

Overvoltage Protection ProTec T2 3+1-US

Type 1CA • Open Type 1 SPD Listed • Class II • Type 2



Location of Use: Sub-Distribution Boards
 Network Systems: 3-Phase
 Mode of Protection: L-N, N-PE
 UL/IEC/EN Category: Open Type 1 SPD Listed / Type 1CA
 Class II / Type 2
 Housing: Pluggable Design
 Compliance: UL 1449 5th Edition
 IEC 61643-11:2011
 EN 61643-11:2012+A11:2018

Technical Data

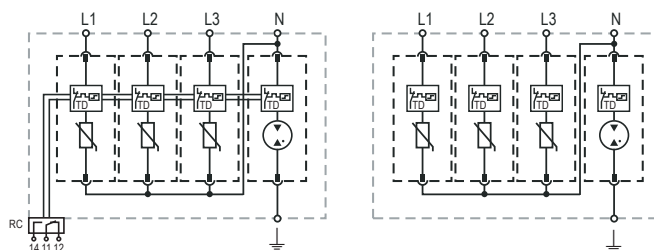
ProTec T2-xxx-3+1-US(-R)

ProTec T2-xxx-3+1-US-(R)			300	350
UL Electrical				
Nominal System Voltage (AC)			415 V / 240 V	480 V / 277 V
System			3Y	3Y
Maximum Continuous Operating Voltage (AC)	(L - N)/(N - G)	MCOV	300 V / 305 V	350 V / 305 V
Voltage Protection Rating	(L - N)/(N - G)	VPR	900 V / 1000 V	1000 V / 1000 V
Nominal Discharge Current (8/20μs)	(L - N)/(N - G)	I _n	20 kA / 20 kA	
Short-Circuit Current Rating (AC)	(L - N)	SCCR	150 kA	200 kA
IEC Electrical				
Nominal AC Voltage (50/60Hz)		U _o /U _n	240 V	277 V
Maximum Continuous Operating Voltage (AC)	(L - N)/(N - PE)	U _c	300 V / 305 V	350 V / 305 V
Nominal Discharge Current (8/20μs)	(L - N)/(N - PE)	I _n	20 kA / 40 kA	20 kA / 40 kA
Maximum Discharge Current (8/20μs)	(L - N)/(N - PE)	I _{max}	50 kA / 65 kA	50 kA / 65 kA
Voltage Protection Level	(L - N)/(N - PE)	U _p	1500 V / 1500 V	1750 V / 1500 V
Follow Current Interrupt Rating	(N - PE)	I _{fi}	100 A	
Response Time	(L - N)/(N - PE)	t _A	< 25 ns / < 100 ns	
Overvoltage Category			III	
Overcurrent Protection (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	337 V	403 V
TOV 120min	(L - N)	U _T	442 V	529 V
		mode	Safe Fail	Safe Fail
TOV Withstand 200ms	(N - PE)	U _T	1200V	
Number of Ports			1	
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 [4000m]	
Terminal Screw Torque		M _{max}	35 lbf-in per UL 1499 [4.5 Nm]	
Conductor Cross Section (max)			6 AWG (Solid, Stranded) per UL 1449	
			35 mm² (Solid, Stranded) / 25 mm² (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/0.5A	
RC Conductor Cross Section (max)			10 AWG (Solid, Stranded) per UL 1449 [1.5mm² (Solid)]	
Overvoltage Category			III	

Internal Configuration

Legend

<i>L</i>	Line Conductor Terminal
<i>N</i>	Neutral Conductor Terminal
$\perp$	PE/G Conductor Terminal
<i>RC</i>	Remote Contacts Terminal (Optional)
<i>TD</i>	Thermal Disconnect

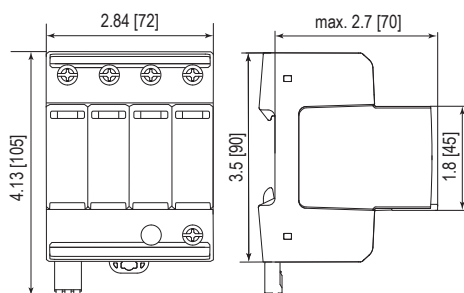


Order Information

Order Code	300	350
ProTec T2-xxx-3+1-US	59.B129	59.B131
ProTec T2-xxx-3+1-US-R (with remote contacts)	59.B130	59.B132
ProTec T2-xxx-P (plug L-N)	59.0065	59.0066
ProTube T2-40-P (plug N-PE)	59.0273	59.0273

Dimensions & Packaging

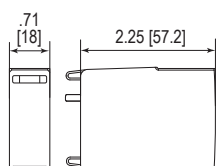
inches [mm]



Complete Unit

ProTec T2-xxx-3+1-US		300	350
Weight	pounds [grams]	1.000 [453]	1.033 [468]
ProTec T2-xxx-3+1-US-R			
Weight	pounds [grams]	1.011 [458]	1.044 [473]
DIN 43880 Dimension	4 TE / 2.84" [72]		
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]		
Standard Order Quantity	4 Units		

Spare Plug



Single Unit

ProTec T2-xxx-P		300	350
Weight	pounds [grams]	.130 [59]	.141 [64]
ProTube T2-40-P		40	
Weight	pounds [grams]	.093 [42]	
DIN 43880 Dimension		1 TE / .71" [18]	
Packaging Dimensions (HxWxL)		3.2 x 4.5 x 12" [83 x 116 x 305 mm]	
Standard Order Quantity		24 Units	