

Surge Protection Barrier

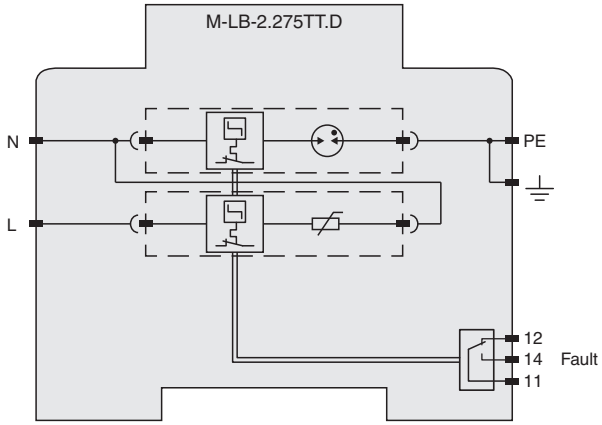
M-LB-2.275TT.D

- 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

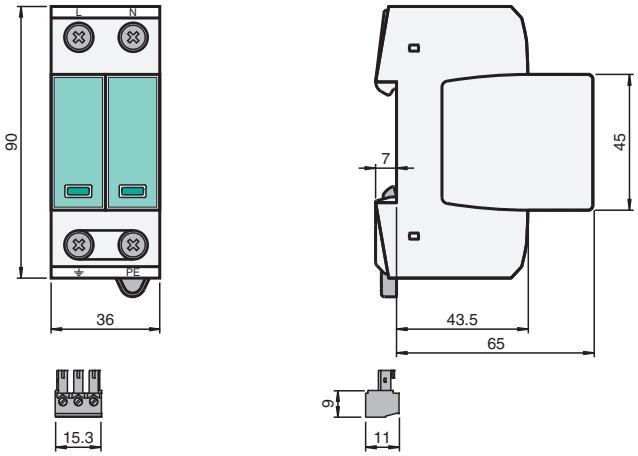
This device is a modular surge protection barrier (type 2 acc. to EN 61643-11) with error message output (floating changeover contact).
The complete device consists of a base module and plug-in protection modules and is ready for installation.
Every protection module is locked in the base module and can be changed without tools via release buttons.

Wiring Diagram



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Dimensions



Technical Data

General specifications		
Device type		Type 2 acc. to EN 61643-11 Class II acc. to IEC 61643-11
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	U_N	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 µs)	I_n	20 kA
Max. surge current (8/20 µs)	I_{max}	40 kA
Total discharge current (8/20 µs)	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
Vibration resistance		EN 60068-2
Ambient conditions		

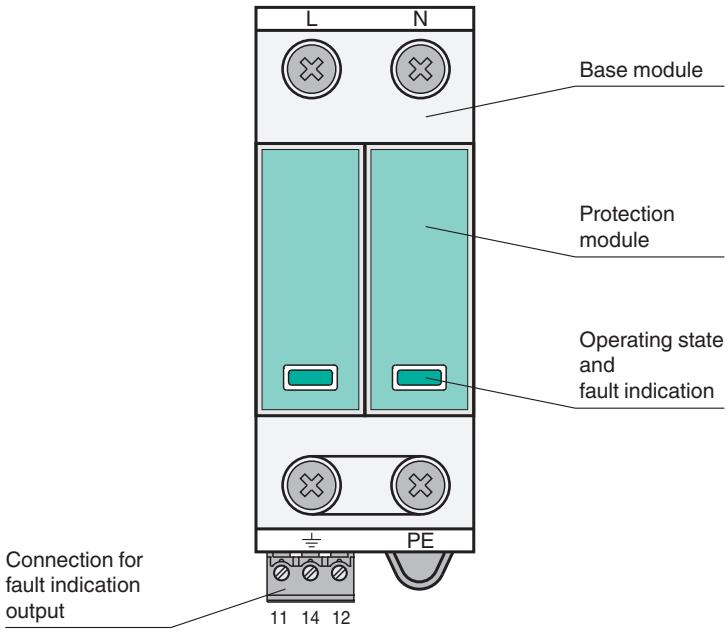
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Technical Data

Ambient temperature	-40 ... 80 °C (-40 ... 176 °F)
Relative humidity	5 ... 95 %
Mechanical specifications	
Degree of protection	IP20
Core cross section	- min. 1.5 mm² solid/flexible - max. 35 mm² stranded/25 mm² flexible - max. 1.5 mm² 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
Data for application in connection with hazardous areas	
Certificate	TÜV 22 ATEX 8931 X
Marking	⟨Ex⟩ 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 22.0081X
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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