

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



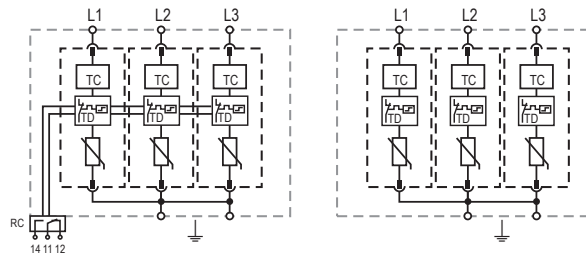
Technical Data

SafeTec T2-xxx-3+0(-R)		150	300	350	480	550	750	880
IEC Electrical								
Nominal AC Voltage (50/60Hz)	U _o /U _n	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 μs)	I _n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20 μs)	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						
Overvoltage Category		III						
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						
UL Electrical								
Maximum Continuous Operating Voltage (AC)	MCOV	150 V	300 V	350 V	480 V	550 V	750 V	880 V
Voltage Protection Rating	VPR	700V	1200V	1200V	1500V	1800V	2500V	2500V
Nominal Discharge Current (8/20 μs)	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
Additional Electrical Parameters <i>(Tests performed within Raycap testing laboratory only)</i>								
Residual Voltage at 5 kA (8/20 μs)	U _{res}	750V	1000V	1300V	1600V	1900V	2700V	2800V
Minimum Backup fuse, if required		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%						
Pollution Degree		2						
Altitude (max)		13123 ft [4000 m]						
Terminal Screw Torque	M _{max}	40 lbf-in [4.5 Nm]						
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 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/1 A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A						
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)						
Overvoltage Category		III						

Internal Configuration

Legend

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

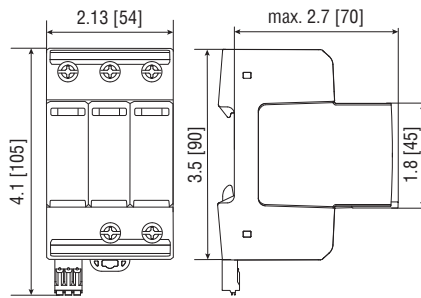


Order Information

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

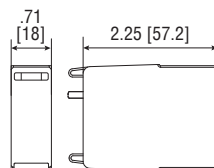
inches [mm]



Complete Unit

SafeTec T2-xxx-3+0	150	300	350	480	550	750	880
Weight	pounds	.846	.866	.919	.926	.959	1.012
	grams	384	393	417	420	435	459
SafeTec T2-xxx-3+0-R							
Weight	pounds	.866	.886	.939	.946	.979	1.031
	grams	393	402	426	429	444	468
DIN 43880 Dimension	3 TE / 2.13" [54 mm]						
Packaging Dimensions (HxWxL)	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
	grams	63	66	74	75	80	88
DIN 43880 Dimension	1 TE / .71" [18 mm]						
Packaging Dimensions (HxWxL)	3.2 x 4.5 x 12" [83 x 116 x 305 mm]						
Standard Order Quantity	24 Units						