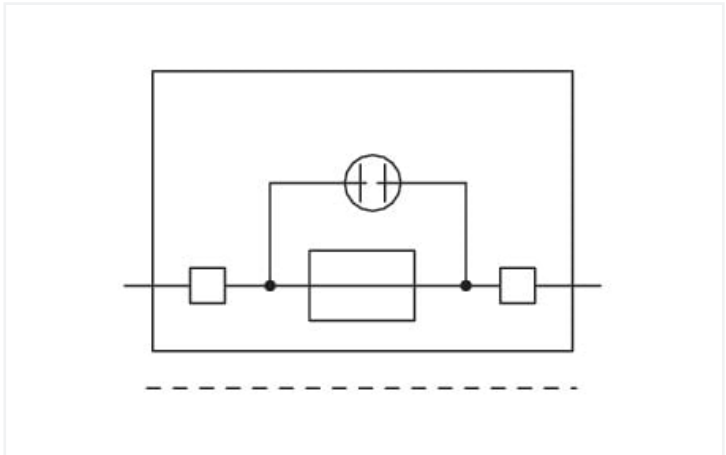




Color: ■ gray

Similar to illustration



281-512/281-417

Fuse plug, 281 Series, gray

This fuse plug (item number 281-512/281-417) simplifies electrical installations. The gray housing is made of polyamide (PA66) for insulation.

Electrical data			
Ratings per IEC/EN		Ratings per IEC/EN – Notes	
Nominal voltage (III/3)	250 V	Ratings (note)	Electrical ratings are given by the fuse and blown fuse indication.
Rated current	6.3 A	Rated current (note)	Leakage current in case of a blown fuse: Neon lamp < 0.4 mA
Operation status indicator	None		
Power Loss		General information	
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.	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	0.082 MJ
Weight	6.5 g

Environmental requirements	
Continuous operating temperature	-60 ... +105 °C

Commercial data	
Product Group	1 (Rail Mounted Terminal Blocks)
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	CN
GTIN	4050821276241
Customs tariff number	85366990990

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	2160584.53	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
KEMA/KEUR DEKRA Certification B.V.	EN 60947	NTR NL-7135	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-



Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	20-HG1941090-PDA
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 281-512/281-417



Documentation

Additional Information
Technical Section

pdf
2246.92 KB



Bid Text			
281-512/281-417	19.02.2019	xml 3.00 KB	
281-512/281-417	14.03.2017	doc 24.00 KB	



CAD/CAE-Data

CAD data
2D/3D Models 281-512/281-417



CAE data
WSCAD Universe 281-512/281-417
ZUKEN Portal 281-512/281-417





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 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

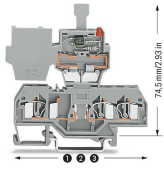


Item No.: 280-510
Triple-deck terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; green-yellow/blue/gray



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

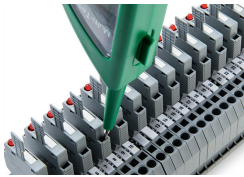
Installation Notes



Length of carrier terminal blocks with a fuse plug:

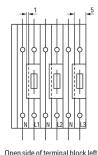
73.5 mm / 2.89 inch für 281-610

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.