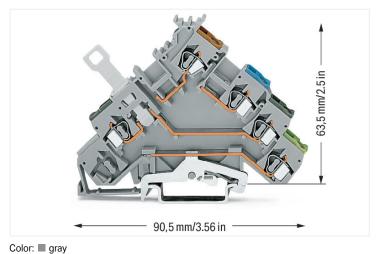
4-conductor sensor terminal block; with colored conductor entries; 2.5 mm²; CAGE

CLAMP®; 2,50 mm²; gray

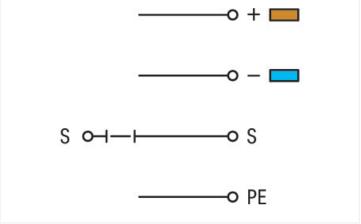
https://www.wago.com/280-573











Sensor terminal block, 280 Series, CAGE CLAMP®

Convenient electrical installations are guaranteed with this sensor terminal block (item number 280-573). Ensure that the strip lengths are between 8 mm and 9 mm when connecting conductors to this sensor terminal block. Featuring conductor terminals along with CAGE CLAMP®, this product outperforms the competition. Our trusted universal connection known as CAGE CLAMP® leads the way when it comes to connection technology and electrical interconnections. This sensor terminal block is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm². It comes with four levels and five clamping points that you can use to connect five potentials. 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                        |                                                           | Power Loss                                   |           |
| Nominal voltage (III/3)                   | 400 V                                                     | Power loss, per pole (potential)             | 0.133 W   |
| Rated impulse withstand voltage (III / 3) | 6 kV                                                      | Rated current $I_N$ for specified power loss | 10 A      |
| Rated current                             | 10 A                                                      | Resistance value for specified, current-     | 0.00133 Ω |
| Legend (ratings)                          | (III / 3) ≙ Overvoltage category III / Pollution degree 3 | dependent power loss                         |           |

https://www.wago.com/280-573



| Connection data            |   |  |
|----------------------------|---|--|
| Clamping units             | 5 |  |
| Total number of potentials | 5 |  |
| Number of levels           | 4 |  |

| Connection 1                           |                                                                          |
|----------------------------------------|--------------------------------------------------------------------------|
| Connection technology                  | CAGE CLAMP®                                                              |
| Actuation type                         | Operating tool                                                           |
| Connectable conductor materials        | Copper<br>Aluminum                                                       |
| Connectable conductor materials (note) | Terminating Aluminum Conductors<br>WAGO Spring-Clamp Terminal Blocks are |

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 termination.

"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 mm<sup>2</sup> = 16 A 4 mm<sup>2</sup> = 22 A

Solid conductor 0.08 ... 2.5 mm² / 28 ... 12 AWG

Fine-stranded conductor 0.08 ... 2.5 mm² / 28 ... 12 AWG

Note (conductor cross-section) 12 AWG: THHN, THWN

Strip length 8 ... 9 mm / 0.31 ... 0.35 inches

Wiring direction Front-entry wiring

| Physical data                     |                        |
|-----------------------------------|------------------------|
| Width                             | 5 mm / 0.197 inches    |
| Height                            | 90.5 mm / 3.563 inches |
| Denth from upper-edge of DIN-rail | 63.5 mm / 2.5 inches   |

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

# Data Sheet | Item Number: 280-573 https://www.wago.com/280-573



| Material data                      |                                                                 |
|------------------------------------|-----------------------------------------------------------------|
| Note (material data)               |                                                                 |
|                                    | <u>Information on material specifications can be found here</u> |
| Color                              | gray                                                            |
| Material group                     | l                                                               |
| Insulation material (main housing) | Polyamide (PA66)                                                |
| Flammability class per UL94        | V0                                                              |
| Fire load                          | 0.333 MJ                                                        |
| Weight                             | 18.7 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           | 27-14-11-28                      |
| eCl@ss 9.0            | 27-14-11-28                      |
| ETIM 9.0              | EC000900                         |
| ETIM 8.0              | EC000900                         |
| PU (SPU)              | 50 pcs                           |
| Packaging type        | Box                              |
| Country of origin     | DE                               |
| GTIN                  | 4045454093754                    |
| Customs tariff number | 85369010000                      |

