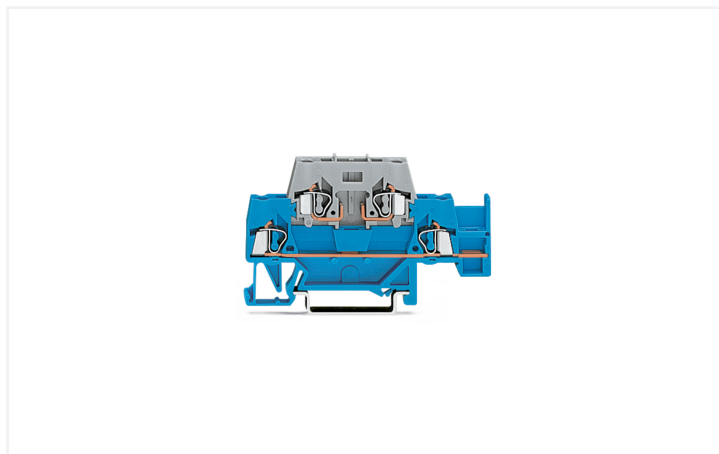
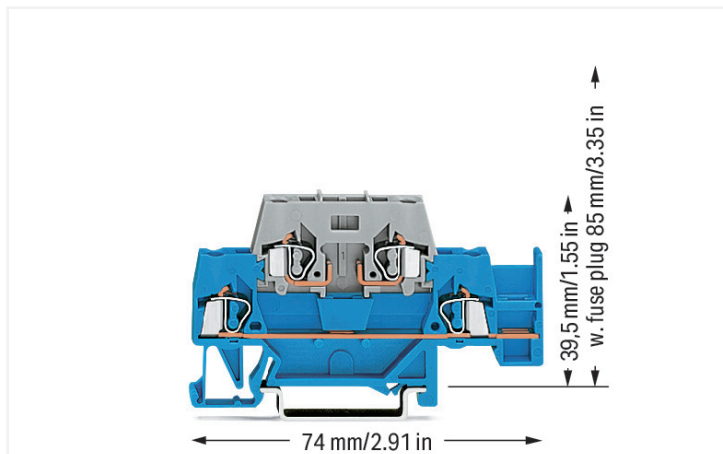


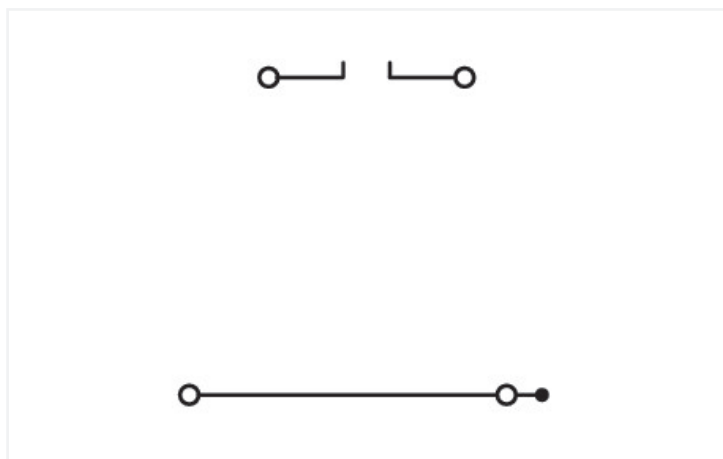
Data Sheet | Item Number: 280-532

Double-deck terminal block; with additional jumper position on lower level; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; blue/gray

<https://www.wago.com/280-532>



Color: ■ blue/gray



Similar to illustration

Double-deck terminal block, 280 Series, CAGE CLAMP®

This double-deck terminal block (item number 280-532) is designed for fault-free electrical installations. Conductors should only be connected to this double-deck terminal block if their strip length is between 8 and 9 mm. The double-deck terminal block also functions as carrier terminal block. This product features conductor terminals and utilizes CAGE CLAMP®. Our renowned universal connection known as CAGE CLAMP® is the industry standard for connection technology and electrical interconnections. This double-deck terminal block is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm².

Electrical data

| Rated per | IEC/EN 60947-7-1 | | |
|---|------------------|-----|----|
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | 400 V | - | - |
| Rated impulse withstand voltage | 6 kV | - | - |
| Rated current | 10 A | - | - |
| Current at conductor cross-section (max.) mm ² | 20 A | - | - |

| Power Loss | |
|--|-----------|
| Power loss, per pole (potential) | 0.266 W |
| Rated current I _N for power loss specification | 10 A |
| Resistance value for specified, current-dependent power loss | 0.00133 Ω |

General information

| | |
|------------------|--------------------|
| Wiring direction | Front-entry wiring |
|------------------|--------------------|

Connection Data

| | |
|----------------------------|---|
| Clamping units | 4 |
| Total number of potentials | 2 |
| Number of levels | 2 |

Connection 1

| | |
|---------------------------------|--------------------|
| Connection technology | CAGE CLAMP® |
| Actuation type | Operating tool |
| Connectable conductor materials | Copper Aluminum |

Connectable conductor materials (note) **Terminating Aluminum Conductors**
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.

