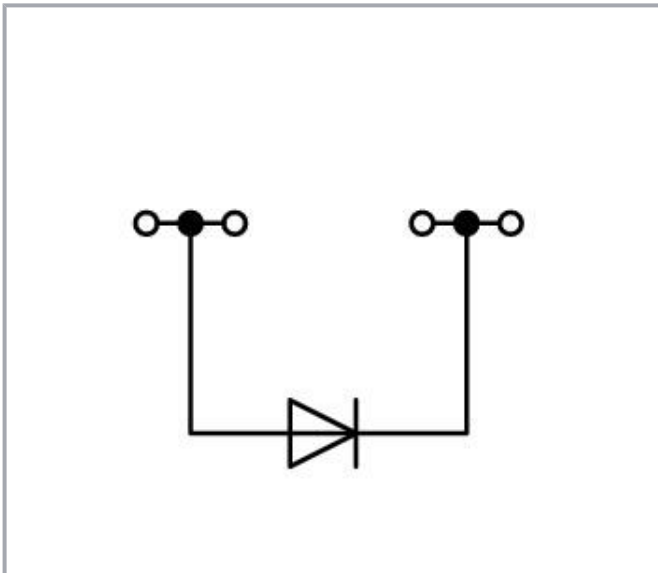
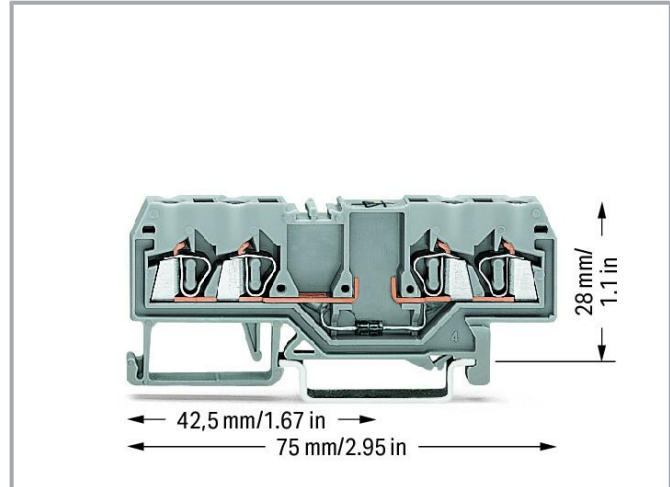
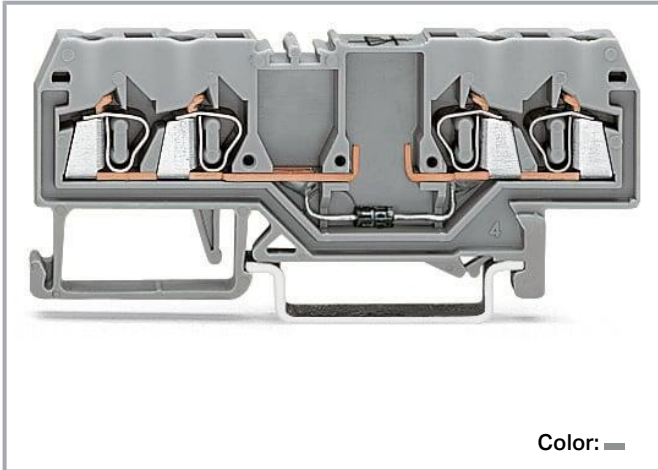


**Data sheet | Item number: 280-815/281-410**

Component terminal block; 4-conductor; with diode 1N4007; anode, left side; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; gray



[www.wago.com/280-815/281-410](http://www.wago.com/280-815/281-410)



**Data**

**Electrical data**

**Ratings per IEC/EN**

Ratings per	IEC/EN 60947-7-1
Rated current	0.5 A

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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
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## General

Nominal voltage	250 V
Reverse voltage	1,000 V

## 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)

### 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 249-130 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

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

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Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Wiring direction	Front-entry wiring

### Physical data

Width	5 mm / 0.197 inches
Height	75 mm / 2.953 inches
Depth from upper-edge of DIN-rail	28 mm / 1.102 inches

