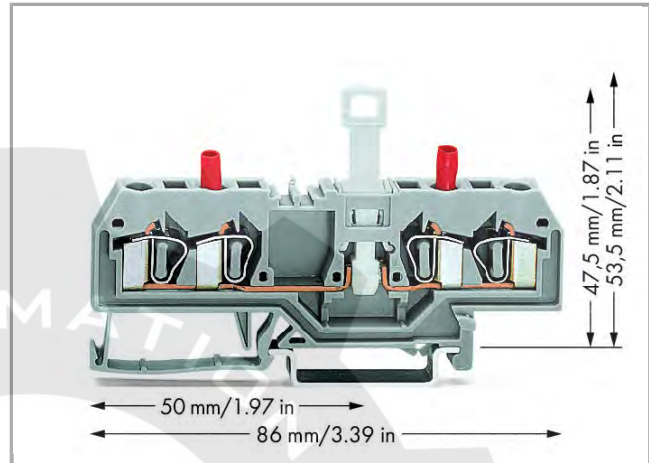
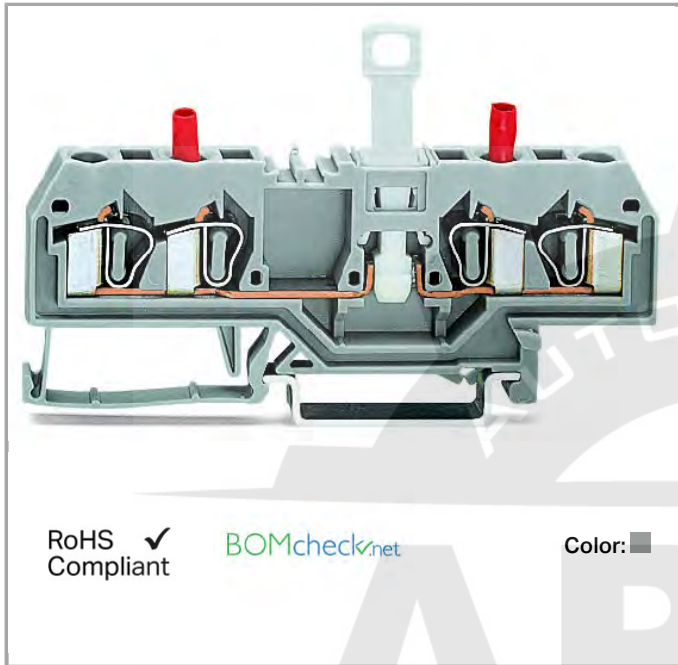


## Data sheet | Item number: 281-666

4-conductor disconnect/test terminal block; with touch-proof test sockets;  
for DIN-rail 35 x 15 and 35 x 7.5; 4 mm<sup>2</sup>; CAGE CLAMP®



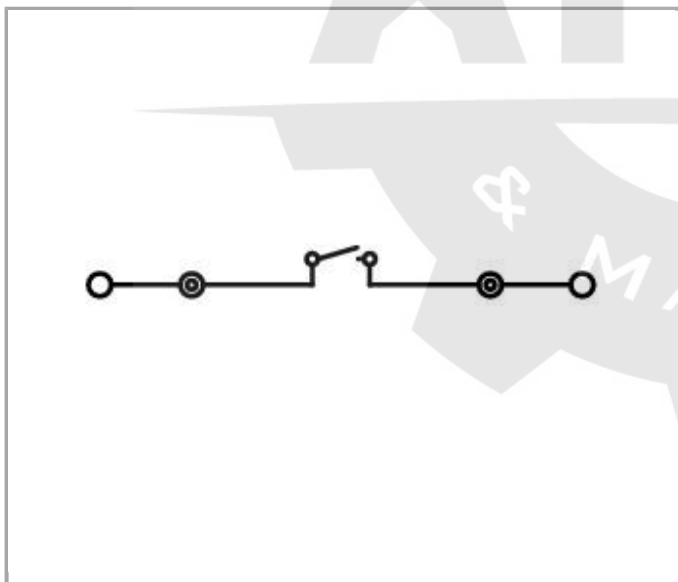
281-666



RoHS   
Compliant

[BOMcheck.net](https://www.bomcheck.net)

Color:



### Item description

#### Note:

##### Terminating Aluminum Conductors

WAGO spring clamp terminal blocks are suitable for solid aluminum conductors up to 4 mm<sup>2</sup>/12 AWG if WAGO "Alu-Plus" Contact Paste 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 be 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 mm<sup>2</sup> (14 AWG) = 16 A

4 mm<sup>2</sup> (12 AWG) = 22 A

## Data

### Electrical data

#### Ratings per IEC/EN 60664-1

|                                 |       |
|---------------------------------|-------|
| Rated voltage (III / 3)         | 400 V |
| Rated impulse voltage (III / 3) | 6 kV  |
| Rated current                   | 10 A  |

