

Overvoltage Protection

SafeTec T2 2+0

Class II • Type 2 • Type 1CA



Location of Use: Sub-distribution Boards
 Network Systems: TN-S
 Mode of Protection: L-N, N-PE
 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



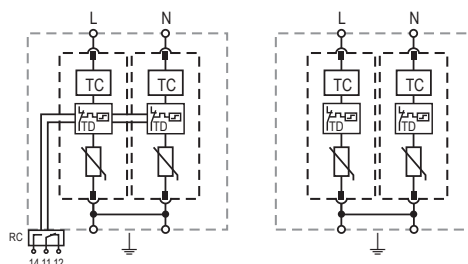
Technical Data

SafeTec T2-xxx-2+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	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20μs)	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								
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	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	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Short-Circuit Current Rating (AC)	SCCR	100kA	200kA	150 kA	200kA	200kA	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}	400V	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 [4000m]								
Terminal Screw Torque	M _{max}	40 lbf-in [4.5Nm]								
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm² (Solid, Stranded) / 25 mm² (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 mm² (Solid)								
Overvoltage Category		III								

Internal Configuration

Legend

<i>L</i>	Line Conductor Terminal
<i>N</i>	Neutral Conductor Terminal
	PE/G Conductor Terminal
<i>RC</i>	Remote Contacts Terminal (Optional)
<i>TC</i>	Thermal Control Function
<i>TD</i>	Thermal Disconnect

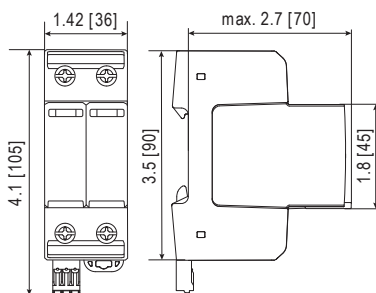


Order Information

Order Code	75	150	300	350	480	550	750	880
SafeTec T2-xxx-2+0	59.0345	59.0148	59.0150	59.0152	59.0154	59.0156	59.0158	59.0160
SafeTec T2-xxx-2+0-R (with remote contacts)	59.0346	59.0149	59.0151	59.0153	59.0155	59.0157	59.0159	59.0161
SafeTec T2-xxx-P (plug)	59.0125	59.0126	59.0127	59.0128	59.0129	59.0299	59.0130	59.0131

Dimensions & Packaging

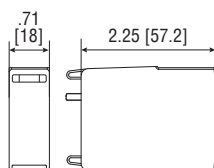
inches [mm]



Complete Unit

SafeTec T2-xxx-2+0	75	150	300	350	480	550	750	880
Weight	pounds	.565	.587	.600	.636	.640	.662	.697
	grams	256	266	272	288	290	300	316
SafeTec T2-xxx-2+0-R								
Weight	pounds	.585	.607	.620	.655	.660	.682	.717
	grams	265	275	281	297	299	309	325
DIN 43880 Dimension	2 TE / 1.42" [36 mm]							
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]							
Standard Order Quantity	7 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
	grams	58	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							