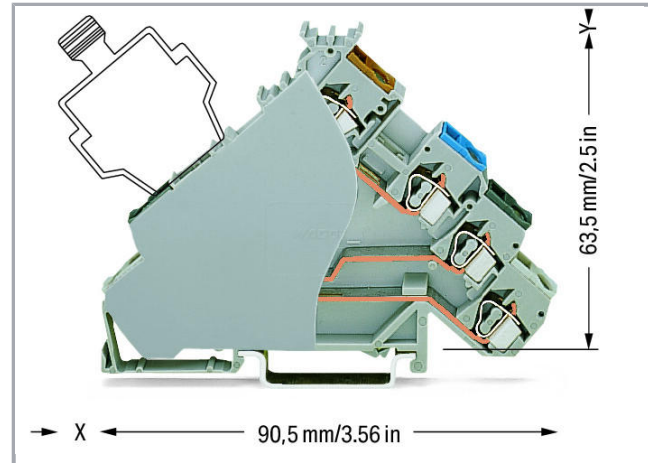


Data sheet | Item number: 280-588/280-320

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

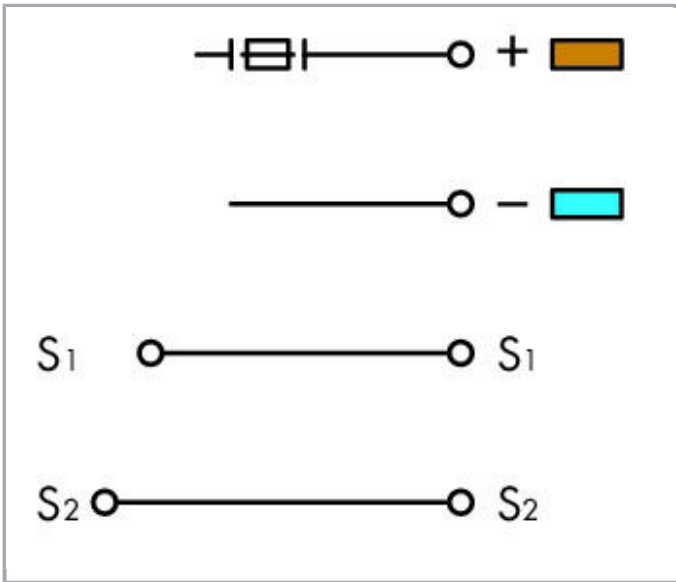
www.wago.com/280-588/280-320



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

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32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Item description

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 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

Safety information 1:

Electrical ratings are given by the fuse plug or empty component plug housing.

Data

Electrical data

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

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Ratings per IEC/EN 60664-1

Rated voltage (III / 3)	125 V
Rated current	5 A
Rated voltage (III / 3) 2	250 V
Rated current (2)	6.3 A
Legend (ratings)	(III / 3) $\hat{=}$ Overvoltage category III / Pollution degree 3

Connection data

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper Aluminum
Solid conductor	0,08 ... 2,5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0,08 ... 2,5 mm ² / 28 ... 12 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
Total number of connection points	6
Total number of potentials	5
Number of levels	4
Type of wiring	Front-entry wiring
Note (conductor cross-section)	12 AWG: THHN, THWN

Geometrical Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-35 rail	63,5 mm / 2.5 inch
Depth	90,5 mm / 3.563 inch

Mechanical data

Design	angled
Type of mounting	DIN-35 rail
Marking level	Center marking

Material Data

Color	gray
Insulating material	Polyamide 66 (PA 66)
Fire load	0.348 MJ

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


Weight	21 g
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Commercial data

Product Group	1 (Rail Mounted Terminal Blocks)
Packaging type	BOX
Country of origin	DE
GTIN	4045454559489
Customs Tariff No.	85369010000

Approvals / Certificates


Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947	2160584.53

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	EN 60947	20- HG1941090- PDA

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UR Underwriters Laboratories Inc.	UL 1059	20190731- E45172

Counterpart







Compatible products

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

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Marking accessories

	Item no.: 2009-115 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-115
	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	www.wago.com/2009-115/000-002
	Item no.: 2009-115/000-006 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-115/000-006
	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	www.wago.com/2009-115/000-007
	Item no.: 2009-115/000-012 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-115/000-012
	Item no.: 2009-115/000-017 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-115/000-017
	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	www.wago.com/2009-115/000-023
	Item no.: 2009-115/000-024 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-115/000-024
	Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type; white	www.wago.com/793-501
	Item no.: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type; yellow	www.wago.com/793-501/000-002
	Item no.: 793-501/000-005 WMB marking card; as card; not stretchable; plain; snap-on type; red	www.wago.com/793-501/000-005
	Item no.: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type; blue	www.wago.com/793-501/000-006

