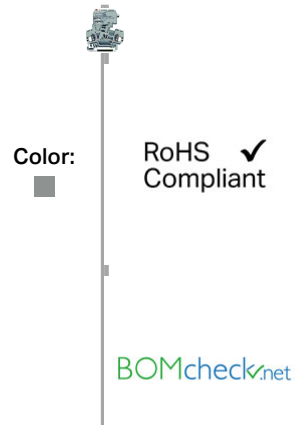


## Data sheet | Item number: 281-622/281-541

2-conductor fuse terminal block; with pivoting fuse holder; for 5 x 30 mm miniature metric fuse; with blown fuse indication by LED; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm<sup>2</sup>; CAGE CLAMP®



281-622/281-541



### 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

#### Safety information 1:

Electrical ratings are given by the fuse and blown fuse indication.

#### Safety information 2:

Leakage current in case of blown fuse: LED 6mA

### Data

#### Electrical data

## Ratings per IEC/EN 60664-1

|                                 |       |
|---------------------------------|-------|
| Rated voltage (III / 3)         | 800 V |
| Rated impulse voltage (III / 3) | 8 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                                 | 8 mm / 0.315 inch  |
| Height from upper-edge of DIN-35 rail | 60 mm / 2.362 inch |
| Depth                                 | 60 mm / 2.362 inch |

## Mechanical data

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

## Material Data




|                     |                      |
|---------------------|----------------------|
| Color               | gray                 |
| Insulating material | Polyamide 66 (PA 66) |
| Fire load           | 0.334 MJ             |
| Weight              | 17.744 g             |

## Commercial data



|                    |                                  |
|--------------------|----------------------------------|
| Product Group      | 1 (Rail Mounted Terminal Blocks) |
| Country of origin  | CN                               |
| GTIN               | 4045454871536                    |
| Customs Tariff No. | 85369095990                      |

## Approvals / Certificates


### Country specific Approvals

| Logo   | Approval                              | Additional Approval Text | Certificate name |
|--|---------------------------------------|--------------------------|------------------|
|  | CSA<br>DEKRA Certification B.V.       | C22.2 No. 158            | 1505034          |
|  | KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947                 | NTR NL-7135      |
|  | KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947                 | 2160584.31       |

### Ship Approvals


| Logo   | Approval   | Additional Approval Text | Certificate name |
|--|--|--------------------------|------------------|
|  | ABS<br>American Bureau of Shipping               | -                        | 14-HG1293677-PDA |
|  | DNV GL<br>Det Norske Veritas, Germanischer Lloyd | -                        | TAE00001V2       |

### UL-Approvals

| Logo   | Approval                             | Additional Approval Text | Certificate name |
|--|--------------------------------------|--------------------------|------------------|
|  | UR<br>Underwriters Laboratories Inc. | UL 1059                  | E45172           |

### Compatible products

## N-busbar

|  |  |         |
|--|--|---------|
|  | <b>Item no.: 210-254</b><br>Interlocking link; mechanically locks multiple links; 1 m long | 210-254 |
|--|--|---------|

## check


|  |  |         |
|--|--|---------|
|  | <b>Item no.: 210-137</b><br>Test plug; 2.3 mm Ø; with 500 mm cable | 210-137 |
|--|--|---------|


## End plate

|  |  |         |
|--|--|---------|
|  | <b>Item no.: 281-309</b><br>End and intermediate plate; 2.5 mm thick | 281-309 |
|--|--|---------|


|  |  |         |
|--|--|---------|
|  | <b>Item no.: 281-311</b><br>End and intermediate plate; 2.5 mm thick | 281-311 |
|--|--|---------|


## assembling

|  |   |         |
|--|---|---------|
|  | <b>Item no.: 209-106</b><br>Mounting carrier; for isolated mounting on DIN 35 rails | 209-106 |
|--|---|---------|


|  |   |         |
|--|---|---------|
|  | <b>Item no.: 709-153</b><br>Cover; Type 1; suitable for cover carrier, type 1; 1 m long | 709-153 |
|--|---|---------|

