



Location of Use: DC Systems, EV Chargers
 Mode of Protection: (+)-PE, (-)-PE, (+)-(-)
 IEC/EN/UL Category: Class I+II / Type 1+2
 DC PV SPD Type 1CA
 Housing: Compact Design
 Compliance: IEC 61643-31:2018
 EN 61643-31:2019
 UL 1449 5th Edition

Technical Data

ProBloc BR 1000 DC

1000

EN Electrical

Nominal DC Voltage	U_n	900 V
Maximum Continuous Operating Voltage (DC)	(+)-(-) U_{CDC}/U_{CPV}	1000V
	(+/-)-PE U_{CDC}/U_{CPV}	750 V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA
Impulse Discharge Current (10/350 μ s)	I_{imp}	6.25 kA
Specific Energy	W/R	9.77 kJ/ Ω
Charge	Q	3.125 As
Total Discharge Current (10/350 μ s)	I_{Total}	12.5 kA
Total Discharge Current (8/20 μ s)	I_{Total}	65 kA
Voltage Protection Level	(+)-(-) U_p	4400 V
	(+/-)-PE U_p	2300 V
Response Time	(+)-(-) t_A	< 25 ns
	(+/-)-PE t_A	< 100 ns
Short-Circuit Current Rating	I_{SCPV}	10 kA
Number of Ports		1

UL Electrical

Maximum Permitted DC Voltage	V_{dcmcov}	1000V
Voltage Protection Rating	(+)-(-) VPR	3000 V
	(+/-)-G VPR	1800 V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA
Short-Circuit Current Rating	SCCR	50 kA

Additional Electrical Parameters (Tests performed within Raycap testing laboratory only)




Residual Voltage at 5 kA (8/20 μ s)	(+)-(-) U_{res}	3500V
	(+/-)-PE U_{res}	1800V
Use in DC battery storage systems up to I_{SCCR}		30 kA (L/R < 3 ms)
Overcurrent protection fuse link for DC battery storage systems up to I_{SCCR}		ETI M1XL BAT 160A/1500V (004110655)

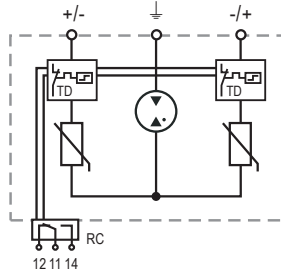
Mechanical & Environmental

Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Altitude (max)		13123 ft [4000 m]
Terminal Screw Torque	M_{max}	25 lbf-in [3.0 Nm]
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible)
		35 mm ² (Solid, Stranded) / 25 mm 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
Operating State / Fault Indication		Green Flag / Not Green Flag
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/0.5A; 125V/3A
RC Terminal Cross Section (max)		16 AWG (Solid) / 1.5mm ² (Solid)
RC Terminal Screw Torque	M_{max}	2 lbf-in [0.25 Nm]

Internal Configuration

Legend

-  PE Conductor Terminal
-  TD Thermal Disconnect
-  RC Remote Contacts Terminal



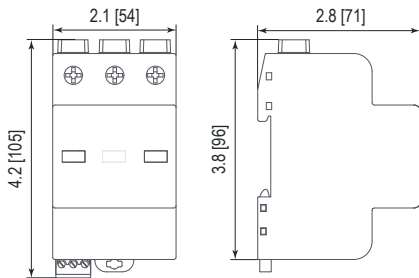
ProBloc BR 1000 DC

Order Information

Order Code	1000
ProBloc BR 1000 DC	56.0671

Dimensions & Packaging

inches [mm]



Single Unit

ProBloc BR 1000 DC	1000
Weight	pounds [grams] .934 [424]
DIN 43880 Dimension	3 TE / 2.13" [54]
Packaging Dimensions (H x W x L)	3.1 x 4.4 x 11.7" [79 x 112 x 298mm]
Standard Order Quantity	5 Units