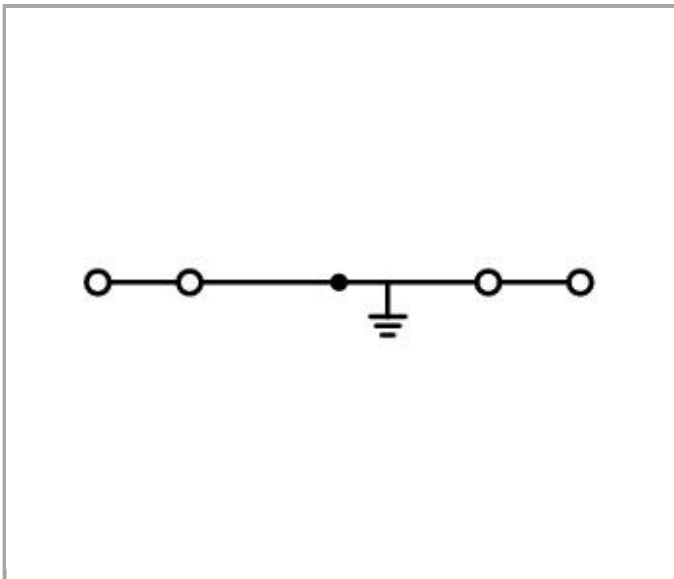
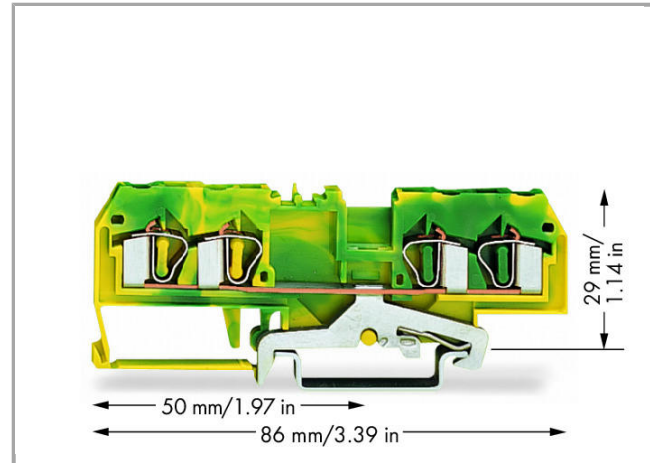
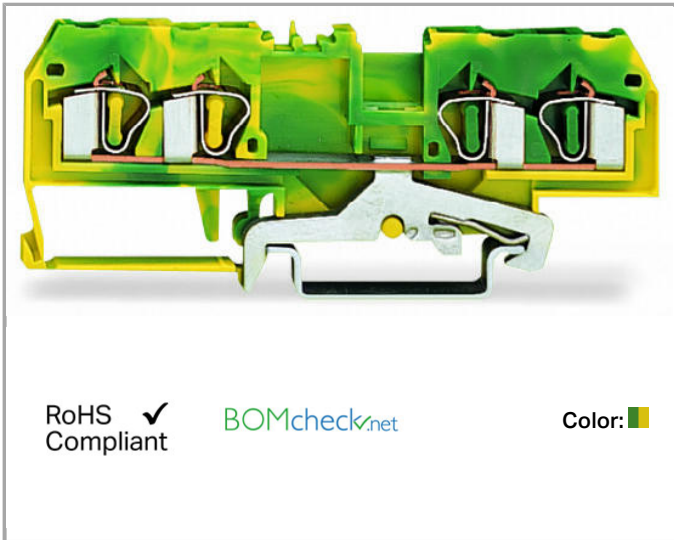


Data sheet | Item number: 281-657

4-conductor ground terminal block; 4 mm²; center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®



www.wago.com/281-657



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

Data

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	4
Total number of potentials	1
Number of levels	1
Type of wiring	Front-entry wiring
Leiterquerschnitte eindrätig	0.08 mm ²

Geometrical Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-35 rail	29 mm / 1.142 inch
Depth	86 mm / 3.386 inch

