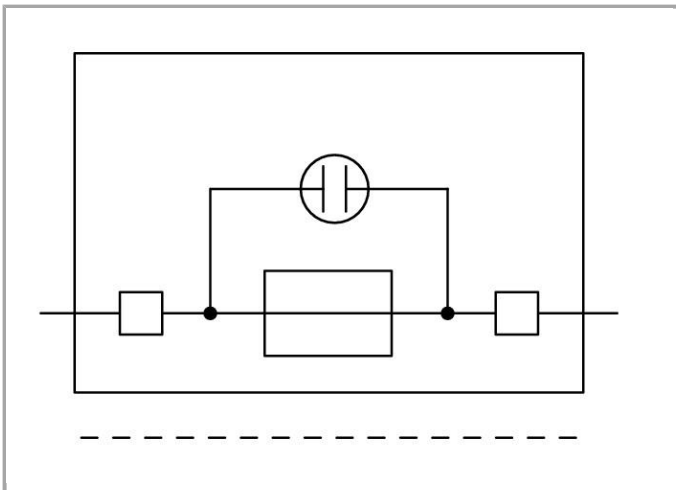
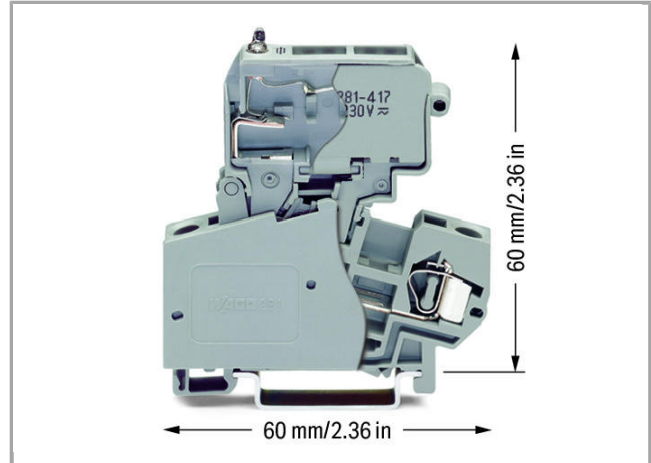
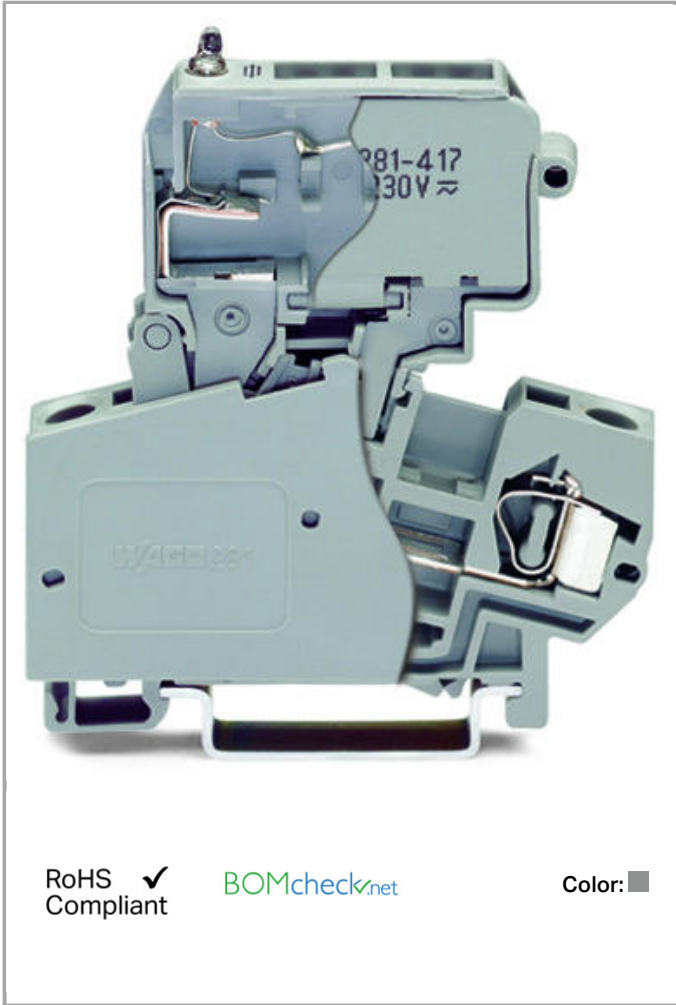


