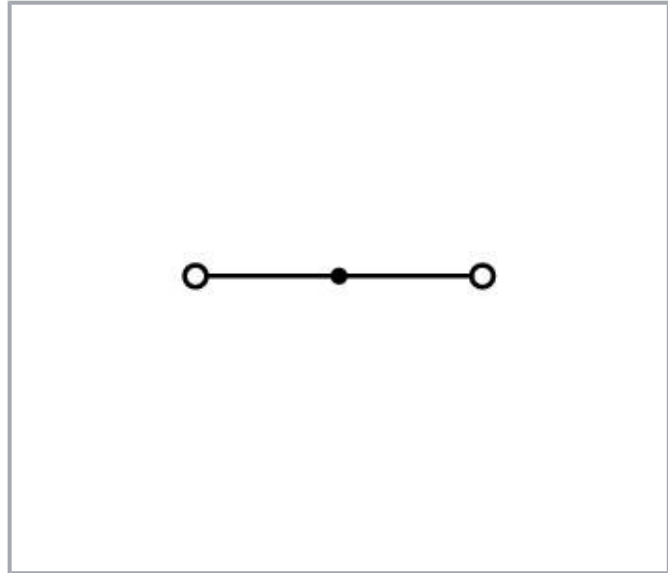
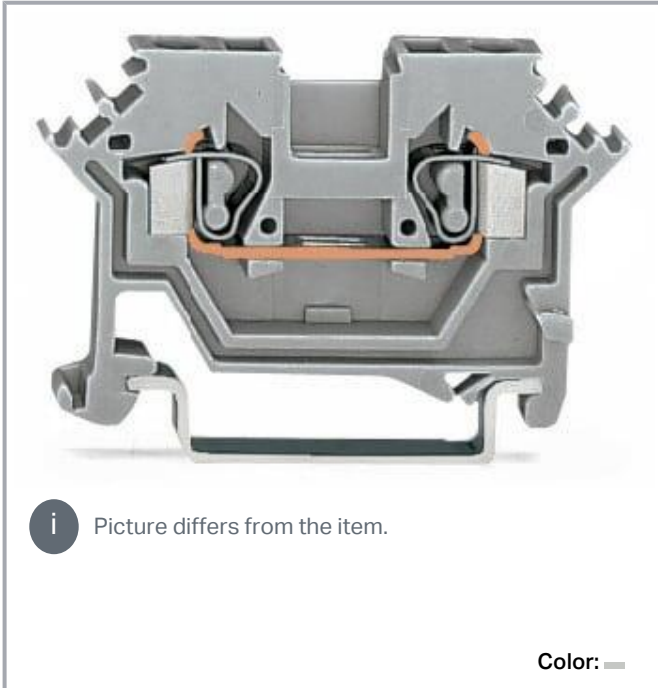


**Data sheet | Item number: 280-691**

2-conductor through terminal block; 2.5 mm<sup>2</sup>; suitable for Ex e II applications; LATERAL MARKING; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 2,50 mm<sup>2</sup>; light gray

[www.wago.com/280-691](http://www.wago.com/280-691)



**Data**

**Electrical data**

**Ratings per IEC/EN**

Ratings per IEC/EN 60947-7-1

**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

Rated voltage CSA (Use Group C) 600 V

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

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Rated current CSA (Use Group C)	24 A
---------------------------------	------

## Ex information

Reference hazardous areas	See application instructions in section "Knowledge and Downloads – Documentation – Additional Information: Technical Section; Technical Explications"
Ratings per	ATEX: PTB 99 ATEX 3109 U / IECEx: PTB 03.0004U (Ex eb IIC Gb or Ex eb I Mb)
Rated voltage EN (Ex e II)	550 V
Note (rated voltage)	Using staggered jumpers reduces the maximum rated voltage to 275 V.
Rated current (Ex e II)	23 A

## Power loss

Power loss, per pole (potential)	0.704 W
Rated current $I_N$ for specified power loss	23 A
Resistance value for specified, current-dependent power loss	0.001 $\Omega$

## Connection data

Connection points	2
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)	<p><b>Terminating Aluminum Conductors</b></p> <p>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 249-130 is used for termination.</p> <p>"Alu-Plus" Contact Paste Advantages:</p>

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



- 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

Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 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	50 mm / 1.969 inches
Depth from upper-edge of DIN-rail	28 mm / 1.102 inches

## Mechanical Data

Mounting type	DIN-35 rail
Marking level	Side marking

## Material Data

Note (material data)	Information on material specifications can be found here
Color	light gray

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

Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.093 MJ
Weight	4.8 g

### 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	4044918467834
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	UL 1059	E45172

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






Underwriters Laboratories Inc.



