

Lightning and Overvoltage Protection
SafeBloc B(R) 75 (3+0) TCG
 Class I • Class II • Type 1 • Type 2



Location of Use: Main Distribution Boards
 Network Systems: TN-C
 Mode of Protection: L - PEN
 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) 75/xxx (3+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
Total Discharge Current (10/350 μ s)	I_{total}		75 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/0.5 A; 125V/3 A	
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]	

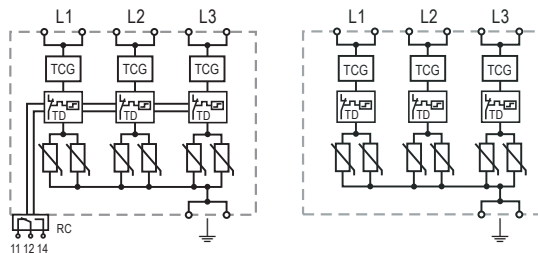
Order Information		
Order Code	150	275*
SafeBloc B 75/xxx (3+0) TCG	54.0550	54.0552
SafeBloc BR 75/xxx (3+0) TCG (with remote contacts)	54.0551	54.0553

*OVE Certified

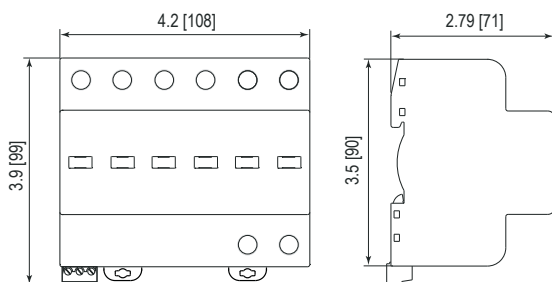
Internal Configuration

Legend

- L Line Conductor Terminal
- ⏏ PEN/G Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TCG Thermal Control Function with No Leakage
- TD Thermal Disconnect



Complete Unit



Single Unit Dimensions & Packaging

	150	275*
SafeBloc B 75/xxx (3+0) TCG		
Weight	pounds [grams]	1.719 [780] 2.050 [930]
DIN 43880 Dimension	6 TE / 4.25" [108]	
Packaging Dimensions (H×W×L)	3.1 × 4.4 × 11.7" [79 × 112 × 298 mm]	
Standard Order Quantity	2 Units	
SafeBloc BR 75/xxx (3+0) TCG		
Weight	pounds [grams]	1.741 [790] 2.072 [940]
DIN 43880 Dimension	6 TE / 4.25" [108]	
Packaging Dimensions (H×W×L)	3.1 × 4.4 × 11.7" [79 × 112 × 298 mm]	
Standard Order Quantity	2 Units	

inches
[mm]

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

