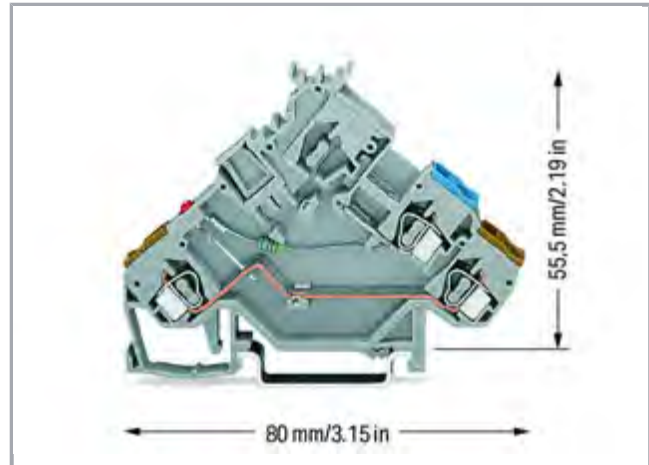
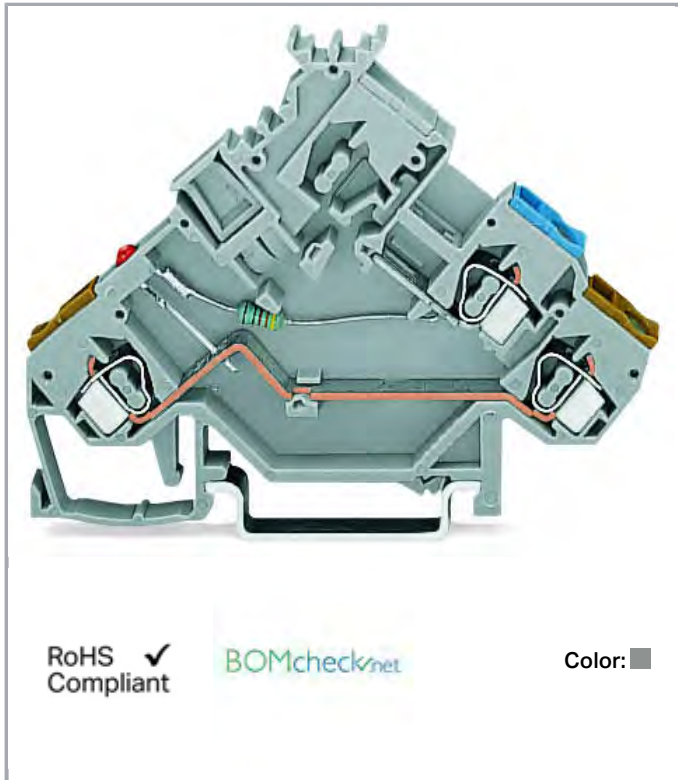
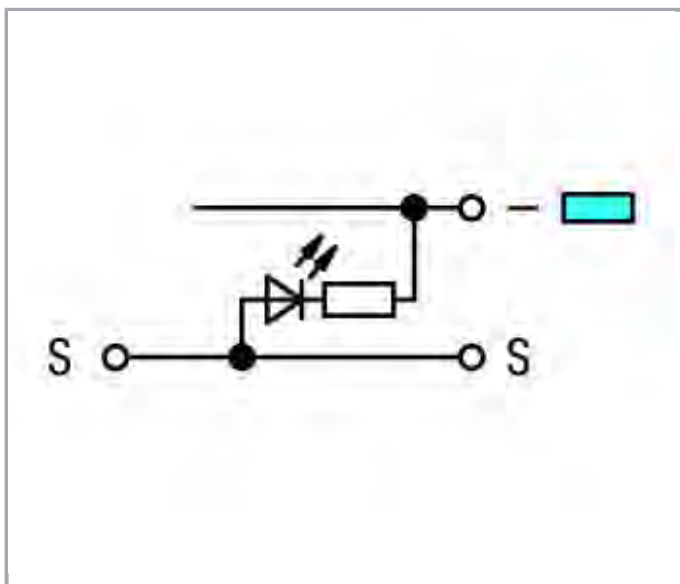


Data sheet | Item number: 280-562/281-434

2-conductor actuator terminal block; LED (red); 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

Safety information 1:

LED power consumption: 4.8 mA

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

**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 mm² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
Total number of connection points	3
Total number of potentials	1
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
-------	------

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

Insulation material	Polyamide 66 (PA66)
Fire load	0.182 MJ
Weight	9.9 g

Commercial data

Product Group	1 (Rail Mounted Terminal Blocks)
Packaging type	BOX
Country of origin	DE
GTIN	4050821248835
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

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!

