## 3-conductor disconnect terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; gray

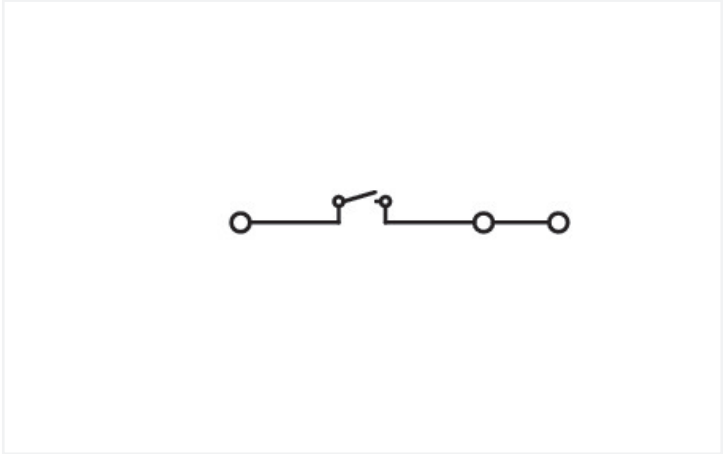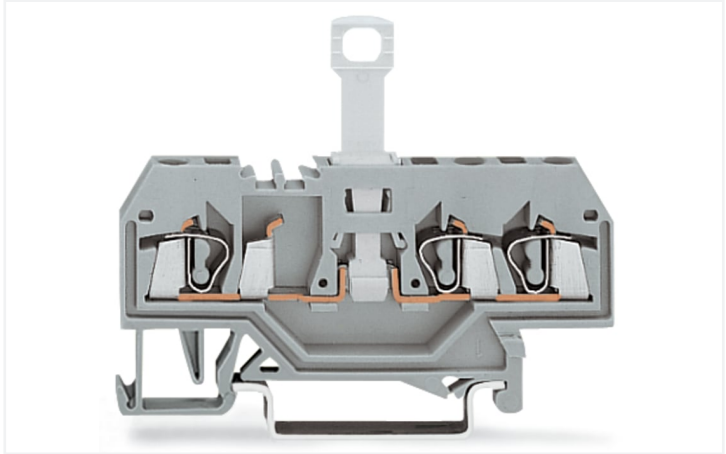https://www.wago.com/280-683



Color: ■ gray





Similar to illustration

Disconnect terminal block, 280 Series, gray

This disconnect terminal block (item number 280-683) is designed to connect conductors quickly and easily. Conductors should only be connected to this disconnect terminal block if their strip length is between 8 mm and 9 mm. This product features conductor terminals and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection provides a reliable and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. Depending on the type of conductor, this disconnect terminal block is ideal for conductor cross sections ranging from 0.08 mm² to 2.5 mm². It comes with one level and three clamping points that you can use to connect two potentials. The gray housing is made of polyamide (PA66) for insulation. These function terminal blocks are mounted using DIN-35 rails..

### Electrical data

#### Ratings per IEC/EN

| | |
|---|---|
| Nominal voltage (III/3) | 400 V |
| Rated impulse withstand voltage (III / 3) | 6 kV |
| Rated current | 10 A |
| Legend (ratings) | (III / 3) ≙ Overvoltage category III / Pollution degree 3 |

#### Power Loss

| | |
|---|---|
| Power loss, per pole (potential) | 0.133 W |
| Rated current $I_N$ for specified power loss | 10 A |
| Resistance value for specified, current-dependent power loss | 0.00133 Ω |

## Connection data

| | |
|---|---|
| Clamping units | 3 |
| Total number of potentials | 2 |
| Number of levels | 1 |

### Connection 1

| | |
|---|---|
| Connection technology | CAGE CLAMP® |
| Actuation type | Operating tool |
| Connectable conductor materials | Copper<br>Aluminum |
| Connectable conductor materials (note) | **Terminating Aluminum Conductors**<br>WAGO Spring-Clamp Terminal Blocks are suitable for solid aluminum conductors up to 4 mm²/12 AWG if WAGO "Alu-Plus" Contact Paste 249-130 is used for termination.<br><br>"Alu-Plus" Contact Paste Advantages:<br><br>• Automatically destroys the oxide film during clamping.<br>• Prevents fresh oxidation at the clamping point.<br>• Prevents electrolytic corrosion between aluminum and copper conductors (in the same terminal block).<br>• Provides long-term protection against corrosion.<br><br>Using terminal blocks with CAGE CLAMP® Spring Pressure Connection Technology, **aluminum conductors must first be cleaned with a blade** and then immediately inserted into the clamping units filled with "Alu-Plus" contact paste.<br><br>It is also possible to apply WAGO "Alu-Plus" **additionally** on the whole surface of the aluminum conductor before termination.<br><br>Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors::<br>2.5 mm² = 16 A<br>4 mm² = 22 A |
| Solid conductor | 0.08 … 2.5 mm² / 28 … 12 AWG |
| Fine-stranded conductor | 0.08 … 2.5 mm² / 28 … 12 AWG |
| Note (conductor cross-section) | 12 AWG: THHN, THWN |
| Strip length | 8 … 9 mm / 0.31 … 0.35 inches |
| Wiring direction | Front-entry wiring |

