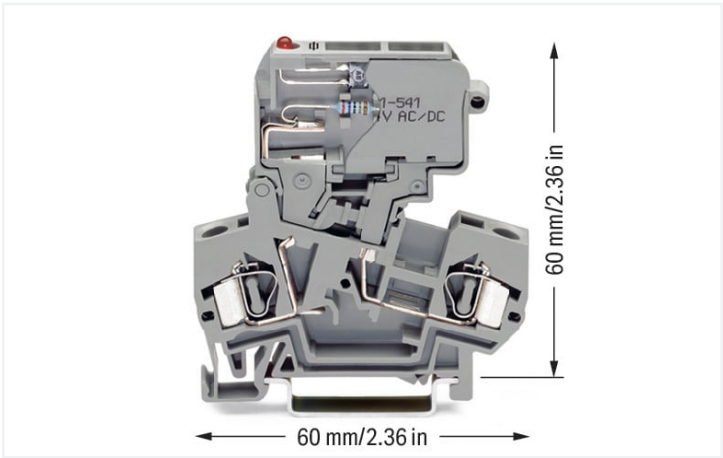
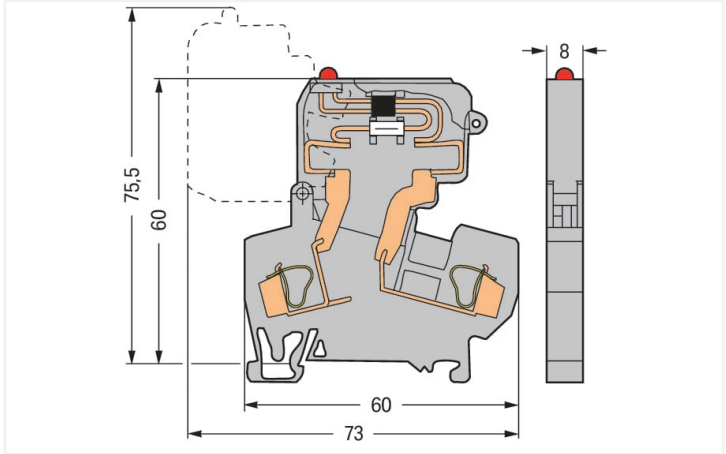
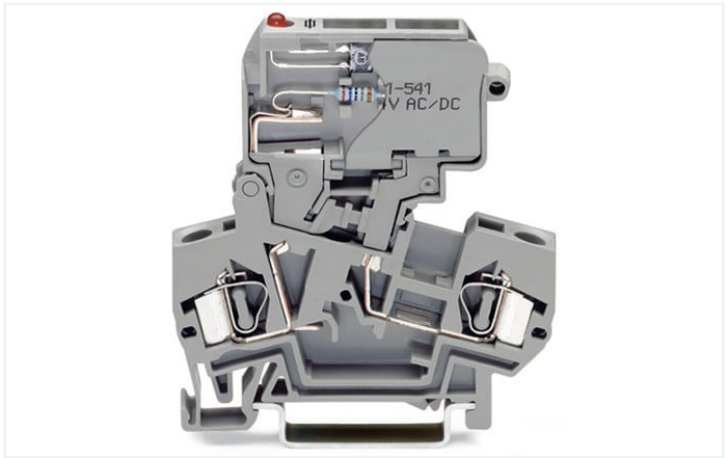
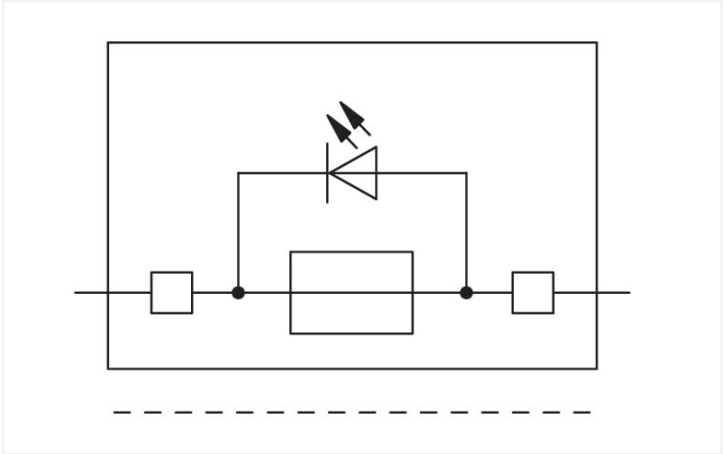


Data Sheet | Item Number: 281-611/281-541
2-conductor fuse terminal block; with pivoting fuse holder; for 5 x 20 mm miniature metric fuse; with blown fuse indication by LED; 15 - 30 V; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²; CAGE CLAMP®; 4,00 mm²; gray
<https://www.wago.com/281-611/281-541>



Color: ■ gray



Dimensions in mm

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.) $P_{I(max)}$ (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.
Power loss P_I max. overload and short-circuit protection (individual arrangement)	2.5 W
Power loss P_I max. overload and short-circuit protection (group arrangement)	1.6 W
Power loss P_I max. short-circuit protection (individual arrangement)	4 W
Power loss P_I 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)	<p>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.</p> <p>"Alu-Plus" Contact Paste Advantages:</p> <ul style="list-style-type: none">• 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. <p>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.</p> <p>It is also possible to apply WAGO "Alu-Plus" additionally on the whole surface of the aluminum conductor before termination.</p> <p>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</p>
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



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	0.327 MJ	
Weight	17.8 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	CN	
GTIN	4045454871451	
Customs tariff number	85369095000	

