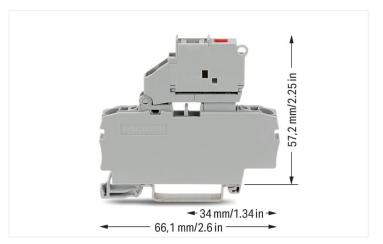
2-conductor fuse terminal block; with pivoting fuse holder; with end plate; for 5×20 mm miniature metric fuse; with blown fuse indication by LED; 12 - 30 V; for DIN-rail 35×15 and 35×7.5 ; 2.5 mm^2 ; Push-in CAGE CLAMP®; $2,50 \text{ mm}^2$; gray

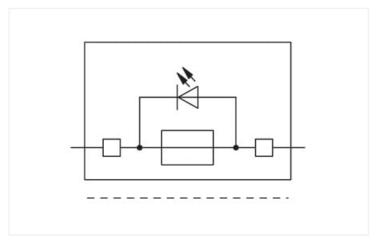


https://www.wago.com/2002-1611/1000-541





Color: ■ gray



Electrical data			
Ratings per	IEC/	EN 60947-	7-3
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	250 V	-	-
Rated surge voltage	6 kV	-	-
Rated current	6.3 A	-	-

Approvals per		UL 1059	
Use group	В	С	D
Rated voltage	30 V	30 V	30 V
Rated current	10 A	10 A	10 A

Ex information	
Reference hazardous areas	See "Downloads – Documentation – Additional Information: Technical Section; Technical Explications"
Ratings per	ATEX: KIWA 17 ATEX 0030 U / IECEx: KI- WA 17.0014U (Ex ec IIC Gc)
Rated voltage EN (Ex e II)	24 V
Rated current (Ex e II)	6.3 A

Ratings per	IEC/	EN 60947-	7-3
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	30 V	-	-
Rated surge voltage	0.8 kV	-	-
Rated current	-	-	-

Approvals per	cs	A 22.2 No 15	58
Use group	В	С	D
Rated voltage	250 V	250 V	-
Rated current	6.3 A	6.3 A	-



Fuse receptacle pivoting

Fuse type Cylindrical fuse; 5 x 20 mm



Connection data			
Connection points	2	Connection 1	
Total number of potentials	1	Connection technology	Push-in CAGE CLAMP®
Number of levels	1	Actuation type	Operating tool
Number of jumper slots	2	Connectable conductor materials	Copper
		Nominal cross-section	2.5 mm²
		Solid conductor	0.25 4 mm² / 22 12 AWG
		Solid conductor; push-in termination	0.75 4 mm² / 18 12 AWG
		Fine-stranded conductor	0.25 4 mm² / 22 12 AWG
	Fine-stranded conductor; with insulated ferrule	0.25 2.5 mm² / 22 14 AWG	
	Fine-stranded conductor; with ferrule; push-in termination	1 2.5 mm² / 18 14 AWG	
	Note (conductor cross-section)	Depending on the conductor characteri- stic, a conductor with a smaller cross- section can also be inserted via push-in termination.	
		Strip length	10 12 mm / 0.39 0.47 inches
		Wiring direction	Front-entry wiring

Physical data	
Width	6.2 mm / 0.244 inches
Height	66.1 mm / 2.602 inches
Depth from upper-edge of DIN-rail	57.2 mm / 2.252 inches

Mechanical data	
Mounting type	DIN-35 rail
Marking level	Center/side marking

Material data	
Note (material data)	Information on material specifications can be found here
Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.294 MJ
Weight	13.5 g

https://www.wago.com/2002-1611/1000-541



Environmental requirements		
Ambient temperature (operation)	-35 +70 °C	
Processing temperature	-35 +70 °C	
Continuous operating temperature	-35 +70 °C	

Commercial data	
Product Group	22 (TOPJOB S)
eCl@ss 10.0	27-14-11-16
eCl@ss 9.0	27-14-11-16
ETIM 8.0	EC000899
ETIM 7.0	EC000899
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	CN
GTIN	4066966335804
Customs tariff number	85369095000

Environmental Product Compliance	
CAS-No.	7439-92-1 7440-43-9
REACH Candidate List Substance	Cadmium Lead
RoHS Compliance Status	Compliant, With Exemption
RoHS Exemption	7(a) 7(c)-l
SCIP notification number (Austria)	a54f1676-ddf2-4f54-b9bd-f653d6986def
SCIP notification number (Belgium)	e0161091-efa6-4165-8e03-8f14872dd495
SCIP notification number (Bulgaria)	00dbba31-ac7c-4bef-9c68-f33ecd0f3e9b
SCIP notification number (Czech Republic)	6eab5509-57ed-4a56-9ce0-711cbd687d07
SCIP notification number (Denmark)	c84188b4-b8cd-496e-bab7-f80edfcf86b2
SCIP notification number (Finland)	c315bf1a-a42c-489f-86d0-1c0f29190264
SCIP notification number (France)	136746eb-42aa-44e7-869f-a928dd5c60f8
SCIP notification number (Germany)	4674dd13-a982-47cf-b8ea-60b9bb4cc2e2
SCIP notification number (Hungary)	a278a177-ce31-4429-a3cf-791e4138a142
SCIP notification number (Italy)	f20875d1-c1ea-4503-b6c6-ccdb9a44241a
SCIP notification number (Netherlands)	1eb7922d-6d31-4d04-9c57-12561d36c3d7
SCIP notification number (Poland)	0a8c3f45-4557-43d2-8205-9d8a88f5a474
SCIP notification number (Romania)	cc48fb51-f1b7-4e0a-8e47-4e7de466280b
SCIP notification number (Sweden)	108ad70b-a647-4a24-828f-9185ad23bce9

