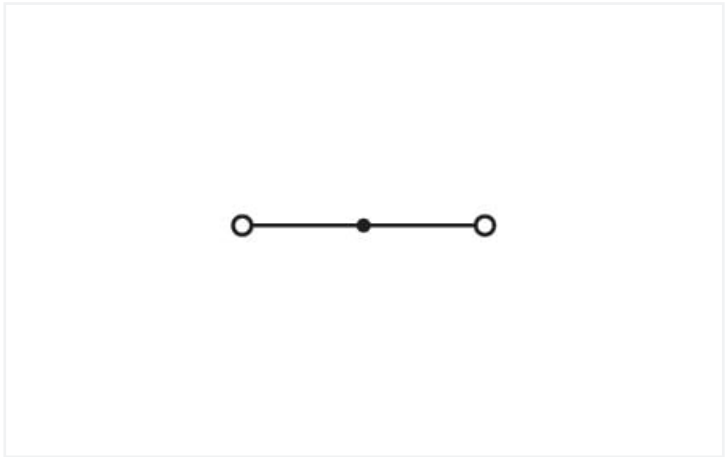
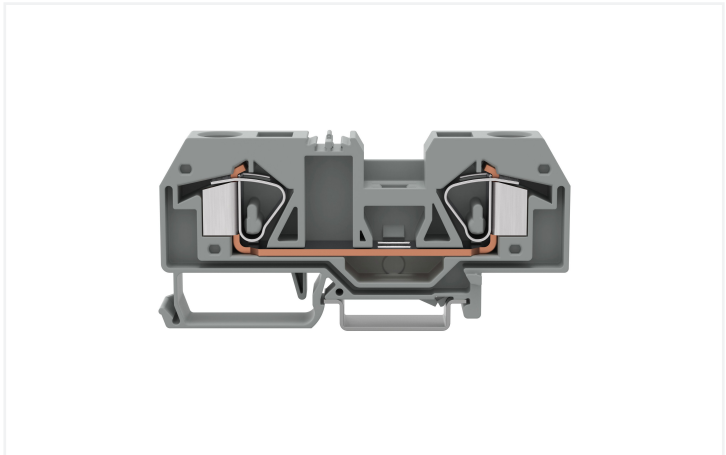
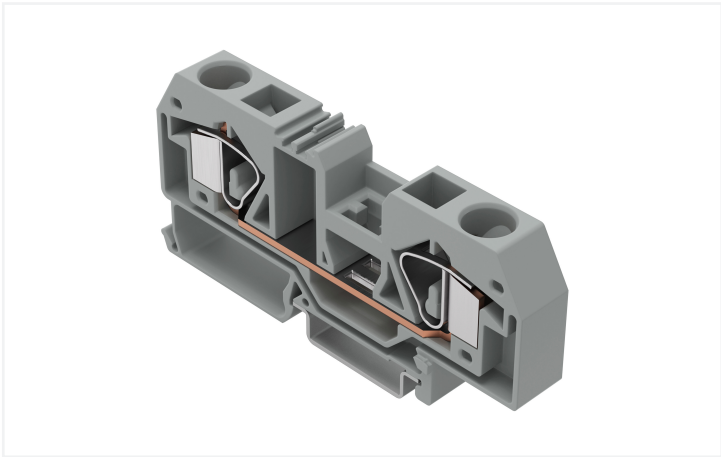


Color: ■ gray



Similar to illustration

Through terminal block, 283 Series, operating tool

Easily, quickly and safely connect conductors with this through terminal block (item number 283-901). 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 version, 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 to handle a rated current of up to 76 A. Conductors should only be connected to this through terminal block if their strip length is between 16 mm and 17 mm. This product incorporates conductor terminals and utilizes CAGE CLAMP®. Our proven universal connection known as CAGE CLAMP® is the industry standard when it comes to connection technology and electrical interconnections. This through terminal block is suitable for conductor cross sections ranging from 0.2 mm² to 16 mm². It has one level. The single potential can connect using the two clamping points. The gray housing is made of polyamide (PA66) for insulation. An operating tool is used to operate this through rail-mount terminal block. 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		76 A	-	-
Power Loss				
Power loss, per pole (potential)		2.4259 W		
Rated current I _N for specified power loss		76 A		
Resistance value for specified, current-dependent power loss		0.00042 Ω		



