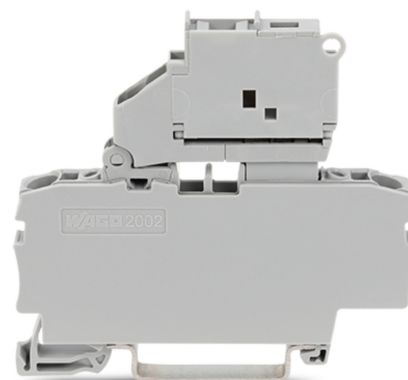
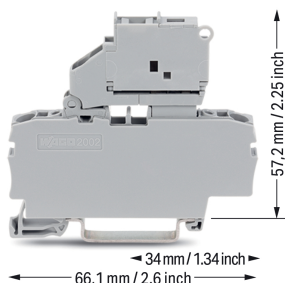


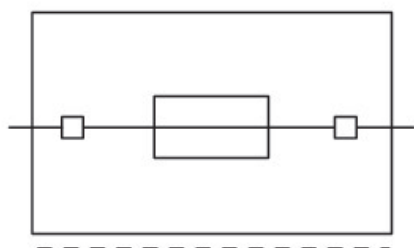
Data Sheet | Item Number: 2002-1611

2-conductor fuse terminal block; with pivoting fuse holder; and end plate; for 5 x 20 mm miniature metric fuse; 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/2002-1611>



Color: ■ gray



Fuse terminal block, 2002 Series, operating tool

Connect conductors quickly and securely with this fuse terminal block (item number 2002-1611). Conductors can only be connected to this fuse terminal block if their strip length is between 10 and 12 mm. This product incorporates conductor terminals and utilizes Push-in CAGE CLAMP®. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, offering a key advantage: 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. This fuse terminal block is suitable for conductor cross sections ranging from 0.25 mm² to 4 mm².

This product is designed for specific Ex applications (please refer to the product datasheet).

Notes	
Safety Information	The 2 mm test slot is only approved for high impedance measurement up to max. 100 mA.

Electrical data

Ratings per		IEC/EN 60947-7-3	
Overvoltage category		III	II
Pollution degree		3	2
Nominal voltage		250 V	-
Rated impulse withstand 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	D
Rated voltage		250 V	250 V
Rated current		10 A	10 A

Approvals per		CSA 22.2 No 158	
Use group		B	D
Rated voltage		-	250 V
Rated current		-	6.3 A

Ex information	
Reference to hazardous areas	See “Downloads – Documentation – Additional Information: Technical Section; Technical Explanations”
Ratings per	ATEX: KIWA 17 ATEX 0030 U / IECEx: KIWA 17.0014U (Ex ec IIC Gc)
Rated voltage EN (Ex e II)	275 V
Rated current (Ex e II)	6.3 A

Power Loss	
Power loss P _{loss (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.
Maximum power loss P _{loss} of fuse insert for overload and short-circuit protection (individual arrangement)	1.6 W
Maximum power loss P _{loss} of fuse insert for overload and short-circuit protection (block arrangement)	1.6 W
Maximum power loss P _{loss} of fuse insert for short-circuit protection (individual arrangement)	1.6 W
Power loss P _{loss} (max.) of fuse cartridge for short-circuit protection (block arrangement)	1.6 W

General information	
Fuse receptacle	pivoting
Fuse type	Cylindrical fuse; 5 x 20 mm
Wiring direction	Front-entry wiring

Connection Data

Connection 1	
Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
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

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

Connection 1	
Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm ² / 22 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1 ... 2.5 mm ² / 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	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 (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.253 MJ
Weight	13.4 g

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

Environmental Testing	
Test specification: Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure: Railway applications – Rolling stock equipment – Vibration and shock tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Mounting location	Service life test, Category 1, Class A/B
Functional test with noise-like oscillations	Test passed according to Section 8 of the standard
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz
Acceleration	0.101g (highest test level used for all axes)
Test duration per axis	10 min.
Test directions	X, Y and Z axes
Monitoring of contact faults and interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like oscillations	Test passed according to Section 9 of the standard
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz
Acceleration	0.572g (highest test level used for all axes)
Test duration per axis	5 h



Environmental Testing	
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Shock test	Test passed according to Section 10 of the standard
Shock pulse form	Half sine
Acceleration	5g (highest test level used for all axes)
Shock duration	30 ms
Number of shocks (per axis)	3 pos. und 3 neg.
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Vibration and shock stress for rolling stock equipment	Passed

Commercial data	
Product Group	22 (TOPJOB S)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	CN
GTIN	4055143870344
Customs tariff number	85369095000

