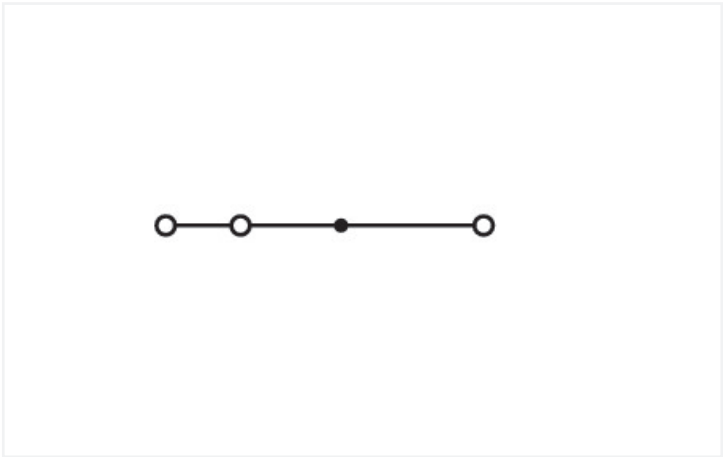
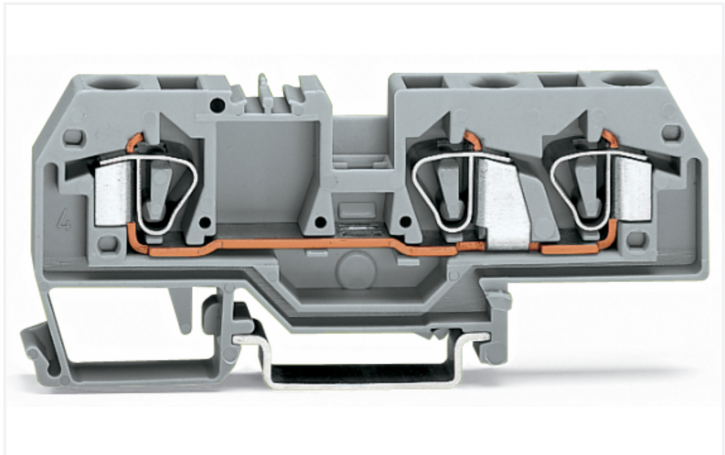


Color: ■ gray



Similar to illustration

Through terminal block, 282 Series, operating tool

Easily, quickly and safely connect conductors with this through terminal block (item number 282-681). Whether for use in industry or building installations, our rail-mount through terminal blocks make it easy to quickly and securely connect electrical conductors. They're perfect for either classic through-wiring or distributing potential, depending on the variant. Our through rail-mount terminal block is rated for 800 V and is designed for use with a rated current of up to 41 A. Conductors can only be connected to this through terminal block if their strip length is between 12 mm and 13 mm. This product features conductor terminals and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection offers 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 type of conductor, this through terminal block is designed for conductor cross sections ranging from 0.2 mm² to 6 mm². It has one level. You can connect a single potential using the three 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.. Conductors made of copper can be connected thanks to front-entry wiring.

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		41 A	-	-
Power Loss				
Power loss, per pole (potential)		1.3112 W		
Rated current I <sub>N</sub> for specified power loss		41 A		
Resistance value for specified, current-dependent power loss		0.00078 Ω		

Physical data	
Width	8 mm / 0.315 inches
Height	93 mm / 3.661 inches
Depth from upper-edge of DIN-rail	32.5 mm / 1.28 inches

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	0.335 MJ
Weight	21.4 g

Commercial data	
Product Group	1 (Rail Mounted Terminal Blocks)
PU (SPU)	25 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918386098
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
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7894
CSA DEKRA Certification B.V.	C22.2 No. 158	1505033
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-120778
UL UL International Germany GmbH	UL 1059	E45172
		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	EN 60947	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 282-681	



Documentation

Bid Text			
282-681	19.02.2019	xml 3.18 KB	
282-681	28.02.2017	doc 24.00 KB	

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 282-681	EPLAN Data Portal 282-681
	WSCAD Universe 282-681
	ZUKEN Portal 282-681

