

Lightning and Overvoltage Protection
SafeBloc B(R) 50/440 (2+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
 Safety: High TOV Immunity
 Technology: Hybrid
 Leakage Current Free: Yes
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

SafeBloc B(R) 50/xxx (2+0) 440

IEC Electrical		
Nominal AC Voltage (50/60 Hz)	U_o / U_n	400V
Maximum Continuous Operating Voltage (AC)	U_c	440V
Nominal Discharge Current (8/20 μ s)	I_n	25 kA
Maximum Discharge Current (8/20 μ s)	I_{max}	100 kA
Impulse Discharge Current (10/350 μ s)	I_{imp}	25 kA
Specific Energy	W/R	156 kJ/ Ω
Charge	Q	12.5 As
Voltage Protection Level	U_p	< 2.5 kV
Response Time	t_A	< 100 ns
Overcurrent Protection (max)		250 A gG
Short-Circuit Current Rating (AC)	I_{SCCR}	50 kA
TOV Withstand 120min	U_T	762V
Number of Ports		1

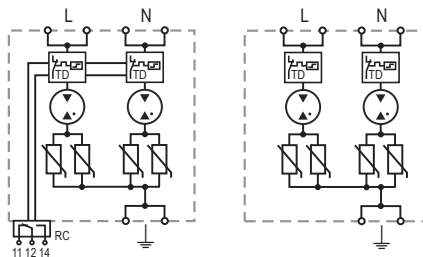
Mechanical & Environmental		
Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Humidity	RH	5%...95%
Terminal Screw Torque	M_{max}	26.5 lbf-in [3.0 Nm]
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35mm ² (Solid, Stranded) / 25mm ² (Flexible)
Mounting		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		440
SafeBloc B 50/xxx (2+0)		54.0548
SafeBloc BR 50/xxx (2+0) (with remote contacts)		54.0549

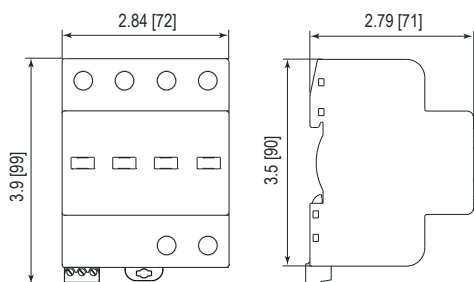
Internal Configuration

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

SafeBloc B 50/xxx (2+0)		440
Weight	pounds [grams]	1.398 [634]
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
SafeBloc BR 50/xxx (2+0)		440
Weight	pounds [grams]	1.415 [642]
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.

