

Pluggable Multi-Pole SPD for Photovoltaic Systems

ProTec T2-PV 2+0

Class II • Type 2



Location of Use: String box, Inverter
 Mode of Protection: (+)-PE, (-)-PE
 Surge Ratings: $I_n = 20 \text{ kA}$ (8/20 μs)
 IEC/EN Category: Class II/Type 2
 Housing: Pluggable Design
 Compliance: IEC 61643-31:2018
 EN 61643-31:2019

Technical Data

ProTec T2-xxxPV-2+0(-R)		125	250	600
EN Electrical				
Maximum Continuous Operating DC Voltage	(+/-)-PE U_{CPV}	125 V	250 V	600 V
Nominal Discharge Current (8/20 μs)	I_n	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20 μs)	I_{max}	50 kA	50 kA	40 kA
Total Discharge Current	I_{Total}	50 kA	50 kA	50 kA
Voltage Protection Level (8/20 μs)	(+/-)-PE U_p	500 V	900 V	1900 V
Response Time	t_A		< 25 ns	
Short-Circuit Current Rating	I_{SCPV}	6 kA	11 kA	11 kA
Number of Ports			1	

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}	40 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: 250 V / 1 A, 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)		

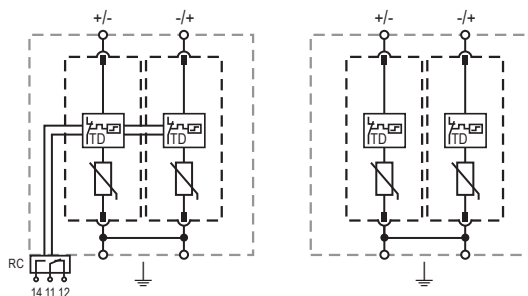
Order Information				
Order Code		125	250	600
ProTec T2-xxxPV-2+0		59.A301	59.A320	59.A086
ProTec T2-xxxPV-2+0-R (with remote contacts)		59.A302	59.A321	59.A087
ProTec T2-xxxPV-P		59.A300	59.0994	59.0995

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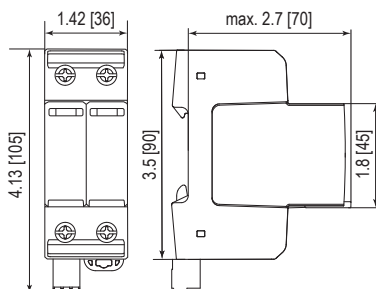
Internal Configuration

Legend

- +/-, -/+ Terminal for +/-, -/+ Conductor
- ⊥ Terminal for PE/G Conductor
- RC Remote Contacts Optional
- TD Thermal Disconnect



Complete Unit

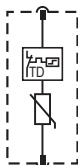


Dimensions & Packaging

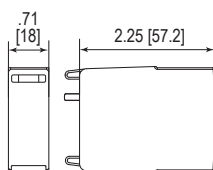
		125	250	600
ProTec T2-xxxPV-2+0	Single Unit Weight	pounds .518	.535	.514
		grams 235	243	233
ProTec T2-xxxPV-2+0-R	Single Unit Weight	pounds .529	.546	.534
		grams 240	248	242
Single Unit DIN 43880 Dimension		1 TE / .71 [18]		
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]		
Standard Order Quantity		7 Units		

Plug Internal Configuration

ProTec T2-XXXPV-P



Spare Plug



Dimensions & Packaging

		125	250	600
ProTec T2-xxxPV-P	Single Unit Weight	pounds .110	.119	.161
		grams 50	54	73
Single Unit DIN 43880 Dimension		1 TE / .71 [18]		
Packaging Dimensions (HxWxL)		3.2 x 4.5 x 12" [83 x 115 x 305 mm]		
Standard Order Quantity		1 Unit		

inches
[mm]

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

