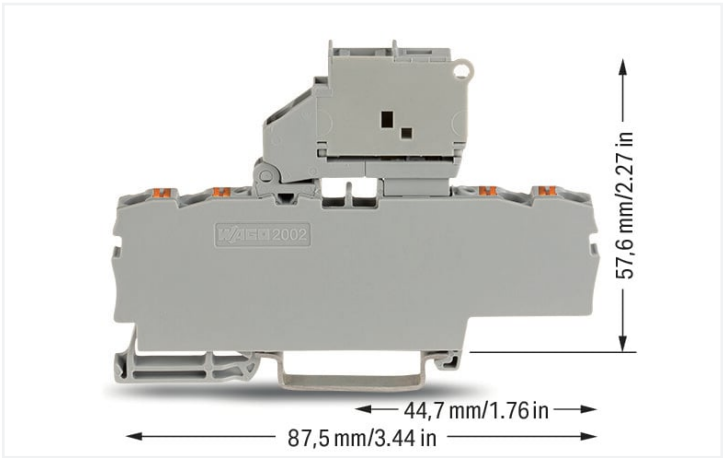


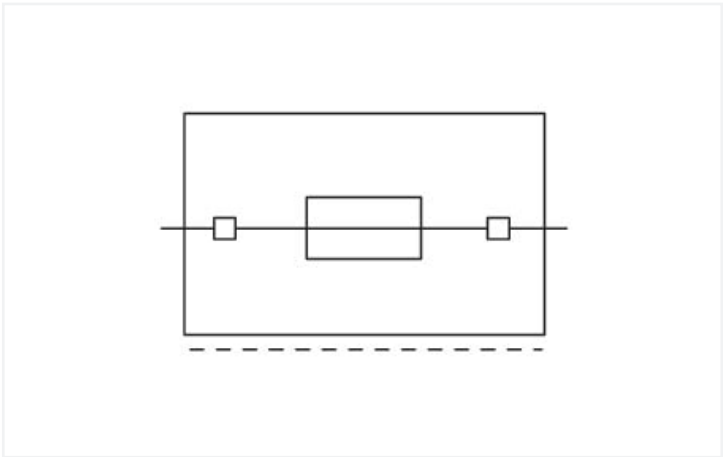
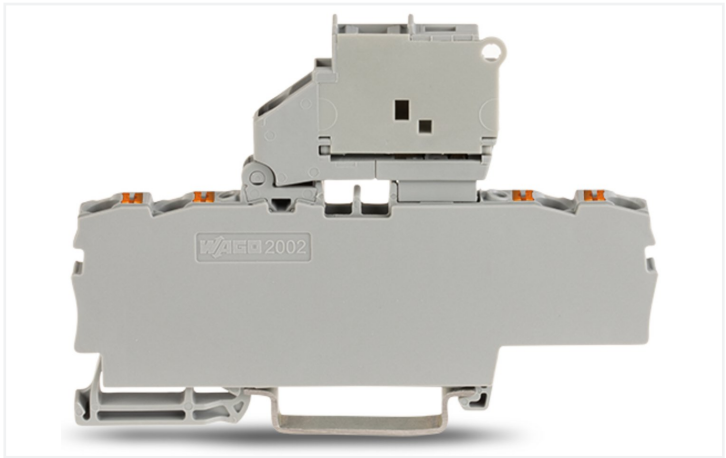
Data Sheet | Item Number: 2202-1811

4-conductor fuse terminal block; with pivoting fuse holder; and end plate; for 5 x 20 mm miniature metric fuse; with push-button; without blown fuse indication; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm²; Push-in CAGE CLAMP®; 2,50 mm²; gray

<https://www.wago.com/2202-1811>



Color: ■ gray



Fuse terminal block, 2202 Series, gray

Our fuse terminal block (item number 2202-1811) is designed for seamless electrical installations. Strip lengths must be between 10 mm and 12 mm when connecting conductors to this fuse terminal block. Featuring conductor terminals along with Push-in CAGE CLAMP®, this connector outperforms the competition. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, featuring a winning design: It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing tools. No preparation is required; for example, crimping the conductor's ferrule is not necessary. Depending on the type of conductor, this fuse terminal block is designed for conductor cross sections ranging from 0.25 mm² to 4 mm². It comes with one level and four clamping points for connecting a single potential. The gray housing is made of polyamide (PA66) for insulation. These function terminal blocks are mounted using DIN-35 rails.. This product is designed for specific Ex applications (please refer to the product datasheet).

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 – Notes				
Ratings (note)		Electrical ratings are given by the fuse.		



Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		250 V	250 V	250 V
Rated current		10 A	10 A	-

Ex information	
Reference hazardous areas	See "Downloads – Documentation – Additional Information: Technical Section; Technical Explanations"
Ratings per	ATEX: PTB 20 ATEX 1007 U / IECEx: PTB 20.0013U (Ex ec IIC Gc)
Rated voltage EN (Ex e II)	275 V
Rated current (Ex e II)	6.3 A

General information	
Fuse receptacle	pivoting
Fuse type	Cylindrical fuse; 5 x 20 mm

Connection data

Clamping units	4
Total number of potentials	1
Number of levels	1
Number of jumper slots	2

Approvals per		CSA 22.2 No 158		
Use group		B	C	D
Rated voltage		250 V	250 V	250 V
Rated current		10 A	10 A	10 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_I max. overload and short-circuit protection (individual arrangement)	1.6 W
Power loss P_I max. overload and short-circuit protection (group arrangement)	1.6 W
Power loss P_I max. short-circuit protection (individual arrangement)	1.6 W
Power loss P_I max. short-circuit protection (group arrangement)	1.6 W

