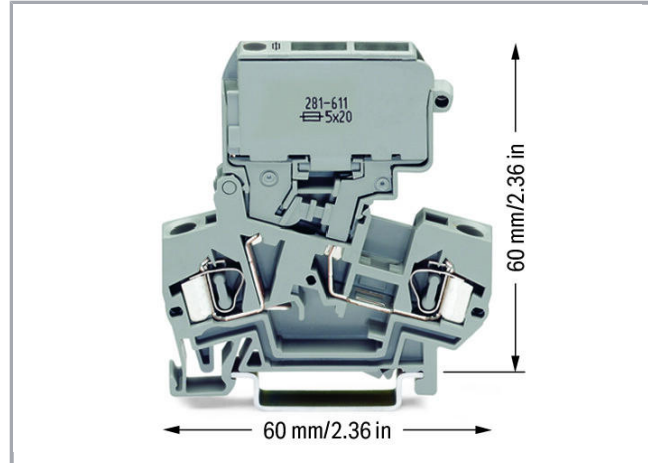
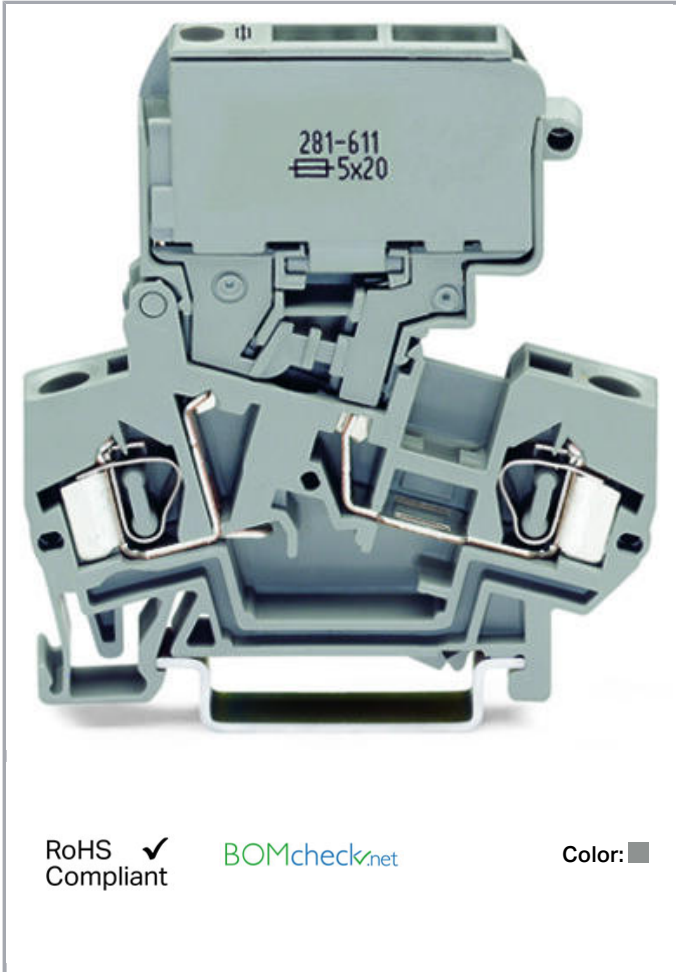


Data sheet | Item number: 281-611

2-conductor fuse terminal block; with pivoting fuse holder; for 5 x 20 mm miniature metric fuse; without blown fuse indication; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²; CAGE CLAMP®; 4,00 mm²; gray



