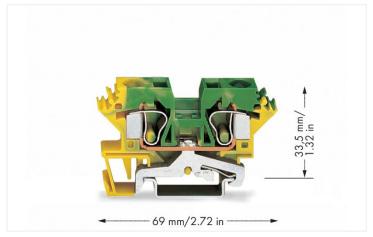
2-conductor ground terminal block; 10 mm $^2$ ; suitable for Ex e II applications; lateral marker slots; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP $^0$ ; 10,00 mm $^2$ ; greenvellow



https://www.wago.com/284-607/999-950





Color: green-yellow

Similar to illustration

Similar to illustration

#### Ground terminal block, 284 Series, operating tool

Our ground terminal block (item number 284-607/999-950) ensures effortless electrical installations. Ground terminal blocks connect directly to the mounting rail via an integrated contact foot. This creates an electrical and mechanical connection between the electrical conductors and the mounting adapter. Ensure that the strip lengths are between 12 mm and 13 mm when connecting conductors to this ground terminal block. Featuring conductor terminals along with CAGE CLAMP®, this connector outperforms the competition. 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. Depending on the conductor type, this ground terminal block is suitable for conductor cross sections ranging from 0.2 mm² to 10 mm². It comes with one level and two clamping points for connecting a single potential. The green-yellow housing is made of polyamide (PA66) for insulation. This through rail-mount terminal block is operated with an operating tool. 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					
Ratings per	IEC	'EN 60947-	7-2	Ex information	
Overvoltage category	III	III	II	Reference hazardous areas	See application instructions in section
Pollution degree	3	2	2		"Knowledge and Downloads – Documentation – Additio- nal Information: Technical Section; Tech-
Nominal voltage	-	-	-		
Rated surge voltage	-	-	-		nical Explications"
Rated current	-	-	-		

onnection 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 10 mm² / 24 8 AWG
		Fine-stranded conductor	0.2 10 mm² / 24 8 AWG
		Strip length	12 13 mm / 0.47 0.51 inches
		Wiring direction	Front-entry wiring

https://www.wago.com/284-607/999-950



#### Physical data

Width10 mm / 0.394 inchesHeight69 mm / 2.717 inchesDepth from upper-edge of DIN-rail33.5 mm / 1.319 inches

#### Mechanical data

Designhorizontal typeMounting typeDIN-35 railMarking levelSide marking

#### Material data

Note (material data)

Information on material specifications can be found here

Color green-yellow

Material group

Insulation material (main housing) Polyamide (PA66)

Flammability class per UL94 V0
Fire load 0.24 MJ
Weight 26.8 g

#### **Environmental requirements**

Processing temperature  $-35 \dots +85 \,^{\circ}\text{C}$ Continuous operating temperature  $-60 \dots +105 \,^{\circ}\text{C}$ 

#### Commercial data

1 (Rail Mounted Terminal Blocks) **Product Group** eCl@ss 10.0 27-14-11-41 eCl@ss 9.0 27-14-11-41 ETIM 9.0 EC000901 ETIM 8.0 EC000901 PU (SPU) 25 pcs Packaging type Box Country of origin DE GTIN 4066966316636 Customs tariff number 85369010000

#### **Environmental Product Compliance**

CAS-No.	7439-92-1
REACH Candidate List Substance	Lead
RoHS Compliance Status	Compliant,No Exemption
SCIP notification number (Austria)	0883a9fc-c5d0-41b6-8306-3b66c7edfed5
SCIP notification number (Belgium)	d4c5b99f-4788-4116-af95-96840eec9361
SCIP notification number (Bulgaria)	ecb7ff84-48d3-44b5-ae4e-90dbef760a38
SCIP notification number (Czech Republic)	b8af4c7c-47db-430d-97fc-eb35f3cb117f
SCIP notification number (Denmark)	e66734b1-b408-4de1-a023-1ef1cb009499
SCIP notification number (Finland)	5865aabd-b556-415d-b93e-0c86c83fe1d5
SCIP notification number (France)	e0ec6c18-15b7-4f9d-963f-8d065f1e04ac
SCIP notification number (Germany)	08e99132-2579-449a-b386-6a7891eb306b
SCIP notification number (Hungary)	49307afe-39e9-4d99-a05e-80ad281952e0
SCIP notification number (Italy)	eb8891a1-593c-4371-8061-de4abea36822
SCIP notification number (Netherlands)	1e9fa12b-51bc-4afa-95cc-a81c472cef8b
SCIP notification number (Poland)	0e109864-9864-421b-95c8-d0fa644beb0a
SCIP notification number (Romania)	1963d6d3-e621-4a3a-95b9-191262376ab6



