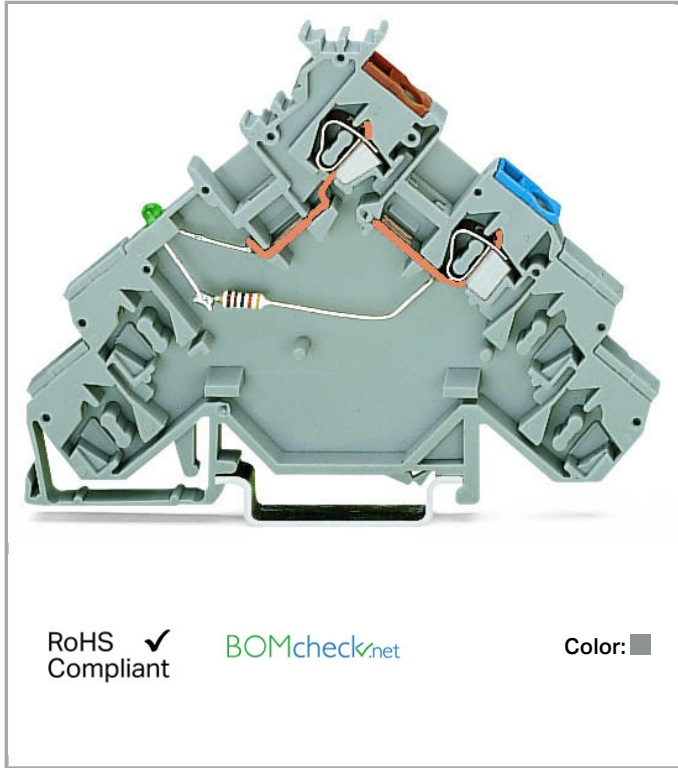


Data sheet | Item number: 280-586/281-496

4-conductor sensor supply terminal block; LED (green); for NPN-(low-side) switching sensors; Power supply from sensor side; with colored conductor entries; 2.5 mm²; CAGE CLAMP®; 2,50 mm²; gray

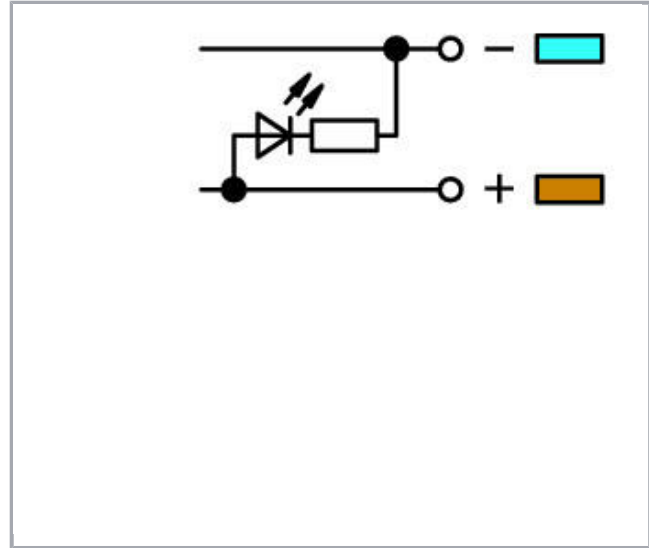
www.wago.com/280-586/281-496



RoHS
Compliant ✓

[BOMcheck.net](https://www.bomcheck.net)

Color: ■



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.

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

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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:

LED power consumption: 4.8 mA

Data

Electrical data

Voltage type 1	DC
Nominal voltage	24 V

Ratings per IEC/EN 60664-1

Rated current	20 A
---------------	------

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	2
Total number of potentials	2
Number of levels	4
Wiring type	Front-entry wiring
Note (conductor cross-section)	12 AWG: THHN, THWN

Geometrical Data

Width	5 mm / 0.197 inch
Height from upper-edge of DIN-rail	63,5 mm / 2.5 inch
Depth	90,5 mm / 3.563 inch

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

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Mechanical data

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

Material Data

Color	gray
Insulation material	Polyamide 66 (PA 66)
Fire load	0.235 MJ
Weight	10.5 g

Commercial data

Product Group	1 (Rail Mounted Terminal Blocks)
Packaging type	BOX
Country of origin	DE
GTIN	4045454365806
Customs tariff number	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
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2