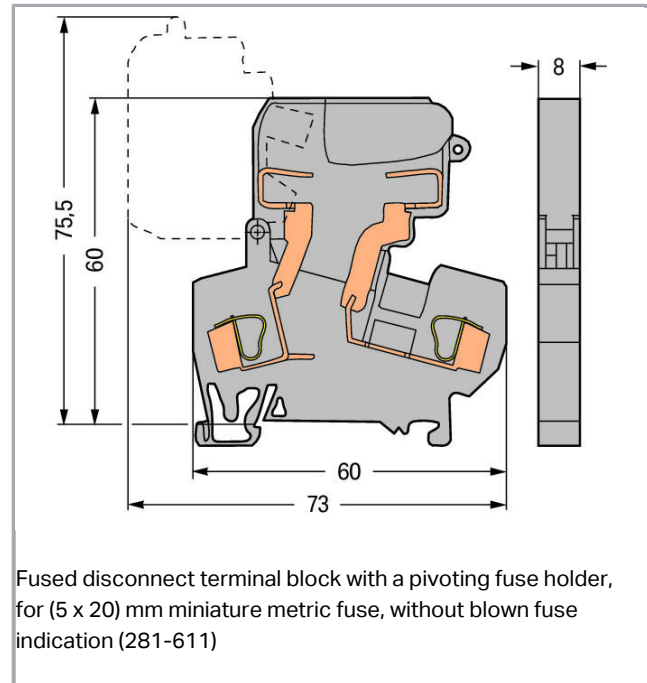
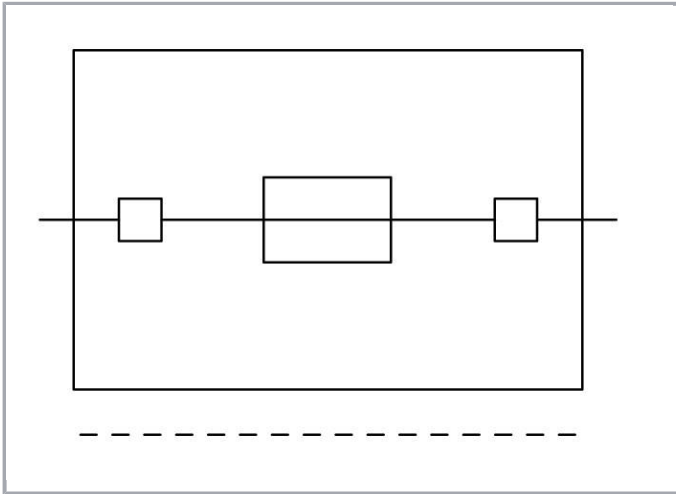
www.wago.com/281-611



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

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Item description

Note:

Terminating Aluminum Conductors

WAGO spring clamp terminal blocks are suitable for solid aluminum conductors up to 4 mm²/12 AWG if WAGO "Alu-Plus" Contact Paste is used for termination.

"Alu-Plus" Contact Paste Advantages:

- Automatically destroys the oxide film during clamping.
- Prevents fresh oxidation at the clamping point.
- Prevents electrolytic corrosion between aluminum and copper conductors (in the same terminal block).
- Provides long-term protection against corrosion.

Using terminal blocks with CAGE CLAMP® Spring Pressure Connection Technology, **aluminum conductors must first be cleaned with a blade** and then immediately be inserted into the clamping units filled with "Alu-Plus" Contact Paste.

It is also possible to apply WAGO "Alu-Plus" **additionally** on the whole surface of the aluminum conductor before termination.

Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors::

2.5 mm² = 16 A

4 mm² = 22 A

Safety information 1:

Electrical ratings are given by the fuse.

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

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Data

Electrical data

Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60947-7-3
Nominal voltage (III/3)	800 V
Rated surge voltage (III/3)	8 kV
Rated current	10 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Connection data

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper Aluminum
Solid conductor	0,08 ... 4 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0,08 ... 4 mm ² / 28 ... 12 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inch
Total number of connection points	2
Total number of potentials	2
Number of levels	1
Wiring type	Front-entry wiring

Geometrical Data

Width	8 mm / 0.315 inch
Height from upper-edge of DIN-rail	60 mm / 2.362 inch
Depth	60 mm / 2.362 inch

