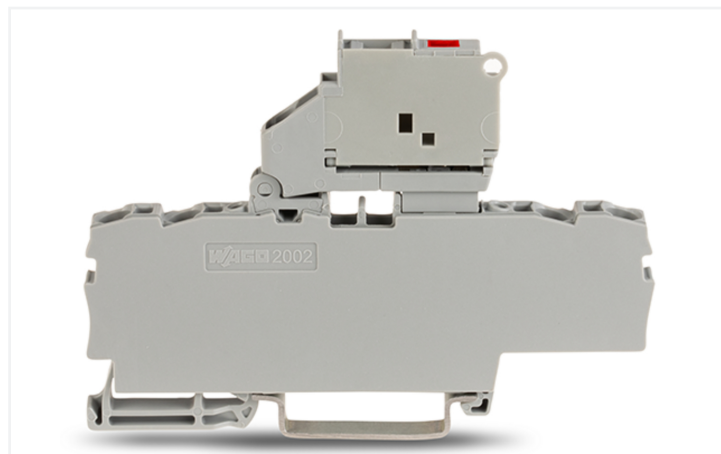
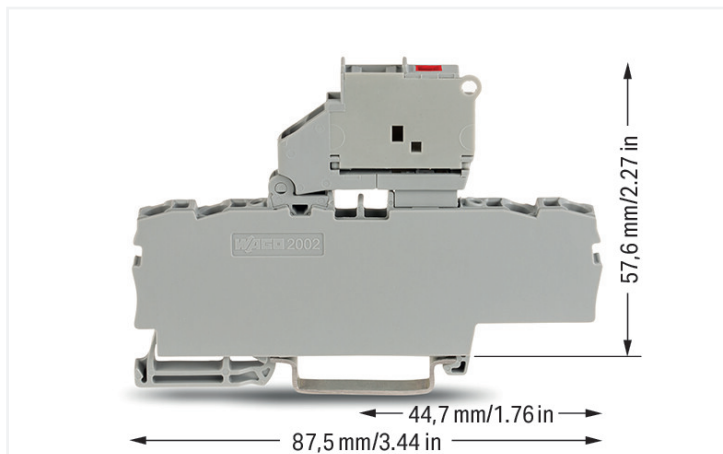


## Data Sheet | Item Number: 2002-1811/1000-867

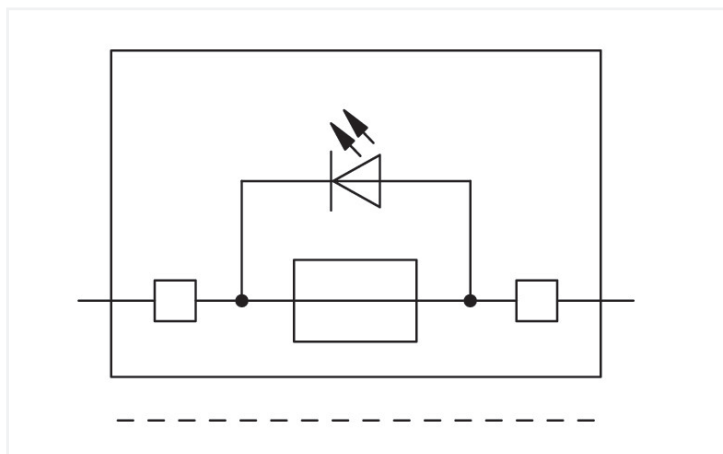
4-conductor fuse terminal block; with pivoting fuse holder; with end plate; for 5 x 20 mm miniature metric fuse; with blown fuse indication by LED; 120 V; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; Push-in CAGE CLAMP®; 2,50 mm<sup>2</sup>; gray



<https://www.wago.com/2002-1811/1000-867>



Color: ■ gray



### Fuse terminal block, 2002 Series, Push-in CAGE CLAMP®

Our fuse terminal block (item number 2002-1811/1000-867) makes connecting wires quick and easy. Ensure that the strip lengths are between 10 and 12 mm when connecting conductors to this fuse terminal block. Featuring conductor terminals along with Push-in CAGE CLAMP®, this product outperforms the competition. Push-in CAGE CLAMP® technology provides a universal connection solution for any type of conductor. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. This fuse terminal block is suitable for conductor cross sections ranging from 0.25 mm<sup>2</sup> to 4 mm<sup>2</sup>.

