

Data sheet | Item number: 281-531

Quadruple-deck rail-mounted terminal block; Rail-mounted terminal block for electric motor wiring; L1 - L2; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²; 4,00 mm²; gray

www.wago.com/281-531



Color:

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 | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Data

Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60947-7-1
Nominal voltage (III/3)	400 V
Rated impulse voltage (III/3)	6 kV
Rated current	20 A
Current at conductor cross-section (max.) mm ²	25 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

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 | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Power Loss

Power loss, per pole (potential)	0.4 W
Rated current I_N for specified power loss	20 A
Resistance value for specified, current-dependent power loss	0.001 Ω

Connection data

Connection points	4
Total number of potentials	2
Number of levels	4

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 mm²/12 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 mm² = 16 A

4 mm² = 22 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 | Web: www.wago.com

Do you have any questions about our products?

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



Nominal cross-section	2.5 mm ²
Solid conductor	0.08 ... 4 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 4 mm ² / 28 ... 12 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Wiring direction	Front-entry wiring

Physical data

Width	6 mm / 0.236 inches
Height	100 mm / 3.937 inches
Depth from upper-edge of DIN-rail	62.5 mm / 2.461 inches

Mechanical Data

Potential marking	L1 - L2
Design	angled
Mounting type	DIN-35 rail
Marking level	Center/side 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	0.38 MJ
Weight	17 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

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



ETIM 8.0	EC000897
ETIM 7.0	EC000897
PU (SPU)	50 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918501545
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.	IEC 60947	NTR NL-7454/A1
	CSA CSA Group	C22.2	1505034
	CSA DEKRA Certification B.V.	C22.2 No. 158	1505034
	KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-107288
	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	-	20-HG1941090-PDA
	DNV GL	-	TAE00001V2

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 | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

Det Norske Veritas, Germanischer Lloyd

Required accessories

End plate

End plate		
Item no.: 281-365	End and intermediate plate; 1 mm thick; gray	www.wago.com/281-365
Item no.: 281-366	End and intermediate plate; 1 mm thick; orange	www.wago.com/281-366

Optional accessories

Push-in type wire jumper

Jumper		
Item no.: 249-123	Push-in type wire jumper; 0.75 mm ² ; insulated; 180 mm long; black	www.wago.com/249-123
Item no.: 249-126	Push-in type wire jumper; 0.75 mm ² ; insulated; 110 mm long; black	www.wago.com/249-126
Item no.: 249-127	Push-in type wire jumper; 0.75 mm ² ; insulated; 250 mm long; black	www.wago.com/249-127
Item no.: 249-125	Push-in type wire jumper; insulated; 60 mm long; black	www.wago.com/249-125

Ferrule

Ferrule		
Item no.: 216-106	Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-106
Item no.: 216-203	Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
Item no.: 216-206	Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; blue	www.wago.com/216-206
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.: 216-204	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.: 216-201		www.wago.com/216-201

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



Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white

Item no.: 216-241

Ferrule; Sleeve for 0.5 mm² / 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 mm² / 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 mm² / 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 mm² / 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 mm² / 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 mm² / AWG 24; insulated; electro-tin plated; yellow

www.wago.com/216-301

Item no.: 216-302

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

www.wago.com/216-302

Insulation stop

Insulation stop

Item no.: 281-470

Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white

www.wago.com/281-470

Item no.: 281-471

Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray

www.wago.com/281-471

Item no.: 281-472

Insulation stop; 0.75 - 1.5 mm²; 5 pieces/strip; dark gray

www.wago.com/281-472

Jumpers

Jumper

Item no.: 210-123

Wire commoning chain; insulated; blue

www.wago.com/210-123

Item no.: 210-103

Wire commoning chain; insulated; black

www.wago.com/210-103

Item no.: 281-485

Jumper; 5-way; insulated; gray

www.wago.com/281-485

Item no.: 281-490

Jumper; 10-way; insulated; gray

www.wago.com/281-490

Item no.: 281-492

Jumper; 2-way; insulated; gray

www.wago.com/281-492

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 | Web: www.wago.com

Do you have any questions about our products?