Mechanical data

Design	angled
Mounting type	DIN-35 rail
Marking level	Center marking

Material Data

Color	gray
-------	------

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




Insulation material	Polyamide 66 (PA 66)
Fire load	0.327 MJ
Weight	17.3 g

Commercial data


Product Group	1 (Rail Mounted Terminal Blocks)
Packaging type	BOX
Country of origin	IN
GTIN	4045454614591
Customs tariff number	85369095990

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CSA DEKRA Certification B.V.	C22.2 No. 158	1505034
	KEMA/KEUR DEKRA Certification B.V.	EN 60947	NTR NL-7135
	KEMA/KEUR DEKRA Certification B.V.	EN 60947	2160584.31

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	20-HG1941090-PDA

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UR Underwriters Laboratories Inc.	UL 1059	E45172

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



Counterpart

Compatible products

Locking lever



Item no.: 210-254

Interlocking link; mechanically locks multiple links; 1 m long; transparent

www.wago.com/210-254

Marking accessories



Item no.: 2009-115

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/2009-115



Item no.: 2009-115/000-002

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

www.wago.com/2009-115/000-002



Item no.: 2009-115/000-006

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

www.wago.com/2009-115/000-006



Item no.: 2009-115/000-007

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

www.wago.com/2009-115/000-007



Item no.: 2009-115/000-012

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

www.wago.com/2009-115/000-012



Item no.: 2009-115/000-017

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green

www.wago.com/2009-115/000-017

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

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







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Do you have any questions about our products?







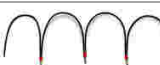
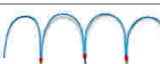









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	<p>Item no.: 2009-115/000-023 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green</p>	www.wago.com/2009-115/000-023
	<p>Item no.: 2009-115/000-024 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet</p>	www.wago.com/2009-115/000-024
	<p>Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type; white</p>	www.wago.com/793-501
	<p>Item no.: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type; yellow</p>	www.wago.com/793-501/000-002
	<p>Item no.: 793-501/000-005 WMB marking card; as card; not stretchable; plain; snap-on type; red</p>	www.wago.com/793-501/000-005
	<p>Item no.: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type; blue</p>	www.wago.com/793-501/000-006
	<p>Item no.: 793-501/000-007 WMB marking card; as card; not stretchable; plain; snap-on type; gray</p>	www.wago.com/793-501/000-007
	<p>Item no.: 793-501/000-012 WMB marking card; as card; not stretchable; plain; snap-on type; orange</p>	www.wago.com/793-501/000-012
	<p>Item no.: 793-501/000-017 WMB marking card; as card; not stretchable; plain; snap-on type; light green</p>	www.wago.com/793-501/000-017
	<p>Item no.: 793-501/000-023 WMB marking card; as card; not stretchable; plain; snap-on type; green</p>	www.wago.com/793-501/000-023
	<p>Item no.: 793-501/000-024 WMB marking card; as card; not stretchable; plain; snap-on type; violet</p>	www.wago.com/793-501/000-024
	<p>Item no.: 793-5501 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white</p>	www.wago.com/793-5501
	<p>Item no.: 793-5501/000-002 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow</p>	www.wago.com/793-5501/000-002
	<p>Item no.: 793-5501/000-005 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red</p>	www.wago.com/793-5501/000-005
















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

	Item no.: 793-5501/000-006 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue	www.wago.com/793-5501/000-006
	Item no.: 793-5501/000-007 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray	www.wago.com/793-5501/000-007
	Item no.: 793-5501/000-012 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange	www.wago.com/793-5501/000-012
	Item no.: 793-5501/000-017 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green	www.wago.com/793-5501/000-017
	Item no.: 793-5501/000-023 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green	www.wago.com/793-5501/000-023
	Item no.: 793-5501/000-024 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet	www.wago.com/793-5501/000-024
Carrier rail		
	Item no.: 210-112 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm	www.wago.com/210-112
	Item no.: 210-113 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715	www.wago.com/210-113
	Item no.: 210-114 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715	www.wago.com/210-114
	Item no.: 210-115 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm	www.wago.com/210-115
	Item no.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715	www.wago.com/210-118
	Item no.: 210-196 Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	www.wago.com/210-196
	Item no.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715	www.wago.com/210-197
	Item no.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	www.wago.com/210-198
	Item no.: 210-504 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715	www.wago.com/210-504