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate

<b>Item No.: 282-308</b> End and intermediate plate; 2.5 mm thick; gray	<b>Item No.: 282-339</b> End and intermediate plate; 2.5 mm thick; orange	<b>Item No.: 282-309</b> Separator plate; 2 mm thick; oversized; gray	<b>Item No.: 282-340</b> Separator plate; 2 mm thick; oversized; orange
<b>Item No.: 282-358</b> Step-down cover plate; 1 mm thick; in connection with 3-conductor 282-681 terminal blocks; gray	<b>Item No.: 282-368</b> Step-down cover plate; 1 mm thick; in connection with 3-conductor 282-681 terminal blocks; orange		

1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 Mounting accessories

<b>Item No.: 210-196</b> Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored	<b>Item No.: 210-198</b> Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; copper-colored	<b>Item No.: 210-508</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; galvanized; similar to EN 60715; silver-colored	<b>Item No.: 210-197</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; similar to EN 60715; silver-colored
<b>Item No.: 210-506</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; galvanized; similar to EN 60715; silver-colored	<b>Item No.: 210-114</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored	<b>Item No.: 210-118</b> Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored	<b>Item No.: 210-115</b> 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



1.2.1.1 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

1.2.2 Ferrule

1.2.2.1 Ferrule



**Item No.: 216-262**  
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.: 216-263**  
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.: 216-264**  
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.: 216-266**  
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.: 216-267**  
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

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 Jumper

1.2.4.1 Jumper



Item No.: 282-402  
Jumper; insulated; gray



Item No.: 282-409  
Jumper; insulated; gray



Item No.: 282-424  
Jumper; insulated; orange



Item No.: 282-422  
Jumper; insulated; yellow-green



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



Item No.: 284-413  
Step-down jumper; from 284/282 to 282/281 series; 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

1.2.5 Marking

1.2.5.1 Group marker carrier



Item No.: 209-143  
Group marker carrier; gray



Item No.: 209-144  
Group marker carrier; gray



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

1.2.5.2 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.: 793-5501/000-014  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; brown



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-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



Item No.: 793-501/000-002  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; 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

1.2.5.2 Marker



**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

1.2.6 Protective warning marker

1.2.6.1 Cover



**Item No.: 282-415**  
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.2.7 Test and measurement

1.2.7.1 Testing accessories



**Item No.: 709-311**  
B-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray



**Item No.: 709-310**  
B-type test plug module; modular; suitable for all WAGO 282 Series rail-mounted terminal blocks with jumper slots; 6,00 mm²; 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

1.2.8 Tool

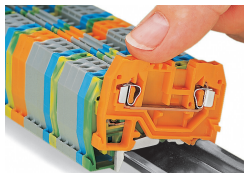
1.2.8.1 Operating tool



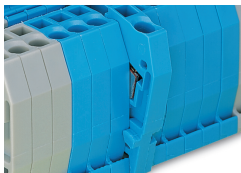
**Item No.: 210-721**  
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

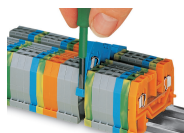
Installation



Snapping a terminal block onto the DIN-rail.



Quick assembly keys prevent reverse mounting.

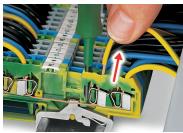
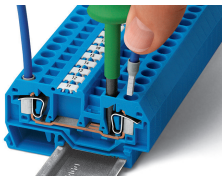


Removing a terminal block from the assembly.



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

Conductor termination

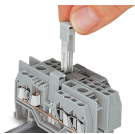


**CAGE CLAMP® connection**  
Inserting a conductor.

**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.

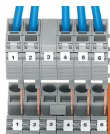
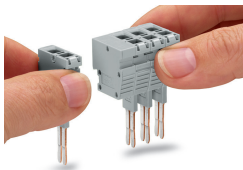
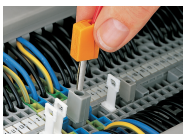
Commoning



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

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

Testing

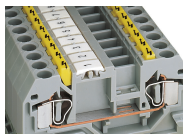


Testing with a test plug.  
Picture shows a test plug adapter (209-170).

Snapping test plug and spacer modules together to assemble a multi-pole test plug module (max. 10 poles) for 8 mm terminal block width.

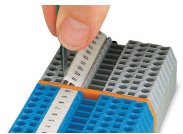
Test plug modules are directly plugged into the jumper contact slot of the current bar (picture shows 282 Series).

Cover



Protective warning markers inserted into the operating slots

Marking



Labeling via WMB Multi Marking System.