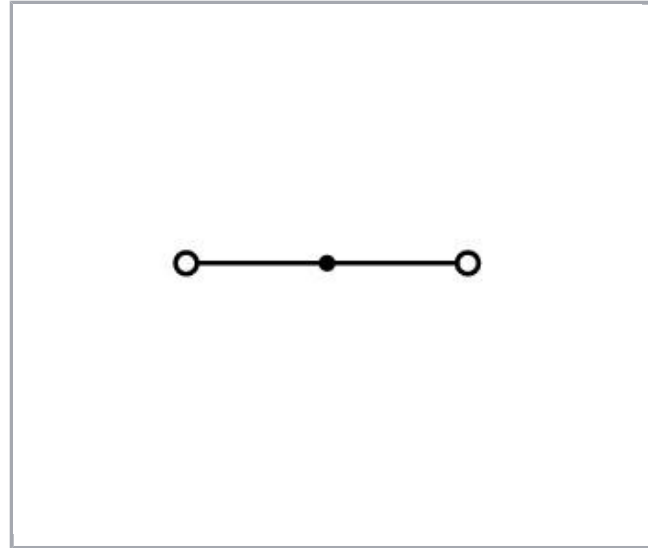
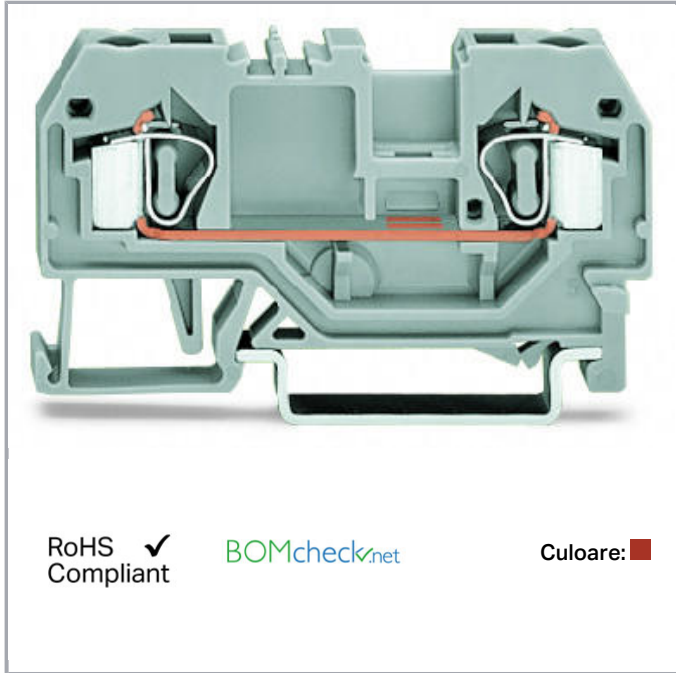


## Fișă tehnică | Număr articol: 281-903

2-conductor through terminal block; 4 mm<sup>2</sup>; center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 4,00 mm<sup>2</sup>; red



[www.wago.com/281-903](http://www.wago.com/281-903)



### Descriere articol

#### Note:

##### Terminating Aluminum Conductors

WAGO spring clamp terminal blocks are suitable for solid aluminum conductors up to 4 mm<sup>2</sup>/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.

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.



Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors:

2.5 mm<sup>2</sup> (14 AWG) = 16 A

4 mm<sup>2</sup> (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	32 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 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0,08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inch
Total number of connection points	2
Total number of potentials	1
Number of levels	1
Wiring type	Front-entry wiring

### Geometrical Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-rail	29 mm / 1.142 inch
Depth	59 mm / 2.323 inch

### Mechanical data

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

Supus modificărilor.