## Declarations of conformity and manufacturer's declarations

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

## Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	EN 60947	20- HG1941090- PDA
	BV Bureau Veritas S.A.	EN 60947	07436/F0 BV
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2

## Approvals for hazardous areas



Logo	Approval	Additional Approval Text	Certificate name
	AEx UL International Germany GmbH c/o Physikalisch Technische Bundesanstalt	UL 60079	E185892 (AEx e II resp. Ex e II)
	ATEX Physikalisch Technische Bundesanstalt	IEC 60079-0	PTB 99 ATEX 3109 U

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(Ex eb IIC,  
IM 2 Ex eb  
IMb)

	<b>EAC</b> Brjansker Zertifizierungsstelle	TP TC 012/2011	RU C-DE. AM02.B. 00127/19
	<b>IECEX</b> Physikalisch Technische Bundesanstalt	IEC 60079-0	IECEx PTB 03.0004U (Ex eb IIC Gb or Ex eb I Mb)

## Required accessories

### End plate

End plate

**Item no.: 280-362**

End and intermediate plate; 2.5 mm thick; light gray

[www.wago.com/280-362](http://www.wago.com/280-362)

## Optional accessories

### Marking accessories

Double marker carrier

**Item no.: 209-128**

Adaptor; gray

[www.wago.com/209-128](http://www.wago.com/209-128)

Marker

**Item no.: 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](http://www.wago.com/2009-115/000-002)**Item no.: 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](http://www.wago.com/2009-115/000-007)**Item no.: 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](http://www.wago.com/2009-115/000-017)**Item no.: 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](http://www.wago.com/2009-115/000-023)

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**Item no.:** 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](http://www.wago.com/2009-115/000-024)



**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](http://www.wago.com/2009-115)



**Item no.:** 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)



**Item no.:** 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)



**Item no.:** 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; light green

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



**Item no.:** 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; green

[www.wago.com/793-5501/000-023](http://www.wago.com/793-5501/000-023)



**Item no.:** 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)



**Item no.:** 793-501/000-002

WMB marking card; as card; not stretchable; plain; snap-on type; yellow

[www.wago.com/793-501/000-002](http://www.wago.com/793-501/000-002)



**Item no.:** 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)



**Item no.:** 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)



**Item no.:** 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)

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**Item no.: 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)



**Item no.: 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)



**Item no.: 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)



**Item no.: 793-501**  
WMB marking card; as card; not stretchable; plain; snap-on type; white

[www.wago.com/793-501](http://www.wago.com/793-501)



**Item no.: 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)



**Item no.: 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)



**Item no.: 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)



**Item no.: 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)



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



**Item no.: 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](http://www.wago.com/2009-115/000-012)



**Item no.: 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](http://www.wago.com/2009-115/000-006)

Group marker carrier













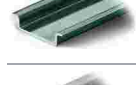
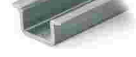


**Item no.: 209-142**  
Group marker carrier; gray

[www.wago.com/209-142](http://www.wago.com/209-142)