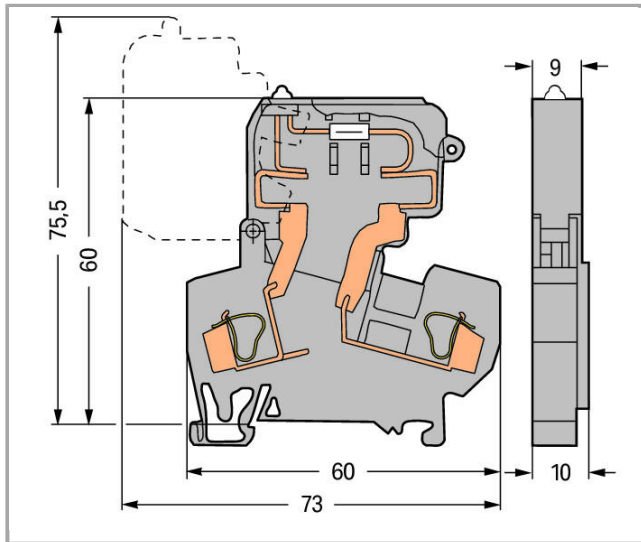
Data sheet | Item number: 281-613/281-417

2-conductor fuse terminal block; with pivoting fuse holder; for miniature metric fuse 1/4 x 1 mm; with blown fuse indication by neon lamp; 230 V; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm<sup>2</sup>; CAGE CLAMP®



281-613/281-417





### 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> (14 AWG) = 16 A

4 mm<sup>2</sup> (12 AWG) = 22 A

#### Safety information 1:

Electrical ratings are given by the fuse and blown fuse indication.

#### Safety information 2:

Leakage current in case of blown fuse: Neon lamp < 0.4mA

### Data

#### Electrical data

## Ratings per IEC/EN 60664-1

Rated voltage (III / 3)	800 V
Rated impulse voltage (III / 3)	8 kV
Rated current	10 A

## Connection data

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper Aluminum
Solid conductor	0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inch
Total number of connection points	2
Total number of potentials	2
Number of levels	1
Type of wiring	Front-entry wiring

## Geometrical Data

Width	10 mm / 0.394 inch
Height from upper-edge of DIN-35 rail	60 mm / 2.362 inch
Depth	60 mm / 2.362 inch

## Mechanical data

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

## Material Data

Color	gray
Insulating material	Polyamide 66 (PA 66)
Fire load	0.395 MJ
Weight	20.088 g

## Commercial data




Product Group	1 (Rail Mounted Terminal Blocks)
Country of origin	DE
GTIN	4045454197025

Customs Tariff No.



85369095990

## Approvals / Certificates


### Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CSA DEKRA Certification B.V.	C22.2 No. 158	1505034
	KEMA/KEUR DEKRA Certification B.V.	EN 60947	2160584.31
	KEMA/KEUR DEKRA Certification B.V.	EN 60947	NTR NL-7135

### Ship Approvals


















Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	14-HG1293677-PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2



















### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UR Underwriters Laboratories Inc.	UL 1059	E45172

### Compatible products

### Jumper

	<b>Item no.: 210-103</b> Wire commoning chain; insulated; 50 connections	210-103
	<b>Item no.: 210-123</b> Wire commoning chain; insulated; 50 connections	210-123
	<b>Item no.: 249-123</b> Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm <sup>2</sup>	249-123
	<b>Item no.: 249-125</b> Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm <sup>2</sup>	249-125
	<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>	249-126
	<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>	249-127
	<b>Item no.: 281-402</b> Adjacent jumper; insulated; IN = IN terminal block	281-402
	<b>Item no.: 709-110</b> Wire commoning chain; insulated; 4 connections; 3 x 110 mm	709-110
	<b>Item no.: 709-111</b> Wire commoning chain; insulated; 3 connections; 2 x 120 mm	709-111
	<b>Item no.: 709-112</b> Wire commoning chain; insulated; 3 connections; 2 x 170 mm	709-112
<b>Carrier rail</b>		
	<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	210-112
	<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	210-113
	<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	210-114
	<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	210-115
	<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	210-118
	<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	210-196
	<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	210-197
	<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	210-198

