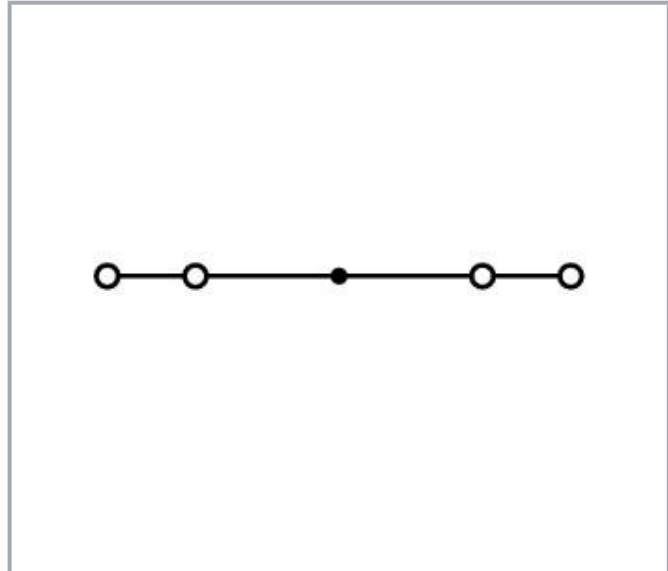
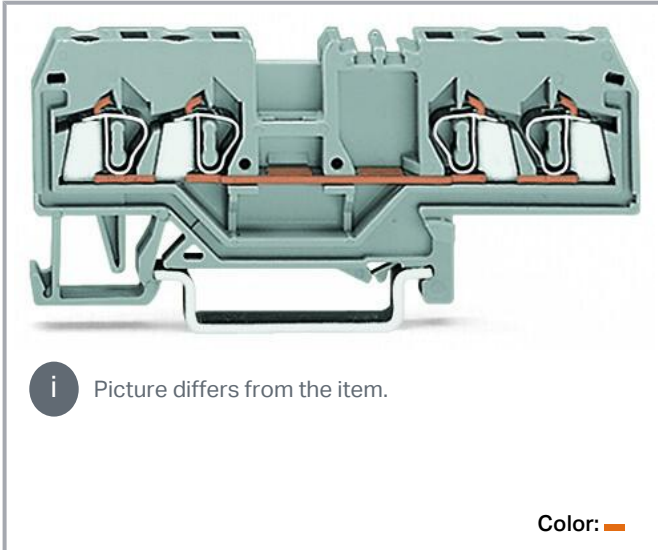


Data sheet | Item number: 280-603

4-conductor through terminal block; 2.5 mm²; center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 2,50 mm²; orange



www.wago.com/280-603



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	20 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Ratings per UL 1059

Approvals per	UL 1059
Rated voltage UL (Use Group C)	600 V
Rated current UL (Use Group C)	20 A

Ratings per CSA

Approvals per	CSA 22.2 No 158
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Subject to changes. Please also observe the further product documentation!

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



Rated voltage CSA (Use Group C)	600 V
Rated current CSA (Use Group C)	24 A

Power loss

Power loss, per pole (potential)	0.532 W
Rated current I_N for specified power loss	20 A
Resistance value for specified, current-dependent power loss	0.001 Ω

Connection data

Connection points	4
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.

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



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 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 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

Physical data

Width	5 mm / 0.197 inches
Height	75 mm / 2.953 inches
Depth from upper-edge of DIN-rail	28 mm / 1.102 inches

Mechanical Data

Mounting type	DIN-35 rail
Marking level	Center marking

Material Data

Note (material data)	Information on material specifications can be found here
Color	orange
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.141 MJ
Weight	9 g

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

Environmental requirements

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

Commercial data




Product Group	1 (Rail Mounted Terminal Blocks)
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 8.0	EC000897
ETIM 7.0	EC000897
PU (SPU)	100 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918311113
Customs tariff number	85369010000

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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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
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Subject to changes. Please also observe the further product documentation!



