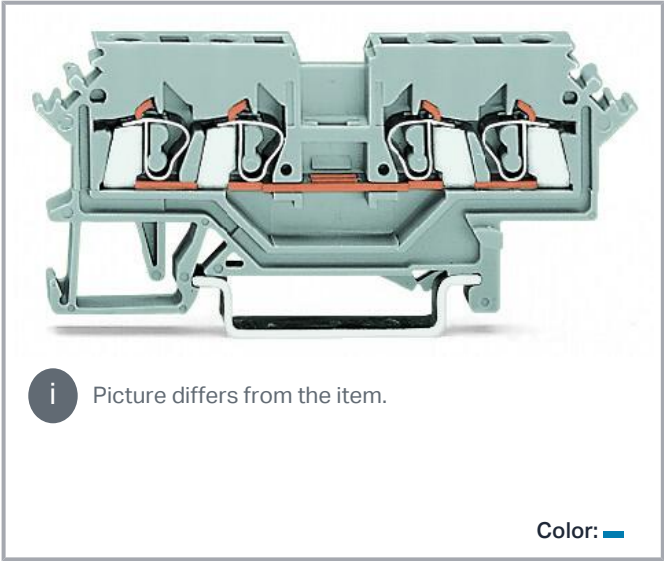
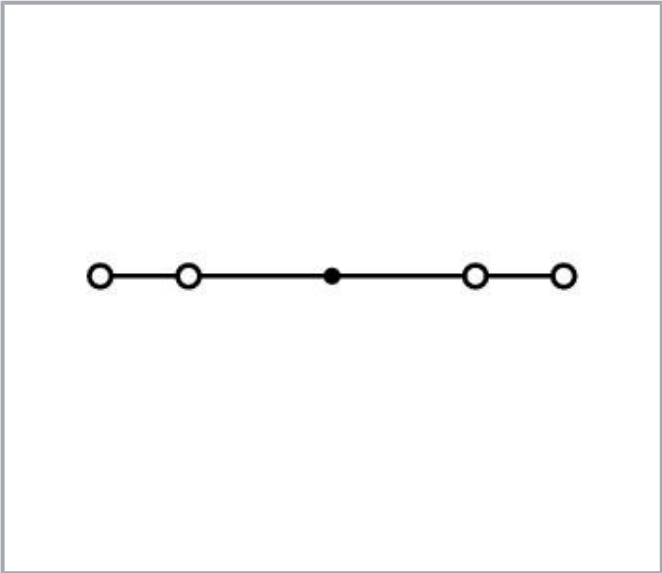


Data sheet | Item number: 280-604

4-conductor through terminal block; 2.5 mm²; suitable for Ex i applications; lateral marker slots; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 2,50 mm²; blue

www.wago.com/280-604



Data
Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60947-7-1
Nominal voltage (III/3)	800 V
Rated impulse voltage (III/3)	8 kV
Rated current	24 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Power Loss

Power loss, per pole (potential)	0.766 W
Rated current I_N for specified power loss	24 A
Resistance value for specified, current-dependent power loss	0.001 Ω

Connection data

Connection points	4
-------------------	---

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

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Total number of potentials	1
Number of levels	1

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

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

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Physical data

Width	5 mm / 0.197 inches
Height	73 mm / 2.874 inches
Depth from upper-edge of DIN-rail	28 mm / 1.102 inches

Mechanical data

Mounting type	DIN-35 rail
Marking level	Side marking

Material data

Note (material data)	Information on material specifications can be found here
Color	blue
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.237 MJ
Weight	8.1 g

Environmental requirements

Processing temperature	-35 ... +85 °C
Continuous operating temperature	-60 ... +105 °C

Commercial data

eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 8.0	EC000897
ETIM 7.0	EC000897
ECCN	NO DATA
PU (SPU)	100 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918391061
Customs tariff number	85369010000

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Environmental Product Compliance