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

	Item no.: 210-505 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715	www.wago.com/210-505
	Item no.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715	www.wago.com/210-506
	Item no.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715	www.wago.com/210-508
check		
	Item no.: 210-137 Test plug; 2.3 mm Ø; with 500 mm cable; yellow	www.wago.com/210-137
	Item no.: 280-404 Test plug adapter; 5 mm wide; for test plug 210-137 (2.3 mm Ø); suitable for 1.5 mm ² - 4 mm ² tbs; gray	www.wago.com/280-404
	Item no.: 281-407 Test plug; 6 mm wide; Nominal current 24 A; for 0.08 mm ² - 2.5 mm ² ; 2,50 mm ² ; gray	www.wago.com/281-407
Jumper		
	Item no.: 210-103 Wire commoning chain; insulated; black	www.wago.com/210-103
	Item no.: 210-123 Wire commoning chain; insulated; blue	www.wago.com/210-123
	Item no.: 281-402 Adjacent jumper; insulated; IN = IN terminal block; gray	www.wago.com/281-402
	Item no.: 709-110 Wire commoning chain; 2.5 mm ² ; insulated; black	www.wago.com/709-110
	Item no.: 709-111 Wire commoning chain; 2.5 mm ² ; insulated; black	www.wago.com/709-111
	Item no.: 709-112 Wire commoning chain; 2.5 mm ² ; insulated; black	www.wago.com/709-112
ferrule		
	Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated	www.wago.com/216-106
	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204

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

	Item no.: 216-205 Ferrule; Sleeve for 2.08 mm ² / AWG 14; insulated; electro-tin plated; yellow	www.wago.com/216-205
	Item no.: 216-206 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; blue	www.wago.com/216-206
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	www.wago.com/216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-242
	Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-243
	Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-244
	Item no.: 216-246 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	www.wago.com/216-246
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green	www.wago.com/216-302
Push-In type wire jumper		
	Item no.: 249-123 Push-in type wire jumper; 0.75 mm ² ; insulated; 180 mm long; black	www.wago.com/249-123
	Item no.: 249-125 Push-in type wire jumper; insulated; 60 mm long; black	www.wago.com/249-125
	Item no.: 249-126 Push-in type wire jumper; 0.75 mm ² ; insulated; 110 mm long; black	www.wago.com/249-126
	Item no.: 249-127 Push-in type wire jumper; 0.75 mm ² ; insulated; 250 mm long; black	www.wago.com/249-127
assembling		
	Item no.: 209-106 Mounting carrier; for isolated mounting on DIN 35 rails; gray	www.wago.com/209-106
	Item no.: 249-116 Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray	www.wago.com/249-116
	Item no.: 709-153 Cover; Type 1; suitable for cover carrier, type 1; 1 m long; transparent	www.wago.com/709-153

General accessories

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



Item no.: 249-120
Group marker carrier; white

www.wago.com/249-120

tools



Item no.: 210-657
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short

www.wago.com/210-657



Item no.: 210-658
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short

www.wago.com/210-658



Item no.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft

www.wago.com/210-720

Downloads

Documentation

Bid Text

281-611 GAEB X81 - Datei	Feb 19, 2019	xml 3.5 kB	Download
281-611 doc - Datei	Mar 9, 2017	doc 25.6 kB	Download

