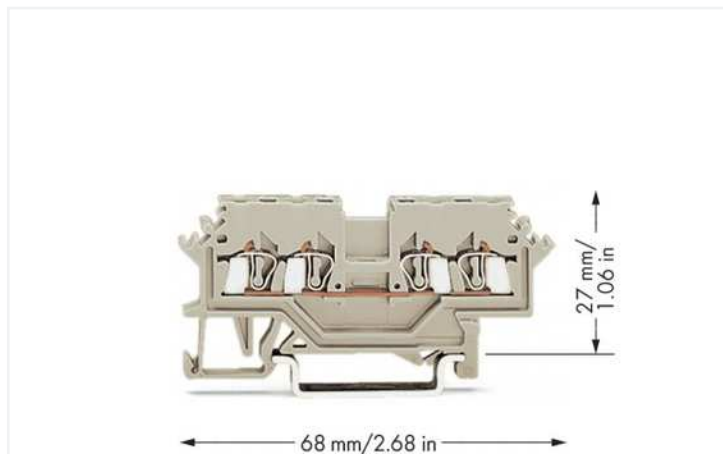


**Data Sheet | Item Number: 279-990**

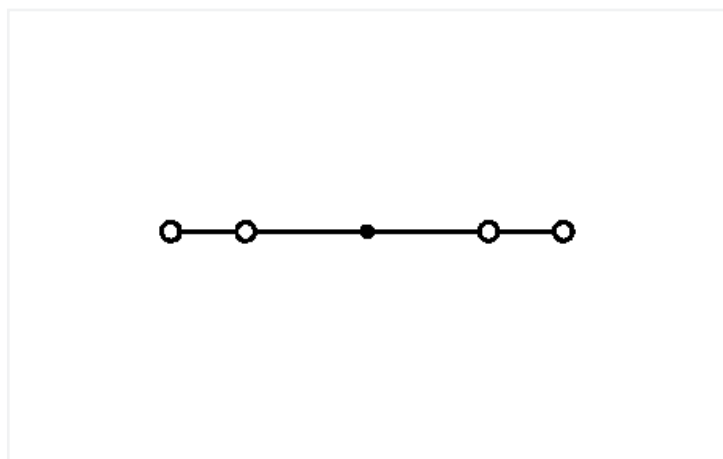
4-conductor through terminal block; 1.5 mm<sup>2</sup>; suitable for Ex e II applications; lateral marker slots; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 1,50 mm<sup>2</sup>; light gray



<https://www.wago.com/279-990>



Color: ■ light gray



Similar to illustration

**Electrical data**

Ratings per	IEC/EN 60947-7-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	-	-	-
Rated surge voltage	-	-	-
Rated current	-	-	-

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	-	600 V	-
Rated current	-	10 A	-

Approvals per	CSA 22.2 No 158		
Use group	B	C	D
Rated voltage	-	600 V	-
Rated current	-	10 A	-

Ex information	
Reference hazardous areas	See application instructions in section "Knowledge and Downloads – Documentation – Additional Information: Technical Section; Technical Explanations"
Ratings per	ATEX: PTB 00 ATEX 3113 U / IECEx: PTB 03.0004U (Ex eb IIC Gb or Ex eb I Mb)
Rated voltage EN (Ex e II)	550 V
Rated current (Ex e II)	15 A

### Power Loss

Power loss, per pole (potential)	0.4118 W
Rated current $I_N$ for specified power loss	15 A
Resistance value for specified, current-dependent power loss	0.00183 $\Omega$

### Connection data

Connection points	4	<b>Connection 1</b>	
Total number of potentials	1	Connection technology	CAGE CLAMP®
Number of levels	1	Actuation type	Operating tool
		Connectable conductor materials	Copper
		Solid conductor	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 16 AWG
		Fine-stranded conductor	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 16 AWG
		Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
		Wiring direction	Front-entry wiring