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	III	II
Pollution degree	3	2	2
Nominal voltage	250 V	-	-
Rated impulse withstand voltage	6 kV	-	-
Rated current	6.3 A	-	-

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	120 V	120 V	120 V
Rated current	10 A	10 A	10 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)	120 V
Rated current (Ex e II)	6.3 A

General information	
Fuse receptacle	pivoting
Fuse type	Cylindrical fuse; 5 x 20 mm
Number/type of diode/LED	Red LED
Wiring direction	Front-entry wiring

## Connection Data

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

## Ratings per IEC/EN – Notes

Ratings (note)	Electrical ratings are given by the fuse and blown fuse indication.
Rated current (note)	Leakage current in case of a blown fuse: LED 2 mA

Approvals per	CSA 22.2 No 158		
Use group	B	C	D
Rated voltage	-	120 V	-
Rated current	-	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.
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
Power loss $P_I$ max. short-circuit protection (individual arrangement)	2.5 W
Power loss $P_{loss}$ (max.) of fuse cartridge for short-circuit protection (block arrangement)	2.5 W

### Connection 1

Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm <sup>2</sup> / 22 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1 ... 2.5 mm <sup>2</sup> / 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)	<a href="#">Information on material specifications can be found here</a>
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.34 MJ
Weight	16.7 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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz
Acceleration	0.572g (highest test level used for all axes)

### Environmental Testing

Test duration per axis	5 h
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	DE
GTIN	4050821214236
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

CAS-No.	1303-86-2 1317-36-8 7439-92-1
REACH Candidate List Substance	Diboron trioxide Lead Lead monoxide
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(c)-I
SCIP notification number (Austria)	b189cade-2630-4bb2-833b-fe9ef581eab3
SCIP notification number (Belgium)	24c131bb-d4e2-43e5-94cf-ed9721c2ec16
SCIP notification number (Bulgaria)	0ab8206c-dd62-4e01-aafd-d7514ac57a1e
SCIP notification number (Czech Republic)	4f204e96-8581-4c91-9c9b-beff3a688d33
SCIP notification number (Denmark)	fc72f6ea-5a69-42ec-85b4-943cf49d45d6
SCIP notification number (Finland)	e6d04a6b-5f63-4307-b57e-b27f28282bae
SCIP notification number (France)	a6282b71-f2e6-42ee-9890-f3cf0347833e
SCIP notification number (Germany)	f6881469-afe7-4c5f-8673-eda54af83c88
SCIP notification number (Hungary)	a4030777-8598-4332-b7fb-40e0fa475228
SCIP notification number (Italy)	d399a058-2672-4bfa-a48f-de28b080155c
SCIP notification number (Netherlands)	318071ca-f8d9-421f-9077-54a7955d6bca
SCIP notification number (Poland)	7d64e643-4975-4ad0-a104-f5d9293a69c4

**Environmental Product Compliance**

SCIP notification number (Romania)	ca315eef-ba05-4dbe-9b56-df4e6db9215e
SCIP notification number (Sweden)	6924213d-1a68-4565-96ee-ab6b9f9ad63c

**Approvals / Certificates**

**General approvals**



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-8054
DEKRA DEKRA Certification B.V.	EN 60947	71-149763
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 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
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 2002-1811/1000-867



**Documentation**

Bid Text			
2002-1811/1000-867	24.04.2019	xml 4.28 KB	
2002-1811/1000-867	23.04.2019	docx 15.67 KB	

