

Color: ■ red Similar to illustration Similar to illustration

Through terminal block, 279 Series, operating tool

This through terminal block (item number 279-683) is designed to connect conductors quickly and easily. Whether in industrial or building applications, our rail-mount through terminal blocks are the perfect solution to quickly and securely connect electrical conductors. Depending on the model, you can use them for either typical through-wiring or potential distribution. Our through rail-mount terminal block is rated for 800 V and is designed for use with a rated current of up to 18 A. Conductors can only be connected to this through terminal block if their strip length is between 8 mm and 9 mm. Featuring conductor terminals along with CAGE CLAMP®, this connector outperforms the competition. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. Depending on the type of conductor, this through terminal block is ideal for conductor cross sections ranging from 0.08 mm² to 1.5 mm². It features one level and three clamping points for connecting a single potential. The red housing is made of polyamide (PA66) for insulation. This through rail-mount terminal block is operated with an operating tool. These through rail-mount terminal blocks are mounted using DIN-35 rails.. The front-entry wiring allows you to connect copper conductors.

Electrical data				
Ratings per		IEC/EN 60947-7-1		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage		800 V	-	-
Rated surge voltage		8 kV	-	-
Rated current		18 A	-	-
Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		-	600 V	-
Rated current		-	10 A	-
Approvals per		CSA 22.2 No 158		
Use group		B	C	D
Rated voltage		-	600 V	-
Rated current		-	10 A	-
Power Loss				
Power loss, per pole (potential)		0.5929 W		
Rated current I _N for specified power loss		18 A		
Resistance value for specified, current-dependent power loss		0.00183 Ω		



Connection data																
Clamping units	3	<div>Connection 1</div> <table><tr><td>Connection technology</td><td>CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Operating tool</td></tr><tr><td>Connectable conductor materials</td><td>Copper</td></tr><tr><td>Solid conductor</td><td>0.08 ... 1.5 mm² / 28 ... 16 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.08 ... 1.5 mm² / 28 ... 16 AWG</td></tr><tr><td>Strip length</td><td>8 ... 9 mm / 0.31 ... 0.35 inches</td></tr><tr><td>Wiring direction</td><td>Front-entry wiring</td></tr></table>	Connection technology	CAGE CLAMP®	Actuation type	Operating tool	Connectable conductor materials	Copper	Solid conductor	0.08 ... 1.5 mm² / 28 ... 16 AWG	Fine-stranded conductor	0.08 ... 1.5 mm² / 28 ... 16 AWG	Strip length	8 ... 9 mm / 0.31 ... 0.35 inches	Wiring direction	Front-entry wiring
Connection technology	CAGE CLAMP®															
Actuation type	Operating tool															
Connectable conductor materials	Copper															
Solid conductor	0.08 ... 1.5 mm² / 28 ... 16 AWG															
Fine-stranded conductor	0.08 ... 1.5 mm² / 28 ... 16 AWG															
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches															
Wiring direction	Front-entry wiring															
Total number of potentials	1															
Number of levels	1															

Physical data		
Width		4 mm / 0.157 inches
Height		62.5 mm / 2.461 inches
Depth from upper-edge of DIN-rail		27 mm / 1.063 inches

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

Material data		
Note (material data)		Information on material specifications can be found here
Color		red
Material group		I
Insulation material (main housing)		Polyamide (PA66)
Flammability class per UL94		V0
Fire load		0.098 MJ
Weight		5.4 g




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





Commercial data		
PU (SPU)		100 pcs
Packaging type		Box
Country of origin		DE
GTIN		4044918650502
Customs tariff number		85369010000



Product classification	
UNSPSC	39121410
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 9.0	EC000897
ETIM 8.0	EC000897
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates											
General approvals		Declarations of conformity and manufacturer's declarations									
  											