### Physical data

Width	4 mm / 0.157 inches
Height	68 mm / 2.677 inches
Depth from upper-edge of DIN-rail	27 mm / 1.063 inches

### Mechanical data

Mounting type	DIN-35 rail
Marking level	Side marking

### Material data

Note (material data)	<a href="https://www.wago.com/us/material-specifications" href="_blank">Information on material specifications can be found here</a>
Color	light gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.1 MJ
Weight	5.7 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 8.0	EC000897
ETIM 7.0	EC000897
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918504461
Customs tariff number	85369010000

**Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption
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**Approvals / Certificates**

**General approvals** **Declarations of conformity and manufacturer's declarations**



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7081
KEMA/KEUR DEKRA Certification B.V.	EN 60947	2160584.04
UL Underwriters Laboratories Inc.	UL 1059	E45172

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

**Approvals for marine applications**

**Approvals for hazardous areas**



Approval	Standard	Certificate Name
BV Bureau Veritas S.A.	EN 60947	07436/F0 BV
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
LR Lloyds Register	EN 60947	91/20112 (E9)



Approval	Standard	Certificate Name
ATEX Physikalisch Technische Bundesanstalt (PTB)	-	PTB 00 ATEX 3113 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb)

**Downloads**

**Environmental Product Compliance**

<b>Compliance Search</b>	
Environmental Product Compliance 279-990	<a href="#">↓</a>

**Documentation**

<b>Additional Information</b>	
Technical Section	pdf 2142.18 KB <a href="#">↓</a>

**CAD/CAE-Data**

CAD data	
2D/3D Models 279-990	<a href="#">↓</a>

CAE data	
EPLAN Data Portal 279-990	<a href="#">↓</a>
WSCAD Universe 279-990	<a href="#">↓</a>
ZUKEN Portal 279-990	<a href="#">↓</a>

## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 End plate

##### 1.1.1.1 End plate



**Item No.: 279-318**  
End and intermediate plate; 2 mm thick; light gray

**Item No.: 209-191**  
Separator for Ex e/Ex i applications; 3 mm thick; 120 mm wide; orange

### 1.2 Optional Accessories

#### 1.2.1 DIN-rail

##### 1.2.1.1 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

#### 1.2.2 Ferrule

1.2.2.1 Ferrule



**Item No.: 216-301**  
 Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

**Item No.: 216-302**  
 Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise

**Item No.: 216-201**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white

**Item No.: 216-101**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-202**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray

**Item No.: 216-102**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored

**Item No.: 216-203**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated; red

**Item No.: 216-103**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated

1.2.3 Installation

1.2.3.1 Cover



**Item No.: 709-153**  
 Cover; Type 1; suitable for cover carrier, type 1; 1 m long; transparent

1.2.3.2 Cover carrier



**Item No.: 709-167**  
 Cover carrier; Type 1; incl. fixing/retaining screws and knurled nut; suitable for 279 to 282 and 880 Series rail-mounted terminal blocks; suitable for 264 Series miniature rail-mounted terminal blocks; suitable for 270 Series sensor and actuator terminal blocks; 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 Insulation stop

1.2.4.1 Insulation stop



**Item No.: 279-470**  
 Insulation stop; 0.08 - 0.2 mm<sup>2</sup> "s" (0.14 mm<sup>2</sup> "f-st"); 5 pieces/strip; white