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

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UL-Approvals

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

Counterpart

Compatible products

Push-In type wire jumper

	Item no.: 249-123 Push-in type wire jumper; 0.75 mm ² ; insulated; 180 mm long; black	www.wago.com/249-123
	Item no.: 249-125 Push-in type wire jumper; insulated; 60 mm long; black	www.wago.com/249-125
	Item no.: 249-126 Push-in type wire jumper; 0.75 mm ² ; insulated; 110 mm long; black	www.wago.com/249-126
	Item no.: 249-127 Push-in type wire jumper; 0.75 mm ² ; insulated; 250 mm long; black	www.wago.com/249-127

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; blue	www.wago.com/2009-115/000-006

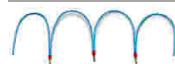
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	Item no.: 2009-115/000-007 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray	www.wago.com/2009-115/000-007
	Item no.: 2009-115/000-012 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange	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; light green	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; violet	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
	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

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

**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**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**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**Jumper****Item no.: 210-103**Wire commoning chain; insulated; black www.wago.com/210-103**Item no.: 210-123**Wire commoning chain; insulated; blue www.wago.com/210-123**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

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

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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



Item no.: 280-485
Comb-style jumper bar; insulated; 5-way; IN = IN terminal block; gray

www.wago.com/280-485



Item no.: 280-490
Comb-style jumper bar; insulated; 10-way; IN = IN terminal block; gray

www.wago.com/280-490



Item no.: 280-492
Alternate comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray

www.wago.com/280-492



Item no.: 709-110
Wire commoning chain; 2.5 mm²; insulated; black

www.wago.com/709-110



Item no.: 709-111
Wire commoning chain; 2.5 mm²; insulated; black

www.wago.com/709-111



Item no.: 709-112
Wire commoning chain; 2.5 mm²; insulated; black

www.wago.com/709-112



Item no.: 780-452
Staggered jumper; insulated; from 1 to 2; Spacing: 5 mm; suitable for 2-conductor female plugs; gray

www.wago.com/780-452



Item no.: 780-453
Staggered jumper; insulated; from 1 to 3; Spacing: 5 mm; suitable for 2-conductor female plugs; gray

www.wago.com/780-453



Item no.: 780-454
Staggered jumper; insulated; from 1 to 4; Spacing: 5 mm; suitable for 2-conductor female plugs; gray

www.wago.com/780-454



Item no.: 780-455
Staggered jumper; insulated; from 1 to 5; Spacing: 5 mm; suitable for 2-conductor female plugs; gray

www.wago.com/780-455



Item no.: 780-456
Staggered jumper; insulated; from 1 to 6; Spacing: 5 mm; suitable for 2-conductor female plugs; gray

www.wago.com/780-456



Item no.: 780-457
Staggered jumper; insulated; from 1 to 7; Spacing: 5 mm; suitable for 2-conductor female plugs; gray

www.wago.com/780-457



Item no.: 780-458
Staggered jumper; insulated; from 1 to 8; Spacing: 5 mm; suitable for 2-conductor female plugs; gray

www.wago.com/780-458

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

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

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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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

ferrule

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

	Item no.: 216-101 Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated	www.wago.com/216-101
	Item no.: 216-102 Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated	www.wago.com/216-102
	Item no.: 216-103 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated	www.wago.com/216-103
	Item no.: 216-104 Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated	www.wago.com/216-104
	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green	www.wago.com/216-302

Downloads

Documentation

Bid Text

280-586/281-496	Mar 14, 2017	doc	Download
doc - Datei		25.6 kB	
280-586/281-496	Feb 19, 2019	xml	Download
GAEB X81 - Datei		3.5 kB	

CAD/CAE-Data

CAD data

2D/3D Models 280-586/281-496	URL	Download
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CAE data

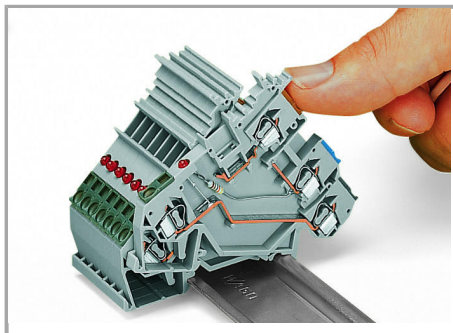
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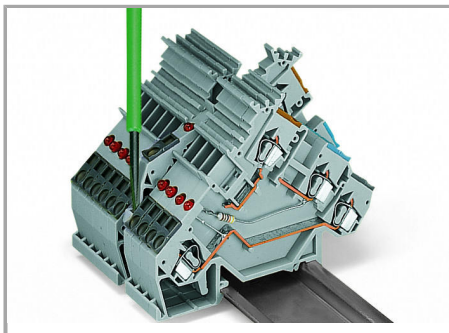
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Installation Notes

