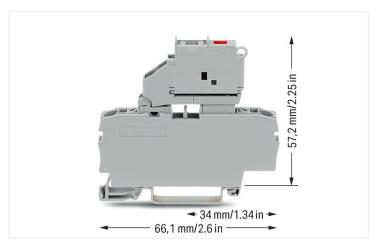
2-conductor fuse terminal block; with pivoting fuse holder; with end plate; for 5×20 mm miniature metric fuse; with blown fuse indication by LED; 30 - 65 V; for DIN-rail 35×15 and 35×7.5 ; 2.5 mm^2 ; Push-in CAGE CLAMP®; $2,50 \text{ mm}^2$; gray

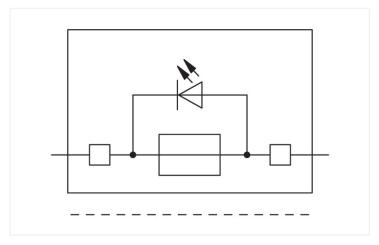


https://www.wago.com/2002-1611/1000-542





Color: ■ gray



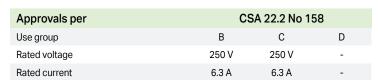
Electrical data				
Ratings per	IEC/	'EN 60947-	7-3	
Overvoltage category	III	III	II	
Pollution degree	3	2	2	
Nominal voltage	250 V	-	-	
Rated surge voltage	6 kV	-	-	
Rated current	6.3 A	-	-	

Ratings per	IEC/	EN 60947-	7-3
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	65 V	-	-
Rated surge voltage	1.5 kV	-	-
Rated current	-	-	-

Ratings per IEC/EN – Notes	
Ratings (note)	Electrical ratings are given by the fuse and blown fuse indication.
Note (rated current)	Leakage current in case of a blown fuse: LED 2.2 mA (at 48 V operating voltage)

Approvals per		UL 1059	
Use group	В	С	D
Rated voltage	65 V	65 V	65 V
Rated current	10 A	10 A	10 A

Data Sheet | Item Number: 2002-1611/1000-542 https://www.wago.com/2002-1611/1000-542





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)	48 V
Rated current (Ex e II)	6.3 A

Power Loss	
Power loss (max.) P _{I (max.)} (note)	When selecting glass cartridge fuses, make sure that the maximum power loss listed below is not exceeded. The power loss is determined according to IEC or EN 60947-7-3/VDE 0611-6 at 23°C. The temperature rise of the terminal block must be checked according to their application and mounting. Higher ambient temperatures represent an additional impact on miniature fuses. Therefore, in such applications, the rated current must be reduced if necessary. More details are available from the manufacturers.
Power loss P ₁ max. overload and short- circuit protection (individual arrange- ment)	1.6 W
Power loss P ₁ max. overload and short- circuit protection (group arrangement)	1.6 W
Power loss P ₁ max. short-circuit protection (individual arrangement)	2.5 W
Power loss P_{\parallel} max. short-circuit protection (group arrangement)	2.5 W

General information	
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 mm ²
	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 characte stic, a conductor with a smaller cross- section can also be inserted via push- termination.		
		Strip length	10 12 mm / 0.39 0.47 inches	
			Wiring direction	Front-entry wiring

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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

Environmental requirements

Ambient temperature (operation) $-35 \dots +70 \, ^{\circ} \text{C}$ Processing temperature $-35 \dots +70 \, ^{\circ} \text{C}$ Continuous operating temperature $-35 \dots +70 \, ^{\circ} \text{C}$

Commercial data

CAS-No.

Product Group 22 (TOPJOBS) 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 Box Packaging type Country of origin DE GTIN 4066966335774 Customs tariff number 85369095000

Environmental Product Compliance

SCIP notification number (Italy)

	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)	2a880117-7879-424d-a114-5a7fbccaa559
SCIP notification number (Belgium)	4f3de010-5d10-4924-881f-85c64a0365e8
SCIP notification number (Bulgaria)	9f6047b3-c611-486b-b1b8-a63e6c69c809
SCIP notification number (Czech Republic)	04e280d1-8606-405b-bcc3-14c91785eb5e
SCIP notification number (Denmark)	45127917-144e-4b87-8c25-c0b3ae75c7e0
SCIP notification number (Finland)	8c95e2b4-ddcd-45a2-8578-e5f10b49aa46
SCIP notification number (France)	3eea3f3b-09b9-47a3-89de-d4d8d91b47e1
SCIP notification number (Germany)	82fb5d23-cf06-4f2e-9f51-4979c950b719
SCIP notification number (Hungary)	c8fe8f82-c5d0-43fe-8c26-7e4580886dac

