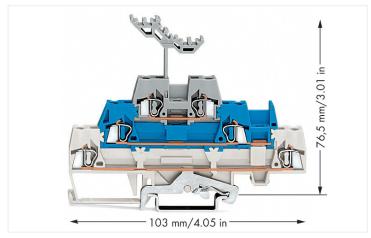
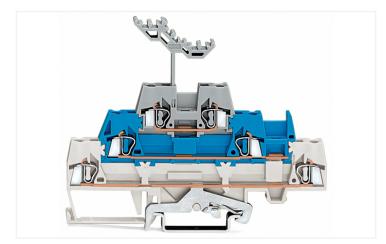
Triple-deck terminal block; Shield/through/through terminal block; 2.5 mm<sup>2</sup>; with marker carrier; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP<sup>®</sup>; 2,50 mm<sup>2</sup>; white/blue/gray



https://www.wago.com/280-558





Color: white/blue/gray

Triple-deck terminal block, 280 Series, CAGE CLAMP®

Our triple-deck terminal block (item number 280-558) simplifies electrical installations. The triple-deck terminal block also serves as a through terminal block as well as a shield terminal block. Strip lengths must be between 8 mm and 9 mm when connecting conductors to this triple-deck terminal block. Featuring conductor terminals along with CAGE CLAMP®, this connector outperforms the competition. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. Depending on the conductor type, this triple-deck terminal block is ideal for conductor cross sections ranging from 0.08 mm² to 2.5 mm². It has three levels. Three potentials can connect using the six clamping points The white/blue/gray housing is made of polyamide (PA66) for insulation. These through rail-mount 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	500 V	-	-	
Rated surge voltage	6 kV	-	-	
Rated current	20 A	_	_	

Power Loss	
Power loss, per pole (potential)	1.596 W
Rated current $I_N$ for specified power loss	20 A
Resistance value for specified, current- dependent power loss	0.00133 Ω

Connection data		
Clamping units	6	
Total number of potentials	3	
Number of levels	3	

Connection 1	
Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper Aluminum

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#### Connection 1

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-

"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	103 mm / 4.055 inches
Depth from upper-edge of DIN-rail	76.5 mm / 3.012 inches

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

Material data	
Note (material data)	
	<u>Information on material specifications can be found here</u>
Color	white/blue/gray
Material group	1
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	VO
Fire load	0.313 MJ
Weight	22 g

https://www.wago.com/280-558



## **Environmental requirements**

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

Commercial data	
Product Group	1 (Rail Mounted Terminal Blocks)
eCl@ss 10.0	27-14-11-41
eCl@ss 9.0	27-14-11-41
ETIM 9.0	EC000901
ETIM 8.0	EC000901
PU (SPU)	40 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454093181
Customs tariff number	85369010000

<b>Environmental Product Compliance</b>	
CAS-No.	7439-92-1
REACH Candidate List Substance	Lead
RoHS Compliance Status	Compliant,No Exemption
SCIP notification number (Austria)	b9ec6af1-c32a-41ba-aacc-db38115a4fcb
SCIP notification number (Belgium)	5fb3bbec-0f0a-458f-87cd-eb849dd8da98
SCIP notification number (Bulgaria)	a72187a1-3885-4f19-ab5d-30cf3d52113d
SCIP notification number (Czech Republic)	bd9ed6a9-6aeb-4a4e-8a62-c1c1669d88d9
SCIP notification number (Denmark)	d77379ef-3a96-4828-9f22-2f849d38fb3a
SCIP notification number (Finland)	430eb260-74fe-4787-819d-b3834ce4292c
SCIP notification number (France)	d16ec607-3106-4a5b-a56b-9081b7366633
SCIP notification number (Germany)	cfe0763b-d9e7-48c7-be57-972f9196395c
SCIP notification number (Hungary)	f91f1f3e-656d-49b8-9a79-81c1779a9fbd
SCIP notification number (Italy)	d0d88acd-8482-4a39-be92-b74bb6f9cfd4
SCIP notification number (Netherlands)	fde8ca6d-81dc-440f-88b4-67397ffc2170
SCIP notification number (Poland)	e5051f3f-4611-4aa4-bc15-818c21911b12
SCIP notification number (Romania)	8a66859d-edd4-43db-9616-02640391ed9e
SCIP notification number (Sweden)	7210e498-e3c1-4309-a804-945ecfc1e9df

