

Overvoltage Protection ProTec T2 3+0-US

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



Location of Use: Sub-Distribution Boards
 Network Systems: 3-Phase Delta / Split Phase, 3W+G
 Mode of Protection: L-PEN
 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+0-US(-R)

150 300 350 480 550* 750

UL Electrical

Nominal System Voltage (AC)		208 V / 120 V	415 V / 240 V	480 V / 277 V	690 V / 400 V	480 V	600 V
		240 V / 120 V	-	-	-	690 V / 400 V	-
System		3Y	3Y	3Y	3Y	3D	3D
		1S	-	-	-	3Y	-
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 μs)	I _n	20kA	20kA	20kA	20kA	20kA	20kA
Short-Circuit Current Rating (AC)	SCCR	200kA	150kA	200kA	200kA	200kA	200kA

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 μs)	I _n	20kA	20kA	20kA	20kA	20kA	20kA
Maximum Discharge Current (8/20 μs)	I _{max}	50kA	50kA	50kA	50kA	50kA	35kA
Voltage Protection Level	U _p	1250V	1500V	1750V	2300V	2500V	3400V
Response Time	t _A	< 25 ns					
Overvoltage Category		III					
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					

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 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/1A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A					
RC Conductor Cross Section (max)		10 AWG (Solid, Stranded) per UL 1449 [1.5 mm ² (Solid)]					
Overvoltage Category		III					

*No VDE certification.

Raycap

www.raycap.com

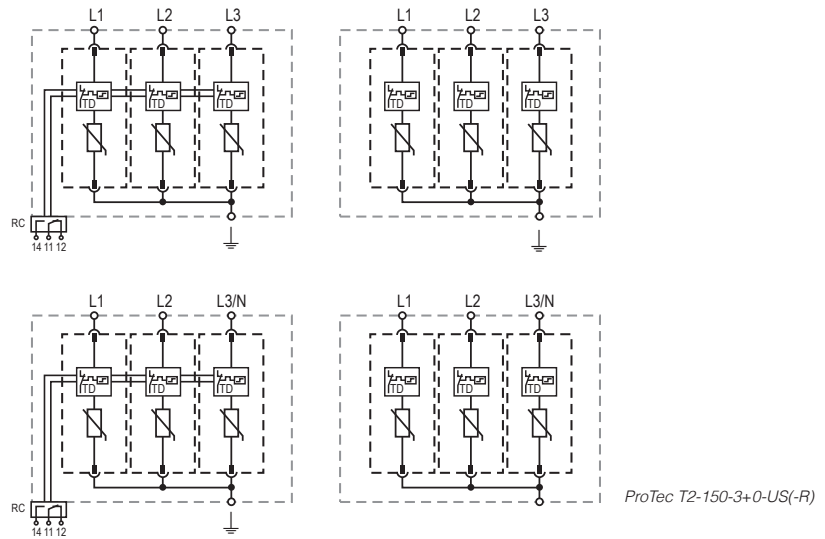


Information contained in this document is subject to change at any time without notice.

Internal Configuration

Legend

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



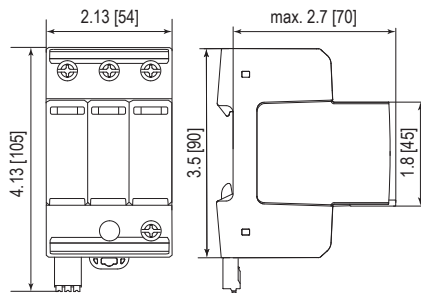
Order Information

Order Code	150	300	350	480	550*	750
ProTec T2-xxx-3+0-US	59.B099	59.B101	59.B103	59.B105	59.B107	59.B109
ProTec T2-xxx-3+0-US-R (with remote contacts)	59.B100	59.B102	59.B104	59.B106	59.B108	59.B110
ProTec T2-xxx-P (plug)	59.0064	59.0065	59.0066	59.0067	59.0685	59.0068

*No VDE certification.

Dimensions & Packaging

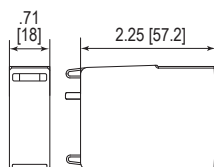
inches [mm]



Complete Unit

ProTec T2-xxx-3+0-US	150	300	350	480	550*	750
Weight	pounds	.780	.800	.833	.873	.890
	grams	354	363	378	396	404
ProTec T2-xxx-3+0-US-R						
Weight	pounds	.800	.820	.853	.892	.913
	grams	363	372	387	405	414
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					

Spare Plug



Single Unit

ProTec T2-xxx-P	150	300	350	480	550*	750
Weight	pounds	.123	.130	.141	.154	.163
	grams	56	59	64	70	74
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					