

**Overvoltage Protection**  
**SafeTec T2 1+0**  
**Class II • Type 2 • Type 1CA**



Location of Use: Sub-distribution Boards  
 Network Systems: TN-S, TN-C, TT (only L-N)  
 Mode of Protection: L-PE, N-PE (only TN-S), L-PEN, L-N  
 IEC/EN/UL Category: Class II / Type 2 / Type 1CA  
 Safety: Current Limiting Technology  
 Housing: Pluggable Design  
 Compliance: IEC 61643-11:2011  
 EN 61643-11:2012+A11:2018  
 UL 1449 5th Edition

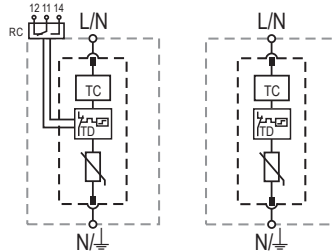
**Technical Data**

SafeTec T2-xxx-1+0(-R)		75	150	300	350	480	550	750	880
<b>IEC Electrical</b>									
Nominal AC Voltage (50/60Hz)	$U_o/U_n$	60V	120V	240V	277V	400V	400V	600V	600V
Maximum Continuous Operating Voltage (AC)	$U_c$	75V	150V	300V	350V	480V	550V	750V	880V
Nominal Discharge Current (8/20 $\mu$ s)	$I_n$	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20 $\mu$ s)	$I_{max}$	50 kA	50 kA	50 kA	50 kA	50 kA	50 kA	35 kA	35 kA
Voltage Protection Level	$U_p$	800V	1250V	1650V	1750V	2300V	2500V	3500V	3600V
Response Time	$t_A$	< 25 ns							
Overcurrent Protection (max)		315 A/250 A gG							
Short-Circuit Current Rating (AC)	$I_{SCCR}$	25 kA/50 kA							
TOV Withstand 120min	$U_T$	150V	255V	442V	529V	762V	918V	1200V	1250V
Number of Ports		1							
<b>UL Electrical</b>									
Maximum Continuous Operating Voltage (AC)	MCOV	75V	150V	300V	350V	480V	550V	750V	880V
Voltage Protection Rating	VPR	600V	700V	1200V	1200V	1500V	1800V	2500V	2500V
Nominal Discharge Current (8/20 $\mu$ s)	$I_n$	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Short-Circuit Current Rating (AC)	SCCR	85kA	200kA	150kA	200kA	200kA	200kA	200kA	200kA
<b>Additional Electrical Parameters</b> (Tests performed within Raycap testing laboratory only)									
Residual Voltage at 5 kA (8/20 $\mu$ s)	$U_{res}$	400V	750V	1000V	1300V	1600V	1900V	2700V	2800V
Overcurrent Protection (min)		80 A gG							
<b>Mechanical &amp; Environmental</b>									
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	$M_{max}$	40 lbf-in [4.5Nm]							
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm <sup>2</sup> (Solid, Stranded) / 25 mm <sup>2</sup> (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)		16 AWG (Solid) / 1.5 mm <sup>2</sup> (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



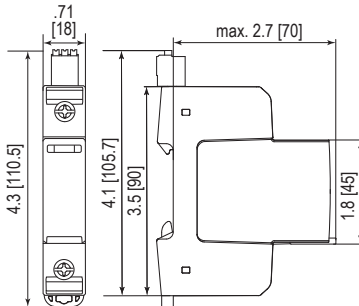
### SafeTec T2-xxx-1+0(-R)

#### Order Information

Order Code	75	150	300	350	480	550	750	880
SafeTec T2-xxx-1+0	59.0132	59.0134	59.0136	59.0138	59.0140	59.0142	59.0144	59.0146
SafeTec T2-xxx-1+0-R (with remote contacts)	59.0133	59.0135	59.0137	59.0139	59.0141	59.0143	59.0145	59.0147
SafeTec T2-xxx-P (plug)	59.0125	59.0126	59.0127	59.0128	59.0129	59.0299	59.0130	59.0131

## Dimensions & Packaging

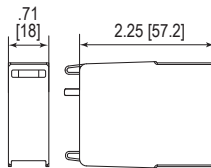
inches [mm]



#### Complete Unit

SafeTec T2-xxx-1+0	75	150	300	350	480	550	750	880	
Weight	pounds	.279	.290	.297	.314	.317	.328	.345	.350
	grams	127	132	135	143	144	149	157	159
<b>SafeTec T2-xxx-1+0-R</b>									
Weight	pounds	.295	.306	.312	.330	.332	.343	.361	.365
	grams	134	139	142	150	151	156	164	166
DIN 43880 Dimension	1 TE / .71" [18]								
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

SafeTec T2-xxx-P	75	150	300	350	480	550	750	880	
Weight	pounds	.128	.139	.146	.163	.165	.176	.194	.198
	grams	58	63	66	74	75	80	88	90
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								