



Location of Use: String box, Inverter
 Mode of Protection: (+)-PE, (-)-PE, (+)-(-)
 EN/UL Category: Type 1+2 / PV SPD Type 1CA
 Compliance: EN 61643-31:2019
 UL 1449 5th Edition

**ProTec T1-xxxxPV-3+0(-R)****1100****EN Electrical**

Maximum Continuous Operating Voltage (PV)	U_{CPV}	1100 V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA
Impulse Discharge Current (10/350 μ s)	I_{imp}	6.25 kA
Specific Energy	W/R	9.77 kJ/ Ω
Charge	Q	3.125 As
Total Discharge Current (10/350 μ s)	I_{Total}	12.5 kA
Total Discharge Current (8/20 μ s)	I_{Total}	50 kA
Maximum Discharge Current (8/20 μ s)	I_{max}	40 kA
Voltage Protection Level	(+)-PE, (-)-PE U_p	3800 V
	(+)-(-) U_p	3800 V
Response Time	t_A	< 25 ns
Overvoltage Category		III
Short-Circuit Current Rating	I_{SCPV}	11 kA
Number of Ports		1

UL Electrical

Maximum Permitted DC Voltage	V_{pdc}	1100V
Voltage Protection Rating	(+)-G, (-)-G VPR	2500V
	(+)-(-) VPR	2500V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA
Short-Circuit Current Rating	SCCR	50 kA

Additional Electrical Parameters (Tests performed within Raycap testing laboratory only)

Residual Voltage at 5 kA (8/20 μ s)	U_{res}	3200 V
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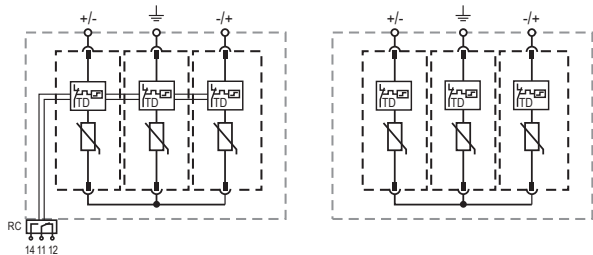
Mechanical & Environmental

Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Pollution Degree		2
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: 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)
Overvoltage Category		III

Internal Configuration

Legend

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

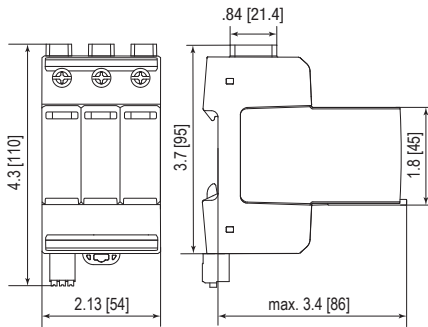


Order Information

Order Code	1100
ProTec T1-xxxxPV-3+0	59.0285
ProTec T1-xxxxPV-3+0-R (with remote contacts)	59.0286
ProTec T1-550PV-P (middle plug)	59.0283
ProTec T1-550PV-M-P (side plug)	59.0284

Dimensions & Packaging

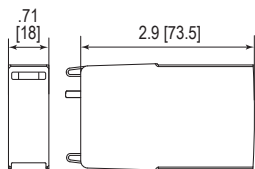
inches [mm]



Complete Unit

ProTec T1-xxxxPV-3+0	1100
Weight	pounds [grams]
	.968 [439]
ProTec T1-xxxxPV-3+0-R	
Weight	pounds [grams]
	.979 [444]
DIN 43880 Dimension	3 TE / 2.13" [54 mm]
Packaging Dimensions (H x W x L)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity	5 Units

Spare Plug



Single Unit

ProTec T1-xxxPV-P	550
Weight	pounds [grams]
	.220 [100]
ProTec T1-xxxPV-M-P	
Weight	pounds [grams]
	.806 [366]
DIN 43880 Dimension	1 TE / .71" [18 mm]
Packaging Dimensions (H x W x L)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity	28 Units