## Carrier rail


|   |  |         |
|---|--|---------|
|  | <b>Item no.: 210-112</b><br>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 |
|---|--|---------|

|  |   |         |
|--|---|---------|
|  | <b>Item no.: 210-113</b><br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715 | 210-113 |
|--|---|---------|


|  |  |         |
|--|--|---------|
|  | <b>Item no.: 210-114</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715 | 210-114 |
|--|--|---------|


|  |  |         |
|--|--|---------|
|  | <b>Item no.: 210-115</b><br>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 |
|--|--|---------|


|  |  |         |
|--|--|---------|
|  | <b>Item no.: 210-118</b><br>Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715 | 210-118 |
|--|--|---------|


|  |  |         |
|--|--|---------|
|  | <b>Item no.: 210-196</b><br>Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715 | 210-196 |
|--|--|---------|
















|  |  |         |
|--|--|---------|
|  | <b>Item no.: 210-197</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715 | 210-197 |
|--|--|---------|
















|  |   |         |
|--|---|---------|
|  | <b>Item no.: 210-198</b><br>Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715 | 210-198 |
|--|---|---------|


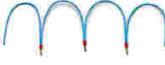

















|  |   |         |
|--|---|---------|
|  | <b>Item no.: 210-504</b><br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715 | 210-504 |
|--|---|---------|








|  |   |         |
|--|---|---------|
|  | <b>Item no.: 210-505</b><br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715 | 210-505 |
|--|---|---------|

|  |  |         |
|--|--|---------|
|  | <b>Item no.: 210-506</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715 | 210-506 |
|--|--|---------|

|   |  |                      |
|---|--|----------------------|
|     | <b>Item no.: 210-508</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715 | 210-508              |
| <b>Marking accessories</b>  |  |                      |
|    | <b>Item no.: 2009-115</b><br>WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type             | 2009-115             |
|    | <b>Item no.: 2009-115/000-002</b><br>WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type     | 2009-115<br>/000-002 |
|    | <b>Item no.: 2009-115/000-006</b><br>WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type      | 2009-115<br>/000-006 |
|    | <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     | 2009-115<br>/000-007 |
|    | <b>Item no.: 2009-115/000-012</b><br>WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type      | 2009-115<br>/000-012 |
|    | <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     | 2009-115<br>/000-017 |
|  | <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     | 2009-115<br>/000-023 |
|  | <b>Item no.: 2009-115/000-024</b><br>WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type      | 2009-115<br>/000-024 |
|   | <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                          | 793-501<br>/000-002  |
|   | <b>Item no.: 793-501/000-005</b><br>WMB marking card; as card; not stretchable; plain; snap-on type                          | 793-501<br>/000-005  |
|   | <b>Item no.: 793-501/000-006</b><br>WMB marking card; as card; not stretchable; plain; snap-on type                          | 793-501<br>/000-006  |
|   | <b>Item no.: 793-501/000-007</b><br>WMB marking card; as card; not stretchable; plain; snap-on type                          | 793-501<br>/000-007  |
|   | <b>Item no.: 793-501/000-012</b><br>WMB marking card; as card; not stretchable; plain; snap-on type                          | 793-501<br>/000-012  |

|  |   |          |          |
|--|---|----------|----------|
|    | <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><br>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 |
|    | <b>Item no.: 793-5501/000-005</b><br>WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type                                       | /000-005 | 793-5501 |
|    | <b>Item no.: 793-5501/000-006</b><br>WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type                                       | /000-006 | 793-5501 |
|  | <b>Item no.: 793-5501/000-007</b><br>WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type                                       | /000-007 | 793-5501 |
|  | <b>Item no.: 793-5501/000-012</b><br>WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type                                       | /000-012 | 793-5501 |
|  | <b>Item no.: 793-5501/000-017</b><br>WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type                                       | /000-017 | 793-5501 |
|  | <b>Item no.: 793-5501/000-023</b><br>WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type                                       | /000-023 | 793-5501 |
|  | <b>Item no.: 793-5501/000-024</b><br>WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type                                       | /000-024 | 793-5501 |
| <b>tools</b>   |   |          |          |
|  | <b>Item no.: 210-657</b><br>Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short  |          | 210-657  |
|  | <b>Item no.: 210-658</b><br>Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short; angled                                    |          | 210-658  |
|  | <b>Item no.: 210-720</b><br>Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm   |          | 210-720  |
| <b>Jumper</b>  |   |          |          |