Approvals / Certificates

General approvals





Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7941
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-124163
UL Underwriters Laboratories Inc.	UL 1059	E45172

Declarations of conformity and manufacturer's declarations



Approval	Standard	Certificate Name
ATEX-Attestation of Conformity WAGO GmbH & Co. KG	-	-
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
Railway WAGO GmbH & Co. KG	-	Railway Ready

https://www.wago.com/2002-1611/1000-541



Declarations of conformity and manufacturer's declarations

UK-Declaration of Confor- - - - mity
WAGO GmbH & Co. KG

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2

Approvals for hazardous areas





Approval	Standard	Certificate Name
AEx Underwriters Laboratories Inc.	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
ATEX KIWA Netherlands B.V.	EN 60079	KIWA 17ATEX0030 U
CCC CNEX	GB/T 3836.3	2020312313000180 (Ex ec IIC Gc)
IECEx KIWA Netherlands B.V.	EN 60079	IECEx KIWA 17.0014U (Ex ec IIC Gc)

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product

Compliance 2002-1611/1000-541



Documentation						
Additional Information			Bid Text			
Technical Section	pdf 2240.62 KB	<u>↓</u>	2002-1611/1000-541	29.04.2019	xml 4.29 KB	$\underline{\downarrow}$
			2002-1611/1000-541	23.04.2019	docx 15.45 KB	$\underline{\downarrow}$

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 2002-1611/1000-541	EPLAN Data Portal 2002-1611/1000-541
	WSCAD Universe 2002-1611/1000-541
	ZUKEN Portal 2002-1611/1000-541

https://www.wago.com/2002-1611/1000-541



1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



Item No.: 209-191

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

1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 Mounting accessories



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

Item No.: 210-198

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

Item No.: 210-508

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

Item No.: 210-197

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



Item No.: 210-506

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

Item No.: 210-114

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

Item No.: 210-118

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

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; silver-colored



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; silver-colored

Item No.: 210-504

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

Item No.: 210-113

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

Item No.: 210-505

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

1.2.2 End plate

1.2.2.1 End plate



Item No.: 2002-991

End plate for fuse terminal blocks; 2 mm thick; gray

Item No.: 2002-992

End plate for fuse terminal blocks; 2 mm thick; orange

1.2.3 Ferrule

1.2.3.1 Ferrule

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; white

Item No.: 216-242

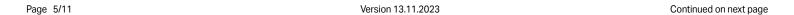
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

Item No.: 216-262

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

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; red



https://www.wago.com/2002-1611/1000-541



1.2.3.1 Ferrule







Item No.: 216-263

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

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; black

Item No.: 216-264

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

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; blue

Item No.: 216-266

Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

1.2.4 Installation

1.2.4.1 Cover



Item No.: 709-156

Cover; Type 3; suitable for cover carrier, type 3; 1 m long; transparent

1.2.4.2 Cover carrier



Item No.: 709-169

Cover carrier; Type 3; incl. fixing/retaining screws and knurled nut; suitable for 279 to 282 and 880 Series rail-mounted terminal blocks; suitable for 264 Series miniature rail-mounted terminal blocks; suitable for 270 Series sensor and actuator terminal blocks; gray