### Connection data

|                                   |                                            |
|-----------------------------------|--------------------------------------------|
| Connection technology             | CAGE CLAMP®                                |
| Actuation type                    | Operating tool                             |
| Connectable conductor materials   | Copper<br>Aluminum                         |
| Solid conductor                   | 0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor           | 0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG |
| Strip length                      | 9 ... 10 mm / 0.35 ... 0.39 inch           |
| Total number of connection points | 2                                          |
| Total number of potentials        | 2                                          |
| Number of levels                  | 1                                          |
| Type of wiring                    | Front-entry wiring                         |

### Geometrical Data

|                                       |                      |
|---------------------------------------|----------------------|
| Width                                 | 6 mm / 0.236 inch    |
| Height from upper-edge of DIN-35 rail | 53.5 mm / 2.106 inch |
| Depth                                 | 86 mm / 3.386 inch   |



## Mechanical data

|                  |                |
|------------------|----------------|
| Design           | horizontal     |
| Type of mounting | DIN-35 rail    |
| Marking level    | Center marking |

## Material Data

|                     |                      |
|---------------------|----------------------|
| Color               | gray                 |
| Insulating material | Polyamide 66 (PA 66) |
| Fire load           | 0 MJ                 |
| Weight              | 14 g                 |

## Commercial data

|                    |                                  |
|--------------------|----------------------------------|
| Product Group      | 1 (Rail Mounted Terminal Blocks) |
| Country of origin  | DE                               |
| GTIN               | 4044918838078                    |
| Customs Tariff No. | 85365080990                      |

## Approvals / Certificates

### Country specific Approvals

| Logo                                                                               | Approval                              | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|---------------------------------------|--------------------------|------------------|
|  | CCA<br>DEKRA Certification B.V.       | EN 60947                 | NTR NL-7454/A1   |
|  | CCA<br>DEKRA Certification B.V.       | IEC 60947                | NTR NL-7454/A1   |
|  | CSA<br>DEKRA Certification B.V.       | C22.2 No. 158            | 1505034          |
|  | KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947                 | 71-107288        |

### Ship Approvals

| Logo | Approval                           | Additional Approval Text | Certificate name |
|------|------------------------------------|--------------------------|------------------|
|      | ABS<br>American Bureau of Shipping | -                        | 14-HG1293677-PDA |



**BV**  
Bureau Veritas S.A.

EN 60947

07436/E0 BV



**DNV GL**  
Det Norske Veritas, Germanischer Lloyd

-

TAE00001V2



**LR**  
Lloyds Register

EN 60947

91/20112  
(E9)

## Compatible products

## Insulation stop



**Item no.: 281-470**  
Insulation stop; 0.08 - 0.2 mm<sup>2</sup> "s" (0.14 mm<sup>2</sup> "f-st"); 5 pieces/strip

281-470



**Item no.: 281-471**  
Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip

281-471



**Item no.: 281-472**  
Insulation stop; 0.75 - 1.5 mm<sup>2</sup>; 5 pieces/strip

281-472

## Marking accessories



**Item no.: 2009-115**  
WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-115



**Item no.: 2009-115/000-002**  
WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-115

/UUU-UUZ



**Item no.: 2009-115/000-006**  
WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-115

/UUU-UU6

|                                                                                    |                                                                                                                                           |          |          |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|
|   | <b>Item no.: 2009-115/000-007</b><br>WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type                  | /000-007 | 2009-115 |
|   | <b>Item no.: 2009-115/000-012</b><br>WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type                   | /000-012 | 2009-115 |
|   | <b>Item no.: 2009-115/000-017</b><br>WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type                  | /000-017 | 2009-115 |
|   | <b>Item no.: 2009-115/000-023</b><br>WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type                  | /000-023 | 2009-115 |
|   | <b>Item no.: 2009-115/000-024</b><br>WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type                   | /000-024 | 2009-115 |
|    | <b>Item no.: 793-501</b><br>WMB marking card; as card; not stretchable; plain; snap-on type                                               |          | 793-501  |
|    | <b>Item no.: 793-501/000-002</b><br>WMB marking card; as card; not stretchable; plain; snap-on type                                       | /000-002 | 793-501  |
|  | <b>Item no.: 793-501/000-005</b><br>WMB marking card; as card; not stretchable; plain; snap-on type                                       | /000-005 | 793-501  |
|  | <b>Item no.: 793-501/000-006</b><br>WMB marking card; as card; not stretchable; plain; snap-on type                                       | /000-006 | 793-501  |
|  | <b>Item no.: 793-501/000-007</b><br>WMB marking card; as card; not stretchable; plain; snap-on type                                       | /000-007 | 793-501  |
|  | <b>Item no.: 793-501/000-012</b><br>WMB marking card; as card; not stretchable; plain; snap-on type                                       | /000-012 | 793-501  |
|  | <b>Item no.: 793-501/000-017</b><br>WMB marking card; as card; not stretchable; plain; snap-on type                                       | /000-017 | 793-501  |
|  | <b>Item no.: 793-501/000-023</b><br>WMB marking card; as card; not stretchable; plain; snap-on type                                       | /000-023 | 793-501  |
|  | <b>Item no.: 793-501/000-024</b><br>WMB marking card; as card; not stretchable; plain; snap-on type                                       | /000-024 | 793-501  |
|  | <b>Item no.: 793-5501</b><br>WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type |          | 793-5501 |
|                                                                                    | <b>Item no.: 793-5501/000-002</b>                                                                                                         |          |          |



WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type

/000-002

793-5501



**Item no.: 793-5501/000-005**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-005

793-5501



**Item no.: 793-5501/000-006**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-006

793-5501



**Item no.: 793-5501/000-007**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-007

793-5501



**Item no.: 793-5501/000-012**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-012

793-5501



**Item no.: 793-5501/000-017**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-017

793-5501



**Item no.: 793-5501/000-023**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-023

793-5501



**Item no.: 793-5501/000-024**

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-024

793-5501

#### Carrier rail



**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

210-112



**Item no.: 210-113**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715

210-113



**Item no.: 210-114**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715

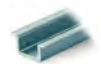
210-114



**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

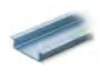
210-115



**Item no.: 210-118**

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715

210-118



**Item no.: 210-196**

Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715

210-196



**Item no.: 210-197**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715

210-197



**Item no.: 210-198**

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

210-198



Item no.: 210-504

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715

210-504



Item no.: 210-505

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715

210-505



Item no.: 210-506

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715

210-506



Item no.: 210-508

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715

210-508

## Protective Warning Marker



Item no.: 281-415

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

281-415

## check



Item no.: 210-136

Test plug; 2 mm Ø; with 500 mm cable

210-136



Item no.: 210-137

Test plug; 2.3 mm Ø; with 500 mm cable

210-137



Item no.: 249-141

L-type test plug module; modular; with spring-loaded contact pin; Center module

249-141

## General accessories



Item no.: 249-105

Group marker carrier

249-105



Item no.: 709-170

Disconnect lock; for disconnect tab used on 280/281 and 769 Series disconnect terminal blocks

709-170

## End plate



Item no.: 281-334

End and intermediate plate; 2.5 mm thick

281-334



Item no.: 281-335

End and intermediate plate; 2.5 mm thick

281-335



Item no.: 281-338

Separator plate; 2 mm thick; oversized

281-338



Item no.: 281-339

Separator plate; 2 mm thick; oversized

281-339

## assembling



Item no.: 209-106

Mounting carrier; for isolated mounting on DIN 35 rails

209-106



Item no.: 709-153

Cover; Type 1; suitable for cover carrier, type 1; 1 m long

709-153

## Jumper



Item no.: 210-103

Wire commoning chain; insulated; 50 connections

210-103

Item no.: 210-123



Wire commoning chain; insulated; 50 connections

210-123

**Item no.: 281-482**

Comb-style jumper bar; insulated; 2-way; IN = IN terminal block

281-482

**Item no.: 281-483**

Comb-style jumper bar; insulated; 3-way; IN = IN terminal block

281-483

**Item no.: 281-485**

Comb-style jumper bar; insulated; 5-way; IN = IN terminal block

281-485

**Item no.: 281-490**

Comb-style jumper bar; insulated; 10-way; IN = IN terminal block

281-490

**Item no.: 281-492**

Alternate comb-style jumper bar; insulated; 2-way; IN = IN terminal block

281-492

**Item no.: 709-110**

Wire commoning chain; insulated; 4 connections; 3 x 110 mm

709-110

**Item no.: 709-111**

Wire commoning chain; insulated; 3 connections; 2 x 120 mm

709-111

**Item no.: 709-112**

Wire commoning chain; insulated; 3 connections; 2 x 170 mm

709-112

**ferrule****Item no.: 216-106**Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; uninsulated; electro-tin plated

216-106

**Item no.: 216-201**Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated

216-201

**Item no.: 216-202**Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated

216-202

**Item no.: 216-203**Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated

216-203

**Item no.: 216-204**Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated

216-204

**Item no.: 216-205**Ferrule; Sleeve for 2.08 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated

216-205

**Item no.: 216-206**Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated

216-206

**Item no.: 216-241**Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-241

**Item no.: 216-242**Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-242

**Item no.: 216-243**Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-243

**Item no.: 216-244**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-244

**Item no.: 216-246**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-246

**Item no.: 216-301**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated

216-301

**Item no.: 216-302**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated

216-302

**tools****Item no.: 210-657**

Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short

210-657

**Item no.: 210-658**

Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short; angled

210-658

**Item no.: 210-720**

Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm

210-720

**Downloads****Documentation****Bid Text**

281-666

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