



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

Technical Data**ProTec T2-xxx-2+0(-R) & ProTec T2-xxx-2+0-US(-R)**

75 150 300 350 440 480 550*** 750**

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o/U_n	60V	120V	240V	277V	230V	400V	480V	600V
Maximum Continuous Operating Voltage (AC)	U_c	75V	150V	300V	350V	440V	480V	550V	750V
Nominal Discharge Current (8/20 μ s)	I_n	20kA	20kA	20kA	20kA	20kA	20kA	20kA	20kA
Maximum Discharge Current (8/20 μ s)	I_{max}	50kA	50kA	50kA	50kA	50kA	50kA	50kA	35kA
Voltage Protection Level	U_p	800V	1250V	1500V	1750V	1800V	2300V	2500V	3400V
Response Time	t_A	< 25ns							
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	440V	581V	697V	871V
TOV 120min	U_T	114V	229V	442V	529V	440V	762V	915V	1143V
	mode	Withstand	Withstand	Safe Fail	Safe Fail	Withstand	Safe Fail	Safe Fail	Safe Fail
Number of Ports		1							

UL Electrical

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 (8/20 μ s)	I_n	20kA	20kA	20kA	20kA	-	20kA	20kA	20kA
Short-Circuit Current Rating (AC)	SCCR	100kA	200kA	150kA	200kA	-	200kA	200kA	200kA

Additional Electrical Parameters - Standard (Tests performed within Raycap testing laboratory only)

Residual Voltage at 5 kA (8/20 μ s)	U_{res}	400V	750V	1000V	1300V	1400V	1500V	1800V	2500V
Overcurrent Protection (min)		80 A gG							

Additional Electrical Parameters - Extended (Additionally tested by VDE)

Short-Circuit Current Rating (AC)	I_{SCCR}	100 kA							
Overcurrent Protection (max)		250 A gG							

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 [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)]							

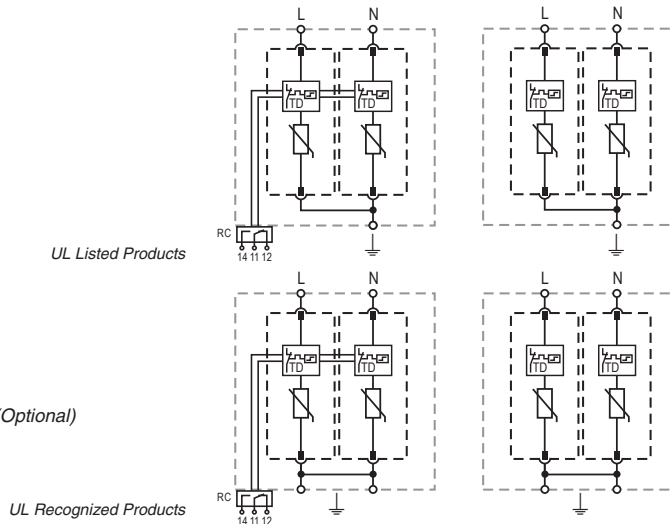
**No VDE and UL certification.

***No VDE certification.

Internal Configuration

Legend

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



ProTec T2-xxx-2+0(-R)

Order Information VDE Certified and UL Recognized Products

Order Code	75	150	300	350	440**	480	550***	750
ProTec T2-xxx-2+0	59.0343	59.0081	59.0083	59.0085	59.0548	59.0087	59.0679	59.0089
ProTec T2-xxx-2+0-R (with remote contacts)	59.0344	59.0082	59.0084	59.0086	59.0549	59.0088	59.0680	59.0090
ProTec T2-xxx-P (plug)	59.0063	59.0064	59.0065	59.0066	59.0547	59.0067	59.0685	59.0068

ProTec T2-xxx-2+0-US(-R)

For UL Listed products one PE/G Conductor Terminal is covered/closed.

Order Information VDE Certified and Open Type 1 UL Listed Products

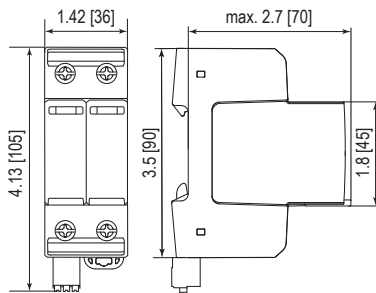
Order Code	75	150	300	350	440**	480	550***	750
ProTec T2-xxx-2+0-US	59.B085	59.B087	59.B089	59.B091	-	59.B093	59.B095	59.B097
ProTec T2-xxx-2+0-US-R (with remote contacts)	59.B086	59.B088	59.B090	59.B092	-	59.B094	59.B096	59.B098
ProTec T2-xxx-P (plug)	59.0063	59.0064	59.0065	59.0066	59.0547	59.0067	59.0685	59.0068

**No VDE and UL certification.

***No VDE certification.

Dimensions & Packaging

inches [mm]



Complete Unit UL Recognized Products

ProTec T2-xxx-2+0		75	150	300	350	440**	480	550***	750
Weight	pounds	.525	.556	.569	.591	.600	.618	.628	.680
	grams	238	252	258	268	272	280	285	308

ProTec T2-xxx-2+0-R

Weight	pounds	.545	.576	.619	.611	.620	.638	.659	.699
	grams	247	261	267	272	281	289	299	317

Complete Unit UL Listed Products

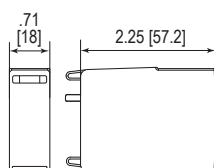
ProTec T2-xxx-2+0-US		75	150	300	350	440**	480	550***	750
Weight	pounds	.505	.536	.549	.571	.580	.598	.608	.660
	grams	229	243	249	259	263	271	276	299

ProTec T2-xxx-2+0-US-R

Weight	pounds	.525	.556	.569	.591	.600	.618	.639	.679
	grams	238	252	258	268	272	280	290	308

DIN 43880 Dimension	2 TE / 1.42" [36]
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity	7 Units

Spare Plug



Single Unit

ProTec T2-xxx-P		75	150	300	350	440**	480	550***	750
Weight	pounds	.108	.123	.130	.141	.146	.154	.163	.185
	grams	49	56	59	64	66	70	74	84

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