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## Material Data




Color	red
Insulation material	Polyamide 66 (PA 66)
Fire load	0,145 MJ
Weight	7,9 g

## Commercial data



Packaging type	BOX
Country of origin	DE
GTIN	4044918485098
Customs tariff number	85369010000

## Aprobări / certificate

### Country specific Approvals

Emblemă	Aprobare	Text de aprobare suplimentar	Nume certificat
	<b>CCA</b> DEKRA Certification B.V.	EN 60947, IEC 60947	NTR NL-7454/A1
	<b>CSA</b> DEKRA Certification B.V.	C22.2 No. 158	1505034
	<b>KEMA/KEUR</b> DEKRA Certification B.V.	EN 60947	71-107288

### Ship Approvals

Emblemă	Aprobare	Text de aprobare suplimentar	Nume certificat
	<b>ABS</b> American Bureau of Shipping	-	20-HG1941090-PDA
	<b>BV</b> Bureau Veritas S.A.	EN 60947	07436/E0 BV

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.



**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
	<b>UR</b> Underwriters Laboratories Inc.	UL 1059	E45172

## Counterpart

## Produse compatibile
















## ferrule

	<b>Nr. articol: 216-106</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-106">www.wago.com/216-106</a>
	<b>Nr. articol: 216-201</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white	<a href="http://www.wago.com/216-201">www.wago.com/216-201</a>
	<b>Nr. articol: 216-202</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	<a href="http://www.wago.com/216-202">www.wago.com/216-202</a>
	<b>Nr. articol: 216-203</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red	<a href="http://www.wago.com/216-203">www.wago.com/216-203</a>
















## Supus modificărilor.

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	<b>Nr. articol: 216-204</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	<a href="http://www.wago.com/216-204">www.wago.com/216-204</a>
	<b>Nr. articol: 216-205</b> Ferrule; Sleeve for 2.08 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; yellow	<a href="http://www.wago.com/216-205">www.wago.com/216-205</a>
	<b>Nr. articol: 216-206</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; blue	<a href="http://www.wago.com/216-206">www.wago.com/216-206</a>
	<b>Nr. articol: 216-241</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	<a href="http://www.wago.com/216-241">www.wago.com/216-241</a>
	<b>Nr. articol: 216-242</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	<a href="http://www.wago.com/216-242">www.wago.com/216-242</a>
	<b>Nr. articol: 216-243</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	<a href="http://www.wago.com/216-243">www.wago.com/216-243</a>
	<b>Nr. articol: 216-244</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	<a href="http://www.wago.com/216-244">www.wago.com/216-244</a>
	<b>Nr. articol: 216-246</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	<a href="http://www.wago.com/216-246">www.wago.com/216-246</a>
	<b>Nr. articol: 216-301</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	<a href="http://www.wago.com/216-301">www.wago.com/216-301</a>
	<b>Nr. articol: 216-302</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; green	<a href="http://www.wago.com/216-302">www.wago.com/216-302</a>
<b>End plate</b>		
	<b>Nr. articol: 281-328</b> End and intermediate plate; 2.5 mm thick; gray	<a href="http://www.wago.com/281-328">www.wago.com/281-328</a>
	<b>Nr. articol: 281-329</b> End and intermediate plate; 2.5 mm thick; orange	<a href="http://www.wago.com/281-329">www.wago.com/281-329</a>
	<b>Nr. articol: 281-330</b> Separator plate; 2 mm thick; oversized; gray	<a href="http://www.wago.com/281-330">www.wago.com/281-330</a>
	<b>Nr. articol: 281-331</b> Separator plate; 2 mm thick; oversized; orange	<a href="http://www.wago.com/281-331">www.wago.com/281-331</a>
	<b>Nr. articol: 284-334</b> Step-down cover plate; 1 mm thick; for 2-, 3- and 4-conductor terminal blocks; gray	<a href="http://www.wago.com/284-334">www.wago.com/284-334</a>
	<b>Nr. articol: 284-344</b> Step-down cover plate; 1 mm thick; for 2-, 3- and 4-conductor terminal blocks; orange	<a href="http://www.wago.com/284-344">www.wago.com/284-344</a>
<b>Marking accessories</b>		

Supus modificărilor.

