

Overvoltage Protection **SafeTec T2 4+0**

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



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
 Safety: Patented Current Limiting Technology
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018
 UL 1449 5th Edition

Technical Data

SafeTec T2-xxx-4+0(-R) & SafeTec T2-xxx-4+0-US(-R)		150	300	350	480	550
IEC Electrical						
Nominal AC Voltage (50/60Hz)	U_o/U_n	120V	240V	277V	400V	400V
Maximum Continuous Operating Voltage (AC)	U_c	150V	300V	350V	480V	550V
Nominal Discharge Current (8/20 μ s)	I_n	20kA	20kA	20kA	20kA	20kA
Maximum Discharge Current (8/20 μ s)	I_{max}	50kA	50kA	50kA	50kA	50kA
Voltage Protection Level	U_p	1250V	1650V	1750V	2300V	2500V
Response Time	t_A	< 25 ns				
Overcurrent Protection (max)		315 A/250 A gG				
Short-Circuit Current Rating (AC)	I_{SCCR}	25kA/50kA				
TOV Withstand 120min	U_T	255V	442V	529V	762V	918V
Number of Ports		1				
UL Electrical						
Maximum Continuous Operating Voltage (AC)	MCOV	150V	300V	350V	480V	550V
Voltage Protection Rating	VPR	700V	1200V	1200V	1500V	1800V
Nominal Discharge Current (8/20 μ s)	I_n	20kA	20kA	20kA	20kA	20kA
Short-Circuit Current Rating (AC)	SCCR	200kA	150kA	200kA	200kA	200kA
Additional Electrical Parameters (Tests performed within Raycap testing laboratory only)						
Residual Voltage at 5 kA (8/20 μ s)	U_{res}	750V	1000V	1300V	1600V	1900V
Overcurrent Protection (min)		80 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)		10AWG (Solid, Stranded) per UL 1449 [1.5 mm ² (Solid)]				

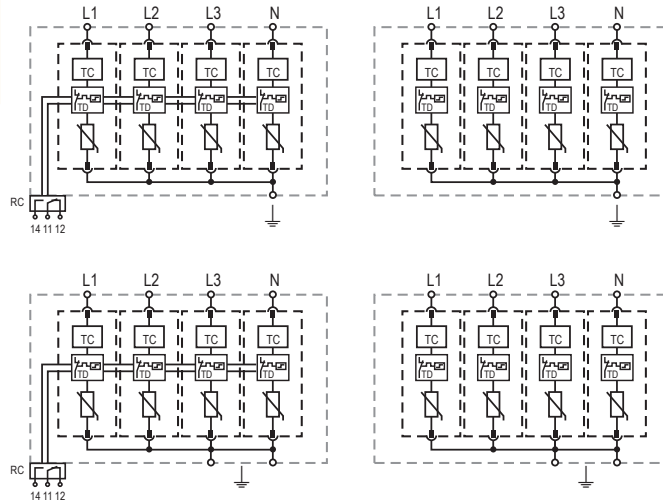
Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- PE/G Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TC Thermal Control Function
- TD Thermal Disconnect

UL Listed Products

UL Recognized Products



SafeTec T2-xxx-4+0(-R)

Order Information VDE Certified and UL Recognized Products

Order Code	150	300	350	480	550
SafeTec T2-xxx-4+0	59.0176	59.0178	59.0180	59.0182	59.0184
SafeTec T2-xxx-4+0-R (with remote contacts)	59.0177	59.0179	59.0181	59.0183	59.0185
SafeTec T2-xxx-P (plug)	59.0126	59.0127	59.0128	59.0129	59.0299

SafeTec T2-xxx-4+0-US(-R)

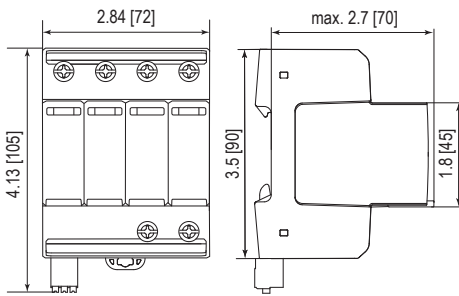
For UL Listed products one PE/G Conductor Terminal is covered/closed.

Order Information VDE Certified and Open Type 1 UL Listed Products

Order Code	150	300	350	480	550
SafeTec T2-xxx-4+0-US	59.B229	59.B231	59.B233	59.B235	59.B237
SafeTec T2-xxx-4+0-US-R (with remote contacts)	59.B230	59.B232	59.B234	59.B236	59.B238
SafeTec T2-xxx-P (plug)	59.0126	59.0127	59.0128	59.0129	59.0299

Dimensions & Packaging

inches [mm]



Complete Unit UL Recognized Products

SafeTec T2-xxx-4+0	150	300	350	480	550	
Weight	pounds	1.070	1.097	1.167	1.1756	1.220
	grams	485	497	529	533	553

SafeTec T2-xxx-4+0-R

Weight	pounds	1.090	1.117	1.187	1.196	1.240
	grams	494	506	538	542	562

Complete Unit UL Listed Products

SafeTec T2-xxx-4+0-US	150	300	350	480	550	
Weight	pounds	1.050	1.077	1.147	1.156	1.200
	grams	476	488	520	524	544

SafeTec T2-xxx-4+0-US-R

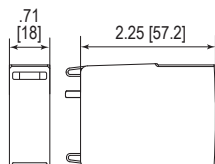
Weight	pounds	1.070	1.097	1.167	1.176	1.220
	grams	485	497	529	533	553

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

SafeTec T2-xxx-P	150	300	350	480	550	
Weight	pounds	.139	.146	.163	.165	.176
	grams	63	66	74	75	80

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