Installation

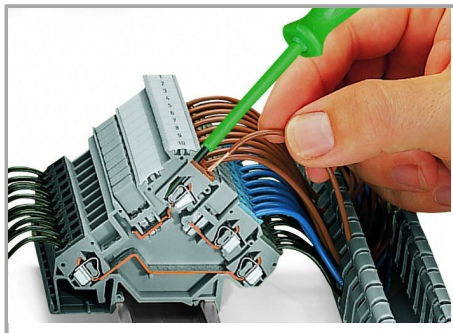


Snapping a terminal block onto the carrier rail – terminal blocks with a grounding foot automatically establish a direct contact to the rail.

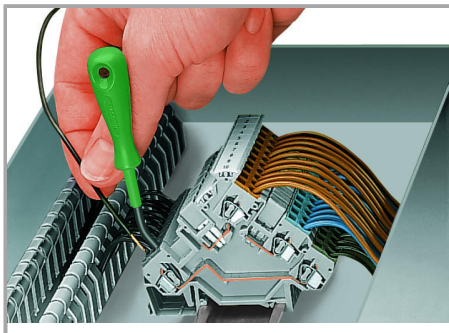


Removing a terminal block from the carrier rail. Notice: Remove jumper contacts first.

Conductor termination



CAGE CLAMP® connection



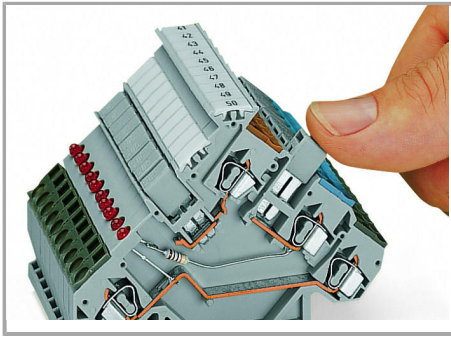
CAGE CLAMP® connection

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

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

Commoning

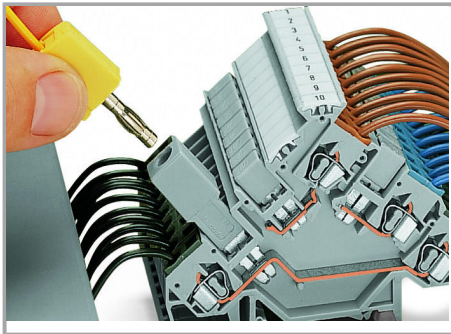
Subject to changes. Please also observe the further product documentation!



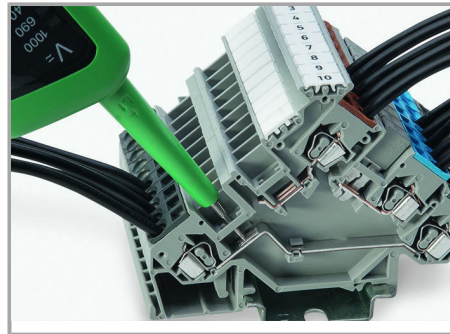
Commoning using an adjacent jumper (280-402).

Push jumper down until fully inserted.

Testing



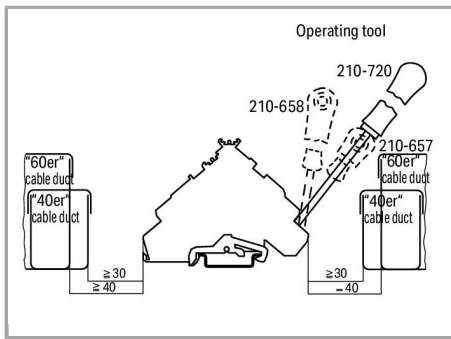
Testing via banana plug and test plug adapter (209-170).



Testing via voltage tester directly on the current bar.

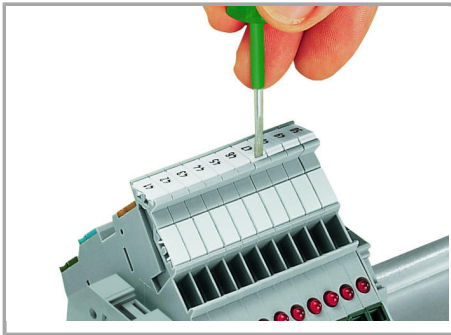
Installation

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



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!

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