

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 4<sup>th</sup> Edition

**Technical Data**

ProTec T2-xxxxPV-3+0

1100

1500

**IEC Electrical**

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

**UL Electrical**

		1100V	1500V
Maximum Permitted DC Voltage	$V_{\text{pVdc}}$	1100V	1500V
Voltage Protection Rating	VPR	2500V	4000V
Nominal Discharge Current (8/20 $\mu\text{s}$ )	$I_n$	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	$M_{\text{max}}$	39.9 lbf-in [4.5 Nm]	
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm <sup>2</sup> (Solid, Stranded) / 25 mm <sup>2</sup> (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) / 1.5 mm <sup>2</sup> (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

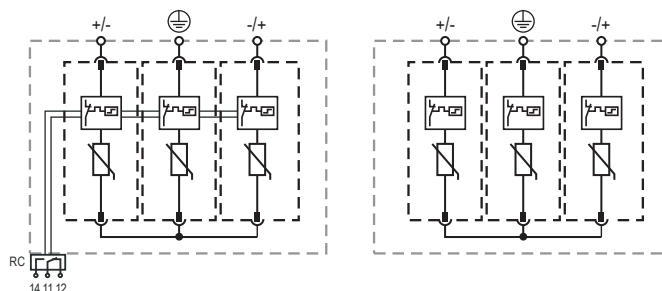
## ProTec T2-PV-3+0

### Internal Configuration

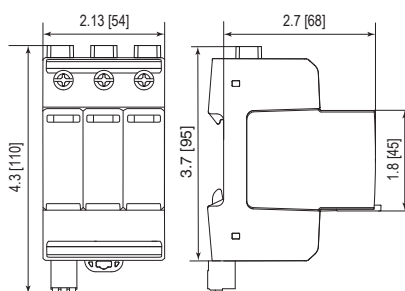
#### Legend

⊕ Ground

RC Remote Contacts Optional



### Dimensions & Weights

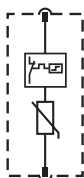


#### Weights

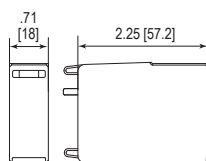
		1100	1500
<b>ProTec T2-xxxxPV-3+0</b>			
Single Unit Weight	pounds	.874	.979
	grams	396	444
<b>ProTec T2-xxxxPV-3+0-R</b>			
Single Unit Weight	pounds	.896	1.001
	grams	406	454
Single Unit DIN 43880 Dimension		3 TE	
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]	
Minimum Order Quantity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

### Plug Internal Configuration

#### ProTec T2-XXXPV-P



### Dimensions & Weights



#### Weights

		550	750
<b>ProTec T2-xxxPV-P</b>			
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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