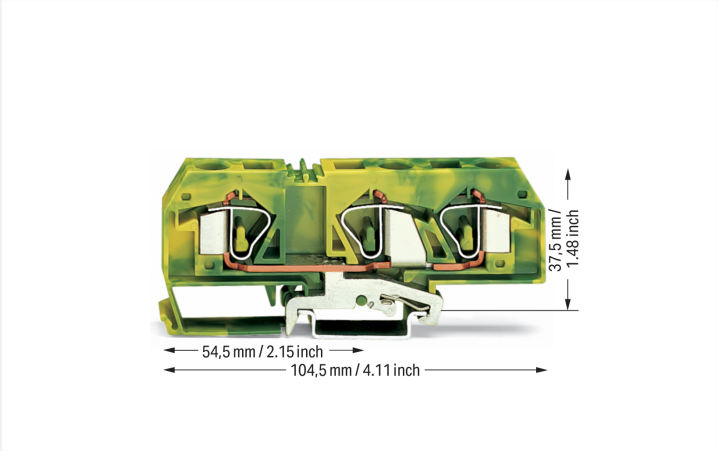
Data Sheet | Item Number: 283-677/999-950

3-conductor ground terminal block; 16 mm²; suitable for Ex e II applications; center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 16,00 mm²; green-yellow

https://www.wago.com/283-677/999-950

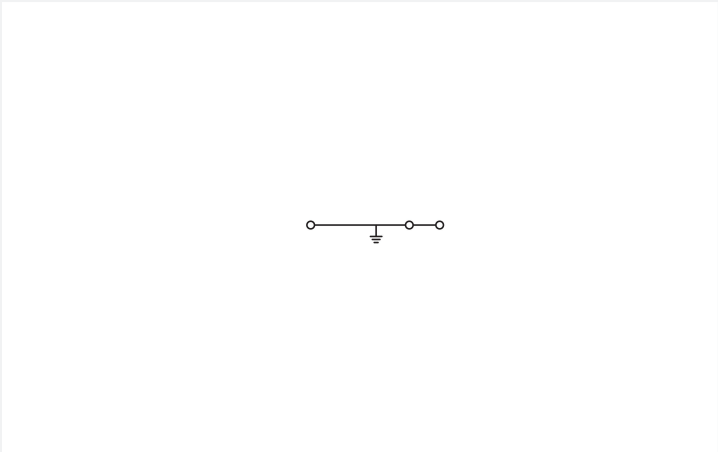


Color: green-yellow

Similar to illustration



Similar to illustration



Similar to illustration

Ground terminal block, 283 Series, green-yellow

This ground terminal block (item number 283-677/999-950) is designed to connect conductors quickly and easily. Strip lengths must be between 16 and 17 mm when connecting conductors to this ground terminal block. WAGO's ground terminal blocks allow you to connect electrical conductors directly to the mounting rail thanks to an integrated contact foot. This connection ensures both electrical and mechanical stability between the conductors and the mounting adapter. This product features conductor terminals and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection provides a secure 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 ground terminal block is suitable for conductor cross sections ranging from 0.2 mm² to 16 mm².

An operating tool is used to operate this through rail-mount terminal block.

Notes

Safety Information	Notice: This (ground) earth conductor terminal block cannot be commoned with adjacent jumpers.

Electrical data

Ratings per IEC/EN 60947-7-2

Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	-	-	-
Rated impulse withstand voltage	-	-	-
Rated current	-	-	-

Ex information

Reference to hazardous areas	See application instructions in section “Knowledge and Downloads – Documentation – Additional Information: Technical Section; Technical Explications”

General information

Wiring direction	Front-entry wiring

Connection Data

Clamping units	3
Total number of potentials	1
Number of levels	1

Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper
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

Physical data

Width	12 mm / 0.472 inches
Height	104.5 mm / 4.114 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	Center marking

Material data

Note (material data)	Information on material specifications can be found here
Color	green-yellow
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.519 MJ
Weight	57.3 g

Continued on next page

Environmental requirements

Processing temperature	-35 … +85 °C
Continuous operating temperature	-60 … +105 °C

Commercial data

PU (SPU)	20 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454089139
Customs tariff number	85369010000

Product Classification

UNSPSC	39121410
eCl@ss 10.0	27-14-11-41
eCl@ss 9.0	27-14-11-41
ETIM 9.0	EC000901
ETIM 10.0	EC000901
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

