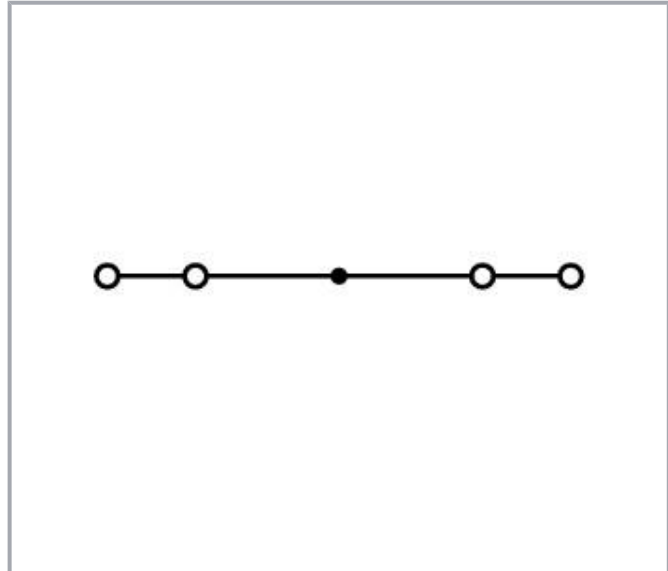
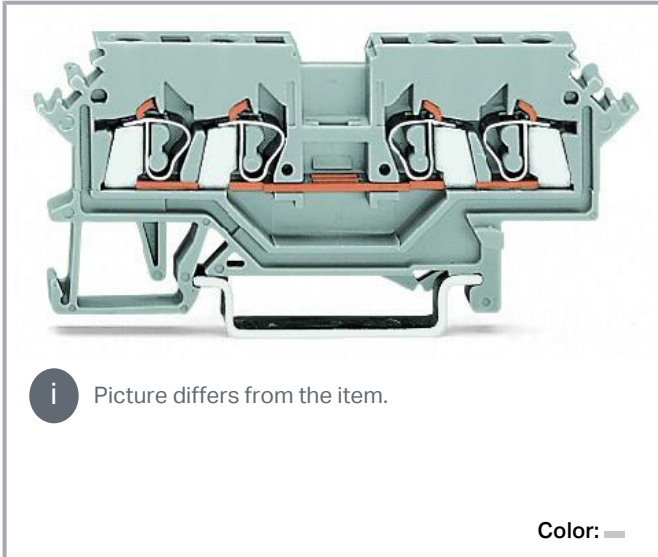


## Data sheet | Item number: 280-990

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

[www.wago.com/280-990](http://www.wago.com/280-990)



## 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

Rated current CSA (Use Group C) 24 A

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

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## 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)	22 A

## Power loss

Power loss, per pole (potential)	0.644 W
Rated current $I_N$ for specified power loss	22 A
Resistance value for specified, current-dependent power loss	0.001 $\Omega$

## Connection data

Connection points	4
Total number of potentials	1
Number of levels	1

## Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper Aluminum
Connectable conductor materials (note)	<p><b>Terminating Aluminum Conductors</b> 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	73 mm / 2.874 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	0.133 MJ
Weight	8.3 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	4044918391450
Customs tariff number	85369010000

### Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------

### Approvals / Certificates

#### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947	2157201.01
	CCC CNEX	GB/T 3836.3	2020312313000232 (Ex eb IIC Gb, Ex eb I Mb)
	CSA DEKRA Certification B.V.	C22.2	1536071

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





UL  
Underwriters Laboratories Inc.




UL 1059

E45172


## 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	IEC 60079-0	PTB 99 ATEX 3109

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Physikalisch Technische Bundesanstalt

U (Ex eb IIC, IM 2 Ex eb IMb)

CCC  
CNEX

GB/T 3836.3

2020312313000232  
(Ex eb IIC Gb, Ex eb I Mb)EAC  
Brjansker Zertifizierungsstelle

TP TC 012/2011

RU C-DE.AM02.B.  
00127/19IECEX  
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.: 280-364

End and intermediate plate; 2.5 mm thick; light gray

[www.wago.com/280-364](http://www.wago.com/280-364)

## Optional accessories

### Carrier rail

Mounting accessories



Item no.: 210-197

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored

[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; silver-colored

[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; silver-colored

[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; silver-colored

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

Item no.: 210-508

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

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Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored

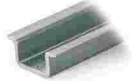
[www.wago.com/210-508](http://www.wago.com/210-508)



**Item no.: 210-113**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

[www.wago.com/210-113](http://www.wago.com/210-113)



**Item no.: 210-118**

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

[www.wago.com/210-118](http://www.wago.com/210-118)



