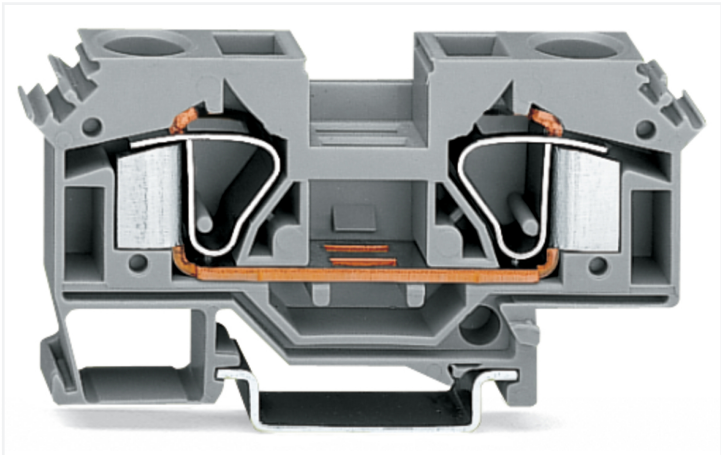


Data Sheet | Item Number: 283-691

2-conductor through terminal block; 16 mm²; suitable for Ex e II applications; lateral marker slots; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 16,00 mm²; light gray

<https://www.wago.com/283-691>



Color: ■ light gray Similar to illustration

Through terminal block, 283 Series, light gray

Our through terminal block (item number 283-691) makes connecting wires quick and easy. Whether for industrial or building applications, you can use our through terminal blocks to connect electrical conductors quickly and safely. We offer variants for both classic through-wiring and potential distribution. Strip lengths must be between 16 mm and 17 mm when connecting conductors to this through terminal block. This product features conductor terminals and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection offers a reliable 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. This through terminal block is suitable for conductor cross sections ranging from 0.2 mm² to 16 mm². It comes with one level and two clamping points for connecting a single potential. The light 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 via front-entry wiring.

Electrical data					Ex information	
Ratings per		IEC/EN 60947-7-1				
Overvoltage category		III	III	II	Reference hazardous areas	See application instructions in section "Knowledge and Downloads – Documentation – Additional Information: Technical Section; Technical Explanations"
Pollution degree		3	2	2		
Nominal voltage		-	-	-		
Rated surge voltage		-	-	-	Rated voltage EN (Ex e II)	550 V
Rated current		-	-	-	Rated current (Ex e II)	72 A

Power Loss	
Power loss, per pole (potential)	2.1773 W
Rated current I _N for specified power loss	72 A
Resistance value for specified, current-dependent power loss	0.00042 Ω



Connection data		
Clamping units	2	Connection 1
Total number of potentials	1	
Number of levels	1	
		Connection 1

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)		Information on material specifications can be found here
Color		light gray
Material group		I
Insulation material (main housing)		Polyamide (PA66)
Flammability class per UL94		V0
Fire load		0.465 MJ
Weight		31.4 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		27-14-11-20
eCl@ss 9.0		27-14-11-20
ETIM 9.0		EC000897
ETIM 8.0		EC000897
PU (SPU)		25 pcs
Packaging type		Box
Country of origin		DE
GTIN		4044918308229
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	ATEX-Attestation of Con- formity WAGO GmbH & Co. KG	-	-
CSA DEKRA Certification B.V.	C22.2 No. 158	1536072	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-120777			
UR UL International Germany GmbH	UL 1059	E45172			

Approvals for marine applications			Approvals for hazardous areas		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	20-HG1941090-PDA	AEx UL International Germany GmbH c/o Physikalisch Technische Bundesanstalt	UL 60079	E185892 (AEx e II resp. Ex e II)
BV Bureau Veritas S.A.	EN 60947	07436/F0 BV	ATEX Physikalisch Technische Bundesanstalt (PTB)	-	PTB 98 ATEX 3132 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb)
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2	CCC CNEX	GB/T 3836.3	2020312313000232 (Ex eb IIC Gb, Ex eb I Mb)
			IECEx Physikalisch Technische Bundesanstalt	IEC 60079-0	IECEx PTB 03.0004U (Ex eb IIC Gb or Ex eb I Mb)

