

Overvoltage Protection ProTec T2 1+0-US

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



Location of Use: Sub-Distribution Boards
 Network Systems: Single phase
 Mode of Protection: L-PE, N-PE (only TN-S), L-PEN, L-N
 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

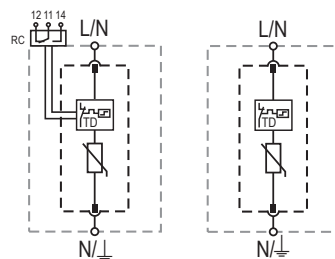
ProTec T2-xxx-1+0-US(-R)		75	150	300	350	480	550*	750
UL Electrical								
Nominal System Voltage (AC)		60V	120V	240V	277V	400V	480V	600V
System		1	1	1	1	1	1	1
Maximum Continuous Operating Voltage (AC)	MCOV	75V	150V	300V	350V	480V	550V	750V
Voltage Protection Rating	VPR	330V	600V	900V	1000V	1500V	2000V	2500V
Nominal Discharge Current (8/20µs)	I _n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Short-Circuit Current Rating (AC)	SCCR	100 kA	200 kA	150 kA	200 kA	200 kA	200 kA	200 kA
IEC Electrical								
Nominal AC Voltage (50/60Hz)	U _o /U _n	60V	120V	240V	277V	400V	480V	600V
Maximum Continuous Operating Voltage (AC)	U _c	75V	150V	300V	350V	480V	550V	750V
Nominal Discharge Current (8/20µs)	I _n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20µs)	I _{max}	50 kA	50 kA	50 kA	50 kA	50 kA	50 kA	35 kA
Voltage Protection Level	U _p	800V	1250V	1500V	1750V	2300V	2500V	3400V
Response Time	t _A	< 25ns						
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	114V	229V	337V	403V	581V	697V	871 V
TOV 120min	U _T	114V	229V	442V	529V	762V	915V	1143V
	mode	Withstand	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 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/0.5 A						
RC Conductor Cross Section (max)		10 AWG (Solid, Stranded) per UL 1449 [1.5 mm² (Solid)]						
Overvoltage Category		III						

*No VDE certification.

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



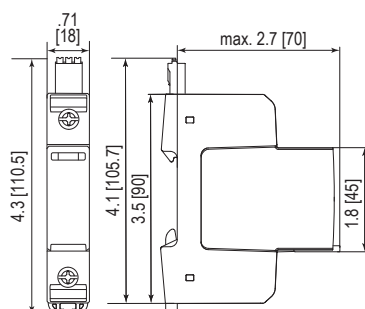
Order Information

Order Code	75	150	300	350	480	550*	750
ProTec T2-xxx-1+0-US	59.B071	59.B073	59.B075	59.B077	59.B079	59.B081	59.B083
ProTec T2-xxx-1+0-US-R (with remote contacts)	59.B072	59.B074	59.B076	59.B078	59.B080	59.B082	59.B084
ProTec T2-xxx-P (plug)	59.0063	59.0064	59.0065	59.0066	59.0067	59.0685	59.0068

*No VDE certification.

Dimensions & Packaging

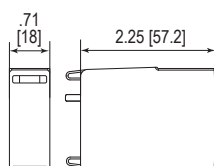
inches [mm]



Complete Unit

ProTec T2-xxx-1+0-US	75	150	300	350	480	550*	750
Weight	pounds	.259	.275	.281	.292	.306	.311
	grams	118	125	128	133	139	141
ProTec T2-xxx-1+0-US-R							
Weight	pounds	.275	.290	.297	.308	.321	.326
	grams	125	132	135	140	146	148
DIN 43880 Dimension	1 TE / .71" [18 mm]						
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]						
Standard Order Quantity	12 Units						

Spare Plug



Single Unit

ProTec T2-xxx-P	75	150	300	350	480	550*	750
Weight	pounds	.108	.123	.130	.141	.154	.163
	grams	49	56	59	64	70	74
DIN 43880 Dimension	1 TE / .71" [18 mm]						
Packaging Dimensions (HxWxL)	3.2 x 4.5 x 12" [83 x 116 x 305 mm]						
Standard Order Quantity	24 Units						