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



Item no.: 793-501/000-007
WMB marking card; as card; not stretchable; plain; snap-on type; gray

www.wago.com/793-501/000-007



Item no.: 793-501/000-012
WMB marking card; as card; not stretchable; plain; snap-on type; orange

www.wago.com/793-501/000-012



Item no.: 793-501/000-017
WMB marking card; as card; not stretchable; plain; snap-on type; light green

www.wago.com/793-501/000-017

Item no.: 793-501/000-023
WMB marking card; as card; not stretchable; plain; snap-on type; green

www.wago.com/793-501/000-023



Item no.: 793-501/000-024
WMB marking card; as card; not stretchable; plain; snap-on type; violet

www.wago.com/793-501/000-024

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

www.wago.com/793-5501



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

www.wago.com/793-5501/000-002



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

www.wago.com/793-5501/000-005



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

www.wago.com/793-5501/000-006



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

www.wago.com/793-5501/000-007



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

www.wago.com/793-5501/000-012



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; green

www.wago.com/793-5501/000-017



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; light green

www.wago.com/793-5501/000-023

Item no.: 793-5501/000-024






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




WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet

www.wago.com/793-5501/000-024



Carrier rail

	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	www.wago.com/210-112
	Item no.: 210-113 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715	www.wago.com/210-113
	Item no.: 210-114 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715	www.wago.com/210-114
	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	www.wago.com/210-115
	Item no.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715	www.wago.com/210-118
	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	www.wago.com/210-196
	Item no.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715	www.wago.com/210-197
	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	www.wago.com/210-198
	Item no.: 210-504 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715	www.wago.com/210-504
	Item no.: 210-505 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715	www.wago.com/210-505
	Item no.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715	www.wago.com/210-506
	Item no.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715	www.wago.com/210-508








assembling

	Item no.: 709-154 Cover; Type 2; suitable for cover carrier, type 2; 1 m long; transparent	www.wago.com/709-154
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ferrule

	Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated	www.wago.com/216-101
	Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated	www.wago.com/216-102

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

	Item no.: 216-103 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated	www.wago.com/216-103
	Item no.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated	www.wago.com/216-104
	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green	www.wago.com/216-302
Jumper		
	Item no.: 210-103 Wire commoning chain; insulated; 50 connections; black	www.wago.com/210-103
	Item no.: 210-123 Wire commoning chain; insulated; 50 connections	www.wago.com/210-123
	Item no.: 249-123 Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm ²	www.wago.com/249-123
	Item no.: 249-125 Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm ²	www.wago.com/249-125
	Item no.: 249-126 Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm ²	www.wago.com/249-126
	Item no.: 249-127 Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm ²	www.wago.com/249-127
	Item no.: 280-402 Adjacent jumper; insulated; IN = IN terminal block; gray	www.wago.com/280-402
	Item no.: 280-482 Comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray	www.wago.com/280-482
	Item no.: 280-483 Comb-style jumper bar; insulated; 3-way; IN = IN terminal block; gray	www.wago.com/280-483
	Item no.: 280-484 Comb-style jumper bar; insulated; 4-way; IN = IN terminal block; gray	www.wago.com/280-484