| Environmental Product Compliance          |                                      |
|-------------------------------------------|--------------------------------------|
| CAS-No.                                   | 7439-92-1                            |
| REACH Candidate List Substance            | Lead                                 |
| RoHS Compliance Status                    | Compliant,No Exemption               |
| SCIP notification number (Austria)        | dbe80cfb-6745-45b9-86b9-b63c860b9028 |
| SCIP notification number (Belgium)        | fa0a1c33-24dd-4617-8826-deedcf0b0ccb |
| SCIP notification number (Bulgaria)       | e209c7e3-fe9c-457e-bd91-412ee399da25 |
| SCIP notification number (Czech Republic) | 04c46a9a-520e-469d-a133-7c4b4ae3f6d1 |
| SCIP notification number (Denmark)        | 60cda16e-9d35-48b6-bbfa-ee4cde10e13c |
| SCIP notification number (Finland)        | 19fa26d7-6d55-4140-9409-c8465f41c114 |
| SCIP notification number (France)         | a6577a6a-5dad-4c0c-b781-cdc8e6c51f7a |
| SCIP notification number (Germany)        | e65797ee-e461-40d2-af16-fb133218a9d3 |
| SCIP notification number (Hungary)        | f6f0fb42-0640-47b9-a6fe-313eb30504c6 |
| SCIP notification number (Italy)          | 22f25927-0ee5-4698-981a-647d3f6c7415 |
| SCIP notification number (Netherlands)    | 8174a860-a2d1-4f2c-8078-75572a87c263 |
| SCIP notification number (Poland)         | f9ebd5a8-336a-4e8b-a460-8d7bbb4890f3 |
| SCIP notification number (Romania)        | a1ba9476-90f0-4430-b911-382ad40b1027 |
| SCIP notification number (Sweden)         | 1f286f53-a7d3-4bba-ad9a-c7601ef2f177 |



# Approvals / Certificates

# General approvals







| Approval                                | Standard | Certificate Name |
|-----------------------------------------|----------|------------------|
| CCA<br>DEKRA Certification B.V.         | EN 60947 | 2160584.53       |
| CSA<br>DEKRA Certification B.V.         | C22.2    | 1536071          |
| UR<br>Underwriters Laboratories<br>Inc. | UL 1059  | E45172           |

# Declarations of conformity and manufacturer's declarations

| Approval                                                | Standard | Certificate Name |
|---------------------------------------------------------|----------|------------------|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG      | -        | -                |
| UK-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |

## Approvals for marine applications





| Approval                                              | Standard | Certificate Name |
|-------------------------------------------------------|----------|------------------|
| ABS<br>American Bureau of Ship-<br>ping               | EN 60947 | 20-HG1941090-PDA |
| DNV GL<br>Det Norske Veritas, Ger-<br>manischer Lloyd | -        | TAE00001V2       |

# Downloads

## **Environmental Product Compliance**

Compliance Search

Environmental Product Compliance 280-573



# Documentation

Additional Information

Technical Section pdf 2246.92 KB

| Bid Text |            |                 |                          |
|----------|------------|-----------------|--------------------------|
| 280-573  | 19.02.2019 | xml<br>3.27 KB  | $\overline{\downarrow}$  |
| 280-573  | 14.03.2017 | doc<br>25.00 KB | $\underline{\downarrow}$ |

https://www.wago.com/280-573



#### CAD/CAE-Data

#### CAE data

**EPLAN Data Portal** 280-573



WSCAD Universe 280-573



# 1 Compatible Products

#### 1.1 Required Accessories

#### 1.1.1 End plate

#### 1.1.1.1 End plate





#### Item No.: 280-320

End and intermediate plate; 1 mm thick; for quadruple-deck terminal blocks; gray

#### Item No.: 280-323

End and intermediate plate; 1 mm thick; for quadruple-deck terminal blocks; oran-

#### 1.2 Optional Accessories

#### 1.2.1 DIN-rail

## 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 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

Item No.: 210-196

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



Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

# Item No.: 216-302

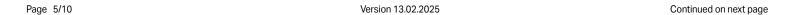
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise

# Item No.: 216-201

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90;

#### Item No.: 216-101

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored



https://www.wago.com/280-573



#### 1.2.2.1 Ferrule

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 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored

Item No.: 216-203

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

Item No.: 216-103

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



Item No.: 216-204

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

tem No.: 216-104

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated; silver-colored

#### 1.2.3 Installation

#### 1.2.3.1 Cover



Item No.: 709-154

Cover; Type 2; suitable for cover carrier, type 2; 1 m long; transparent

#### 1.2.3.2 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

#### 1.2.3.3 Mounting accessories



Item No.: 249-116

Screwless end stop; 6 mm wide; for DIN-rail  $35 \times 15$  and  $35 \times 7.5$ ; gray

#### 1.2.4 Insulation stop

Item No.: 280-470

## 1.2.4.1 Insulation stop



Insulation stop; 0.08 - 0.2 mm2 "s" (0.14

mm2 "f-st"); 5 pieces/strip; white

Item No.: 280-471

Insulation stop; 0.25 - 0.5 mm²; 5 pieces/ strip; light gray

00000



Item No.: 280-472

Insulation stop; 0.75 - 1 mm²; 5 pieces/ strip; black mmm



## 1.2.5 Jumper

#### 1.2.5.1 Jumper

Item No.: 280-490

Jumper; 10-way; insulated; gray

Item No.: 280-482

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

Item No.: 280-485

Jumper; 5-way; insulated; gray

Item No.: 280-402

Jumper: insulated: grav

Item No.: 780-452

Staggered jumper; from 1 to 2; insulated;

gray

Item No.: 780-453

Staggered jumper; from 1 to 3; insulated; gray

Item No.: 780-454

Staggered jumper; from 1 to 4; insulated; gray

Item No.: 780-455

Staggered jumper; from 1 to 5; insulated; gray

Item No.: 780-456

Staggered jumper; from 1 to 6; insulated; gray

Item No.: 780-457

Staggered jumper; from 1 to 7; insulated; gray

Item No.: 780-458

Staggered jumper; from 1 to 8; 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

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 Lock-out

## 1.2.6.1 Locking system



Item No.: 709-170

Disconnect lock; for disconnect tab used on 280/281 and 769 Series disconnect terminal blocks: red

#### 1.2.7 Marking

#### 1.2.7.1 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



block width 5 - 17.5 mm; stretchable 5 -5.2 mm; plain; snap-on type; yellow

block width 5 - 17.5 mm; stretchable 5 -5.2 mm; plain; snap-on type; gray



Item No.: 793-5501/000-007 WMB marking card; as card; for terminal

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 -

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

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

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

https://www.wago.com/280-573



#### 1.2.7.1 Marker









#### 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.: 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.: 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

WMB-Inline; for Smart Printer; 1500 pie-

ces on roll; stretchable 5 - 5.2 mm; plain;

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

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

WMB-Inline; for Smart Printer; 1500 pie-

ces on roll; stretchable 5 - 5.2 mm; plain;

# snap-on type; light green

# Item No.: 2009-115/000-002

Item No.: 2009-115/000-017

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

# 1.2.8 Protective warning marker

#### 1.2.8.1 Cover



#### Item No.: 280-415

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

#### 1.2.9 Push-in type wire jumper

#### 1.2.9.1 Jumper



lated; 110 mm long; black



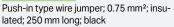
Item No.: 249-123

lated; 180 mm long; black



Push-in type wire jumper; 0.75 mm<sup>2</sup>; insu-







#### Item No.: 249-125

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

## 1.2.10 Test and measurement

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insu-

#### 1.2.10.1 Testing accessories



#### Item No.: 209-170

Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm<sup>2</sup> - 10 mm2 tbs; gray



#### 1.2.11 Tool

## 1.2.11.1 Operating tool



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**

## Installation



Snapping a terminal block onto the DIN-

Terminal blocks with a grounding foot automatically establish a direct contact to the rail.



Removing the terminal block from DIN-rail. Notice: Remove jumper contacts first!

## **Conductor termination**



CAGE CLAMP® connection

Inserting a conductor via straight operating tool (210-720).



CAGE CLAMP® connection

Inserting a conductor via angled operating tool (210-658).

# Commoning



Commoning using an adjacent jumper (280-402).

Push jumper down until fully inserted.

## Testing



Testing via banana plug and test plug adapter (209-170).

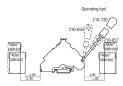


Testing via voltage tester directly on the current bar

https://www.wago.com/280-573

# W/AGO

# Installation



Min. mounting distance – terminal blocks to cable duct

# Marking



Labeling via WMB Multi Marking System.

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