Connection data																		
Clamping units	2	<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>Nominal cross-section</td><td>16 mm²</td></tr><tr><td>Solid conductor</td><td>0.2 ... 16 mm² / 24 ... 6 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.2 ... 16 mm² / 24 ... 6 AWG</td></tr><tr><td>Strip length</td><td>16 ... 17 mm / 0.63 ... 0.67 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	Nominal cross-section	16 mm²	Solid conductor	0.2 ... 16 mm² / 24 ... 6 AWG	Fine-stranded conductor	0.2 ... 16 mm² / 24 ... 6 AWG	Strip length	16 ... 17 mm / 0.63 ... 0.67 inches	Wiring direction	Front-entry wiring
Connection technology	CAGE CLAMP®																	
Actuation type	Operating tool																	
Connectable conductor materials	Copper																	
Nominal cross-section	16 mm²																	
Solid conductor	0.2 ... 16 mm² / 24 ... 6 AWG																	
Fine-stranded conductor	0.2 ... 16 mm² / 24 ... 6 AWG																	
Strip length	16 ... 17 mm / 0.63 ... 0.67 inches																	
Wiring direction	Front-entry wiring																	
Total number of potentials	1																	
Number of levels	1																	

Physical data		
Width	12 mm / 0.472 inches	
Height	94.5 mm / 3.72 inches	
Depth from upper-edge of DIN-rail	37.5 mm / 1.476 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	gray	
Material group	I	
Insulation material (main housing)	Polyamide (PA66)	
Flammability class per UL94	V0	
Fire load	0.536 MJ	
Weight	35.6 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	27-14-11-20	
eCl@ss 9.0	27-14-11-20	
ETIM 9.0	EC000897	
ETIM 8.0	EC000897	
PU (SPU)	20 pcs	
Packaging type	Box	
Country of origin	DE	
GTIN	4044918297615	
Customs tariff number	85369010000	



Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7895	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CSA DEKRA Certification B.V.	C22.2 No. 158	1536072			
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-120777			
UL UL International Germany GmbH	UL 1059	E45172			

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

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 283-901	

Documentation

Additional Information			Bid Text		
Technical Section	pdf 2246.92 KB		283-901	19.02.2019	xml 3.18 KB
			283-901	28.02.2017	doc 24.50 KB



CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 283-901	EPLAN Data Portal 283-901
	WSCAD Universe 283-901
	ZUKEN Portal 283-901

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate


1.1.1.1 End plate

			
Item No.: 283-325 End and intermediate plate; 2.5 mm thick; gray	Item No.: 283-328 End and intermediate plate; 2.5 mm thick; orange	Item No.: 283-326 Separator plate; 2 mm thick; oversized; gray	Item No.: 283-329 Separator plate; 2 mm thick; oversized; orange
			
Item No.: 283-357 Step-down cover plate; 1 mm thick; only for 2-conductor 283-901 terminal block; gray	Item No.: 283-367 Step-down cover plate; 1 mm thick; only for 2-conductor 283-901 terminal block; orange		

1.2 Optional Accessories









1.2.1 Cover

1.2.1.1 Cover


Item No.: 283-400 Finger guard; touchproof cover protects unused conductor entries; yellow

1.2.2 DIN-rail

1.2.2.1 Mounting accessories

			
Item No.: 210-196 Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored	Item No.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; copper-colored	Item No.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; 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; slopped; similar to EN 60715; silver-colored
			
Item No.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; 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; unslopped; similar to EN 60715; silver-colored	Item No.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored	Item No.: 210-115 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; according to EN 60715; \"Hole width 18 mm; silver-colored



1.2.2.1 Mounting accessories



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; unslopped; according to EN 60715; silver-colored



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

1.2.3 Ferrule

1.2.3.1 Ferrule



Item No.: 216-284
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.: 216-289
Ferrule; Sleeve for 10 mm² / AWG 8; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-286
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.: 216-287
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-288
Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow

1.2.4 Installation

1.2.4.1 Cover



Item No.: 709-154
Cover; Type 2; suitable for cover carrier, type 2; 1 m long; transparent

1.2.4.2 Cover carrier



Item No.: 709-168
Cover carrier; Type 2; incl. fixing/retaining screws and knurled nut; suitable for 283 to 285 Series rail-mounted terminal blocks; suitable for 279 to 281 Series double- and triple-deck terminal blocks; suitable for 780 to 785, 775, 776 and 777 Series TOP-JOB® rail-mounted terminal blocks; suitable for 280 Series sensor and actuator terminal blocks; suitable for 282 Series disconnect/test terminal blocks for transformer circuits; 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 Jumper