RoHS Compliance Status

Compliant, No Exemption

Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947	2157201.01
	CSA DEKRA Certification B.V.	C22.2	1536071
	UL Underwriters Laboratories Inc.	UL 1059	E45172

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	EN 60947	20-HG1941090-PDA
	BV Bureau Veritas S.A.	EN 60947	07436/F0 BV

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

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	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
	LR Lloyds Register	EN 60947	91/20112 (E9)

Required accessories

End plate

	Item no.: 280-317 End and intermediate plate; 2.5 mm thick; orange	www.wago.com/280-317
	Item no.: 280-316 End and intermediate plate; 2.5 mm thick; gray	www.wago.com/280-316

Optional accessories

End plate

	Item no.: 284-334 Step-down cover plate; 1 mm thick; for 2-, 3- and 4-conductor terminal blocks; gray	www.wago.com/284-334
	Item no.: 284-344 Step-down cover plate; 1 mm thick; for 2-, 3- and 4-conductor terminal blocks; orange	www.wago.com/284-344

Marking accessories

Double marker carrier		
	Item no.: 209-128 Adaptor; gray	www.wago.com/209-128
Marker		
	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.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type; white	www.wago.com/793-501
	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

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

Group marker carrier

	Item no.: 209-142 Group marker carrier; gray	www.wago.com/209-142
	Item no.: 209-141 Group marker carrier; gray	www.wago.com/209-141
	Item no.: 209-140 Group marker carrier; gray	www.wago.com/209-140



Item no.: 249-105
Group marker carrier; gray

www.wago.com/249-105

Mounting

Cover carrier



Item no.: 709-167
Cover carrier; Type 1; incl. fixing/retaining screws and knurled nut; suitable for 279 to 282 and 880 Series rail-mounted terminal blocks; suitable for 264 Series miniature rail-mounted terminal blocks; suitable for 270 Series sensor and actuator terminal blocks; gray

www.wago.com/709-167

Cover



Item no.: 709-153
Cover; Type 1; suitable for cover carrier, type 1; 1 m long; transparent

www.wago.com/709-153

Mounting accessories



Item no.: 209-106
Mounting carrier; for isolated mounting on DIN 35 rails; gray

www.wago.com/209-106



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

www.wago.com/249-116

Push-in type wire jumper

Jumper



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

www.wago.com/249-123



Item no.: 249-126
Push-in type wire jumper; 0.75 mm²; insulated; 110 mm long; black

www.wago.com/249-126



Item no.: 249-127
Push-in type wire jumper; 0.75 mm²; insulated; 250 mm long; black

www.wago.com/249-127



Item no.: 249-125
Push-in type wire jumper; insulated; 60 mm long; black

www.wago.com/249-125

Protective warning marker

Cover

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

**Item no.: 280-415**

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

www.wago.com/280-415**Insulation stop**

Insulation stop

**Item no.: 280-472**

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

www.wago.com/280-472**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**Plugs**

