



## Surge Protection Barrier

### M-LB-2.255.T3.D

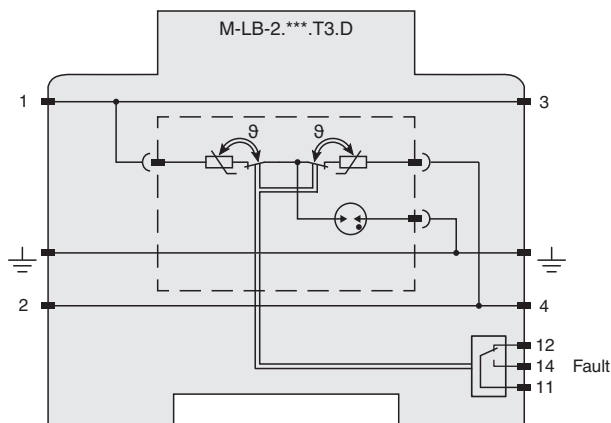
- Surge protection for 2 supply lines
- Type 3 acc. to EN 61643-11
- Nominal voltage 230 V AC
- Pre-wired unit
- Operating state and fault indication of every protected line
- Fault indication output
- DIN rail mountable



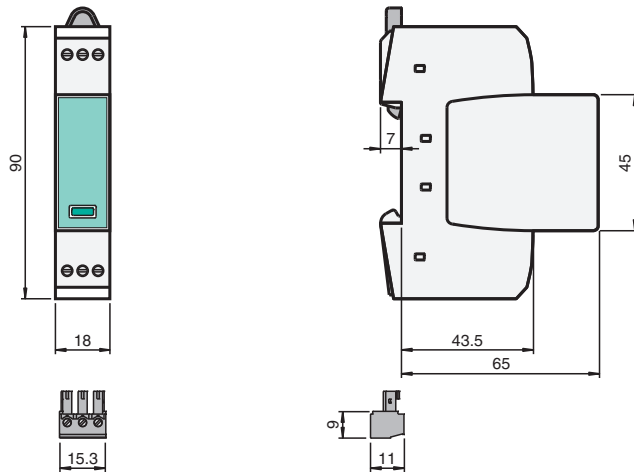
### Function

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.

### Connection



## Dimensions



## Technical Data

General specifications		
Device type		type 3 acc. to EN 61643-11:2013 class III acc. to IEC 61643-1:2011
Number of protected supply lines		2
Suitable components		protection module M-LB-2.255.T3.M
Electrical specifications		
Nominal voltage		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 $\mu$ s)	$I_n$	3 kA
Max. surge current (8/20 $\mu$ 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 <sub>eff</sub> 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)
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: 2022-11-09 Date of issue: 2022-11-09 Filename: 263958\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

 PEPPERL+FUCHS

## 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 <sup>2</sup> solid/flexible - max. 4 mm <sup>2</sup> stranded/2.5 mm <sup>2</sup> 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
General information	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

## Assembly

### Front view