**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)

## Jumpers

### Jumper



**Item no.: 280-402**

Jumper; insulated; gray

[www.wago.com/280-402](http://www.wago.com/280-402)



**Item no.: 280-492**

Jumper; 2-way; insulated; gray

[www.wago.com/280-492](http://www.wago.com/280-492)



**Item no.: 280-409**

Jumper; insulated; gray

[www.wago.com/280-409](http://www.wago.com/280-409)



**Item no.: 280-422**

Jumper; insulated; yellow-green

[www.wago.com/280-422](http://www.wago.com/280-422)



**Item no.: 280-482**

Jumper; 2-way; insulated; gray

[www.wago.com/280-482](http://www.wago.com/280-482)



**Item no.: 280-484**

Jumper; 4-way; insulated; gray

[www.wago.com/280-484](http://www.wago.com/280-484)



**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**

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

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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)

**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)



**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)

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**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

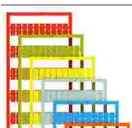
[www.wago.com/793-501/000-007](http://www.wago.com/793-501/000-007)



**Item no.:** 793-501/000-017

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

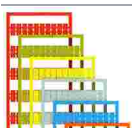
[www.wago.com/793-501/000-017](http://www.wago.com/793-501/000-017)



**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)



**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)

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**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)



**Item no.: 209-141**  
Group marker carrier; gray

[www.wago.com/209-141](http://www.wago.com/209-141)



**Item no.: 209-140**

[www.wago.com/209-140](http://www.wago.com/209-140)

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



Group marker carrier; gray

**Item no.: 249-105**

Group marker carrier; gray




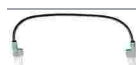
[www.wago.com/249-105](http://www.wago.com/249-105)**Ferrule**

## Ferrule

	<b>Item no.: 216-101</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored	<a href="http://www.wago.com/216-101">www.wago.com/216-101</a>
	<b>Item no.: 216-104</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated; silver-colored	<a href="http://www.wago.com/216-104">www.wago.com/216-104</a>
	<b>Item no.: 216-102</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored	<a href="http://www.wago.com/216-102">www.wago.com/216-102</a>
	<b>Item no.: 216-103</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-103">www.wago.com/216-103</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>
	<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.: 216-204</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>

**Push-in type wire jumper**




## Jumper

	<b>Item no.: 249-123</b> Push-in type wire jumper; 0.75 mm <sup>2</sup> ; insulated; 180 mm long; black	<a href="http://www.wago.com/249-123">www.wago.com/249-123</a>
	<b>Item no.: 249-126</b> Push-in type wire jumper; 0.75 mm <sup>2</sup> ; insulated; 110 mm long; black	<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; 0.75 mm <sup>2</sup> ; insulated; 250 mm long; black	<a href="http://www.wago.com/249-127">www.wago.com/249-127</a>
	<b>Item no.: 249-125</b> Push-in type wire jumper; insulated; 60 mm long; black	<a href="http://www.wago.com/249-125">www.wago.com/249-125</a>

**Tool**

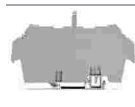
Subject to changes. Please also observe the further product documentation!

Operating tool


	<b>Item no.: 210-657</b> Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured	<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; multicoloured	<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; multicoloured	<a href="http://www.wago.com/210-720">www.wago.com/210-720</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>




Protective warning marker

Cover

	<b>Item no.: 280-415</b> Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow	<a href="http://www.wago.com/280-415">www.wago.com/280-415</a>
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Insulation stop

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>

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



## Downloads

### Documentation

#### Additional Information

Technical Section	pdf	Download
Technical explanations	2.2 MB	

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## CAD/CAE-Data

### CAD data

2D/3D Models 280-990	URL	Download
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### CAE data

EPLAN Data Portal 280-990	URL	Download
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WSCAD Universe 280-990	URL	Download
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ZUKEN Portal 280-990	URL	Download
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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 280-990	URL	Download
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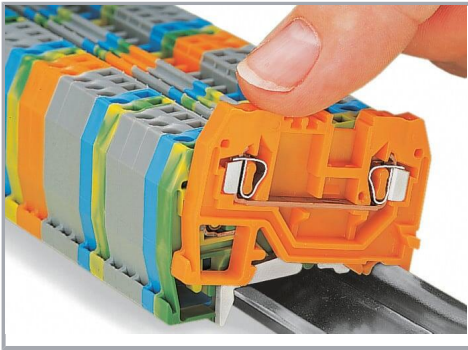
4-conductor through terminal block; 2.5 mm<sup>2</sup>; suitable for Ex e II applications; lateral marker slots; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 2,50 mm<sup>2</sup>; light gray

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## Installation Notes

### Installation

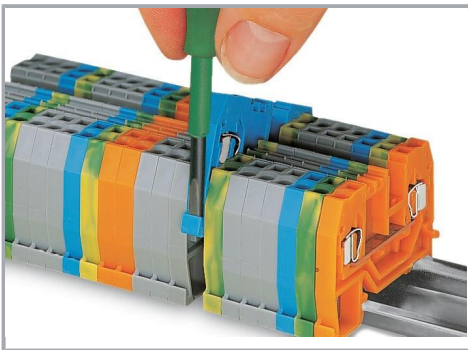
Subject to changes. Please also observe the further product documentation!