CAD/CAE-Data

CAD data

2D/3D Models 281-611	URL	Download
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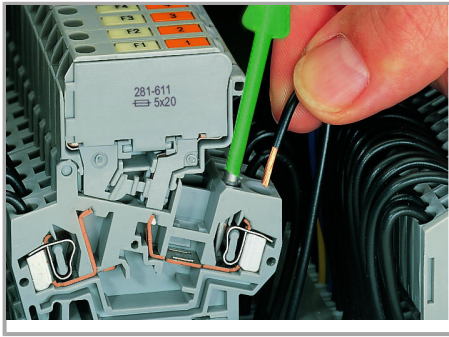
CAE data

EPLAN Data Portal 281-611	URL	Download
WSCAD Universe 281-611	URL	Download

Installation Notes

Conductor termination

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

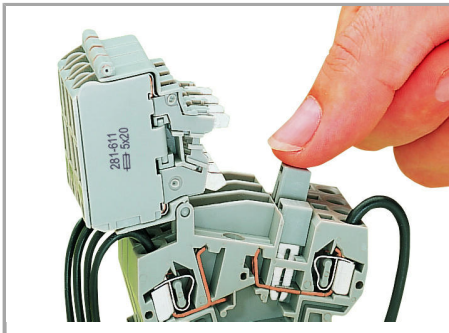


CAGE CLAMP® connection

Inserting a conductor via screwdriver.

With ferruled conductors, it is necessary to use a terminal block one size smaller than the conductor's nominal cross section.

Commoning

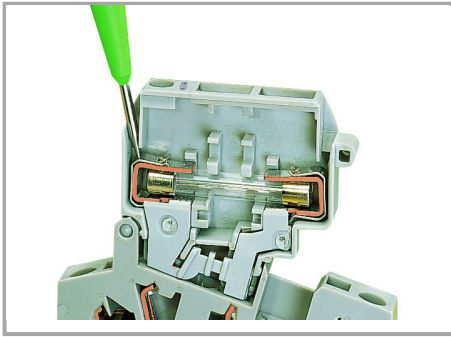


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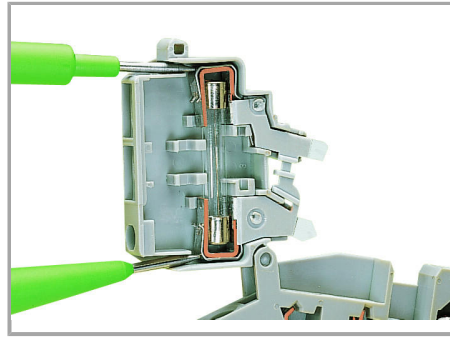
Distributing current to several fuse-protected circuits via insulated push-in type jumpers.

Testing

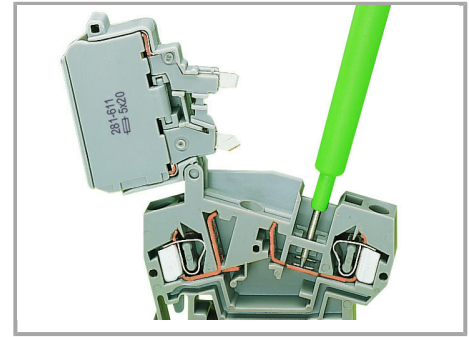
Subject to changes. Please also observe the further product documentation!



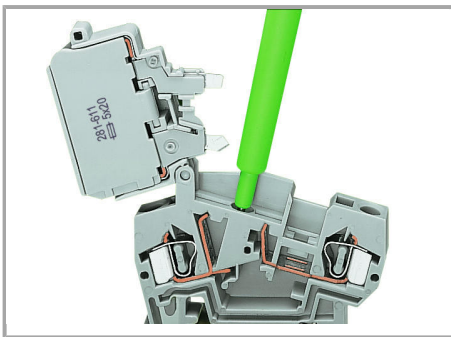
Voltage test, either at input or output with fuse holder in closed position (live)



