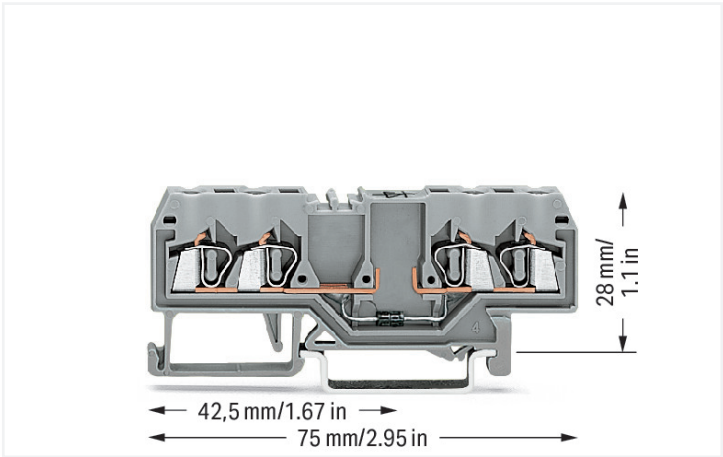
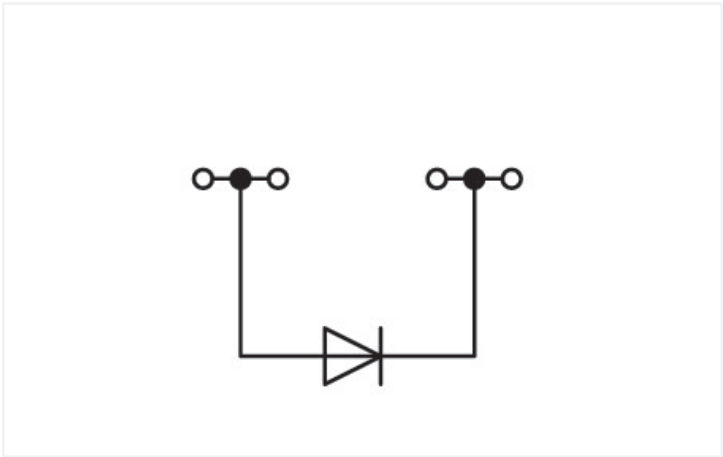
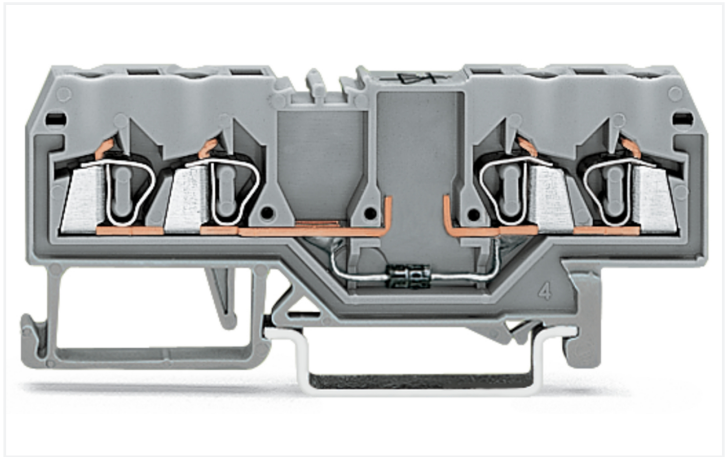


Data Sheet | Item Number: 280-815/281-410
Component terminal block; 4-conductor; with diode 1N4007; anode, left side; for
DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; CAGE CLAMP®; gray
<https://www.wago.com/280-815/281-410>



Color: ■ gray



Component terminal block with diode, 280 Series, operating tool

Enjoy fault-free electrical installations with component terminal block with diode (item number 280-815/281-410). Conductors should only be connected to component terminal block with diode if their strip length is between 8 mm and 9 mm. This product incorporates conductor terminals and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection provides a convenient and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. Component terminal block with diode is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm². It has one level. You can connect a single potential using the four clamping points. The gray housing is made of polyamide (PA66) for insulation. These function terminal blocks are mounted using DIN-35 rails.

Electrical data					General information	
Ratings per		IEC/EN 60947-7-1				
Overvoltage category	III	III	II		Nominal voltage	250 V
Pollution degree	3	2	2		Reverse voltage	1000 V
Nominal voltage	-	-	-			
Rated surge voltage	-	-	-			
Rated current	-	-	-			



Connection data		
Clamping units	4	
Total number of potentials	1	
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 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 ... 2.5 mm² / 28 ... 14 AWG	
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG	
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches	
Wiring direction	Front-entry wiring	

Physical data		
Width	5 mm / 0.197 inches	
Height	75 mm / 2.953 inches	
Depth from upper-edge of DIN-rail	28 mm / 1.102 inches	

Mechanical data		
Design	horizontal type	
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 (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.16 MJ
Weight	9.3 g

Environmental requirements	
Processing temperature	-35 ... +85 °C
Continuous operating temperature	-60 ... +105 °C

Commercial data	
Product Group	1 (Rail Mounted Terminal Blocks)
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	CN
GTIN	4050821275473
Customs tariff number	85369010000