#### **Environmental Product Compliance**

SCIP notification number (Sweden)

a40b4a84-246d-4dbe-a500-060c33f710ec

#### Approvals / Certificates

#### General approvals







Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7379
CSA CSA Group	C22.2	1536073
KEMA/KEUR DEKRA Certification B.V.	EN 60947	2178517.01
UL UL International Germany GmbH	UL 1059	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	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

#### Approvals for marine applications





Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2

#### 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)	EN 60079	PTB 98 ATEX 3133 U (II 2 G Ex eb IIC bzw. I M 2 Ex eb I Mb)
CCC CNEX	GB/T 3836.3	2020312313000176 (Ex eb IIC Gb, Ex eb I Mb)
IECEx Physikalisch Technische Bundesanstalt (PTB)	IEC 60079	IECEx PTB 14.0046U (Ex eb IIC Gb and Ex eb I Mb)

#### Downloads

#### **Environmental Product Compliance**

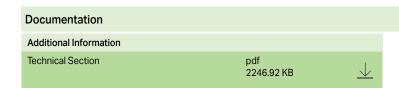
### Compliance Search

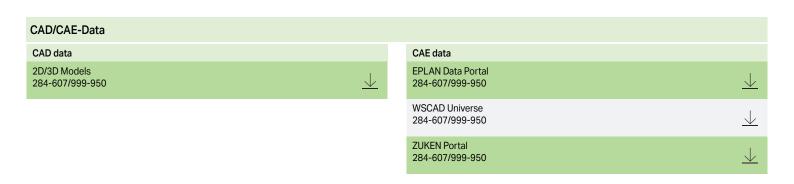
**Environmental Product** Compliance 284-607/999-950



https://www.wago.com/284-607/999-950









#### 1.2 Optional Accessories

#### 1.2.1 Cover

#### 1.2.1.1 Cover



#### <u>Item No.: 284-400</u>

Finger guard; touchproof cover protects unused conductor entries; yellow

#### 1.2.2 DIN-rail

#### 1.2.2.1 Mounting accessories



Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm

thick; 2 m long; unslotted; similar to EN



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





#### 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

Item No.: 210-196

60715; silver-colored

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



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

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# WAGO

#### 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



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 Ferrule

#### 1.2.3.1 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

Item No.: 210-113

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 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Ferrule; Sleeve for 4 mm<sup>2</sup> / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow

#### Item No.: 216-108

Ferrule; Sleeve for 6 mm<sup>2</sup> / AWG 10; uninsulated; electro-tin plated; silver-colored

#### 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 DINrail 35 x 15 and 35 x 7.5; gray

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#### 1.2.5 Jumper

#### 1.2.5.1 Jumper

Item No.: 284-402

Jumper; insulated; gray



Item No.: 284-409



Item No.: 284-422

Jumper; insulated; yellow-green

#### 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.: 793-5501/000-012

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.: 793-5501/000-002

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.: 793-501/000-017

WMB marking card; as card; not stretchable; plain; snap-on type; light green



#### Item No.: 793-501

WMB marking card; as card; not stretchable; plain; snap-on type; white



#### 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

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



#### Item No.: 793-5501/000-007

Jumper; insulated; gray

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.: 793-5501/000-005

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.: 793-501/000-006

WMB marking card; as card; not stretchable; plain; snap-on type; blue





#### Item No.: 793-501/000-012

WMB marking card; as card; not stretchable; plain; snap-on type; orange



#### Item No.: 793-501/000-002

WMB marking card; as card; not stretchable; plain; snap-on type; yellow



#### 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.: 2009-115/000-002

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



#### 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.: 793-5501/000-024

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.: 793-501/000-007

WMB marking card; as card; not stretchable; plain; snap-on type; gray



#### Item No.: 793-501/000-005

WMB marking card; as card; not stretchable; plain; snap-on type; red



## 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.: 2009-115/000-012

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



#### 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

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.: 793-501/000-023

WMB marking card; as card; not stretchable; plain; snap-on type; green



#### Item No.: 793-501/000-024

WMB marking card; as card; not stretchable; plain; snap-on type; violet



#### Item No.: 2009-115/000-007 WMB-Inline; for Smart Printer; 1500 pie-

ces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



#### 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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#### 1.2.7 Protective warning marker

#### 1.2.7.1 Cover



#### Item No.: 284-415

Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; vellow

#### 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 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.

#### Commoning



Commoning ground conductor terminal blocks with through terminal blocks is possible in one direction only (via rear side of terminal block) using adjacent jumpers. WAGO recommends using yellow–green adjacent jumpers in addition to the required marking of these blocks.

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#### 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 DINrail.

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.

Subject to changes. Please also observe the further product documentation!