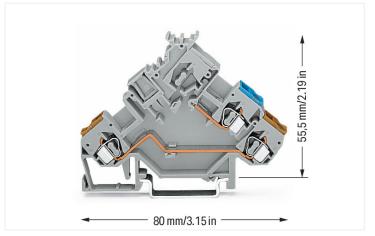
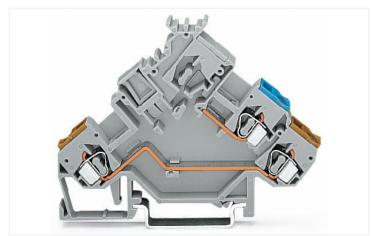
2-conductor actuator terminal block; with colored conductor entries; 2.5 mm²; CA-GE CLAMP®; 2,50 mm²; gray

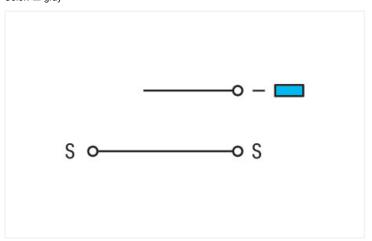


https://www.wago.com/280-562





Color: ■ gray



280-562

Electrical data	
Ratings per IEC/EN	
Nominal voltage (III/3)	400 V
Rated impulse voltage (III/3)	6 kV
Rated current	20 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Ratings per IEC/EN 2		
Rated voltage (III/3) 2	250 V	
Rated surge voltage (III/3) 2	4 kV	
Rated current 2	20 A	

Power Loss	
Power loss, per pole (potential)	0.532 W
Rated current $I_N$ for specified power loss	20 A
Resistance value for specified, current- dependent power loss	0.00133 Ω

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Connection data		
Connection points	3	
Total number of potentials	2	
Number of levels	3	

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 <a href="https://www.wa-go.com/249-130">249-130</a> 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 be 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	80 mm / 3.15 inches
Depth from upper-edge of DIN-rail	55.5 mm / 2.185 inches

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

https://www.wago.com/280-562



Material data	
Note (material data)	<a href="https://www.wago.com/us/material-specifications">Information on material specifications can be found here</a>
Color	gray
Material group	
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.291 MJ
Weight	9.7 g

Env	ironmer	ntal rec	quiremen	ts

Processing temperature -35 ... +85 °C

Continuous operating temperature  $-60\ldots +105\,^{\circ}\text{C}$ 

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 8.0	EC000900
ETIM 7.0	EC000900
PU (SPU)	50 pcs
Packaging type	Вох
Country of origin	DE
GTIN	4044918637190
Customs tariff number	85369010000

# **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

## 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 Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

https://www.wago.com/280-562



## Approvals for marine applications

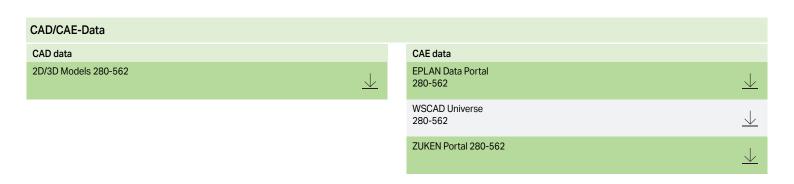


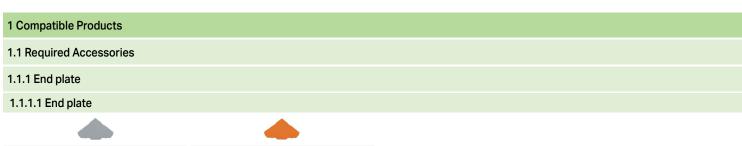


Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2

# Downloads **Environmental Product Compliance** Compliance Search **Environmental Product** Compliance 280-562







Item No.: 280-319

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

Item No.: 280-321

End and intermediate plate; 1 mm thick; for triple-deck terminal blocks; orange

https://www.wago.com/280-562



#### 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

#### 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

#### 1.2.2 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; 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 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-co-

#### 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

https://www.wago.com/280-562



# 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 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

#### 1.2.3.3 Mounting accessories



#### 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 mm2 "s" (0.14 mm2 "f-st"); 5 pieces/strip; white

## Item No.: 280-471

Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 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





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; gray

#### 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;

Item No.: 780-458 Staggered jumper; from 1 to 8; insulated;

# Item No.: 709-110

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



gray



Wire commoning chain; 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; blue

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#### 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.: 793-5501/000-012

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



#### tom No : 703-501

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

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



#### 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.: 793-5501/000-005

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.: 793-501/000-006

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



#### Item No.: 793-501/000-012

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



## Item No.: 793-501/000-002

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



# 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.: 2009-115/000-002

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



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

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.: 793-501/000-007

Item No.: 793-501/000-005

ble; plain; snap-on type; red

Item No.: 2009-115/000-006

Item No.: 2009-115/000-012

snap-on type; orange

snap-on type; blue

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

WMB marking card; as card; not stretcha-

WMB-Inline; for Smart Printer; 1500 pie-

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

WMB-Inline; for Smart Printer; 1500 pie-

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



Item No.: 793-5501

#### Item No.: 793-501/000-023

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

WMB marking card; as card; for terminal

block width 5 - 17.5 mm; stretchable 5 -

5.2 mm; plain; snap-on type; white

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.: 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.: 2009-115/000-024

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

#### 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

https://www.wago.com/280-562



## 1.2.8 Push-in type wire jumper

#### 1.2.8.1 Jumper

Item No.: 249-126

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 110 mm long; black

Item No.: 249-123

Push-in type wire jumper; 0.75 mm²; insulated; 180 mm long; black

Item No.: 249-127

Push-in type wire jumper; 0.75 mm²; 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 mm² - 10 mm² tbs; gray

## 1.2.10 Tool

## 1.2.10.1 Operating tool



Operating tool; Blade:  $3.5\times0.5$  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-rail.

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).

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## 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).



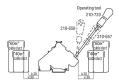
Testing via voltage tester directly on the current bar.

# Application



Actuator terminal block paired with a magnetic valve

# Installation



Min. mounting distance – terminal blocks to cable duct

# Marking



Labeling via WMB Multi Marking System.

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

Current addresses can be found at::  $\underline{www.wago.com}$ 

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