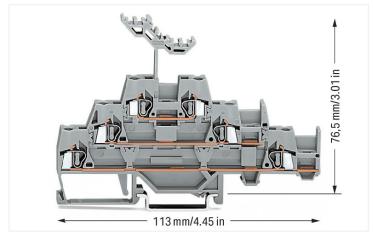
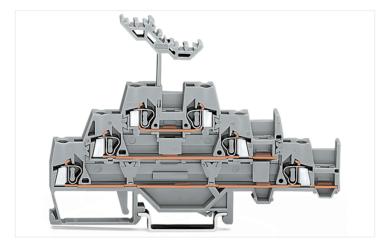
Triple-deck terminal block; Through/through/through terminal block; with additional jumper position on lower level; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; $2,50 \text{ mm}^2$; gray/gray/gray

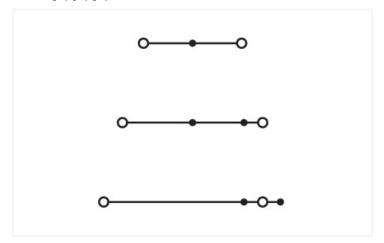


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Color: ■ gray/gray/gray



Similar to illustration

Triple-deck terminal block, 280 Series, gray/gray/gray

Our triple-deck terminal block (item number 280-550) ensures effortless electrical installations. The triple-deck terminal block also serves as a through terminal block. Ensure that the strip lengths are between 8 mm and 9 mm when connecting conductors to this triple-deck terminal block. This product features conductor terminals and utilizes CAGE CLAMP®. Our reliable and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. This triple-deck terminal block is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm². It has three levels. Three potentials can connect using the six clamping points The gray housing is made of polyamide (PA66) for insulation. These through rail-mount terminal blocks are mounted using DIN-35 rails...

| Electrical data | | | |
|----------------------|-------|-----------|-----|
| Ratings per | IEC/ | EN 60947- | 7-1 |
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | 500 V | - | - |
| Rated surge voltage | 6 kV | - | - |
| Rated current | 20 A | - | - |

| Power Loss | |
|--|-----------|
| Power loss, per pole (potential) | 0.532 W |
| Rated current I_N for specified power loss | 20 A |
| Resistance value for specified, current- dependent power loss | 0.00133 Ω |

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| Connection data | | |
|----------------------------|---|--|
| Clamping units | 6 | |
| Total number of potentials | 3 | |
| Number of levels | 3 | |

| 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 |

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 terminative

"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 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 | 113 mm / 4.449 inches |
| Depth from upper-edge of DIN-rail | 76.5 mm / 3.012 inches |

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

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| Material data | |
|------------------------------------|---|
| Note (material data) | |
| | <u>Information on material specifications can be found here</u> |
| Color | gray/gray/gray |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.332 MJ |
| Weight | 18.7 g |

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

| Commercial data | |
|-----------------------|----------------------------------|
| Product Group | 1 (Rail Mounted Terminal Blocks) |
| PU (SPU) | 40 pcs |
| Packaging type | Box |
| Country of origin | CN |
| GTIN | 4050821293743 |
| 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 8.0 | 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 Conformity WAGO GmbH & Co. KG | - | - |

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Approvals for marine applications



manischer Lloyd





| Approval | Standard | Certificate Name |
|---|----------|------------------|
| ABS American Bureau of Ship- ping | EN 60947 | 20-HG1941090-PDA |
| BV Bureau Veritas S.A. | EN 60947 | 07436/F0 BV |
| DNV GL Det Norske Veritas Ger- | - | TAE00001V2 |

Downloads Environmental Product

Environmental Product Compliance

Compliance Search Environmental Product Compliance 280-550

 $\underline{\downarrow}$

Documentation

| Bid Text | | | |
|----------|------------|-----------------|-------------------------|
| 280-550 | 19.02.2019 | xml 3.44 KB | <u>↓</u> |
| 280-550 | 02.03.2017 | doc 24.50 KB | $\overline{\downarrow}$ |

CAD/CAE-Data CAD data 2D/3D Models 280-550

| CAE data | |
|------------------------------|--------------------------|
| EPLAN Data Portal 280-550 | $\underline{\downarrow}$ |
| WSCAD Universe 280-550 | $\underline{\downarrow}$ |
| ZUKEN Portal 280-550 | |



1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



Item No.: 280-305

End and intermediate plate; 2.5 mm thick; arav



Item No.: 280-306

End and intermediate plate; 2.5 mm thick; orange



Item No.: 280-339

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



Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored



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

Item No.: 210-198

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



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;

Item No.: 216-101

Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored



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-co-

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

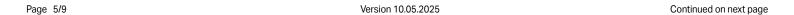


Item No.: 216-204

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-colo-





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 TOPJOB® 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 DINrail 35 x 15 and 35 x 7.5; gray

1.2.4 Insulation stop

1.2.4.1 Insulation stop



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

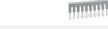


Item No.: 280-472

Insulation stop; 0.75 - 1 mm²; 5 pieces/ strip; black

1.2.5 Jumper

1.2.5.1 Jumper



<u>Item No.: 280-490</u> Jumper; 10-way; insulated; gray Item No.: 280-482

Jumper; 2-way; insulated; gray

n

Item No.: 280-492

Jumper; 2-way; insulated; gray

Item No.: 280-483

Jumper; 3-way; insulated; gray

m

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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; grav

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1.2.5.1 Jumper

Item No.: 780-456

Staggered jumper; from 1 to 6; insulated; gray



Item No.: 709-111

Staggered jumper; from 1 to 7; insulated; gray



Staggered jumper; from 1 to 8; insulated; gray

Item No.: 281-421

Vertical jumper; insulated; gray



Item No.: 709-110

Wire commoning chain; 2.5 mm²; insula-



Wire commoning chain; 2.5 mm²; insula-

Item No.: 709-112

Wire commoning chain; 2.5 mm²; insula-

Item No.: 210-103

Wire commoning chain; insulated; black

ted; black



Item No.: 210-123

Wire commoning chain; insulated; blue

1.2.6 Marking

1.2.6.1 Marker





Item No.: 793-501



Item No.: 2009-115

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

WMB marking card; as card; not stretchable; plain; snap-on type; white

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.2.7 Protective warning marker

1.2.7.1 Cover



Item No.: 280-415

Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.2.8 Push-in type wire jumper

1.2.8.1 Jumper

Item No.: 249-126

lated; 110 mm long; black



Push-in type wire jumper; 0.75 mm²; insu-



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

1.2.9 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.: 249-141

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

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1.2.10 Tool

1.2.10.1 Operating tool



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.

Conductor termination



CAGE CLAMP® connection

Inserting a conductor.
With ferruled conductors, it is necessary to use a terminal block one size smaller than the conductor's nominal cross-section.

Commoning





A vertical jumper commons the upper and lower decks, creating a 6-conductor feed-through terminal block in one housing. Two adjacent triple-deck terminal blocks may be commoned together on the same deck using a push-in adjacent jumper.

Combining vertical and adjacent jumpers.

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Use 67% less rail space with triple-deck terminal blocks.

Marking



Labeling via WMB Multi Marking System.

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$