DATA SHEET

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
IEC Electrical									
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 (8/20µs)	I_n	20kA	20kA	20kA	20kA	20kA	20kA	20kA	20kA
Maximum Discharge Current (8/20µs)	I_{max}	50kA	50kA	50kA	50kA	50kA	50kA	35kA	35kA
Voltage Protection Level	U_p	800V	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	150V	255V	442V	529V	762V	918V	1200V	1250V
Number of Ports		1							
UL Electrical									
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 (8/20µs)	I_n	20kA	20kA	20kA	20kA	20kA	20kA	20kA	20kA
Short-Circuit Current Rating (AC)	SCCR	85kA	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}	400V	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)							

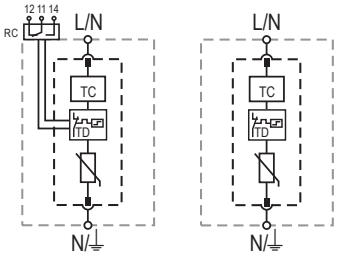
RoHS COMPLIANT

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

Internal Configuration

Legend

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



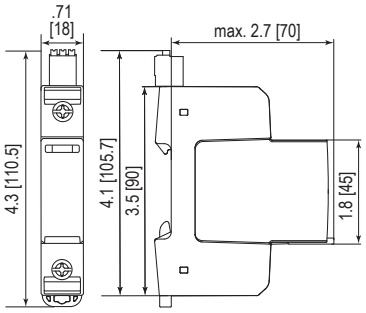
SafeTec T2-xxx-1+0(-R)

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

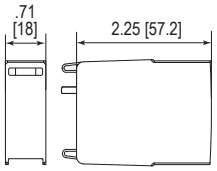
inches [mm]



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
SafeTecT2-xxx-1+0-R									
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 (H x W x L)		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 (H x W x L)		3.2 x 4.5 x 12" [83 x 116 x 305 mm]							
Standard Order Quantity		24 Units							

© 2022 Raycap All rights reserved.