Mechanical data

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

Material Data

Color	green-yellow
Insulating material	Polyamide 66 (PA 66)
Fire load	0.193 MJ




Weight	17.65 g
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Commercial data





Product Group	1 (Rail Mounted Terminal Blocks)
Country of origin	DE
GTIN	4044918512008

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	-	14-HG1293677-PDA
	BV Bureau Veritas S.A.	EN 60947	07436/E0 BV
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
	LR Lloyds Register	EN 60947	91/20112 (E9)

UL-Approvals

Certificate

Logo	Approval	Additional Approval Text	name
	UL UL International Germany GmbH	UL 1059	E45172

Compatible products

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	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
	Item no.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715	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	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
	Item no.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715	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

www.wago.com/210-508**General accessories****Item no.: 249-105**

Group marker carrier

www.wago.com/249-105**Item no.: 249-147**

B-type test plug module; modular

www.wago.com/249-147**Item no.: 249-148**

B-type spacer module; modular; e.g., for bridging commoned terminal blocks

www.wago.com/249-148**Item no.: 280-404**Test plug adapter; 5 mm wide; for test plug 210-137 (2.3 mm Ø); suitable for 1.5 mm² - 4 mm² tbswww.wago.com/280-404**Item no.: 281-407**Test plug; 6 mm wide; Nominal current 24 A; for 0.08 mm² - 2.5 mm²www.wago.com/281-407**Item no.: 281-418**

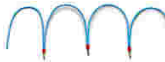
Test plug module; modular; suitable for all WAGO 281, 776, 777 and 781 series rail-mounted terminal blocks with jumper slots in the current bar

www.wago.com/281-418**Item no.: 281-419**

Spacer module; modular; bridging commoned terminal blocks

www.wago.com/281-419**Jumper****Item no.: 210-103**

Wire commoning chain; insulated; 50 connections

www.wago.com/210-103**Item no.: 210-123**

Wire commoning chain; insulated; 50 connections

www.wago.com/210-123**Item no.: 249-123**Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm²www.wago.com/249-123**Item no.: 249-125**Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm²www.wago.com/249-125**Item no.: 249-126**Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm²www.wago.com/249-126**Item no.: 249-127**Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm²www.wago.com/249-127**Item no.: 281-402**

Adjacent jumper; insulated; IN = IN terminal block

www.wago.com/281-402**Item no.: 281-409**

Alternate jumper; insulated; IN = IN terminal block

www.wago.com/281-409**Item no.: 281-422**

Adjacent jumper; insulated; IN = IN terminal block

www.wago.com/281-422**Item no.: 281-482**

Comb-style jumper bar; insulated; 2-way; IN = IN terminal block

www.wago.com/281-482**Item no.: 281-483**

Comb-style jumper bar; insulated; 3-way; IN = IN terminal block

www.wago.com/281-483



Item no.: 281-485
Comb-style jumper bar; insulated; 5-way; IN = IN terminal block

www.wago.com/281-485



Item no.: 281-490
Comb-style jumper bar; insulated; 10-way; IN = IN terminal block

www.wago.com/281-490



Item no.: 281-492
Alternate comb-style jumper bar; insulated; 2-way; IN = IN terminal block

www.wago.com/281-492



Item no.: 709-110
Wire commoning chain; insulated; 4 connections; 3 x 110 mm

www.wago.com/709-110



Item no.: 709-111
Wire commoning chain; insulated; 3 connections; 2 x 120 mm

www.wago.com/709-111



Item no.: 709-112
Wire commoning chain; insulated; 3 connections; 2 x 170 mm

www.wago.com/709-112



Item no.: 781-452
Staggered jumper; insulated; from 1 to 2; Spacing: 6 mm

www.wago.com/781-452



Item no.: 781-453
Staggered jumper; insulated; from 1 to 3; Spacing: 6 mm

www.wago.com/781-453



Item no.: 781-454
Staggered jumper; insulated; from 1 to 4; Spacing: 6 mm

www.wago.com/781-454



Item no.: 781-455
Staggered jumper; insulated; from 1 to 5; Spacing: 6 mm

www.wago.com/781-455



Item no.: 781-456
Staggered jumper; insulated; from 1 to 6; Spacing: 6 mm

www.wago.com/781-456

tools



Item no.: 210-657
Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short

www.wago.com/210-657



Item no.: 210-658
Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short; angled