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

	<p>Item no.: 280-485 Comb-style jumper bar; insulated; 5-way; IN = IN terminal block; gray</p>	www.wago.com/280-485
	<p>Item no.: 280-490 Comb-style jumper bar; insulated; 10-way; IN = IN terminal block; gray</p>	www.wago.com/280-490
	<p>Item no.: 280-492 Alternate comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray</p>	www.wago.com/280-492
	<p>Item no.: 709-110 Wire commoning chain; insulated; 4 connections; 3 x 110 mm; black</p>	www.wago.com/709-110
	<p>Item no.: 709-111 Wire commoning chain; insulated; 3 connections; 2 x 120 mm; black</p>	www.wago.com/709-111
	<p>Item no.: 709-112 Wire commoning chain; insulated; 3 connections; 2 x 170 mm; black</p>	www.wago.com/709-112
	<p>Item no.: 780-452 Staggered jumper; insulated; from 1 to 2; Spacing: 5 mm; suitable for 2-conductor female plugs; gray</p>	www.wago.com/780-452
	<p>Item no.: 780-453 Staggered jumper; insulated; from 1 to 3; Spacing: 5 mm; suitable for 2-conductor female plugs; gray</p>	www.wago.com/780-453
	<p>Item no.: 780-454 Staggered jumper; insulated; from 1 to 4; Spacing: 5 mm; suitable for 2-conductor female plugs; gray</p>	www.wago.com/780-454
	<p>Item no.: 780-455 Staggered jumper; insulated; from 1 to 5; Spacing: 5 mm; suitable for 2-conductor female plugs; gray</p>	www.wago.com/780-455
	<p>Item no.: 780-456 Staggered jumper; insulated; from 1 to 6; Spacing: 5 mm; suitable for 2-conductor female plugs; gray</p>	www.wago.com/780-456
	<p>Item no.: 780-457 Staggered jumper; insulated; from 1 to 7; Spacing: 5 mm; suitable for 2-conductor female plugs; gray</p>	www.wago.com/780-457
	<p>Item no.: 780-458 Staggered jumper; insulated; from 1 to 8; Spacing: 5 mm; suitable for 2-conductor female plugs; gray</p>	www.wago.com/780-458
plug		
	<p>Item no.: 280-801 Empty component plug housing; gray</p>	www.wago.com/280-801
	<p>Item no.: 280-850 Fuse plug; with soldered miniature fuse; 250 mA FF; 5 mm wide; gray</p>	www.wago.com/280-850
	<p>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</p>	www.wago.com/280-850/281-413
	<p>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</p>	www.wago.com/280-850/281-414

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

	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	www.wago.com/280-850/281-415
	Item no.: 280-852 Fuse plug; with soldered miniature fuse; 500 mA FF; 5 mm wide; gray	www.wago.com/280-852
	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	www.wago.com/280-852/281-413
	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	www.wago.com/280-852/281-414
	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	www.wago.com/280-852/281-415
	Item no.: 280-854 Fuse plug; with soldered miniature fuse; 1 A FF; 5 mm wide; gray	www.wago.com/280-854
	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	www.wago.com/280-854/281-413
	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	www.wago.com/280-854/281-414
	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	www.wago.com/280-854/281-415
	Item no.: 280-856 Fuse plug; with soldered miniature fuse; 2 A FF; 5 mm wide; gray	www.wago.com/280-856
	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	www.wago.com/280-856/281-413
	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	www.wago.com/280-856/281-414
	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	www.wago.com/280-856/281-415
	Item no.: 281-511 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	www.wago.com/281-511
	Item no.: 281-512	

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



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 www.wago.com/281-512

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 www.wago.com/281-512/281-417



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 www.wago.com/281-512/281-418



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 www.wago.com/281-512/281-501

tools

Item no.: 210-657

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short www.wago.com/210-657



Item no.: 210-658

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short www.wago.com/210-658

Item no.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft www.wago.com/210-720

Insulation stop

Item no.: 280-470

Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white www.wago.com/280-470



Item no.: 280-471

Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray www.wago.com/280-471

Item no.: 280-472

Insulation stop; 0.75 - 1 mm²; 5 pieces/strip www.wago.com/280-472

Protective Warning Marker



Item no.: 280-415

Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks; yellow www.wago.com/280-415

Downloads

Documentation

Additional Information

Technical explanations	Apr 3, 2019	pdf 2.1 MB	Download
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CAD/CAE-Data

CAD data

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

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 Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
 We are always happy to take your call at +49 (571) 887-44222.

2D/3D Models 280-588/280-320

[URL](#)

[Download](#)

CAE data

EPLAN Data Portal 280-588/280-320

[URL](#)

[Download](#)

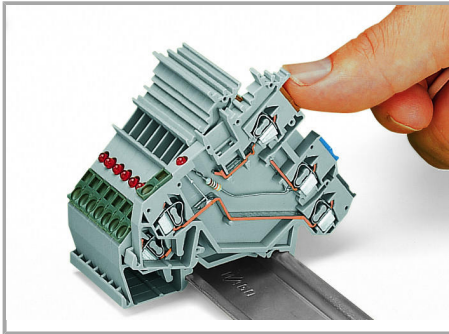
WSCAD Universe 280-588/280-320

[URL](#)

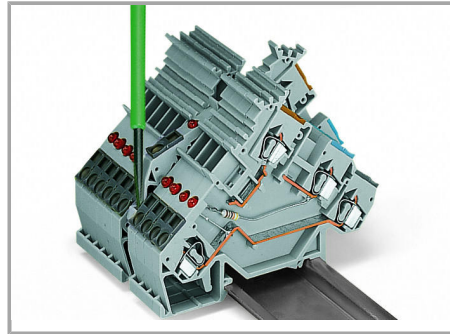
[Download](#)