Neon indicator module

**Item no.: 280-803/281-417**

Component plug; 2-pole; 10 mm wide; gray

www.wago.com/280-803/281-417**Item no.: 280-803/281-418**

Component plug; 2-pole; 10 mm wide; gray

www.wago.com/280-803/281-418

Component module with LED

**Item no.: 280-803/281-414**

Component plug; 2-pole; LED (red); 48 VDC; 10 mm wide; gray

www.wago.com/280-803/281-414**Item no.: 280-803/281-413**

Component plug; 2-pole; LED (red); 24 VDC; 10 mm wide; gray

www.wago.com/280-803/281-413**Item no.: 280-803/281-415**

Component plug; 2-pole; LED (red); 10 mm wide; gray

www.wago.com/280-803/281-415**Item no.: 280-803/281-416**

Component plug; 2-pole; LED (red); 10 mm wide; gray

www.wago.com/280-803/281-416

Component module with diode

**Item no.: 280-803/281-411**

Component plug; 2-pole; with diode 1N4007; 10 mm wide; gray

www.wago.com/280-803/281-411**Item no.: 280-803/281-420**

Component plug; 2-pole; with rectifier diode and LED; 10 mm wide; gray

www.wago.com/280-803/281-420

Empty component plug housing

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

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**Item no.: 280-803**

Empty component plug housing; 10 mm wide; Type 4; 2-pole; gray

www.wago.com/280-803**Carrier rail**

Mounting accessories

**Item no.: 210-197**

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

www.wago.com/210-197**Item no.: 210-198**

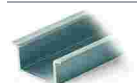
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored

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; silver-colored

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; silver-colored

www.wago.com/210-505**Item no.: 210-506**

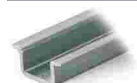
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored

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; silver-colored

www.wago.com/210-508**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

www.wago.com/210-113**Item no.: 210-118**

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

www.wago.com/210-118**Item no.: 210-112**

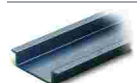
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored

www.wago.com/210-112**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

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; silver-colored

www.wago.com/210-115**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**Testing and measuring**

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; graywww.wago.com/209-170**Item no.: 249-106**

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

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	B-type test plug module; modular; 1,50 mm ² ; gray	www.wago.com/249-106
	Item no.: 249-107 B-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray	www.wago.com/249-107
	Item no.: 249-141 L-type test plug module; modular; with spring-loaded contact pin; Center module; 1,50 mm ² ; gray	www.wago.com/249-141
	Item no.: 249-143 L-type spacer module; modular; e.g., bridging commoned terminal blocks; gray	www.wago.com/249-143
	Item no.: 249-147 B-type test plug module; modular; 2,50 mm ² ; gray	www.wago.com/249-147
	Item no.: 249-142 L-type end module; modular; with rigid contact pin; End module; 1,50 mm ² ; gray	www.wago.com/249-142
	Item no.: 280-418 Test plug module; modular; suitable for all WAGO 280 and 780 Series rail-mounted terminal blocks with jumper slots in the current bar; gray	www.wago.com/280-418
	Item no.: 280-404 Test plug adapter; 5 mm wide; for test plug (2.3 mm Ø); suitable for 1.5 mm ² - 4 mm ² tbs; gray	www.wago.com/280-404
	Item no.: 280-419 Spacer module; modular; bridging commoned terminal blocks; gray	www.wago.com/280-419

Tool

Operating tool		
	Item no.: 210-657 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured	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; multicoloured	www.wago.com/210-658
	Item no.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured	www.wago.com/210-720

Ferrule

Ferrule		
	Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-101
	Item no.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-104
	Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored	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.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	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.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	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.: 216-301 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; light turquoise	www.wago.com/216-302
Jumpers		
Jumper		
	Item no.: 210-123 Wire commoning chain; insulated; blue	www.wago.com/210-123
	Item no.: 280-402 Jumper; insulated; gray	www.wago.com/280-402
	Item no.: 210-103 Wire commoning chain; insulated; black	www.wago.com/210-103
	Item no.: 280-492 Jumper; 2-way; insulated; gray	www.wago.com/280-492
	Item no.: 280-409 Jumper; insulated; gray	www.wago.com/280-409
	Item no.: 280-422 Jumper; insulated; yellow-green	www.wago.com/280-422
	Item no.: 280-482 Jumper; 2-way; insulated; gray	www.wago.com/280-482
	Item no.: 280-484 Jumper; 4-way; insulated; gray	www.wago.com/280-484
	Item no.: 280-490 Jumper; 10-way; insulated; gray	www.wago.com/280-490
	Item no.: 280-485 Jumper; 5-way; insulated; gray	www.wago.com/280-485

