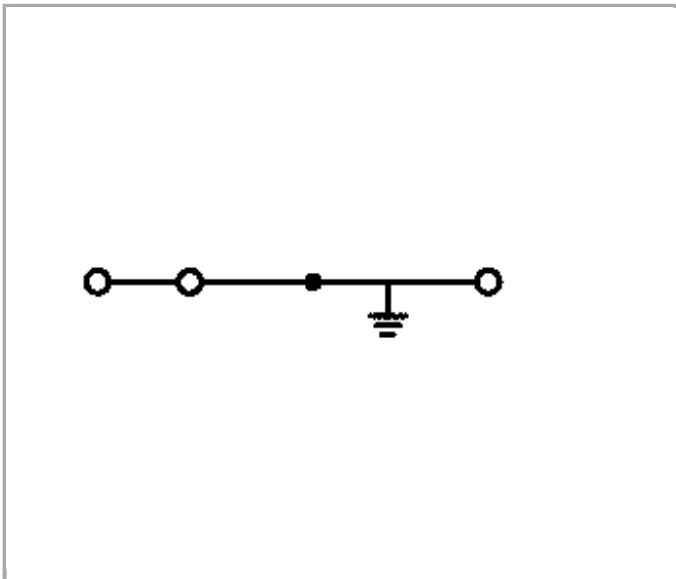
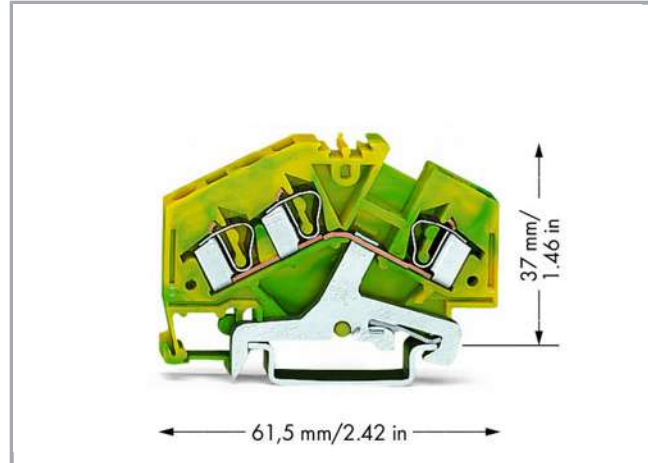


Data sheet | Item number: 281-637

3-conductor ground 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>; green-yellow



[www.wago.com/281-637](http://www.wago.com/281-637)



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

WAGO Kontakttechnik GmbH & Co. KG  
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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.



## Item description

### 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.

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

2.5 mm<sup>2</sup> = 16 A

4 mm<sup>2</sup> = 22 A

## Data

### Electrical data

#### Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60947-7-2
-------------	------------------

### 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	3
Total number of potentials	1
Number of levels	1

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Type of wiring

Front-entry wiring

### Geometrical Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-35 rail	37 mm / 1.457 inch
Depth	61,5 mm / 2.421 inch

### Mechanical data

Design	angled
Type of mounting	DIN-35 rail
Marking level	Center marking

### Material Data



Color	green-yellow
Insulating material	Polyamide 66 (PA 66)
Fire load	0.182 MJ
Weight	16.1 g

### Commercial data

Packaging type	BOX
Country of origin	DE
GTIN	4045454084516
Customs Tariff No.	85369010000

### Approvals / Certificates





#### Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947, IEC 60947	NTR NL-7454/A1
	CSA DEKRA Certification B.V.	C22.2 No. 158	1505034
	KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-107288


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



## Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	-	20- HG1941090- PDA
	<b>BV</b> Bureau Veritas S.A.	EN 60947	07436/E0 BV
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
	<b>LR</b> Lloyds Register	EN 60947	91/20112 (E9)

## UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>UL</b> UL International Germany GmbH	UL 1059	20190731- E45172

## Counterpart




## Compatible products

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









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## Insulation stop

	<b>Item no.: 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>Item no.: 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>
	<b>Item no.: 281-472</b> Insulation stop; 0.75 - 1.5 mm <sup>2</sup> ; 5 pieces/strip; dark gray	<a href="http://www.wago.com/281-472">www.wago.com/281-472</a>
















## check

	<b>Item no.: 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>Item no.: 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>Item no.: 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>Item no.: 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>Item no.: 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>Item no.: 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>Item no.: 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>Item no.: 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>
















