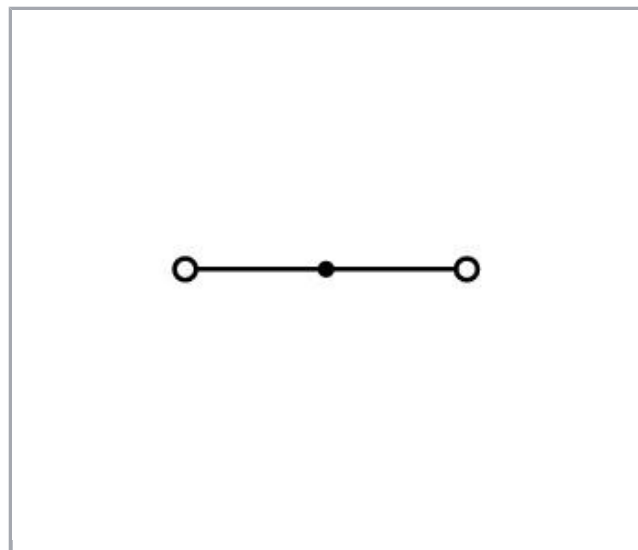
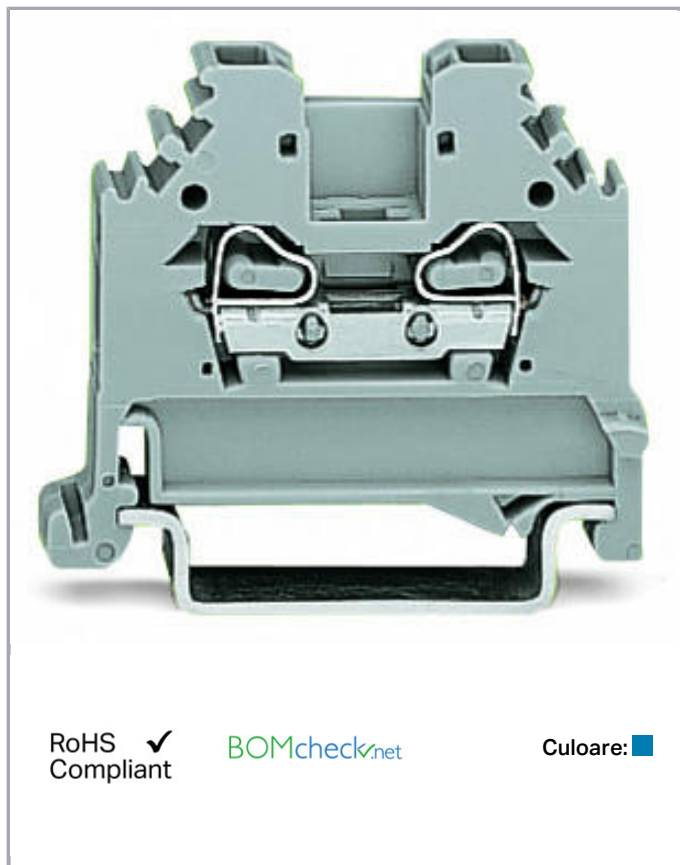


Fișă tehnică | Număr articol: 280-104

2-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/280-104



Descriere articol

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.

Supus modificărilor.

WAGO Kontakttechnik GmbH & Co. KG
/Representative Office Romania
Sos. Pipera-Tunari nr. 1/1
building 1, 2nd floor | 077190 Voluntari, Ilfov
Tel.: +40-(0)31 421 85 68 | Email: info-RO@wago.com

Aveți întrebări despre produsele noastre?
Vă stăm la dispoziție pentru preluarea apelului la +40 (0) 31 421 85 68.



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 (14 AWG) = 16 A

4 mm² (12 AWG) = 22 A

Date

Electrical data

Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60947-7-1
Nominal voltage (III/3)	800 V
Rated surge voltage (III/3)	8 kV
Rated current	24 A
Legend (ratings)	(III / 3) ≙ 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	1
Number of levels	1
Wiring type	Side-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	30,5 mm / 1.201 inch
Depth	42,5 mm / 1.673 inch

Supus modificărilor.