**Item No.: 279-471**  
 Insulation stop; 0.25 mm<sup>2</sup>; 5 pieces/strip; dark gray

1.2.5 Jumper

### 1.2.5.1 Jumper



[Item No.: 279-490](#)  
Jumper; 10-way; insulated; gray

[Item No.: 279-482](#)  
Jumper; 2-way; insulated; gray

[Item No.: 279-492](#)  
Jumper; 2-way; insulated; gray

[Item No.: 279-483](#)  
Jumper; 3-way; insulated; gray



[Item No.: 279-402](#)  
Jumper; insulated; gray

[Item No.: 279-409](#)  
Jumper; insulated; gray

[Item No.: 279-422](#)  
Jumper; insulated; yellow-green

### 1.2.6 Marking

#### 1.2.6.1 Double marker carrier



[Item No.: 209-128](#)  
Adaptor; gray

#### 1.2.6.2 Group marker carrier



[Item No.: 209-140](#)  
Group marker carrier; gray

[Item No.: 209-141](#)  
Group marker carrier; gray

[Item No.: 209-142](#)  
Group marker carrier; gray

[Item No.: 249-105](#)  
Group marker carrier; gray

#### 1.2.6.3 Marker



[Item No.: 793-4501/000-006](#)  
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; blue

[Item No.: 793-4501/000-007](#)  
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; gray

[Item No.: 793-4501/000-023](#)  
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; green

[Item No.: 793-4501/000-017](#)  
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; light green



[Item No.: 793-4501/000-012](#)  
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; orange

[Item No.: 793-4501/000-005](#)  
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; red

[Item No.: 793-4501/000-024](#)  
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; violet

[Item No.: 793-4501](#)  
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; white



[Item No.: 793-4501/000-002](#)  
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; yellow

[Item No.: 2009-114/000-006](#)  
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; blue

[Item No.: 2009-114/000-007](#)  
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; gray

[Item No.: 2009-114/000-023](#)  
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; green



[Item No.: 2009-114/000-012](#)  
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; orange

[Item No.: 2009-114/000-005](#)  
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; red

[Item No.: 2009-114/000-024](#)  
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; violet

[Item No.: 2009-114](#)  
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; white



[Item No.: 2009-114/000-002](#)  
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; yellow

### 1.2.7 Protective warning marker

### 1.2.7.1 Cover



**Item No.: 279-415**

Protective warning marker; 5-pole; with high-voltage symbol, black; yellow

### 1.2.8 Push-in type wire jumper

#### 1.2.8.1 Jumper



**Item No.: 249-126**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 110 mm long; black



**Item No.: 249-123**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 180 mm long; black



**Item No.: 249-127**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 250 mm long; black



**Item No.: 249-125**

Push-in type wire jumper; insulated; 60 mm long; black

### 1.2.9 Tool

#### 1.2.9.1 Operating tool



**Item No.: 210-719**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



**Item No.: 210-648**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

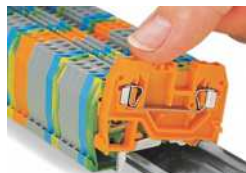


**Item No.: 210-647**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

## Installation Notes

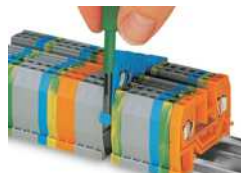
### Installation



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.



Inserting insulation stops.



CAGE CLAMP® connection  
Removing a solid conductor.

Commoning



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

**Push-In Type Wire Jumpers**  
When installing machines or control systems, it is often necessary to make an additional connection between two terminal blocks that are not next to each other on the rail. In such cases, WAGO's touch-proof, push-in type wire jumpers are the ideal solution.

These jumpers are compatible with the following rail-mount terminal blocks:  
- 279 Series (1.5 mm<sup>2</sup>/16 AWG),  
- 280/775/780 Series (2.5 mm<sup>2</sup>/14 AWG)  
- 281/769/776/777/781 and 880 Series (4 mm<sup>2</sup>/12 AWG)

They are available in three conductor lengths (60, 110 and 250 mm), allowing up to 60 terminal blocks to be commoned depending on their width (see table on the right).

The 280/775/780 and 281/776/777/781 Series Terminal Blocks accept two wire jumpers, allowing the use of commoning chains. Furthermore, the 280/769/775/780/880 and 281/776/777/781 Series allow both wire jumper and adjacent jumper to be simultaneously plugged into a same terminal block.

Commoning using comb-style jumper bars:  
Push comb-style jumper bars down until fully inserted.

Cover



Protective warning markers inserted into the operating slots

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.