DATA SHEET

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: 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-3+0(-R)		150	300	350	480	550	750	880
IEC Electrical								
Nominal AC Voltage (50/60Hz)	U_o/U_n	120V	240V	277V	400V	400V	600V	600V
Maximum Continuous Operating Voltage (AC)	U_c	150V	300V	350V	480V	550V	750V	880V
Nominal Discharge Current (8/20µs)	I_n	20kA	20kA	20kA	20kA	20kA	20kA	20kA
Maximum Discharge Current (8/20µs)	I_{max}	50kA	50kA	50kA	50kA	50kA	35kA	35kA
Voltage Protection Level	U_p	1250V	1650V	1750V	2300V	2500V	3500V	3600V
Response Time	t_A	< 25ns						
Overcurrent Protection (max)		315A/250A gG						
Short-Circuit Current Rating (AC)	I_{SCCR}	25kA/50kA						
TOV Withstand 120min	U_T	255V	442V	529V	762V	918V	1200V	1250V
Number of Ports		1						
UL Electrical								
Maximum Continuous Operating Voltage (AC)	MCOV	150V	300V	350V	480V	550V	750V	880V
Voltage Protection Rating	VPR	700V	1200V	1200V	1500V	1800V	2500V	2500V
Nominal Discharge Current (8/20µs)	I_n	20kA	20kA	20kA	20kA	20kA	20kA	20kA
Short-Circuit Current Rating (AC)	SCCR	200kA	150kA	200kA	200kA	200kA	200kA	200kA
Additional Electrical Parameters *(Tests performed within Raycap testing laboratory only)*								
Residual Voltage at 5 kA (8/20 µs)	U_{res}	750V	1000V	1300V	1600V	1900V	2700V	2800V
Overcurrent Protection (min)		80A 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}	40 lbf·in [4.5Nm]						
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible)						
		35mm² (Solid, Stranded) / 25mm² (Flexible)						
Mounting		35mm 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) / 1.5mm² (Solid)						

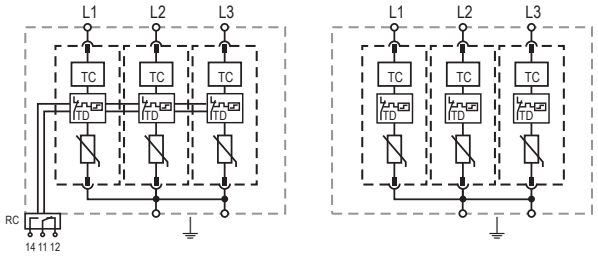
RoHS COMPLIANT

Information contained in this document is subject to change at any time without notice.

Internal Configuration

Legend

L	*Line Conductor Terminal*
⏚	*PEN/G Conductor Terminal*
RC	*Remote Contacts Terminal (Optional)*
TC	*Thermal Control Function*
TD	*Thermal Disconnector*



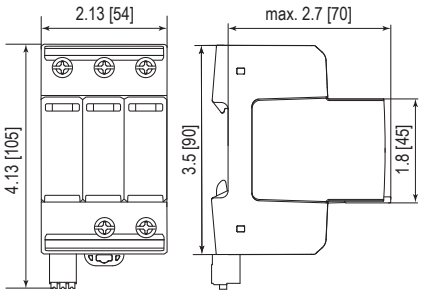
SafeTec T2-xxx-3+0(-R)

Order Information

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

Dimensions & Packaging

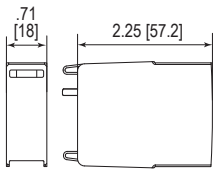
inches [mm]



Complete Unit

SafeTec T2-xxx-3+0		**150**	**300**	**350**	**480**	**550**	**750**	**880**
Weight	pounds	.846	.866	.919	.926	.959	1.012	1.025
	grams	384	393	417	420	435	459	465
SafeTecT2-xxx-3+0-R								
Weight	pounds	.866	.886	.939	.946	.979	1.031	1.045
	grams	393	402	426	429	444	468	474
DIN 43880 Dimension		3 TE / 2.13" [54]						
Packaging Dimensions (H x W x L)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]						
Standard Order Quantity		5 Units						

Spare Plug



Single Unit

SafeTec T2-xxx-P		**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 (H x W x L)		3.2 x 4.5 x 12" [83 x 116 x 305 mm]						
Standard Order Quantity		24 Units						

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