	<b>Nr. articol: 2009-115</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	<a href="http://www.wago.com/2009-115">www.wago.com/2009-115</a>
	<b>Nr. articol: 2009-115/000-002</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow	<a href="http://www.wago.com/2009-115/000-002">www.wago.com/2009-115/000-002</a>
	<b>Nr. articol: 2009-115/000-006</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue	<a href="http://www.wago.com/2009-115/000-006">www.wago.com/2009-115/000-006</a>
	<b>Nr. articol: 2009-115/000-007</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray	<a href="http://www.wago.com/2009-115/000-007">www.wago.com/2009-115/000-007</a>
	<b>Nr. articol: 2009-115/000-012</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange	<a href="http://www.wago.com/2009-115/000-012">www.wago.com/2009-115/000-012</a>
	<b>Nr. articol: 2009-115/000-017</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green	<a href="http://www.wago.com/2009-115/000-017">www.wago.com/2009-115/000-017</a>
	<b>Nr. articol: 2009-115/000-023</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green	<a href="http://www.wago.com/2009-115/000-023">www.wago.com/2009-115/000-023</a>
	<b>Nr. articol: 2009-115/000-024</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet	<a href="http://www.wago.com/2009-115/000-024">www.wago.com/2009-115/000-024</a>
	<b>Nr. articol: 209-140</b> Group marker carrier; gray	<a href="http://www.wago.com/209-140">www.wago.com/209-140</a>
	<b>Nr. articol: 209-141</b> Group marker carrier; gray	<a href="http://www.wago.com/209-141">www.wago.com/209-141</a>
	<b>Nr. articol: 209-142</b> Group marker carrier; gray	<a href="http://www.wago.com/209-142">www.wago.com/209-142</a>
	<b>Nr. articol: 209-185</b> Adaptor; gray	<a href="http://www.wago.com/209-185">www.wago.com/209-185</a>
	<b>Nr. articol: 249-105</b> Group marker carrier; gray	<a href="http://www.wago.com/249-105">www.wago.com/249-105</a>
	<b>Nr. articol: 793-501</b> WMB marking card; as card; not stretchable; plain; snap-on type; white	<a href="http://www.wago.com/793-501">www.wago.com/793-501</a>
	<b>Nr. articol: 793-501/000-002</b> WMB marking card; as card; not stretchable; plain; snap-on type; yellow	<a href="http://www.wago.com/793-501/000-002">www.wago.com/793-501/000-002</a>

Supus modificărilor.



**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](http://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](http://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](http://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](http://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](http://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](http://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](http://www.wago.com/793-501/000-024)



**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](http://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](http://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](http://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](http://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](http://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](http://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-

[www.wago.com/793-5501/000-017](http://www.wago.com/793-5501/000-017)

Supus modificărilor.

on type; green



**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](http://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](http://www.wago.com/793-5501/000-024)

#### Protective Warning Marker



**Nr. articol: 281-415**

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

[www.wago.com/281-415](http://www.wago.com/281-415)

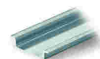
#### Carrier rail



**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](http://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](http://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

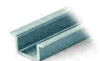
[www.wago.com/210-114](http://www.wago.com/210-114)



**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

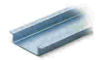
[www.wago.com/210-115](http://www.wago.com/210-115)



**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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://www.wago.com/210-508)














#### assembling

Supus modificărilor.

