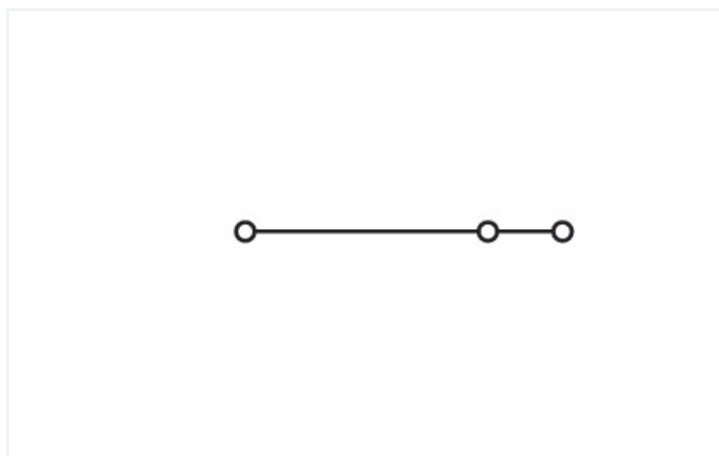
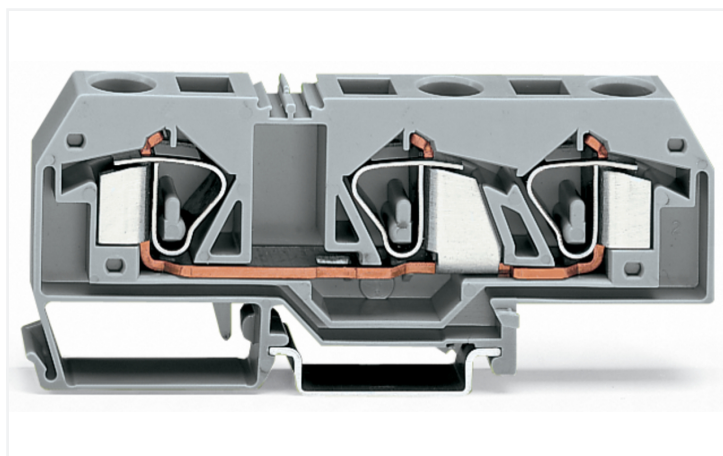


## Data Sheet | Item Number: 283-998

3-conductor through terminal block; 16 mm<sup>2</sup>; suitable for Ex e II applications; center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 16,00 mm<sup>2</sup>; light gray

<https://www.wago.com/283-998>



Color: ■ light gray

Similar to illustration

Similar to illustration

Through terminal block, 283 Series, light gray

Quick and easy connections are guaranteed with this through terminal block (item number 283-998). Conductors should only be connected to this through terminal block if their strip length is between 16 and 17 mm. Whether in industrial or building applications, our rail-mount through terminal blocks are the perfect solution to quickly and securely connect electrical conductors. Depending on the model, you can use them for either typical through-wiring or potential distribution. This product features conductor terminals and utilizes CAGE CLAMP®. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. This through terminal block is suitable for conductor cross sections ranging from 0.2 mm<sup>2</sup> to 16 mm<sup>2</sup>.

This through rail-mount terminal block is operated with an operating tool.

### Notes

Safety Information

Notice: This terminal block cannot be commoned with adjacent jumpers.

### Electrical data

Ratings per	IEC/EN 60947-7-1		
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 Explanations"
Rated voltage EN (Ex e II)	550 V
Rated current (Ex e II)	68 A

### Power Loss

Power loss, per pole (potential)	1.9421 W
Rated current $I_N$ for power loss specification	68 A
Resistance value for specified, current-dependent power loss	0.00042 Ω

### General information

Wiring direction	Front-entry wiring
------------------	--------------------

### Connection data

Clamping units	3	<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	0.2 ... 16 mm <sup>2</sup> / 24 ... 6 AWG
		Fine-stranded conductor	0.2 ... 16 mm <sup>2</sup> / 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

Mounting type	DIN-35 rail
Marking level	Center marking

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	light gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.619 MJ
Weight	45.3 g

### 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	4044918543712
Customs tariff number	85369010000

### Product Classification

UNSPSC	39121410
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 9.0	EC000897
ETIM 10.0	EC000897
ECCN	NO US CLASSIFICATION

**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 Conformity WAGO GmbH & Co. KG	-	-
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-120777	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UL UL International Germany GmbH	UL 1059	E45172			

**Approvals for marine applications** **Approvals for hazardous areas**

Approvals for marine applications			Approvals for hazardous areas		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	24-0152298-PDA	AEx UL International Germany GmbH c/o Physikalisch Technische Bundesanstalt	UL 60079	E185892 (AEx e II resp. e II)
BV Bureau Veritas S.A.	EN 60947	07436/G0 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, Germanischer Lloyd	-	TAE00001V2	CCC CNEX	GB/T 3836.3	2020312313000232 (Ex eb IIC Gb, Ex eb I Mb)
PRS Polski Rejestr Statków	-	TE/1094/880590/23	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 283-998	<a href="#">↓</a>

**Documentation**

Bid Text			
283-998	19.02.2019	xml 3.33 KB	<a href="#">↓</a>
283-998	28.02.2017	doc 25.00 KB	<a href="#">↓</a>

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 283-998	EPLAN Data Portal 283-998
	WSCAD Universe 283-998
	ZUKEN Portal 283-998

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 Ferrule

#### 1.2.3.1 Ferrule



**Item No.: 216-284**

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.: 216-289**

Ferrule; Sleeve for 10 mm<sup>2</sup> / 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 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.: 216-287**

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.: 216-288**

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

### 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 Marking

1.2.5.1 Group marker carrier



**Item No.: 249-105**

Group marker carrier; gray

1.2.5.2 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

## 1.2.6 Protective warning marker

### 1.2.6.1 Cover



**Item No.: 283-415**

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

## 1.2.7 Tool

### 1.2.7.1 Operating tool

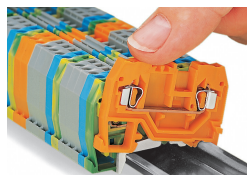


**Item No.: 210-721**

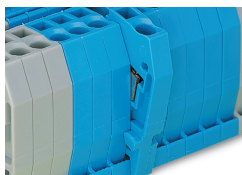
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

## Installation Notes

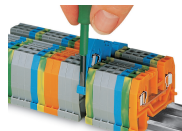
### Installation



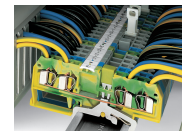
Snapping a terminal block onto the DIN-rail.



Quick assembly keys prevent reverse mounting.

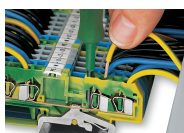


Removing a terminal block from the assembly.



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

## Conductor termination



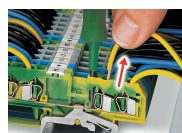
**CAGE CLAMP® connection**

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.



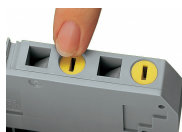
**CAGE CLAMP® connection**

Removing a solid conductor.

## Cover

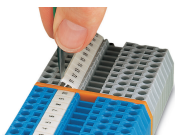


Protective warning markers inserted into the operating slots



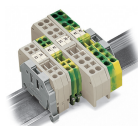
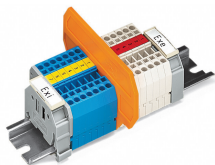
Finger guard seals an unused conductor entry.

## 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.