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



Item no.: 281-482 Jumper; 2-way; insulated; gray	www.wago.com/281-482
Item no.: 281-483 Jumper; 3-way; insulated; gray	www.wago.com/281-483
Item no.: 709-110 Wire commoning chain; 2.5 mm ² ; insulated; black	www.wago.com/709-110
Item no.: 709-112 Wire commoning chain; 2.5 mm ² ; insulated; black	www.wago.com/709-112
Item no.: 709-111 Wire commoning chain; 2.5 mm ² ; insulated; black	www.wago.com/709-111
Marking accessories	
Marking strip	
Item no.: 709-196 Marking strips; for laser printer; translucent	www.wago.com/709-196
Item no.: 709-178 Marking strips; on reel; 7.5 mm wide; not stretchable; plain; snap-on type; white	www.wago.com/709-178
Item no.: 709-177 Marking strips; on reel; 7.5 mm wide; not stretchable; plain; snap-on type; translucent	www.wago.com/709-177
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
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
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
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; violet	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
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

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



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; light 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; 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

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.: 793-501/000-007
WMB marking card; as card; not stretchable; plain; snap-on type; gray www.wago.com/793-501/000-007

Item no.: 793-501/000-017
WMB marking card; as card; not stretchable; plain; snap-on type; light green www.wago.com/793-501/000-017

Item no.: 793-501/000-012
WMB marking card; as card; not stretchable; plain; snap-on type; orange www.wago.com/793-501/000-012

Item no.: 793-501/000-023
WMB marking card; as card; not stretchable; plain; snap-on type; green www.wago.com/793-501/000-023

Item no.: 793-501/000-006
WMB marking card; as card; not stretchable; plain; snap-on type; blue www.wago.com/793-501/000-006

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

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

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 www.wago.com/793-5501/000-005

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



type; red

Item no.: 793-5501/000-002WMB 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.: 793-5501/000-006**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**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.: 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**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

Group marker carrier

Item no.: 249-105Group marker carrier; gray www.wago.com/249-105**Mounting**

Mounting accessories

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

Testing accessories

Item no.: 210-136Test plug; 2 mm Ø; with 500 mm cable; red www.wago.com/210-136**Carrier rail**

Mounting accessories

Item no.: 210-197Steel 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**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**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**Item no.: 210-505**Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; www.wago.com/210-505

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 | Web: www.wago.com

Do you have any questions about our products?

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



silver-colored

Item no.: 210-506Steel 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**Item no.: 210-508**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**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**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**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**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**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**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**Tool**

Operating tool

Item no.: 210-657Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured 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**Item no.: 210-720**Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured www.wago.com/210-720**Downloads****Documentation****Bid Text**

281-531 X81 - Datei	2019 年2月19 日	xml 3.3 kB	Download
281-531 doc - Datei	2017 年3月2 日	doc 25.1 kB	Download

Additional Information

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 | Web: www.wago.com

Do you have any questions about our products?
 We are always happy to take your call at +49 (571) 887-44222.



pdf
2.3 MB Download

CAD/CAE-Data

CAD data

2D/3D Models 281-531	URL	Download
----------------------	-----	----------

CAE data

EPLAN Data Portal 281-531	URL	Download
---------------------------	-----	----------

WSCAD Universe 281-531	URL	Download
------------------------	-----	----------

ZUKEN Portal 281-531	URL	Download
----------------------	-----	----------

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 281-531	URL	Download
--	-----	----------

Quadruple-deck rail-mounted terminal block; Rail-mounted terminal block for electric motor wiring; L1 - L2; for DIN-rail 35 x 15 and 35 x 7.5; 4 mm²; 4,00 mm²; gray

Installation Notes

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 | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



In addition to rail-mount terminal blocks for electric motor wiring, special versions are also available:

- Version **without** ground contact and only two potentials:

These terminal blocks were specifically designed to support additional functions, such as engine brakes or temperature sensors. Sharing a common profile, this terminal block version can be put next to the appropriate electric motor wiring terminal block without using intermediate plates. That makes the rail assembly easier to understand and wire. This also prevents wiring errors as no conductor entry is unused.

- Version **without** ground contact and with three potentials:

Clearly designated clamping units are the primary advantage to this terminal block design. When using devices with protective insulation, for example, there are no open ground clamping units that could create confusion.

Commoning

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

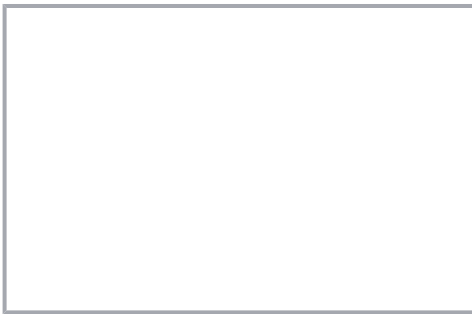


Commoning using comb-style jumper bars.

Push comb-style jumper bars down until fully inserted.

Group marking via marking strips (Item No. 709-177)

Testing



Testing with voltage tester.

Marking

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



Marking clamping points via WMB Multi Marking System.

Group marking via marking strips (Item No. 709-177)

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