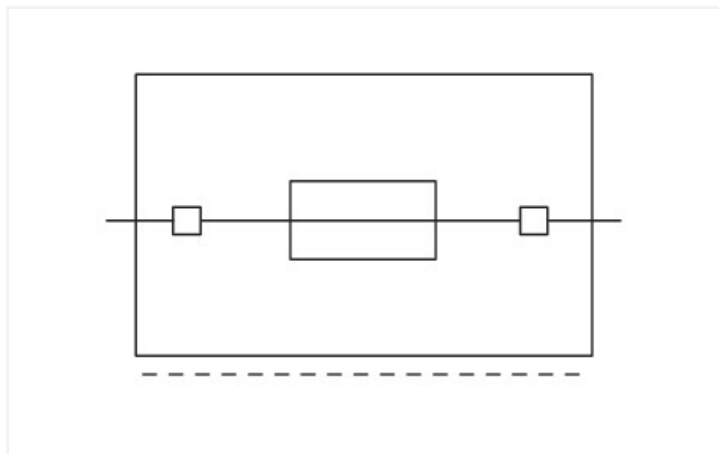


## Data Sheet | Item Number: 281-512

Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with port for LED; 6 mm wide; gray

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



Color: ■ gray

Fuse plug, 281 Series, gray

Enjoy convenient electrical installations with this fuse plug (item number 281-512).

### 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.
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### 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.
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### General information

Fuse type	Cylindrical fuse; 5 x 20 mm and 5 x 25 mm
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### Physical data

Width	6 mm / 0.236 inches
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### Mechanical data

Marking level	Center marking
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### 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	0.076 MJ
Weight	6.1 g

### Environmental requirements

Processing temperature	-35 ... +85 °C
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	4050821032557
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
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### Approvals / Certificates

#### General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	2160584.53
CSA CSA Group	C22.2	1505034
KEMA/KEUR DEKRA Certification B.V.	EN 60947	NTR NL-7135

#### General approvals

UL Underwriters Laboratories Inc.	UL 1059	20170731-E45172
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Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	EN 60947	24-0152298-PDA
ABS American Bureau of Shipping	-	24-0152298-PDA

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 281-512

Documentation

Bid Text			
281-512	19.02.2019	xml 2.92 KB	
281-512	14.03.2017	doc 24.00 KB	

CAD/CAE-Data

CAD data
2D/3D Models 281-512

CAE data
WSCAD Universe 281-512
ZUKEN Portal 281-512

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

 <p><b>Item No.: 794-4615</b> WMB marking card; as card; MARKED; F1, ..., F10 (10x); stretchable 4 - 4.2 mm; Vertical marking; snap-on type; white</p>	 <p><b>Item No.: 794-4616</b> WMB marking card; as card; MARKED; F11, ..., F20 (10x); stretchable 4 - 4.2 mm; Vertical marking; snap-on type; white</p>	 <p><b>Item No.: 794-4617</b> WMB marking card; as card; MARKED; F21, ..., F30 (10x); stretchable 4 - 4.2 mm; Vertical marking; snap-on type; white</p>	 <p><b>Item No.: 794-4618</b> WMB marking card; as card; MARKED; F31, ..., F40 (10x); stretchable 4 - 4.2 mm; Vertical marking; snap-on type; white</p>
 <p><b>Item No.: 794-4619</b> WMB marking card; as card; MARKED; F41, ..., F50 (10x); stretchable 4 - 4.2 mm; Vertical marking; snap-on type; white</p>	 <p><b>Item No.: 793-4501/000-006</b> WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; blue</p>	 <p><b>Item No.: 793-4501/000-014</b> WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; brown</p>	 <p><b>Item No.: 793-4501/000-007</b> WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; gray</p>
 <p><b>Item No.: 793-4501/000-023</b> WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; green</p>	 <p><b>Item No.: 793-4501/000-012</b> WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; orange</p>	 <p><b>Item No.: 793-4501/000-005</b> WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; red</p>	 <p><b>Item No.: 793-4501/000-024</b> WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; violet</p>
 <p><b>Item No.: 793-4501</b> WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; white</p>	 <p><b>Item No.: 793-4501/000-002</b> WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; yellow</p>	 <p><b>Item No.: 2009-114/000-006</b> WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; blue</p>	 <p><b>Item No.: 2009-114/000-007</b> WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; gray</p>
 <p><b>Item No.: 2009-114/000-023</b> WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; green</p>	 <p><b>Item No.: 2009-114/000-012</b> WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; orange</p>	 <p><b>Item No.: 2009-114/000-005</b> WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; red</p>	 <p><b>Item No.: 2009-114/000-024</b> WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; violet</p>
 <p><b>Item No.: 2009-114</b> WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; white</p>	 <p><b>Item No.: 2009-114/000-002</b> WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; yellow</p>		

### 1.1.3 Terminal blocks

#### 1.1.3.1 Carrier terminal block

 <p><b>Item No.: 280-531</b> 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</p>	 <p><b>Item No.: 280-514</b> 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</p>	 <p><b>Item No.: 280-528</b> 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</p>	 <p><b>Item No.: 280-532</b> 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</p>
 <p><b>Item No.: 280-891</b> 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</p>	 <p><b>Item No.: 280-510</b> 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</p>	 <p><b>Item No.: 280-889</b> 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</p>	

### 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>; CA-GE 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>; CA-GE 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>; CA-GE 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>; CA-GE 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**

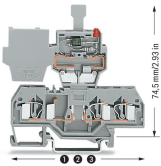
Triple-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; green-yellow/blue/gray



**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

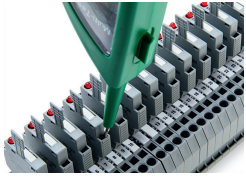
## Installation Notes



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

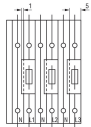
73.5 mm / 2.89 inch für 281-610

## 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



Open side of terminal block left

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.