

Pluggable Multi-Pole SPD  
**ProTec T2 1+1**  
 Class II • Type 2 • Type 1CA



Location of Use: Sub-Distribution Boards  
 Network Systems: TT, TN-S  
 Mode of Protection: L-N, N-PE  
 Surge Ratings:  $I_n = 20\text{kA}$  (8/20 $\mu\text{s}$ )  
 IEC/EN/UL Category: Class II / Type 2 / Type 1CA  
 Protective Elements: High Energy MOV and GDT  
 Housing: Pluggable Design  
 Compliance: IEC 61643-11:2011  
 EN 61643-11:2012  
 UL 1449, 4th edition

**Technical Data**

ProTec T2-xxx-1+1(-R)		75	150	300	350
<b>IEC Electrical</b>					
Nominal AC Voltage (50/60Hz)	$U_o/U_n$	60 V	120 V	240 V	277 V
Maximum Continuous Operating Voltage (AC)	(L-N) $U_c$	75 V	150 V	300 V	350 V
	(N-PE) $U_c$	305 V	305 V	305 V	305 V
Nominal Discharge Current (8/20 $\mu\text{s}$ )	(L-N)/(N-PE) $I_n$	20 kA / 40 kA	20 kA / 40 kA	20 kA / 40 kA	20 kA / 40 kA
Maximum Discharge Current (8/20 $\mu\text{s}$ )	(L-N)/(N-PE) $I_{max}$	50 kA / 65 kA	50 kA / 65 kA	50 kA / 65 kA	50 kA / 65 kA
Voltage Protection Level	(L-N)/(N-PE) $U_p$	800 V / 1500 V	1250 V / 1500 V	1500 V / 1500 V	1750 V / 1500 V
Follow Current Interrupt Rating	(N-PE) $I_{fi}$	100 A <sub>RMS</sub>			
Response Time	(L-N)/(N-PE) $t_A$	< 25 ns / < 100 ns			
Back-Up Fuse (max)		315 A / 250 A gG			
Short-Circuit Current Rating (AC)	(L-N) $I_{SCCR}$	25 kA / 50 kA			
TOV Withstand 5s	(L-N) $U_T$	114 V	229 V	337 V	403 V
TOV 120min	(L-N) $U_T / \text{mode}$	114 V/withstand	229 V/withstand	442 V/safe fail	529 V/safe fail
TOV Withstand 200ms	(N-PE) $U_T$	1200 V			
Number of Ports		1			

<b>UL Electrical</b>					
Maximum Continuous Operating Voltage (AC)	(L-N)/(N-PE) MCOV	75 V / 305 V	150 V / 305 V	300 V / 305 V	350 V / 305 V
Voltage Protection Rating	(L-N)/(N-PE) VPR	330 V / 1000 V	600 V / 1000 V	900 V / 1000 V	1000 V / 1000 V
Nominal Discharge Current (8/20 $\mu\text{s}$ )	(L-N)/(N-PE) $I_n$	20 kA / 20 kA			
Short-Circuit Current Rating (AC)	(L-N) SCCR	100 kA	200 kA	150 kA	200 kA

<b>Mechanical</b>					
Operating Temperature Range	$T_a$	-40 °F to +185 °F [-40 °C to +85 °C]			
Permissible Operating Humidity	RH	5%...95%			
Altitude		13123 ft [4000 m]			
Terminal Screw Torque	$M_{max}$	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)			

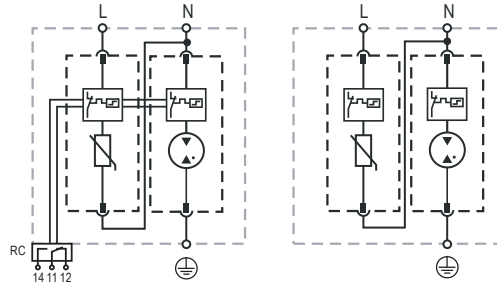
Order Code	75	150	300	350
ProTec T2-xxx-1+1	59.0109	59.0111	59.0113	59.0115
ProTec T2-xxx-1+1-R (with remote contacts)	59.0110	59.0112	59.0114	59.0116
ProTec T2-xxx-P	59.0063	59.0064	59.0065	59.0066
ProTube T2-40-P	59.0273	59.0273	59.0273	59.0273

## ProTec T2 1+1

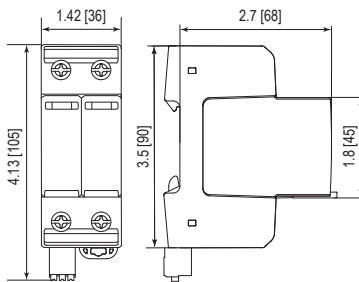
### Internal Configuration

#### Legend

- L Line
- N Neutral
- ⊕ Protective Earth
- RC Remote Contacts Optional



### Dimensions & Packaging

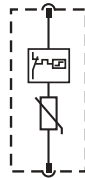


#### Dimensions & Packaging

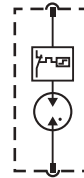
		75	150	300	350
<b>ProTec T2-xxx-1+1</b>					
Single Unit Weight	pounds	.492	.501	.516	.527
	grams	223	227	234	239
<b>ProTec T2-xxx-1+1-R</b>					
Single Unit Weight	pounds	.505	.514	.530	.541
	grams	229	233	240	245
Single Unit DIN 43880 Dimension		2 TE			
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]			
Minimum Order Quantity		7 Units			

### Plug Internal Configuration

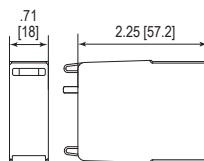
#### ProTec T2-xxx-P



#### ProTube T2-40-P



### Dimensions & Packaging



#### Dimensions & Packaging

		75	150	300	350
<b>ProTec T2-xxx-P</b>					
Single Unit Weight	pounds	.120	.135	.146	.157
	grams	54	61	66	71
<b>ProTube T2-40-P</b>					
Single Unit Weight	pounds [grams]	.093[42]			
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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