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

Required accessories

End plate

End plate

	Item no.: 280-314 End and intermediate plate; 2.5 mm thick; gray	www.wago.com/280-314
	Item no.: 280-315 End and intermediate plate; 2.5 mm thick; orange	www.wago.com/280-315











Optional accessories

Ferrule














Ferrule

1

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

















	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
	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
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
Diode plug		
	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
LED plug		
	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.: 280-803/281-414 Component plug; 2-pole; LED (red); 48 VDC; 10 mm wide; gray	www.wago.com/280-803/281-414

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

	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
Empty component plug housing		
	Item no.: 280-803 Empty component plug housing; 10 mm wide; Type 4; 2-pole; gray	www.wago.com/280-803
Push-in type wire jumper		
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.: 249-126 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
	Item no.: 249-125 Push-in type wire jumper; insulated; 60 mm long; black	www.wago.com/249-125
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
End plate		
End plate		
	Item no.: 284-335 Step-down cover plate; 1 mm thick; for 4-conductor 280-633 terminal blocks; gray	www.wago.com/284-335
	Item no.: 284-345 Step-down cover plate; 1 mm thick; for 4-conductor 280-633 terminal blocks; orange	www.wago.com/284-345

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

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
	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

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

	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

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 mm ² - 10 mm ² tbs; gray	www.wago.com/209-170
	Item no.: 281-407 Test plug; 6 mm wide; Nominal current 24 A; for 0.08 mm ² - 2.5 mm ² ; 2,50 mm ² ; gray	www.wago.com/281-407
	Item no.: 249-106 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.: 249-142 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

Insulation stop

Insulation stop

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



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

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

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










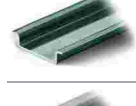



Group marker carrier



Item no.: 209-142
Group marker carrier; gray

www.wago.com/209-142

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

	<p>Item no.: 209-141 Group marker carrier; gray</p>	<p>www.wago.com/209-141</p>
	<p>Item no.: 209-140 Group marker carrier; gray</p>	<p>www.wago.com/209-140</p>
	<p>Item no.: 249-105 Group marker carrier; gray</p>	<p>www.wago.com/249-105</p>
<p>Protective warning marker</p>		
<p>Cover</p>		
	<p>Item no.: 280-415 Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow</p>	<p>www.wago.com/280-415</p>
<p>Carrier rail</p>		
<p>Mounting accessories</p>		
	<p>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</p>	<p>www.wago.com/210-197</p>
	<p>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</p>	<p>www.wago.com/210-198</p>
	<p>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</p>	<p>www.wago.com/210-504</p>
	<p>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</p>	<p>www.wago.com/210-505</p>
	<p>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</p>	<p>www.wago.com/210-506</p>
	<p>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</p>	<p>www.wago.com/210-508</p>
	<p>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</p>	<p>www.wago.com/210-113</p>
	<p>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</p>	<p>www.wago.com/210-118</p>
	<p>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</p>	<p>www.wago.com/210-112</p>
	<p>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</p>	<p>www.wago.com/210-114</p>

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; 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

Downloads

Documentation

Additional Information

Technical Section	pdf	Download
Technical explanations	2.2 MB	

CAD/CAE-Data

CAE data

EPLAN Data Portal 280-603	URL	Download
WSCAD Universe 280-603	URL	Download
ZUKEN Portal 280-603	URL	Download

CAD data

2D/3D Models 280-603	URL	Download
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Environmental Product Compliance

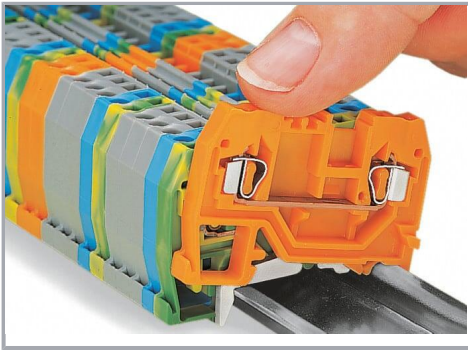
Compliance Search

Environmental Product Compliance 280-603	URL	Download
4-conductor through terminal block; 2.5 mm ² ; center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 2,50 mm ² ; orange		