Connection 1	
Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-button
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 characteristic, 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	87.5 mm / 3.445 inches
Depth from upper-edge of DIN-rail	57.6 mm / 2.268 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 (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.391 MJ
Actuator color	orange
Weight	16.7 g

Environmental requirements	
Processing temperature	-35 ... +85 °C
Continuous operating temperature	-60 ... +105 °C

Commercial data	
ETIM 9.0	EC000899
ETIM 8.0	EC000899
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143902731
Customs tariff number	85369095000

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
			Approval	Standard	Certificate Name
CSA DEKRA Certification B.V.	C22.2	70173745	ATEX-Attestation of Con- formity WAGO GmbH & Co. KG	-	-
UL Underwriters Laboratories Inc.	UL 1059	UL-CA- L45172-6189178-11508102-1	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
			UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for hazardous areas

AEx ec IIC Ex ec IIC U PTB 0102 Ex ec IIC Gc IECEX		
Approval	Standard	Certificate Name
AEx Underwriters Laboratories Inc.	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
ATEX Physikalisch Technische Bundesanstalt	EN IEC 60079-0	PTB 20 ATEX 1007U (II 3 G Ex ec IIC Gc)
CCC CNEX	-	2020312313000288 (Ex ec IIC Gc)
IECEX Physikalisch Technische Bundesanstalt	IEC 60079	IECEX PTB 20.0013U (Ex ec IIC Gc)

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 2202-1811	

Documentation

Additional Information		Bid Text		
Technical Section	pdf 2246.92 KB	2202-1811	20.05.2019	xml 4.21 KB
				docx 15.22 KB

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 2202-1811	ZUKEN Portal 2202-1811

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 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	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



Item No.: 210-196
Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored



Item No.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; copper-colored



Item No.: 210-508
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; 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; slopped; similar to EN 60715; silver-colored



Item No.: 210-506
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; 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; unslopped; similar to EN 60715; silver-colored



Item No.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored



Item No.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; 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; slopped; 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; slopped; 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; unslopped; according to EN 60715; silver-colored



Item No.: 210-505
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslopped; galvanized; according to EN 60715; silver-colored

1.2.2 Ferrule

1.2.2.1 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



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

1.2.3 Installation

1.2.3.1 Cover



Item No.: 709-156
Cover; Type 3; suitable for cover carrier, type 3; 1 m long; transparent



1.2.3.2 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

1.2.4 Insulation stop

1.2.4.1 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

1.2.5 Jumper

1.2.5.1 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.: 2004-404
Jumper; 4-way; insulated; light gray



Item No.: 2004-405
Jumper; 5-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.: 2004-408
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 gray



Item No.: 210-103
Wire commoning chain; insulated; black



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



1.2.6 Locking system

1.2.6.1 Locking system



Item No.: 210-254
Interlocking link; mechanically locks multiple links; 1 m long; transparent

1.2.7 Marking

1.2.7.1 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



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

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





1.2.7.2 Marking strip



Item No.: 2009-110
Marking strips; for Smart Printer; on reel;
not stretchable; plain; snap-on type; white

1.2.8 Push-in type wire jumper

1.2.8.1 Jumper



Item No.: 2009-412
Push-in type wire jumper; insulated; 60
mm long; black

1.2.9 Screwless end stop

1.2.9.1 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 DIN-
rail 35 x 15 and 35 x 7.5; gray

1.2.10 Test and measurement

1.2.10.1 Testing accessories



Item No.: 210-136
Test plug; 2 mm Ø; with 500 mm cable; red

1.2.11 Tool

1.2.11.1 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



All conductor types at a glance



Push-in termination of solid and ferruled conductors



Push-in termination of solid and ferruled conductors

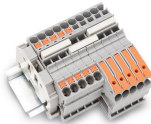


Insert fine-stranded conductors via operating tool.

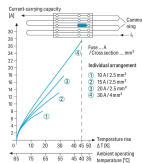


Removing all conductors via operating tool.

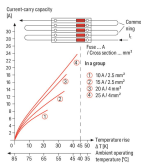
Commoning



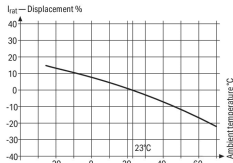
Insert a push-in type jumper bar and push down until it hits the backstop.



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



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

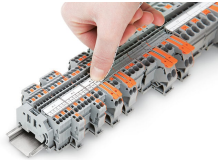


Application Notes on Terminal Blocks for Glass Cartridge Fuses
Nominal current ratings for fuse cartridges are defined differently in international standards. This is why the recommended continuous current-carrying capacity of the fuses is a max. 80% of their nominal current according to DIN 72581/ Part 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).

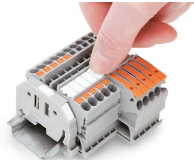
Concerning product safety, fuse cartridges must generally be tested under both normal and faulty operating conditions within your application.

Information from the mini-automotive, blade-type fuse manufacturers			
Operating temperature T _{amb} / °C	Displacement %	F _n	
-25	14	0.877	
-20	13	0.885	
-15	12	0.893	
-10	11	0.901	
-5	10	0.909	
0	9	0.917	
5	8	0.925	
10	7	0.933	
15	6	0.941	
20	5	0.949	
25	4	0.957	
30	3	0.965	
35	2	0.973	
40	1	0.981	
45	0	0.989	
50	-1	0.997	
55	-2	1.005	
60	-3	1.013	
65	-4	1.021	
70	-5	1.029	

Marking



Snapping a marking strip into a marker slot.



Snapping a marking strip into the marker slot.