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	<b>Nr. articol: 209-106</b> Mounting carrier; for isolated mounting on DIN 35 rails; gray	<a href="http://www.wago.com/209-106">www.wago.com/209-106</a>
	<b>Nr. articol: 709-153</b> Cover; Type 1; suitable for cover carrier, type 1; 1 m long; transparent	<a href="http://www.wago.com/709-153">www.wago.com/709-153</a>
<b>check</b>		
	<b>Nr. articol: 209-170</b> Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm <sup>2</sup> - 10 mm <sup>2</sup> tbs; gray	<a href="http://www.wago.com/209-170">www.wago.com/209-170</a>
	<b>Nr. articol: 249-144</b> L-type test plug module; modular; with spring-loaded contact pin; Center module; 2,50 mm <sup>2</sup> ; gray	<a href="http://www.wago.com/249-144">www.wago.com/249-144</a>
	<b>Nr. articol: 249-146</b> L-type spacer module; modular; e.g., bridging commoned terminal blocks; gray	<a href="http://www.wago.com/249-146">www.wago.com/249-146</a>
	<b>Nr. articol: 249-147</b> B-type test plug module; modular; 2,50 mm <sup>2</sup> ; gray	<a href="http://www.wago.com/249-147">www.wago.com/249-147</a>
	<b>Nr. articol: 249-148</b> B-type spacer module; modular; e.g., for bridging commoned terminal blocks; gray	<a href="http://www.wago.com/249-148">www.wago.com/249-148</a>
	<b>Nr. articol: 280-404</b> Test plug adapter; 5 mm wide; for test plug 210-137 (2.3 mm Ø); suitable for 1.5 mm <sup>2</sup> - 4 mm <sup>2</sup> tbs; gray	<a href="http://www.wago.com/280-404">www.wago.com/280-404</a>
	<b>Nr. articol: 281-418</b> Test plug module; modular; suitable for all WAGO 281, 776, 777 and 781 series rail-mounted terminal blocks with jumper slots in the current bar; gray	<a href="http://www.wago.com/281-418">www.wago.com/281-418</a>
	<b>Nr. articol: 281-419</b> Spacer module; modular; bridging commoned terminal blocks; gray	<a href="http://www.wago.com/281-419">www.wago.com/281-419</a>
<b>General accessories</b>		
	<b>Nr. articol: 281-407</b> Test plug; 6 mm wide; Nominal current 24 A; for 0.08 mm <sup>2</sup> - 2.5 mm <sup>2</sup> ; 2,50 mm <sup>2</sup> ; gray	<a href="http://www.wago.com/281-407">www.wago.com/281-407</a>
<b>tools</b>		
	<b>Nr. articol: 210-657</b> Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short	<a href="http://www.wago.com/210-657">www.wago.com/210-657</a>
	<b>Nr. articol: 210-658</b> Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short	<a href="http://www.wago.com/210-658">www.wago.com/210-658</a>
	<b>Nr. articol: 210-720</b> Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft	<a href="http://www.wago.com/210-720">www.wago.com/210-720</a>
<b>Insulation stop</b>		
	<b>Nr. articol: 281-470</b> Insulation stop; 0.08 - 0.2 mm <sup>2</sup> "s" (0.14 mm <sup>2</sup> "f-st"); 5 pieces/strip; white	<a href="http://www.wago.com/281-470">www.wago.com/281-470</a>
	<b>Nr. articol: 281-471</b> Insulation stop; 0.25 - 0.5 mm <sup>2</sup> ; 5 pieces/strip; light gray	<a href="http://www.wago.com/281-471">www.wago.com/281-471</a>

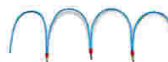
Supus modificărilor.

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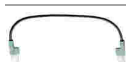
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**Nr. articol:** 281-472Insulation stop; 0.75 - 1.5 mm<sup>2</sup>; 5 pieces/strip; dark gray[www.wago.com/281-472](http://www.wago.com/281-472)**Jumper****Nr. articol:** 210-103

Wire commoning chain; insulated; 50 connections; black

[www.wago.com/210-103](http://www.wago.com/210-103)**Nr. articol:** 210-123

Wire commoning chain; insulated; 50 connections

[www.wago.com/210-123](http://www.wago.com/210-123)**Nr. articol:** 249-123Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm<sup>2</sup>[www.wago.com/249-123](http://www.wago.com/249-123)**Nr. articol:** 249-125Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm<sup>2</sup>[www.wago.com/249-125](http://www.wago.com/249-125)**Nr. articol:** 249-126Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm<sup>2</sup>[www.wago.com/249-126](http://www.wago.com/249-126)**Nr. articol:** 249-127Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm<sup>2</sup>[www.wago.com/249-127](http://www.wago.com/249-127)**Nr. articol:** 281-402