CAS-No.	7439-92-1
REACH Candidate List Substance	Lead
RoHS Compliance Status	Compliant,No Exemption
SCIP notification number (Austria)	75f75a9d-582b-4e89-a3b2-7174f9e06477
SCIP notification number (Belgium)	e3a487b4-2c9e-4816-bf5d-db3ade4a7a33
SCIP notification number (Bulgaria)	f8ea226b-b05f-400e-b2fd-87189fb74e84
SCIP notification number (Czech Republic)	0f554cf5-87a0-4b4c-ad6a-7933dcaf6fb0
SCIP notification number (Denmark)	2fce8ef2-cf97-431b-9d12-badaab605ca1
SCIP notification number (Finland)	3c5bd4a0-b00f-4307-87bb-c1cd4c5f12dc
SCIP notification number (France)	ab8170c8-7933-47bf-8c73-cefe254469d7
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SCIP notification number (Hungary)	84091510-55ee-4145-a068-c2494faa8a30
SCIP notification number (Italy)	7ccc688c-020e-4116-9e15-696e1c5c3246
SCIP notification number (Netherlands)	645c7724-62e1-4183-bdb7-33c4fe42e5e2
SCIP notification number (Poland)	135d6091-a3ca-414c-a7f3-0fa6580550ba
SCIP notification number (Romania)	03937ac5-752c-49e9-a25d-88150721c975
SCIP notification number (Sweden)	0fc4d399-631d-4db4-946b-5964168b0450

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
UL Underwriters Laboratories Inc.	UL 1059	20190731-E45172

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
ATEX-Attestation of Conformity WAGO GmbH & Co. KG	-	-
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Continued on next page

Approvals for marine applications

Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	24-0152298-PDA
BV Bureau Veritas S.A.	EN 60947	07436/G0 BV
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
PRS Polski Rejestr Statków	-	TE/1094/880590/23

Approvals for hazardous areas

Approval	Standard	Certificate Name
AEx UL International Germany GmbH c/o Physikalisch Technische Bundesanstalt	UL 60079	E185892 (AEx e II resp. Ex e II)
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)
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
283-677/999-950

Documentation

Bid Text

283-677/999-950	19.02.2019	xml 3.10 KB
283-677/999-950	28.02.2017	doc 24.50 KB

CAD/CAE-Data

CAD data

2D/3D Models
283-677/999-950

CAE data

EPLAN Data Portal
283-677/999-950

WSCAD Universe
283-677/999-950

ZUKEN Portal
283-677/999-950

Continued on next page

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



Item No.: 283-354
End and intermediate plate; 2.5 mm thick; light gray



Item No.: 283-355
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; 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

1.2.3 Installation

1.2.3.1 Cover



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

1.2.3.2 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

1.2.3.3 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 Marking

1.2.4.1 Group marker carrier



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

1.2.4.2 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

Continued on next page

1.2.4.2 Marker



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

1.2.5 Protective warning marker

1.2.5.1 Cover



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

1.2.6 Tool

1.2.6.1 Operating tool



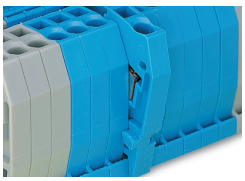
Item No.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

Installation



Snapping a ground conductor block onto the DIN-rail automatically makes a direct electrical connection to the rail.

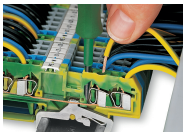


Quick assembly keys prevent reverse mounting.

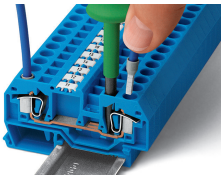


Removing a terminal block from the assembly.

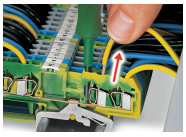
Conductor termination



CAGE CLAMP® connection
Inserting a conductor.



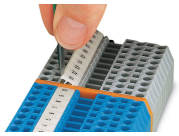
CAGE CLAMP® connection
Inserting a conductor.
With ferruled conductors, it is necessary to use a terminal block one size larger than the conductor's nominal cross-section.



CAGE CLAMP® connection
Removing a solid conductor.

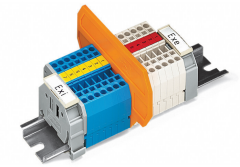
Continued on next page

Marking

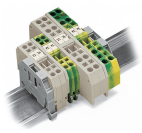


Labeling via WMB Multi Marking System.

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.