### Mechanical Data

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

### Material Data

Note (material data)	Information on material specifications can be found here
Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.16 MJ
Weight	9.4 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	27-14-11-27
eCl@ss 9.0	27-14-11-27
ETIM 8.0	EC000903
ETIM 7.0	EC000903
PU (SPU)	100 pcs

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

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 Hansastr. 27  
 32423 Minden  
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 Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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Packaging type	box
Country of origin	CN
GTIN	4050821275473
Customs tariff number	85369010000

## Environmental Product Compliance

CAS-No.	7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	5e655896-65ff-4ac9-bbca-9cda6dcc9488
SCIP notification number (Belgium)	0e35d7f7-797f-46c5-ac76-59521804af77
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SCIP notification number (Romania)	6c341a63-9636-4174-a02b-88f67fc81ce6
SCIP notification number (Sweden)	aa008298-69a4-4164-a6a9-90be910ce280

## Required accessories

### End plate

End plate

	<b>Item no.: 280-314</b> End and intermediate plate; 2.5 mm thick; gray	<a href="http://www.wago.com/280-314">www.wago.com/280-314</a>
	<b>Item no.: 280-315</b> End and intermediate plate; 2.5 mm thick; orange	<a href="http://www.wago.com/280-315">www.wago.com/280-315</a>




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

## Optional accessories

### 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>













### Tool

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>

### Carrier rail



#### Mounting accessories

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

	<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>
	<b>Item no.: 210-112</b> 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	<a href="http://www.wago.com/210-112">www.wago.com/210-112</a>
	<b>Item no.: 210-114</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-114">www.wago.com/210-114</a>
	<b>Item no.: 210-115</b> 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	<a href="http://www.wago.com/210-115">www.wago.com/210-115</a>
	<b>Item no.: 210-196</b> Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-196">www.wago.com/210-196</a>

**Marking accessories**

Marker

	<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.: 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>

**Item no.: 793-5501**

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



WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on [www.wago.com/793-5501](http://www.wago.com/793-5501)  
type; white

Group marker carrier



**Item no.: 249-105**  
Group marker carrier; gray

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

Insulation stop

Insulation stop



**Item no.: 280-472**  
Insulation stop; 0.75 - 1 mm<sup>2</sup>; 5 pieces/strip; black

[www.wago.com/280-472](http://www.wago.com/280-472)



**Item no.: 280-470**  
Insulation stop; 0.08 - 0.2 mm<sup>2</sup> "s" (0.14 mm<sup>2</sup> "f-st"); 5 pieces/strip; white

[www.wago.com/280-470](http://www.wago.com/280-470)



**Item no.: 280-471**  
Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip; light gray

[www.wago.com/280-471](http://www.wago.com/280-471)

Mounting

Cover carrier



**Item no.: 709-167**  
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

[www.wago.com/709-167](http://www.wago.com/709-167)

Cover



**Item no.: 709-153**  
Cover; Type 1; suitable for cover carrier, type 1; 1 m long; transparent

[www.wago.com/709-153](http://www.wago.com/709-153)

Mounting accessories



**Item no.: 209-106**  
Mounting carrier; for isolated mounting on DIN 35 rails; gray

[www.wago.com/209-106](http://www.wago.com/209-106)



**Item no.: 249-116**  
Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

[www.wago.com/249-116](http://www.wago.com/249-116)

Testing and measuring

Testing accessories



**Item no.: 249-141**  
L-type test plug module; modular; with spring-loaded contact pin; Center module; 1,50 mm<sup>2</sup>; gray

[www.wago.com/249-141](http://www.wago.com/249-141)



**Item no.: 249-143**  
L-type spacer module; modular; e.g., bridging commoned terminal blocks; gray

[www.wago.com/249-143](http://www.wago.com/249-143)















**Item no.: 249-142**  
L-type end module; modular; with rigid contact pin; End module; 1,50 mm<sup>2</sup>; gray

[www.wago.com/249-142](http://www.wago.com/249-142)

