



Location of Use: DC Systems, EV Chargers
 Network Systems: Unipolar grounded / ungrounded, TN, TT*, IT*
 Mode of Protection: (+)-PE/G, (-)-PE/G, (+)-(-)
 IEC/UL Category: Class II, DC SPD Type 4CA
 Housing: Pluggable Design
 Compliance: IEC FDIS 61643-41 Edition 1
 UL 1449 5th Edition



Technical Data




ProTec T2-xxxxDCGU-3Y(-R)		1000
IEC Electrical		
Nominal DC System Voltage	(+)-(-) U_n	900 V
Maximum Continuous Operating Voltage (DC)	(+)-(-) U_c	1000 V
	(+)/(-)-PE U_c	1000 V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA
Maximum Discharge Current	I_{max}	40 kA
Impulse Discharge Current (10/350 μ s)	I_{imp}	2.5 kA
Total Discharge Current (8/20 μ s)	I_{Total}	65 kA
Voltage Protection Level	(+)-(-) U_p	3700 V
	(+)-PE U_p	2400 V
	(-)-PE U_p	2400 V
Response Time	(+)-(-) t_A	<25 ns
	(+)/(-)-PE t_A	<100 ns
Overvoltage Category		III
Overcurrent Protection (max)		200 A gBat**
Short-Circuit Current Rating (DC)	I_{SCCR}	30 kA (L/R < 3 ms)
Number of Ports		1
UL Electrical		
Maximum Permitted DC Voltage	(+)-(-) V_{dmcov}	1000 V
	(+)/(-)-G V_{dmcov}	1000 V
Measured Limiting Voltage	(+)-(-) MLV	3700 V
	(+)/(-)-G MLV	4300 V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA
Additional Electrical Parameters (Tests performed within Raycap testing laboratory only)		
Rated DC withstand voltage (in accordance with IEC 61851-23)	$U_{W DC}$	1200 V
Mechanical & Environmental		
Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Pollution Degree		2
Altitude (max)		6562 ft [2000 m]
Terminal Screw Torque	M_{max}	35 lbf-in per UL 1449 [4.5 Nm]
Conductor Cross Section (max)		6 AWG (Solid, Stranded) per UL 1449
		35 mm ² (Solid, Stranded) / 25 mm ² (Flexible)
		Cu Only per UL 1449
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: 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)
Overvoltage Category		III

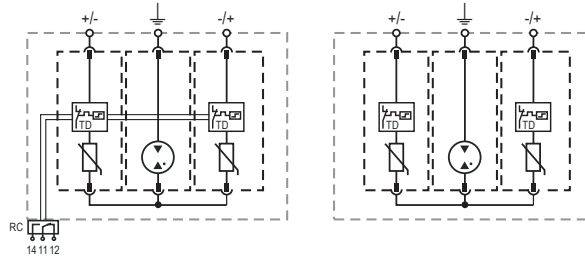
*Only for DC power systems which are electrically separated from AC power systems.

**ETI NH1 BAT 200A/1500V DC (004110656)

Internal Configuration

Legend

-  PE / G Conductor Terminal
-  RC Remote Contacts Terminal (Optional)
-  TD Thermal Disconnecter

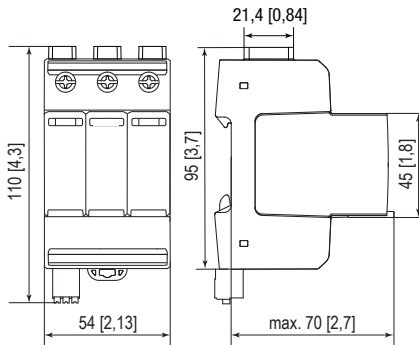


Order Information

Order Code	1000
ProTec T2-xxxxDCGU-3Y	59.C380
ProTec T2-xxxxDCGU-3Y-R (with remote contacts)	59.C381
ProTec T2-500DCGU-M-P (plug)	59.C383
ProTube T2-500DCGU-P (middle plug)	59.C382

Dimensions & Packaging

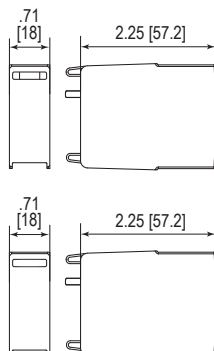
inches [mm]



Complete Unit Dimensions & Packaging

ProTec T2-xxxxDCGU-3Y		1000
Weight	pounds	.758
	grams	344
ProTec T2-xxxxDCGU-3Y-R		
Weight	pounds	.778
	grams	353
DIN 43880 Dimension	3 TE / 2.13" [54mm]	
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]	
Standard Order Quantity	5 Units	

Spare Plug



Single Unit Dimensions & Packaging

ProTec T2-xxxDCGU-M-P		500
Weight	pounds	.148
	grams	67
ProTube T2-xxxDCGU-P		500
Weight	pounds	.088
	grams	40
DIN 43880 Dimension	1 TE / .70" [18 mm]	
Packaging Dimensions (HxWxL)	3.2 x 4.5 x 12" [83 x 116 x 305 mm]	
Standard Order Quantity	24 Units	