|  |  |         |
|--|--|---------|
|    | <b>Item no.: 210-103</b><br>Wire commoning chain; insulated; 50 connections  | 210-103 |
|    | <b>Item no.: 210-123</b><br>Wire commoning chain; insulated; 50 connections  | 210-123 |
|    | <b>Item no.: 249-123</b><br>Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm <sup>2</sup>                    | 249-123 |
|    | <b>Item no.: 249-125</b><br>Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm <sup>2</sup>                     | 249-125 |
|    | <b>Item no.: 249-126</b><br>Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm <sup>2</sup>                    | 249-126 |
|    | <b>Item no.: 249-127</b><br>Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm <sup>2</sup>                    | 249-127 |
|    | <b>Item no.: 281-402</b><br>Adjacent jumper; insulated; IN = IN terminal block   | 281-402 |
|    | <b>Item no.: 709-110</b><br>Wire commoning chain; insulated; 4 connections; 3 x 110 mm   | 709-110 |
|    | <b>Item no.: 709-111</b><br>Wire commoning chain; insulated; 3 connections; 2 x 120 mm   | 709-111 |
|   | <b>Item no.: 709-112</b><br>Wire commoning chain; insulated; 3 connections; 2 x 170 mm   | 709-112 |
| <b>General accessories</b>   |  |         |
|  | <b>Item no.: 249-120</b><br>Group marker carrier   | 249-120 |
|  | <b>Item no.: 280-404</b><br>Test plug adapter; 5 mm wide; for test plug 210-137 (2.3 mm Ø); suitable for 1.5 mm <sup>2</sup> - 4 mm <sup>2</sup> tbs | 280-404 |
|  | <b>Item no.: 281-407</b><br>Test plug; 6 mm wide; Nominal current 24 A; for 0.08 mm <sup>2</sup> - 2.5 mm <sup>2</sup>                               | 281-407 |
| <b>ferrule</b>   |  |         |
|  | <b>Item no.: 216-106</b><br>Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; uninsulated; electro-tin plated  | 216-106 |
|  | <b>Item no.: 216-201</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated  | 216-201 |
|  | <b>Item no.: 216-202</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated   | 216-202 |
|  | <b>Item no.: 216-203</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated  | 216-203 |
|  | <b>Item no.: 216-204</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated  | 216-204 |
|  | <b>Item no.: 216-205</b><br>Ferrule; Sleeve for 2.08 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated   | 216-205 |

|  |  |         |
|--|--|---------|
|  | <b>Item no.: 216-206</b><br>Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated  | 216-206 |
|  | <b>Item no.: 216-241</b><br>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 |
|  | <b>Item no.: 216-242</b><br>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 |
|  | <b>Item no.: 216-243</b><br>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 |
|  | <b>Item no.: 216-244</b><br>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 |
|  | <b>Item no.: 216-246</b><br>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 |
|  | <b>Item no.: 216-301</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated   | 216-301 |
|  | <b>Item no.: 216-302</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated   | 216-302 |

## Downloads

## Documentation

## Bid Text

|                 |                |          |
|-----------------|----------------|----------|
| 281-622/281-541 | doc<br>26.1 kB | Download |
|-----------------|----------------|----------|

## CAD/CAE - Smart Data

## CAD data

|                             |     |          |
|-----------------------------|-----|----------|
| 3D Download 281-622/281-541 | URL | Download |
|-----------------------------|-----|----------|

Subject to changes.