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Mechanical data

Design	horizontal
Mounting type	DIN-35 rail
Marking level	Side marking

Material Data



Color	blue
Insulation material	Polyamide 66 (PA 66)
Fire load	0,08 MJ
Weight	3,9 g

Commercial data

Packaging type	BOX
Country of origin	IN
GTIN	4045454044503
Customs tariff number	85369010000

Aprobări / certificate

Country specific Approvals

Emblemă	Aprobare	Text de aprobare suplimentar	Nume certificat
	CCA DEKRA Certification B.V.	EN 60947	2157201.01
	CSA DEKRA Certification B.V.	C22.2	1536071

Ship Approvals

Emblemă	Aprobare	Text de aprobare suplimentar	Nume certificat
	ABS American Bureau of Shipping	EN 60947	20- HG1941090- PDA
	BV	EN 60947	07436/E0 BV

Supus modificărilor.



Bureau Veritas S.A.

**DNV GL**

Det Norske Veritas, Germanischer Lloyd

-

TAE00001V2

**LR**

Lloyds Register

EN 60947

91/20112
(E9)**UL-Approvals**

Emblemă

Aprobare

Text de aprobare suplimentar

Nume
certificat**UL**

UL International Germany GmbH

UL 1059

20190731-
E45172**Counterpart****Produse compatibile****Carrier rail****Nr. articol: 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**Nr. articol: 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**Nr. articol: 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

Supus modificărilor.

WAGO Kontakttechnik GmbH & Co. KG

/Representative Office Romania










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Tel.: +40-(0)31 421 85 68 | Email: info-RO@wago.com

Aveți întrebări despre produsele noastre?
















Vă stăm la dispoziție pentru preluarea apelului la +40 (0) 31 421 85 68.

	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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















Marking accessories

	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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



















Supus modificărilor.

	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 209-140 Group marker carrier; gray	www.wago.com/209-140
	Nr. articol: 209-141 Group marker carrier; gray	www.wago.com/209-141
	Nr. articol: 209-142 Group marker carrier; gray	www.wago.com/209-142
	Nr. articol: 249-105 Group marker carrier; gray	www.wago.com/249-105
	Nr. articol: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type; white	www.wago.com/793-501
	Nr. articol: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type; yellow	www.wago.com/793-501/000-002
	Nr. articol: 793-501/000-005 WMB marking card; as card; not stretchable; plain; snap-on type; red	www.wago.com/793-501/000-005
	Nr. articol: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type; blue	www.wago.com/793-501/000-006
	Nr. articol: 793-501/000-007 WMB marking card; as card; not stretchable; plain; snap-on type; gray	www.wago.com/793-501/000-007
	Nr. articol: 793-501/000-012 WMB marking card; as card; not stretchable; plain; snap-on type; orange	www.wago.com/793-501/000-012
	Nr. articol: 793-501/000-017 WMB marking card; as card; not stretchable; plain; snap-on type; light green	www.wago.com/793-501/000-017
	Nr. articol: 793-501/000-023 WMB marking card; as card; not stretchable; plain; snap-on type; green	www.wago.com/793-501/000-023
	Nr. articol: 793-501/000-024 WMB marking card; as card; not stretchable; plain; snap-on type; violet	www.wago.com/793-501/000-024

Supus modificărilor.




	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
	Nr. articol: 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
Jumper		
	Nr. articol: 210-103 Wire commoning chain; insulated; 50 connections; black	www.wago.com/210-103
	Nr. articol: 210-123 Wire commoning chain; insulated; 50 connections	www.wago.com/210-123
	Nr. articol: 249-123 Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm ²	www.wago.com/249-123
	Nr. articol: 249-125 Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm ²	www.wago.com/249-125
	Nr. articol: 249-126 Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm ²	www.wago.com/249-126
	Nr. articol: 249-127	

Supus modificărilor.










	Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm ²	www.wago.com/249-127
	Nr. articol: 280-402 Adjacent jumper; insulated; IN = IN terminal block; gray	www.wago.com/280-402
	Nr. articol: 280-409 Alternate jumper; insulated; IN = IN terminal block; gray	www.wago.com/280-409
	Nr. articol: 280-422 Adjacent jumper; insulated; IN = IN terminal block; yellow-green	www.wago.com/280-422
	Nr. articol: 284-414 Step-down jumper; insulated; from 10/6 mm ² to 4/2.5/1.5 mm ² ; Nominal current 15 A; gray	www.wago.com/284-414
	Nr. articol: 709-110 Wire commoning chain; insulated; 4 connections; 3 x 110 mm; black	www.wago.com/709-110
	Nr. articol: 709-111 Wire commoning chain; insulated; 3 connections; 2 x 120 mm; black	www.wago.com/709-111
	Nr. articol: 709-112 Wire commoning chain; insulated; 3 connections; 2 x 170 mm; black	www.wago.com/709-112
	Nr. articol: 780-452 Staggered jumper; insulated; from 1 to 2; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	www.wago.com/780-452
	Nr. articol: 780-453 Staggered jumper; insulated; from 1 to 3; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	www.wago.com/780-453
	Nr. articol: 780-454 Staggered jumper; insulated; from 1 to 4; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	www.wago.com/780-454
	Nr. articol: 780-455 Staggered jumper; insulated; from 1 to 5; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	www.wago.com/780-455
	Nr. articol: 780-456 Staggered jumper; insulated; from 1 to 6; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	www.wago.com/780-456
	Nr. articol: 780-457 Staggered jumper; insulated; from 1 to 7; Spacing: 5 mm; suitable for 2-conductor female plugs; gray	www.wago.com/780-457
	Nr. articol: 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		
	Nr. articol: 210-657 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short	www.wago.com/210-657
	Nr. articol: 210-658 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short	www.wago.com/210-658
	Nr. articol: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft	www.wago.com/210-720

Supus modificărilor.


assembling

	Nr. articol: 209-106 Mounting carrier; for isolated mounting on DIN 35 rails; gray	www.wago.com/209-106
	Nr. articol: 210-148 Angled support bracket; without screw	www.wago.com/210-148
	Nr. articol: 709-153 Cover; Type 1; suitable for cover carrier, type 1; 1 m long; transparent	www.wago.com/709-153


ferrule

	Nr. articol: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated	www.wago.com/216-101
	Nr. articol: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated	www.wago.com/216-102
	Nr. articol: 216-103 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated	www.wago.com/216-103
	Nr. articol: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated	www.wago.com/216-104
	Nr. articol: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
	Nr. articol: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Nr. articol: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Nr. articol: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	Nr. articol: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-301
	Nr. articol: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green	www.wago.com/216-302


General accessories

	Nr. articol: 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
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Protective Warning Marker

	Nr. articol: 280-405 Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks; yellow	www.wago.com/280-405
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check

	Nr. articol: 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
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Supus modificărilor.

**Nr. articol: 280-404**Test plug adapter; 5 mm wide; for test plug 210-137 (2.3 mm Ø); suitable for 1.5 mm² - 4 mm² tbs; graywww.wago.com/280-404**End plate****Nr. articol: 280-301**

End and intermediate plate; 2.5 mm thick; gray

www.wago.com/280-301**Nr. articol: 280-302**

End and intermediate plate; 2.5 mm thick; orange

www.wago.com/280-302**Nr. articol: 280-322**

Separator plate; 2 mm thick; oversized; orange

www.wago.com/280-322**Nr. articol: 280-332**

Separator plate; 2 mm thick; oversized; gray

www.wago.com/280-332**Nr. articol: 281-333**

Step-down intermediate plate; 1 mm thick; "only for 4 mm terminal blocks; gray

www.wago.com/281-333**Nr. articol: 281-336**

Step-down intermediate plate; 1 mm thick; "only for 4 mm terminal blocks; orange

www.wago.com/281-336**Descărcări****Documentation****Additional Information**

Technical explanations

Apr 3, 2019

pdf
2,1 MB

Descărcare

CAD/CAE-Data**CAD data**

2D/3D Models 280-104

URL

Descărcare

CAE data

EPLAN Data Portal 280-104

URL

Descărcare

WSCAD Universe 280-104

URL

Descărcare

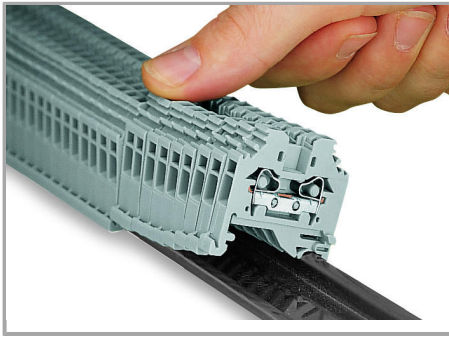
Installation Notes**Installation**

Supus modificărilor.

