

Compact Single Pole SPD for Wind Turbine Systems  
**SafeBloc B(R) 25 (1+0) WT 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) WT TCG**

**750**

**Electrical**

Nominal AC Voltage (50/60 Hz)	$U_o$	600V
Maximum Continuous Operating Voltage (AC)	$U_c$	750V
Nominal Discharge Current (8/20 $\mu\text{s}$ )	$I_n$	25 kA
Maximum Discharge Current (8/20 $\mu\text{s}$ )	$I_{max}$	80 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	$U_p$	< 3.0 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	$U_T$	1000V
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
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]

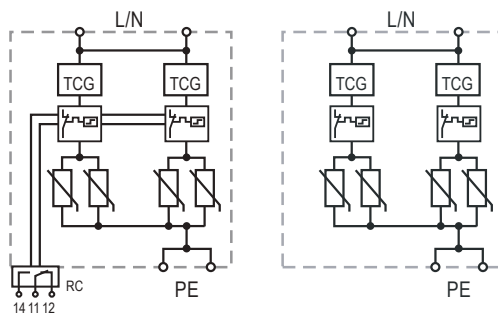
**Order Information**

Order Code	<b>750</b>
SAFELOC B 25/xxx (1+0) WT TCG	54.0594
SAFELOC BR 25/xxx (1+0) WT TCG (with remote contacts)	54.0595

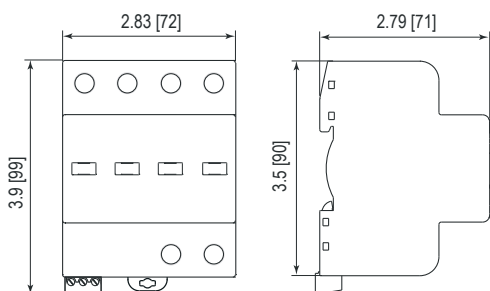
Internal Configuration

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+0) WT TCG		750
Single Unit Weight	pounds [grams]	1.763 [800]
Single Unit DIN 43880 Dimension		4 TE
Packaging Dimensions (H x W x L)		4.2 x 3 x 3.1" [109 x 77 x 80 mm]
Minimum Order Quantity		3 Units
SafeBloc BR 25/xxx (1+0) WT TCG		750
Single Unit Weight	pounds [grams]	1.785 [810]
Single Unit DIN 43880 Dimension		4 TE
Packaging Dimensions (H x W x L)		4.2 x 3 x 3.1" [109 x 77 x 80 mm]
Minimum Order Quantity		3 Units

inches  
[mm]

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

