

# Overvoltage Protection

## SafeTec T2 3+0

### Class II • Type 2 • Type 1CA



Location of Use: Sub-distribution Boards  
 Network Systems: TN-C  
 Mode of Protection: L-PEN  
 IEC/EN/UL Category: Class II / Type 2 / Type 1CA  
 Safety: Patented Current Limiting Technology  
 Housing: Pluggable Design  
 Compliance: IEC 61643-11:2011  
 EN 61643-11:2012  
 UL 1449 4<sup>th</sup> Edition

#### Technical Data

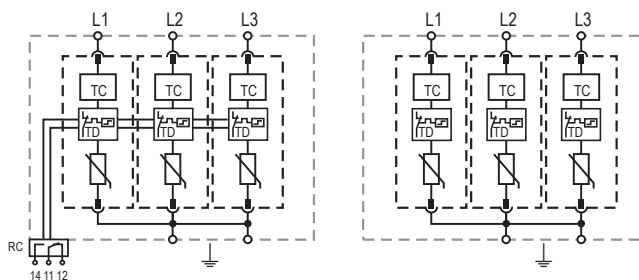
SafeTec T2-xxx-3+0(-R)		150	300	350	480	550	750	880
<b>IEC Electrical</b>								
Nominal AC Voltage (50/60Hz)	$U_o/U_n$	120 V	240 V	277 V	400 V	400 V	600 V	600 V
Maximum Continuous Operating Voltage (AC)	$U_c$	150 V	300 V	350 V	480 V	550 V	750 V	880 V
Nominal Discharge Current (8/20 $\mu$ s)	$I_n$	20 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	35 kA	35 kA
Voltage Protection Level	$U_p$	1250 V	1650 V	1750 V	2300 V	2500 V	3500 V	3600 V
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	$U_T$	255 V	442 V	529 V	762 V	918 V	1200 V	1250 V
Number of Ports		1						
<b>UL Electrical</b>								
Maximum Continuous Operating Voltage (AC)	MCOV	150 V	300 V	350 V	480 V	550 V	750 V	880 V
Voltage Protection Rating	VPR	700 V	1200 V	1200 V	1500 V	1800 V	2500 V	2500 V
Nominal Discharge Current (8/20 $\mu$ s)	$I_n$	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Short-Circuit Current Rating (AC)	SCCR	200 kA	150 kA	200 kA	200 kA	200 kA	200 kA	200 kA
<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 [4000 m]						
Terminal Screw Torque	$M_{max}$	39.9 lbf-in [4.5 Nm]						
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)						
<b>Order Information</b>								
Order Code		150	300	350	480	550	750	880
SafeTec T2-xxx-3+0		59.0162	59.0164	59.0166	59.0168	59.0170	59.0172	59.0174
SafeTec T2-xxx-3+0-R (with remote contacts)		59.0163	59.0165	59.0167	59.0169	59.0171	59.0173	59.0175
SafeTec T2-xxx-P (plug)		59.0126	59.0127	59.0128	59.0129	59.0299	59.0130	59.0131

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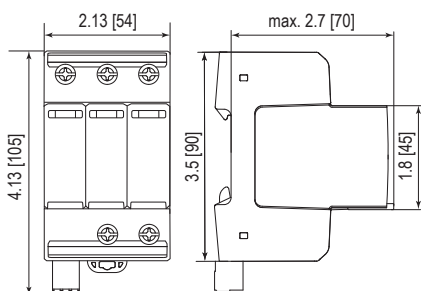
### Internal Configuration

#### Legend

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



### Complete Unit

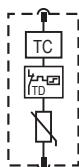


#### Complete Unit Dimensions & Packaging

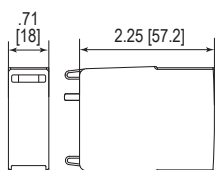
		150	300	350	480	550	750	880
Weight	pounds	.826	.846	.899	.906	.939	.992	1.005
	grams	375	384	408	411	426	450	456
<b>SafeTecT2-xxx-3+0-R</b>								
Weight	pounds	.846	.866	.919	.926	.959	1.011	1.025
	grams	384	393	417	420	435	459	465
DIN 43880 Dimension		3 TE / 2.13" [54]						
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]						
Standard Order Quantity		5 Units						

### Plug Internal Configuration

#### SafeTec T2-xxx-P



### Spare Plug



#### Single Unit Dimensions & Packaging

		150	300	350	480	550	750	880
Weight	pounds	.139	.146	.163	.165	.176	.194	.198
	grams	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 115 x 305 mm]						
Standard Order Quantity		24 Units						

