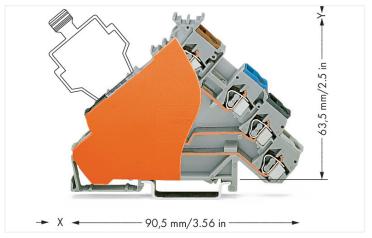
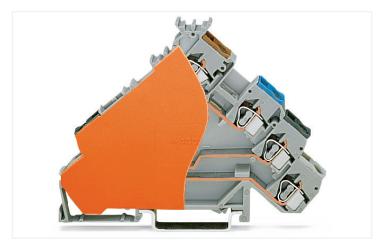
4-conductor sensor terminal block; for PNP (positive) switching sensors; for fuse plugs; with orange end plate; with colored conductor entries; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; gray

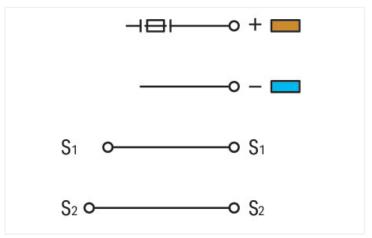


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Color: gray



280-588/280-323

Electrical data

dependent power loss

Ratings per IEC/EN	
Ratings (note)	Electrical ratings are given by the fuse plug or empty component plug housing.
Nominal voltage (III/3)	125 V
Rated current	5 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Raum	gs pe	i ieu/	EIN Z

Rated voltage (III/3) 2	250 V
Rated current 2	6.3 A

$\begin{array}{lll} \textbf{Power Loss} \\ \textbf{Power loss, per pole (potential)} & 0.0333 \, \textbf{W} \\ \textbf{Rated current I}_{\textbf{N}} \, \textbf{for specified power loss} & 5 \, \textbf{A} \\ \textbf{Resistance value for specified, current-} & 0.00133 \, \Omega \\ \end{array}$

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Connection data		
Connection points	6	
Total number of potentials	5	
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

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 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	6 mm / 0.236 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

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Material data	
Note (material data)	Information on material specifications can be found here
Color	gray
Material group	
Insulation material	Polyamide (PA66)
Flammability class per UL94	VO
Fire load	0.442 MJ
Weight	20.9 g

Environmenta	I requirements
LITTI OTTITICITA	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	27-14-11-28
eCl@ss 9.0	27-14-11-28
ETIM 8.0	EC000900
ETIM 7.0	EC000900
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454559496
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
UR Underwriters Laboratories	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	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship	EN 60947	20-HG1941090-PDA
ning		

https://www.wago.com/280-588/280-323



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 280-588/280-323



Documentation

Additional Information

Technical Section pdf 2240.62 KB

Bid Text			
280-588/280-323	19.02.2019	xml 3.54 KB	<u>↓</u>
280-588/280-323	14.03.2017	doc 25.00 KB	$\underline{\downarrow}$

CAD/CAE-Data

CAD data

2D/3D Models 280-588/280-323



EPLAN Data Portal 280-588/280-323

WSCAD Universe 280-588/280-323

ZUKEN Portal 280-588/280-323



1 Compatible Products

1.1 Optional Accessories

1.1.1 DIN-rail

1.1.1.1 Mounting accessories



thick; 2 m long; unslotted; similar to EN

Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm

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



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

Item No.: 210-115

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

60715; silver-colored

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

Item No.: 210-508

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

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

https://www.wago.com/280-588/280-323



1.1.2 Ferrule

1.1.2.1 Ferrule



Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

Item No.: 216-302

Ferrule; Sleeve for 0.34 mm² / 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 mm² / 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 mm² / AWG 18; insulated; electro-tin plated; red

Item No.: 216-103

Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated

Item No.: 216-204

Ferrule; Sleeve for 1.5 mm² / 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

