

Compact Multi-pole SPD SafeBloc B(R) 25 (1+1) TCG

Class I • Class II • Type 1 • Type 2

12.5 kA Series



Location of Use: Main Distribution Boards
 Network Systems: 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

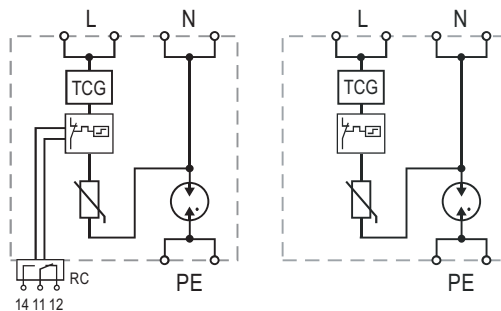
Technical Data

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 5s	(L-N) U_T	228V	438V
TOV withstand 200ms	(N-PE) U_T	1200V / 300A	
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	
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)		1.5 mm ²	
RC Terminal Screw Torque	M_{max}	0.25 Nm	
Order Information			
Order Code		150	275
SAFELOC B 25/xxx (1+1) TCG		54.0525	54.0527
SAFELOC B(R) 25/xxx (1+1) TCG (with remote contacts)		54.0526	54.0528

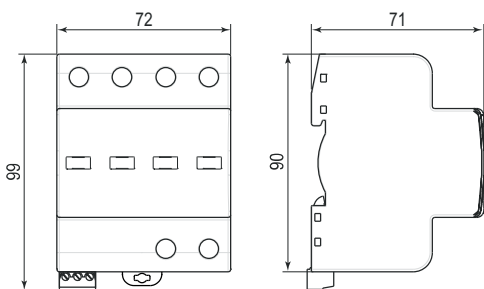
Internal Configuration

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 (1+1) TCG	150	275
Single Unit Weight	280g	315g
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 (1+1) TCG	150	275
Single Unit Weight	285g	320g
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 55.