## Physical data

| | |
|---|---|
| Width | 5 mm / 0.197 inches |
| Height | 64 mm / 2.52 inches |
| Depth from upper-edge of DIN-rail | 52.5 mm / 2.067 inches |

## Mechanical data

| | |
|---|---|
| Design | horizontal type |
| Mounting type | DIN-35 rail |
| Marking level | Center marking |

**WAGO**

## Material data

| | |
|---|---|
| Note (material data) | |
| | Information on material specifications can be found here |
| Color | gray |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.143 MJ |
| Weight | 8.3 g |

## Environmental requirements

| | |
|---|---|
| Processing temperature | -35 ... +85 ℃ |
| Continuous operating temperature | -60 ... +105 ℃ |

## Commercial data

| | |
|---|---|
| Product Group | 1 (Rail Mounted Terminal Blocks) |
| eCl@ss 10.0 | 27-14-11-26 |
| eCl@ss 9.0 | 27-14-11-26 |
| ETIM 9.0 | EC000902 |
| ETIM 8.0 | EC000902 |
| PU (SPU) | 50 pcs |
| Packaging type | Box |
| Country of origin | CN |
| GTIN | 4050821214953 |
| Customs tariff number | 85365080000 |

## Environmental Product Compliance

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

## Approvals / Certificates

### General approvals

| Approval | Standard | Certificate Name |
|---|---|---|
| CCA
DEKRA Certification B.V. | EN 60947 | 2157201.01 |
| CSA
DEKRA Certification B.V. | C22.2 | 1536071 |
| UL
Underwriters Laboratories Inc. | UL 1059 | E45172 |

### Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|---|---|
| EU-Declaration of Conformity
WAGO GmbH & Co. KG | - | - |
| UK-Declaration of Conformity
WAGO GmbH & Co. KG | - | - |

## Approvals for marine applications

| Approval | Standard | Certificate Name |
|---|---|---|
| ABS<br>American Bureau of Shipping | EN 60947 | 20-HG1941090-PDA |
| BV<br>Bureau Veritas S.A. | EN 60947 | 07436/F0 BV |
| DNV GL<br>Det Norske Veritas, Germanischer Lloyd | - | TAE00001V2 |
| LR<br>Lloyds Register | EN 60947 | 91/20112 (E9) |

## Downloads

### Environmental Product Compliance

**Compliance Search**

| | |
|---|---|
| Environmental Product Compliance 280-683 | ↓ |

### Documentation

**Additional Information**

| Technical Section | pdf<br>2246.92 KB | ↓ |
|---|---|---|

**Bid Text**

| 280-683 | 19.02.2019 | xml<br>3.22 KB | ↓ |
|---|---|---|---|
| 280-683 | 02.03.2017 | doc<br>24.00 KB | ↓ |

### CAD/CAE-Data

**CAD data**

| 2D/3D Models 280-683 | ↓ |
|---|---|

**CAE data**

| EPLAN Data Portal 280-683 | ↓ |
|---|---|
| WSCAD Universe 280-683 | ↓ |
| ZUKEN Portal 280-683 | ↓ |

# 1 Compatible Products

## 1.1 Required Accessories

### 1.1.1 End plate

#### 1.1.1.1 End plate

Item No.: 280-324
End and intermediate plate; 2.5 mm thick; gray

Item No.: 280-326
End and intermediate plate; 2.5 mm thick; orange

Item No.: 280-344
Separator plate; 2 mm thick; oversized; gray

Item No.: 280-346
Separator plate; 2 mm thick; oversized; orange

## 1.2 Optional Accessories

### 1.2.1 DIN-rail

#### 1.2.1.1 Mounting accessories

Item No.: 210-196
Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored

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

Item No.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored

Item No.: 210-112
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored

Item No.: 210-504
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored

Item No.: 210-113
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

Item No.: 210-505
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

### 1.2.2 Ferrule

#### 1.2.2.1 Ferrule

Item No.: 216-301
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

Item No.: 216-302
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

Item No.: 216-201
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white

Item No.: 216-101
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored

Item No.: 216-202
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray

Item No.: 216-102
Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored

Item No.: 216-203
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red

Item No.: 216-103
Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated

Item No.: 216-204
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black

Item No.: 216-104
Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; silver-colored

