



Surge Protection Barrier

M-LB-2.275TT.D

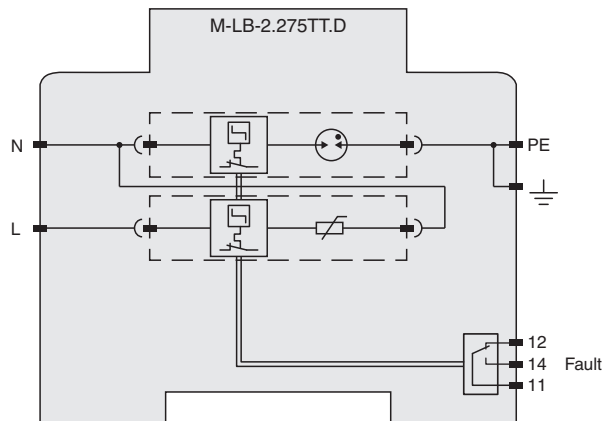
- Surge protection for 2 supply lines
- Type 2 acc. to EN 61643-11
- For TT and TN systems (230 V AC)
- Pre-wired unit
- Operating state and fault indication of every protected line
- Fault indication output
- DIN rail mountable



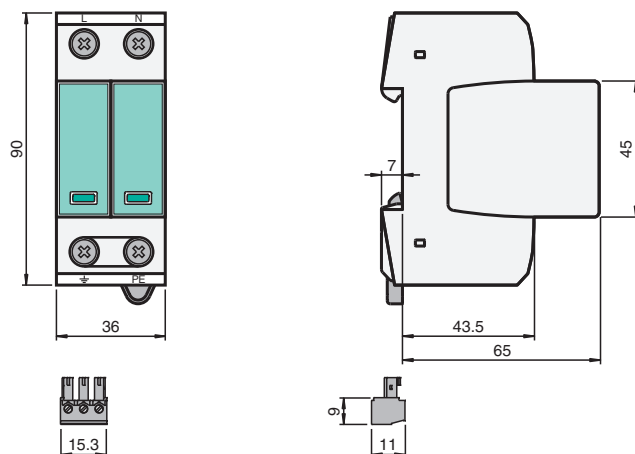
Function

This device is a modular surge protection barrier (type 2 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. Every protection module is locked in the base module and can be changed without tools via release buttons.

Connection



Dimensions



Technical Data

Search characteristics

Network configuration	TT
-----------------------	----

General specifications

Device type	type 2 acc. to EN 61643-11 class II acc. to IEC 61643-1
Number of protected supply lines	2
Suitable components	protection module M-LB-1.275.M protection module M-LB-1.NPE.M

Electrical specifications

Nominal voltage	230 V AC, 50 ... 60 Hz
Maximum continuous operating voltage	U_c 275 V AC, 50 ... 60 Hz (L-N) 255 V AC, 50 ... 60 Hz (N-PE)
Temporary over-voltage	U_t 335 V/5 s (TOV withstand) (L-N) 1200 V/200 ms (TOV withstand) (N-PE)
Nominal discharge current (8/20 μ s)	I_n 20 kA
Max. surge current (8/20 μ s)	I_{max} 40 kA
Total discharge current (8/20 μ s)	I_{total} 12 kA (N-PE)
Voltage protection level	U_p max. 1.25 kV (L-N) max. 1 kV at 5 kA (L-N) ≤ 1.5 kV (N-PE)
Reaction time	t_A max. 25 ns (L-N) max. 100 ns (N-PE)
Follow current extinguishing capability	I_{fi} 100 A _{eff} (N-PE)
Short-circuit-proof	50 kA _{eff}
Overcurrent protection	max. 125 A gG, 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

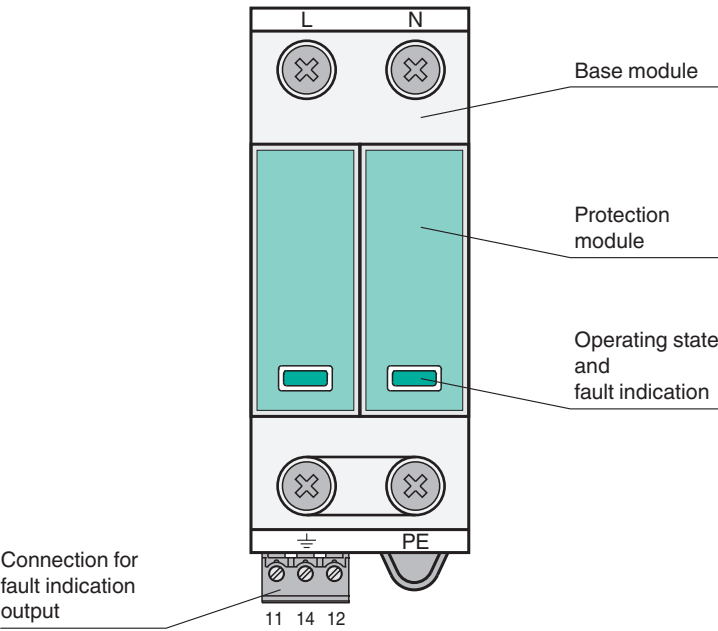
Degree of protection	IEC 60529
Shock resistance	EN 60068-2

Technical Data

Vibration resistance	EN 60068-2
Ambient conditions	
Ambient temperature	-40 ... 80 °C (-40 ... 176 °F)
Relative humidity	5 ... 95 %
Mechanical specifications	
Degree of protection	IP20
Core cross section	- min. 1.5 mm ² solid/flexible - max. 35 mm ² stranded/25 mm ² flexible - max. 1.5 mm ² solid/flexible (for remote signalling contact)
Material	
Housing	thermoplastic, color grey , UL 94 V-0
Mass	approx. 240 g
Dimensions	36 x 90 x 72 mm (1.4 x 3.6 x 2.8 inch) (W x H x D) , 2 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 www.pepperl-fuchs.com .

Assembly

Front view



Accessories

	M-LB-1.NPE.M	Protection Module for Surge Protection Barrier
	M-LB-1.275.M	Protection Module for Surge Protection Barrier

Release date: 2022-01-13 Date of issue: 2022-01-13 Filename: 235908_eng.pdf