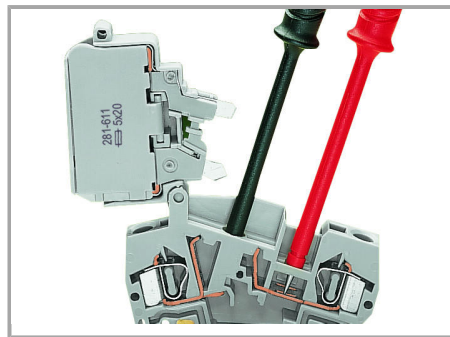
Through test with fuse holder in open position (no voltage)



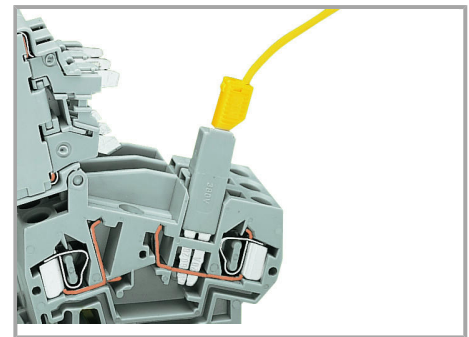
Voltage test at input in the test slot of the current bar



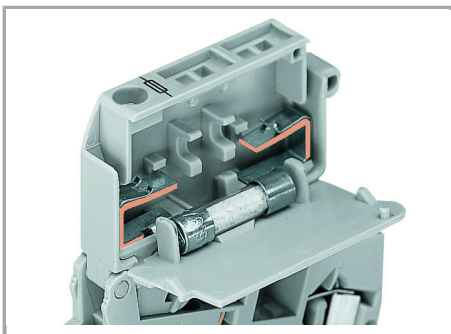
Testing voltage at the output via separate test slot.



Measuring current between jumper slot and separate test slot.



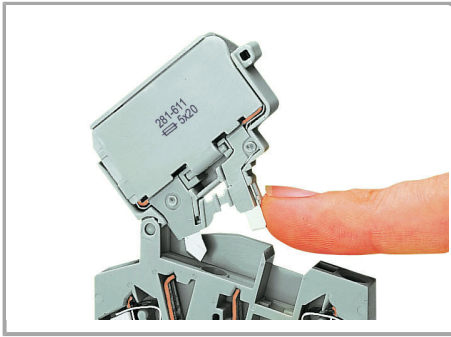
Testing voltage (input side) via test plug adapter (280-404, shown) or test plug (281-407).



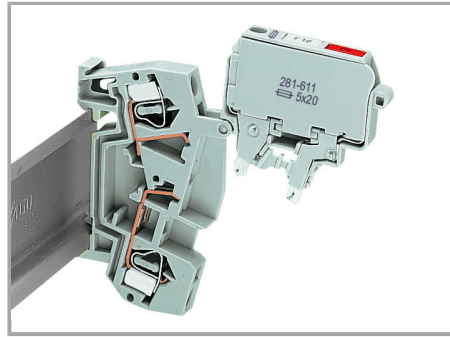
5 x 20 mm, 5 x 25 mm and 1/4" x 1" fuse holders are fitted with stops on the inside of the cover.

Safety

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



Touch-proof protection in all positions of the fuse holder



Fuse holder will remain safely locked open in vertical assemblies.

Locking lever

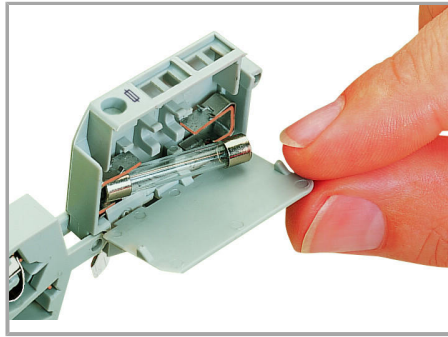


Ganging several fuse holders with an interlocking link (example shows 8 mm wide terminal blocks).