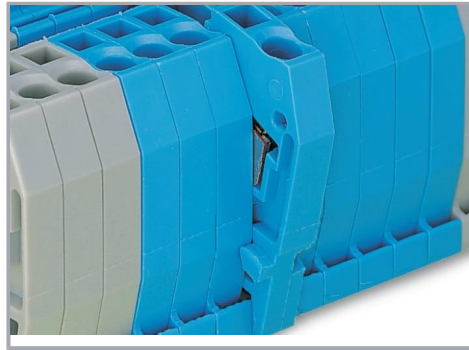
Installation Notes

Installation

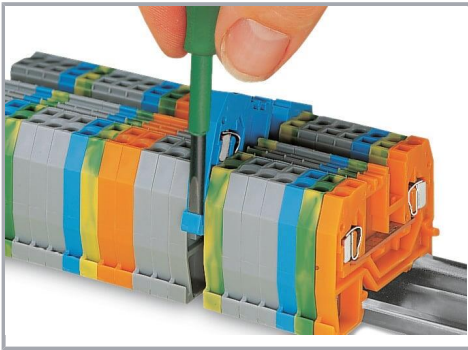
Subject to changes. Please also observe the further product documentation!



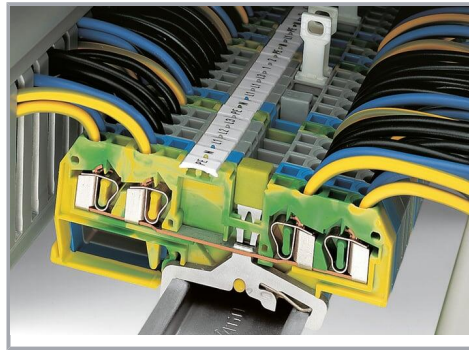
Snapping a terminal block onto the DIN-rail.



Quick assembly keys prevent reverse mounting.

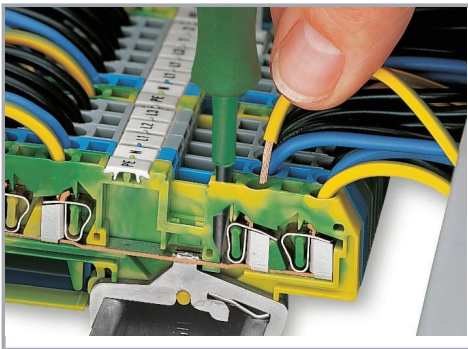


Removing a terminal block from the assembly.



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

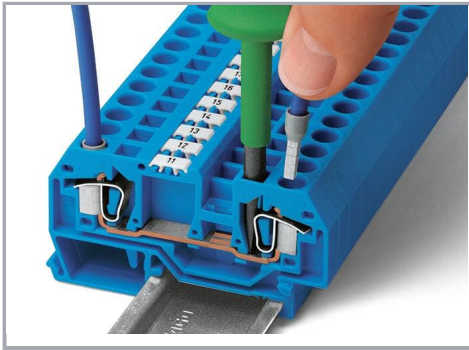
Conductor termination



CAGE CLAMP® connection

Inserting a conductor.

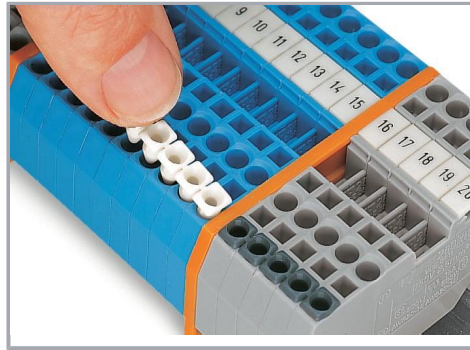
Subject to changes. Please also observe the further product documentation!



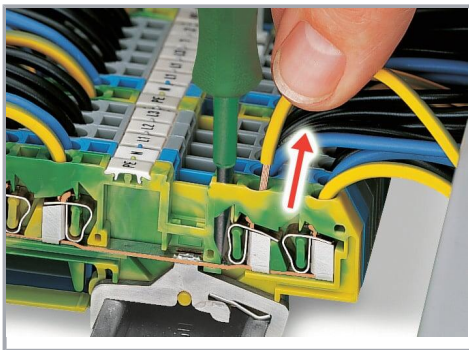
CAGE CLAMP® connection

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.

