

Lightning and Overvoltage Protection

SafeBloc B(R) 25 (1+0) TCG

Class I • Class II • Type 1 • Type 2



Location of Use: Main Distribution Boards
 Network Systems: TN-S, TN-C
 Mode of Protection: L-PE, N-PE, L-PEN, L-N
 IEC/EN Category: Class I+II / Type 1+2
 Safety: High TOV Immunity
 Technology: Hybrid
 Leakage Current Free: Yes
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

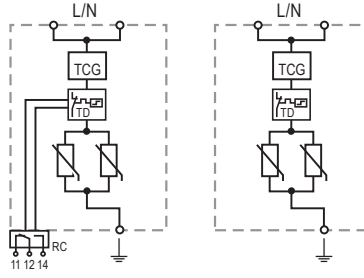
| SafeBloc B(R) 25/xxx (1+0) TCG | 150 | 275* |
|---|------------|--|
| IEC Electrical | | |
| Nominal AC Voltage (50/60 Hz) | U_o | 120V / 230V |
| Maximum Continuous Operating Voltage (AC) | U_c | 150V / 275V |
| Nominal Discharge Current (8/20 μ s) | I_n | 25 kA |
| Maximum Discharge Current (8/20 μ s) | I_{max} | 100 kA |
| Impulse Discharge Current (10/350 μ s) | I_{imp} | 25 kA |
| Specific Energy | W/R | 156 kJ/ Ω |
| Charge | Q | 12.5 As |
| Voltage Protection Level | U_p | < 1.2 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 120min | U_T | 229V / 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 ² (Solid, Stranded) / 25mm ² (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/0.5A; 125V/3A |
| RC Terminal Cross Section (max) | | 1.5mm ² (Solid) / 16 AWG (Solid) |
| RC Terminal Screw Torque | M_{max} | 2.2 lbf-in [0.25 Nm] |
| Order Information | | |
| Order Code | 150 | 275* |
| SafeBloc B 25/xxx (1+0) TCG | 54.0537 | 54.0539 |
| SafeBloc BR 25/xxx (1+0) TCG (with remote contacts) | 54.0538 | 54.0540 |

*OVE Certified

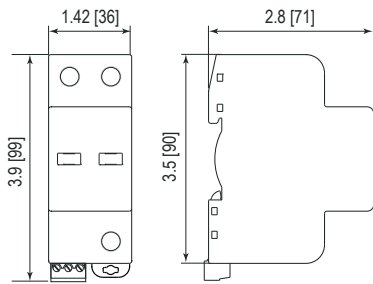
Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⏏ PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TCG Thermal Control Function with No Leakage
- TD Thermal Disconnecter



Complete Unit



Single Unit Dimensions & Packaging

| | | 150 | 275* |
|-------------------------------------|----------------|---------------------------------------|------------|
| SafeBloc B 25/xxx (1+0) TCG | | | |
| Weight | pounds [grams] | .606 [275] | .716 [325] |
| DIN 43880 Dimension | | 2 TE / 1.42" [36] | |
| Packaging Dimensions (H x W x L) | | 3.1 x 4.4 x 11.7" [79 x 112 x 298 mm] | |
| Standard Order Quantity | | 7 Units | |
| SafeBloc BR 25/xxx (1+0) TCG | | | |
| Weight | pounds [grams] | .617 [280] | .727 [330] |
| DIN 43880 Dimension | | 2 TE / 1.42" [36] | |
| Packaging Dimensions (H x W x L) | | 3.1 x 4.4 x 11.7" [79 x 112 x 298 mm] | |
| Standard Order Quantity | | 7 Units | |

inches
[mm]

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

