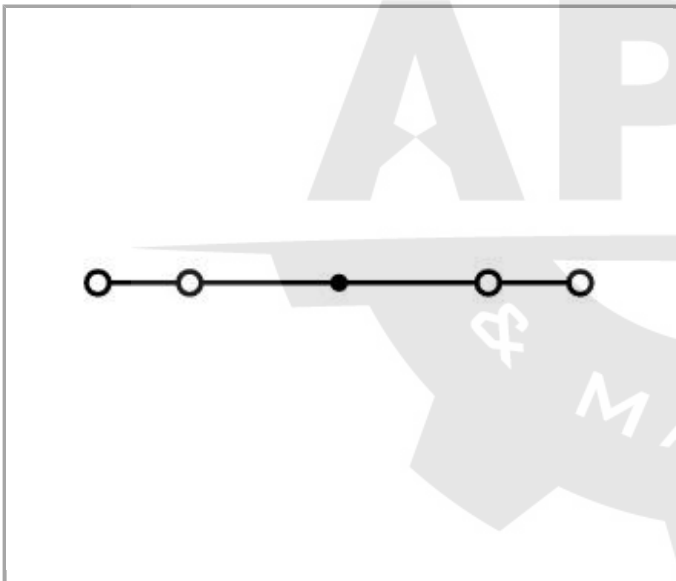
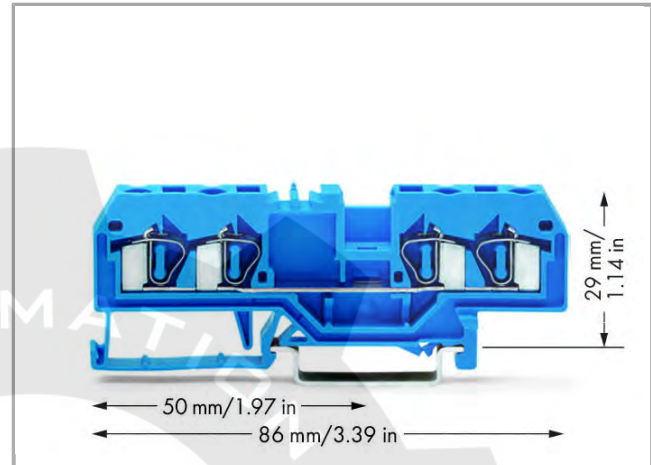
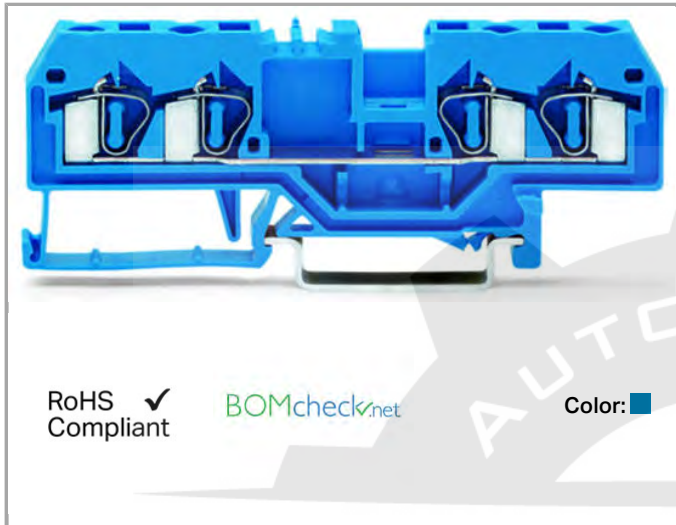


Data sheet | Item number: 281-654

4-conductor through terminal block; 4 mm²; suitable for Ex i applications;
center marking; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®



281-654



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

Electrical data

Ratings per IEC/EN 60664-1

Rated voltage (III / 3)	800 V
Rated impulse voltage (III / 3)	8 kV
Rated current	26 A

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

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	blue
Insulating material	Polyamide 66 (PA 66)
Fire load	0.205 MJ
Weight	11.2 g

Commercial data

Country of origin	DE
GTIN	4044918486453
Customs Tariff No.	85369010000

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947	NTR NL-7454/A1
	CCA DEKRA Certification B.V.	IEC 60947	NTR NL-7454/A1
	CSA DEKRA Certification B.V.	C22.2 No. 158	1505034
	CSA DEKRA Certification B.V.	UL 1059	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
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2



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EN 60947

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UL-Approvals

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

Compatible products

tools

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

Jumper

	Item no.: 210-103 Wire commoning chain; insulated; 50 connections	210-103
	Item no.: 210-123 Wire commoning chain; insulated; 50 connections	210-123
	Item no.: 249-123 Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm ²	249-123
	Item no.: 249-125 Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm ²	249-125

