



Surge Protection Barrier

M-LB-2.255.T3.D

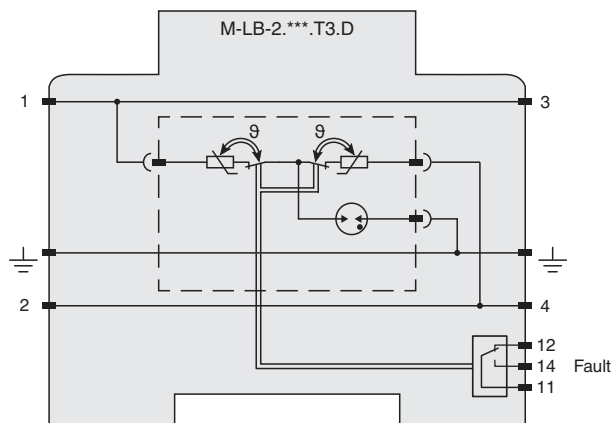
- Surge protection for 2 supply lines
- Type 3 acc. to EN 61643-11
- Nominal voltage 230 V AC
- Pre-wired unit
- Operating state and fault indication of every protected line
- Fault indication output
- DIN rail mountable



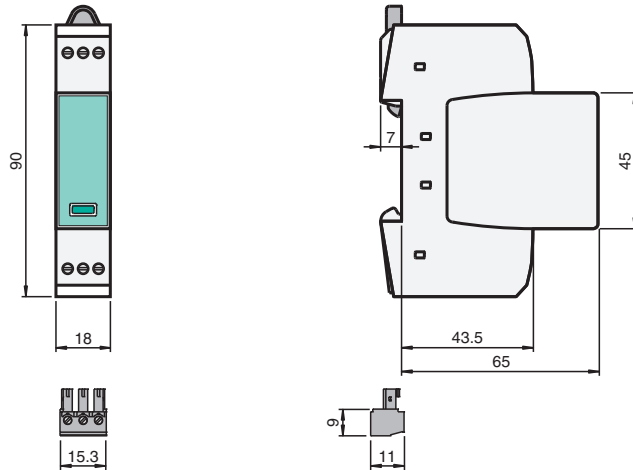
Function

This device is a modular surge protection barrier (type 3 acc. to EN 61643-11) with error message output (floating changeover contact). The complete device consists of a base module and plug-in protection modules and is ready for installation. The base part offers multifunctional terminals for connection of conductors and busbars. Every protection module is locked in the base module and can be changed without tools via release buttons.

Wiring Diagram



Dimensions



Technical Data

General specifications

Device type	Type 3 acc. to EN 61643-11 Class III acc. to IEC 61643-11	
Number of protected supply lines		2
Suitable components	protection module M-LB-2.255.T3.M	

Electrical specifications

Nominal voltage	U_N	230 V AC, 50 ... 60 Hz
Maximum continuous operating voltage	U_c	255 V AC, 50 ... 60 Hz 255 V DC
Temporary over-voltage	U_t	335 V/5 s (TOV withstand) (L-N) 400 V/5 s (TOV withstand) (L/N-PE) 1200 V+ U_{cs} /200 ms (TOV safe failure) (L+N-PE) 5 s (TOV withstand)
Nominal load current	I_L	25 A
Nominal discharge current (8/20 μ s)	I_n	3 kA
Max. surge current (8/20 μ s)	I_{max}	5 kA
Voltage protection level	U_p	max. 1.25 kV (L-N) max. 1.5 kV (L/N-PE)
Reaction time	t_A	max. 25 ns (L-N) max. 100 ns (L/N-PE)
Short-circuit-proof	6 kA _{eff} at max. mains-side overcurrent protection	
Overcurrent protection	max. 25 A gL/gG (B 25 A) , mains-side	

Fault indication output

Connection	terminals 11, 12, 14
Output	volt-free change-over contact
Switch power	AC: 250 V / 0.5 A DC: 250 V/0.1 A; 125 V/0.2 A; 75 V/0.5 A; 24 V/0.5 A

Indicators/settings

Display elements	status display operating state (green) fault indication (red)
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Directive conformity

Low voltage	
Directive 2014/35/EU	EN 61643-11:2012

Conformity

Degree of protection	IEC 60529:2013
Shock resistance	EN 60068-2:2010
Vibration resistance	EN 60068-2:2010

Operating conditions

Installation conditions	
Mounting location	indoor

Release date: 2026-08-21 Date of issue: 2026-08-21 Filename: 70174647_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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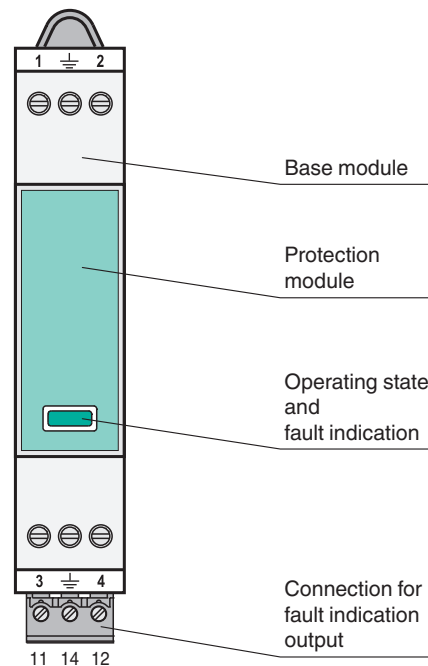
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Technical Data

Ambient conditions		
Ambient temperature		-40 ... 80 °C (-40 ... 176 °F)
Relative humidity		5 ... 95 %
Mechanical specifications		
Degree of protection		IP20
Core cross section		- min. 0.5 mm ² solid/flexible - max. 4 mm ² stranded/2.5 mm ² flexible
Material		
Housing		thermoplastic, color grey , UL 94 V-0
Mass		approx. 120 g
Dimensions		18 x 90 x 72 mm (0.7 x 3.6 x 2.8 inch) (W x H x D) , 1 TE acc. to DIN 43880
Mounting		on 35 mm DIN mounting rail acc. to EN 60715:2001
Data for application in connection with hazardous areas		
Certificate		TÜV 22 ATEX 8932 X
Marking		Ⓔ II 3G Ex ec IIC T4 Gc
Directive conformity		
Directive 2014/34/EU		EN IEC 60079-0:2018 , EN IEC 60079-7:2015+A1:2018
International approvals		
UL approval		E346845
IECEx approval		
IECEx certificate		IECEx TUR 22.0082X
IECEx marking		Ex ec IIC T4 Gc
General information		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com .

Assembly

Front view



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