

# Lightning and Overvoltage Protection

## ProBloc B(R) 100 (4+0)

### Class I • Class II • Type 1 • Type 2



Location of Use: Main Distribution Boards  
 Network Systems: TN-S  
 Mode of Protection: L-PE, N-PE  
 IEC/EN Category: Class I+II / Type 1+2  
 Housing: Compact Design  
 Compliance: IEC 61643-11:2011  
 EN 61643-11:2012

## Technical Data

### ProBloc B(R) 100/xxx (4+0)

|                                            |             | 150      | 275*             | 320*     |
|--------------------------------------------|-------------|----------|------------------|----------|
| <b>IEC Electrical</b>                      |             |          |                  |          |
| Nominal AC Voltage (50/60 Hz)              | $U_o$       | 120V     | 230V             | 230V     |
| Maximum Continuous Operating Voltage (AC)  | $U_c$       | 150V     | 275V             | 320V     |
| Nominal Discharge Current (8/20 $\mu$ s)   | $I_n$       |          | 25 kA            |          |
| Maximum Discharge Current (8/20 $\mu$ s)   | $I_{max}$   |          | 100 kA           |          |
| Impulse Discharge Current (10/350 $\mu$ s) | $I_{imp}$   |          | 25 kA            |          |
| Total Discharge Current (10/350 $\mu$ s)   | $I_{total}$ |          | 100 kA           |          |
| Specific Energy                            | W/R         |          | 156 kJ/ $\Omega$ |          |
| Charge                                     | Q           |          | 12.5 As          |          |
| Voltage Protection Level                   | $U_p$       | < 1.0 kV | < 1.5 kV         | < 1.5 kV |
| Response Time                              | $t_A$       |          | < 25 ns          |          |
| Overcurrent Protection (max)               |             |          | 250 A gG         |          |
| Short-Circuit Current Rating (AC)          | $I_{SCCR}$  |          | 50 kA            |          |
| TOV Withstand 5s                           | $U_T$       | 174V     | 334V             | 334V     |
| TOV Safe Fail 120min                       | $U_T$       | 229V     | 438V             | 438V     |
| Number of Ports                            |             |          | 1                |          |

### Mechanical & Environmental

|                                 |           |                                                                    |  |  |
|---------------------------------|-----------|--------------------------------------------------------------------|--|--|
| Temperature Range               | $T_a$     | -40 °F to +185 °F [-40 °C to +85 °C]                               |  |  |
| Permissible Humidity            | RH        | 5%...95%                                                           |  |  |
| Terminal Screw Torque           | $M_{max}$ | 26.5 lbf-in [3.0 Nm]                                               |  |  |
| Conductor Cross Section (max)   |           | 2 AWG (Solid, Stranded) / 4 AWG (Flexible)                         |  |  |
|                                 |           | 35mm <sup>2</sup> (Solid, Stranded) / 25mm <sup>2</sup> (Flexible) |  |  |
| Mounting                        |           | 35 mm DIN Rail, EN 60715                                           |  |  |
| Degree of Protection            |           | IP 20 (built-in)                                                   |  |  |
| Housing Material                |           | Thermoplastic: Extinguishing Degree UL 94 V-0                      |  |  |
| Thermal Protection              |           | Yes                                                                |  |  |
| Fault Indication                |           | Red Flag                                                           |  |  |
| Remote Contacts (RC)            |           | Optional                                                           |  |  |
| RC Switching Capacity           |           | AC: 250V/0.5 A; 125V/3 A                                           |  |  |
| RC Terminal Cross Section (max) |           | 1.5mm <sup>2</sup> (Solid) / 16 AWG (Solid)                        |  |  |
| RC Terminal Screw Torque        | $M_{max}$ | 2.2 lbf-in [0.25 Nm]                                               |  |  |

### Order Information

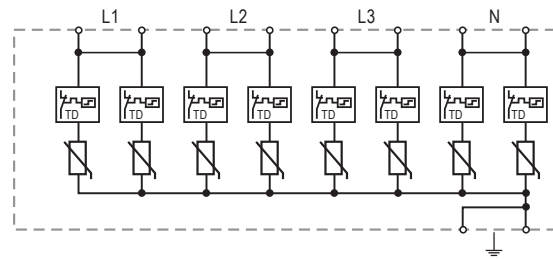
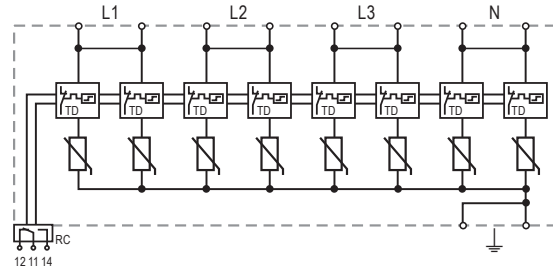
| Order Code                                      | 150     | 275*    | 320*    |
|-------------------------------------------------|---------|---------|---------|
| ProBloc B 100/xxx (4+0)                         | 56.0592 | 56.0594 | 56.0596 |
| ProBloc BR 100/xxx (4+0) (with remote contacts) | 56.0593 | 56.0595 | 56.0597 |

\*OVE Certified

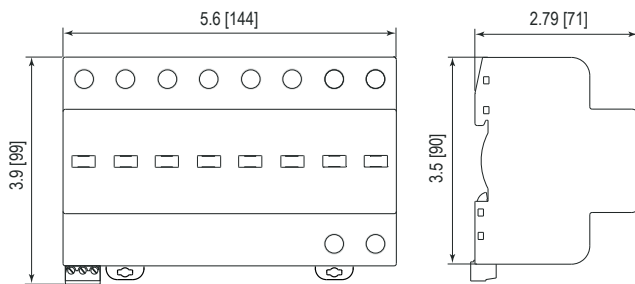
## Internal Configuration

## Legend

|                                                                                   |                                     |
|-----------------------------------------------------------------------------------|-------------------------------------|
| <i>L</i>                                                                          | Line Conductor Terminal             |
| <i>N</i>                                                                          | Neutral Conductor Terminal          |
|  | PE Conductor Terminal               |
| <i>RC</i>                                                                         | Remote Contacts Terminal (Optional) |
| <i>TD</i>                                                                         | Thermal Disconnect                  |



## Complete Unit



## Single Unit Dimensions &amp; Packaging

| ProBloc B 100/xxx (4+0)          |        | 150                                   | 275*  | 320*  |
|----------------------------------|--------|---------------------------------------|-------|-------|
| Weight                           | pounds | 2.028                                 | 2.469 | 2.469 |
|                                  | grams  | 920                                   | 1120  | 1120  |
| DIN 43880 Dimension              |        | 8 TE / 5.66" [144]                    |       |       |
| Packaging Dimensions (H x W x L) |        | 3.1 x 4.4 x 11.7" [79 x 112 x 298 mm] |       |       |
| Standard Order Quantity          |        | 2 Units                               |       |       |
| ProBloc BR 100/xxx (4+0)         |        | 150                                   | 275*  | 320*  |
| Weight                           | pounds | 2.182                                 | 2.623 | 2.623 |
|                                  | grams  | 990                                   | 1190  | 1190  |
| DIN 43880 Dimension              |        | 8 TE / 5.66" [144]                    |       |       |
| Packaging Dimensions (H x W x L) |        | 3.1 x 4.4 x 11.7" [79 x 112 x 298 mm] |       |       |
| Standard Order Quantity          |        | 2 Units                               |       |       |

inches  
[mm]

Information contained in this document is subject to  
change at any time without notice.