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



	<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.: 209-140</b> Group marker carrier; gray	<a href="http://www.wago.com/209-140">www.wago.com/209-140</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>Insulation stop</b>		
Insulation stop		
	<b>Item no.: 280-472</b> Insulation stop; 0.75 - 1 mm <sup>2</sup> ; 5 pieces/strip; black	<a href="http://www.wago.com/280-472">www.wago.com/280-472</a>
	<b>Item no.: 280-470</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/280-470">www.wago.com/280-470</a>
	<b>Item no.: 280-471</b> Insulation stop; 0.25 - 0.5 mm <sup>2</sup> ; 5 pieces/strip; light gray	<a href="http://www.wago.com/280-471">www.wago.com/280-471</a>
<b>Carrier rail</b>		
Mounting accessories		
	<b>Item no.: 210-197</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-197">www.wago.com/210-197</a>
	<b>Item no.: 210-198</b> Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	<a href="http://www.wago.com/210-198">www.wago.com/210-198</a>
	<b>Item no.: 210-504</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored	<a href="http://www.wago.com/210-504">www.wago.com/210-504</a>
	<b>Item no.: 210-505</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored	<a href="http://www.wago.com/210-505">www.wago.com/210-505</a>
	<b>Item no.: 210-506</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-506">www.wago.com/210-506</a>
	<b>Item no.: 210-508</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-508">www.wago.com/210-508</a>
	<b>Item no.: 210-113</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	<a href="http://www.wago.com/210-113">www.wago.com/210-113</a>
	<b>Item no.: 210-118</b> Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	<a href="http://www.wago.com/210-118">www.wago.com/210-118</a>

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



**Item no.: 210-112**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored [www.wago.com/210-112](http://www.wago.com/210-112)



**Item no.: 210-114**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored [www.wago.com/210-114](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; silver-colored [www.wago.com/210-115](http://www.wago.com/210-115)

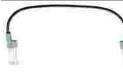


**Item no.: 210-196**

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

**Push-in type wire jumper**

Jumper



**Item no.: 249-123**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 180 mm long; black [www.wago.com/249-123](http://www.wago.com/249-123)



**Item no.: 249-126**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 110 mm long; black [www.wago.com/249-126](http://www.wago.com/249-126)



**Item no.: 249-127**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 250 mm long; black [www.wago.com/249-127](http://www.wago.com/249-127)



**Item no.: 249-125**

Push-in type wire jumper; insulated; 60 mm long; black [www.wago.com/249-125](http://www.wago.com/249-125)

**Protective warning marker**

Cover



**Item no.: 280-415**

Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow [www.wago.com/280-415](http://www.wago.com/280-415)

**Ferrule**

Ferrule



**Item no.: 216-101**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored [www.wago.com/216-101](http://www.wago.com/216-101)



**Item no.: 216-104**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated; silver-colored [www.wago.com/216-104](http://www.wago.com/216-104)



**Item no.: 216-102**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored [www.wago.com/216-102](http://www.wago.com/216-102)



**Item no.: 216-103**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated [www.wago.com/216-103](http://www.wago.com/216-103)



**Item no.: 216-203**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red [www.wago.com/216-203](http://www.wago.com/216-203)



**Item no.: 216-202**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray [www.wago.com/216-202](http://www.wago.com/216-202)

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

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	<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.: 216-201</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.: 216-301</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; light turquoise	<a href="http://www.wago.com/216-302">www.wago.com/216-302</a>

## Mounting



### Cover carrier

	<b>Item no.: 709-167</b> 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	<a href="http://www.wago.com/709-167">www.wago.com/709-167</a>
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### Cover







	<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>
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### Mounting accessories

	<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.: 249-116</b> Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray	<a href="http://www.wago.com/249-116">www.wago.com/249-116</a>

## Jumpers

### Jumper

	<b>Item no.: 280-402</b> Jumper; insulated; gray	<a href="http://www.wago.com/280-402">www.wago.com/280-402</a>
	<b>Item no.: 280-492</b> Jumper; 2-way; insulated; gray	<a href="http://www.wago.com/280-492">www.wago.com/280-492</a>
	<b>Item no.: 280-409</b> Jumper; insulated; gray	<a href="http://www.wago.com/280-409">www.wago.com/280-409</a>
	<b>Item no.: 280-422</b> Jumper; insulated; yellow-green	<a href="http://www.wago.com/280-422">www.wago.com/280-422</a>
	<b>Item no.: 280-482</b> Jumper; 2-way; insulated; gray	<a href="http://www.wago.com/280-482">www.wago.com/280-482</a>
	<b>Item no.: 280-484</b> Jumper; 4-way; insulated; gray	<a href="http://www.wago.com/280-484">www.wago.com/280-484</a>

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



**Item no.: 280-490**  
Jumper; 10-way; insulated; gray

[www.wago.com/280-490](http://www.wago.com/280-490)



