

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, (+)-(-)
 Surge Ratings: $I_n = 20 \text{ kA (8/20 } \mu\text{s)}$
 $I_{\text{Total}} = \text{up to } 50 \text{ kA (8/20 } \mu\text{s)}$
 EN/UL Category: Type 2 / Type 1CA
 Protective Elements: High Energy MOV
 Housing: Pluggable Design
 Compliance: EN 50539-11:2013+A1:2014
 UL 1449 4th Edition

Technical Data

ProTec T2-xxxxPV-3+0

1100

1500

IEC Electrical

Maximum Continuous Operating DC Voltage	U_{CPV}	1100V	1500V
Nominal Discharge Current (8/20 μs)	I_n	20kA	
Maximum Discharge Current (8/20 μs)	I_{max}	40kA	30kA
Total Discharge Current	I_{Total}	50kA	40kA
Voltage Protection Level	U_p	3800V	5000V
Response Time	t_A		< 25ns
Short-Circuit Current Rating	I_{SCPV}		11kA
Number of Ports			1

UL Electrical

Maximum Permitted DC Voltage	V_{pVdc}	1100V	1500V
Voltage Protection Rating	VPR	2500V	4000V
Nominal Discharge Current (8/20 μs)	I_n	20kA	
Short-Circuit Current Rating	SCCR	50kA	65kA

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 [4.5Nm]	
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	
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) / 1.5mm 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	59.0291	-
ProTec T2-750PV-P	-	59.0294

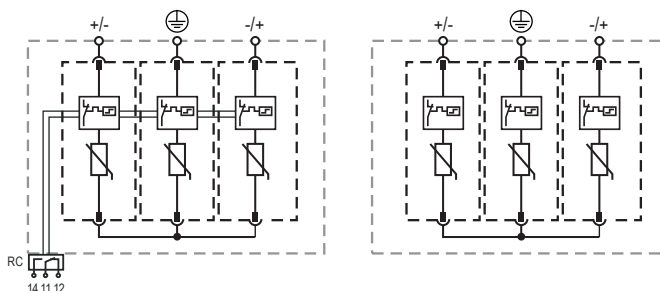
ProTec T2-PV-3+0

Internal Configuration

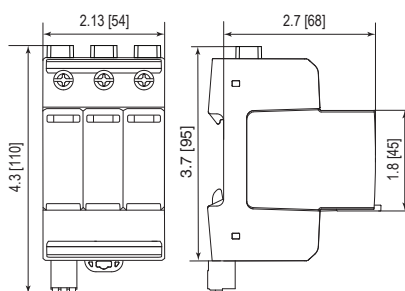
Legend

⊕ Ground

RC Remote Contacts Optional



Dimensions & Weights

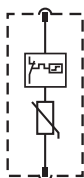


Weights

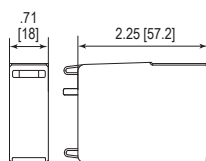
		1100	1500
ProTec T2-xxxxPV-3+0			
Single Unit Weight	pounds	.874	.979
	grams	396	444
ProTec T2-xxxxPV-3+0-R			
Single Unit Weight	pounds	.896	1.001
	grams	406	454
Single Unit DIN 43880 Dimension		3 TE	
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]	
Minimum Order Quantity		5 Units	

Plug Internal Configuration

ProTec T2-XXXPV-P



Dimensions & Weights



Weights

		550	750
ProTec T2-xxxPV-P			
Single Unit Weight	pounds	.157	.192
	grams	71	87
Single Unit DIN 43880 Dimension		1 TE	
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]	
Minimum Order Quantity		28 Units	

inches
[mm]

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



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