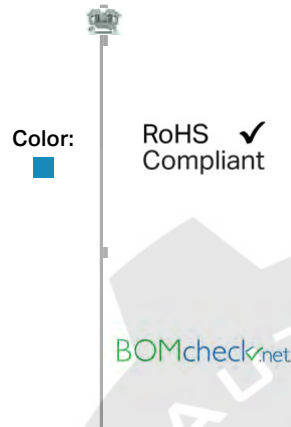


Data sheet | Item number: 281-604

2-conductor through terminal block; 4 mm²; suitable for Ex i applications;
lateral marker slots; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®



281-604



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	32 A

Connection data

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper Aluminum
Solid conductor	0.08 ... 4 mm² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 4 mm² / 28 ... 12 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inch
Total number of connection points	2
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	53 mm / 2.087 inch

Mechanical data

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

Material Data

Color	blue
Insulating material	Polyamide 66 (PA 66)
Fire load	0.128 MJ
Weight	6.93 g

Commercial data

Country of origin	DE
GTIN	4044918500630
Customs Tariff No.	85369010000

Approvals / Certificates

Country specific Approvals

Certificate

Logo	Approval	Additional Approval Text	name
	CCA DEKRA Certification B.V.	IEC 60947	NTR NL-7454/A1
	CCA DEKRA Certification B.V.	EN 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

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

Compatible products

ferrule

	Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated	216-106
	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated	216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated	216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated	216-204
	Item no.: 216-205 Ferrule; Sleeve for 2.08 mm ² / AWG 14; insulated; electro-tin plated	216-205
	Item no.: 216-206 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated	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	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	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	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	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	216-246
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated	216-302

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**

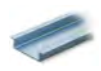
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm

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

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

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

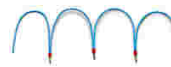
281-472

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 mm²

249-123

**Item no.: 249-125**Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm²

249-125

**Item no.: 249-126**Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm²

249-126

**Item no.: 249-127**Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm²

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 mm² to 4 mm²; Nominal current 32 A

283-414

**Item no.: 284-413**Step-down jumper; insulated; from 10/6 mm² to 6/4 mm²; Nominal current 30 A

284-413

**Item no.: 284-414**Step-down jumper; insulated; from 10/6 mm² to 4/2.5/1.5 mm²; 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
Protective Warning Marker		
	Item no.: 281-415 Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks	281-415
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
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
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

/000-005

793-5501



Item no.: 793-5501/000-006
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-006

793-5501



Item no.: 793-5501/000-007
WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

/000-007

793-5501



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

End plate



Item no.: 209-190
Separator for Ex e/Ex i applications; 3 mm thick; 90 mm wide

209-190



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.: 281-316
End and intermediate plate; 3 mm thick

281-316



Item no.: 281-317
End and intermediate plate; 3 mm thick

281-317



Item no.: 281-327
Separator plate; 2 mm thick; oversized

281-327



Item no.: 281-337
Separator plate; 2 mm thick; oversized

281-337



Item no.: 284-334
Step-down cover plate; 1 mm thick; for 2-, 3- and 4-conductor terminal blocks

284-334



Item no.: 284-344
Step-down cover plate; 1 mm thick; for 2-, 3- and 4-conductor terminal blocks

284-344

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

Downloads**CAD/CAE - Smart Data****CAD data**

3D Download 281-604

URL

Download

Subject to changes.