**CAD/CAE-Data**

CAD data	
2D/3D Models 2002-1811/1000-867	

CAE data	
EPLAN Data Portal 2002-1811/1000-867	
WSCAD Universe 2002-1811/1000-867	
ZUKEN Portal 2002-1811/1000-867	

**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; 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 Ferrule

### 1.2.2.1 Ferrule



**Item No.: 216-241**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup>; 5 pieces/strip; light gray



**Item No.: 2002-172**

Insulation stop; 0.75 - 1 mm<sup>2</sup>; 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

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; multicoloured

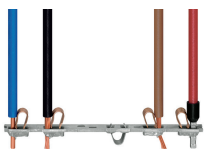


**Item No.: 210-720**

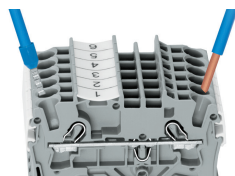
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

## Installation Notes

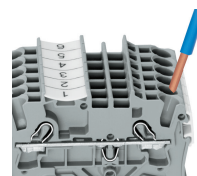
### Conductor termination



All conductor types at a glance

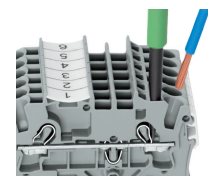


Push-in termination of solid and ferruled conductors



**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.

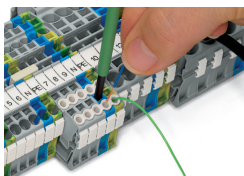


**Inserting a conductor via operating tool:**

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.

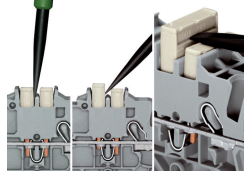
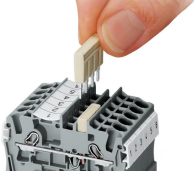
**Advantage:**

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

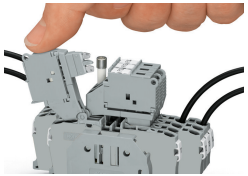


Insert push-in type jumper bar and push down until it hits backstop.

**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.

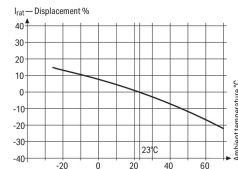
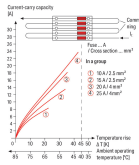
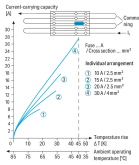


Fuse terminal blocks with a width of 6.2 mm/0.244 in can be assembled adjacently. If there is no adjacent fuse terminal block at the end of the assembly, an end plate must be used.



**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



Information from the mini-automotive, blade-type fuse manufacturers

Operating Temp. °C	%	F <sub>1</sub>
-25	14	0.877
-20	13	0.865
-15	12	0.853
-10	11	0.841
-5	10	0.829
0	9	0.817
5	8	0.805
10	7	0.793
15	6	0.781
20	5	0.769
25	4	0.757
30	3	0.745
35	2	0.733
40	1	0.721
45	0	0.709
50	-1	0.697
55	-2	0.685
60	-3	0.673
65	-4	0.661
70	-5	0.649
75	-6	0.637
80	-7	0.625
85	-8	0.613
90	-9	0.601
95	-10	0.589
100	-11	0.577
105	-12	0.565
110	-13	0.553
115	-14	0.541
120	-15	0.529
125	-16	0.517
130	-17	0.505
135	-18	0.493
140	-19	0.481
145	-20	0.469
150	-21	0.457
155	-22	0.445

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

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

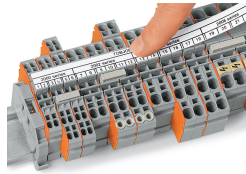
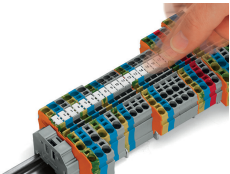
**Application Notes on Terminal Blocks for Glass Cartridge Fuses**

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.