Compatible products

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

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

**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

**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

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**

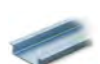
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715

**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

Protective Warning Marker**Item no.: 280-415**

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

tools

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

**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**

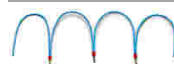
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft

Push-In type wire jumper**Item no.: 249-123**Push-in type wire jumper; 0.75 mm²; insulated; 180 mm long; black**Item no.: 249-125**

Push-in type wire jumper; insulated; 60 mm long; black

**Item no.: 249-126**Push-in type wire jumper; 0.75 mm²; insulated; 110 mm long; black**Item no.: 249-127**Push-in type wire jumper; 0.75 mm²; insulated; 250 mm long; black**Jumper****Item no.: 210-103**

Wire commoning chain; insulated; black

**Item no.: 210-123**

Wire commoning chain; insulated; blue

**Item no.: 280-402**

Jumper; insulated; gray

**Item no.: 280-482**

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.: 280-490**

Jumper; 10-way; insulated; gray

**Item no.: 280-492**

Jumper; 2-way; insulated; gray

**Item no.: 709-110**Wire commoning chain; 2.5 mm²; insulated; black**Item no.: 709-111**

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



Wire commoning chain; 2.5 mm²; insulated; black



Item no.: 709-112

Wire commoning chain; 2.5 mm²; insulated; black



Item no.: 780-452

Staggered jumper; from 1 to 2; insulated; 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

Insulation stop



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

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

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



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

assembling



Item no.: 249-116
Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray



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

Downloads

Documentation

Bid Text

280-562/281-434

doc - Datei

280-562/281-434

GAEB X81 - Datei

Additional Information

Technical explanations

CAD/CAE-Data

CAE data

EPLAN Data Portal 280-562/281-434

WSCAD Universe 280-562/281-434

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



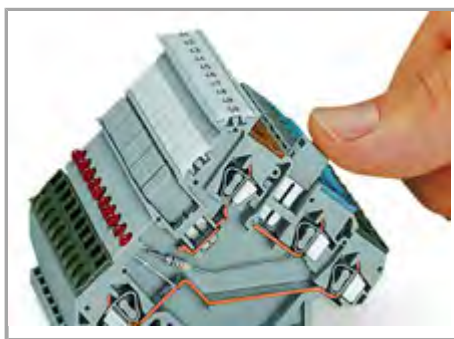
CAGE CLAMP® connection

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

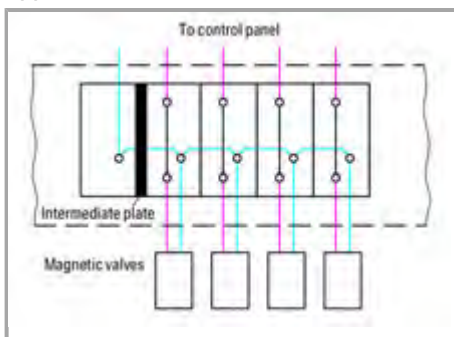


Testing via banana plug and test plug adapter (209-170).



Testing via voltage tester directly on the current bar.

Application



Power supply from control panel side

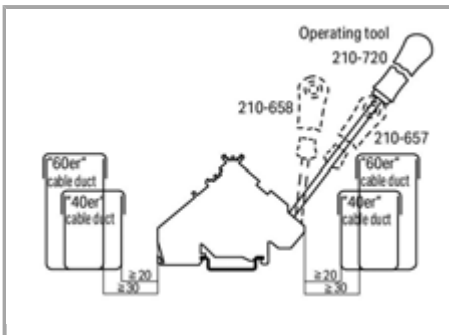
Subject to changes. Please also observe the further product documentation!



Terminal block assembly:

Actuator 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!