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



	Item no.: 280-483 Jumper; 3-way; insulated; gray	www.wago.com/280-483
	Item no.: 284-414 Step-down jumper; from 284/282 to 281/280/279 series; insulated; gray	www.wago.com/284-414
	Item no.: 709-110 Wire commoning chain; 2.5 mm ² ; insulated; black	www.wago.com/709-110
	Item no.: 709-112 Wire commoning chain; 2.5 mm ² ; insulated; black	www.wago.com/709-112
	Item no.: 709-111 Wire commoning chain; 2.5 mm ² ; insulated; black	www.wago.com/709-111
	Item no.: 780-454 Staggered jumper; from 1 to 4; insulated; gray	www.wago.com/780-454
	Item no.: 780-452 Staggered jumper; from 1 to 2; insulated; gray	www.wago.com/780-452
	Item no.: 780-453 Staggered jumper; from 1 to 3; insulated; gray	www.wago.com/780-453
	Item no.: 780-457 Staggered jumper; from 1 to 7; insulated; gray	www.wago.com/780-457
	Item no.: 780-456 Staggered jumper; from 1 to 6; insulated; gray	www.wago.com/780-456
	Item no.: 780-455 Staggered jumper; from 1 to 5; insulated; gray	www.wago.com/780-455
	Item no.: 780-458 Staggered jumper; from 1 to 8; insulated; gray	www.wago.com/780-458

Downloads

Documentation

Additional Information

Technical Section	pdf	Download
Technical explanations	2.3 MB	

CAD/CAE-Data

CAD data

2D/3D Models 280-604	URL	Download
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CAE data

WSCAD Universe 280-604	URL	Download
EPLAN Data Portal 280-604	URL	Download
ZUKEN Portal 280-604	URL	Download
Asset Administration Shell		
Asset Administration Shell 280-604	URL	Download

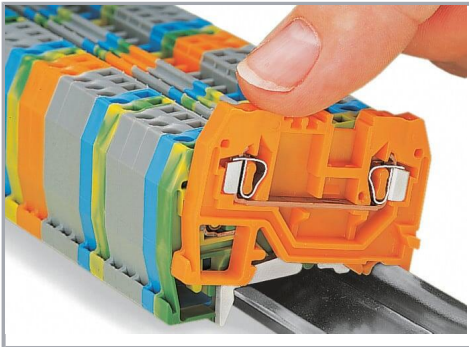
Environmental Product Compliance

Compliance Search

Environmental Product Compliance 280-604	URL	Download
4-conductor through terminal block; 2.5 mm ² ; suitable for Ex i applications; lateral marker slots; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 2,50 mm ² ; blue		

Installation Notes

Installation



Snapping a terminal block onto the DIN-rail.

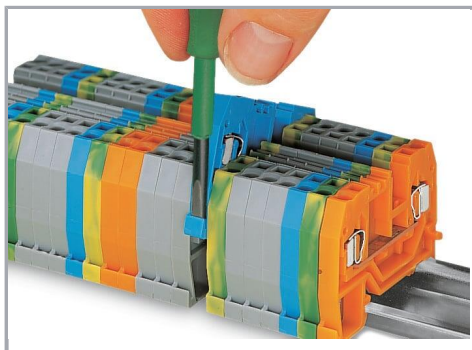


Quick assembly keys prevent reverse mounting.

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

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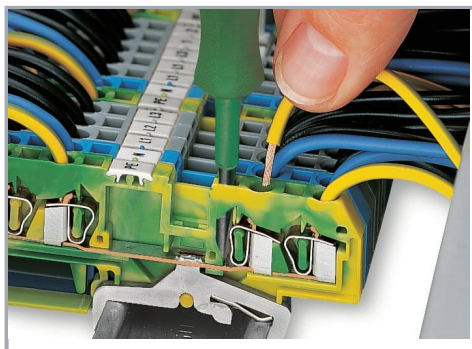


Removing a terminal block from the assembly.