# Approvals / Certificates

## General approvals





Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	2157201.01
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/280-558



# Approvals for marine applications



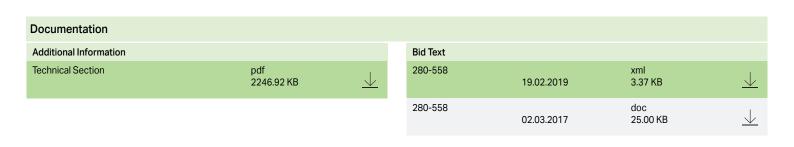






VERITAS	- DAYLONGO -	
Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA
BV Bureau Veritas S.A.	EN 60947	07436/F0 BV
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2
LR Lloyds Register	EN 60947	91/20112 (E9)

# Downloads Environmental Product Compliance Compliance Search Environmental Product Compliance 280-558



CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 280-558	EPLAN Data Portal 280-558
	WSCAD Universe 280-558
	ZUKEN Portal 280-558



#### 1 Compatible Products

#### 1.1 Required Accessories

#### 1.1.1 End plate

#### 1.1.1.1 End plate



Item No.: 280-303 End and intermediate plate; 2.5 mm thick;

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Item No.: 280-304

End and intermediate plate; 2.5 mm thick; orange



Item No.: 280-336

Intermediate plate; 1.1 mm thick; orange

#### 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



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



#### 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 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated; silver-colo-



#### 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 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.: 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 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

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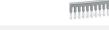


Item No.: 280-472

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; 10-way; insulated; gray



Item No.: 280-484 Jumper; 4-way; insulated; gray

Item No.: 780-452

Item No.: 280-482 Jumper; 2-way; insulated; gray

Jumper; 5-way; insulated; gray

Item No.: 280-402 Jumper; insulated; gray

Item No.: 280-492

Jumper; 2-way; insulated; gray

Item No.: 780-454

Item No.: 780-455

Item No.: 280-483

Item No.: 280-409

Jumper; insulated; gray

Jumper; 3-way; insulated; gray

Staggered jumper; from 1 to 5; insulated;

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Staggered jumper; from 1 to 2; insulated;

Item No.: 780-453

Staggered jumper; from 1 to 3; insulated;

Staggered jumper; from 1 to 4; insulated;

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#### 1.2.5.1 Jumper

Item No.: 780-456

Staggered jumper; from 1 to 6; insulated; gray



Item No.: 709-111

Staggered jumper; from 1 to 7; insulated; gray



Staggered jumper; from 1 to 8; insulated; gray

#### Item No.: 281-421

Vertical jumper; insulated; gray



Item No.: 709-110

Wire commoning chain; 2.5 mm²; insulated; black



Wire commoning chain; 2.5 mm<sup>2</sup>; insula-

Item No.: 709-112

Wire commoning chain; 2.5 mm<sup>2</sup>; insula-

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





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

# 1.2.7 Protective warning marker

WMB marking card; as card; for terminal

block width 5 - 17.5 mm; stretchable 5 -

5.2 mm; plain; snap-on type; white

#### 1.2.7.1 Cover



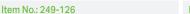
Item No.: 280-415

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





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 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.: 249-142

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

Item No.: 249-141

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



#### 1.2.10 Tool

## 1.2.10.1 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**

#### Installation



Snapping a terminal block onto the DIN-rail.



Removing a terminal block from the assembly.

#### Conductor termination



#### CAGE CLAMP® connection

Inserting a conductor.
With ferruled conductors, it is necessary to use a terminal block one size smaller than the conductor's nominal cross-section.

#### Commoning



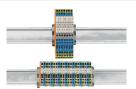
A vertical jumper commons the upper and lower decks, creating a 6-conductor feed-through terminal block in one housing. Two adjacent triple-deck terminal blocks may be commoned together on the same deck using a push-in adjacent jumper.



Combining vertical and adjacent jumpers.

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Use 67% less rail space with triple-deck terminal blocks.

# Marking



Labeling via WMB Multi Marking System.

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