## ferrule

	<b>Item no.: 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>Item no.: 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>Item no.: 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>Item no.: 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>














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

	<b>Item no.: 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>Item no.: 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>Item no.: 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>Item no.: 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>Item no.: 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>Item no.: 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>Item no.: 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>Item no.: 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>Item no.: 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>Item no.: 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>assembling</b>		
	<b>Item no.: 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>Item no.: 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>Marking accessories</b>		
	<b>Item no.: 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>Item no.: 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>Item no.: 2009-115/000-006</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/2009-115/000-006">www.wago.com/2009-115/000-006</a>
	<b>Item no.: 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>

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

	<b>Item no.: 2009-115/000-012</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/2009-115/000-012">www.wago.com/2009-115/000-012</a>
	<b>Item no.: 2009-115/000-017</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/2009-115/000-017">www.wago.com/2009-115/000-017</a>
	<b>Item no.: 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>Item no.: 2009-115/000-024</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/2009-115/000-024">www.wago.com/2009-115/000-024</a>
	<b>Item no.: 209-140</b> Group marker carrier; gray	<a href="http://www.wago.com/209-140">www.wago.com/209-140</a>
	<b>Item no.: 209-141</b> Group marker carrier; gray	<a href="http://www.wago.com/209-141">www.wago.com/209-141</a>
	<b>Item no.: 209-142</b> Group marker carrier; gray	<a href="http://www.wago.com/209-142">www.wago.com/209-142</a>
	<b>Item no.: 209-185</b> Adaptor; gray	<a href="http://www.wago.com/209-185">www.wago.com/209-185</a>
	<b>Item no.: 249-105</b> Group marker carrier; gray	<a href="http://www.wago.com/249-105">www.wago.com/249-105</a>
	<b>Item no.: 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>Item no.: 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>
	<b>Item no.: 793-501/000-005</b> WMB marking card; as card; not stretchable; plain; snap-on type; red	<a href="http://www.wago.com/793-501/000-005">www.wago.com/793-501/000-005</a>
	<b>Item no.: 793-501/000-006</b> WMB marking card; as card; not stretchable; plain; snap-on type; blue	<a href="http://www.wago.com/793-501/000-006">www.wago.com/793-501/000-006</a>
	<b>Item no.: 793-501/000-007</b> WMB marking card; as card; not stretchable; plain; snap-on type; gray	<a href="http://www.wago.com/793-501/000-007">www.wago.com/793-501/000-007</a>
	<b>Item no.: 793-501/000-012</b> WMB marking card; as card; not stretchable; plain; snap-on type; orange	<a href="http://www.wago.com/793-501/000-012">www.wago.com/793-501/000-012</a>

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

	<b>Item no.: 793-501/000-017</b> WMB marking card; as card; not stretchable; plain; snap-on type; light green	<a href="http://www.wago.com/793-501/000-017">www.wago.com/793-501/000-017</a>
	<b>Item no.: 793-501/000-023</b> WMB marking card; as card; not stretchable; plain; snap-on type; green	<a href="http://www.wago.com/793-501/000-023">www.wago.com/793-501/000-023</a>
	<b>Item no.: 793-501/000-024</b> WMB marking card; as card; not stretchable; plain; snap-on type; violet	<a href="http://www.wago.com/793-501/000-024">www.wago.com/793-501/000-024</a>
	<b>Item no.: 793-5501</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white	<a href="http://www.wago.com/793-5501">www.wago.com/793-5501</a>
	<b>Item no.: 793-5501/000-002</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow	<a href="http://www.wago.com/793-5501/000-002">www.wago.com/793-5501/000-002</a>
	<b>Item no.: 793-5501/000-005</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red	<a href="http://www.wago.com/793-5501/000-005">www.wago.com/793-5501/000-005</a>
	<b>Item no.: 793-5501/000-006</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue	<a href="http://www.wago.com/793-5501/000-006">www.wago.com/793-5501/000-006</a>
	<b>Item no.: 793-5501/000-007</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray	<a href="http://www.wago.com/793-5501/000-007">www.wago.com/793-5501/000-007</a>
	<b>Item no.: 793-5501/000-012</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange	<a href="http://www.wago.com/793-5501/000-012">www.wago.com/793-5501/000-012</a>
	<b>Item no.: 793-5501/000-017</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green	<a href="http://www.wago.com/793-5501/000-017">www.wago.com/793-5501/000-017</a>
	<b>Item no.: 793-5501/000-023</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green	<a href="http://www.wago.com/793-5501/000-023">www.wago.com/793-5501/000-023</a>
	<b>Item no.: 793-5501/000-024</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet	<a href="http://www.wago.com/793-5501/000-024">www.wago.com/793-5501/000-024</a>
<b>General accessories</b>		
	<b>Item no.: 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>