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

[www.wago.com/281-402](http://www.wago.com/281-402)**Nr. articol:** 281-409

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

[www.wago.com/281-409](http://www.wago.com/281-409)**Nr. articol:** 281-422

Adjacent jumper; insulated; IN = IN terminal block; yellow-green

[www.wago.com/281-422](http://www.wago.com/281-422)**Nr. articol:** 281-482

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

[www.wago.com/281-482](http://www.wago.com/281-482)**Nr. articol:** 281-483

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

[www.wago.com/281-483](http://www.wago.com/281-483)**Nr. articol:** 281-485

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

[www.wago.com/281-485](http://www.wago.com/281-485)**Nr. articol:** 281-490

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

[www.wago.com/281-490](http://www.wago.com/281-490)**Nr. articol:** 281-492

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

[www.wago.com/281-492](http://www.wago.com/281-492)**Nr. articol:** 283-414Step-down jumper; insulated; from 16 mm<sup>2</sup> to 4 mm<sup>2</sup>; Nominal current 32 A; gray[www.wago.com/283-414](http://www.wago.com/283-414)**Nr. articol:** 284-413Step-down jumper; insulated; from 10/6 mm<sup>2</sup> to 6/4 mm<sup>2</sup>; Nominal current 30 A; gray[www.wago.com/284-413](http://www.wago.com/284-413)**Nr. articol:** 284-414Step-down jumper; insulated; from 10/6 mm<sup>2</sup> to 4/2.5/1.5 mm<sup>2</sup>; Nominal current 15 A; gray[www.wago.com/284-414](http://www.wago.com/284-414)

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**Nr. articol: 709-110**  
Wire commoning chain; insulated; 4 connections; 3 x 110 mm; black

[www.wago.com/709-110](http://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](http://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](http://www.wago.com/709-112)



**Nr. articol: 781-452**  
Staggered jumper; insulated; from 1 to 2; Spacing: 6 mm; gray

[www.wago.com/781-452](http://www.wago.com/781-452)



**Nr. articol: 781-453**  
Staggered jumper; insulated; from 1 to 3; Spacing: 6 mm; gray

[www.wago.com/781-453](http://www.wago.com/781-453)



**Nr. articol: 781-454**  
Staggered jumper; insulated; from 1 to 4; Spacing: 6 mm; gray

[www.wago.com/781-454](http://www.wago.com/781-454)



**Nr. articol: 781-455**  
Staggered jumper; insulated; from 1 to 5; Spacing: 6 mm; gray

[www.wago.com/781-455](http://www.wago.com/781-455)



**Nr. articol: 781-456**  
Staggered jumper; insulated; from 1 to 6; Spacing: 6 mm; gray

[www.wago.com/781-456](http://www.wago.com/781-456)

## Descărcări

### Documentation

#### Additional Information

Technical explanations	Apr 3, 2019	pdf 2,1 MB	Descărcare
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### CAD/CAE-Data

#### CAD data

2D/3D Models 281-903	URL	Descărcare
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#### CAE data

EPLAN Data Portal 281-903	URL	Descărcare
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WSCAD Universe 281-903	URL	Descărcare
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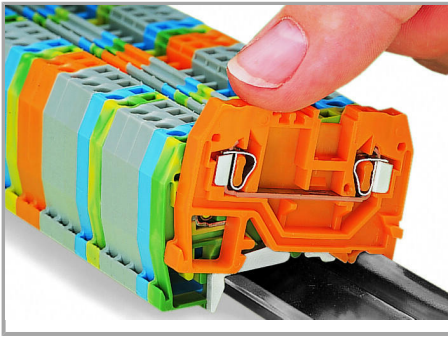
### Installation Notes

