

Pluggable Multi-Pole SPD for Photovoltaic Systems

ProTec T2-PV 3+0

Type 2 • Type 1CA



Location of Use: String box, Inverter
 Mode of Protection: (+)-PE, (-)-PE, (+)-(-)
 EN/UL Category: Type 2 / Type 1CA
 Housing: Pluggable Design
 Compliance: EN 50539-11:2013+A1:2014
 UL 1449 4th Edition

Technical Data

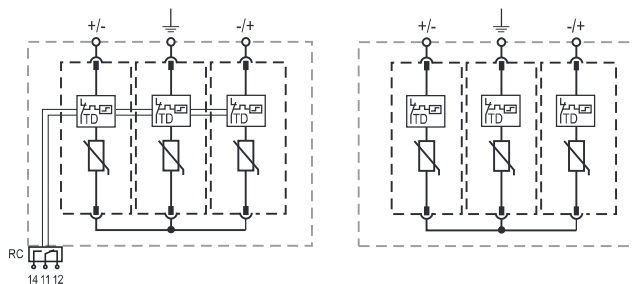
ProTec T2-xxxxPV-3+0(-R)		1100	1500
EN Electrical			
Maximum Continuous Operating Voltage (PV)	U_{CPV}	1100 V	1500 V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA	
Maximum Discharge Current (8/20 μ s)	I_{max}	40 kA	30 kA
Total Discharge Current	I_{Total}	50 kA	40 kA
Voltage Protection Level	U_p	3800 V	5000 V
Response Time	t_A	< 25 ns	
Short-Circuit Current Rating	I_{SCPV}	11 kA	
Number of Ports		1	
UL Electrical			
Maximum Permitted DC Voltage	V_{pVdc}	1100 V	1500 V
Voltage Protection Rating	VPR	2500 V	4000 V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA	
Short-Circuit Current Rating	SCCR	50 kA	65 kA
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}	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		1100	1500
ProTec T2-xxxxPV-3+0		59.0292	59.0295
ProTec T2-xxxxPV-3+0-R (with remote contacts)		59.0293	59.0296
ProTec T2-550PV-P (plug)		59.0291	-
ProTec T2-750PV-P (plug)		-	59.0294

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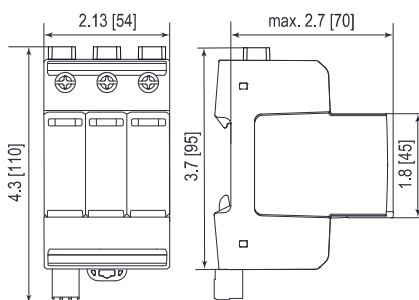
Internal Configuration

Legend

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



Complete Unit

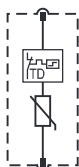


Complete Unit Dimensions & Packaging

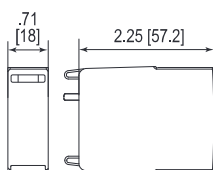
		1100	1500
ProTec T2-xxxxPV-3+0			
Weight	pounds	.806	.879
	grams	366	399
ProTec T2-xxxxPV-3+0-R			
Weight	pounds	.817	.890
	grams	371	404
DIN 43880 Dimension		3 TE / 2.13" [54]	
Packaging Dimensions (HxWxL)		4.3 × 4.5 × 13.8" [109 × 115 × 352 mm]	
Standard Order Quantity		5 Units	

Plug Internal Configuration

ProTec T2-XXXPV-P



Spare Plug



Single Unit Dimensions & Packaging

		550	750
ProTec T2-xxxPV-P			
Weight	pounds	.150	.174
	grams	68	79
DIN 43880 Dimension		1 TE / .71" [18]	
Packaging Dimensions (HxWxL)		3.2 × 4.5 × 12" [83 × 115 × 305 mm]	
Standard Order Quantity		24 Units	

inches
[mm]