

ProTec T2-PV 3+0

Type 2 • PV SPD Type 1CA



Location of Use: String box, Inverter
 Mode of Protection: (+)-PE, (-)-PE, (+)-(-)
 EN/UL Category: Type 2 / PV SPD Type 1CA
 Housing: Pluggable Design
 Compliance: IEC 61643-31:2018
 UL 1449 5th Edition

Technical Data

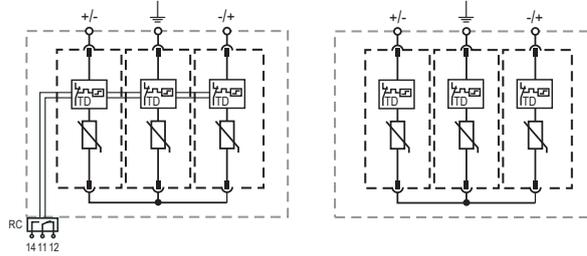
ProTec T2-xxxxPV-3+0(-R)		250*	600*	1100	1500
EN Electrical					
Maximum Continuous Operating Voltage (PV)	U_{OPV}	250 V	600 V	1100 V	1500 V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20 μ s)	I_{max}	50 kA	50 kA	40 kA	30 kA
Total Discharge Current	I_{Total}	50 kA	50 kA	50 kA	40 kA
Voltage Protection Level	U_p	1000 V	2000 V	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	20 kA
Short-Circuit Current Rating	SCCR	-	-	50 kA	65 kA
Additional Electrical Parameters (Tests performed within Raycap testing laboratory only)					
Residual Voltage at 5 kA (8/20 μ s)	U_{res}	700 V	1500 V	3100 V	4000 V
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)			

*No VDE and UL certification.

Internal Configuration

Legend

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



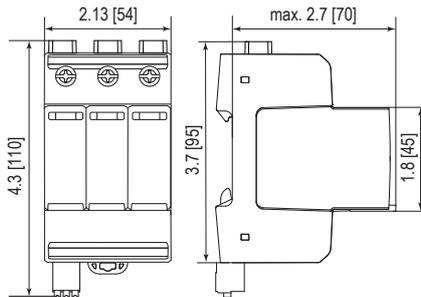
Order Information

Order Code	250*	600*	1100	1500
ProTec T2-xxxxPV-3+0	59.0985	59.0986	59.0292	59.0295
ProTec T2-xxxxPV-3+0-R (with remote contacts)	59.0979	59.0980	59.0293	59.0296
ProTec T2-5125PV-P (plug)	59.A300	-		
ProTec T2-300PV-P (plug)	-	59.0992		
ProTec T2-550PV-P (plug)			59.0291	-
ProTec T2-750PV-P (plug)			-	59.0294

*No VDE and UL certification.

Dimensions & Packaging

inches [mm]



Complete Unit UL Recognized Products

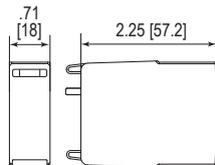
ProTec T2-xxxxPV-3+0(-US)	250*	600*	1100	1500	
Weight	pounds	.696	.745	.806	.879
	grams	316	338	366	399

Complete Unit UL Listed Products

ProTec T2-xxxxPV-3+0(-US)-R	250*	600*	1100	1500	
Weight	pounds	.509	.753	.817	.890
	grams	321	342	371	404

DIN 43880 Dimension	3 TE / 2.13" [54]
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity	5 Units

Spare Plug



Single Unit

ProTec T2-xxxPV-P	125*	300*	550	750	
Weight	pounds	.110	.121	.150	.174
	grams	50	55	68	79

DIN 43880 Dimension	1 TE / .71" [18]
Packaging Dimensions (HxWxL)	3.2 x 4.5 x 12" [83 x 116 x 305 mm]
Standard Order Quantity	24 Units