

Lightning and Overvoltage Protection
ProBloc B(R) 50 (4+0)
 Class I • Class II • Type 1 • Type 2



Location of Use: Main Distribution Boards
 Network Systems: TN-S
 Mode of Protection: L-PE, 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 (4+0)	150	275*	320*	
IEC Electrical				
Nominal AC Voltage (50/60 Hz)	U_o	120V	230V	230V
Maximum Continuous Operating Voltage (AC)	U_c	150V	275V	320V
Nominal Discharge Current (8/20 μ s)	I_n		20 kA	
Maximum Discharge Current (8/20 μ s)	I_{max}		50 kA	
Impulse Discharge Current (10/350 μ s)	I_{imp}		12.5 kA	
Total Discharge Current (10/350 μ s)	I_{total}		50 kA	
Specific Energy	W/R		39 kJ/ Ω	
Charge	Q		6.25 As	
Voltage Protection Level	U_p	< 1.0 kV	< 1.5 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 5s	U_T	174V	334V	334V
TOV Safe Fail 120min	U_T	229V	438V	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/0.5A; 125V/3A		
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

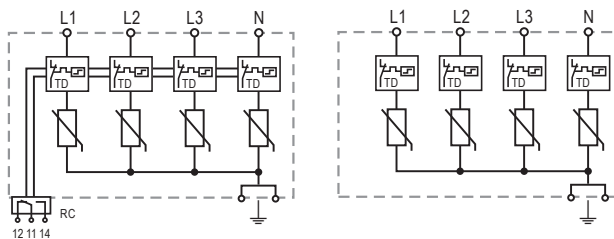
Order Code	150	275*	320*
ProBloc B 50/xxx (4+0)	56.0532	56.0534	56.0536
ProBloc BR 50/xxx (4+0) (with remote contacts)	56.0533	56.0535	56.0537

*OVE Certified

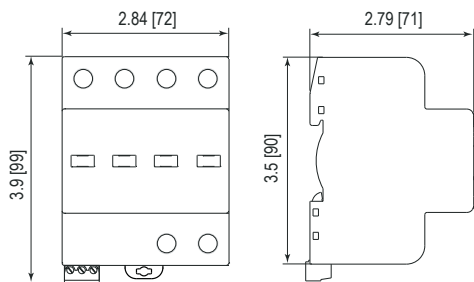
Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⏏ PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect



Complete Unit



Dimensions & Packaging				
ProBloc B 50/xxx (4+0)		150	275*	320*
Weight	pounds	1.212	1.521	1.521
	grams	550	590	590
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 (4+0)		150	275*	320*
Weight	pounds	1.234	1.234	1.322
	grams	560	560	600
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		2 Units		

inches
[mm]

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

