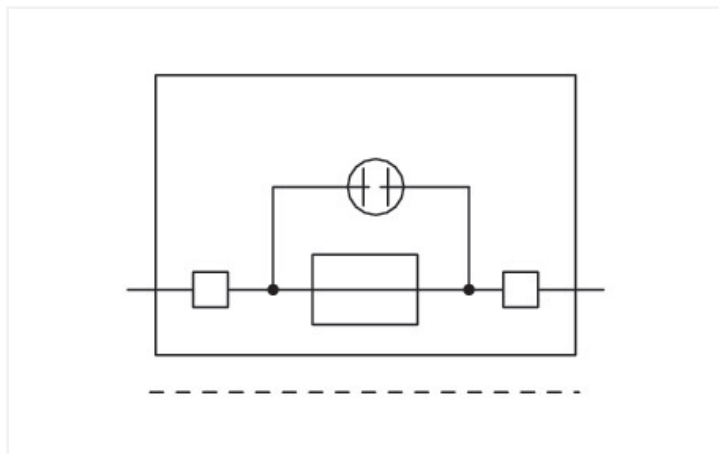


## Data Sheet | Item Number: 281-512/281-418

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

<https://www.wago.com/281-512/281-418>



Color: ■ gray

Similar to illustration

Fuse plug, 281 Series, gray

Enjoy error-free electrical installations with this fuse plug (item number 281-512/281-418).

### Electrical data

#### Ratings per IEC/EN

|                            |       |
|----------------------------|-------|
| Nominal voltage (III/3)    | 250 V |
| Rated current              | 6.3 A |
| Operation status indicator | None  |

#### Ratings per IEC/EN – Notes

|                      |   |
|----------------------|---|
| Ratings (note)       | Electrical ratings are given by the fuse and blown fuse indication. |
| Rated current (note) | Leakage current in case of a blown fuse:<br>Neon lamp < 0.4 mA      |

### Power Loss

|  |  |
|--|--|
| Power loss (max.) $P_{I(\max)}$ (note) | When selecting glass cartridge fuses, make sure that the maximum power loss listed below is not exceeded. The power loss is determined according to IEC or EN 60947-7-3/VDE 0611-6 at 23°C. The temperature rise of the terminal block must be checked according to their application and mounting. Higher ambient temperatures represent an additional impact on miniature fuses. Therefore, in such applications, the rated current must be reduced if necessary. More details are available from the manufacturers. |
|--|--|

### General information

|                |   |
|----------------|---|
| Voltage type 1 | AC/DC                                     |
| Fuse type      | Cylindrical fuse; 5 x 20 mm and 5 x 25 mm |

### Physical data

|       |                     |
|-------|---------------------|
| Width | 6 mm / 0.236 inches |
|-------|---------------------|

### Mechanical data

|               |                |
|---------------|----------------|
| Marking level | Center marking |
|---------------|----------------|

### Material data

|                                    |  |
|------------------------------------|--|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | gray   |
| Material group                     | I  |
| Insulation material (main housing) | Polyamide (PA66)   |
| Flammability class per UL94        | V0   |
| Fire load                          | 0.082 MJ   |
| Weight                             | 6.4 g  |

### Environmental requirements

|                                  |                 |
|----------------------------------|-----------------|
| 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                  | 4050821276258                    |
| Customs tariff number | 85366990990                      |

### Product Classification

|             |                      |
|-------------|----------------------|
| UNSPSC      | 39121624             |
| eCl@ss 10.0 | 27-14-11-49          |
| eCl@ss 9.0  | 27-14-11-49          |
| ETIM 9.0    | EC002018             |
| ETIM 10.0   | EC002018             |
| ECCN        | NO US CLASSIFICATION |

### Environmental Product Compliance

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

### Approvals / Certificates

#### General approvals



| Approval                              | Standard | Certificate Name |
|---------------------------------------|----------|------------------|
| CCA<br>DEKRA Certification B.V.       | EN 60947 | 2160584.53       |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947 | NTR NL-7135      |

#### Declarations of conformity and manufacturer's declarations

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


Approvals for marine applications





| Approval  | Standard | Certificate Name  |
|---|----------|-------------------|
| ABS<br>American Bureau of Ship-<br>ping               | -        | 24-0152298-PDA    |
| ABS<br>American Bureau of Ship-<br>ping               | EN 60947 | 24-0152298-PDA    |
| DNV GL<br>Det Norske Veritas, Ger-<br>manischer Lloyd | -        | TAE00001V2        |
| PRS<br>Polski Rejestr Statków                         | -        | TE/1094/880590/23 |

Downloads


Environmental Product Compliance



| Compliance Search  |
|--|
| Environmental Product<br>Compliance<br>281-512/281-418  |

Documentation

| Bid Text        |            |                 |   |
|-----------------|------------|-----------------|---|
| 281-512/281-418 | 19.02.2019 | xml<br>3.00 KB  |  |
| 281-512/281-418 | 14.03.2017 | doc<br>24.00 KB |  |

CAD/CAE-Data

| CAD data  |
|---|
| 2D/3D Models<br>281-512/281-418  |

| CAE data  |
|---|
| WSCAD Universe<br>281-512/281-418  |
| ZUKEN Portal<br>281-512/281-418    |

