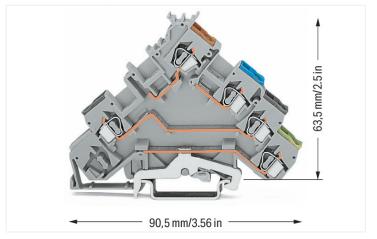
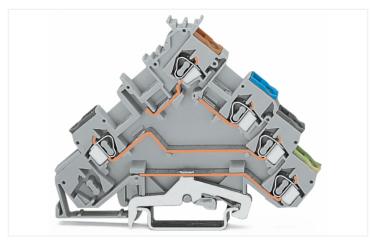
4-conductor sensor terminal block; with ground contact; with colored conductor entries; 2.5 mm<sup>2</sup>; CAGE CLAMP<sup>®</sup>; 2,50 mm<sup>2</sup>; gray

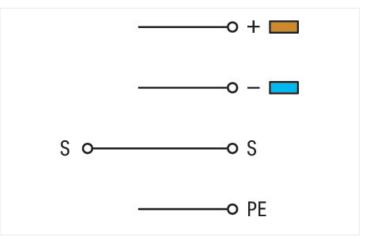


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Color: ■ gray



Sensor terminal block, 280 Series, gray

Fault-free electrical installations are guaranteed with this sensor terminal block (item number 280-570). Conductors can only be connected to this sensor terminal block if their strip length is between 8 mm and 9 mm. Featuring conductor terminals along with CAGE CLAMP®, this connector outperforms the competition. Our tried-and-tested 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 has four levels. Four potentials can connect using the five 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 **Power Loss** Nominal voltage (III/3) 400 V Power loss, per pole (potential) 0.532 W Rated impulse withstand voltage (III / 3) 6 kV Rated current I<sub>N</sub> for specified power loss 20 A Rated current 20 A Resistance value for specified, current-0.00133.0 dependent power loss Legend (ratings) on degree 3

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

Connection 1	
Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper Aluminum
Connectable conductor materials (note)	Terminating Aluminum Conductors 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 ter-

"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

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
Depth 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: 280-570 https://www.wago.com/280-570



Material data	
Material data	
Note (material data)	
	<u>Information on material specifications can be found here</u>
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	VO
Fire load	0.315 MJ
Weight	18.1 g

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

Commercial data	
Product Group	1 (Rail Mounted Terminal Blocks)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454093693
Customs tariff number	85369010000

Product classification	
UNSPSC	39121410
eCl@ss 10.0	27-14-11-28
eCl@ss 9.0	27-14-11-28
ETIM 9.0	EC000900
ETIM 8.0	EC000900
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
CAS-No.	7439-92-1
REACH Candidate List Substance	Lead
RoHS Compliance Status	Compliant,No Exemption
SCIP notification number (Austria)	1fcc4efd-27dd-478d-a626-bcc64265a364
SCIP notification number (Belgium)	a4264131-1e05-408e-ac12-932fdf674a6e
SCIP notification number (Bulgaria)	69db176e-ca45-4668-936d-07f85b2d9466
SCIP notification number (Czech Republic)	945c4885-5cd2-4c2f-ab91-edbfb9acef75
SCIP notification number (Denmark)	a65e6a78-55d2-41f3-8f17-b3bebdec65b9
SCIP notification number (Finland)	441aeb3f-5403-49e1-90db-4ded020dded7
SCIP notification number (France)	365077d1-9ef6-428f-aea1-8733c1e22fd1
SCIP notification number (Germany)	94da2fa3-e2e4-415d-8435-69156f6bd281
SCIP notification number (Hungary)	a2893c8b-2a09-4c32-84c5-cfee032023fa
SCIP notification number (Italy)	641230f3-930a-49a0-83f9-a44d4e3a28d7
SCIP notification number (Netherlands)	2ca2da03-14ac-4790-b4c8-5768a15f825d
SCIP notification number (Poland)	b06480b9-d8ef-40a0-9727-89fa183a3c42
SCIP notification number (Romania)	69bcd4b1-b53a-40ac-a034-d248c611b036
SCIP notification number (Sweden)	27db8d1b-b1b4-4bb5-954b-8733c22ec850



# Approvals / Certificates

# General approvals







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

# Declarations of conformity and manufacturer's declarations

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

# Approvals for marine applications





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

# Downloads

# **Environmental Product Compliance**

# Compliance Search

Environmental Product Compliance 280-570



# Documentation

Bid Text			
280-570	19.02.2019	xml 3.21 KB	$\underline{\downarrow}$
280-570	14.03.2017	doc 24.50 KB	<u>↓</u>

https://www.wago.com/280-570



# CAD/CAE-Data CAD data CAE data 2D/3D Models 280-570 **EPLAN Data Portal** 280-570 WSCAD Universe 280-570 ZUKEN Portal 280-570

# 1 Compatible Products 1.1 Required Accessories 1.1.1 End plate 1.1.1.1 End plate Item No.: 280-320 Item No.: 280-323 End and intermediate plate; 1 mm thick; End and intermediate plate; 1 mm thick; for quadruple-deck terminal blocks; gray for quadruple-deck terminal blocks; oran-

## 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

EN 60715; copper-colored

Item No.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to

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

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

Item No.: 210-114

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

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

Item No.: 216-101

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

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

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.: 709-154

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 x 15 and 35 x 7.5; gray

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#### 1.2.4 Insulation stop

#### 1.2.4.1 Insulation stop

Item No.: 280-470

Insulation stop; 0.08 - 0.2 mm2 "s" (0.14 mm2 "f-st"); 5 pieces/strip; white

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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 mm2; 5 pieces/ strip; black

#### 1.2.5 Jumper

#### 1.2.5.1 Jumper

Item No.: 280-490

Jumper; 10-way; insulated; gray

THILL

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; gray

Item No.: 780-452

Staggered jumper; from 1 to 2; insulated;

m

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

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>; insula-

ted; black



Item No.: 709-112

Item No.: 780-457

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 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



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

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#### 1.2.6.1 Marker









#### 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





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#### 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

## 1.2.7 Protective warning marker

#### 1.2.7.1 Cover



#### Item No.: 280-415

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

## 1.2.8 Push-in type wire jumper

#### 1.2.8.1 Jumper

Item No.: 249-126

lated; 110 mm long; black



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



# 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 Test and measurement

# 1.2.9.1 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



#### 1.2.10 Tool

# 1.2.10.1 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

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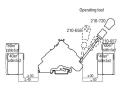


# Application



Sensor terminal block paired with a 3-conductor sensor (ground connection)

# Installation



Min. mounting distance – terminal blocks to cable duct

# Marking



Labeling via WMB Multi Marking System.

Subject to changes. Please also observe the further product documentation!