Downloads	
Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 283-691	



Documentation		
Additional Information		
Technical Section	pdf 2246.92 KB	

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 283-691	EPLAN Data Portal 283-691
	WSCAD Universe 283-691
	ZUKEN Portal 283-691

1 Compatible Products
1.1 Required Accessories
1.1.1 End plate
1.1.1.1 End plate



Item No.: 283-318
End and intermediate plate; 4 mm thick; light gray



Item No.: 283-338
Separator plate; 2 mm thick; oversized; light gray

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
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1.2.6 Marking

1.2.6.1 Group marker carrier



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

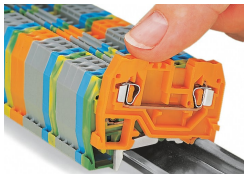
1.2.9.1 Operating tool



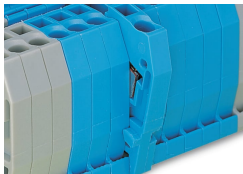
Item No.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

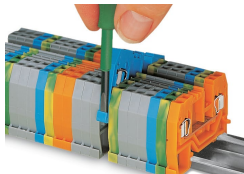
Installation



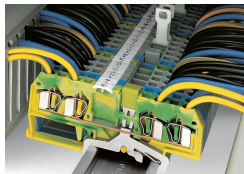
Snapping a terminal block onto the DIN-rail.



Quick assembly keys prevent reverse mounting.

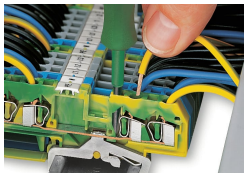


Removing a terminal block from the assembly.

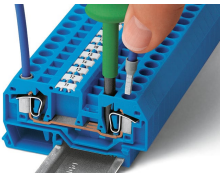


Steel DIN-rails are not suited for PEN (ground and N-conductor) applications per EN 60947-7-2 (VDE 0611, Part 3).

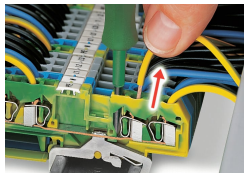
Conductor termination



CAGE CLAMP® connection
Inserting a conductor.

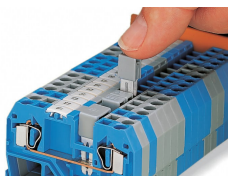


CAGE CLAMP® connection
Inserting a conductor.
With ferruled conductors, it is necessary to use a terminal block one size larger than the conductor's nominal cross-section.



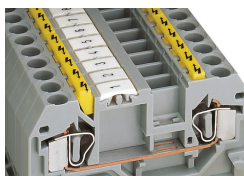
CAGE CLAMP® connection
Removing a solid conductor.

Commoning

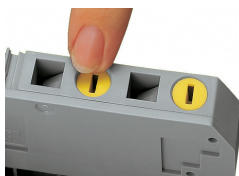


Commoning using an adjacent jumper.
Push jumper down until fully inserted!

Cover

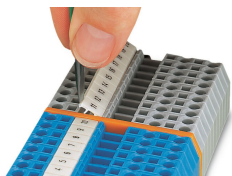


Protective warning markers inserted into the operating slots



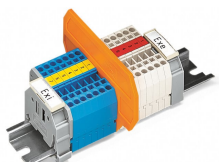
Finger guard seals an unused conductor entry.

Marking



Labeling via WMB Multi Marking System.

Ex application



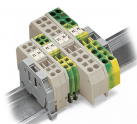
Separator plate for Ex e/Ex i applications

According to EN 50020, a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. The use of Ex e/Ex i separators is a space-saving solution when Ex e and Ex i terminal blocks are mounted on a common DIN-rail.

For 279 ... 282 Series:

209-190 for 2-conductor terminal blocks

209-191 for 2-, 3-, 4-conductor terminal blocks



End and intermediate plate

In order to meet creepage and clearance requirements for Ex e applications, it is necessary to insert an end or intermediate plate between a through and a ground conductor terminal block.