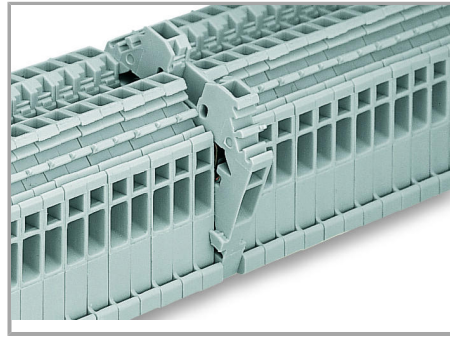
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Aveți întrebări despre produsele noastre?

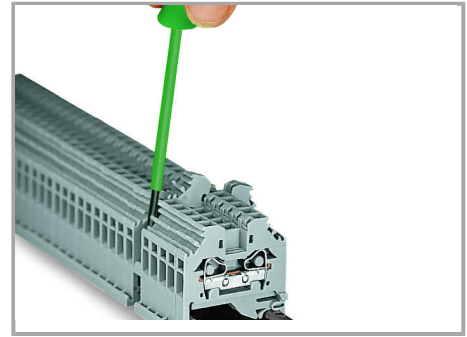
Vă stăm la dispoziție pentru preluarea apelului la +40 (0) 31 421 85 68.



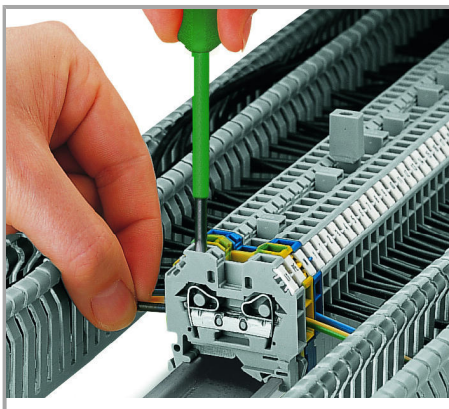
Snapping side-entry rail-mount terminal blocks onto the carrier rail.



Quick assembly keys prevent reverse mounting.



Removing a terminal block from the assembly.



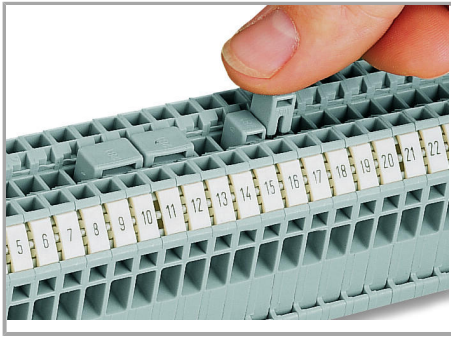
CAGE CLAMP® connection

Inserting a conductor.

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

Commoning

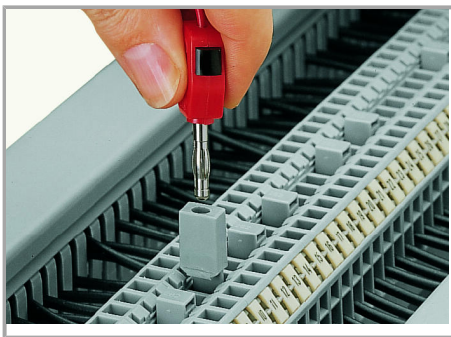
Supus modificărilor.



Commoning using an adjacent jumper (280-402).

Push jumper down until fully inserted.

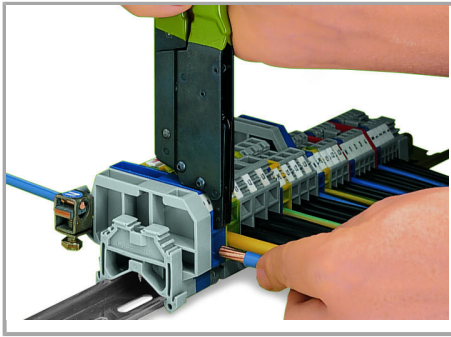
Testing



Testing with a test plug

(picture shows 209-170 Test Plug Adapter).

Supus modificărilor.



When operating the handles beyond the locked position, the ratchet allows the tool to open and be removed from the terminal block.



Labeling via WMB Multi Marking System.

Supus modificărilor.