**Protective Warning Marker**

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





**Item no.: 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**



**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

[www.wago.com/210-112](http://www.wago.com/210-112)



**Item no.: 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)



**Item no.: 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)



**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

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



**Item no.: 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)



**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](http://www.wago.com/210-196)



**Item no.: 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)



**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](http://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

[www.wago.com/210-504](http://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

[www.wago.com/210-505](http://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

[www.wago.com/210-506](http://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

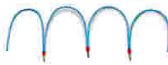
[www.wago.com/210-508](http://www.wago.com/210-508)

**Jumper**



**Item no.: 210-103**  
Wire commoning chain; insulated; 50 connections; black

[www.wago.com/210-103](http://www.wago.com/210-103)



**Item no.: 210-123**  
Wire commoning chain; insulated; 50 connections

[www.wago.com/210-123](http://www.wago.com/210-123)



**Item no.: 249-123**  
Push-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)



**Item no.: 249-125**  
Push-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)

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

	<b>Item no.: 249-126</b> Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm <sup>2</sup>	<a href="http://www.wago.com/249-126">www.wago.com/249-126</a>
	<b>Item no.: 249-127</b> Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm <sup>2</sup>	<a href="http://www.wago.com/249-127">www.wago.com/249-127</a>
	<b>Item no.: 281-402</b> Adjacent jumper; insulated; IN = IN terminal block; gray	<a href="http://www.wago.com/281-402">www.wago.com/281-402</a>
	<b>Item no.: 281-409</b> Alternate jumper; insulated; IN = IN terminal block; gray	<a href="http://www.wago.com/281-409">www.wago.com/281-409</a>
	<b>Item no.: 281-422</b> Adjacent jumper; insulated; IN = IN terminal block; yellow-green	<a href="http://www.wago.com/281-422">www.wago.com/281-422</a>
	<b>Item no.: 281-482</b> Comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray	<a href="http://www.wago.com/281-482">www.wago.com/281-482</a>
	<b>Item no.: 281-483</b> Comb-style jumper bar; insulated; 3-way; IN = IN terminal block; gray	<a href="http://www.wago.com/281-483">www.wago.com/281-483</a>
	<b>Item no.: 281-485</b> Comb-style jumper bar; insulated; 5-way; IN = IN terminal block; gray	<a href="http://www.wago.com/281-485">www.wago.com/281-485</a>
	<b>Item no.: 281-490</b> Comb-style jumper bar; insulated; 10-way; IN = IN terminal block; gray	<a href="http://www.wago.com/281-490">www.wago.com/281-490</a>
	<b>Item no.: 281-492</b> Alternate comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray	<a href="http://www.wago.com/281-492">www.wago.com/281-492</a>
	<b>Item no.: 709-110</b> Wire commoning chain; insulated; 4 connections; 3 x 110 mm; black	<a href="http://www.wago.com/709-110">www.wago.com/709-110</a>
	<b>Item no.: 709-111</b> Wire commoning chain; insulated; 3 connections; 2 x 120 mm; black	<a href="http://www.wago.com/709-111">www.wago.com/709-111</a>
	<b>Item no.: 709-112</b> Wire commoning chain; insulated; 3 connections; 2 x 170 mm; black	<a href="http://www.wago.com/709-112">www.wago.com/709-112</a>
	<b>Item no.: 781-452</b> Staggered jumper; insulated; from 1 to 2; Spacing: 6 mm; gray	<a href="http://www.wago.com/781-452">www.wago.com/781-452</a>
	<b>Item no.: 781-453</b> Staggered jumper; insulated; from 1 to 3; Spacing: 6 mm; gray	<a href="http://www.wago.com/781-453">www.wago.com/781-453</a>
	<b>Item no.: 781-454</b> Staggered jumper; insulated; from 1 to 4; Spacing: 6 mm; gray	<a href="http://www.wago.com/781-454">www.wago.com/781-454</a>
	<b>Item no.: 781-455</b> Staggered jumper; insulated; from 1 to 5; Spacing: 6 mm; gray	<a href="http://www.wago.com/781-455">www.wago.com/781-455</a>
	<b>Item no.: 781-456</b> Staggered jumper; insulated; from 1 to 6; Spacing: 6 mm; gray	<a href="http://www.wago.com/781-456">www.wago.com/781-456</a>