		
	<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	210-504
	<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	210-505
	<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	210-506
	<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	210-508
<b>ferrule</b>		
	<b>Item no.: 216-106</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; uninsulated; electro-tin plated	216-106
	<b>Item no.: 216-201</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated	216-201
	<b>Item no.: 216-202</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated	216-202
	<b>Item no.: 216-203</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated	216-203
	<b>Item no.: 216-204</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated	216-204
	<b>Item no.: 216-205</b> Ferrule; Sleeve for 2.08 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated	216-205
	<b>Item no.: 216-206</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated	216-206
	<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	216-241
	<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	216-242
	<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	216-243
	<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	216-244
	<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	216-246
	<b>Item no.: 216-301</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated	216-301
	<b>Item no.: 216-302</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated	216-302

## assembling



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

209-106



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

709-153

## End plate



**Item no.: 281-309**  
End and intermediate plate; 2.5 mm thick

281-309



**Item no.: 281-311**  
End and intermediate plate; 2.5 mm thick

281-311

## Marking accessories



**Item no.: 2009-115**  
WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-115



**Item no.: 2009-115/000-002**  
WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-115

/000-002



**Item no.: 2009-115/000-006**  
WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-115

/000-006



**Item no.: 2009-115/000-007**  
WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-115

/000-007



**Item no.: 2009-115/000-012**  
WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-115

/000-012



**Item no.: 2009-115/000-017**  
WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-115

/000-017



**Item no.: 2009-115/000-023**  
WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-115

/000-023



**Item no.: 2009-115/000-024**  
WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-115

/000-024



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

793-501



**Item no.: 793-501/000-002**  
WMB marking card; as card; not stretchable; plain; snap-on type

793-501
















/000-002






**Item no.: 793-501/000-005**  
WMB marking card; as card; not stretchable; plain; snap-on type

793-501


/000-005

	<b>Item no.: 793-501/000-006</b> WMB marking card; as card; not stretchable; plain; snap-on type	/000-006	793-501
	<b>Item no.: 793-501/000-007</b> WMB marking card; as card; not stretchable; plain; snap-on type	/000-007	793-501
	<b>Item no.: 793-501/000-012</b> WMB marking card; as card; not stretchable; plain; snap-on type	/000-012	793-501
	<b>Item no.: 793-501/000-017</b> WMB marking card; as card; not stretchable; plain; snap-on type	/000-017	793-501
	<b>Item no.: 793-501/000-023</b> WMB marking card; as card; not stretchable; plain; snap-on type	/000-023	793-501
	<b>Item no.: 793-501/000-024</b> WMB marking card; as card; not stretchable; plain; snap-on type	/000-024	793-501
	<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		793-5501
	<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	/000-002	793-5501
	<b>Item no.: 793-5501/000-005</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-005	793-5501
	<b>Item no.: 793-5501/000-006</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-006	793-5501
	<b>Item no.: 793-5501/000-007</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-007	793-5501
	<b>Item no.: 793-5501/000-012</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-012	793-5501
	<b>Item no.: 793-5501/000-017</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-017	793-5501
	<b>Item no.: 793-5501/000-023</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-023	793-5501
	<b>Item no.: 793-5501/000-024</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-024	793-5501

## tools

	<b>Item no.: 210-657</b> Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short	210-657
	<b>Item no.: 210-658</b> Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short; angled	210-658
	<b>Item no.: 210-720</b> Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm	210-720




## N-busbar

	<b>Item no.: 210-254</b> Interlocking link; mechanically locks multiple links; 1 m long	210-254
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## check

	<b>Item no.: 210-137</b> Test plug; 2.3 mm Ø; with 500 mm cable	210-137
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## General accessories

	<b>Item no.: 249-120</b> Group marker carrier	249-120
	<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	280-404
	<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>	281-407

## Downloads

## Documentation

## Bid Text

281-613/281-417	doc 26.6 kB	Download
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## CAD/CAE - Smart Data

## CAD data

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Subject to changes.