Approval	Standard	Certificate Name									
CSA DEKRA Certification B.V.	C22.2 No. 158	70133738									
KEMA/KEUR DEKRA Certification B.V.	EN 60947	2160584.04									
UL Underwriters Laboratories Inc.	UL 1059	E45172									
		<table><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr><tr><td>EU-Declaration of Confor- mity WAGO GmbH & Co. KG</td><td>-</td><td>-</td></tr><tr><td>UK-Declaration of Confor- mity WAGO GmbH & Co. KG</td><td>-</td><td>-</td></tr></table>	Approval	Standard	Certificate Name	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
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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
BV Bureau Veritas S.A.	EN 60947	07436/F0 BV
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2
LR Lloyds Register	EN 60947	LR23325966TA

Downloads	
Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 279-683	



Documentation			
Bid Text			
279-683	19.02.2019	xml 3.19 KB	
279-683	28.02.2017	doc 23.50 KB	

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 279-683 	EPLAN Data Portal 279-683
	WSCAD Universe 279-683
	ZUKEN Portal 279-683

1 Compatible Products			
1.1 Required Accessories			
1.1.1 End plate			
1.1.1.1 End plate			
Item No.: 279-308 End and intermediate plate; 2 mm thick; gray	Item No.: 279-339 End and intermediate plate; 2 mm thick; orange	Item No.: 279-309 Separator plate; 2 mm thick; oversized; gray	Item No.: 279-340 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 End plate

1.2.2.1 End plate



Item No.: 284-334
Step-down cover plate; 1 mm thick; for 2-, 3- and 4-conductor terminal blocks; gray



Item No.: 284-344
Step-down cover plate; 1 mm thick; for 2-, 3- and 4-conductor terminal blocks; orange

1.2.3 Ferrule

1.2.3.1 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

1.2.4 Installation

1.2.4.1 Cover



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

1.2.4.2 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

1.2.4.3 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



1.2.5 Insulation stop

1.2.5.1 Insulation stop



[Item No.: 279-470](#)
Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white



[Item No.: 279-471](#)
Insulation stop; 0.25 mm²; 5 pieces/strip; dark gray

1.2.6 Jumper

1.2.6.1 Jumper



[Item No.: 279-490](#)
Jumper; 10-way; insulated; gray



[Item No.: 279-482](#)
Jumper; 2-way; insulated; gray



[Item No.: 279-492](#)
Jumper; 2-way; insulated; gray



[Item No.: 279-483](#)
Jumper; 3-way; insulated; gray



[Item No.: 279-402](#)
Jumper; insulated; gray



[Item No.: 279-409](#)
Jumper; insulated; gray



[Item No.: 279-422](#)
Jumper; insulated; yellow-green



[Item No.: 284-414](#)
Step-down jumper; from 284/282 to 281/280/279 series; insulated; gray

1.2.7 Marking

1.2.7.1 Double marker carrier



[Item No.: 209-128](#)
Adaptor; gray

1.2.7.2 Group marker carrier



[Item No.: 209-140](#)
Group marker carrier; gray



[Item No.: 209-141](#)
Group marker carrier; gray



[Item No.: 209-142](#)
Group marker carrier; gray



[Item No.: 249-105](#)
Group marker carrier; gray

1.2.7.3 Marker



[Item No.: 793-4501/000-006](#)
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; blue



[Item No.: 793-4501/000-014](#)
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; brown



[Item No.: 793-4501/000-007](#)
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; gray



[Item No.: 793-4501/000-023](#)
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; green



[Item No.: 793-4501/000-017](#)
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; light green



[Item No.: 793-4501/000-012](#)
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; orange



[Item No.: 793-4501/000-005](#)
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; red



[Item No.: 793-4501/000-024](#)
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; violet



[Item No.: 793-4501](#)
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; white



[Item No.: 793-4501/000-002](#)
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; yellow



[Item No.: 2009-114/000-006](#)
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; blue



[Item No.: 2009-114/000-007](#)
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; gray



1.2.7.3 Marker



Item No.: 2009-114/000-023
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; green



Item No.: 2009-114/000-012
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; orange



Item No.: 2009-114/000-005
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; red



Item No.: 2009-114/000-024
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; violet



Item No.: 2009-114
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; white



Item No.: 2009-114/000-002
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; yellow

1.2.8 Protective warning marker

1.2.8.1 Cover



Item No.: 279-415
Protective warning marker; 5-pole; with high-voltage symbol, black; yellow