1 Compatible Products

1.1 Optional Accessories

1.1.1 Jumper

1.1.1.1 Jumper



**Item No.: 281-503**

Short circuit jumper; for fuse holder; silver-colored

1.1.2 Marking

1.1.2.1 Marker



**Item No.: 794-4615**

WMB marking card; as card; MARKED; F1, ..., F10 (10x); stretchable 4 - 4.2 mm; Vertical marking; snap-on type; white



**Item No.: 794-4616**

WMB marking card; as card; MARKED; F11, ..., F20 (10x); stretchable 4 - 4.2 mm; Vertical marking; snap-on type; white



**Item No.: 794-4617**

WMB marking card; as card; MARKED; F21, ..., F30 (10x); stretchable 4 - 4.2 mm; Vertical marking; snap-on type; white



**Item No.: 794-4618**

WMB marking card; as card; MARKED; F31, ..., F40 (10x); stretchable 4 - 4.2 mm; Vertical marking; snap-on type; white



**Item No.: 794-4619**

WMB marking card; as card; MARKED; F41, ..., F50 (10x); stretchable 4 - 4.2 mm; Vertical marking; snap-on type; white



**Item No.: 793-4501/000-006**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; blue



**Item No.: 793-4501/000-014**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; brown



**Item No.: 793-4501/000-007**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; gray



**Item No.: 793-4501/000-023**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; green



**Item No.: 793-4501/000-012**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; orange



**Item No.: 793-4501/000-005**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; red



**Item No.: 793-4501/000-024**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; violet



**Item No.: 793-4501**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; white



**Item No.: 793-4501/000-002**

WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; yellow



**Item No.: 2009-114/000-006**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; blue



**Item No.: 2009-114/000-007**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; gray



**Item No.: 2009-114/000-023**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; green



**Item No.: 2009-114/000-012**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; orange



**Item No.: 2009-114/000-005**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; red



**Item No.: 2009-114/000-024**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; violet



**Item No.: 2009-114**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; white



**Item No.: 2009-114/000-002**

WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; yellow

### 1.1.3 Terminal blocks

#### 1.1.3.1 Carrier terminal block



**Item No.: 280-531**

Double-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; blue/gray



**Item No.: 280-514**

Double-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; gray/gray



**Item No.: 280-528**

Double-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; gray/gray



**Item No.: 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 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; blue/gray



**Item No.: 280-891**

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



**Item No.: 280-510**

Triple-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; green-yellow/blue/gray



**Item No.: 280-889**

Triple-deck terminal block; with additional jumper position on lower level; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; gray/gray/gray

#### 1.1.3.2 Carrier terminal block for modules and plugs



**Item No.: 281-917**

2-conductor carrier terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm<sup>2</sup>; CAGE CLAMP®; 4,00 mm<sup>2</sup>; blue



**Item No.: 281-916**

2-conductor carrier terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm<sup>2</sup>; CAGE CLAMP®; 4,00 mm<sup>2</sup>; gray



**Item No.: 281-610**

3-conductor carrier terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm<sup>2</sup>; CAGE CLAMP®; 4,00 mm<sup>2</sup>; gray



**Item No.: 281-656**

4-conductor carrier terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm<sup>2</sup>; CAGE CLAMP®; 4,00 mm<sup>2</sup>; gray

#### 1.1.3.3 Double-deck terminal block



**Item No.: 280-531**

Double-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; blue/gray



**Item No.: 280-514**

Double-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; gray/gray



**Item No.: 280-528**

Double-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; gray/gray



**Item No.: 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 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; blue/gray



**Item No.: 280-891**

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

#### 1.1.3.4 Triple-deck terminal block



**Item No.: 280-510**

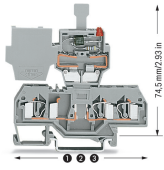
Triple-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; green-yellow/blue/gray



**Item No.: 280-889**

Triple-deck terminal block; with additional jumper position on lower level; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; gray/gray/gray

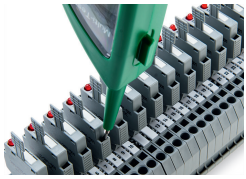
## Installation Notes



### Length of carrier terminal blocks with a fuse plug:

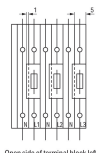
73.5 mm / 2.89 inch für 281-610

## Testing



Using fuse plugs with rail-mount terminal blocks for control circuit protection is highly advantageous because the function and wiring levels are separated:

- No additional cost for assembly and wiring
- No risk of accidental contact with live parts when disconnecting the fuse plug
- The fuse plug is completely separated from the carrier terminal block when replacing a fuse – away from current carrying parts
- The fuse plug can be removed by service personnel
- No unintentional reclosing of the circuit by another person
- Quickly exchange a fuse by using a prepared "stand-by plug" Fuse plug features for quick and safe applications:
- Optional LED indicates blown fuse
- Top-of-unit marking slot provides clear carrier terminal block identification
- Two test slots with touch contacts
- Terminal blocks/plugs provide high-density wiring in a width of just 6 mm
- May be used as a disconnect plug in combination with a shorting link



When a corresponding neutral circuit is adjacent to the fuse plug, a 5 mm wide space-saving terminal block may be used as a 6 mm fuse plug may overlap the terminal block (see diagram).

For example, 5 mm (0.197 inch) wide carrier terminal blocks can be used with an end plate.

Subject to changes. Please also observe the further product documentation!

Current addresses can be found at: [www.wago.com](http://www.wago.com)