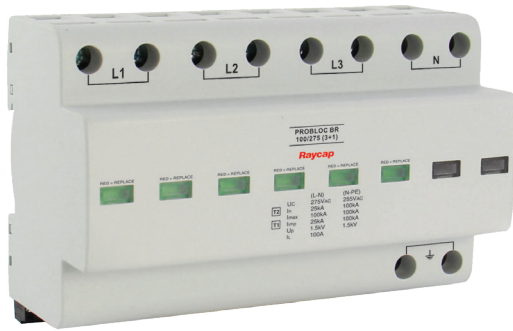


# Lightning and Overvoltage Protection

## ProBloc B(R) 100 (3+1)

### Class I • Class II • Type 1 • Type 2

25 kA Series



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) 100/xxx (3+1)

275\*

320\*

#### IEC Electrical

Parameter	Symbol	275*	320*
Nominal AC Voltage (50/60 Hz)	$U_o$	230 V	230 V
Maximum Continuous Operating Voltage (AC)	(L-N) $U_c$	275 V	320 V
	(N-PE) $U_c$		255 V
Nominal Discharge Current (8/20 $\mu$ s)	(L-N)/(N-PE) $I_n$	25 kA / 100 kA	
Maximum Discharge Current (8/20 $\mu$ s)	(L-N)/(N-PE) $I_{max}$	100 kA / 100 kA	
Impulse Discharge Current (10/350 $\mu$ s)	(L-N)/(N-PE) $I_{imp}$	25 kA / 100 kA	
Total Discharge Current (10/350 $\mu$ 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	< 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	
Overcurrent Protection (max)	(L-N)	250 A gG	
Short-Circuit Current Rating (AC)	$I_{SCCR}$	50 kA	
TOV Withstand 5s	(L-N) $U_T$	334 V	334 V
TOV Safe Fail 120min	(L-N) $U_T$	438 V	438 V
TOV Withstand 200ms	(N-PE) $U_T$	1200 V / 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 (max)	$M_{max}$	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

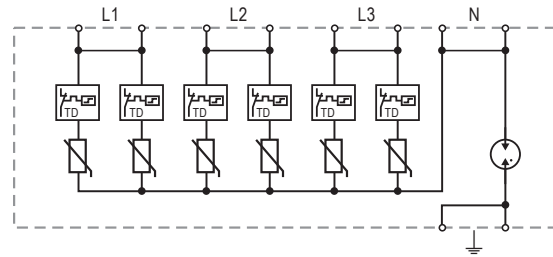
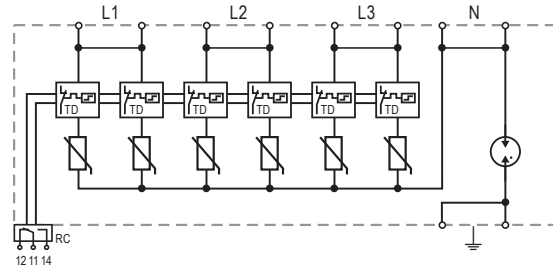
Order Code	275*	320*
ProBloc B 100/xxx (3+1)	56.0614	56.0616
ProBloc BR 100/xxx (3+1) (with remote contacts)	56.0615	56.0617

\*OVE Certified

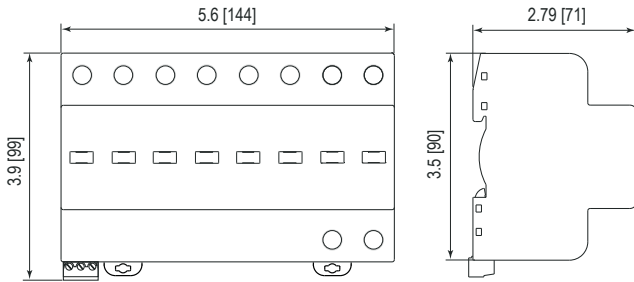
Internal Configuration

Legend

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



Complete Unit



Single Unit Dimensions & Packaging

		275*	320*
<b>ProBloc B 100/xxx (3+1)</b>			
Weight	pounds	2.50	2.50
	grams	1135	1135
DIN 43880 Dimension		8 TE / 5.66" [144]	
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	
<b>ProBloc BR 100/xxx (3+1)</b>			
Weight	pounds	2.53	2.53
	grams	1150	1150
DIN 43880 Dimension		8 TE / 5.66" [144]	
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]



Applicable connection configurations can be found beginning on page 98.