

Compact Multi-pole SPD
SafeBloc B(R) 25 (1+1) TCG
 Class I • Class II • Type 1 • Type 2



Location of Use: Main Distribution Boards
 Network Systems: TN-S, TT
 Mode of Protection: L-N, N-PE
 Surge Ratings: $I_{imp} = 12.5 \text{ kA} / 50 \text{ kA} (10/350 \mu\text{s})$
 $I_n = 20 \text{ kA} / 50 \text{ kA} (8/20 \mu\text{s})$
 IEC/EN Category: Class I, II / Type 1, 2
 Protective Elements: High Energy MOV and GDT
 Safety: High TOV Immunity
 Leakage Current: No Leakage Current
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

SafeBloc B(R) 25/xxx (1+1) TCG

150

275*

Electrical

| | | | |
|---|------------------------|------------------------------------|---------------------|
| Nominal AC Voltage (50/60 Hz) | U_o | 120V | 230V |
| Maximum Continuous Operating Voltage (AC) | (L-N) U_c | 150V | 275V |
| | (N-PE) U_c | 255V | |
| Nominal Discharge Current (8/20 μs) | (L-N)/(N-PE) I_n | 20 kA / 50 kA | |
| Maximum Discharge Current (8/20 μs) | (L-N)/(N-PE) I_{max} | 50 kA / 100 kA | |
| Impulse Discharge Current (10/350 μs) | (L-N)/(N-PE) I_{imp} | 12.5 kA / 50 kA | |
| Total Discharge Current (10/350 μs) | I_{total} | 25 kA | |
| Specific Energy | (L-N)/(N-PE) W/R | 39 kJ/ Ω / 625 kJ/ Ω | |
| Charge | (L-N)/(N-PE) Q | 6.25 As / 25 As | |
| Voltage Protection Level | (L-N)/(N-PE) U_p | < 1.2 kV / < 1.5 kV | < 1.5 kV / < 1.5 kV |
| Follow Current Interrupt Rating | (N-PE) I_{fi} | 100 A _{RMS} | |
| Response Time | (L-N)/(N-PE) t_A | < 25 ns / < 100 ns | |
| Thermal Protection | (L-N)/(N-PE) | Yes/No | |
| Back-Up Fuse (if mains > 250 A) | | 250 A gG | |
| Short-Circuit Current Rating (AC) | I_{SCCR} | 50 kA | |
| TOV Withstand 120min | (L-N) U_T | 229V | 438V |
| TOV Withstand 200ms | (N-PE) U_T | 1200V / 300A | |
| 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 | | 35mm DIN Rail, EN 60715 | |
| Degree of Protection | | IP 20 (built-in) | |
| Housing Material | | Thermoplastic: Extinguishing Degree UL 94 V-0 | |
| Fault Indication | (L-N)/(N-PE) | Red Flag/No | |
| 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

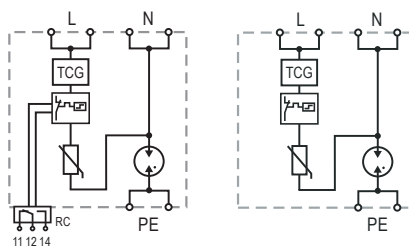
| | | |
|---|------------|------------|
| Order Code | 150 | 275 |
| SafeBloc B 25/xxx (1+1) TCG | 54.0525 | 54.0527 |
| SafeBloc B(R) 25/xxx (1+1) TCG (with remote contacts) | 54.0526 | 54.0528 |

*OVE Certified

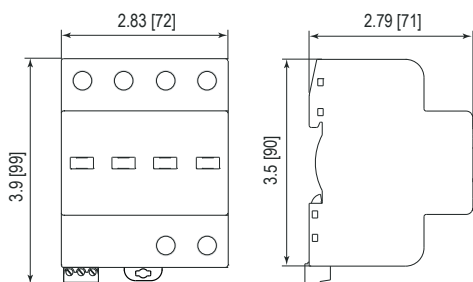
Internal Configuration

Legend

- L Line
- N Neutral
- PE Protective Earth
- RC Remote Contacts Optional
- TCG Thermal Control Function with No Leakage



Dimensions & Packaging



Dimensions & Packaging

| | | 150 | 275 |
|-------------------------------------|----------------|-----------------------------------|------------|
| SafeBloc B 25/xxx (1+1) TCG | | | |
| Single Unit Weight | pounds [grams] | .617 [280] | .694 [315] |
| Single Unit DIN 43880 Dimension | | 4 TE | |
| Packaging Dimensions (H x W x L) | | 4.2 x 3 x 3.1" [109 x 77 x 80 mm] | |
| Minimum Order Quantity | | 3 Units | |
| SafeBloc BR 25/xxx (1+1) TCG | | | |
| Single Unit Weight | pounds [grams] | .628 [285] | .705 [320] |
| Single Unit DIN 43880 Dimension | | 4 TE | |
| Packaging Dimensions (H x W x L) | | 4.2 x 3 x 3.1" [109 x 77 x 80 mm] | |
| Minimum Order Quantity | | 3 Units | |

inches
[mm]

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