1.1.3 Installation

1.1.3.1 Cover



Item No.: 709-154

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

1.1.3.2 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

1.1.3.3 Mounting accessories



Item No.: 249-116

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

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1.1.4 Insulation stop

1.1.4.1 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

1.1.5 Jumper

1.1.5.1 Jumper

Item No.: 280-490

Jumper; 10-way; insulated; gray

THITTH

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

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 mm²; insulated; black

Item No.: 709-111

Wire commoning chain; 2.5 mm²; insula-

ted; black



Item No.: 709-112

Wire commoning chain; 2.5 mm²; insulated; black

Item No.: 210-103

Wire commoning chain; insulated; black

Item No.: 210-123

Wire commoning chain; insulated; blue

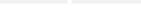
1.1.6 Marking

1.1.6.1 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



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



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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WAGO

1.1.6.1 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

1.1.7 Plug

1.1.7.1 Empty component plug housing



Item No.: 280-801

Empty component plug housing; gray

1.1.7.2 Fuse plug



Item No.: 281-512/281-418
Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with blown fuse indication by neon lamp; 120 V; 6 mm wide; gray

Item No.: 281-512/281-417

Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with blown fuse indication by neon lamp; 230 V; 6 mm wide; gray

Item No.: 281-512/281-501

Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with LED indicator; 24 V AC/DC; 6 mm wide; gray

Item No.: 281-512

Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with port for LED; 6 mm wide; gray



Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; without blown fuse indication; 6 mm wide; gray

Item No.: 280-854

Fuse plug; with soldered miniature fuse; 1 A FF; 5 mm wide; gray

Item No.: 280-856

Fuse plug; with soldered miniature fuse; 2 A FF; 5 mm wide; gray

Item No.: 280-850

Fuse plug; with soldered miniature fuse; 250 mA FF; 5 mm wide; gray

Item No.: 280-852

Fuse plug; with soldered miniature fuse; 500 mA FF; 5 mm wide; gray

Item No.: 280-854/281-415

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); AC 15 - 30 V; 1 A FF; 5 mm wide; gray

Item No.: 280-856/281-415

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); AC 15 - 30 V; 2 A FF; 5 mm wide; gray

Item No.: 280-850/281-415

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); AC 15 - 30 V; 250 mA FF; 5 mm wide; gray



Item No.: 280-852/281-415
Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); AC 15 - 30
V; 500 mA FF; 5 mm wide; gray

Item No.: 280-854/281-413

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 15 - 30 V; 1 A FF; 5 mm wide; gray

Item No.: 280-856/281-413

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 15 - 30 V; 2 A FF; 5 mm wide; gray

Item No.: 280-850/281-413

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 15 - 30 V; 250 mA FF; 5 mm wide; gray



Item No.: 280-852/281-413

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 15 - 30 V; 500 mA FF; 5 mm wide; gray

Item No.: 280-854/281-414

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 30 - 65 V; 1 A FF; 5 mm wide; gray

Item No.: 280-856/281-414

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 30 - 65 V; 2 A FF; 5 mm wide; gray

Item No.: 280-850/281-414

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 30 - 65 V; 250 mA FF; 5 mm wide; gray

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1.1.7.2 Fuse plug



Item No.: 280-852/281-414

Fuse plug; with soldered miniature fuse; with indicator lamp; LED (red); DC 30 - 65 V; 500 mA FF; 5 mm wide; gray

1.1.8 Protective warning marker

1.1.8.1 Cover



Item No.: 280-415

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

1.1.9 Push-in type wire jumper

1.1.9.1 Jumper



lated; 110 mm long; black



lated; 180 mm long; black





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

1.1.10 Test and measurement

Push-in type wire jumper; 0.75 mm²; insu-

1.1.10.1 Testing accessories



Item No.: 209-170

Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm² - 10 mm² tbs; gray

1.1.11 Tool

1.1.11.1 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

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Installation Notes

Installation



Snapping a terminal block onto the DINrail.

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 Push jumper down until fully inserted.

Testing

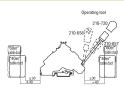


Testing via banana plug and test plug adapter (209-170).



Testing via voltage tester directly on the current bar.

Installation



Min. mounting distance - terminal blocks to cable duct

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Marking



Labeling via WMB Multi Marking System.

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