

Overvoltage Protection

ProTec T2 3+0

Class II • Type 2 • Type 1CA



Location of Use: Sub-Distribution Boards
 Network Systems: TN-C
 Mode of Protection: L-PEN
 IEC/EN/UL Category: Class II / Type 2 /
 Open Type 1 SPD Listed
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012
 UL 1449 4th Edition

Technical Data

ProTec T2-xxx-3+0(-R)		150	300	350	480	550 *	750
IEC Electrical							
Nominal AC Voltage (50/60Hz)	U_o/U_n	120V	240V	277V	400V	480V	600V
Maximum Continuous Operating Voltage (AC)	U_c	150V	300V	350V	480V	550V	750V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20 μ s)	I_{max}	50 kA	50 kA	50 kA	50 kA	50 kA	35 kA
Voltage Protection Level	U_p	1250V	1500V	1750V	2300V	2500V	3400V
Response Time	t_A	< 25 ns					
Overcurrent Protection (max)		315 A / 250 A gG					
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA / 50 kA					
TOV Withstand 5s	U_T	229V	337V	403V	581V	697V	871V
TOV 120min	U_T	229V	442V	529V	762V	915V	1143V
	mode	Withstand	Safe Fail	Safe Fail	Safe Fail	Safe Fail	Safe Fail
Number of Ports		1					

UL Electrical							
Maximum Continuous Operating Voltage (AC)	MCOV	150V	300V	350V	480V	550V	750V
Voltage Protection Rating	VPR	600V	900V	1000V	1500V	2000V	2500V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Short-Circuit Current Rating (AC)	SCCR	200 kA	150 kA	200 kA	200 kA	200 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 (max)		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 / 0.5 A, 24V / 0.5 A, 12V / 0.5 A					
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)					

Order Information							
Order Code		150	300	350	480	550 *	750
ProTec T2-xxx-3+0		59.0091	59.0093	59.0095	59.0097	59.0681	59.0099
ProTec T2-xxx-3+0-R (with remote contacts)		59.0092	59.0094	59.0096	59.0098	59.0682	59.0100
ProTec T2-xxx-P (plug)		59.0064	59.0065	59.0066	59.0067	59.0685	59.0068

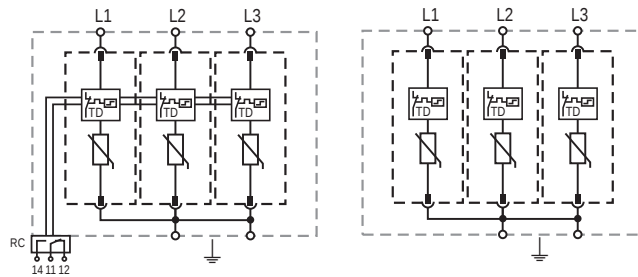
*UL listed, no IEC/EN certification.

ProTec T2 3+0

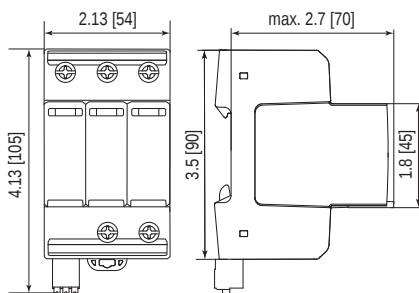
Internal Configuration

Legend

L	Line Conductor Terminal
⏏	PE/G Conductor Terminal
RC	Remote Contacts Terminal (Optional)
TD	Thermal Disconnect



Complete Unit

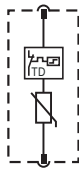


Complete Unit Dimensions & Packaging

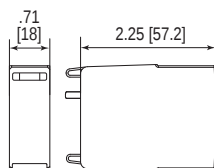
ProTec T2-xxx-3+0		150	300	350	480	550*	750
Weight	pounds	.780	.800	.833	.873	.890	.965
	grams	354	363	378	396	404	438
ProTec T2-xxx-3+0-R							
Weight	pounds	.800	.820	.853	.892	.913	.985
	grams	363	372	387	405	414	447
DIN 43880 Dimension		3 TE / 2.13" [54]					
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]					
Standard Order Quantity		5 Units					

Plug Internal Configuration

ProTec T2-xxx-P



Spare Plug



Single Unit Dimensions & Packaging

ProTec T2-xxx-P		150	300	350	480	550*	750
Weight	pounds	.123	.130	.141	.154	.163	.185
	grams	56	59	64	70	74	84
DIN 43880 Dimension		1 TE / .71" [18]					
Packaging Dimensions (HxWxL)		3.2 x 4.5 x 12" [83 x 115 x 305 mm]					
Standard Order Quantity		24 Units					

inches
[mm]