

## Data Sheet | Item Number: 281-512/281-977

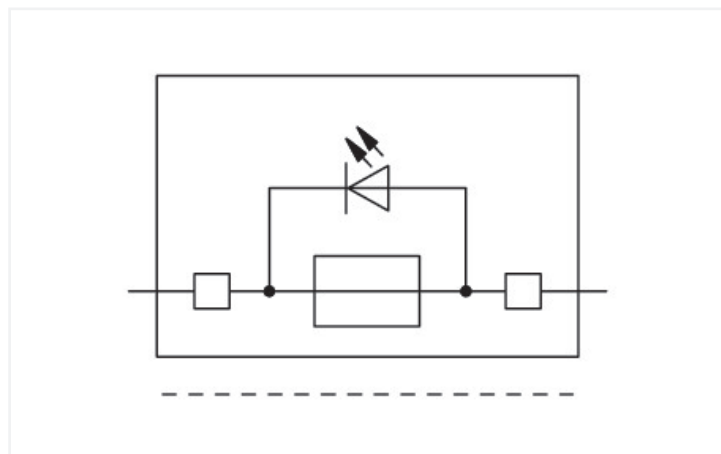
Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with LED indicator; 6 mm wide; gray

<https://www.wago.com/281-512/281-977>



Color: ■ gray

Similar to illustration



Similar to illustration

Fuse plug, 281 Series, gray

This fuse plug (item number 281-512/281-977) is designed for seamless electrical installations.

### Electrical data

#### Ratings per IEC/EN

Nominal voltage (III/3)	24 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 0.016 ... 0.034 mA

### Power Loss

Power loss $P_{\text{loss(max.)}}$ (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.
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### General information

Voltage type 1	DC
Fuse type	Cylindrical fuse; 5 x 20 mm and 5 x 25 mm

### 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	6.5 g

### Environmental requirements

Continuous operating temperature	-60 ... +105 °C
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### Commercial data

PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143464680
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
KEMA/KEUR DEKRA Certification B.V.	EN 60947	NTR NL-7135
KEMA/KEUR DEKRA Certification B.V.	EN 60947	2160584.31

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

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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance  
281-512/281-977



CAD/CAE-Data

CAD data

2D/3D Models  
281-512/281-977



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

1.1.2.1 Marker



**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**

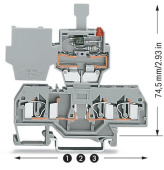
Triple-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; green-yellow/blue/gray



**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

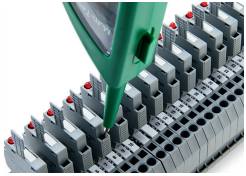
## Installation Notes



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

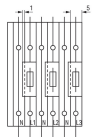
73.5 mm / 2.89 inch für 281-610

## 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



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.

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

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