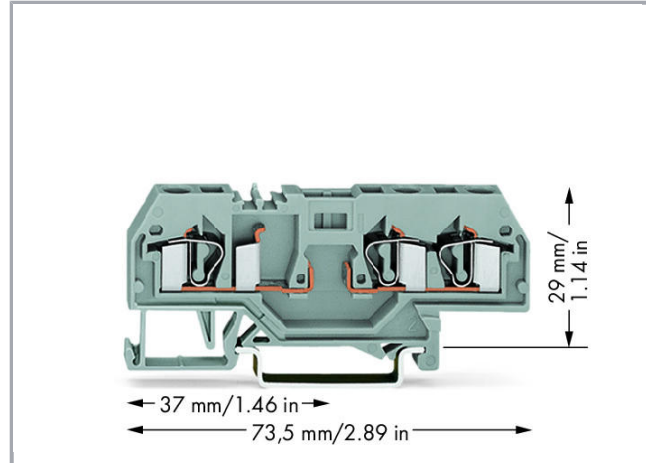
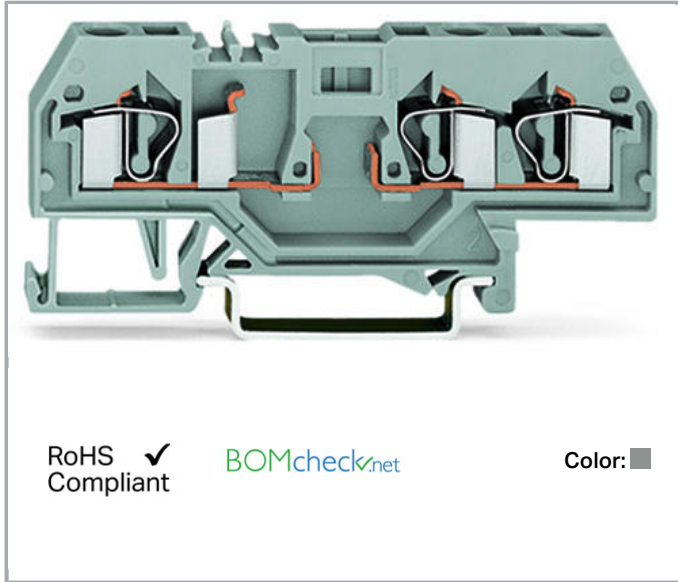


Data sheet | Item number: 281-610

3-conductor carrier terminal block; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²; CAGE CLAMP®; 4,00 mm²; gray

www.wago.com/281-610



Item description

Note:

Terminating Aluminum Conductors

WAGO spring clamp terminal blocks are suitable for solid aluminum conductors up to 4 mm²/12 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 mm² (14 AWG) = 16 A

4 mm² (12 AWG) = 22 A

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

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We are always happy to take your call at +49 (571) 887-44222.



Data

Electrical data

Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60947-7-1
Rated voltage (III / 3)	400 V
Rated impulse voltage (III / 3)	6 kV
Rated current	10 A
Legend (ratings)	(III / 3) $\hat{=}$ Overvoltage category III / Pollution degree 3

Connection data

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper Aluminum
Solid conductor	0.08 ... 4 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 4 mm ² / 28 ... 12 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inch
Total number of connection points	3
Total number of potentials	2
Number of levels	1
Type of wiring	Front-entry wiring

Geometrical Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-35 rail	29 mm / 1.142 inch
Depth	73.5 mm / 2.894 inch

Mechanical data

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

Material Data

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




Insulating material	Polyamide 66 (PA 66)
Fire load	0.179 MJ
Weight	11.1 g

Commercial data

Product Group	1 (Rail Mounted Terminal Blocks)
Packaging type	BOX
Country of origin	DE
GTIN	4044918631990
Customs Tariff No.	85369010000

Approvals / Certificates

Country specific Approvals

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

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	20-HG1941090-PDA
	BV Bureau Veritas S.A.	EN 60947	07436/E0 BV
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2

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




LR
Lloyds Register

EN 60947

91/20112
(E9)





UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 1059	20170731- E45172

Counterpart

Compatible products

Marking accessories

	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
	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
	Item no.: 2009-115/000-006 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-115/000-006
	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

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Item no.: 2009-115/000-012

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/2009-115/000-012

Item no.: 2009-115/000-017

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

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

Item no.: 2009-115/000-024

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/2009-115/000-024



Item no.: 249-105

Group marker carrier; gray

www.wago.com/249-105



Item no.: 793-501

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

www.wago.com/793-501

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

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

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



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

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

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

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



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

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

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	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
	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
	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
	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
	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
	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
	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; green	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; light green	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
Protective Warning Marker		
	Item no.: 281-415 Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks; yellow	www.wago.com/281-415
Insulation stop		
	Item no.: 281-470 Insulation stop; 0.08 - 0.2 mm ² "s" (0.14 mm ² "f-st"); 5 pieces/strip; white	www.wago.com/281-470
	Item no.: 281-471 Insulation stop; 0.25 - 0.5 mm ² ; 5 pieces/strip; light gray	www.wago.com/281-471
	Item no.: 281-472 Insulation stop; 0.75 - 1.5 mm ² ; 5 pieces/strip; dark gray	www.wago.com/281-472
assembling		
	Item no.: 209-106 Mounting carrier; for isolated mounting on DIN 35 rails; gray	www.wago.com/209-106