Product Classification	
UNSPSC	39121410
eCl@ss 10.0	27-14-11-16
eCl@ss 9.0	27-14-11-16
ETIM 9.0	EC000899
ETIM 10.0	EC000899
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-8054	ATEX-Attestation of Conformity WAGO GmbH & Co. KG	-	-
CSA CSA Group	C22.2 No. 158	154112	ATEX-Attestation of Conformity WAGO GmbH & Co. KG	-	-
DEKRA DEKRA Certification B.V.	EN 60947	71-149763	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-124163	Railway WAGO GmbH & Co. KG	-	Railway Ready
UL Underwriters Laboratories Inc.	UL 1059	E45172			



Declarations of conformity and manufacturer's declarations

UK-Declaration of Conformity -
WAGO GmbH & Co. KG

Approvals for marine applications

  		
Approval	Standard	Certificate Name
ABS American Bureau of Shipping	EN 60947	24-0152298-PDA
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
PRS Polski Rejestr Statków	-	TE/1094/880590/23

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 

Documentation

Bid Text
2002-1611 29.04.2019 xml 4.13 KB 
2002-1611 23.04.2019 docx 15.37 KB 



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

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; 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; 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; 0.5 mm²; 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



1.2.7.1 Marker



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 Protective warning marker

1.2.8.1 Cover



Item No.: 2002-115
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

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; multi-coloured



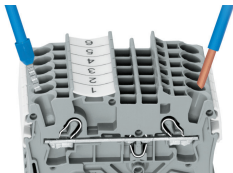
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

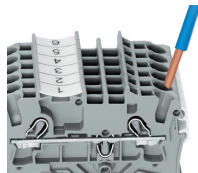
Conductor termination



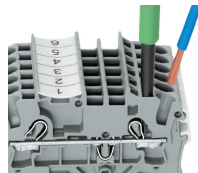
All conductor types at a glance



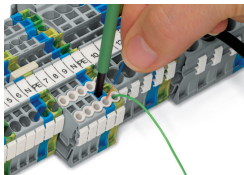
Push-in termination of solid and ferruled conductors



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.

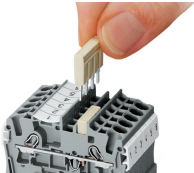


Inserting a conductor via operating tool:
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.
Advantage:
To open the clamp, the operating tool is inserted vertically. The conductor entry is less than 15 degrees for easier wiring.

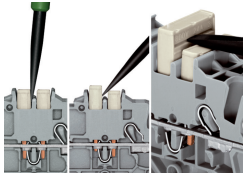


Conductor termination – insulation stop

Commoning



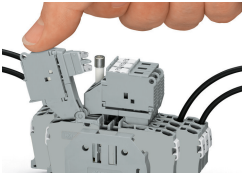
Insert push-in type jumper bar and push down until it hits backstop.



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.



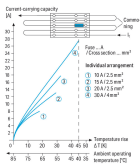
Fuse terminal blocks with a width of 6.2 mm/0.244 in can be assembled adjacently. If there is no adjacent fuse terminal block at the end of the assembly, an end plate must be used.



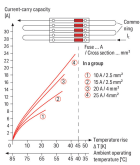
Fused Disconnect Terminal Block with a Pivoting Fuse Holder
Pivot the fuse holder into the locked open position.



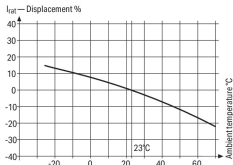
Fused disconnect terminal block with a pivoting fuse holder
Fuse replacement



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



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

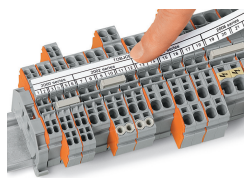
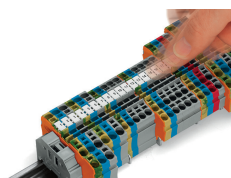


Application Notes on Terminal Blocks for Glass Cartridge Fuses
Nominal current ratings for fuse cartridges are defined differently in international standards. This is why the recommended continuous current-carrying capacity of the fuses is a max. 80% of their nominal current according to DIN 72581/Part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

Information from the mini-automotive, blade-type fuse manufacturers			
Discontinuation	F ₁	F ₂	F ₃
Temp °C	%		
-25	14	0.877	
-20	12	0.885	
-15	11	0.893	
-10	10	0.901	
-5	9	0.909	
0	8	0.917	
5	7	0.925	
10	6	0.933	
15	5	0.941	
20	4	0.949	
25	3	0.957	
30	2	0.965	
35	1	0.973	
40	0	0.981	
45	-1	0.989	
50	-2	0.997	
55	-3	1.005	
60	-4	1.013	
65	-5	1.021	
70	-6	1.029	
75	-7	1.037	
80	-8	1.045	
85	-9	1.053	
90	-10	1.061	
95	-11	1.069	
100	-12	1.077	
105	-13	1.085	
110	-14	1.093	
115	-15	1.101	
120	-16	1.109	
125	-17	1.117	
130	-18	1.125	
135	-19	1.133	
140	-20	1.141	
145	-21	1.149	
150	-22	1.157	

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.