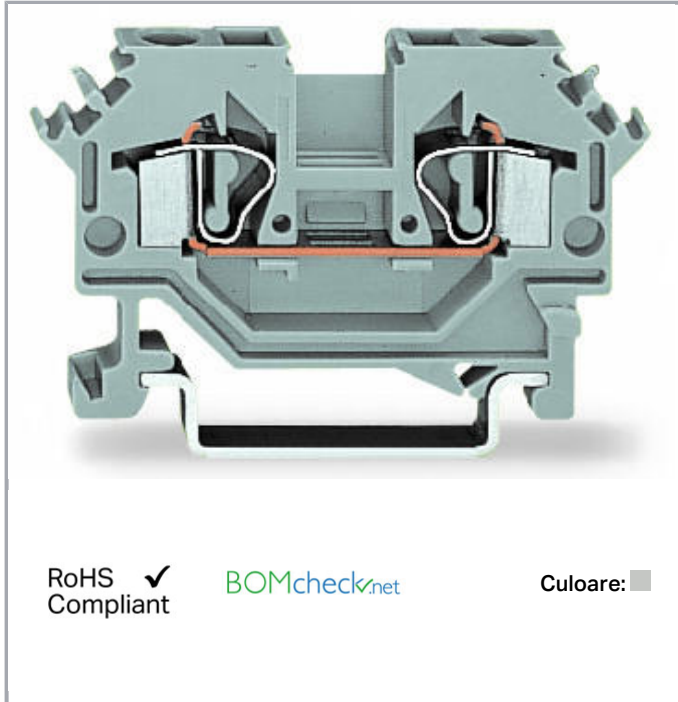


Fișă tehnică | Număr articol: 281-691

2-conductor through terminal block; 4 mm²; suitable for Ex e II applications; lateral marker slots; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 4,00 mm²; light gray

www.wago.com/281-691



Descriere articol

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.

Supus modificărilor.

WAGO Kontakttechnik GmbH & Co. KG
/Representative Office Romania
Sos. Pipera-Tunari nr. 1/1
building 1, 2nd floor | 077190 Voluntari, Ilfov
Tel.: +40-(0)31 421 85 68 | Email: info-RO@wago.com

Aveți întrebări despre produsele noastre?
Vă stăm la dispoziție pentru preluarea apelului la +40 (0) 31 421 85 68.



Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors::

2.5 mm² = 16 A

4 mm² = 22 A

Date

Electrical data

Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60947-7-1
-------------	------------------

Approvals Ex

Rated voltage EN (Ex e II)	550 V
Rated current (Ex e II)	30 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
Wiring type	Front-entry wiring

Geometrical Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-rail	29 mm / 1.142 inch
Depth	53 mm / 2.087 inch

Mechanical data

Design	horizontal type
Mounting type	DIN-35 rail

Supus modificărilor.

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Marking level

Side marking

Material Data




Color	light gray
Insulation material	Polyamide 66 (PA 66)
Fire load	0,128 MJ
Weight	6,9 g

Commercial data


Packaging type	BOX
Country of origin	DE
GTIN	4044918500746
Customs tariff number	85369010000

Aprobări / certificate

Country specific Approvals

Emblemă	Aprobare	Text de aprobare suplimentar	Nume certificat
	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

Emblemă	Aprobare	Text de aprobare suplimentar	Nume certificat
	ABS American Bureau of Shipping	-	20-HG1941090-PDA
	BV Bureau Veritas S.A.	EN 60947	07436/E0 BV

Supus modificărilor.

**DNV GL**

Det Norske Veritas, Germanischer Lloyd

-


TAE00001V2

**LR**

Lloyds Register

EN 60947

91/20112
(E9)**UL-Approvals**

Emblemă	Aprobare	Text de aprobare suplimentar	Nume certificat
	UR Underwriters Laboratories Inc.	UL 1059	E45172









Counterpart**Produce compatibile****Jumper****Nr. articol: 249-123**Push-in type wire jumper; insulated; wire length 180 mm; Conductor cross section 0.75 mm²www.wago.com/249-123**Nr. articol: 249-125**Push-in type wire jumper; insulated; wire length 60 mm; Conductor cross section 0.75 mm²www.wago.com/249-125**Nr. articol: 249-126**Push-in type wire jumper; insulated; wire length 110 mm; Conductor cross section 0.75 mm²www.wago.com/249-126**Nr. articol: 249-127**Push-in type wire jumper; insulated; wire length 250 mm; Conductor cross section 0.75 mm²www.wago.com/249-127

Supus modificărilor.

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Aveți întrebări despre produsele noastre?
Vă stăm la dispoziție pentru preluarea apelului la +40 (0) 31 421 85 68.