**Item no.: 280-485**  
Jumper; 5-way; insulated; gray

[www.wago.com/280-485](http://www.wago.com/280-485)



**Item no.: 280-483**  
Jumper; 3-way; insulated; gray

[www.wago.com/280-483](http://www.wago.com/280-483)



**Item no.: 780-454**  
Staggered jumper; from 1 to 4; insulated; gray

[www.wago.com/780-454](http://www.wago.com/780-454)



**Item no.: 780-452**  
Staggered jumper; from 1 to 2; insulated; gray

[www.wago.com/780-452](http://www.wago.com/780-452)



**Item no.: 780-453**  
Staggered jumper; from 1 to 3; insulated; gray

[www.wago.com/780-453](http://www.wago.com/780-453)



**Item no.: 780-457**  
Staggered jumper; from 1 to 7; insulated; gray

[www.wago.com/780-457](http://www.wago.com/780-457)



**Item no.: 780-456**  
Staggered jumper; from 1 to 6; insulated; gray

[www.wago.com/780-456](http://www.wago.com/780-456)



**Item no.: 780-455**  
Staggered jumper; from 1 to 5; insulated; gray

[www.wago.com/780-455](http://www.wago.com/780-455)



**Item no.: 780-458**  
Staggered jumper; from 1 to 8; insulated; gray

[www.wago.com/780-458](http://www.wago.com/780-458)

## 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](http://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](http://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](http://www.wago.com/210-720)

## Downloads

### Documentation

#### Additional Information

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

Technical Section  
Technical explanations

pdf  
2.2 MB  
Download

## CAD/CAE-Data

### CAD data

2D/3D Models 280-691 [URL](#) [Download](#)

### CAE data

EPLAN Data Portal 280-691 [URL](#) [Download](#)

WSCAD Universe 280-691 [URL](#) [Download](#)

ZUKEN Portal 280-691 [URL](#) [Download](#)

## Environmental Product Compliance

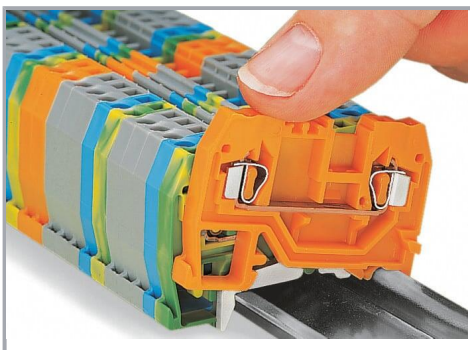
### Compliance Search

Environmental Product Compliance 280-691 [URL](#) [Download](#)

2-conductor through terminal block; 2.5 mm<sup>2</sup>; suitable for Ex e II applications;  
LATERAL MARKING; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 2,50 mm<sup>2</sup>; light gray

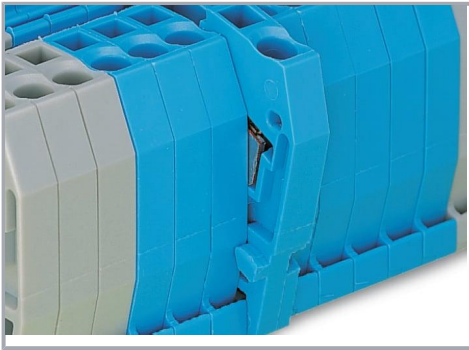
## Installation Notes

### Installation

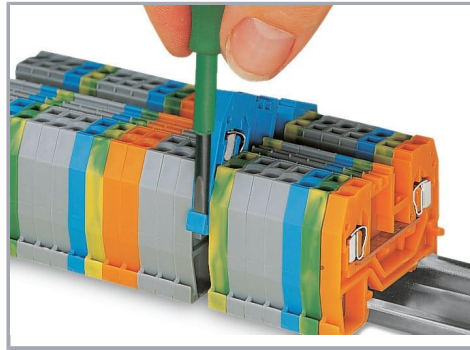


Snapping a terminal block onto the DIN-rail.

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



Quick assembly keys prevent reverse mounting.