#### Assembly

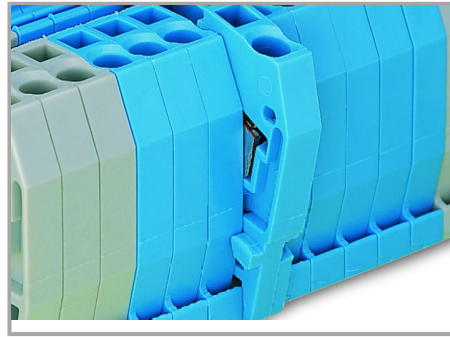
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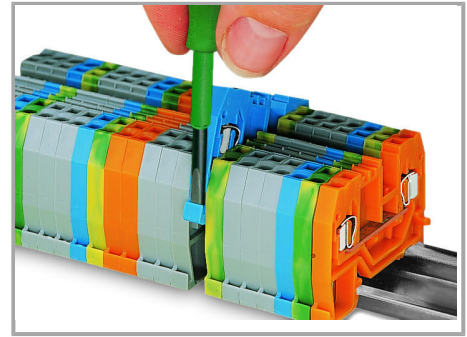
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Snapping a terminal block onto the carrier rail.

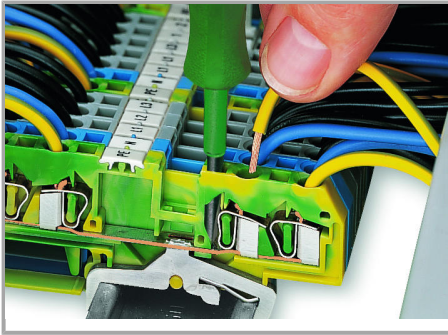


Quick assembly keys prevent reverse mounting.



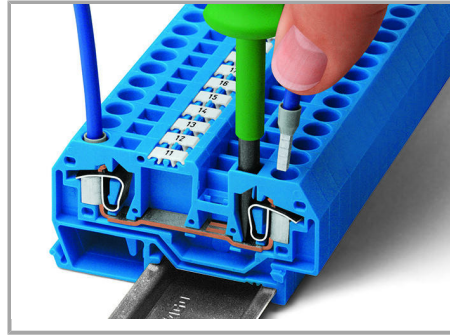
Removing a terminal block from the assembly.

### Inserting a conductor



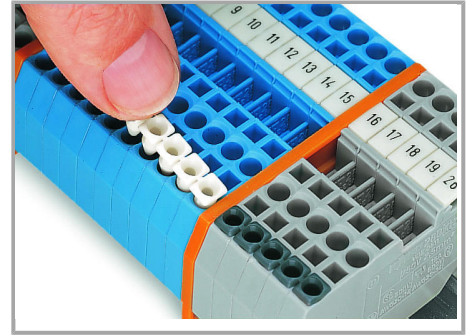
CAGE CLAMP® connection

Inserting a conductor.



CAGE CLAMP® connection

Inserting a conductor.

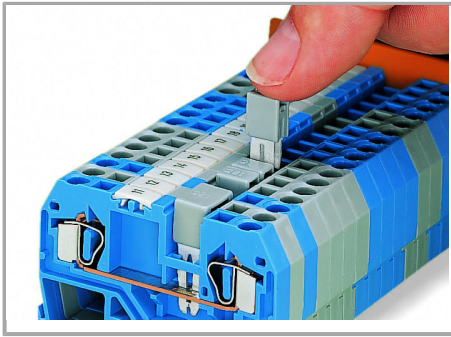


Inserting insulation stops.

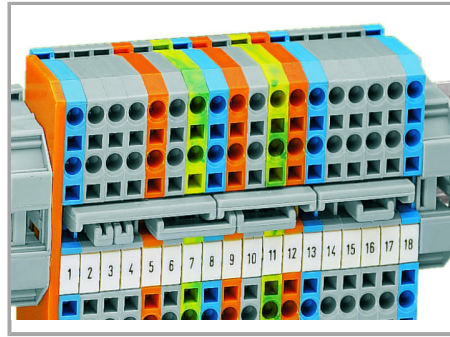
With ferruled conductors, it is necessary to use a terminal block one size larger than the conductor's nominal cross-section.

### Commoning

Supus modificărilor.