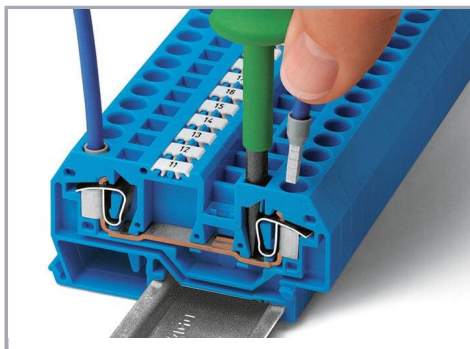


Steel DIN-rails are not suited for PEN (ground and N-conductor) applications per EN 60947-7-2 (VDE 0611, Part 3).

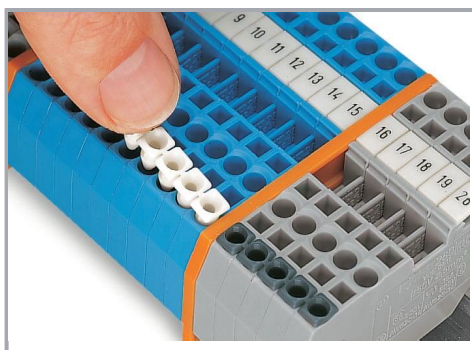
Conductor termination



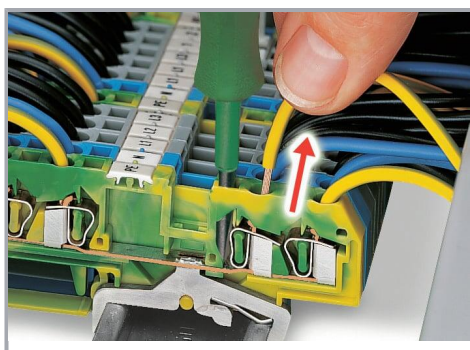
CAGE CLAMP® connection
Inserting a conductor.



CAGE CLAMP® connection
Inserting a conductor.
With ferruled conductors, it is necessary to use a terminal block one size larger than the conductor's nominal cross-section.



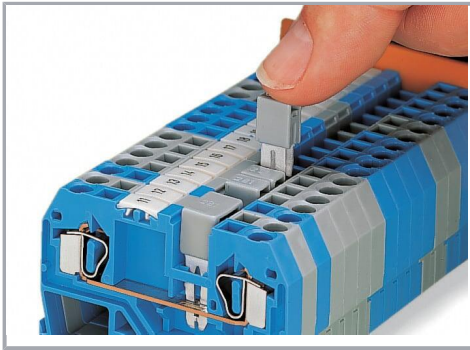
Inserting insulation stops.



CAGE CLAMP® connection
Removing a solid conductor.

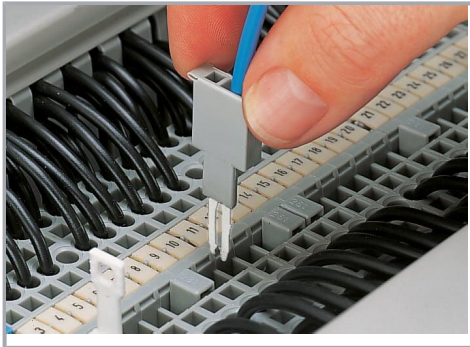
Commoning

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

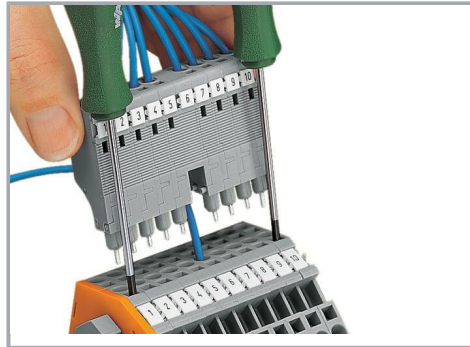


Commoning using an adjacent jumper.
Push jumper down until fully inserted!