## 1.2.3 Installation

### 1.2.3.1 Cover

**Item No.: 709-154**
Cover; Type 2; suitable for cover carrier, type 2; 1 m long; transparent

### 1.2.3.2 Cover carrier

**Item No.: 709-168**
Cover carrier; Type 2; incl. fixing/retaining screws and knurled nut; suitable for 283 to 285 Series rail-mounted terminal blocks; suitable for 279 to 281 Series double- and triple-deck terminal blocks; suitable for 780 to 785, 775, 776 and 777 Series TOP-JOB® rail-mounted terminal blocks; suitable for 280 Series sensor and actuator terminal blocks; suitable for 282 Series disconnect/test terminal blocks for transformer circuits; gray

### 1.2.3.3 Mounting accessories

**Item No.: 209-106**
Mounting carrier; for isolated mounting on DIN 35 rails; gray

**Item No.: 249-116**
Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

## 1.2.4 Insulation stop

### 1.2.4.1 Insulation stop

**Item No.: 280-470**
Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white

**Item No.: 280-471**
Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray

**Item No.: 280-472**
Insulation stop; 0.75 - 1 mm²; 5 pieces/strip; black

## 1.2.5 Jumper

### 1.2.5.1 Jumper

**Item No.: 280-490**
Jumper; 10-way; insulated; gray

**Item No.: 280-482**
Jumper; 2-way; insulated; gray

**Item No.: 280-492**
Jumper; 2-way; insulated; gray

**Item No.: 280-483**
Jumper; 3-way; insulated; gray

**Item No.: 280-484**
Jumper; 4-way; insulated; gray

**Item No.: 280-485**
Jumper; 5-way; insulated; gray

**Item No.: 709-110**
Wire commoning chain; 2.5 mm²; insulated; black

**Item No.: 709-111**
Wire commoning chain; 2.5 mm²; insulated; black

**Item No.: 709-112**
Wire commoning chain; 2.5 mm²; insulated; black

**Item No.: 210-103**
Wire commoning chain; insulated; black

**Item No.: 210-123**
Wire commoning chain; insulated; blue

## 1.2.6 Lock-out

### 1.2.6.1 Locking system

Item No.: 709-170
Disconnect lock; for disconnect tab used on 280/281 and 769 Series disconnect terminal blocks; red

## 1.2.7 Marking

### 1.2.7.1 Marker

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.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white

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

## 1.2.8 Protective warning marker

### 1.2.8.1 Cover

Item No.: 280-415
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

## 1.2.9 Test and measurement

### 1.2.9.1 Testing accessories

Item No.: 249-142
L-type end module; modular; with rigid contact pin; End module; 1,50 mm²; gray

Item No.: 249-143
L-type spacer module; modular; e.g., bridging commoned terminal blocks; gray

Item No.: 249-141
L-type test plug module; modular; with spring-loaded contact pin; Center module; 1,50 mm²; gray

Item No.: 210-136
Test plug; 2 mm Ø; with 500 mm cable; red

Item No.: 209-107
Test socket; insulated; 2 mm Ø; red

Item No.: 209-108
Test socket; insulated; 2.3 mm Ø; yellow

## 1.2.10 Tool

### 1.2.10.1 Operating tool

Item No.: 210-658
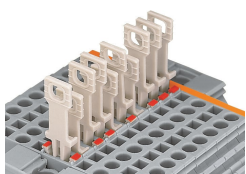Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured

Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured
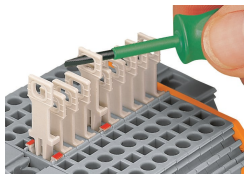
Item No.: 210-657
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured
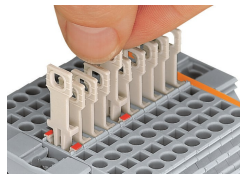
Version 13.02.2025

## Installation Notes

### Security



Disconnect terminal block with colored tab to indicate the switching status (red = disconnected)



Pulling the disconnect tab via operating tool.



Pulling the disconnect tab by hand.

Current addresses can be found at:: www.wago.com