	Item no.: 249-126 Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm ²	249-126
	Item no.: 249-127 Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm ²	249-127
	Item no.: 281-402 Adjacent jumper; insulated; IN = IN terminal block	281-402
	Item no.: 281-409 Alternate jumper; insulated; IN = IN terminal block	281-409
	Item no.: 281-422 Adjacent jumper; insulated; IN = IN terminal block	281-422
	Item no.: 281-482 Comb-style jumper bar; insulated; 2-way; IN = IN terminal block	281-482
	Item no.: 281-483 Comb-style jumper bar; insulated; 3-way; IN = IN terminal block	281-483
	Item no.: 281-485 Comb-style jumper bar; insulated; 5-way; IN = IN terminal block	281-485
	Item no.: 281-490 Comb-style jumper bar; insulated; 10-way; IN = IN terminal block	281-490
	Item no.: 281-492 Alternate comb-style jumper bar; insulated; 2-way; IN = IN terminal block	281-492
	Item no.: 283-414 Step-down jumper; insulated; from 16 mm ² to 4 mm ² ; Nominal current 32 A	283-414
	Item no.: 284-413 Step-down jumper; insulated; from 10/6 mm ² to 6/4 mm ² ; Nominal current 30 A	284-413
	Item no.: 284-414 Step-down jumper; insulated; from 10/6 mm ² to 4/2.5/1.5 mm ² ; Nominal current 15 A	284-414
	Item no.: 709-110 Wire commoning chain; insulated; 4 connections; 3 x 110 mm	709-110
	Item no.: 709-111 Wire commoning chain; insulated; 3 connections; 2 x 120 mm	709-111
	Item no.: 709-112 Wire commoning chain; insulated; 3 connections; 2 x 170 mm	709-112
	Item no.: 781-452 Staggered jumper; insulated; from 1 to 2; Spacing: 6 mm	781-452
	Item no.: 781-453 Staggered jumper; insulated; from 1 to 3; Spacing: 6 mm	781-453
	Item no.: 781-454 Staggered jumper; insulated; from 1 to 4; Spacing: 6 mm	781-454
	Item no.: 781-455 Staggered jumper; insulated; from 1 to 5; Spacing: 6 mm	781-455



Item no.: 781-456

Staggered jumper; insulated; from 1 to 6; Spacing: 6 mm

781-456

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

ferrule



Item no.: 216-106

Ferrule; Sleeve for 2.5 mm² / AWG 14; uninsulated; electro-tin plated

216-106



Item no.: 216-201

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

216-201



Item no.: 216-202

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated

216-202



Item no.: 216-203

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated

216-203



Item no.: 216-204

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated

216-204



Item no.: 216-205

Ferrule; Sleeve for 2.08 mm² / AWG 14; insulated; electro-tin plated

216-205



Item no.: 216-206

Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated

216-206



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

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

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

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

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

216-246

Item no.: 216-301

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated

216-301



Item no.: 216-302

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

216-302

End plate



Item no.: 209-191

Separator for Ex e/Ex i applications; 3 mm thick; 120 mm wide

209-191



Item no.: 209-192
Separator for Ex e/Ex i applications; 3 mm thick; 125.5 mm wide

209-192



Item no.: 281-334
End and intermediate plate; 2.5 mm thick

281-334



Item no.: 281-335
End and intermediate plate; 2.5 mm thick

281-335



Item no.: 281-338
Separator plate; 2 mm thick; oversized

281-338



Item no.: 281-339
Separator plate; 2 mm thick; oversized

281-339



Item no.: 284-336
Step-down cover plate; 1 mm thick; for 4-conductor 279-831, 280-833 and 281-652 terminal blocks

284-336



Item no.: 284-346
Step-down cover plate; 1 mm thick; for 4-conductor 279-831, 280-833 and 281-652 terminal blocks

284-346

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.: 209-140
Group marker carrier

209-140



Item no.: 209-141
Group marker carrier

209-141

	Item no.: 209-142 Group marker carrier	209-142
	Item no.: 209-185 Adaptor	209-185
	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
	Item no.: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type	793-501 /000-006
	Item no.: 793-501/000-007 WMB marking card; as card; not stretchable; plain; snap-on type	793-501 /000-007
	Item no.: 793-501/000-012 WMB marking card; as card; not stretchable; plain; snap-on type	793-501 /000-012
	Item no.: 793-501/000-017 WMB marking card; as card; not stretchable; plain; snap-on type	793-501 /000-017
	Item no.: 793-501/000-023 WMB marking card; as card; not stretchable; plain; snap-on type	793-501 /000-023
	Item no.: 793-501/000-024 WMB marking card; as card; not stretchable; plain; snap-on type	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	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	793-5501 /000-002
	Item no.: 793-5501/000-005 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	793-5501 /000-005
	Item no.: 793-5501/000-006 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	793-5501 /000-006
	Item no.: 793-5501/000-007 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	793-5501 /000-007



Item no.: 793-5501/000-012
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-012

793-5501



Item no.: 793-5501/000-017
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-017

793-5501



Item no.: 793-5501/000-023
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-023

793-5501



Item no.: 793-5501/000-024
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-024

793-5501

Insulation stop



Item no.: 281-470
Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip

281-470



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

281-471



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

281-472

Protective Warning Marker



Item no.: 281-415
Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks

281-415

check



Item no.: 209-170
Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm² - 10 mm² tbs

209-170

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

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

210-113



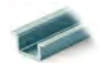
Item no.: 210-114
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715

210-114



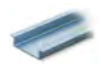
Item no.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm

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

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

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	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	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	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	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	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	210-508
General accessories		
	Item no.: 249-105 Group marker carrier	249-105
	Item no.: 249-147 B-type test plug module; modular	249-147
	Item no.: 249-148 B-type spacer module; modular; e.g., for bridging commoned terminal blocks	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 tbs	280-404
	Item no.: 281-407 Test plug; 6 mm wide; Nominal current 24 A; for 0.08 mm² - 2.5 mm²	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	281-418
	Item no.: 281-419 Spacer module; modular; bridging commoned terminal blocks	281-419

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Additional Information

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CAD/CAE - Smart Data

CAD data

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Subject to changes.