**tools**

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

	<b>Item no.: 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>Item no.: 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>Item no.: 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>End plate</b>		
	<b>Item no.: 281-312</b> End and intermediate plate; 2.5 mm thick; gray	<a href="http://www.wago.com/281-312">www.wago.com/281-312</a>
	<b>Item no.: 281-313</b> End and intermediate plate; 2.5 mm thick; orange	<a href="http://www.wago.com/281-313">www.wago.com/281-313</a>
	<b>Item no.: 281-318</b> Separator plate; 2 mm thick; oversized; gray	<a href="http://www.wago.com/281-318">www.wago.com/281-318</a>
	<b>Item no.: 281-348</b> Separator plate; 2 mm thick; oversized; gray	<a href="http://www.wago.com/281-348">www.wago.com/281-348</a>

## Downloads

### Documentation

#### Bid Text

281-637 doc - Datei	Feb 28, 2017	doc 24.6 kB	Download
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281-637 GAEB X81 - Datei	Feb 19, 2019	xml 3.1 kB	Download
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#### Additional Information

Technical explanations	Apr 3, 2019	pdf 2.1 MB	Download
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## CAD/CAE-Data

### CAD data

2D/3D Models 281-637	URL	Download
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### CAE data

EPLAN Data Portal 281-637	URL	Download
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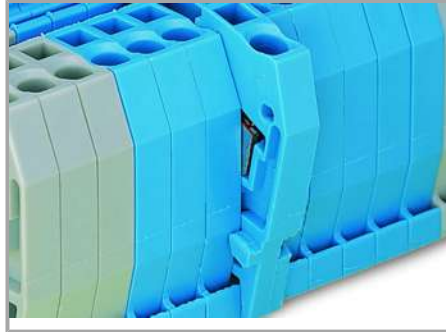
Subject to changes. Please also observe the further product documentation!

## Installation Notes

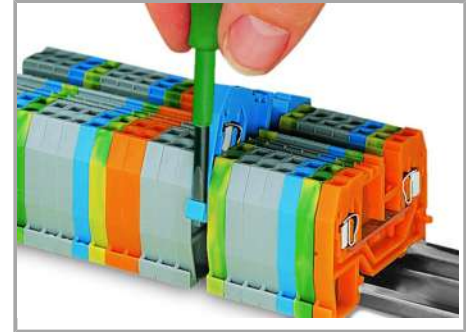
### Assembly



By snapping a ground conductor terminal block onto the carrier rail, a direct electrical connection is automatically made to the rail.



Quick assembly keys prevent reverse mounting.



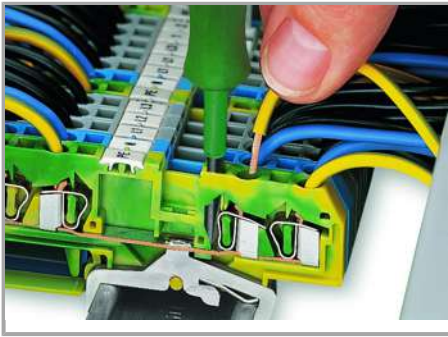
Removing a terminal block from the assembly.



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

### Inserting a conductor

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



CAGE CLAMP® connection

Inserting a conductor.



CAGE CLAMP® connection

Inserting a conductor.



CAGE CLAMP® connection  
Removing a conductor.

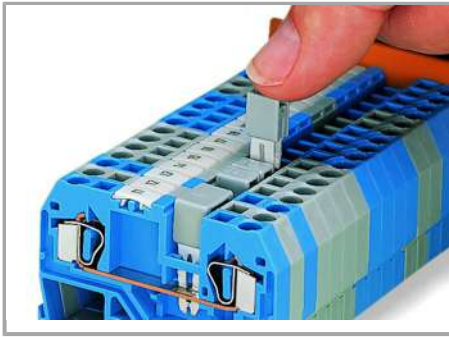
With ferruled conductors, it is necessary to use a terminal block one size larger than the conductor's nominal cross-section.