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




plug

	Item no.: 281-511 Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; without blown fuse indication; 6 mm wide; gray	www.wago.com/281-511
	Item no.: 281-512 Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with port for LED; 6 mm wide; gray	www.wago.com/281-512
	Item no.: 281-512/281-417 Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with blown fuse indication by neon lamp; 230 V; 6 mm wide; gray	www.wago.com/281-512/281-417
	Item no.: 281-512/281-418 Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with blown fuse indication by neon lamp; 120 V; 6 mm wide; gray	www.wago.com/281-512/281-418
	Item no.: 281-512/281-501 Fuse plug; with pull-tab; for miniature metric fuses 5 x 20 mm and 5 x 25 mm; with LED indicator; 24 V AC/DC; 6 mm wide; gray	www.wago.com/281-512/281-501




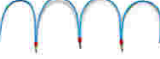





tools

	Item no.: 210-657 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short	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	www.wago.com/210-658
	Item no.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft	www.wago.com/210-720









Carrier rail

	Item no.: 210-112 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm	www.wago.com/210-112
	Item no.: 210-113 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715	www.wago.com/210-113
	Item no.: 210-114 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715	www.wago.com/210-114
	Item no.: 210-115 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm	www.wago.com/210-115
	Item no.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715	www.wago.com/210-118
	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
	Item no.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715	www.wago.com/210-197

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

	<p>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</p>	www.wago.com/210-198
	<p>Item no.: 210-504 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715</p>	www.wago.com/210-504
	<p>Item no.: 210-505 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715</p>	www.wago.com/210-505
	<p>Item no.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715</p>	www.wago.com/210-506
	<p>Item no.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715</p>	www.wago.com/210-508
Jumper		
	<p>Item no.: 210-103 Wire commoning chain; insulated; 50 connections; black</p>	www.wago.com/210-103
	<p>Item no.: 210-123 Wire commoning chain; insulated; 50 connections</p>	www.wago.com/210-123
	<p>Item no.: 249-123 Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm²</p>	www.wago.com/249-123
	<p>Item no.: 249-125 Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm²</p>	www.wago.com/249-125
	<p>Item no.: 249-126 Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm²</p>	www.wago.com/249-126
	<p>Item no.: 249-127 Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm²</p>	www.wago.com/249-127
	<p>Item no.: 281-482 Comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray</p>	www.wago.com/281-482
	<p>Item no.: 281-483 Comb-style jumper bar; insulated; 3-way; IN = IN terminal block; gray</p>	www.wago.com/281-483
	<p>Item no.: 281-485 Comb-style jumper bar; insulated; 5-way; IN = IN terminal block; gray</p>	www.wago.com/281-485
	<p>Item no.: 281-490 Comb-style jumper bar; insulated; 10-way; IN = IN terminal block; gray</p>	www.wago.com/281-490
	<p>Item no.: 281-492 Alternate comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray</p>	www.wago.com/281-492
	<p>Item no.: 709-110 Wire commoning chain; insulated; 4 connections; 3 x 110 mm; black</p>	www.wago.com/709-110

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

	Item no.: 709-111 Wire commoning chain; insulated; 3 connections; 2 x 120 mm; black	www.wago.com/709-111
	Item no.: 709-112 Wire commoning chain; insulated; 3 connections; 2 x 170 mm; black	www.wago.com/709-112
End plate		
	Item no.: 281-324 End and intermediate plate; 2.5 mm thick; gray	www.wago.com/281-324
	Item no.: 281-326 End and intermediate plate; 2.5 mm thick; orange	www.wago.com/281-326
ferrule		
	Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated	www.wago.com/216-106
	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	Item no.: 216-205 Ferrule; Sleeve for 2.08 mm ² / AWG 14; insulated; electro-tin plated; yellow	www.wago.com/216-205
	Item no.: 216-206 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; blue	www.wago.com/216-206
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	www.wago.com/216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-242
	Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-243
	Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-244
	Item no.: 216-246 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	www.wago.com/216-246
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-301

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



Item no.: 216-302

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green

www.wago.com/216-302

Downloads

Documentation

Additional Information

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

CAD data

2D/3D Models 281-610	URL	Download
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CAE data

EPLAN Data Portal 281-610	URL	Download
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WSCAD Universe 281-610	URL	Download
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Installation Notes

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