7439-92-1

5bba1286-1533-4041-acea-2753dcf94598

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Environmental Product Compliance	
SCIP notification number (Netherlands)	5a0bcad1-5acc-4473-b783-fe9d78725288
SCIP notification number (Poland)	f523e185-698f-42f7-8bee-dcf85333b749
SCIP notification number (Romania)	35f0d5b8-e35a-4098-b521-50610012aa2e
SCIP notification number (Sweden)	9484ce9d-66e5-4be7-a29b-948f514325d0

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	-	-
ATEX-Attestation of Conformity WAGO GmbH & Co. KG	-	-
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
Railway WAGO GmbH & Co. KG	-	Railway Ready
UK-Declaration of Conformity 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

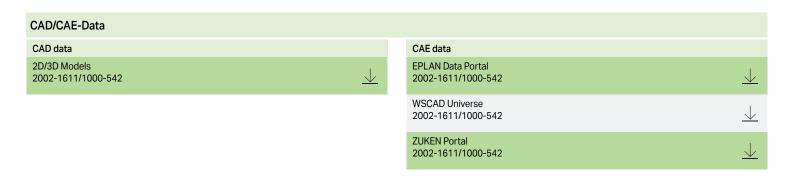
Environmental Product Compliance 2002-1611/1000-542



https://www.wago.com/2002-1611/1000-542



Documentation Bid Text 2002-1611/1000-542 xml 29.04.2019 4.29 KB 2002-1611/1000-542 docx 23.04.2019 15.69 KB



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

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

Item No.: 210-508

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



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

https://www.wago.com/2002-1611/1000-542



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





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

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

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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









Item No.: 2004-406/020-000

Delta jumper; insulated; light gray

Item No.: 2004-410

Jumper; 10-way; insulated; light gray

Item No.: 2004-402

Jumper; 2-way; insulated; light gray

Item No.: 2004-403

Jumper; 3-way; insulated; light gray



Item No.: 2004-406 Jumper; 6-way; insulated; light gray Item No.: 2004-407

Jumper; 7-way; insulated; light gray

Item No.: 2004-404

Jumper; 4-way; insulated; light gray

Item No.: 2004-405 Jumper; 5-way; insulated; light gray

Item No.: 2004-408 Jumper; 8-way; insulated; light gray Item No.: 2004-409

Jumper; 9-way; insulated; light gray

Item No.: 2004-440

Jumper; from 1 to 10; insulated; light gray

Item No.: 2004-433

Jumper; from 1 to 3; insulated; light gray

Item No.: 2004-434

Jumper; from 1 to 4; insulated; light gray

Item No.: 2004-435

Jumper; from 1 to 5; insulated; light gray

Item No.: 2004-436

Jumper; from 1 to 6; insulated; light gray

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

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

https://www.wago.com/2002-1611/1000-542



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

Mini-WSB Inline; for Smart Printer; 1700

pieces on roll; stretchable 5 - 5.2 mm;

Mini-WSB marking card; as card; not

Mini-WSB marking card; as card; not

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

plain; snap-on type; violet

Item No.: 248-501/000-007

Item No.: 2009-145/000-024

Item No.: 2009-145

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

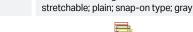
Item No.: 2009-145/000-002

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.: 248-501/000-023

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

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



WMB marking card; as card; for terminal

block width 5 - 17.5 mm; stretchable 5 -

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.: 793-5501/000-014

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

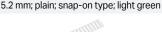
Item No.: 793-5501/000-007

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



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

Item No.: 793-5501/000-017

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



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



A

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

https://www.wago.com/2002-1611/1000-542



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; yellow

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 35×15 and 35×7.5 ; gray

Item No.: 249-116

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

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

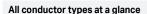
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



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.

https://www.wago.com/2002-1611/1000-542





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

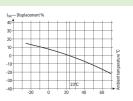


Application Notes on Terminal Blocks for Glass Cartridge Fuses Diagram: "Individual Arrangement"



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).

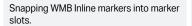
Selecting the correct fuse cartridge is important for product safety within applications, as well as for fuse cartridge service life and reliability. Fuse cartridges will only operate perfectly as protection components (break-off point) if they are properly selected and used as intended (i.e., according 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







Subject to changes. Please also observe the further product documentation!