

# Surge Protection Barrier

## M-LB-2.275TT.D

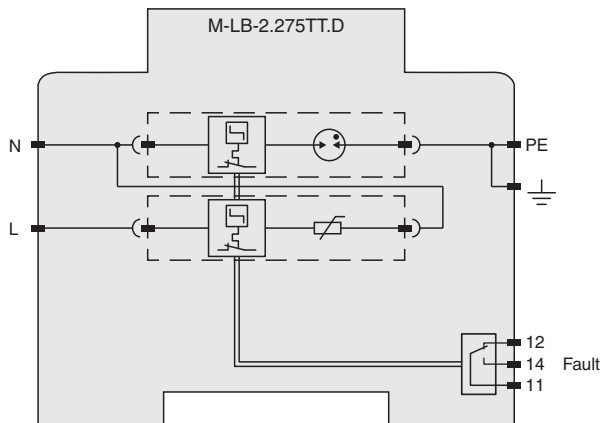
- Surge protection for 2 supply lines
- Type 2 acc. to EN 61643-11
- For TT and TN systems (230 V AC)
- Pre-wired unit
- Operating state and fault indication of every protected line
- Fault indication output
- DIN rail mountable



### 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



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

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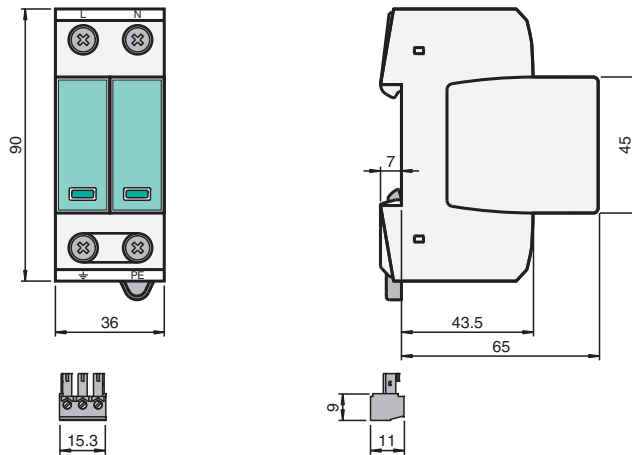
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 PEPPERL+FUCHS

## Dimensions



## Technical Data

<b>Search characteristics</b>	
Network configuration	TT
<b>General specifications</b>	
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
<b>Electrical specifications</b>	
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 $\mu$ s)	$I_n$ 20 kA
Max. surge current (8/20 $\mu$ s)	$I_{max}$ 40 kA
Total discharge current (8/20 $\mu$ 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) $\leq$ 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 <sub>eff</sub> (N-PE)
Short-circuit-proof	50 kA <sub>eff</sub>
Overcurrent protection	max. 125 A gG , mains-side
<b>Fault indication output</b>	
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
<b>Indicators/settings</b>	
Display elements	status display operating state (green) fault indication (red)
<b>Directive conformity</b>	
Low voltage	
Directive 2014/35/EU	EN 61643-11:2012
<b>Conformity</b>	
Degree of protection	IEC 60529
Shock resistance	EN 60068-2

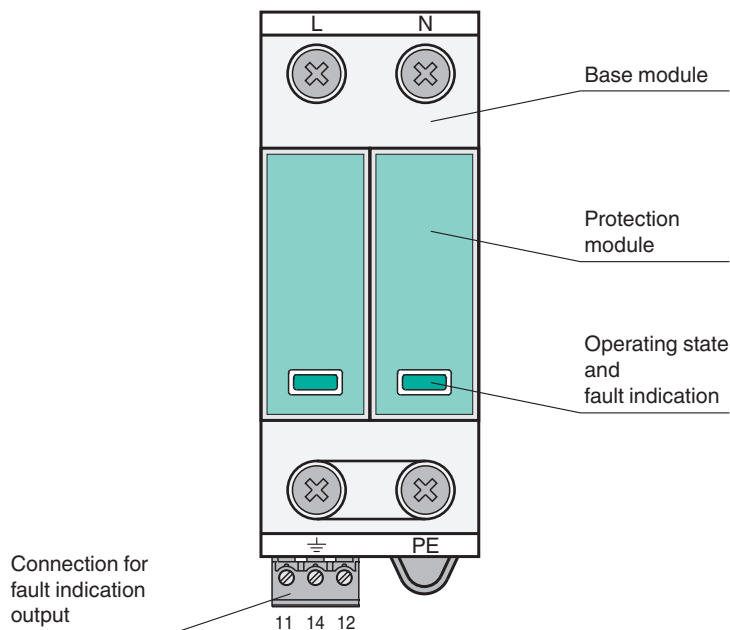
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## Technical Data



Vibration resistance	EN 60068-2
<b>Ambient conditions</b>	
Ambient temperature	-40 ... 80 °C (-40 ... 176 °F)
Relative humidity	5 ... 95 %
<b>Mechanical specifications</b>	
Degree of protection	IP20
Core cross section	- min. 1.5 mm <sup>2</sup> solid/flexible - max. 35 mm <sup>2</sup> stranded/25 mm <sup>2</sup> flexible - max. 1.5 mm <sup>2</sup> solid/flexible (for remote signalling contact)
<b>Material</b>	
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
<b>General information</b>	
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



## Accessories

	<b>M-LB-1.NPE.M</b>	Protection Module for Surge Protection Barrier
	<b>M-LB-1.275.M</b>	Protection Module for Surge Protection Barrier