	Nr. articol: 281-402 Adjacent jumper; insulated; IN = IN terminal block; gray	www.wago.com/281-402
	Nr. articol: 281-409 Alternate jumper; insulated; IN = IN terminal block; gray	www.wago.com/281-409
	Nr. articol: 281-422 Adjacent jumper; insulated; IN = IN terminal block; yellow-green	www.wago.com/281-422
	Nr. articol: 281-482 Comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray	www.wago.com/281-482
	Nr. articol: 281-483 Comb-style jumper bar; insulated; 3-way; IN = IN terminal block; gray	www.wago.com/281-483
	Nr. articol: 281-485 Comb-style jumper bar; insulated; 5-way; IN = IN terminal block; gray	www.wago.com/281-485
	Nr. articol: 281-490 Comb-style jumper bar; insulated; 10-way; IN = IN terminal block; gray	www.wago.com/281-490
	Nr. articol: 281-492 Alternate comb-style jumper bar; insulated; 2-way; IN = IN terminal block; gray	www.wago.com/281-492
	Nr. articol: 709-110 Wire commoning chain; insulated; 4 connections; 3 x 110 mm; black	www.wago.com/709-110
	Nr. articol: 709-111 Wire commoning chain; insulated; 3 connections; 2 x 120 mm; black	www.wago.com/709-111
	Nr. articol: 709-112 Wire commoning chain; insulated; 3 connections; 2 x 170 mm; black	www.wago.com/709-112
	Nr. articol: 781-452 Staggered jumper; insulated; from 1 to 2; Spacing: 6 mm; gray	www.wago.com/781-452
	Nr. articol: 781-453 Staggered jumper; insulated; from 1 to 3; Spacing: 6 mm; gray	www.wago.com/781-453
	Nr. articol: 781-454 Staggered jumper; insulated; from 1 to 4; Spacing: 6 mm; gray	www.wago.com/781-454
	Nr. articol: 781-455 Staggered jumper; insulated; from 1 to 5; Spacing: 6 mm; gray	www.wago.com/781-455
	Nr. articol: 781-456 Staggered jumper; insulated; from 1 to 6; Spacing: 6 mm; gray	www.wago.com/781-456
Protective Warning Marker		
	Nr. articol: 281-415 Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks; yellow	www.wago.com/281-415

Supus modificărilor.

assembling

**Nr. articol: 209-106**

Mounting carrier; for isolated mounting on DIN 35 rails; gray

www.wago.com/209-106**Nr. articol: 709-153**

Cover; Type 1; suitable for cover carrier, type 1; 1 m long; transparent

www.wago.com/709-153

Marking accessories

**Nr. articol: 2009-115**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/2009-115**Nr. articol: 2009-115/000-002**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

www.wago.com/2009-115/000-002**Nr. articol: 2009-115/000-006**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

www.wago.com/2009-115/000-006**Nr. articol: 2009-115/000-007**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

www.wago.com/2009-115/000-007**Nr. articol: 2009-115/000-012**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

www.wago.com/2009-115/000-012**Nr. articol: 2009-115/000-017**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green

www.wago.com/2009-115/000-017**Nr. articol: 2009-115/000-023**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

www.wago.com/2009-115/000-023**Nr. articol: 2009-115/000-024**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

www.wago.com/2009-115/000-024**Nr. articol: 209-140**

Group marker carrier; gray

www.wago.com/209-140**Nr. articol: 209-141**

Group marker carrier; gray

www.wago.com/209-141**Nr. articol: 209-142**

Group marker carrier; gray

www.wago.com/209-142**Nr. articol: 209-185**















Adaptor; gray

www.wago.com/209-185**Nr. articol: 249-105**

Group marker carrier; gray

www.wago.com/249-105

Supus modificărilor.

	Nr. articol: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type; white	www.wago.com/793-501
	Nr. articol: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type; yellow	www.wago.com/793-501/000-002
	Nr. articol: 793-501/000-005 WMB marking card; as card; not stretchable; plain; snap-on type; red	www.wago.com/793-501/000-005
	Nr. articol: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type; blue	www.wago.com/793-501/000-006
	Nr. articol: 793-501/000-007 WMB marking card; as card; not stretchable; plain; snap-on type; gray	www.wago.com/793-501/000-007
	Nr. articol: 793-501/000-012 WMB marking card; as card; not stretchable; plain; snap-on type; orange	www.wago.com/793-501/000-012
	Nr. articol: 793-501/000-017 WMB marking card; as card; not stretchable; plain; snap-on type; light green	www.wago.com/793-501/000-017
	Nr. articol: 793-501/000-023 WMB marking card; as card; not stretchable; plain; snap-on type; green	www.wago.com/793-501/000-023
	Nr. articol: 793-501/000-024 WMB marking card; as card; not stretchable; plain; snap-on type; violet	www.wago.com/793-501/000-024
	Nr. articol: 793-5501 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/793-5501
	Nr. articol: 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; yellow	www.wago.com/793-5501/000-002
	Nr. articol: 793-5501/000-005 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red	www.wago.com/793-5501/000-005
	Nr. articol: 793-5501/000-006 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue	www.wago.com/793-5501/000-006
	Nr. articol: 793-5501/000-007 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray	www.wago.com/793-5501/000-007