www.wago.com/210-658



Item no.: 210-720
Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm

www.wago.com/210-720

Marking accessories



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

www.wago.com/2009-115



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

www.wago.com/2009-115/000-002



















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

















www.wago.com/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

www.wago.com/2009-115/000-007

	<p>Item no.: 2009-115/000-012 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115/000-012
	<p>Item no.: 2009-115/000-017 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115/000-017
	<p>Item no.: 2009-115/000-023 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115/000-023
	<p>Item no.: 2009-115/000-024 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115/000-024
	<p>Item no.: 209-140 Group marker carrier</p>	www.wago.com/209-140
	<p>Item no.: 209-141 Group marker carrier</p>	www.wago.com/209-141
	<p>Item no.: 209-142 Group marker carrier</p>	www.wago.com/209-142
	<p>Item no.: 209-185 Adaptor</p>	www.wago.com/209-185
	<p>Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/793-501
	<p>Item no.: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/793-501/000-002
	<p>Item no.: 793-501/000-005 WMB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/793-501/000-005
	<p>Item no.: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/793-501/000-006
	<p>Item no.: 793-501/000-007 WMB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/793-501/000-007
	<p>Item no.: 793-501/000-012 WMB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/793-501/000-012
	<p>Item no.: 793-501/000-017 WMB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/793-501/000-017
	<p>Item no.: 793-501/000-023 WMB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/793-501/000-023

	Item no.: 793-501/000-024 WMB marking card; as card; not stretchable; plain; snap-on type	www.wago.com/793-501/000-024
	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	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	www.wago.com/793-5501/000-002
	Item no.: 793-5501/000-005 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/793-5501/000-005
	Item no.: 793-5501/000-006 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/793-5501/000-006
	Item no.: 793-5501/000-007 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/793-5501/000-007
	Item no.: 793-5501/000-012 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/793-5501/000-012
	Item no.: 793-5501/000-017 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/793-5501/000-017
	Item no.: 793-5501/000-023 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/793-5501/000-023
	Item no.: 793-5501/000-024 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/793-5501/000-024
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	www.wago.com/216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated	www.wago.com/216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	www.wago.com/216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated	www.wago.com/216-204
	Item no.: 216-205 Ferrule; Sleeve for 2.08 mm ² / AWG 14; insulated; electro-tin plated	www.wago.com/216-205

	Item no.: 216-206 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated	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	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	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	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	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	www.wago.com/216-246
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated	www.wago.com/216-302
End plate		
	Item no.: 281-334 End and intermediate plate; 2.5 mm thick	www.wago.com/281-334
	Item no.: 281-335 End and intermediate plate; 2.5 mm thick	www.wago.com/281-335
	Item no.: 281-338 Separator plate; 2 mm thick; oversized	www.wago.com/281-338
	Item no.: 281-339 Separator plate; 2 mm thick; oversized	www.wago.com/281-339
check		
	Item no.: 209-170 Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm ² - 10 mm ² tbs	www.wago.com/209-170
assembling		
	Item no.: 209-106 Mounting carrier; for isolated mounting on DIN 35 rails	www.wago.com/209-106
	Item no.: 709-153 Cover; Type 1; suitable for cover carrier, type 1; 1 m long	www.wago.com/709-153
Protective Warning Marker		
	Item no.: 281-415 Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks	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	www.wago.com/281-470



Item no.: 281-471
Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip

www.wago.com/281-471



Item no.: 281-472
Insulation stop; 0.75 - 1.5 mm²; 5 pieces/strip

www.wago.com/281-472

Subject to changes.