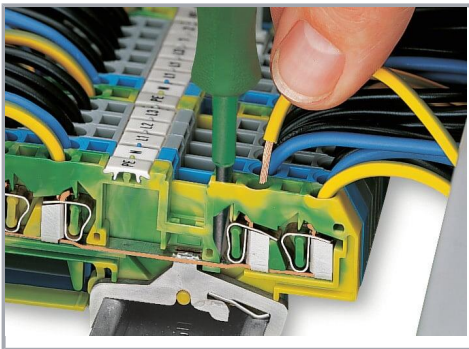


Removing a terminal block from the assembly.



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

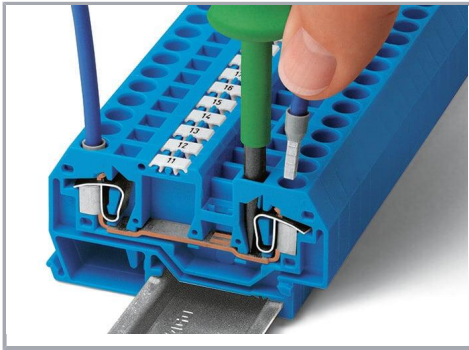
#### Conductor termination



#### CAGE CLAMP® connection

Inserting a conductor.

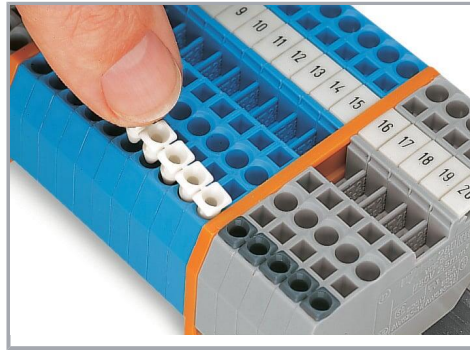
Subject to changes. Please also observe the further product documentation!



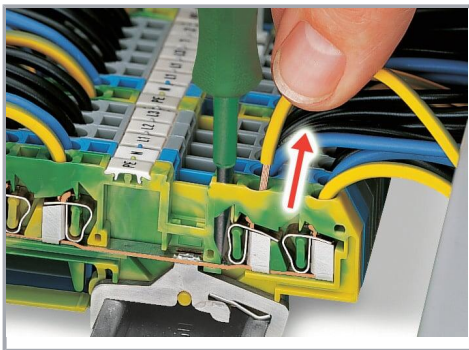
**CAGE CLAMP® connection**

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.

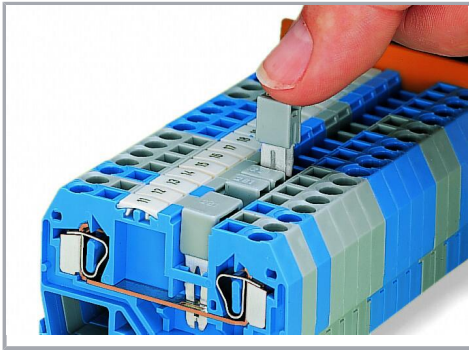


**CAGE CLAMP® connection**

Removing a solid conductor.

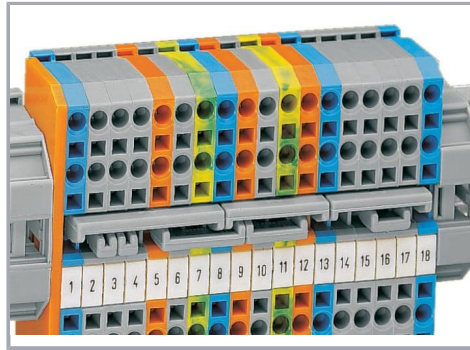
**Commoning**

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



Commoning using an adjacent jumper.

Push jumper down until fully inserted!

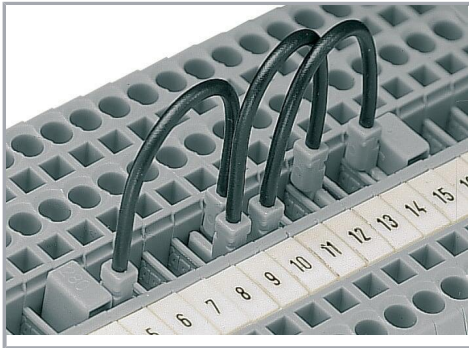


Staggered jumpers are suitable for

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.

