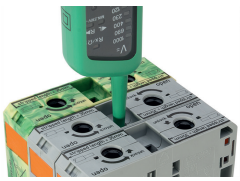


Risk of Injury!
Do not insert fingers in the conductor entry!

## Testing

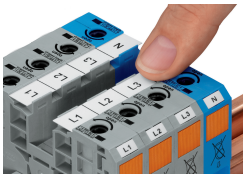


Testing via touch-proof 4 mm Ø test plugs (not available from WAGO, but offered by industry suppliers such as, Multi-Contact Deutschland GmbH).

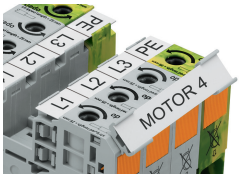


Testing
Voltage measurements can be performed, e. g., using a 2-pole voltage tester (206-707).

## Marking



WMB markers or self-adhesive, printable marking strips can be accommodated on 35, 50 and 95 mm² 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