

Compact Single Pole SPD  
**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, TT (only L-N)  
 Mode of Protection: L-PE, N-PE, L-PEN, L-N  
 Surge Ratings:  $I_{imp} = 25 \text{ kA (10/350 } \mu\text{s)}$   
 $I_n = 25 \text{ kA (8/20 } \mu\text{s)}$   
 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**

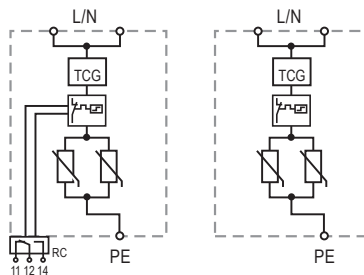
SafeBloc B(R) 25/xxx (1+0) TCG	150	275*	
<b>Electrical</b>			
Nominal AC Voltage (50/60 Hz)	$U_o$	120V	230V
Maximum Continuous Operating Voltage (AC)	$U_c$	150V	275V
Nominal Discharge Current (8/20 $\mu\text{s}$ )	$I_n$		25 kA
Maximum Discharge Current (8/20 $\mu\text{s}$ )	$I_{max}$		100 kA
Impulse Discharge Current (10/350 $\mu\text{s}$ )	$I_{imp}$		25 kA
Specific Energy	W/R		156 kJ/ $\Omega$
Charge	Q		12.5 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 120min	$U_T$	229V	438V
Number of Ports			1
<b>Mechanical &amp; Environmental</b>			
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/0.5A; 125V/3A	
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]	
<b>Order Information</b>			
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

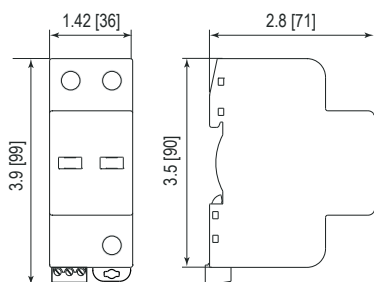
Internal Configuration

Legend

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



Dimensions & Packaging



Dimensions & Packaging			
<b>SafeBloc B 25/xxx (1+0) TCG</b>		<b>150</b>	<b>275</b>
Single Unit Weight	pounds [grams]	.606 [275]	.716 [325]
Single Unit DIN 43880 Dimension		2 TE	
Packaging Dimensions (H x W x L)		4.2 x 3 x 1.6" [109 x 77 x 42 mm]	
Minimum Order Quantity		7 Units	
<b>SafeBloc BR 25/xxx (1+0) TCG</b>		<b>150</b>	<b>275</b>
Single Unit Weight	pounds [grams]	.617 [280]	.727 [330]
Single Unit DIN 43880 Dimension		2 TE	
Packaging Dimensions (H x W x L)		4.2 x 3 x 1.6" [109 x 77 x 42 mm]	
Minimum Order Quantity		7 Units	

inches  
[mm]

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