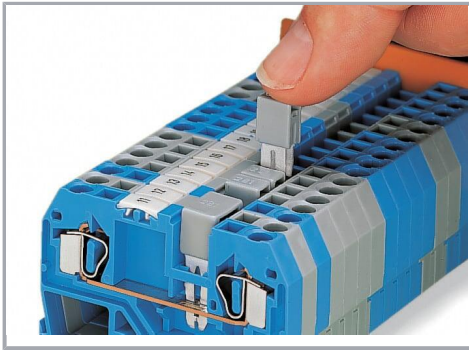


CAGE CLAMP® connection

Removing a solid conductor.

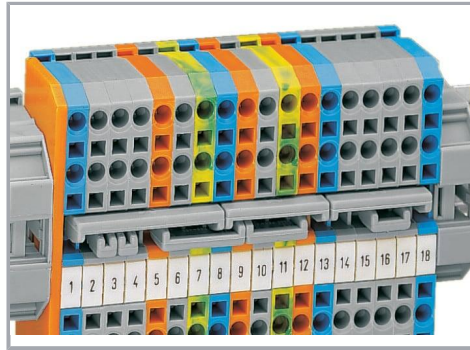
Commoning

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



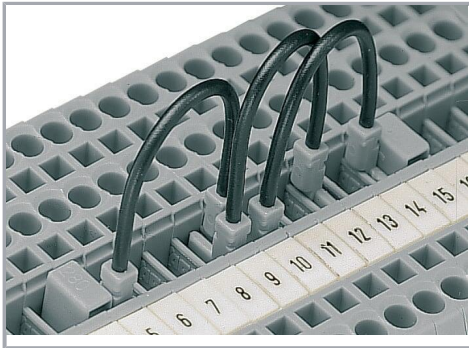
Commoning using an adjacent jumper.

Push jumper down until fully inserted!



Staggered jumpers are suitable for sophisticated circuit requirements. Push jumpers down until fully inserted!

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



Push-In Type Wire Jumpers

When installing machines or control systems, it is often necessary to make an additional connection between two terminal blocks that are not next to each other on the rail. In such cases, WAGO's touch-proof, push-in type wire jumpers are the ideal solution.

These jumpers are compatible with the following rail-mount terminal blocks:

- 279 Series (1.5 mm²/16 AWG),
- 280/775/780 Series (2.5 mm²/14 AWG)
- 281/769/776/777/781 and 880 Series (4 mm²/12 AWG)

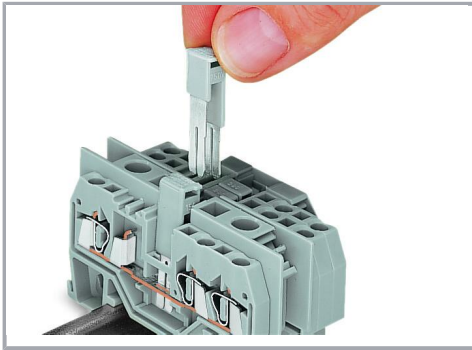
They are available in three conductor lengths (60, 110 and 250 mm), allowing up to 60 terminal blocks to be commoned depending on their width (see table on the right).

The 280/775/780 and 281/776/777/781 Series Terminal Blocks accept two wire jumpers, allowing the use of commoning chains. Furthermore, the 280/769/775/780/880 and 281/776/777/781 Series allow both wire jumper and adjacent jumper to be simultaneously plugged into a same terminal block.



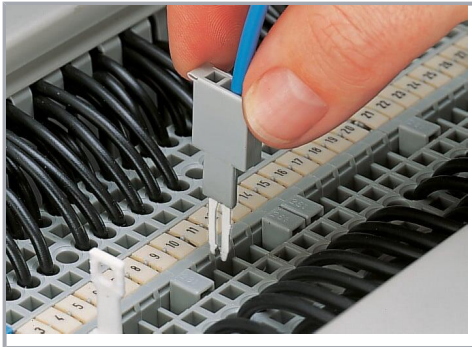
Commoning using comb-style jumper bars:
Push comb-style jumper bars down until fully inserted.

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



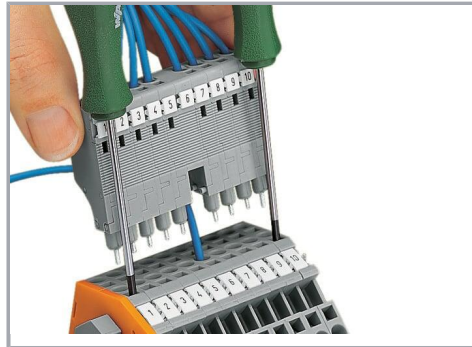
Commoning terminal blocks of different sizes via step-down jumpers.

