

Overvoltage Protection with Integrated Fuse

ProTec T2F 1+0

Class II • Class III • Type 2 • Type 3



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 Category: Class II+III / Type 2+3
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018

Technical Data

ProTec T2F-xxx-1+0(-R)

300

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o/U_n	240V
Maximum Continuous Operating Voltage (AC)	U_c	300V
Nominal Discharge Current (8/20 μ s)	I_n	20kA
Maximum Discharge Current (8/20 μ s)	I_{max}	40kA
Open Circuit Voltage of Combination Wave Generator (1.2/50 μ s)	U_{oc}	6kV
Short Circuit Current of Combination Wave Generator (8/20 μ s)	I_{cw}	3kA
Voltage Protection Level	U_p	1500V
Response Time	t_A	< 25ns
Overcurrent Protection		Not Required
Short-Circuit Current Rating (AC)	I_{SCCR}	100kA
TOV Withstand 5s	U_T	337V
TOV 120min	U_T	442V
	mode	Safe Fail
Number of Ports		1

Additional Electrical Parameters (Tests performed within Raycap testing laboratory only)

Residual Voltage at 5 kA (8/20 μ s)	U_{res}	1150V
Overcurrent Protection (min)		Not Required

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}	39.9 lbf-in [4.5Nm]
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) / 1.5mm ² (Solid)

Order Information

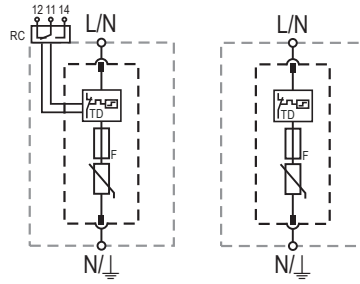
Order Code	300
ProTec T2F-xxx-1+0	59.A250
ProTec T2F-xxx-1+0-R (with remote contacts)	59.A251
ProTec T2F-xxx-P (plug)	59.A258

ProTec T2F 1+0

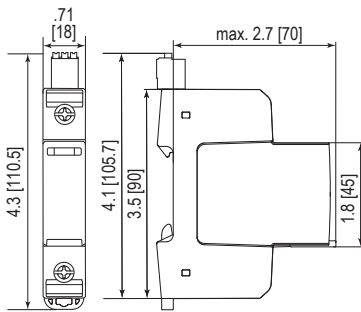
Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⏏ PE/G Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnecter
- F Integrated Surge Adapted Backup Fuse



Complete Unit inches [mm]

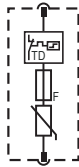


Complete Unit Dimensions & Packaging

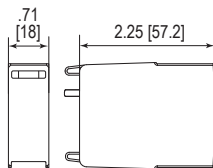
ProTec T2F-xxx-1+0	300
Weight	pounds .320
	grams 145
ProTec T2F-xxx-1+0-R	
Weight	pounds .342
	grams 155
DIN 43880 Dimension	1 TE / .71" [18 mm]
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity	12 Units

Plug Internal Configuration

ProTec T2F-xxx-P



Spare Plug inches [mm]



Single Unit Dimensions & Packaging

ProTec T2F-xxx-P	300
Weight	pounds .152
	grams 69
DIN 43880 Dimension	1 TE / .71" [18 mm]
Packaging Dimensions (HxWxL)	3.2 x 4.5 x 12" [83 x 115 x 305 mm]
Standard Order Quantity	24 Units

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

