

Compact Multi-pole SPD SafeBloc B(R) 25 (2+0) TCG

Class I • Class II • Type 1 • Type 2

12.5 kA Series



Location of Use: Main Distribution Boards
 Network Systems: TN-S
 Mode of Protection: L - PE, N - PE
 Surge Ratings: $I_{imp} = 12.5 \text{ kA (10/350}\mu\text{s)}$
 $I_n = 20 \text{ kA (8/20}\mu\text{s)}$
 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

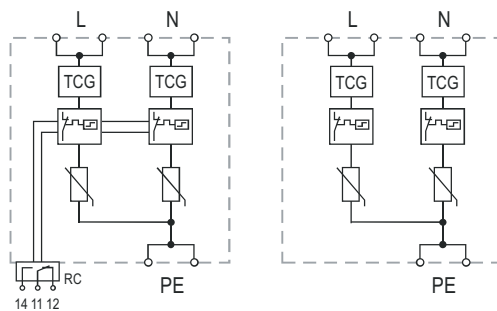
Technical Data

| SafeBloc B(R) 25/xxx (2+0) TCG | 150 | 275 | |
|--|-------------|----------|--|
| 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 μs) | I_n | | 20 kA |
| Maximum Discharge Current (8/20 μs) | I_{max} | | 50 kA |
| Impulse Discharge Current (10/350 μs) | I_{imp} | | 12.5 kA |
| Total Discharge Current (10/350 μs) | I_{total} | | 25 kA |
| Specific Energy | W/R | | 39 kJ/ Ω |
| Charge | Q | | 6.25 As |
| Voltage Protection Level | U_p | < 1.2 kV | < 1.5 kV |
| Response Time | t_A | | < 25 ns |
| Back-Up Fuse (if mains > 250 A) | | | 250 A gG |
| Short-Circuit Current Rating (AC) | I_{SCCR} | | 50 kA |
| TOV withstand 5s | U_T | 228V | 438V |
| Number of Ports | | | 1 |
| Mechanical & Environmental | | | |
| Temperature Range | T_a | | -40 °C to +85 °C |
| Permissible Humidity | RH | | 5%...95% |
| Terminal Screw Torque | M_{max} | | 3.0 Nm |
| Conductor Cross Section (max) | | | 35 mm ² (solid) / 25 mm ² (stranded) |
| Mounting | | | 35 mm DIN Rail, EN 60715 |
| Degree of Protection | | | IP 20 |
| 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) | | | 1.5 mm ² |
| RC Terminal Screw Torque | M_{max} | | 0.25 Nm |
| Order Information | | | |
| Order Code | 150 | 275 | |
| SAFELOC B 25/xxx (2+0) TCG | 54.0507 | 54.0509 | |
| SAFELOC BR 25/xxx (2+0) TCG (with remote contacts) | 54.0508 | 54.0510 | |

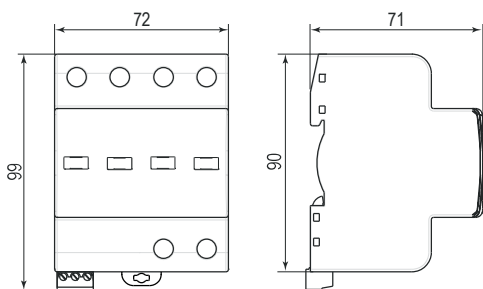
Internal Configuration

Legend

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



Dimensions & Packaging [mm]



| Dimensions & Packaging | | |
|-------------------------------------|------------------|------------|
| SafeBloc B 25/xxx (2+0) TCG | 150 | 275 |
| Single Unit Weight | 320g | 420g |
| Single Unit DIN 43880 Dimension | 4 TE | |
| Packaging Dimensions (H × W × L) | 109 × 77 × 80 mm | |
| Minimum Order Quantity | 3 Units | |
| SafeBloc BR 25/xxx (2+0) TCG | 150 | 275 |
| Single Unit Weight | 330g | 430g |
| Single Unit DIN 43880 Dimension | 4 TE | |
| Packaging Dimensions (H × W × L) | 109 × 77 × 80 mm | |
| Minimum Order Quantity | 3 Units | |

Applicable connection configurations can be found on page 54.

