

# Surge Protection Barrier

## M-LB-1.150.D

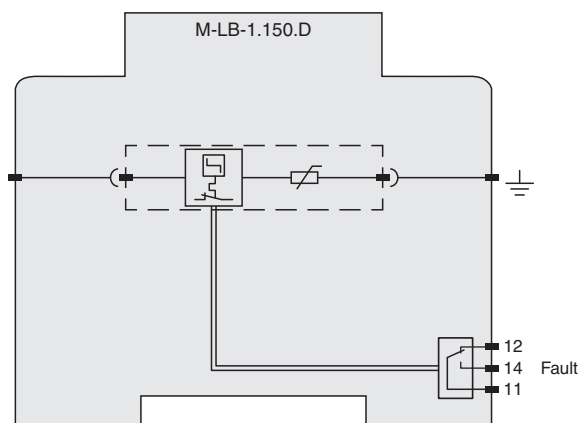
- Surge protection for 1 supply line
- Type 2 acc. to EN 61643-11
- For 120 V
- Pre-wired unit
- Operating state and fault indication of every protected line
- Fault indication output
- DIN rail mountable



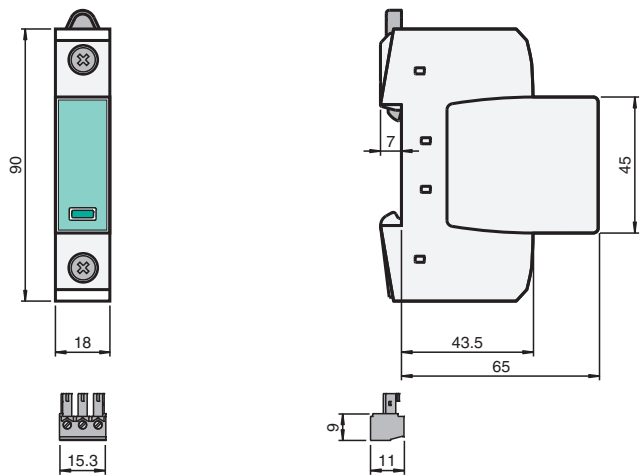
### Function

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

|                                      |  |                                                                           |
|--------------------------------------|--|---------------------------------------------------------------------------|
| General specifications               |  |                                                                           |
| Device type                          |  | type 2 acc. to EN 61643-11<br>class II acc. to IEC 61643-1                |
| Number of protected supply lines     |  | 1                                                                         |
| Suitable components                  |  | protection module M-LB-1.150.M                                            |
| Electrical specifications            |  |                                                                           |
| Nominal voltage                      |  | 120 V AC, 50 ... 60 Hz                                                    |
| Maximum continuous operating voltage |  | U <sub>c</sub> 150 V AC, 50 ... 60 Hz<br>200 V DC                         |
| Temporary over-voltage               |  | U <sub>t</sub> 175 V / 5 s (TOV withstand)                                |
| Nominal discharge current (8/20 μs)  |  | I <sub>n</sub> 15 kA                                                      |
| Max. surge current (8/20 μs)         |  | I <sub>max</sub> 40 kA                                                    |
| Voltage protection level             |  | U <sub>p</sub> max. 0.7 kV<br>max. 0.55 kV at 5 kA                        |
| Reaction time                        |  | t <sub>A</sub> max. 25 ns                                                 |
| Short-circuit-proof                  |  | 50 kA <sub>eff</sub>                                                      |
| 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<br>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<br>operating state (green)<br>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                   |  |                                                                           |
| Ambient temperature                  |  | -40 ... 80 °C (-40 ... 176 °F)                                            |
| Relative humidity                    |  | 5 ... 95 %                                                                |
| Mechanical specifications            |  |                                                                           |
| Degree of protection                 |  | IP20                                                                      |

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## Technical Data

|                            |                                                                                                                                                                                                                                                    |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Core cross section         | <ul style="list-style-type: none"> <li>- min. 1.5 mm<sup>2</sup> solid/flexible</li> <li>- max. 35 mm<sup>2</sup> stranded/25 mm<sup>2</sup> flexible</li> <li>- max. 1.5 mm<sup>2</sup> solid/flexible (for remote signalling contact)</li> </ul> |
| Material                   |                                                                                                                                                                                                                                                    |
| Housing                    | thermoplastic, color grey , UL 94 V-0                                                                                                                                                                                                              |
| Mass                       | approx. 240 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                                                                                                                                                                                                   |
| <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