1.2.5 Insulation stop

1.2.5.1 Insulation stop





Item No.: 2002-171

Insulation stop; 0.25 - 0.5 mm²; 5 pieces/ strip; light gray

Item No.: 2002-172

Insulation stop; 0.75 - 1 mm²; 5 pieces/ strip; dark gray

1.2.6 Jumper

1.2.6.1 Jumper







Jumper; 10-way; insulated; light gray





Jumper; 2-way; insulated; light gray

Jumper; 6-way; insulated; light gray



Item No.: 2004-403

Jumper; 3-way; insulated; light gray





Item No.: 2004-406/020-000

Delta jumper; insulated; light gray

Jumper; 4-way; insulated; light gray



Item No.: 2004-405

Jumper; 5-way; insulated; light gray



Item No.: 2004-406

Item No.: 2004-407

Jumper; 7-way; insulated; light gray

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1.2.6.1 Jumper

Item No.: 2004-409

Item No.: 2004-440

Jumper; from 1 to 10; insulated; light gray

Item No.: 2004-433

Jumper; from 1 to 3; insulated; light gray

Jumper; 8-way; insulated; light gray

Item No.: 2004-434

Item No.: 2004-408

Jumper; from 1 to 4; insulated; light gray

Jumper; 9-way; insulated; light gray

Item No.: 2004-435

Jumper; from 1 to 5; insulated; light gray

Jumper; from 1 to 6; insulated; light gray

Item No.: 2004-436

Item No.: 2004-437

Jumper; from 1 to 7; insulated; light gray

Item No.: 2004-438

Jumper; from 1 to 8; insulated; light gray

Item No.: 2004-439

Jumper; from 1 to 9; insulated; light gray

Item No.: 2004-405/011-000

Star point jumper; 3-way; insulated; light gray

Item No.: 210-103

Wire commoning chain; insulated; black

Item No.: 210-123 Wire commoning chain; insulated; blue

1.2.7 Locking system

1.2.7.1 Locking system



Item No.: 210-254

Interlocking link; mechanically locks multiple links; 1 m long; transparent

1.2.8 Marking

1.2.8.1 Marker

Item No.: 2009-145/000-006

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

Item No.: 2009-145/000-007

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

Item No.: 2009-145/000-023

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

Item No.: 2009-145/000-012

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

Item No.: 2009-145/000-005

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red

Item No.: 2009-145/000-024

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

Item No.: 2009-145

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

Item No.: 2009-145/000-002

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



Item No.: 248-501/000-006

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue



Item No.: 248-501/000-007

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

Item No.: 248-501/000-023

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

Item No.: 248-501/000-017

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green



Item No.: 248-501/000-012

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange



Item No.: 248-501/000-005

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red



Item No.: 248-501/000-024

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet



Item No.: 248-501

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: 248-501/000-002

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

Item No.: 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

Item No.: 793-5501/000-014

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

Item No.: 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

https://www.wago.com/2002-1611/1000-541



1.2.8.1 Marker









Item No.: 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; green

Item No.: 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; light green

Item No.: 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

Item No.: 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



Item No.: 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

MINITER

_ ___

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; white

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; yellow

Item No.: 2009-115/000-006

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



Item No.: 2009-115/000-007

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

Item No.: 2009-115/000-023 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

Item No.: 2009-115/000-017

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

Item No.: 2009-115/000-012

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



Item No.: 2009-115/000-005

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

Item No.: 2009-115/000-024

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

Item No.: 2009-115

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

Item No.: 2009-115/000-002

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

1.2.8.2 Marking strip



Item No.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.2.9 Protective warning marker

1.2.9.1 Cover



Item No.: 2002-115

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

1.2.10 Screwless end stop

1.2.10.1 Mounting accessories





Item No.: 249-117

Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

Item No.: 249-116

Screwless end stop; 6 mm wide; for DINrail 35 x 15 and 35 x 7.5; gray

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1.2.11 Test and measurement

1.2.11.1 Testing accessories



Item No.: 210-136

Test plug; 2 mm Ø; with 500 mm cable; red

1.2.12 Tool

1.2.12.1 Operating tool



Item No.: 210-658

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured

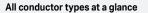
Item No.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

Conductor termination







Push-in termination of solid and ferruled conductors



Inserting a conductor via push-in termination:

Solid conductors with cross-sections from either one size above, or up to two sizes below, the rated cross-section can be simply pushed in – no tools needed.

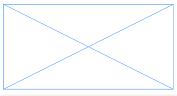


Inserting a conductor via operating tool:

Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.

Advantage:

To open the clamp, the operating tool is inserted vertically. The conductor entry is less than 15 degrees for easier wiring.

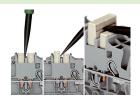


Conductor termination – insulation stop

Commoning



Insert push-in type jumper bar and push down until it hits backstop.



Removing a push-in type jumper bar:

Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper.

Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five contacts.





Fuse terminal blocks with a width of 6.2 mm/0.244 in can be assembled adjacently. If there is no adjacent fuse terminal block at the end of the assembly, an end plate must be used.



Fused Disconnect Terminal Block with a Pivoting Fuse Holder Pivot the fuse holder into the locked open position.



Fused disconnect terminal block with a pivoting fuse holder
Fuse replacement



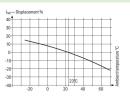
Application Notes on Terminal Blocks for Glass Cartridge Fuses

Diagram: "Individual Arrangement"



Application Notes on Terminal Blocks for Glass Cartridge Fuses

Diagram: "Block Arrangement"



Application Notes on Terminal Blocks for Glass Cartridge Fuses

Nominal current ratings for fuse cartridges are defined differently in international standards. This is why the recommended continuous current-carrying capacity of the fuses is a max. 80% of their nominal current according to DIN 72581/ Part 3 (for a surrounding air temperature of 23°C).

Selecting the correct fuse cartridge is important for product safety within applications, as well as for fuse cartridge service life and reliability. Fuse cartridges will only operate perfectly as protection components (break-off point) if they are properly selected and used as intended (i.e., according to the state of the technology and valid specifications, as well as data sheet characteristics), according to basic safety requirements (i.e., persons, animals and property must be protected against hazards).



Concerning product safety, fuse cartridges must generally be tested under both normal and faulty operating conditions within your application.

Marking



Snapping WMB Inline markers into marker slots.





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