

**DATA SHEET**

Multi-Pole Base for Photovoltaic Systems

**ProTec T1-PV-5Y-00(-R)**

**Class I • Class II • Type 1 • Type 2 • Type 1CA PV SPD**



Location of Use: String box, Inverter  
 Mode of Protection: (+)-PE, (-)-PE, (+)-(-)  
 IEC/EN/UL Category: Class I+II/Type 1+2 / Type 1CA PV SPD  
 Compliance: IEC 61643-31:2018  
 EN 61643-31:2019  
 UL 1449 5<sup>th</sup> Edition

**ProTec T1-xxxxPV-5Y-00(-R)**

**1100**

**EN Electrical**

Maximum Continuous Operating Voltage (PV)	$U_{OPV}$	1100 V
Nominal Discharge Current (8/20 $\mu$ s)	$I_n$	20 kA
Impulse Discharge Current (10/350 $\mu$ s)	$I_{imp}$	5 kA
Specific Energy	W/R	6.25 kJ/ $\Omega$
Charge	Q	2.5 As
Total Discharge Current (10/350 $\mu$ s)	$I_{Total}$	10 kA
Total Discharge Current (8/20 $\mu$ s)	$I_{Total}$	50 kA
Maximum Discharge Current (8/20 $\mu$ s)	$I_{max}$	40 kA
Voltage Protection Level	(+/-)-PE $U_p$	3800 V
	(+)-(-) $U_p$	3800 V
Short-Circuit Current Rating	$I_{SCPV}$	11 kA
Number of Ports		1

**UL Electrical**

Maximum Permitted DC Voltage	$V_{pvdc}$	1100 V
Voltage Protection Level	(+/-)-PE VPR	2500 V
	(+)-(-) VPR	2500 V
Nominal Discharge Current (8/20 $\mu$ s)	$I_n$	20 kA
Short-Circuit Current Rating	SCCR	50 kA

**Mechanical & Environmental**

Operating Temperature Range	$T_a$	-40 °F to +158 °F [185 °F per UL 1449]
		-40 °C to +70 °C [85 °C per UL 1449]
Permissible Operating Humidity	RH	5%...95%
Altitude (max)		13123 ft [4000 m]
Terminal Screw Torque	$M_{max}$	35 lbf-in per UL 1449 [4.5 Nm]
Conductor Cross Section (max)		6 AWG (Solid, Stranded) per UL 1449
		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 (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)		10 AWG (Solid) per UL 1449 [1.5mm <sup>2</sup> (Solid)]

**Order Information**

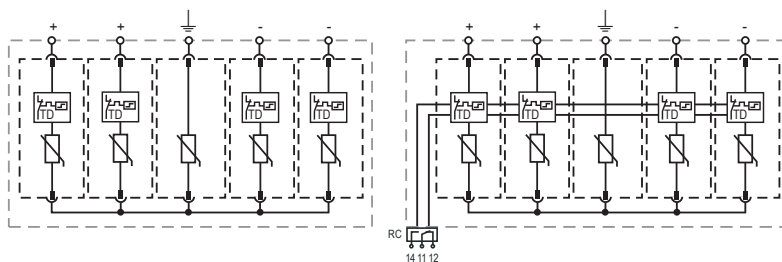
<b>Order Code</b>	<b>1100</b>
ProTec T1-xxxxPV-5Y-00	59.A444
ProTec T1-xxxxPV-5Y-00-R (with remote contacts)	59.A445
ProTec T1-550PV-00-P (ground plug)	59.A446
ProTec T1-550PV-00M-P (side plugs)	59.A447

## ProTec T1-PV-5Y-00(-R)

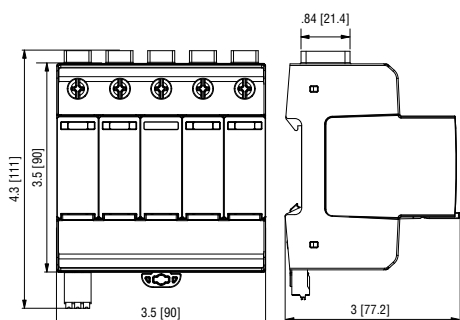
### Internal Configuration

#### Legend

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



### Complete Unit



#### Complete Unit Dimensions & Packaging

<b>ProTec T1-xxxxPV-5Y-00</b>		<b>1100</b>
Weight	pounds	1.536
	grams	697
<b>ProTec T1-xxxxPV-5Y-00-R</b>		<b>1100</b>
Weight	pounds	1.552
	grams	704
DIN 43880 Dimension		5 TE / 3.5" [90]
Packaging Dimensions (H x W x L)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity		3 Units

### Plug Internal Configuration

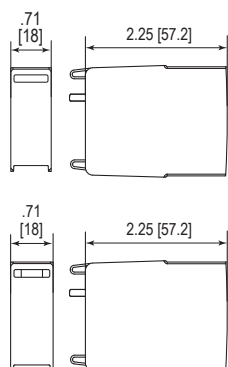
#### ProTec T1-550PV-00M-P



#### ProTec T1-550PV-00-P



### Spare Plug



#### Dimensions & Packaging

<b>ProTec T1-550PV-00M-P</b>		<b>550</b>
Single Unit Weight	pounds	.202
	grams	92
<b>ProTec T1-550PV-00-P</b>		<b>550</b>
Single Unit Weight	pounds	.182
	grams	83
Single Unit DIN 43880 Dimension		1 TE / .71 [18]
Packaging Dimensions (H x W x L)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity		24 Units

inches  
[mm]

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

