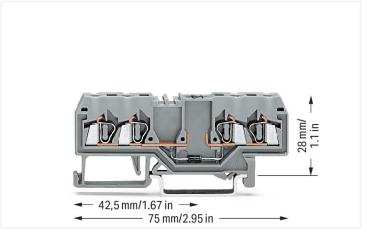
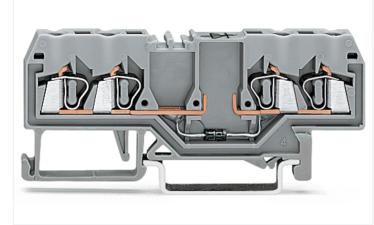
Component terminal block; 4-conductor; with diode 1N4007; anode, left side; for DIN-rail  $35 \times 15$  and  $35 \times 7.5$ ;  $2.5 \text{ mm}^2$ ; CAGE CLAMP®; gray

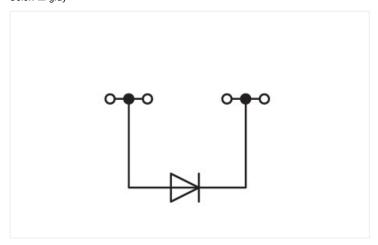


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Component terminal block with diode, 280 Series, operating tool

Enjoy fault-free electrical installations with component terminal block with diode (item number 280-815/281-410). Conductors should only be connected to component terminal block with diode if their strip length is between 8 mm and 9 mm. This product incorporates conductor terminals and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection provides a convenient 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. Component terminal block with diode is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm². He has one level. You can connect a single potential using the four clamping points. The gray housing is made of polyamide (PA66) for insulation. These function terminal blocks are mounted using DIN-35 rails..

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	-	-	-

General information		
Nominal voltage	250 V	
Reverse voltage	1000 V	
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Connectable conductor materials

Connectable conductor materials (note)

Terminating Aluminum Conductors
WAGO Spring-Clamp Terminal Blocks are
suitable for solid aluminum conductors
up to 4 mm²/12 AWG if WAGO "Alu-Plus"
Contact Paste 249-130 is used for ter-

mination.

"Alu-Plus" Contact Paste Advantages:

- Automatically destroys the oxide film during clamping.
- Prevents fresh oxidation at the clamping point.
- Prevents electrolytic corrosion between aluminum and copper conductors (in the same terminal block).
- Provides long-term protection against corrosion.

Using terminal blocks with CAGE CLAMP® Spring Pressure Connection Technology, aluminum conductors must first be cleaned with a blade and then immediately inserted into the clamping units filled with "Alu-Plus" contact paste.

It is also possible to apply WAGO "Alu-Plus" **additionally** on the whole surface of the aluminum conductor before termination.

Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors:: 2.5 mm² = 16 A 4 mm² = 22 A

Wiring direction Front-entry wiring

Physical data	
Width	5 mm / 0.197 inches
Height	75 mm / 2.953 inches
Depth from upper-edge of DIN-rail	28 mm / 1.102 inches

Mechanical data	
Design	horizontal type
Mounting type	DIN-35 rail
Marking level	Center marking

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Material data	
Note (material data)	Information on material specifications can be found here
Color	gray
Material group	1
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	VO
Fire load	0.16 MJ
Weight	9.3 g

## **Environmental requirements**

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

Commercial data

Product Group 1 (Rail Mounted Terminal Blocks)

 PU (SPU)
 100 pcs

 Packaging type
 Box

 Country of origin
 CN

GTIN 4050821275473

Customs tariff number 85369010000

**Product Classification** 

 UNSPSC
 39121410

 eCl@ss 10.0
 27-14-11-27

 eCl@ss 9.0
 27-14-11-27

 ETIM 9.0
 EC000903

 ETIM 8.0
 EC000903

ECCN NO US CLASSIFICATION

|--|

CAS-No. 7439-92-1 79-94-7

REACH Candidate List Substance 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol

Lead

RoHS Compliance Status Compliant, With Exemption

RoHS Exemption 7(a)