Testing

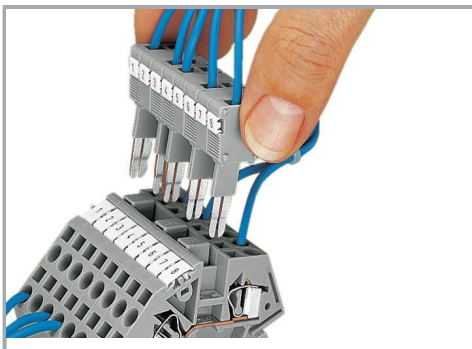


Testing with a test plug.

Picture shows a test plug fitted with CAGE CLAMP®.

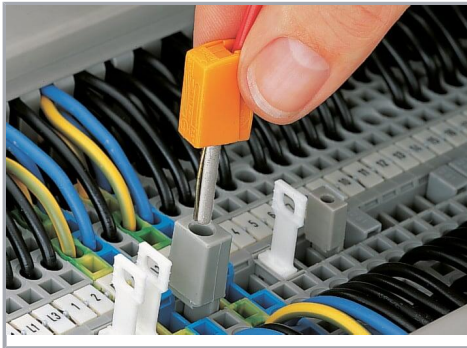


L-type test plug modules fitted with CAGE CLAMP®



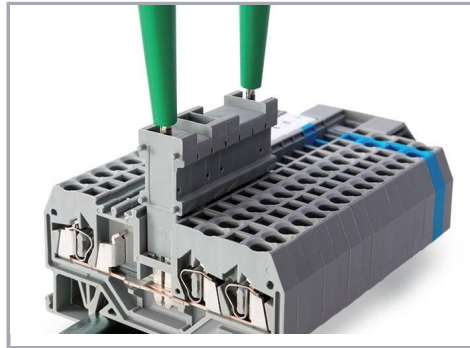
B-type test plug modules fitted with CAGE CLAMP®

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



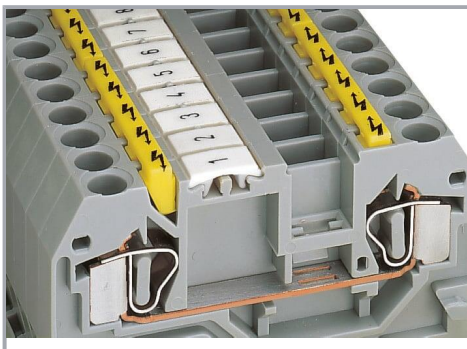
Testing with a test plug.

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



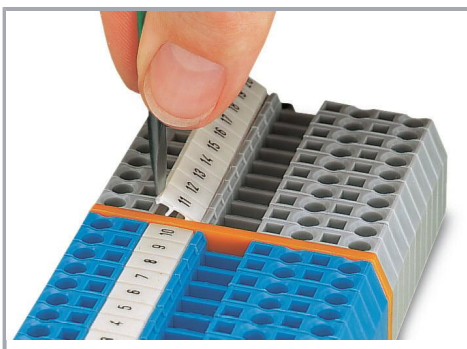
Test plugs modules are directly plugged into the jumper contact slot of the current bar.

Cover



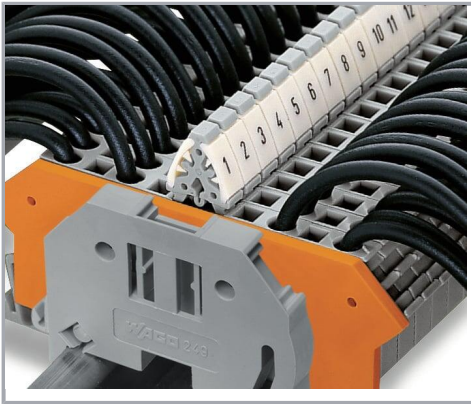
Protective warning markers inserted into the operating slots

Marking



Labeling via WMB Multi Marking System.

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



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

Product family

Classic

EPSITRON® CLASSIC POWER: The Robust Power Supply – with Integrated TopBoost (Optional)

[Show all products from the family](#)

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