

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: Patented Current Limiting Technology
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012
 UL 1449 4th Edition

Technical Data

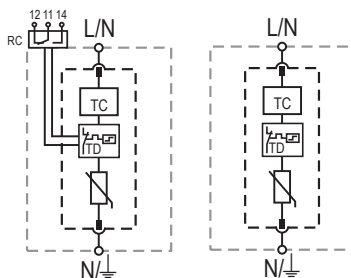
SafeTec T2-xxx-1+0(-R)		75	150	300	350	480	550	750	880
IEC Electrical									
Nominal AC Voltage (50/60Hz)	U_o/U_n	60V	120V	240V	277V	400V	400V	600V	600V
Maximum Continuous Operating Voltage (AC)	U_c	75V	150V	300V	350V	480V	550V	750V	880V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20 μ s)	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							
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 (8/20 μ s)	I_n	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA	20 kA
Short-Circuit Current Rating (AC)	SCCR	85 kA	200 kA	150 kA	200 kA	200 kA	200 kA	200 kA	200 kA
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 [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 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/1A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A							
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)							
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

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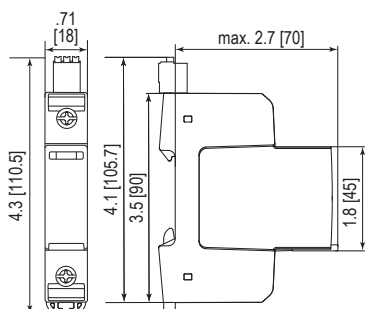
Internal Configuration

Legend

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



Complete Unit



Complete Unit Dimensions & Packaging

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

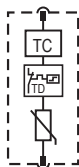
SafeTecT2-xxx-1+0-R

Weight	pounds	.295	.306	.312	.330	.332	.343	.361	.365
	grams	134	139	142	150	151	156	164	166

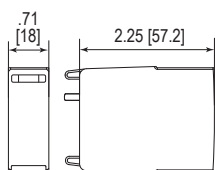
DIN 43880 Dimension	1 TE / .71" [18]
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity	12 Units

Plug Internal Configuration

SafeTec T2-xxx-P



Spare Plug



Single Unit Dimensions & Packaging

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 (HxWxL)	3.2 x 4.5 x 12" [83 x 115 x 305 mm]
Standard Order Quantity	24 Units