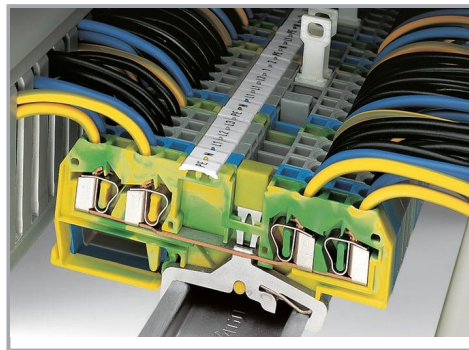
Snapping a terminal block onto the DIN-rail.



Quick assembly keys prevent reverse mounting.

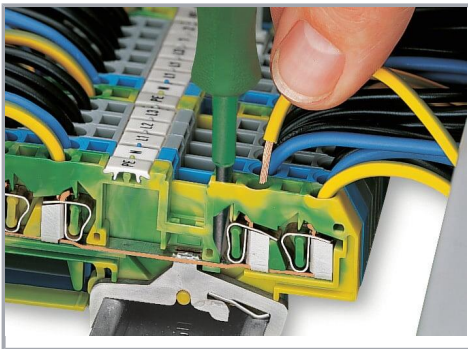


Removing a terminal block from the assembly.



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

### Conductor termination

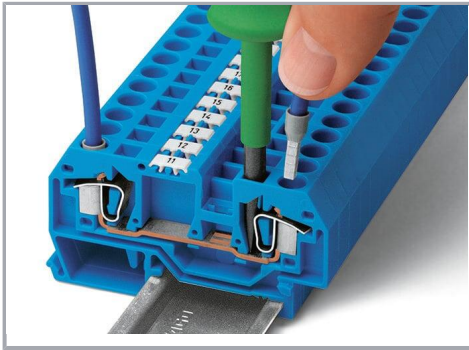


### CAGE CLAMP® connection

Inserting a conductor.

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

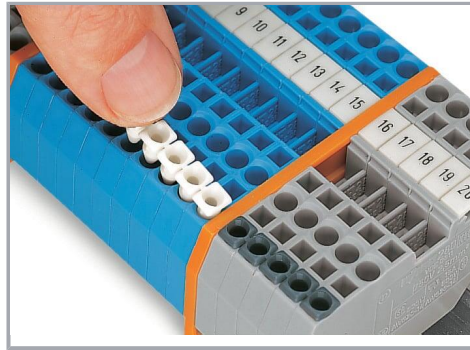




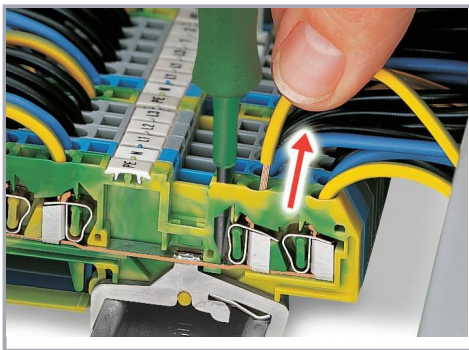
**CAGE CLAMP® connection**

Inserting a conductor.

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



Inserting insulation stops.

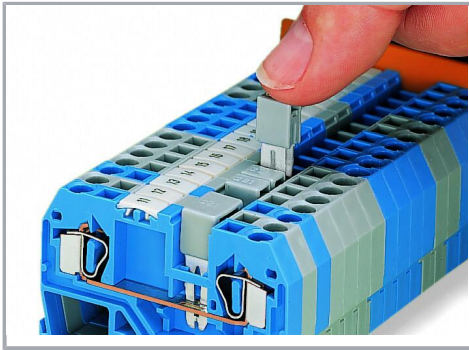


**CAGE CLAMP® connection**

Removing a solid conductor.

