

Color: ■ gray

Through terminal block, 283 Series, CAGE CLAMP®

Connecting conductors is quick and easy with this through terminal block (item number 283-601). 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 76 A. Ensure that the strip lengths are between 16 mm and 17 mm when connecting conductors to this through terminal block. Featuring conductor terminals along with CAGE CLAMP®, this connector delivers reliable performance. Our tried-and-tested universal connection known as CAGE CLAMP® is industry-leading when it comes to connection technology and electrical interconnections. Depending on the type of conductor, this through terminal block is ideal for conductor cross sections ranging from 0.2 mm<sup>2</sup> to 16 mm<sup>2</sup>. It features one level and two clamping points that you can use to connect a single potential. 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			Power Loss	
Overvoltage category	III	III	II	Power loss, per pole (potential)	2.4259 W
Pollution degree	3	2	2	Rated current I <sub>N</sub> for specified power loss	76 A
Nominal voltage	800 V	-	-	Resistance value for specified, current-dependent power loss	0.00042 Ω
Rated surge voltage	8 kV	-	-		
Rated current	76 A	-	-		

Connection data

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



Physical data	
Width	12 mm / 0.472 inches
Height	80 mm / 3.15 inches
Depth from upper-edge of DIN-rail	37.5 mm / 1.476 inches

Mechanical data	
Design	horizontal type
Mounting type	DIN-35 rail
Marking level	Side 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	0.468 MJ
Weight	31.8 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)	25 pcs
Packaging type	Box
Country of origin	CN
GTIN	4050821413134
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



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7895
CSA DEKRA Certification B.V.	C22.2 No. 158	1536072
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-120777
UR UL International Germany GmbH	UL 1059	E45172

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-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

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 283-601



CAD/CAE-Data

CAD data
2D/3D Models 283-601



CAE data
EPLAN Data Portal 283-601
WSCAD Universe 283-601
ZUKEN Portal 283-601





1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



**Item No.: 283-316**  
End and intermediate plate; 4 mm thick; gray



**Item No.: 283-334**  
Step-down cover plate; 1 mm thick; only for 2-conductor 283-601 terminal block; gray



**Item No.: 283-317**  
End and intermediate plate; 4 mm thick; orange



**Item No.: 283-336**  
Step-down cover plate; 1 mm thick; only for 2-conductor 283-601 terminal block; orange



**Item No.: 283-337**  
Separator plate; 2 mm thick; oversized; gray



**Item No.: 283-327**  
Separator plate; 2 mm thick; oversized; 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; unslotted; 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.: 210-112**  
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.: 210-198**  
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored



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



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



**Item No.: 210-508**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored



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



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



**Item No.: 210-197**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



**Item No.: 210-115**  
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.: 210-505**  
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

1.2.3 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 TOPJOB® 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 mm<sup>2</sup> (283/783 Series) and 35 mm<sup>2</sup>; 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

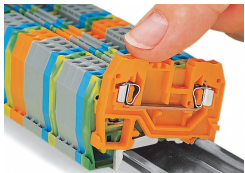
1.2.10.1 Operating tool



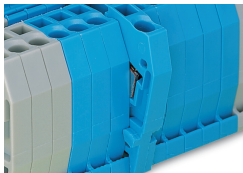
**Item No.: 210-721**  
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

Installation



Snapping a terminal block onto the DIN-rail.



Quick assembly keys prevent reverse mounting.

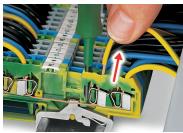
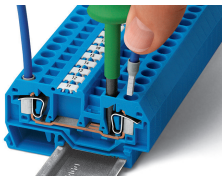


Removing a terminal block from the assembly.



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

Conductor termination

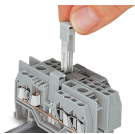


**CAGE CLAMP® connection**  
Inserting a conductor.

**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.

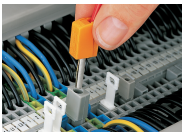
Commoning



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

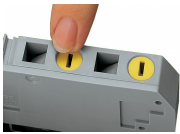
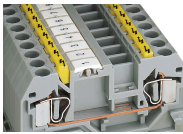
Commoning terminal blocks of different sizes via step-down jumpers.

Testing



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

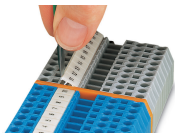
Cover



Protective warning markers inserted into the operating slots

Finger guard seals an unused conductor entry.

Marking



Labeling via WMB Multi Marking System.