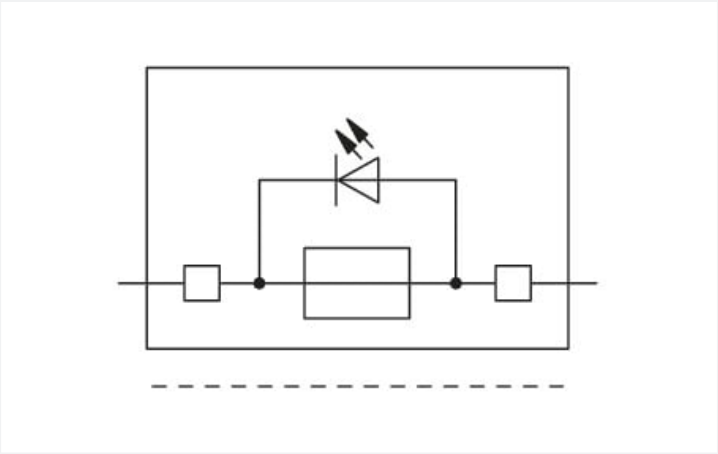
Data Sheet | Item Number: 281-512/281-977

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
281-512/281-501

Fuse plug, 281 Series, gray

This fuse plug (item number 281-512/281-977) simplifies electrical installations. The gray housing is made of polyamide (PA66) for insulation.

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 (max.) $P_{l\,(max.)}$ (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	DC
Fuse type	Cylindrical fuse; 5 x 20 mm and 5 x 25 mm

Physical data

Width	6 mm / 0.236 inches

Continued on next page

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	0.076 MJ
Weight	6.5 g

Environmental requirements

Continuous operating temperature	-60 … +105 °C

Commercial data

eCl@ss 10.0	27-14-11-49
eCl@ss 9.0	27-14-11-49
ETIM 9.0	EC002018
ETIM 8.0	EC002018
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143464680
Customs tariff number	85366990990

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

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	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

 Continued on next page

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 281-512/281-977

Documentation

Additional Information

Technical Section	pdf 2246.92 KB	

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

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1.1.2.1 Marker

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 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

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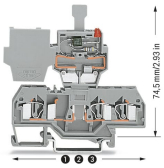
1.1.3.4 Triple-deck terminal block

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

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

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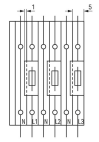

Open side of terminal block left

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.