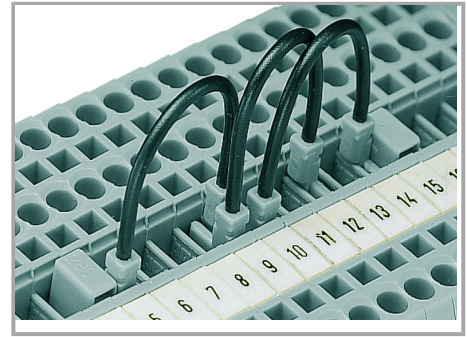
Commoning using an adjacent jumper (280-402).



Staggered jumpers for sophisticated circuit requirements – push jumpers down until fully inserted.

Push jumper down until fully inserted.

Supus modificărilor.



Supus modificărilor.

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## 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:

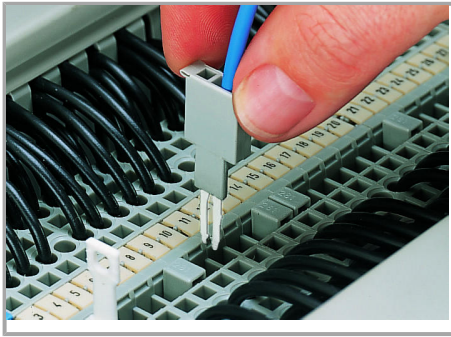
- 279 Series (1.5 mm<sup>2</sup>/16 AWG),
- 
- 280/775/780 Series (2.5 mm<sup>2</sup>/14 AWG)
- 
- 281/769/776/777/781 and 880 Series (4 mm<sup>2</sup>/12 AWG)
- 

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).

Compared with the 279 Series, the 280/775/780 and 281/776/777/781 Series can also accommodate 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.

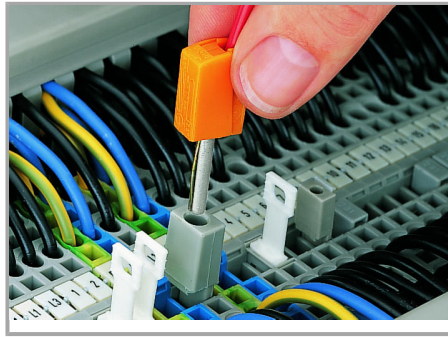
## Testing

Supus modificărilor.



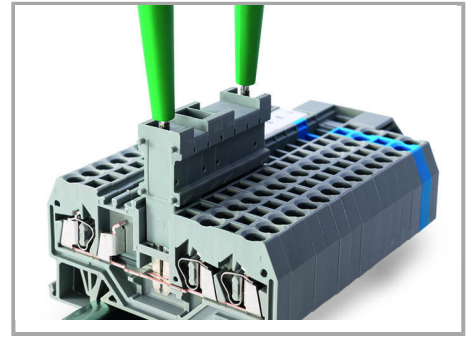
Testing with a test plug

(picture shows a test plug fitted with CAGE CLAMP®).



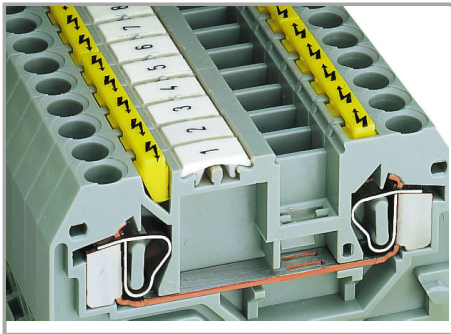
Testing with a test plug

(picture shows 209-170 Test Plug Adapter).



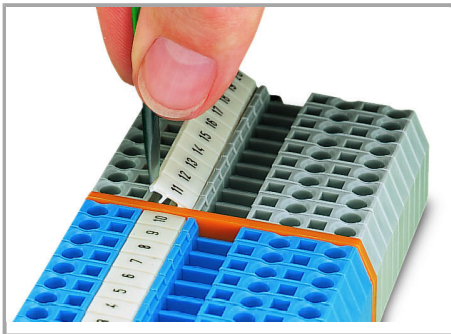
The test plug modules are directly plugged into the jumper contact slot of the current bar.

#### Cover



Protective warning markers inserted into the operating slots.

#### Marking



Marking via WMB Multi Marking System.

Supus modificărilor.