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

## Jumpers

Jumper		
	<b>Item no.: 210-123</b> Wire commoning chain; insulated; blue	<a href="http://www.wago.com/210-123">www.wago.com/210-123</a>
	<b>Item no.: 210-103</b> Wire commoning chain; insulated; black	<a href="http://www.wago.com/210-103">www.wago.com/210-103</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.: 280-482</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>
	<b>Item no.: 280-490</b> Jumper; 10-way; insulated; gray	<a href="http://www.wago.com/280-490">www.wago.com/280-490</a>
	<b>Item no.: 280-485</b> Jumper; 5-way; insulated; gray	<a href="http://www.wago.com/280-485">www.wago.com/280-485</a>
	<b>Item no.: 280-483</b> Jumper; 3-way; insulated; gray	<a href="http://www.wago.com/280-483">www.wago.com/280-483</a>
	<b>Item no.: 709-110</b> Wire commoning chain; 2.5 mm²; insulated; black	<a href="http://www.wago.com/709-110">www.wago.com/709-110</a>
	<b>Item no.: 709-112</b> Wire commoning chain; 2.5 mm²; insulated; black	<a href="http://www.wago.com/709-112">www.wago.com/709-112</a>
	<b>Item no.: 709-111</b> Wire commoning chain; 2.5 mm²; insulated; black	<a href="http://www.wago.com/709-111">www.wago.com/709-111</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>

## Downloads

## Documentation

## Bid Text

280-815/281-410	2019 Feb 19	xml	Download
X81 - Datei		3.3 kB	

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





280-815/281-410	2017 Apr 10	doc	Download
doc - Datei		25.1 kB	

#### Additional Information

Technical Section		pdf	Download
Technical explanations		2.2 MB	

#### CAD/CAE-Data

##### CAD data

2D/3D Models 280-815/281-410		URL	Download
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##### CAE data

EPLAN Data Portal 280-815/281-410		URL	Download
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WSCAD Universe 280-815/281-410		URL	Download
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ZUKEN Portal 280-815/281-410		URL	Download
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WSCAD Universe 280-815/281-410		URL	Download
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EPLAN Data Portal 280-815/281-410		URL	Download
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#### Environmental Product Compliance

##### Compliance Search

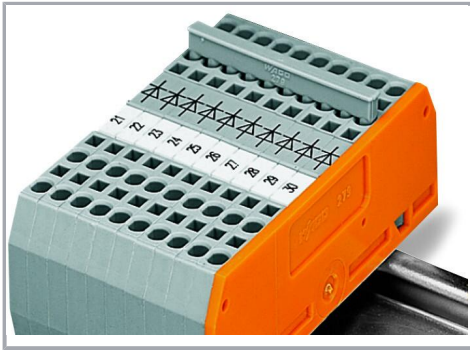
Environmental Product Compliance 280-815/281-410		URL	Download
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Component terminal block; 4-conductor; with diode 1N4007; anode, left side; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; 2,50 mm<sup>2</sup>; gray

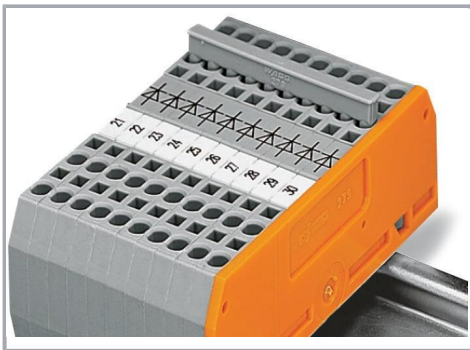
#### Installation Notes

##### Commoning

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

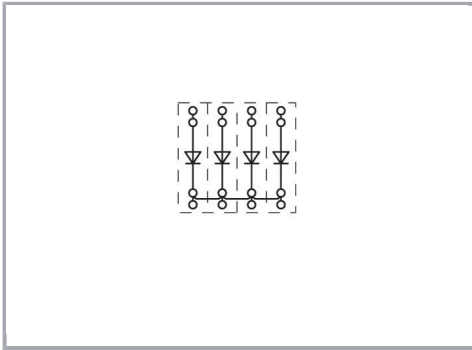


Commoning using comb-style jumper bars:  
Push comb-style jumper bars down until fully inserted.



These diode terminal blocks have been specially developed for custom diode circuits, such as lamp test and collective fault signal circuits.

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



Polarized diode gates with a common cathode can be created using the following terminal blocks:

280-815/281-410 or 280-815/281-411

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