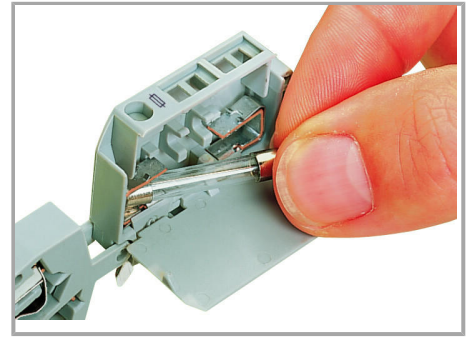
Subject to changes. Please also observe the further product documentation!



Fuse replacement:



Fuse replacement:

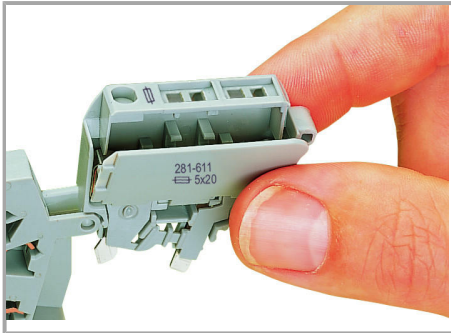


Fuse replacement:

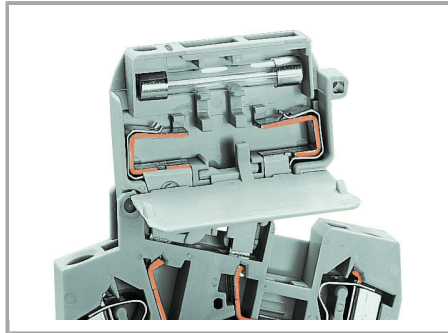
Before replacing a fuse, pivot the fuse holder into the locked open position.

One end of the fuse is automatically ejected from the holder when opening the cover.

Easily removing a fuse by hand.



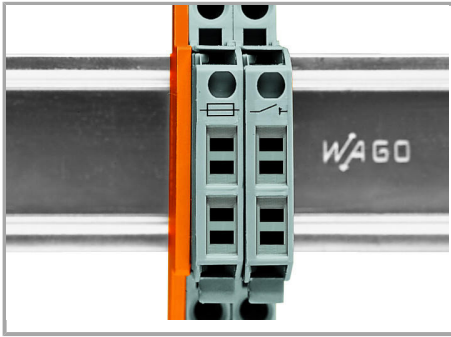
Fuse replacement:



Storing a spare fuse (fuse holder without blown fuse indication).

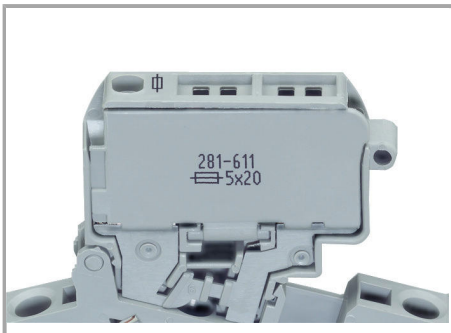
Insert a new fuse and snap the cover closed.

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

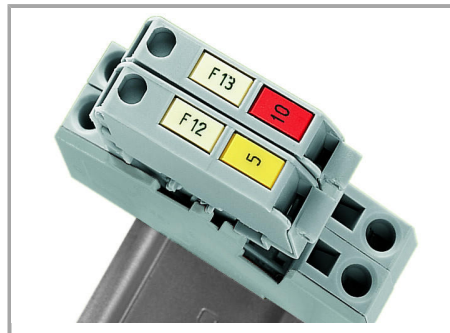


Fused disconnect or disconnect terminal blocks with a width of 8 mm can be assembled adjacently. At the end of an assembly or if there is **no** adjacent fused disconnect or disconnect terminal block, an end or intermediate plate must be used.

Marking



Fuse holders are printed with correct fuse size.



Each fuse holder features two marker slots for custom WMB Multi markers (example shows 8 mm wide terminal blocks).

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