Supus modificărilor.

type; gray

**Nr. articol: 793-5501/000-012**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange

www.wago.com/793-5501/000-012**Nr. articol: 793-5501/000-017**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green

www.wago.com/793-5501/000-017**Nr. articol: 793-5501/000-023**

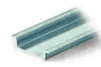
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green

www.wago.com/793-5501/000-023**Nr. articol: 793-5501/000-024**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet

www.wago.com/793-5501/000-024**Carrier rail****Nr. articol: 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**Nr. articol: 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**Nr. articol: 210-114**

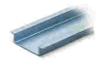
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715

www.wago.com/210-114**Nr. articol: 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**Nr. articol: 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**Nr. articol: 210-196**

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

www.wago.com/210-196**Nr. articol: 210-197**

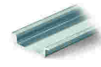
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715

www.wago.com/210-197**Nr. articol: 210-198**

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

www.wago.com/210-198**Nr. articol: 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**Nr. articol: 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**Nr. articol: 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**Nr. articol: 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

Supus modificărilor.



End plate

	Nr. articol: 209-190 Separator for Ex e/Ex i applications; 3 mm thick; 90 mm wide; orange	www.wago.com/209-190
	Nr. articol: 209-191 Separator for Ex e/Ex i applications; 3 mm thick; 120 mm wide; orange	www.wago.com/209-191
	Nr. articol: 209-192 Separator for Ex e/Ex i applications; 3 mm thick; 125.5 mm wide; orange	www.wago.com/209-192
	Nr. articol: 281-353 End and intermediate plate; 3 mm thick; light gray	www.wago.com/281-353
	Nr. articol: 281-354 Separator plate; 2 mm thick; oversized; light gray	www.wago.com/281-354





Insulation stop

	Nr. articol: 281-470 Insulation stop; 0.08 - 0.2 mm ² "s" (0.14 mm ² "f-st"); 5 pieces/strip; white	www.wago.com/281-470
	Nr. articol: 281-471 Insulation stop; 0.25 - 0.5 mm ² ; 5 pieces/strip; light gray	www.wago.com/281-471
	Nr. articol: 281-472 Insulation stop; 0.75 - 1.5 mm ² ; 5 pieces/strip; dark gray	www.wago.com/281-472

ferrule

	Nr. articol: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated	www.wago.com/216-106
	Nr. articol: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
	Nr. articol: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Nr. articol: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Nr. articol: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	Nr. articol: 216-205 Ferrule; Sleeve for 2.08 mm ² / AWG 14; insulated; electro-tin plated; yellow	www.wago.com/216-205
	Nr. articol: 216-206 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; blue	www.wago.com/216-206
	Nr. articol: 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; white	www.wago.com/216-241
	Nr. articol: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight	www.wago.com/216-242

Supus modificărilor.

	crimped; acc. to DIN 46228, Part 4/09.90; gray	
	Nr. articol: 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; red	www.wago.com/216-243
	Nr. articol: 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; black	www.wago.com/216-244
	Nr. articol: 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; blue	www.wago.com/216-246
	Nr. articol: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-301
	Nr. articol: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green	www.wago.com/216-302
tools		
	Nr. articol: 210-657 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short	www.wago.com/210-657
	Nr. articol: 210-658 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short	www.wago.com/210-658
	Nr. articol: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft	www.wago.com/210-720

Descărcări

Documentation

Additional Information

Technical explanations	Apr 3, 2019	pdf 2,1 MB	Descărcare
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CAD/CAE-Data

CAD data

2D/3D Models 281-691	URL	Descărcare
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CAE data

EPLAN Data Portal 281-691	URL	Descărcare
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WSCAD Universe 281-691	URL	Descărcare
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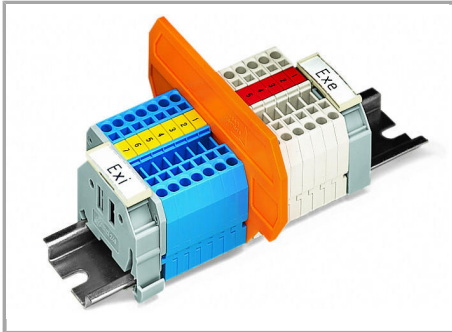
Supus modificărilor.

WAGO Kontakttechnik GmbH & Co. KG
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Installation Notes

Assembly



Separator for Ex e/Ex i applications

According to EN 50020, a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. The use of Ex e/Ex i separators is a space-saving solution when Ex e and Ex i terminal blocks are mounted on a common carrier rail.

Compatible with 279 to 282 Series:

209-190 for 2-conductor terminal blocks

209-191 for 2-, 3-, 4-conductor terminal blocks

Supus modificărilor.