Installation Notes

Installation



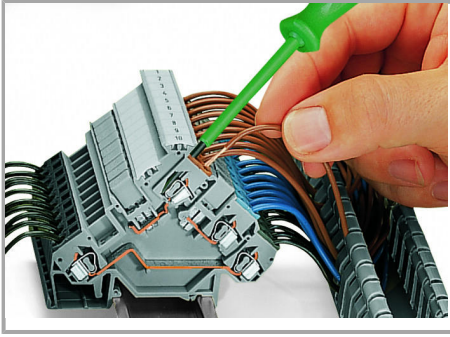
Snapping a terminal block onto the carrier rail – terminal blocks with a grounding foot automatically establish a direct contact to the rail.



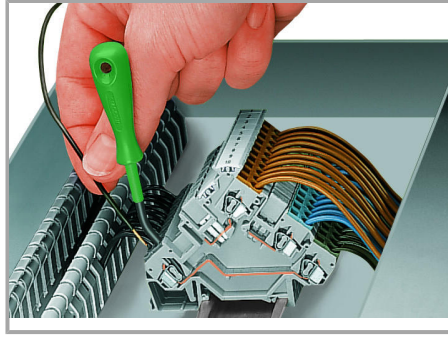
Removing a terminal block from the carrier rail. Notice: Remove jumper contacts first.

Conductor termination

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



CAGE CLAMP® connection

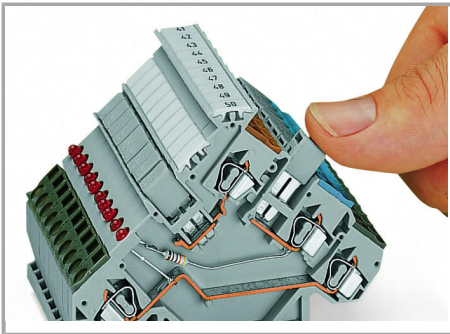


CAGE CLAMP® connection

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

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

Commoning

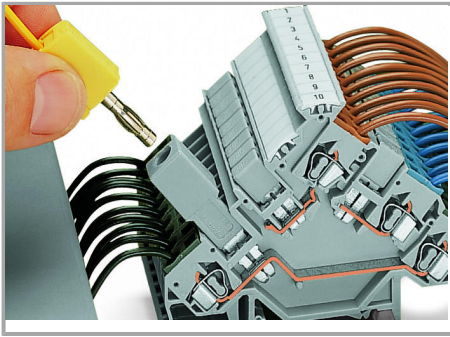


Commoning using an adjacent jumper (280-402).

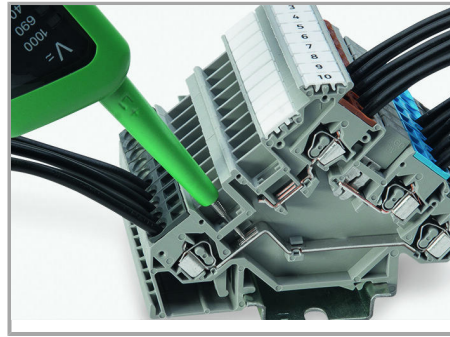
Push jumper down until fully inserted.

Testing

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

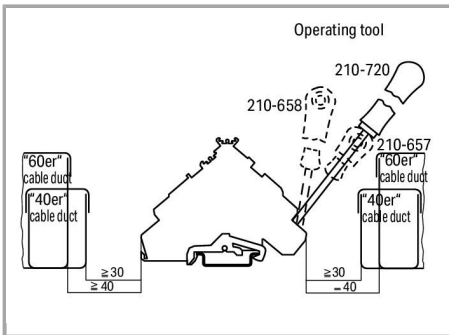


Testing via banana plug and test plug adapter (209-170).



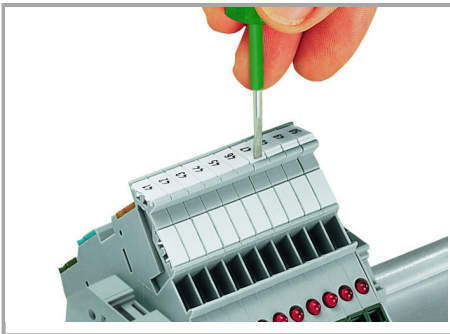
Testing via voltage tester directly on the current bar.

Installation



Min. mounting distance – terminal blocks to cable duct

Marking



Labeling via WMB Multi Marking System.

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