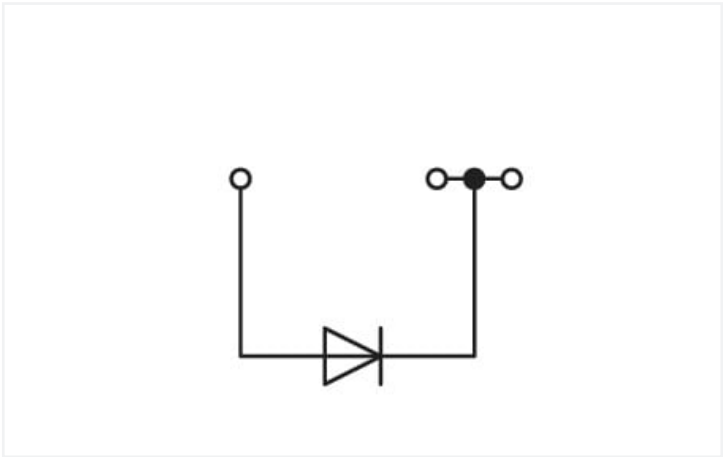


Color: ■ gray



281-673/281-410

Component terminal block with diode, 281 Series, gray

Enjoy error-free electrical installations with component terminal block with diode (item number 281-673/281-410). Strip lengths must be between 9 mm and 10 mm when connecting conductors to component terminal block with diode. This product incorporates conductor terminals and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection provides a safe 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. Depending on the conductor type, component terminal block with diode is designed for conductor cross sections ranging from 0.08 mm² to 4 mm². He features one level and three clamping points for connecting a single potential. 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	3	
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)	<p><b>Terminating Aluminum Conductors</b> WAGO Spring-Clamp Terminal Blocks are suitable for solid aluminum conductors up to 4 mm²/12 AWG if WAGO "Alu-Plus" Contact Paste <a href="#">249-130</a> is used for termination.</p> <p>"Alu-Plus" Contact Paste Advantages:</p> <ul style="list-style-type: none"><li>• Automatically destroys the oxide film during clamping.</li><li>• Prevents fresh oxidation at the clamping point.</li><li>• Prevents electrolytic corrosion between aluminum and copper conductors (in the same terminal block).</li><li>• Provides long-term protection against corrosion.</li></ul> <p>Using terminal blocks with CAGE CLAMP® Spring Pressure Connection Technology, <b>aluminum conductors must first be cleaned with a blade</b> and then immediately inserted into the clamping units filled with "Alu-Plus" contact paste.</p> <p>It is also possible to apply WAGO "Alu-Plus" <b>additionally</b> 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	6 mm / 0.236 inches	
Height	73.5 mm / 2.894 inches	
Depth from upper-edge of DIN-rail	29 mm / 1.142 inches	

Mechanical data		
Design	horizontal type	
Mounting type	DIN-35 rail	
Marking level	Center marking	



Material data	
Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.189 MJ
Weight	11.4 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	27-14-11-27
eCl@ss 9.0	27-14-11-27
ETIM 9.0	EC000903
ETIM 8.0	EC000903
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	CN
GTIN	4050821275589
Customs tariff number	85369010000

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)	1ce6ebbb-8cae-4f4f-9c15-6f287d65a1b1
SCIP notification number (Belgium)	b2cd5177-29cb-4a8f-8b8b-8482d18543ba
SCIP notification number (Bulgaria)	0531dcf6-a735-4cf2-87d8-17d08ba5eea7
SCIP notification number (Czech Republic)	a78850e0-5107-4d70-9533-2b021807030c
SCIP notification number (Denmark)	d54f900e-df57-4f67-b955-8d8cc4a7dda7
SCIP notification number (Finland)	9f9b404e-7f70-413c-a893-42aa76c90885
SCIP notification number (France)	6611b3c0-0168-4f27-b21d-da80cee23d67
SCIP notification number (Germany)	95631486-cde8-44ec-b306-c61761fd219b
SCIP notification number (Hungary)	86ad5127-47ef-421a-a65f-c45092ca5005
SCIP notification number (Italy)	0512c50a-1c37-4fd9-a720-f9d758813901
SCIP notification number (Netherlands)	24170215-fe53-409b-8f2d-572f59f91304
SCIP notification number (Poland)	3316e121-253d-453f-a15a-1de8682402c8
SCIP notification number (Romania)	49668f98-41a9-445d-ada6-bf44ced04a13
SCIP notification number (Sweden)	f520d3b9-5f43-4204-8698-c454a9ba71d8



Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947,IEC 60947	NTR NL-7454/A1
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-107288

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 281-673/281-410





Documentation

Additional Information
Technical Section

pdf  
2246.92 KB



Bid Text			
281-673/281-410	19.02.2019	xml 3.21 KB	<a href="#"></a>
281-673/281-410	27.04.2017	doc 25.00 KB	<a href="#"></a>



CAD/CAE-Data

CAD data
2D/3D Models 281-673/281-410



CAE data
EPLAN Data Portal 281-673/281-410
WSCAD Universe 281-673/281-410
ZUKEN Portal 281-673/281-410





1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



**Item No.: 281-324**  
End and intermediate plate; 2.5 mm thick; gray



**Item No.: 281-326**  
End and intermediate plate; 2.5 mm thick; orange



**Item No.: 281-344**  
Separator plate; 2 mm thick; oversized; gray



**Item No.: 281-346**  
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



**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.: 216-241**  
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



**Item No.: 216-242**  
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item No.: 216-243**  
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



**Item No.: 216-244**  
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



**Item No.: 216-246**  
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



**Item No.: 216-106**  
Ferrule; Sleeve for 2.5 mm² / AWG 14; 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.: 281-470**  
Insulation stop; 0.08 - 0.2 mm<sup>2</sup> "s" (0.14 mm<sup>2</sup> "f-st"); 5 pieces/strip; white



**Item No.: 281-471**  
Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip; light gray



**Item No.: 281-472**  
Insulation stop; 0.75 - 1.5 mm<sup>2</sup>; 5 pieces/strip; dark gray

1.2.5 Jumper

1.2.5.1 Jumper



**Item No.: 281-490**  
Jumper; 10-way; insulated; gray



**Item No.: 281-482**  
Jumper; 2-way; insulated; gray



**Item No.: 281-492**  
Jumper; 2-way; insulated; gray



**Item No.: 281-483**  
Jumper; 3-way; insulated; gray



**Item No.: 281-485**  
Jumper; 5-way; insulated; gray



**Item No.: 709-110**  
Wire commoning chain; 2.5 mm<sup>2</sup>; insulated; black



**Item No.: 709-111**  
Wire commoning chain; 2.5 mm<sup>2</sup>; insulated; black



**Item No.: 709-112**  
Wire commoning chain; 2.5 mm<sup>2</sup>; 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.: 793-5501/000-006](#)  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue



[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



[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; green



[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; light green



[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



[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



[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



[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.: 793-5501/000-002](#)  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



[Item No.: 793-501/000-006](#)  
WMB marking card; as card; not stretchable; plain; snap-on type; blue



[Item No.: 793-501/000-007](#)  
WMB marking card; as card; not stretchable; plain; snap-on type; gray



[Item No.: 793-501/000-023](#)  
WMB marking card; as card; not stretchable; plain; snap-on type; green



[Item No.: 793-501](#)  
WMB marking card; as card; not stretchable; plain; snap-on type; white



[Item No.: 793-501/000-002](#)  
WMB marking card; as card; not stretchable; plain; snap-on type; yellow



[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



[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



[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



[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



[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



[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



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



[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

1.2.7 Protective warning marker

1.2.7.1 Cover



**Item No.: 281-415**  
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.2.8 Tool

1.2.8.1 Operating tool



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



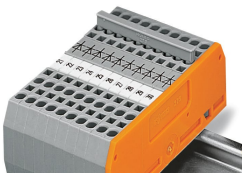
**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



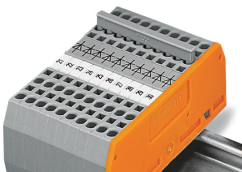
**Item No.: 210-657**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

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:  
281-673/281-410 or 281-673/281-411