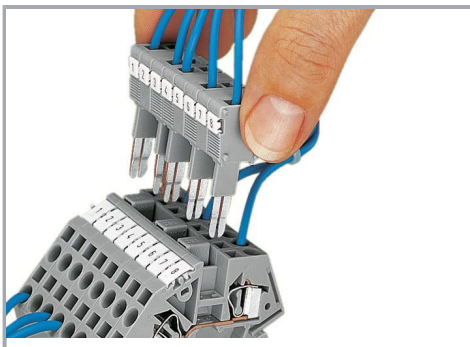
Testing



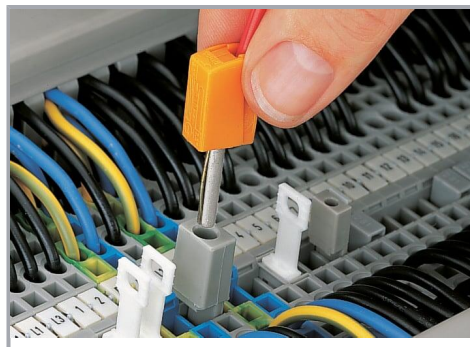
Testing with a test plug.
Picture shows a test plug fitted with CAGE CLAMP®.



L-type test plug modules fitted with
CAGE CLAMP®

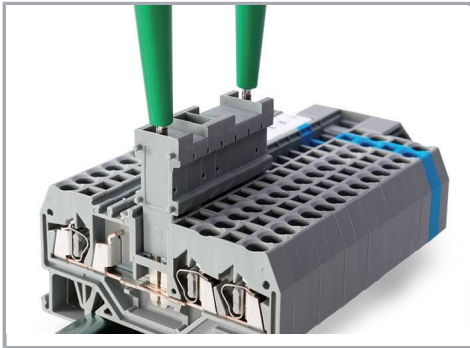


B-type test plug modules fitted with
CAGE CLAMP®



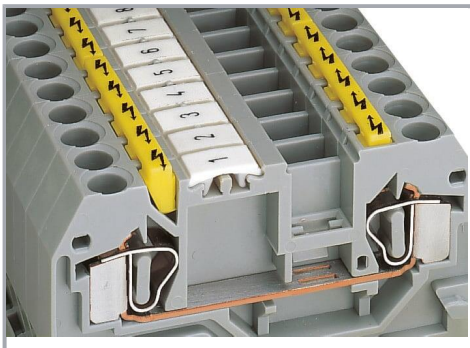
Testing with a test plug.
Picture shows a test plug adapter (209-170).

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



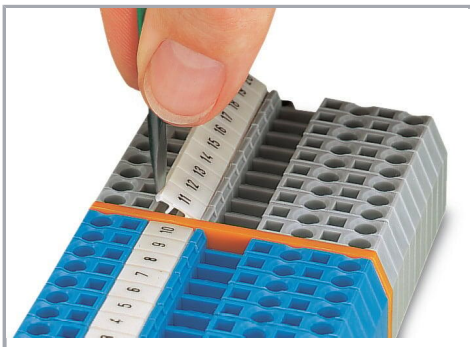
Test plugs modules are directly plugged into the jumper contact slot of the current bar.

Cover

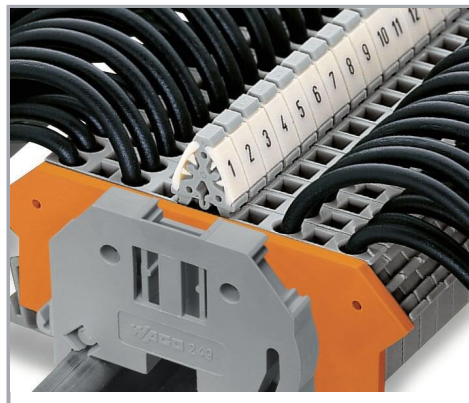


Protective warning markers inserted into the operating slots

Marking



Labeling via WMB Multi Marking System.



Terminal block marking with double marker carriers (209-128) Terminal blocks with side marking

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