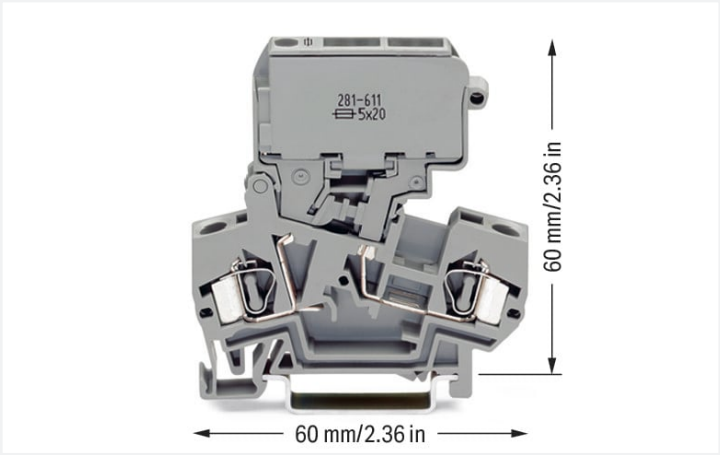
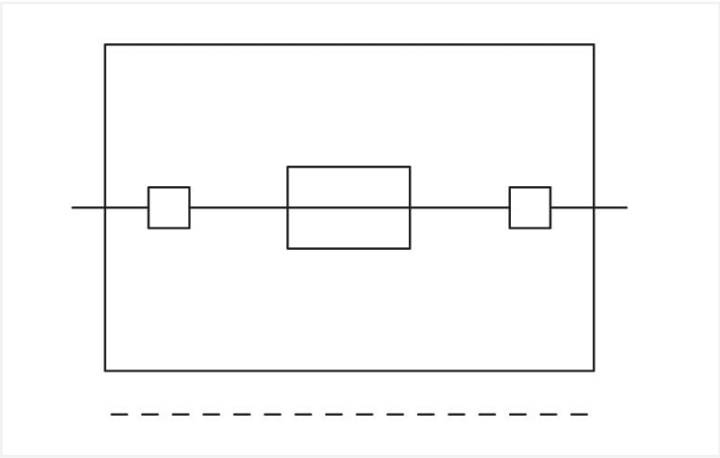
Data Sheet | Item Number: 281-611

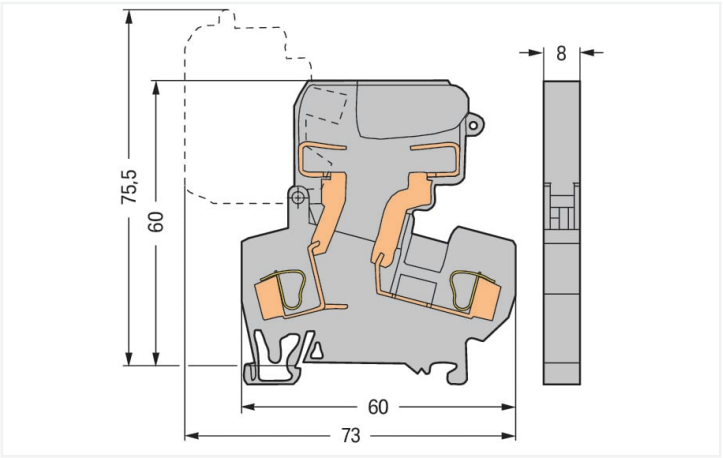
2-conductor fuse terminal block; with pivoting fuse holder; for 5 x 20 mm miniature metric fuse; without blown fuse indication; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²; CAGE CLAMP®; 4,00 mm²; gray

https://www.wago.com/281-611



Color: gray





Dimensions in mm

Fused disconnect terminal block with a pivoting fuse holder, for (5 x 20) mm glass cartridge fuse, without blown fuse indication (281-611)

Electrical data

Ratings per	IEC/EN 60947-7-3		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	800 V	-	-
Rated surge voltage	8 kV	-	-
Rated current	10 A	-	-

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.
Power loss P_l max. overload and short-circuit protection (individual arrangement)	2.5 W
Power loss P_l max. overload and short-circuit protection (group arrangement)	1.6 W
Power loss P_l max. short-circuit protection (individual arrangement)	4 W
Power loss P_l max. short-circuit protection (group arrangement)	4 W

General information

Fuse receptacle	pivoting
Fuse type	Cylindrical fuse; 5 x 20 mm

Connection data

Connection points	2
Total number of potentials	2
Number of levels	1

Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper Aluminum
Connectable conductor materials (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 249-130 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
Solid conductor	0.08 … 4 mm² / 28 … 12 AWG
Fine-stranded conductor	0.08 … 4 mm² / 28 … 12 AWG
Strip length	9 … 10 mm / 0.35 … 0.39 inches
Wiring direction	Front-entry wiring