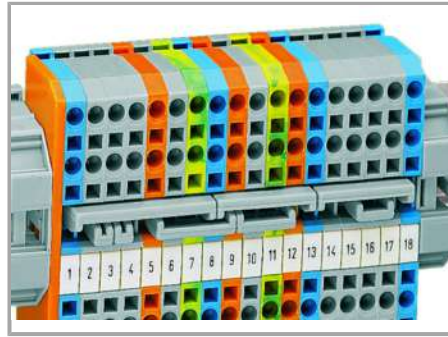
Inserting insulation stops.

### Commoning

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



Commoning using an adjacent jumper (280-402).



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

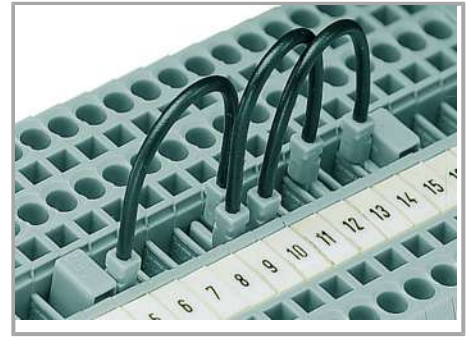
Push jumper down until fully inserted.

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.





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

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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:

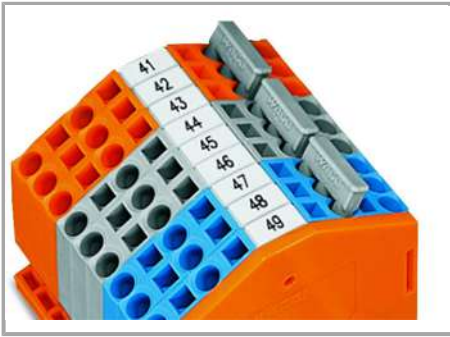
- 279 Series (1.5 mm<sup>2</sup>/16 AWG),
- 
- 280/775/780 Series (2.5 mm<sup>2</sup>/14 AWG)
- 
- 281/769/776/777/781 and 880 Series (4 mm<sup>2</sup>/12 AWG)
- 

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.

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

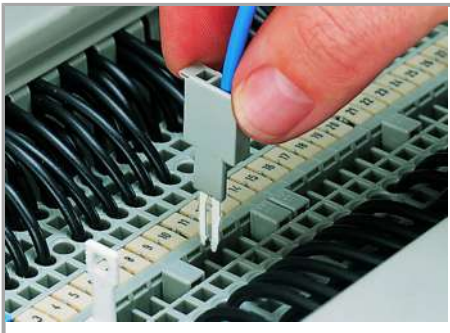




4-conductor through terminal blocks, angled type –

formation of groups with 3-way, comb-style jumper bars

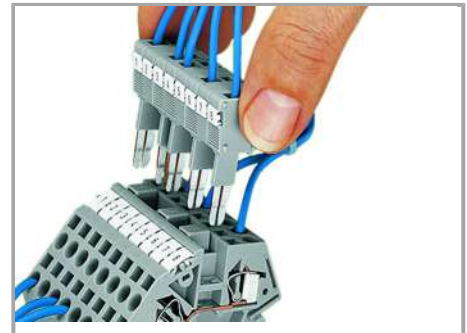
#### Testing



Testing with a test plug



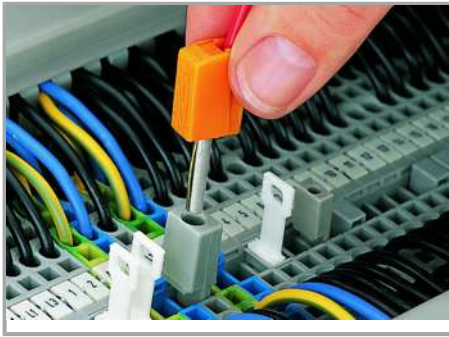
L-type test plug modules fitted with CAGE CLAMP®



B-type test plug modules fitted with CAGE CLAMP®

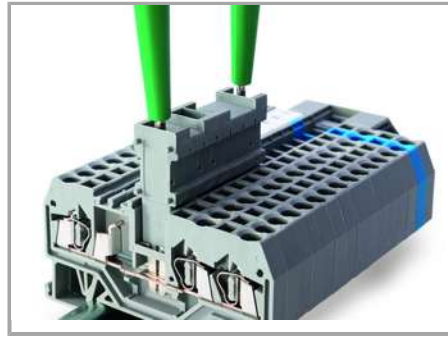
(picture shows a test plug fitted with CAGE CLAMP®).

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



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.

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