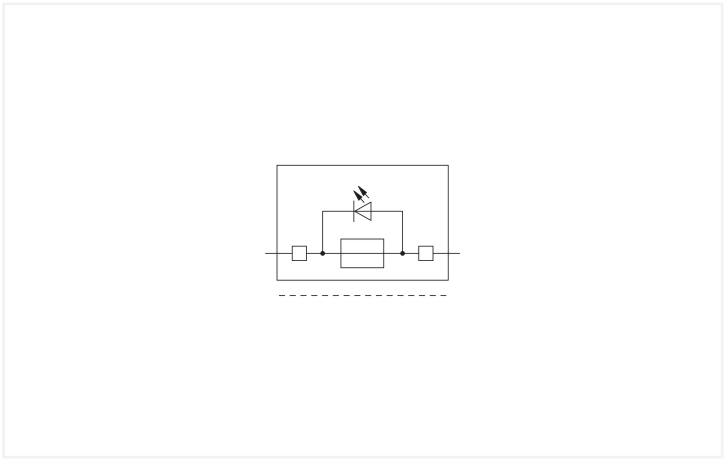
# Data Sheet | Item Number: 281-512/281-501

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

https://www.wago.com/281-512/281-501





Color: gray

Fuse plug, 281 Series, gray

Enjoy error-free electrical installations with this fuse plug (item number 281-512/281-501).

## 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: LED 5 … 20 mA |

### Power Loss

| | |
|---|---|
| Power loss $P_{loss\,(max.)}$ (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) | Information on material specifications can be found here |
| Color | gray |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.081 MJ |
| Weight | 6.7 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 | 4050821276265 |
| 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

| | |
|---|---|
| CAS-No. | 7439-92-1 |
| REACH Candidate List Substance | Lead |
| RoHS Compliance Status | Compliant,With Exemption |
| RoHS Exemption | 7(a)<br>7(c)-I |
| SCIP notification number (Austria) | aa35b2cb-cb0d-4299-8408-65ff0f74f2cb |
| SCIP notification number (Belgium) | ff0f92ca-1e64-459d-befe-9c56a5cc4515 |
| SCIP notification number (Bulgaria) | e6bf6cf9-0735-4a78-82d4-bb85769a1e63 |
| SCIP notification number (Czech Republic) | 8f5ff1c6-aa41-48aa-b888-5bc3c705056d |
| SCIP notification number (Denmark) | d60407f9-28d0-4a48-825f-0cdc2308a0f4 |
| SCIP notification number (Finland) | 9a3e6f3c-9dfc-4df2-8e75-574656e85c0b |
| SCIP notification number (France) | aada7dcf-c462-41a5-95b1-3e4d3e809790 |
| SCIP notification number (Germany) | 8234951a-c249-4fed-955e-18494e11ab9a |
| SCIP notification number (Hungary) | f44ddd59-cece-4f79-9bfd-fc877cbaf82b |
| SCIP notification number (Italy) | 57f8ae2e-ad98-431b-a5cc-9ed6fb923b64 |
| SCIP notification number (Netherlands) | 40ab186b-b669-4128-a2c1-5af4bcfbcc88 |


Continued on next page

## Environmental Product Compliance

| | |
|---|---|
| SCIP notification number (Poland) | cc1aae9d-c676-4fa4-8bfc-9295a56a1312 |
| SCIP notification number (Romania) | 5f340b62-9dba-4661-93e3-46e454c1b3e0 |
| SCIP notification number (Sweden) | 5a187112-c5a2-46b0-8316-3d72564d28e3 |

## Approvals / Certificates

### Declarations of conformity and manufacturer's declarations

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

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance
281-512/281-501

### Documentation

**Bid Text**

| | | | |
|---|---|---|---|
| 281-512/281-501 | 19.02.2019 | xml<br>3.00 KB | |
| 281-512/281-501 | 14.03.2017 | doc<br>24.00 KB | |

### CAD/CAE-Data

**CAD data**

2D/3D Models
281-512/281-501

**CAE data**

WSCAD Universe
281-512/281-501

ZUKEN Portal
281-512/281-501


Continued on next page

# 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


Continued on next page

## 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 mm²; CAGE CLAMP®; 2,50 mm²; blue/gray



Item No.: 280-514
Double-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; gray/gray



Item No.: 280-528
Double-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; 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 mm²; CAGE CLAMP®; 2,50 mm²; 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 mm²; CAGE CLAMP®; 2,50 mm²; gray/gray



Item No.: 280-510
Triple-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; 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 mm²; CAGE CLAMP®; 2,50 mm²; 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 mm²; CAGE CLAMP®; 4,00 mm²; blue



Item No.: 281-916
2-conductor carrier terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²; CAGE CLAMP®; 4,00 mm²; gray



Item No.: 281-610
3-conductor carrier terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²; CAGE CLAMP®; 4,00 mm²; gray



Item No.: 281-656
4-conductor carrier terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²; CAGE CLAMP®; 4,00 mm²; 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 mm²; CAGE CLAMP®; 2,50 mm²; blue/gray



Item No.: 280-514
Double-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; gray/gray



Item No.: 280-528
Double-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; 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 mm²; CAGE CLAMP®; 2,50 mm²; 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 mm²; CAGE CLAMP®; 2,50 mm²; gray/gray

### 1.1.3.4 Triple-deck terminal block



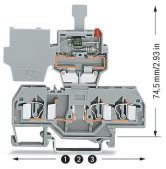
Item No.: 280-510
Triple-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; green-yellow/blue/gray



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 mm²; CAGE CLAMP®; 2,50 mm²; gray/gray/gray


Continued on next page

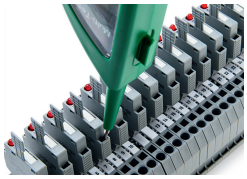
## Installation Notes




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

73.5 mm / 2.89 inch für 281-610

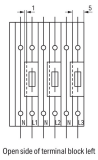
## Testing



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.