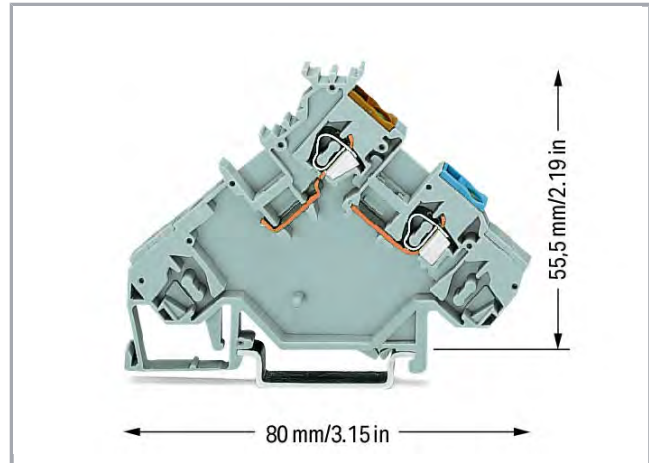
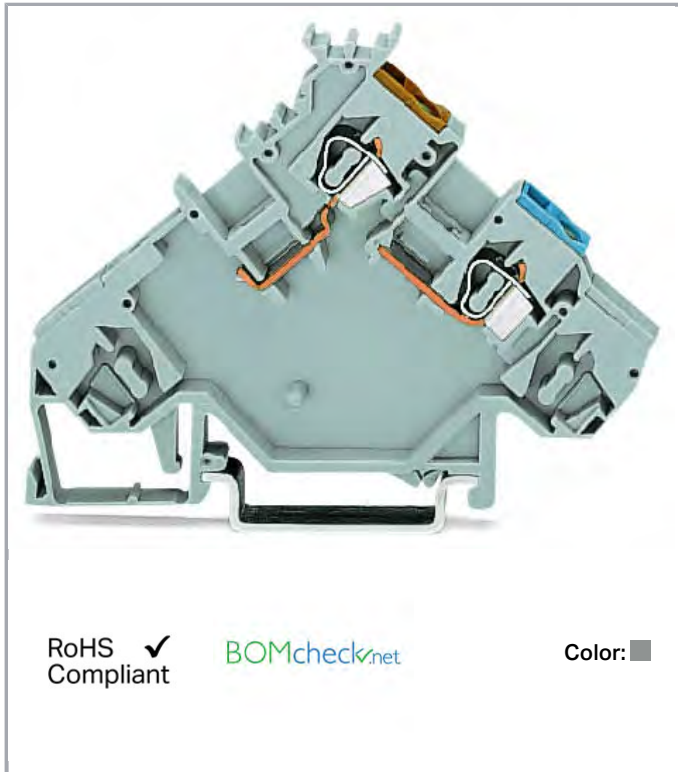


Data sheet | Item number: 280-564

2-conductor sensor supply terminal block; with colored conductor entries;
2.5 mm²; CAGE CLAMP®; 2,50 mm²; gray



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



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

Data

Electrical data

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



Ratings per IEC/EN 60664-1

Nominal voltage (III/3)	400 V
Rated surge voltage (III/3)	6 kV
Rated current	20 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	2
Total number of potentials	2
Number of levels	3
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	55,5 mm / 2.185 inch
Depth	80 mm / 3.15 inch

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	0.176 MJ
Weight	7.7 g

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

Commercial data

Product Group	1 (Rail Mounted Terminal Blocks)
Packaging type	BOX
Country of origin	DE
GTIN	4044918637206
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
	CSA DEKRA Certification B.V.	C22.2	1536071

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

UL-Approvals

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

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

Counterpart

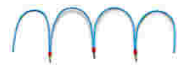
Compatible products

Jumper



Item no.: 210-103

Wire commoning chain; insulated; 50 connections; black



Item no.: 210-123

Wire commoning chain; insulated; 50 connections



Item no.: 249-123

Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm²



Item no.: 249-125

Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm²



Item no.: 249-126

Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm²



Item no.: 249-127

Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm²



Item no.: 280-402

Adjacent jumper; insulated; IN = IN terminal block; gray



Item no.: 280-482

Comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray



Item no.: 280-483

Comb-style jumper bar; insulated; 3-way; IN = IN terminal block; gray



Item no.: 280-484

Comb-style jumper bar; insulated; 4-way; IN = IN terminal block; gray



Item no.: 280-485

Comb-style jumper bar; insulated; 5-way; IN = IN terminal block; gray



Item no.: 280-490

Comb-style jumper bar; insulated; 10-way; IN = IN terminal block; gray



Item no.: 280-492

Alternate comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray

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



Item no.: 709-110
Wire commoning chain; insulated; 4 connections; 3 x 110 mm; black



Item no.: 709-111
Wire commoning chain; insulated; 3 connections; 2 x 120 mm; black



Item no.: 709-112
Wire commoning chain; insulated; 3 connections; 2 x 170 mm; black



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



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



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



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



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



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



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

End plate



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

tools



Item no.: 210-657
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short



Item no.: 210-658
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short



Item no.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft

assembling



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

Insulation stop

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


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 mm²; 5 pieces/strip; light gray


Item no.: 280-472

Insulation stop; 0.75 - 1 mm²; 5 pieces/strip

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


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.: 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


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.: 2009-115/000-017

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


Item no.: 2009-115/000-023

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


Item no.: 2009-115/000-024

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


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.: 793-501/000-005

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

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



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.: 793-501/000-012

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



Item no.: 793-501/000-017

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



Item no.: 793-501/000-023

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.: 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.: 793-5501/000-005

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.: 793-5501/000-006

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.: 793-5501/000-012

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.: 793-5501/000-017

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.: 793-5501/000-023

Subject to changes.



