

Lightning and Overvoltage Protection

ProBloc B(R) 50 (1+1)

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
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

ProBloc B(R) 50/xxx (1+1)

		150	275*	320*
IEC Electrical				
Nominal AC Voltage (50/60 Hz)	U_o	120V	230V	230V
Maximum Continuous Operating Voltage (AC)	(L - N) U_c	150V	275V	320V
	(N - PE) U_c		255V	
Nominal Discharge Current (8/20 μ s)	(L - N)/(N - PE) I_n		25 kA / 50 kA	
Maximum Discharge Current (8/20 μ s)	(L - N)/(N - PE) I_{max}		100 kA / 100 kA	
Impulse Discharge Current (10/350 μ s)	(L - N)/(N - PE) I_{imp}		25 kA / 50 kA	
Total Discharge Current (10/350 μ s)	I_{total}		50 kA	
Specific Energy	(L - N)/(N - PE) W/R		156 kJ / Ω / 625 kJ / Ω	
Charge	(L - N)/(N - PE) Q		12.5 As / 25 As	
Voltage Protection Level	(L - N)/(N - PE) U_p	< 1.0 kV / < 1.5 kV	< 1.5 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	
Overcurrent Protection (max)	(L - N)		250 A gG	
Short-Circuit Current Rating (AC)	I_{SCCR}		50 kA	
TOV Withstand 5s	(L - N) U_T	174V	334V	334V
TOV Safe Fail 120min	(L - N) U_T	229V	438V	438V
TOV Withstand 200ms	(N - PE) U_T		1200V / 300 A	
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	(L - N)/(N - PE)	Yes/No		
Fault Indication	(L - N)/(N - PE)	Red Flag/No		
Remote Contacts (RC)		Optional		
RC Switching Capacity		AC: 250V/0.5 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

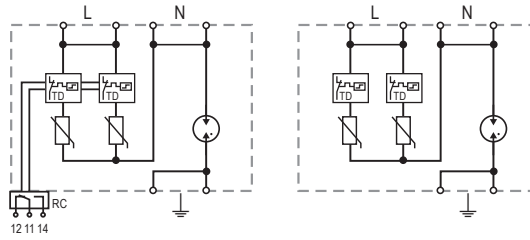
Order Code	150	275*	320*
ProBloc B 50/xxx (1+1)	56.0602	56.0604	56.0606
ProBloc BR 50/xxx (1+1) (with remote contacts)	56.0603	56.0605	56.0607

*OVE Certified

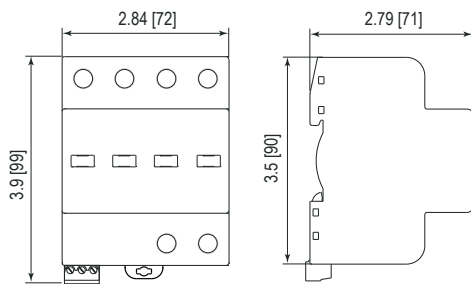
Internal Configuration

Legend

<i>L</i>	Line Conductor Terminal
<i>N</i>	Neutral Conductor Terminal
	PE Conductor Terminal
<i>RC</i>	Remote Contacts Terminal (Optional)
<i>TD</i>	Thermal Disconnect



Complete Unit



Single Unit Dimensions & Packaging

ProBloc B 50/xxx (1+1)		150	275*	320*
Weight	pounds	.98	1.06	1.06
	grams	445	485	485
DIN 43880 Dimension		4 TE / 2.84" [72]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298 mm]		
Standard Order Quantity		3 Units		
ProBloc BR 50/xxx (1+1)		150	275*	320*
Weight	pounds	.99	1.06	1.06
	grams	450	490	490
DIN 43880 Dimension		4 TE / 2.84" [72]		
Packaging Dimensions (H x W x L)		3.1 x 4.4 x 11.7" [79 x 112 x 298 mm]		
Standard Order Quantity		3 Units		

inches
[mm]

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