1.2.9 Push-in type wire jumper

1.2.9.1 Jumper



Item No.: 249-126
Push-in type wire jumper; 0.75 mm²; insulated; 110 mm long; black



Item No.: 249-123
Push-in type wire jumper; 0.75 mm²; insulated; 180 mm long; black



Item No.: 249-127
Push-in type wire jumper; 0.75 mm²; insulated; 250 mm long; black



Item No.: 249-125
Push-in type wire jumper; insulated; 60 mm long; black

1.2.10 Test and measurement

1.2.10.1 Testing accessories



Item No.: 280-404
Test plug adapter; 5 mm wide; for test plug (2.3 mm Ø); suitable for 1.5 mm² - 4 mm² tbs; gray



Item No.: 209-170
Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm² - 10 mm² tbs; gray

1.2.11 Tool

1.2.11.1 Operating tool



Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



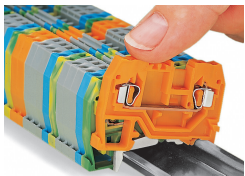
Item No.: 210-648
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short



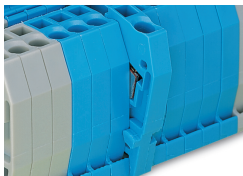
Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

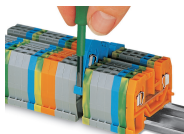
Installation



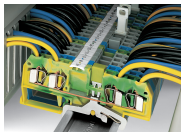
Snapping a terminal block onto the DIN-rail.



Quick assembly keys prevent reverse mounting.

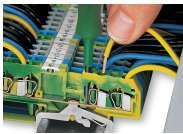


Removing a terminal block from the assembly.

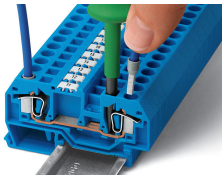


Steel DIN-rails are not suited for PEN (ground and N-conductor) applications per EN 60947-7-2 (VDE 0611, Part 3).

Conductor termination



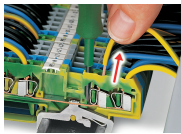
CAGE CLAMP® connection
Inserting a conductor.



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



Inserting insulation stops.

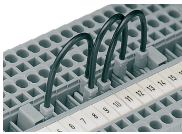


CAGE CLAMP® connection
Removing a solid conductor.

Commoning



Commoning using an adjacent jumper.
Push jumper down until fully inserted!



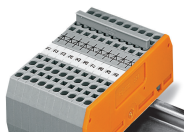
Push-In Type Wire Jumpers
When installing machines or control systems, it is often necessary to make an additional connection between two terminal blocks that are not next to each other on the rail. In such cases, WAGO's touch-proof, push-in type wire jumpers are the ideal solution.

These jumpers are compatible with the following rail-mount terminal blocks:

- 279 Series (1.5 mm²/16 AWG),
- 280/775/780 Series (2.5 mm²/14 AWG)
- 281/769/776/777/781 and 880 Series (4 mm²/12 AWG)

They are available in three conductor lengths (60, 110 and 250 mm), allowing up to 60 terminal blocks to be commoned depending on their width (see table on the right).

The 280/775/780 and 281/776/777/781 Series Terminal Blocks accept two wire jumpers, allowing the use of commoning chains. Furthermore, the 280/769/775/780/880 and 281/776/777/781 Series allow both wire jumper and adjacent jumper to be simultaneously plugged into a same terminal block.

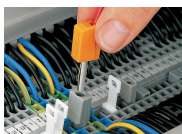


Commoning using comb-style jumper bars:
Push comb-style jumper bars down until fully inserted.



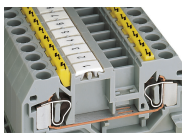
Commoning terminal blocks of different sizes via step-down jumpers.

Testing



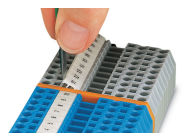
Testing with a test plug.
Picture shows a test plug adapter
(209-170).

Cover



Protective warning markers inserted into
the operating slots

Marking



Labeling via WMB Multi Marking System.