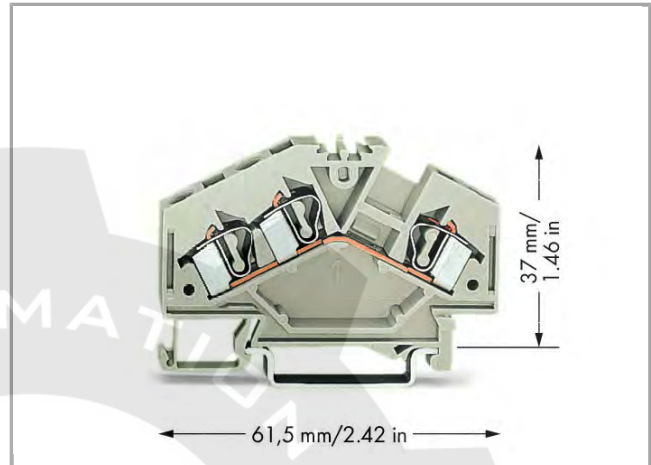


Data sheet | Item number: 281-998

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



281-998



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

Rated voltage EN (Ex e II)	550 V
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Ratings per IEC/EN 60664-1

Rated current	30 A
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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	3
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	37 mm / 1.457 inch
Depth	61.5 mm / 2.421 inch

Mechanical data

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

Material Data

Color	light gray
Insulating material	Polyamide 66 (PA 66)
Fire load	0.185 MJ
Weight	10.218 g

Commercial data

Product Group	1 (Rail Mounted Terminal Blocks)
Country of origin	DE
GTIN	4044918325400
Customs Tariff No.	85369010000

Approvals / Certificates

Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ATEx Physikalisch Technische Bundesanstalt (PTB)	-	PTB 00 ATEX 3110 U (II 2 G EEx e II)

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	UL 1059	1505034

DEKRA Certification B.V.



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 Underwriters Laboratories Inc.	UL 1059	20170731- E45172

Compatible products

General accessories

Item no.: 249-105
Group marker carrier

249-105



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

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.: 281-357**

End and intermediate plate; 2.5 mm thick

281-357

**Item no.: 281-358**

Separator plate; 2 mm thick; oversized

281-358

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

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
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

/000-002

793-501

**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

/000-024

793-5501

Protective Warning Marker**Item no.: 281-415**

Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks

281-415

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

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

Jumper



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.: 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

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Documentation

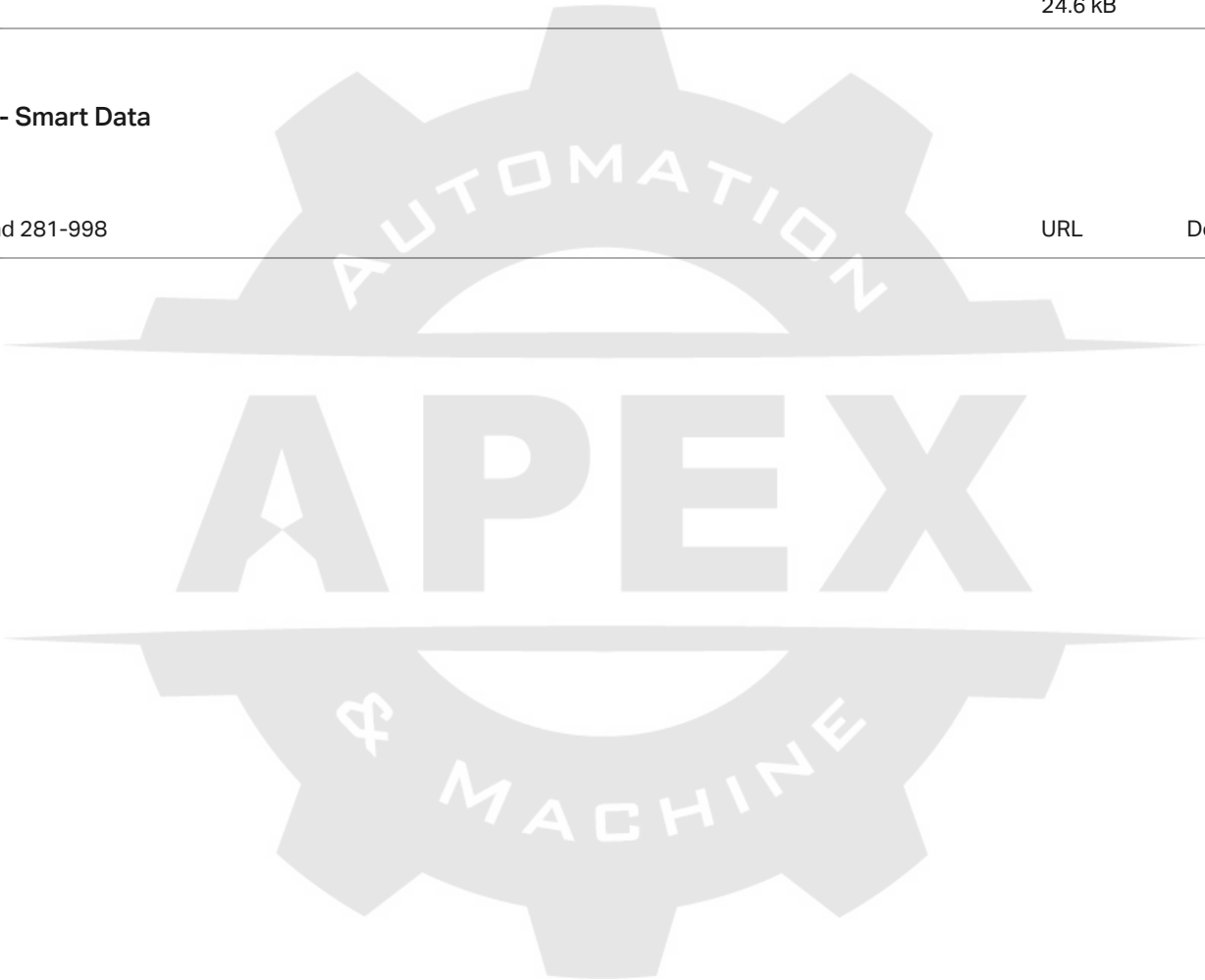
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Subject to changes.