 SCIP notification number (Austria)
 5e655896-65ff-4ac9-bbca-9cda6dcc9488

 SCIP notification number (Belgium)
 0e35d7f7-797f-46c5-ac76-59521804af77

 SCIP notification number (Bulgaria)
 ee81166f-608c-42fa-ab29-b853ddf90568

 SCIP notification number (Czech Republic)
 44309132-87cb-484d-94f3-9b0a79d66e60

 SCIP notification number (Denmark)
 59272011-393c-44bc-9866-eaa32ebd5b28

 SCIP notification number (Finland)
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 SCIP notification number (France)
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 SCIP notification number (Germany)
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 SCIP notification number (Romania)
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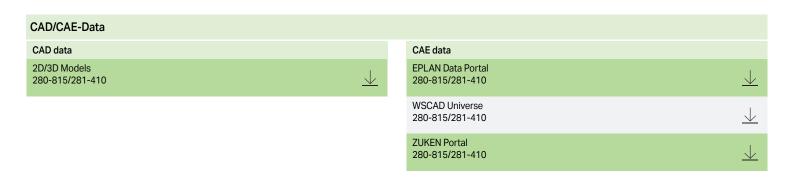
https://www.wago.com/280-815/281-410

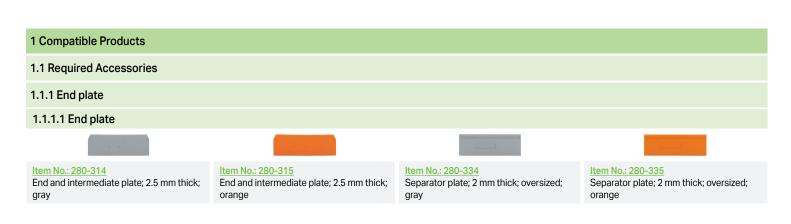
280-815/281-410



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Documentation			
Bid Text			
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280-815/281-410	10.04.2017	doc 24.50 KB	$\overline{\downarrow}$





## 1.2 Optional Accessories

## 1.2.1 DIN-rail

Item No.: 210-196

60715; silver-colored

## 1.2.1.1 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

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

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# W/AGO

#### 1.2.1.1 Mounting accessories



#### 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

#### em No.: 210-504

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to FN 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 0.34 mm<sup>2</sup> / 22 AWG; in-

sulated; electro-tin plated; light turquoise

## Item No.: 216-201

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white



Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; 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

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; in-

sulated; electro-tin plated; yellow



Item No.: 216-302

Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-co-



Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated



## <u>Item No.: 216-204</u>

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black

## Item No.: 216-104

Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; silver-colored

## 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

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

## 1.2.4 Insulation stop

#### 1.2.4.1 Insulation stop







Item No.: 280-470

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.: 280-471

Insulation stop; 0.25 - 0.5 mm²; 5 pieces/ strip; light gray Item No.: 280-472

Insulation stop; 0.75 - 1 mm<sup>2</sup>; 5 pieces/ strip; black

#### 1.2.5 Jumper

## 1.2.5.1 Jumper

Item No.: 280-490





Jumper; 2-way; insulated; gray

Item No.: 280-492

Jumper; 2-way; insulated; gray



Item No.: 280-483

Jumper; 3-way; insulated; gray



Item No.: 280-484

Jumper; 4-way; insulated; gray

Jumper; 10-way; insulated; gray

Item No.: 280-485

Jumper; 5-way; insulated; gray

Item No.: 709-110

Wire commoning chain; 2.5 mm<sup>2</sup>; insulated: black

Item No.: 709-111

Wire commoning chain; 2.5 mm<sup>2</sup>; insulated; black

 $\bigcap$ 

Item No.: 709-112

Wire commoning chain; 2.5 mm<sup>2</sup>; insulated; black

Item No.: 210-103

Wire commoning chain; insulated; black

Item No.: 210-123

Wire commoning chain; insulated; blue

## 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

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

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

Item No.: 2009-115

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

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## 1.2.7 Protective warning marker

## 1.2.7.1 Cover



## Item No.: 280-415

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

#### 1.2.8 Test and measurement

## 1.2.8.1 Testing accessories



## Item No.: 249-142

L-type end module; modular; with rigid contact pin; End module; 1,50 mm²; gray

## Item No.: 249-143

L-type spacer module; modular; e.g., bridging commoned terminal blocks; gray

#### Item No.: 249-141

L-type test plug module; modular; with spring-loaded contact pin; Center module; 1,50 mm²; gray

#### 1.2.9 Tool

## 1.2.9.1 Operating tool

## Item No.: 210-658

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured

#### Item No.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

#### Item No.: 210-657

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

## Installation Notes

## Commoning



Commoning using comb-style jumper

Push comb-style jumper bars down until fully inserted.



These diode terminal blocks have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits.

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Polarized diode gates with a common cathode can be created using the following terminal blocks: 280-815/281-410 or 280-815/281-411

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

Current addresses can be found at:: www.wago.com