1.2.5.1 Jumper



Item No.: 283-402
Jumper; insulated; gray

Item No.: 283-409
Jumper; insulated; gray

Item No.: 285-435
Jumper; insulated; gray

Item No.: 283-422
Jumper; insulated; yellow-green



Item No.: 283-414
Step-down jumper; from 283 to 281 series; insulated; gray

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.: 793-501/000-017
WMB marking card; as card; not stretchable; plain; snap-on type; light green



Item No.: 793-501/000-012
WMB marking card; as card; not stretchable; plain; snap-on type; orange



Item No.: 793-501/000-005
WMB marking card; as card; not stretchable; plain; snap-on type; red



Item No.: 793-501/000-024
WMB marking card; as card; not stretchable; plain; snap-on type; violet



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 Power tap

1.2.7.1 Power tap



Item No.: 283-407
Power tap; with 500 mm cable; for 16 mm² (283/783 Series) and 35 mm²; gray

1.2.8 Protective warning marker

1.2.8.1 Cover



Item No.: 283-415
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.2.9 Test and measurement

1.2.9.1 Testing accessories



Item No.: 283-404
Test plug adapter; 11.6 mm wide; for 4 mm Ø test plugs; gray

1.2.10 Tool

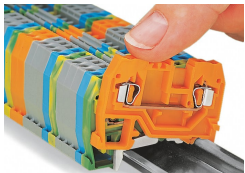
1.2.10.1 Operating tool



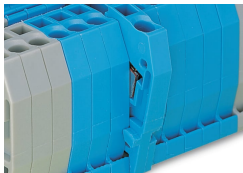
Item No.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

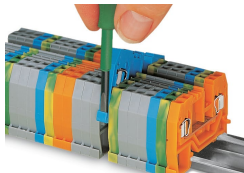
Installation



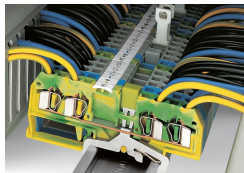
Snapping a terminal block onto the DIN-rail.



Quick assembly keys prevent reverse mounting.



Removing a terminal block from the assembly.

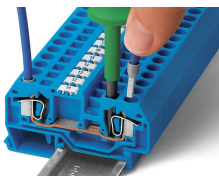


Steel DIN-rails are not suited for PEN (ground and N-conductor) applications per EN 60947-7-2 (VDE 0611, Part 3).

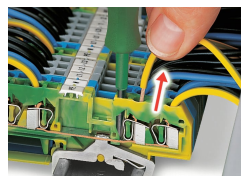
Conductor termination



CAGE CLAMP® connection
Inserting a conductor.

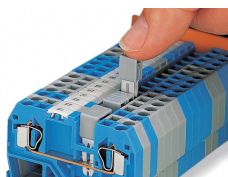


CAGE CLAMP® connection
Inserting a conductor.
With ferruled conductors, it is necessary to use a terminal block one size larger than the conductor's nominal cross-section.

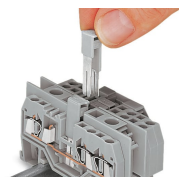


CAGE CLAMP® connection
Removing a solid conductor.

Commoning

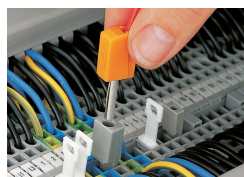


Commoning using an adjacent jumper.
Push jumper down until fully inserted!



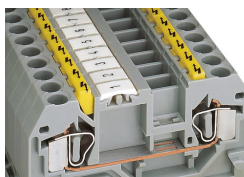
Commoning terminal blocks of different sizes via step-down jumpers.

Testing

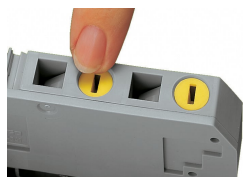


Testing with a test plug.
Picture shows a test plug adapter (209-170).

Cover

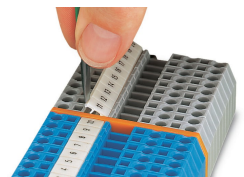


Protective warning markers inserted into the operating slots



Finger guard seals an unused conductor entry.

Marking



Labeling via WMB Multi Marking System.