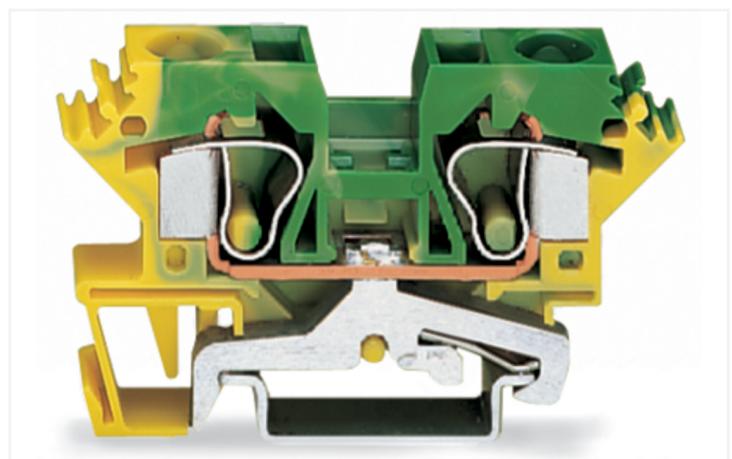
Color: █ green-yellow

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 mm<sup>2</sup> to 10 mm<sup>2</sup>. 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		
Overvoltage category		III	III	II
Pollution degree	3	2	2	
Nominal voltage	-	-	-	
Rated surge voltage	-	-	-	
Rated current	-	-	-	

#### Ex information

Reference hazardous areas See application instructions in section "Knowledge and Downloads – Documentation – Additional Information: Technical Section; Technical Explanations"

#### Connection data

Clamping units	2
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 ... 10 mm <sup>2</sup> / 24 ... 8 AWG
Fine-stranded conductor	0.2 ... 10 mm <sup>2</sup> / 24 ... 8 AWG
Strip length	12 ... 13 mm / 0.47 ... 0.51 inches
Wiring direction	Front-entry wiring

**Physical data**

Width	10 mm / 0.394 inches
Height	69 mm / 2.717 inches
Depth from upper-edge of DIN-rail	33.5 mm / 1.319 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	green-yellow
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.24 MJ
Weight	26.5 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	DE
GTIN	4066966316636
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 8.0	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)	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)	5865aabbd-b556-415d-b93e-0c86c83fe1d5
SCIP notification number (France)	e0ec6c18-15b7-4f9d-963f-8d065f1e04ac
SCIP notification number (Germany)	08e99132-2579-449a-b386-6a7891eb306b

## Environmental Product Compliance

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
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 Shipping	EN 60947	20-HG1941090-PDA
DNV GL Det Norske Veritas, Germanischer 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



## CAD/CAE-Data

### CAD data

2D/3D Models  
284-607/999-950



### CAE data

EPLAN Data Portal  
284-607/999-950



WSCAD Universe  
284-607/999-950



ZUKEN Portal  
284-607/999-950



## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 End plate

[Item No.: 284-318](#)

End and intermediate plate; 2.5 mm thick;  
light gray

[Item No.: 284-338](#)

Separator plate; 2 mm thick; oversized;  
light gray

### 1.2 Optional Accessories

#### 1.2.1 Cover

[Item No.: 284-400](#)

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; simi-  
lar 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; simi-  
lar 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 Ferrule

### 1.2.3.1 Ferrule



#### [Item No.: 216-262](#)

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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



#### [Item No.: 216-267](#)

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

#### [Item No.: 216-208](#)

Ferrule; Sleeve for 6 mm<sup>2</sup> / 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 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.: 284-402](#)

Jumper; insulated; gray

[Item No.: 284-409](#)

Jumper; insulated; gray

[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.: 793-5501/000-007](#)

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 Protective warning marker

## 1.2.7.1 Cover



## Item No.: 284-415

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

## 1.2.8 Tool

## 1.2.8.1 Operating tool

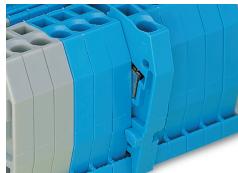


## Item No.: 210-721

Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

## Installation Notes

## Installation

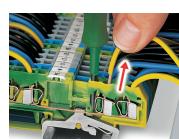


Snapping a ground conductor block onto the DIN-rail automatically makes a direct electrical connection to the rail.

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



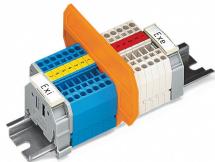
Commoning ground conductor terminal blocks with through terminal blocks is possible in one direction only (via rear side of terminal block) using adjacent jumpers. WAGO recommends using yellow-green adjacent jumpers in addition to the required marking of these blocks.

## 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.