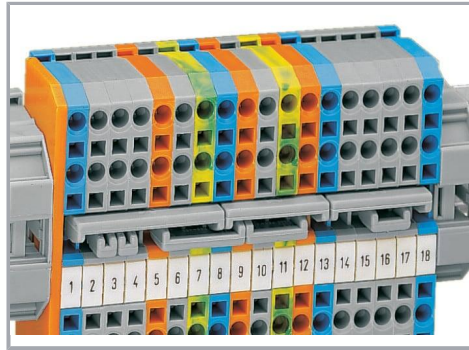
**Commoning**

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



Commoning using an adjacent jumper.

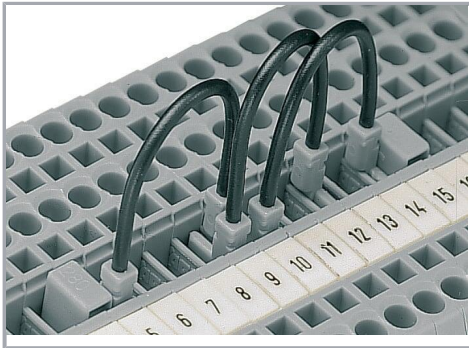
Push jumper down until fully inserted!



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

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





### Push-In Type Wire Jumpers

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

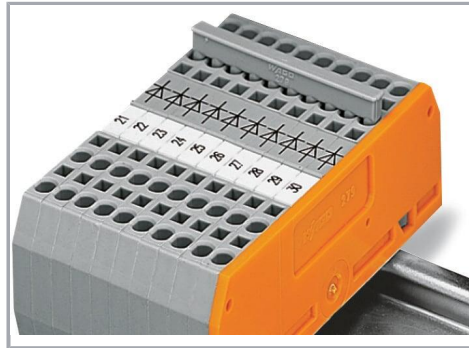
These jumpers are compatible with the following rail-mount terminal blocks:

- 279 Series (1.5 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).

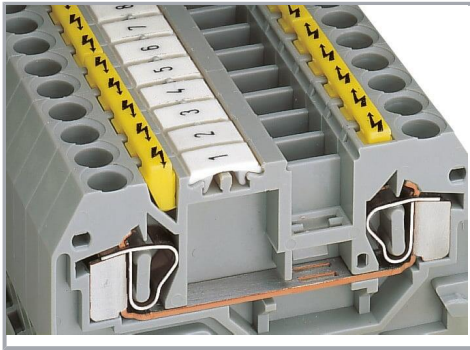
The 280/775/780 and 281/776/777/781 Series Terminal Blocks accept two wire jumpers, allowing the use of commoning chains. Furthermore, the 280/769/775/780 /880 and 281/776/777/781 Series allow both wire jumper and adjacent jumper to be simultaneously plugged into a same terminal block.

### Cover



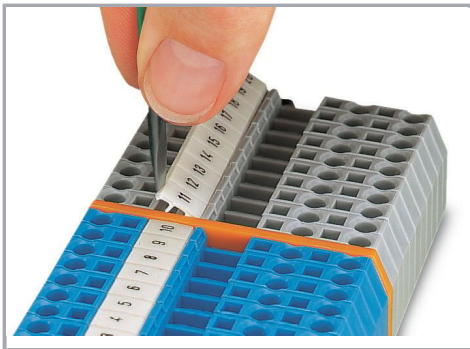
Commoning using comb-style jumper bars:  
Push comb-style jumper bars down until fully inserted.

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



Protective warning markers inserted into the operating slots

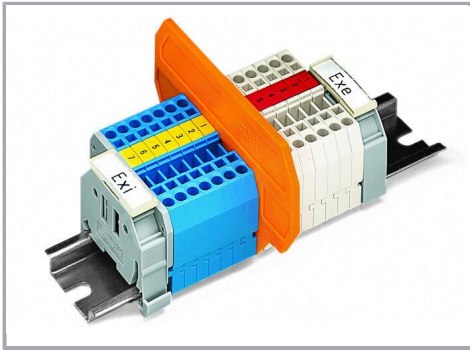
### Marking



Labeling via WMB Multi Marking System.

### Ex application

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



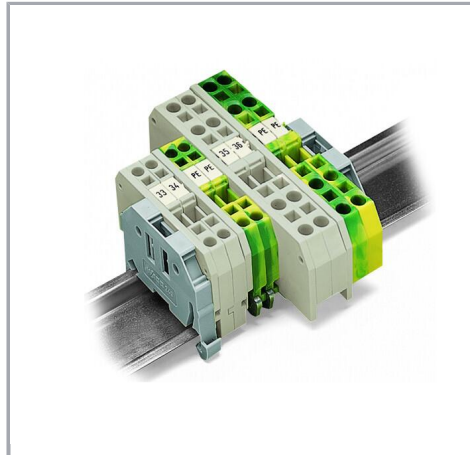
#### Separator plate for Ex e/Ex i applications

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!