Environmental Product Compliance		
CAS-No.	7439-92-1	
REACH Candidate List Substance	Lead	
RoHS Compliance Status	Compliant,With Exemption	
RoHS Exemption	7(a) 7(c)-I	
SCIP notification number (Austria)	a252d32e-762d-4684-92a9-9f9ec3c78781	
SCIP notification number (Belgium)	3f270c36-4bdb-4a5f-89e0-2c2335c1ede4	
SCIP notification number (Bulgaria)	3940235b-10b0-486f-a960-b9c4675072a6	
SCIP notification number (Czech Republic)	88f698ec-8edc-4fa7-a61c-168b1e471306	
SCIP notification number (Denmark)	57237dee-e744-46cf-bf1f-d0bb344bd67b	
SCIP notification number (Finland)	3f3aebaf-410c-42cc-9adc-70817dbbd920	
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SCIP notification number (Hungary)	572dd1e8-41a3-4129-b9e2-172a1fab3300	
SCIP notification number (Italy)	cba55906-3a99-406e-bb63-ac5ef6c5cb36	
SCIP notification number (Netherlands)	d8e93525-028e-4e4f-8850-1adaddf6d49f	
SCIP notification number (Poland)	583cb765-780a-4175-9315-647d6fdbf3c9	
SCIP notification number (Romania)	b00b0598-0588-4428-bd1a-be05ae49e8a6	
SCIP notification number (Sweden)	40f6f308-a057-42f5-8924-83e5ff9ada30	



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 Confor- mity WAGO GmbH & Co. KG	-	-
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
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 281-611/281-541





Documentation

Additional Information
Technical Section

pdf
2240.62 KB



Bid Text			
281-611/281-541	19.02.2019	xml 3.60 KB	
281-611/281-541	14.03.2017	doc 25.50 KB	





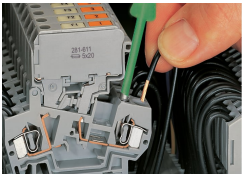
CAD/CAE-Data	
<div>CAD data</div> <div>2D/3D Models 281-611/281-541</div> <div>↓</div>	<div>CAE data</div> <div>EPLAN Data Portal 281-611/281-541</div> <div>↓</div>
	<div>WSCAD Universe 281-611/281-541</div> <div>↓</div>
	<div>ZUKEN Portal 281-611/281-541</div> <div>↓</div>

1 Compatible Products
1.1 Required Accessories
1.1.1 End plate
1.1.1.1 End plate



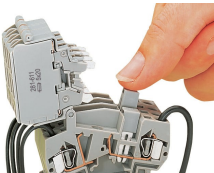
<div>Item No.: 281-311</div> <div>End and intermediate plate; 2.5 mm thick; gray</div>	<div>Item No.: 281-309</div> <div>End and intermediate plate; 2.5 mm thick; orange</div>
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Installation Notes
Conductor termination



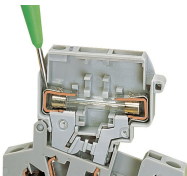
CAGE CLAMP® connection
Inserting a conductor.
With ferruled conductors, it is necessary to use a terminal block one size smaller than the conductor's nominal cross-section.

Commoning

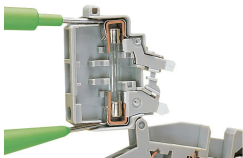


Commoning
Distributing current to several fuse-protected circuits via insulated push-in type jumpers.

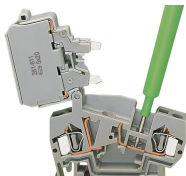
Testing



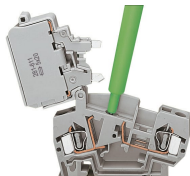
Voltage test, either at input or output with fuse holder in closed position (live)



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



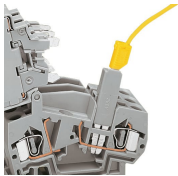
Voltage test at input in the test slot of the current bar



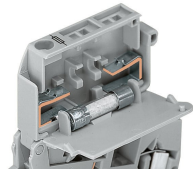
Testing voltage at the output via separate test slot.



Measuring current between jumper slot and separate test slot.

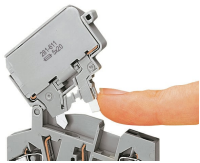


Testing voltage (input side) via test plug adapter (280-404, shown) or test plug (281-407).

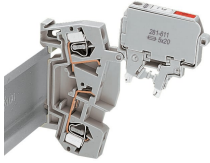


5 x 20 mm, 5 x 25 mm and 1/4" x 1" fuse holders are fitted with stops on the inside of the cover.

Security

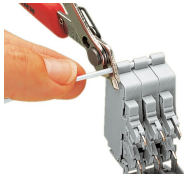


Touch-proof protection in all positions of the fuse holder



Fuse holder will remain safely locked open in vertical assemblies.

Locking system

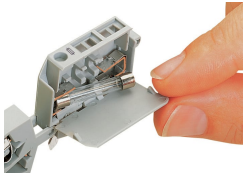


Ganging several fuse holders with an interlocking link (example shows 8 mm wide terminal blocks).

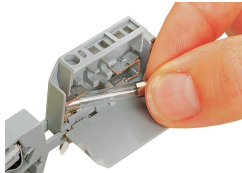
Application



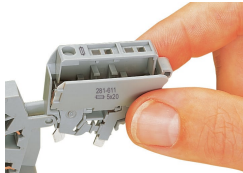
Fuse replacement:
Before replacing a fuse, pivot the fuse holder into the locked open position.



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.



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).