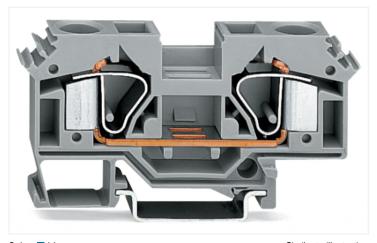
2-conductor through terminal block;  $16 \text{ mm}^2$ ; lateral marker slots; for DIN-rail  $35 \times 15 \text{ and } 35 \times 7.5$ ; CAGE CLAMP®;  $16,00 \text{ mm}^2$ ; blue



https://www.wago.com/283-604



Through terminal block, 283 Series, CAGE CLAMP®

Color: ■ blue Similar to illustration

This through terminal block (item number 283-604) is designed for quick and simple connections. 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 version, you can use them for either typical through-wiring or potential distribution. Rated current and voltage are key factors to consider when choosing a through rail-mount terminal block, as they indicate how the product can be used. This product has a rated voltage of 800 V and a rated current of 76 A. Conductors should only be connected to this through terminal block if their strip length is between 16 mm and 17 mm. Featuring conductor terminals along with CAGE CLAMP®, this product outperforms the competition. Our CAGE CLAMP® connection provides a safe 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 through terminal block is suitable for conductor cross sections ranging from 0.2 mm² to 16 mm². It has one level. The single potential can connect using the two clamping points The blue housing is made of polyamide (PA66) for insulation. An operating tool is used to operate this through rail-mount terminal block. These through rail-mount terminal blocks are mounted using DIN-35 rails.. The front-entry wiring makes it possible to connect copper conductors.

Electrical data				
Ratings per	IEC	'EN 60947-	7-1	
Overvoltage category	III	III	II	
Pollution degree	3	2	2	
Nominal voltage	800 V	-	-	
Rated surge voltage	8 kV	-	-	
Rated current	76 A	-	-	

Power Loss	
Power loss, per pole (potential)	2.4259 W
Rated current $I_N$ for specified power loss	76 A
Resistance value for specified, current- dependent power loss	0.00042 Ω

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 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

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#### Physical data

Width 12 mm / 0.472 inches Height 80 mm / 3.15 inches 37.5 mm / 1.476 inches Depth from upper-edge of DIN-rail

#### Mechanical data

Design horizontal type Mounting type DIN-35 rail Marking level Side marking

## Material data

Note (material data)

Information on material specifications can be found here

Color blue Material group

Insulation material (main housing) Polyamide (PA66)

Flammability class per UL94 V0 Fire load 0.542 MJ Weight 31.8 g

#### **Environmental requirements**

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

## 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 9.0 EC000897 ETIM 8.0 EC000897 PU (SPU) 25 pcs Box Packaging type Country of origin CN GTIN 4050821413141 Customs tariff number 85369010000

### **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

## Approvals / Certificates

### General approvals



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CCA OF	KEUR	
Approval	Standard	Certifi

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

## General approvals

UR UL 1059

**UL International Germany** GmbH

E45172

https://www.wago.com/283-604



#### Declarations of conformity and manufacturer's declarations

**Certificate Name** Approval Standard EU-Declaration of Conformity

### Approvals for marine applications







Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	20-HG1941090-PDA
BV Bureau Veritas S.A.	EN 60947	07436/F0 BV
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2

## **Downloads**

#### **Environmental Product Compliance**

Compliance Search

WAGO GmbH & Co. KG

**Environmental Product** Compliance 283-604

#### Documentation

Additional Information

**Technical Section** 

pdf

. 2246.92 KB



## CAD/CAE-Data

CAD data

2D/3D Models 283-604



CAE data

EPLAN Data Portal 283-604



ZUKEN Portal 283-604





#### 1 Compatible Products

## 1.1 Required Accessories

## 1.1.1 End plate

## 1.1.1.1 End plate



Item No.: 283-316 End and intermediate plate; 4 mm thick; gray



Item No.: 283-317

End and intermediate plate; 4 mm thick; orange



Item No.: 283-337

Separator plate; 2 mm thick; oversized; gray



Item No.: 283-327

Separator plate; 2 mm thick; oversized; orange



## Item No.: 283-334

Step-down cover plate; 1 mm thick; only for 2-conductor 283-601 terminal block; gray

Item No.: 283-336

Step-down cover plate; 1 mm thick; only for 2-conductor 283-601 terminal block; orange

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#### 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.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored



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;  $35 \times 15$  mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm

thick; 2 m long; unslotted; similar to EN

#### 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

## 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



# Item No.: 216-289

Ferrule; Sleeve for 10 mm² / 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 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

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.: 216-288

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

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#### 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

## 1.2.5 Jumper

## 1.2.5.1 Jumper











Item No.: 283-402 Jumper; insulated; gray Item No.: 283-409
Jumper; insulated; gray

Item No.: 285-435 Jumper; insulated; gray <u>Item No.: 283-422</u> Jumper; insulated; yellow-green

Item No.: 283-414

Step-down jumper; from 283 to 281 series; insulated; gray

## 1.2.6 Marking

#### 1.2.6.1 Group marker carrier



Item No.: 249-105

Group marker carrier; gray

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#### 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

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



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

Item No.: 793-5501/000-005

5.2 mm; plain; snap-on type; red

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 -5.2 mm; plain; snap-on type; gray

WMB marking card; as card; for terminal

block width 5 - 17.5 mm; stretchable 5 -



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

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 -5.2 mm; plain; snap-on type; violet



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.: 793-501/000-006

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



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

WMB marking card; as card; not stretcha-

## 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.: 793-501/000-002

Item No.: 793-501/000-012

ble; plain; snap-on type; orange

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

WMB marking card; as card; not stretcha-



Item No.: 793-501/000-005

ble; 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



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



## 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

WMB-Inline; for Smart Printer; 1500 pie-

#### 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 Power tap

## 1.2.7.1 Power tap



### Item No.: 283-407

Power tap; with 500 mm cable; for 16 mm<sup>2</sup> (283/783 Series) and 35 mm<sup>2</sup>; gray



## 1.2.8 Protective warning marker

#### 1.2.8.1 Cover



Item No.: 283-415

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

#### 1.2.9 Test and measurement

## 1.2.9.1 Testing accessories



Item No.: 283-404

Test plug adapter; 11.6 mm wide; for 4 mm Ø test plugs; gray

## 1.2.10 Tool

## 1.2.10.1 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-



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.

https://www.wago.com/283-604



## Commoning



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



Commoning terminal blocks of different sizes via step-down jumpers.

## Testing



Testing with a test plug. Picture shows a test plug adapter (209-170).

## Cover



Protective warning markers inserted into the operating slots



Finger guard seals an unused conductor entry.

## Marking



Labeling via WMB Multi Marking System.

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$