

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 μs)
 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

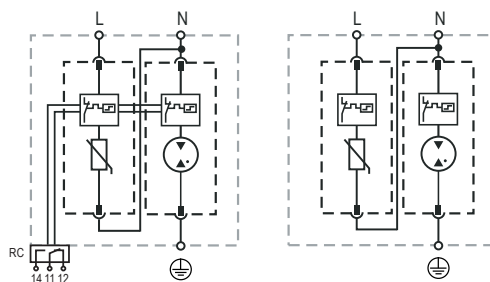
ProTec T2-xxx-1+1(-R)		75	150	300	350
IEC Electrical					
Nominal AC Voltage (50/60Hz)	U_o/U_n	60 V	120 V	240 V	277 V
Maximum Continuous Operating Voltage (AC)	(L-N) U_c	75 V	150 V	300 V	350 V
	(N-PE) U_c	305 V	305 V	305 V	305 V
Nominal Discharge Current (8/20 μs)	(L-N)/(N-PE) I_n	20 kA / 40 kA	20 kA / 40 kA	20 kA / 40 kA	20 kA / 40 kA
Maximum Discharge Current (8/20 μs)	(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 _{RMS}			
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	114 V	229 V	442 VI	529 V
		mode	Withstand	Withstand	Safe Fail
TOV Withstand 200ms	(N-PE) U_T	1200 V			
Number of Ports		1			
UL Electrical					
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 μs)	(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
Mechanical & Environmental					
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 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/1 A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5 A			
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)			
Order Information					
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

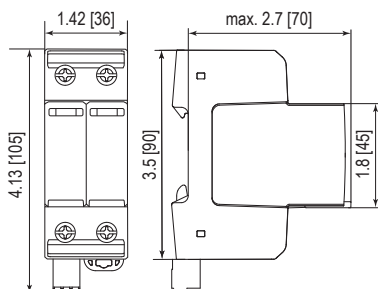
Internal Configuration

Legend

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



Dimensions & Packaging



Dimensions & Packaging

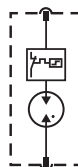
		75	150	300	350
ProTec T2-xxx-1+1	Single Unit Weight	pounds .492	.501	.516	.527
		grams 223	227	234	239
ProTec T2-xxx-1+1-R	Single Unit Weight	pounds .505	.514	.530	.541
		grams 229	233	240	245
Single Unit DIN 43880 Dimension		2 TE			
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]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

Plug Internal Configuration

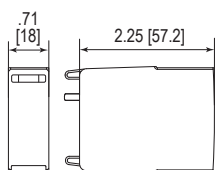
ProTec T2-xxx-P



ProTube T2-40-P



Dimensions & Packaging



Dimensions & Packaging

		75	150	300	350
ProTec T2-xxx-P	Single Unit Weight	pounds .120	.135	.146	.157
		grams 54	61	66	71
ProTube T2-40-P	Single Unit Weight	pounds .093			
		grams 42			
Single Unit DIN 43880 Dimension		1 TE			
Packaging Dimensions (HxWxL)		3.3 x 4.6 x 12" [83 x 116 x 305 mm]			
Minimum Order Quantity		24 Units			

inches
[mm]

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

