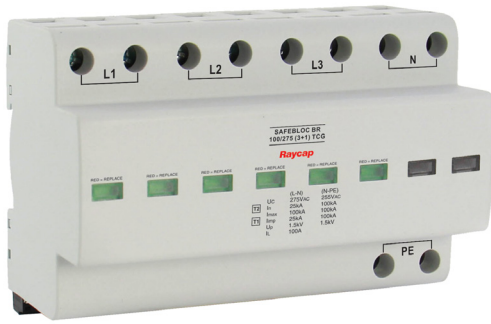


**Compact Multi-pole SPD**  
**SafeBloc B(R) 100 (3+1) TCG**  
**Class I • Class II • Type 1 • Type 2**



Location of Use: Main Distribution Boards  
 Network Systems: TN-S, TT  
 Mode of Protection: L - N, N - PE  
 Surge Ratings:  $I_{imp} = 25 \text{ kA} / 100 \text{ kA} (10/350 \mu\text{s})$   
 $I_n = 25 \text{ kA} / 100 \text{ kA} (8/20 \mu\text{s})$   
 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) 100/xxx (3+1) TCG**

**275**

**Electrical**

Nominal AC Voltage (50/60 Hz)	$U_o$	230V
Maximum Continuous Operating Voltage (AC)	(L - N) $U_c$	275V
	(N - PE) $U_c$	255V
Nominal Discharge Current (8/20 $\mu\text{s}$ )	(L - N)/(N - PE) $I_n$	25 kA/100 kA
Maximum Discharge Current (8/20 $\mu\text{s}$ )	(L - N)/(N - PE) $I_{max}$	100 kA/100 kA
Impulse Discharge Current (10/350 $\mu\text{s}$ )	(L - N)/(N - PE) $I_{imp}$	25 kA/100 kA
Total Discharge Current (10/350 $\mu\text{s}$ )	$I_{total}$	100 kA
Specific Energy	(L - N)/(N - PE) W/R	156 kJ/ $\Omega$ /2.5 MJ/ $\Omega$
Charge	(L - N)/(N - PE) Q	12.5 As/50 As
Voltage Protection Level	(L - N)/(N - PE) $U_p$	< 1.5 kV / < 1.5 kV
Follow Current Interrupt Rating	(N - PE) $I_{fi}$	100 A <sub>RMS</sub>
Response Time	(L - N)/(N - PE) $t_A$	< 25 ns / < 100 ns
Back-Up Fuse (if mains > 250 A)		250 A gG
Short-Circuit Current Rating (AC)	$I_{SCCR}$	50 kA
TOV Withstand 120min	(L - N) $U_T$	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 <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	(L - N)/(N - PE)	Yes/No
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 <sup>2</sup> (Solid) / 16 AWG (Solid)
RC Terminal Screw Torque	$M_{max}$	2.2 lbf-in [0.25 Nm]

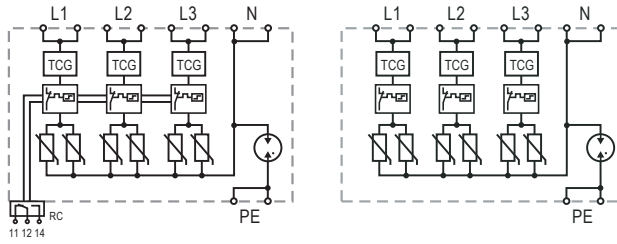
**Order Information**

Order Code	<b>275</b>
SafeBloc B 100/xxx (3+1) TCG	54.0570
SafeBloc BR 100/xxx (3+1) TCG (with remote contacts)	54.0571

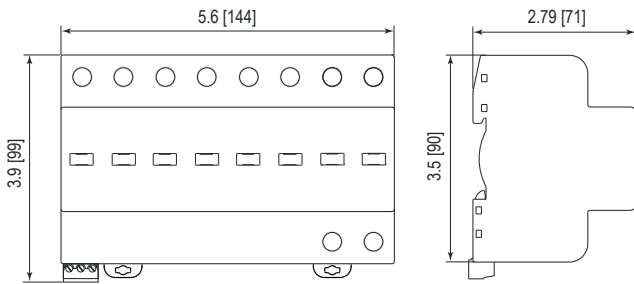
Internal Configuration

Legend

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



Dimensions & Packaging



Dimensions & Packaging

SafeBloc B 100/xxx (3+1) TCG		275
Single Unit Weight	pounds [grams]	2.502 [1135]
Single Unit DIN 43880 Dimension		8 TE
Packaging Dimensions (H x W x L)		4.2 x 3 x 5.8" [109 x 77 x 148 mm]
Minimum Order Quantity		2 Units
SafeBloc B(R) 100/xxx (3+1) TCG		275
Single Unit Weight	pounds [grams]	2.535 [1150]
Single Unit DIN 43880 Dimension		8 TE
Packaging Dimensions (H x W x L)		4.2 x 3 x 5.8" [109 x 77 x 148 mm]
Minimum Order Quantity		2 Units

inches  
[mm]

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

