

Pluggable Multi-Pole SPD for DC Systems
SafeTec T2-1000DC-3+0(-R)
 Class II • Type 2 • Type 4CA



Location of Use: DC Systems, EV Chargers
 Mode of Protection: (+)-GND, (-)-GND, (+)-(-)
 Surge Ratings: $I_n = 20 \text{ kA}$ (8/20 μs)
 $I_{\text{Total}} = 65 \text{ kA}$ (8/20 μs)
 EN/UL Category: Type 2 / Type 4CA
 Protective Elements: High Energy MOV and GDT
 Housing: Pluggable Design
 Safety: Patented Current Limiting
 Compliance: UL 1449, 4th Edition

Technical Data

SafeTec T2-1000DC-3+0(-R)

IEC Electrical

Nominal System DC Voltage	U_n	900 V
Maximum Continuous Operating DC Voltage	(+)-(-) U_{CDC}	1000 V
Nominal Discharge Current (8/20 μs)	I_n	20 kA
Total Discharge Current	I_{Total}	65 kA
Voltage Protection Level	(+/-)-GND U_p	2500 V
	(+)-(-) U_p	4800 V
Temporary Overvoltage	(+/-)-GND U_T	654 V / 5 sec - whitstand
	(+/-)-GND U_T	990 V / 120 sec - whitstand
Response Time	(+/-)-GND t_A	< 100 ns
	(+)-(-) t_A	< 25 ns
Number of Ports		1

UL Electrical

Maximum Permitted DC Voltage	V_{dcmcov}	1000 V
Measured Limiting Voltage	(+/-)-GND MLV	2500 V
	(+)-(-) MLV	4800 V
Nominal Discharge Current (8/20 μs)	I_n	20 kA

Mechanical & Environmental

Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Terminal Screw Torque	M_{max}	39.9 lbf.in [4.5 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/1A, 125V/1A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)

Order Information

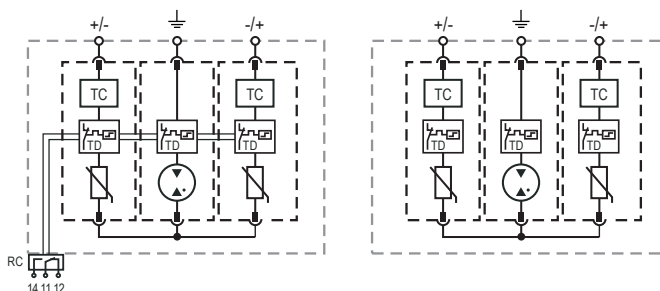
Order Code	
SafeTec T2-1000DC-3+0	59.0373
SafeTec T2-1000DC-3+0-R (with remote contacts)	59.0374

SafeTec T2-1000DC-3+0(-R)

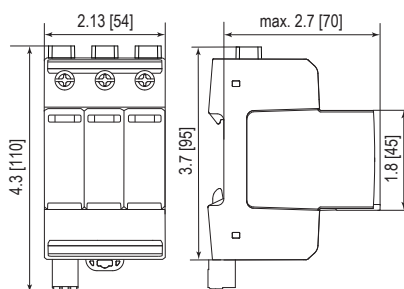
Internal Configuration

Legend

- ⊕ Ground
- RC Remote Contacts Optional
- TC Thermal Control Function



Dimensions & Packaging



Dimensions & Packaging

SafeTec T2-1000DC-3+0

Single Unit Weight	pounds	.853
	grams	387

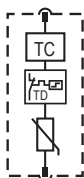
SafeTec T2-1000DC-3+0-R

Single Unit Weight	pounds	.870
	grams	395

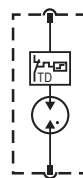
Single Unit DIN 43880 Dimension	3 TE
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Minimum Order Quantity	5 Units

Plug Internal Configuration

SafeTec T2-xxxDC-P



SafeTube T2-DC-P



inches
[mm]

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

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