"Alu-Plus" Contact Paste Advantages:

- Automatically destroys the oxide film during clamping.
- Prevents fresh oxidation at the clamping point.
- Prevents electrolytic corrosion between aluminum and copper conductors (in the same terminal block).
- Provides long-term protection against corrosion.

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.

It is also possible to apply WAGO "Alu-Plus" **additionally** on the whole surface of the aluminum conductor before termination.

Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors::

2.5 mm² = 16 A

4 mm² = 22 A

| | |
|--------------------------------|--|
| Solid conductor | 0.08 ... 2.5 mm ² / 28 ... 12 AWG |
| Fine-stranded conductor | 0.08 ... 2.5 mm ² / 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 | 74 mm / 2.913 inches |
| Depth from upper-edge of DIN-rail | 39.5 mm / 1.555 inches |

Mechanical data

| | |
|---------------|-----------------------|
| Design | horizontal type |
| Mounting type | DIN-35 rail |
| Marking level | without marking level |

Material data

| | |
|------------------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | blue/gray |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.164 MJ |
| Weight | 10.4 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|----------------------------------|
| Product Group | 1 (Rail Mounted Terminal Blocks) |
| PU (SPU) | 50 pcs |
| Packaging type | Box |
| Country of origin | CN |
| GTIN | 4050821293682 |
| 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 |
|---|----------|------------------|
| CSA DEKRA Certification B.V. | C22.2 | 1536071 |
| KEMA/KEUR DEKRA Certification B.V. | EN 60947 | 71-154769 |
| UR Underwriters Laboratories Inc. | UL 1059 | E45172 |

Declarations of conformity and manufacturer's declarations

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

Approvals for marine applications



| Approval | Standard | Certificate Name |
|---|----------|------------------|
| ABS American Bureau of Ship- ping | EN 60947 | 24-0152298-PDA |
| BV Bureau Veritas S.A. | EN 60947 | 07436/G0 BV |

Downloads

Environmental Product Compliance

| Compliance Search |
|--|
| Environmental Product Compliance 280-532 ↓ |

Documentation

| Bid Text | | | |
|----------|------------|-----------------|-------------------|
| 280-532 | 19.02.2019 | xml 3.64 KB | ↓ |
| 280-532 | 02.03.2017 | doc 25.00 KB | ↓ |

CAD/CAE-Data

| CAD data |
|--|
| 2D/3D Models 280-532 ↓ |

| CAE data |
|---|
| EPLAN Data Portal 280-532 ↓ |
| WSCAD Universe 280-532 ↓ |
| ZUKEN Portal 280-532 ↓ |

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



[Item No.: 280-342](#)
End and intermediate plate; 2.5 mm thick; gray

[Item No.: 280-343](#)
End and intermediate plate; 2.5 mm thick; orange

[Item No.: 280-369](#)
Intermediate plate; 1.1 mm thick; 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; un-insulated; 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; un-insulated; 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; un-insulated; 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; un-insulated; 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.: 280-402
 Jumper; insulated; gray



Item No.: 280-409
 Jumper; insulated; gray



Item No.: 780-452
 Staggered jumper; from 1 to 2; insulated; gray



Item No.: 780-453
 Staggered jumper; from 1 to 3; insulated; gray



Item No.: 780-454
 Staggered jumper; from 1 to 4; insulated; gray



Item No.: 780-455
 Staggered jumper; from 1 to 5; insulated; gray



Item No.: 780-456
 Staggered jumper; from 1 to 6; insulated; gray



Item No.: 780-457
 Staggered jumper; from 1 to 7; insulated; gray



Item No.: 780-458
 Staggered jumper; from 1 to 8; 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 Marking

1.2.6.1 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

1.2.7 Plug

1.2.7.1 Fuse plug



Item No.: 281-512/281-418

Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with blown fuse indication by neon lamp; 120 V; 6 mm wide; gray

Item No.: 281-512/281-417

Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with blown fuse indication by neon lamp; 230 V; 6 mm wide; gray

Item No.: 281-512/281-501

Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with LED indicator; 24 V AC/DC; 6 mm wide; gray

Item No.: 281-512

Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with port for LED; 6 mm wide; gray