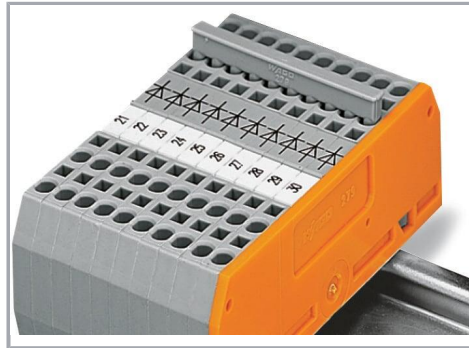
These jumpers are compatible with the following rail-mount terminal blocks:

- 279 Series (1.5 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).

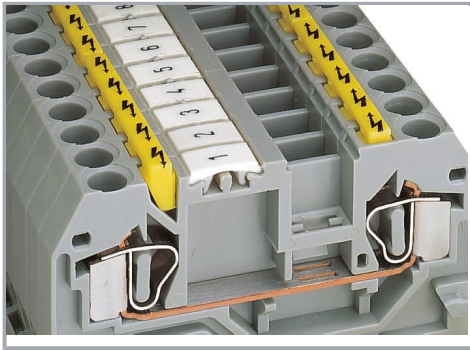
The 280/775/780 and 281/776/777/781 Series Terminal Blocks accept two wire jumpers, allowing the use of commoning chains. Furthermore, the 280/769/775/780 /880 and 281/776/777/781 Series allow both wire jumper and adjacent jumper to be simultaneously plugged into a same terminal block.

### Cover



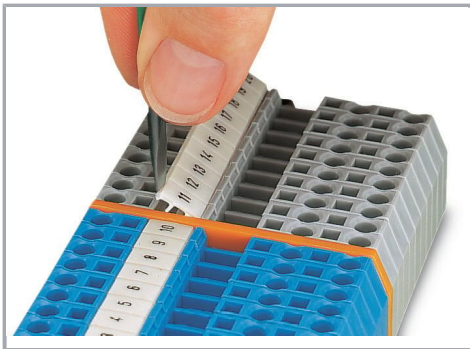
Commoning using comb-style jumper bars:  
Push comb-style jumper bars down until fully inserted.

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



Protective warning markers inserted into the operating slots

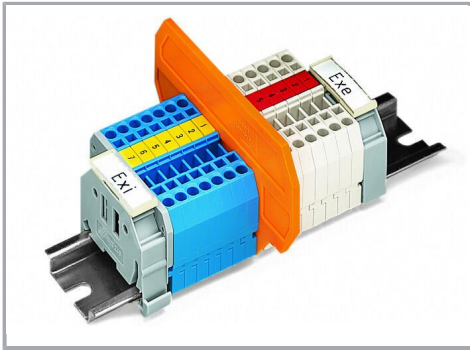
### Marking



Labeling via WMB Multi Marking System.

### Ex application

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



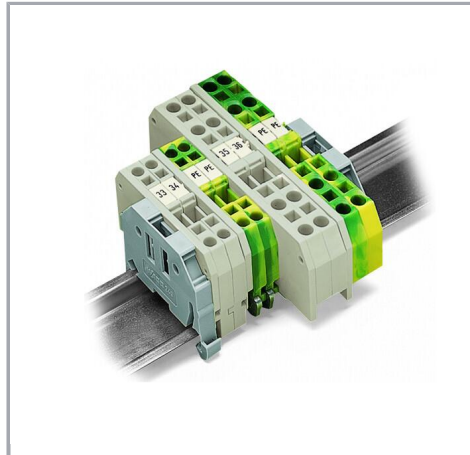
### Separator plate for Ex e/Ex i applications

According to EN 50020, a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. The use of Ex e/Ex i separators is a space-saving solution when Ex e and Ex i terminal blocks are mounted on a common DIN-rail.

For 279 ... 282 Series:

209-190 for 2-conductor terminal blocks

209-191 for 2-, 3-, 4-conductor terminal blocks



### End and intermediate plate

In order to meet creepage and clearance requirements for Ex e applications, it is necessary to insert an end or intermediate plate between a through and a ground conductor terminal block.

## 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!