Physical data

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

Continued on next page

Mechanical data

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

Material data

Note (material data)	Information on material specifications can be found here
Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.318 MJ
Weight	17 g

Environmental requirements

Processing temperature	-35 … +85 °C
Continuous operating temperature	-60 … +105 °C

Commercial data

Product Group	1 (Rail Mounted Terminal Blocks)
eCl@ss 10.0	27-14-11-16
eCl@ss 9.0	27-14-11-16
ETIM 8.0	EC000899
ETIM 7.0	EC000899
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	IN
GTIN	4045454614591
Customs tariff number	85369095000

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
CSA CSA Group	C22.2	1505034
KEMA/KEUR DEKRA Certification B.V.	EN 60947	NTR NL-7135
KEMA/KEUR DEKRA Certification B.V.	EN 60947	2160584.31
UR UL International Germany GmbH	UL 1059	E45172

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

Approvals for marine applications

Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	20-HG1941090-PDA

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 281-611

Documentation

Additional Information

Technical Section	pdf 2240.62 KB	

Bid Text

281-611	19.02.2019	xml 3.44 KB
281-611	09.03.2017	doc 25.00 KB

CAD/CAE-Data

CAD data

2D/3D Models 281-611

CAE data

EPLAN Data Portal 281-611

WSCAD Universe 281-611

ZUKEN Portal 281-611

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate

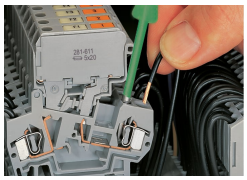
Item No.: 281-311
End and intermediate plate; 2.5 mm thick; gray

Item No.: 281-309
End and intermediate plate; 2.5 mm thick; orange

 Continued on next page

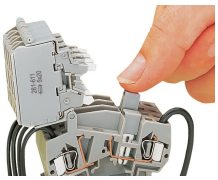
Installation Notes

Conductor termination



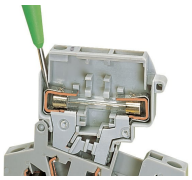
CAGE CLAMP® connection
Inserting a conductor.
With ferruled conductors, it is necessary to use a terminal block one size smaller than the conductor's nominal cross-section.

Commoning

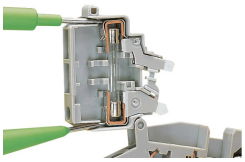


Commoning
Distributing current to several fuse-protected circuits via insulated push-in type jumpers.

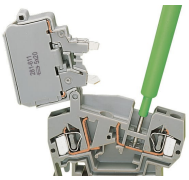
Testing



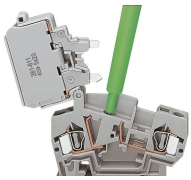
Voltage test, either at input or output with fuse holder in closed position (live)



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

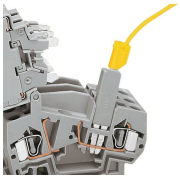


Voltage test at input in the test slot of the current bar

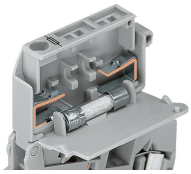


Testing voltage at the output via separate test slot.

Measuring current between jumper slot and separate test slot.



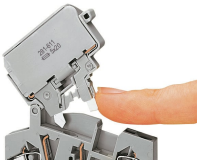
Testing voltage (input side) via test plug adapter (280-404, shown) or test plug (281-407).



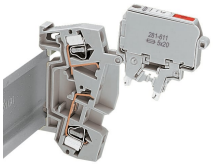
5 x 20 mm, 5 x 25 mm and ¼" x 1" fuse holders are fitted with stops on the inside of the cover.

 Continued on next page

Security



Touch-proof protection in all positions of the fuse holder



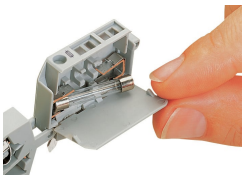
Fuse holder will remain safely locked open in vertical assemblies.

Locking system

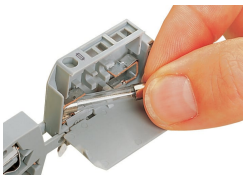
Ganging several fuse holders with an interlocking link (example shows 8 mm wide terminal blocks).

Application

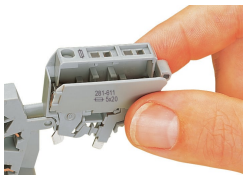
Fuse replacement:
Before replacing a fuse, pivot the fuse holder into the locked open position.



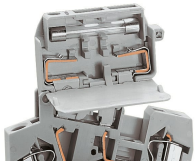
Fuse replacement:
One end of the fuse is automatically ejected from the holder when opening the cover.



Fuse replacement:
Easily removing a fuse by hand.



Fuse replacement:
Insert a new fuse and snap the cover closed.



Storing a spare fuse (fuse holder without blown fuse indication) for the types of fuses 5 x 20 mm, 5 x 25 mm und 5 x 30 mm.

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

All 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).