Item No.: 281-511

Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; without blown fuse indication; 6 mm wide; gray

Item No.: 280-854

Fuse plug; with soldered miniature fuse; 1 A FF; 5 mm wide; gray

Item No.: 280-856

Fuse plug; with soldered miniature fuse; 2 A FF; 5 mm wide; gray

Item No.: 280-850

Fuse plug; with soldered miniature fuse; 250 mA FF; 5 mm wide; gray



Item No.: 280-852

Fuse plug; with soldered miniature fuse; 500 mA FF; 5 mm wide; gray

Item No.: 280-854/281-415

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); AC 15 - 30 V; 1 A FF; 5 mm wide; gray

Item No.: 280-856/281-415

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); AC 15 - 30 V; 2 A FF; 5 mm wide; gray

Item No.: 280-850/281-415

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); AC 15 - 30 V; 250 mA FF; 5 mm wide; gray



Item No.: 280-852/281-415

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); AC 15 - 30 V; 500 mA FF; 5 mm wide; gray

Item No.: 280-854/281-413

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 15 - 30 V; 1 A FF; 5 mm wide; gray

Item No.: 280-856/281-413

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 15 - 30 V; 2 A FF; 5 mm wide; gray

Item No.: 280-850/281-413

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 15 - 30 V; 250 mA FF; 5 mm wide; gray



Item No.: 280-852/281-413

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 15 - 30 V; 500 mA FF; 5 mm wide; gray

Item No.: 280-854/281-414

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 30 - 65 V; 1 A FF; 5 mm wide; gray

Item No.: 280-856/281-414

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 30 - 65 V; 2 A FF; 5 mm wide; gray

Item No.: 280-850/281-414

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 30 - 65 V; 250 mA FF; 5 mm wide; gray



Item No.: 280-852/281-414

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 30 - 65 V; 500 mA FF; 5 mm wide; gray

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 Push-in type wire jumper

1.2.9.1 Jumper



Item No.: 249-126

Push-in type wire jumper; 0.75 mm²; insulated; 110 mm long; black



Item No.: 249-123

Push-in type wire jumper; 0.75 mm²; insulated; 180 mm long; black



Item No.: 249-127

Push-in type wire jumper; 0.75 mm²; insulated; 250 mm long; black



Item No.: 249-125

Push-in type wire jumper; insulated; 60 mm long; black

1.2.10 Test and measurement

1.2.10.1 Testing accessories



Item No.: 249-142

L-type end module; modular; with rigid contact pin; End module; 1,50 mm²; gray



Item No.: 249-141

L-type test plug module; modular; with spring-loaded contact pin; Center module; 1,50 mm²; gray

1.2.11 Tool

1.2.11.1 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

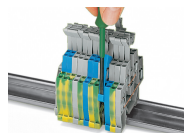
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

Installation Notes

Installation



Snapping a terminal block onto the DIN-rail.

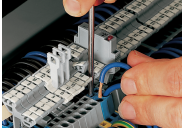


Removing a terminal block from the assembly.



Double-deck terminal blocks accommodate two circuits of different potentials on two decks; different circuits can be differentiated by color coding either deck (280 Series). The lower deck is wider than the upper for easier wiring.

Conductor termination

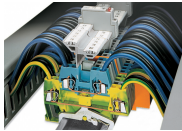


The flexible marker carrier, which is placed above the wiring level, can be pushed aside during wiring or commoning. The carrier has two staggered levels for WMB markers that perfectly align with the terminal block decks.

Commoning

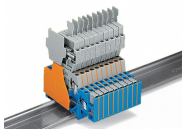


Commoning using an adjacent jumper.
Push jumpers down until fully inserted!

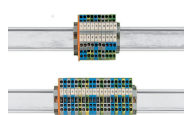


Example of a mixed assembly with double-deck terminal blocks.

The 280 Series Double-Deck Terminal Blocks are available with decks of same or different color according to their function. This is an additional visual aid during wiring, service or maintenance.



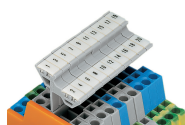
When double-deck terminal blocks are used with a fuse plug (6 mm wide) in the receptacle (top) level, the extra width of the 280 Series (5 mm wide) can be compensated for via intermediate plates (1.1 mm thick). If required, this special intermediate plate still allows commoning on the lower level via push-in adjacent jumpers (280-402).



With a terminal block width of just 5 mm, an effective width of just 2.5 mm for terminal blocks of same or different potentials can be realized for conductors ranging 0.08 mm² ... 2.5 mm² (28 ... 14 AWG).

Use 50% less rail space with double-deck terminal blocks.

Marking



Labeling via WMB Multi Marking System.