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.: 793-5501/000-024

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

ferrule



Item no.: 216-101

Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated



Item no.: 216-102

Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated



Item no.: 216-103

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



Item no.: 216-104

Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated



Item no.: 216-201

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white



Item no.: 216-202

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item no.: 216-203

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



Item no.: 216-204

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black

Item no.: 216-301

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; green

Protective Warning Marker



Item no.: 280-415

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

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



Item no.: 210-113

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715



Item no.: 210-114

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715

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


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


Item no.: 210-118

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


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.: 210-197

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715


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.: 210-504

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715


Item no.: 210-505

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715


Item no.: 210-506

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715


Item no.: 210-508

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715

Downloads

Documentation

Additional Information

Technical explanations

Apr 3, 2019

CAD/CAE-Data

CAD data

2D/3D Models 280-564

CAE data

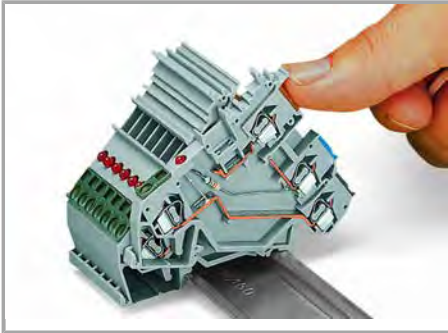
EPLAN Data Portal 280-564

WSCAD Universe 280-564

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

Installation Notes

Installation

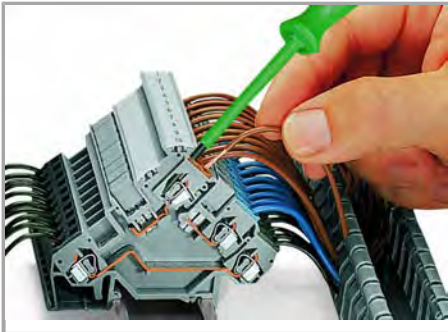


Snapping a terminal block onto the carrier rail – terminal blocks with a grounding foot automatically establish a direct contact to the rail.



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

Conductor termination



CAGE CLAMP® connection

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

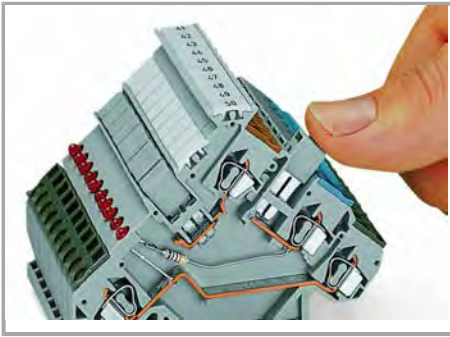


CAGE CLAMP® connection

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

Commoning

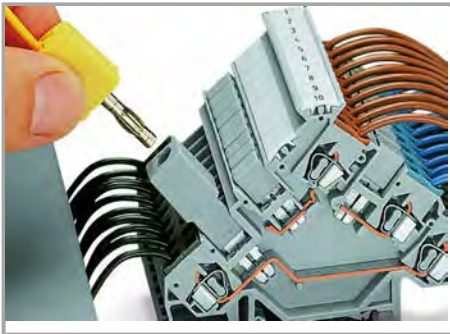
Subject to changes. Please also observe the further product documentation!



Commoning using an adjacent jumper (280-402).

Push jumper down until fully inserted.

Testing



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



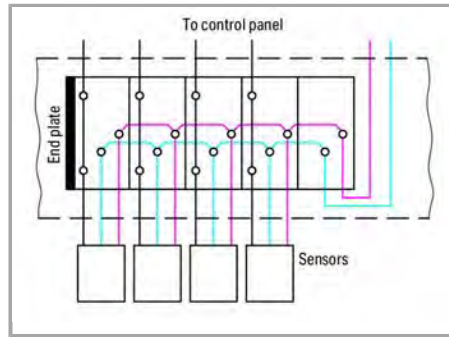
Testing via voltage tester directly on the current bar.

Application

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



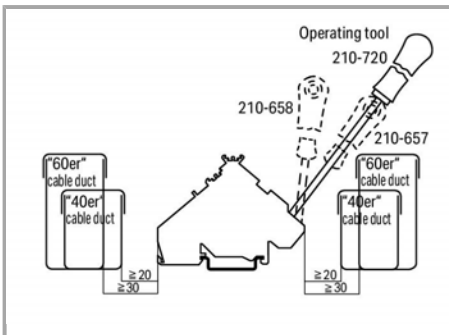
Terminal block assembly:



Power supply from sensor side

Sensor terminal blocks

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!