



# Surge Protection Barrier

## M-LB-2.150.T3.D

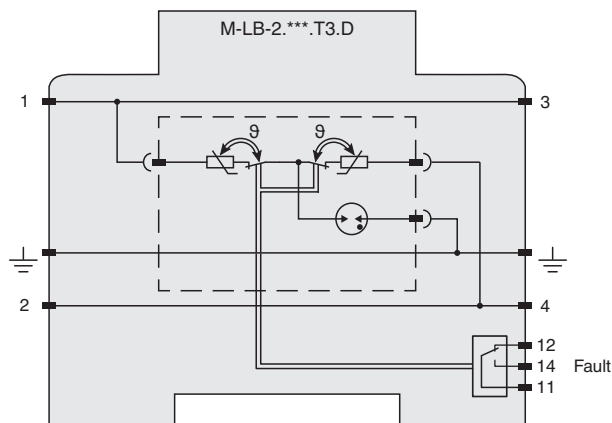
- Surge protection for 2 supply lines
- Type 3 acc. to EN 61643-11
- Nominal voltage 120 V AC
- Pre-wired unit
- Operating state and fault indication of every protected line
- Fault indication output
- DIN rail mountable



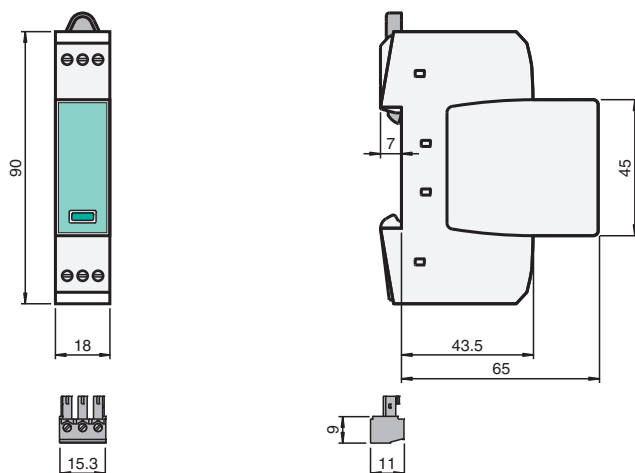
### Function

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<br>class III acc. to IEC 61643-1:2011 |   |
| Number of protected supply lines |                                                                       | 2 |
| Suitable components              | protection module M-LB-2.150.T3.M                                     |   |

### Electrical specifications

|                                          |           |                                                               |
|------------------------------------------|-----------|---------------------------------------------------------------|
| Nominal voltage                          |           | 120 V AC, 50 ... 60 Hz                                        |
| Maximum continuous operating voltage     | $U_c$     | 150 V AC, 50 ... 60 Hz<br>150 V DC                            |
| Nominal load current                     | $I_L$     | 25 A                                                          |
| Nominal discharge current (8/20 $\mu$ s) | $I_n$     | 2 kA                                                          |
| Max. surge current (8/20 $\mu$ s)        | $I_{max}$ | 4 kA                                                          |
| Voltage protection level                 | $U_p$     | max. 640 V (L-N)<br>max. 800 V (L/N-PE)                       |
| Reaction time                            | $t_A$     | max. 25 ns (L-N)<br>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<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 60529:2013  |
| Shock resistance     |  | EN 60068-2:2010 |
| Vibration resistance |  | EN 60068-2:2010 |

### Operating conditions

|                         |  |        |
|-------------------------|--|--------|
| Installation conditions |  |        |
| Mounting location       |  | indoor |

### Ambient conditions

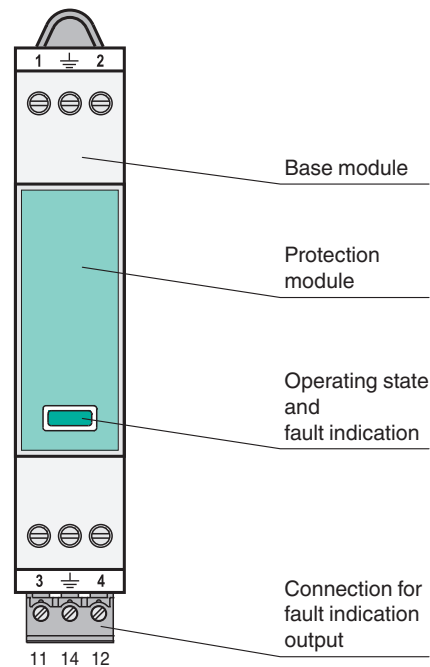
|                     |                                |  |
|---------------------|--------------------------------|--|
| Ambient temperature | -40 ... 80 °C (-40 ... 176 °F) |  |
|---------------------|--------------------------------|--|

Technical Data

|                                  |                                                                                                                                                                                                 |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Relative humidity                | 5 ... 95 %                                                                                                                                                                                      |
| <b>Mechanical specifications</b> |                                                                                                                                                                                                 |
| Degree of protection             | IP20                                                                                                                                                                                            |
| Core cross section               | - min. 0.5 mm <sup>2</sup> solid/flexible<br>- 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                                                                                                                                                |
| <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



Release date: 2022-11-09 Date of issue: 2022-11-09 Filename: 263957\_eng.pdf