Product classification	
UNSPSC	39121410
eCl@ss 10.0	27-14-11-27
eCl@ss 9.0	27-14-11-27
ETIM 9.0	EC000903
ETIM 8.0	EC000903
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
CAS-No.	7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	5e655896-65ff-4ac9-bbca-9cda6dcc9488
SCIP notification number (Belgium)	0e35d7f7-797f-46c5-ac76-59521804af77
SCIP notification number (Bulgaria)	ee81166f-608c-42fa-ab29-b853ddf90568
SCIP notification number (Czech Republic)	44309132-87cb-484d-94f3-9b0a79d66e60
SCIP notification number (Denmark)	59272011-393c-44bc-9866-aaa32ebd5b28
SCIP notification number (Finland)	85518523-99b9-4c1f-850b-83d7a60ab022
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SCIP notification number (Romania)	6c341a63-9636-4174-a02b-88f67fc81ce6
SCIP notification number (Sweden)	aa008298-69a4-4164-a6a9-90be910ce280



Downloads			
Environmental Product Compliance			
Compliance Search			
Environmental Product Compliance			↓
280-815/281-410			

Documentation			
Bid Text			
280-815/281-410	19.02.2019	xml 3.23 KB	↓
280-815/281-410	10.04.2017	doc 24.50 KB	↓

CAD/CAE-Data			
CAD data		CAE data	
2D/3D Models		EPLAN Data Portal	↓
280-815/281-410	↓	280-815/281-410	
		WSCAD Universe	↓
		280-815/281-410	
		ZUKEN Portal	↓
		280-815/281-410	

1 Compatible Products			
1.1 Required Accessories			
1.1.1 End plate			
1.1.1.1 End plate			
			
Item No.: 280-314 End and intermediate plate; 2.5 mm thick; gray	Item No.: 280-315 End and intermediate plate; 2.5 mm thick; orange	Item No.: 280-334 Separator plate; 2 mm thick; oversized; gray	Item No.: 280-335 Separator plate; 2 mm thick; oversized; orange

1.2 Optional Accessories			
1.2.1 DIN-rail			
1.2.1.1 Mounting accessories			
			
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	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	Item No.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored	Item No.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



1.2.1.1 Mounting accessories



Item No.: 210-506
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored



Item No.: 210-114
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



Item No.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



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; silver-colored



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; silver-colored



Item No.: 210-504
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored



Item No.: 210-113
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



Item No.: 210-505
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

1.2.2 Ferrule

1.2.2.1 Ferrule



Item No.: 216-301
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-302
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-201
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white



Item No.: 216-101
Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored



Item No.: 216-202
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-102
Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; electro-tin plated; silver-colored



Item No.: 216-203
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-103
Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated



Item No.: 216-204
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



Item No.: 216-104
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored

1.2.3 Installation

1.2.3.1 Cover



Item No.: 709-153
Cover; Type 1; suitable for cover carrier, type 1; 1 m long; transparent

1.2.3.2 Cover carrier



Item No.: 709-167
Cover carrier; Type 1; incl. fixing/retaining screws and knurled nut; suitable for 279 to 282 and 880 Series rail-mounted terminal blocks; suitable for 264 Series miniature rail-mounted terminal blocks; suitable for 270 Series sensor and actuator terminal blocks; gray



1.2.3.3 Mounting accessories



Item No.: 209-106
Mounting carrier; for isolated mounting on DIN 35 rails; gray



Item No.: 249-116
Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

1.2.4 Insulation stop

1.2.4.1 Insulation stop



Item No.: 280-470
Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white



Item No.: 280-471
Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray



Item No.: 280-472
Insulation stop; 0.75 - 1 mm²; 5 pieces/strip; black

1.2.5 Jumper

1.2.5.1 Jumper



Item No.: 280-490
Jumper; 10-way; insulated; gray



Item No.: 280-482
Jumper; 2-way; insulated; gray



Item No.: 280-492
Jumper; 2-way; insulated; gray



Item No.: 280-483
Jumper; 3-way; insulated; gray



Item No.: 280-484
Jumper; 4-way; insulated; gray



Item No.: 280-485
Jumper; 5-way; insulated; gray



Item No.: 709-110
Wire commoning chain; 2.5 mm²; insulated; black



Item No.: 709-111
Wire commoning chain; 2.5 mm²; insulated; black



Item No.: 709-112
Wire commoning chain; 2.5 mm²; insulated; black



Item No.: 210-103
Wire commoning chain; insulated; black



Item No.: 210-123
Wire commoning chain; insulated; blue

1.2.6 Marking

1.2.6.1 Group marker carrier



Item No.: 249-105
Group marker carrier; gray

1.2.6.2 Marker



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



Item No.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.2.7 Protective warning marker

1.2.7.1 Cover



Item No.: 280-415
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.2.8 Test and measurement

1.2.8.1 Testing accessories



Item No.: 249-142
L-type end module; modular; with rigid contact pin; End module; 1,50 mm²; gray



Item No.: 249-143
L-type spacer module; modular; e.g., bridging commoned terminal blocks; gray



Item No.: 249-141
L-type test plug module; modular; with spring-loaded contact pin; Center module; 1,50 mm²; gray

1.2.9 Tool

1.2.9.1 Operating tool



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



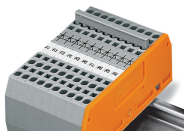
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



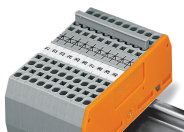
Item No.: 210-657
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

Installation Notes

Commoning



Commoning using comb-style jumper bars:
Push comb-style jumper bars down until fully inserted.



These diode terminal blocks have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits.



Polarized diode gates with a common cathode can be created using the following terminal blocks:

280-815/281-410 or 280-815/281-411