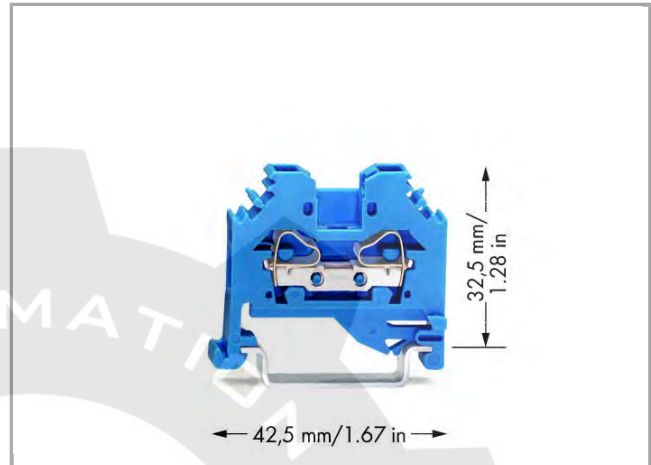


Data sheet | Item number: 281-104

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®



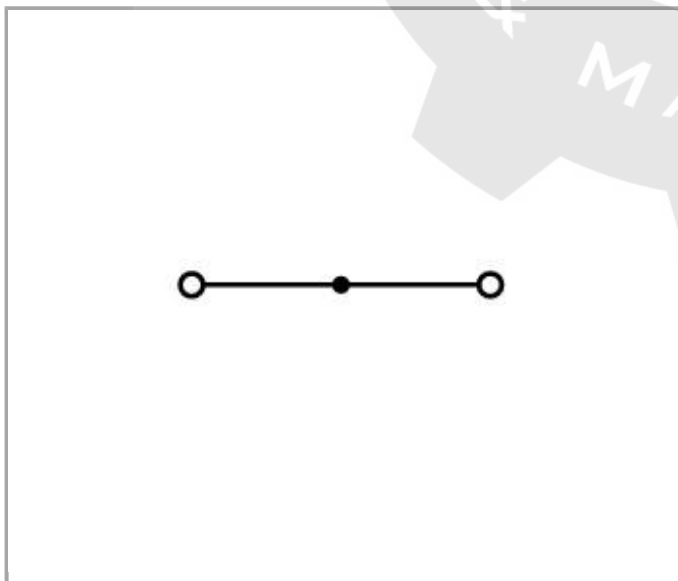
281-104



RoHS
Compliant

[BOMcheck.net](#)

Color:



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 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	2
Total number of potentials	1
Number of levels	1
Type of wiring	Side-entry wiring

Geometrical Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-35 rail	32.5 mm / 1.28 inch
Depth	42.5 mm / 1.673 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	0.108 MJ
Weight	6.091 g

Commercial data

Country of origin	IN
GTIN	4045454076054
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
	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
	UL UL International Germany GmbH	UL 1059	E45172

Compatible products

Protective Warning Marker

	Item no.: 281-405 Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks	281-405
--	---	---------

General accessories

	Item no.: 249-105 Group marker carrier	249-105
	Item no.: 280-404 Test plug adapter; 5 mm wide; for test plug 210-137 (2.3 mm Ø); suitable for 1.5 mm ² - 4 mm ² tbs	280-404

**Item no.: 281-407**

281-407

Test plug; 6 mm wide; Nominal current 24 A; for 0.08 mm² - 2.5 mm²**check****Item no.: 209-170**

209-170

Test plug adapter; 8.3 mm wide; for 4 mm Ø test plugs; suitable for 1.5 mm² - 10 mm² tbs**Carrier rail****Item no.: 210-112**

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

**Item no.: 210-113**

210-113

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715

**Item no.: 210-114**

210-114

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715

**Item no.: 210-115**

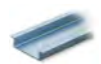
210-115

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

**Item no.: 210-118**

210-118

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715

**Item no.: 210-196**

210-196

Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715

**Item no.: 210-197**

210-197

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715

**Item no.: 210-198**

210-198

Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715

**Item no.: 210-504**

210-504

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715

**Item no.: 210-505**

210-505

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715

**Item no.: 210-506**

210-506

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715

**Item no.: 210-508**

210-508

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715

End plate**Item no.: 281-301**

281-301

End and intermediate plate; 3 mm thick

**Item no.: 281-302**

281-302

End and intermediate plate; 3 mm thick

**Item no.: 281-322**

281-322

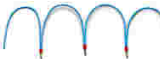
Separator plate; 2 mm thick; oversized

**Item no.: 281-332**

281-332

Separator plate; 2 mm thick; oversized

Item no.: 281-333

	Step-down intermediate plate; 1 mm thick; "only for 4 mm terminal blocks	281-333
	Item no.: 281-336 Step-down intermediate plate; 1 mm thick; "only for 4 mm terminal blocks	281-336
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.: 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
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.: 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

/000-005

793-501

**Item no.: 793-501/000-006**

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

/000-006

793-501

**Item no.: 793-501/000-007**

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

/000-007

793-501

**Item no.: 793-501/000-012**

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

/000-012

793-501

**Item no.: 793-501/000-017**

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

/000-017

793-501

**Item no.: 793-501/000-023**

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

/000-023

793-501

**Item no.: 793-501/000-024**

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

/000-024

793-501

**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

/000-002

793-5501

**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

793-5501

/000-024

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.: 216-301Ferrule; 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

tools

**Item no.: 210-657**

210-657

Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short

**Item no.: 210-658**

210-658

Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short; angled

**Item no.: 210-720**

210-720

Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm

Downloads**Documentation****Bid Text**

281-104

doc
24.6 kB[Download](#)**CAD/CAE - Smart Data****CAD data**

3D Download 281-104

[URL](#)[Download](#)

Subject to changes.