

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

#### 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 <sup>2</sup> (Solid, Stranded) / 25 mm <sup>2</sup> (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 <sup>2</sup> (Solid)

#### Order Information

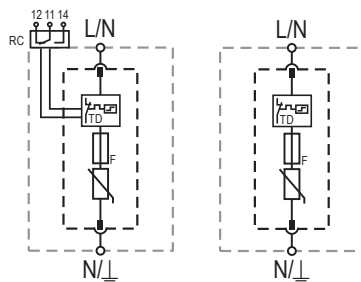
Order Code	<b>300</b>
ProTec T2F-xxx-1+0	59.A250
ProTec T2F-xxx-1+0-R (with remote contacts)	59.A251
ProTec T2F-xxx-P (plug)	59.A258

## ProTec T2F 1+0

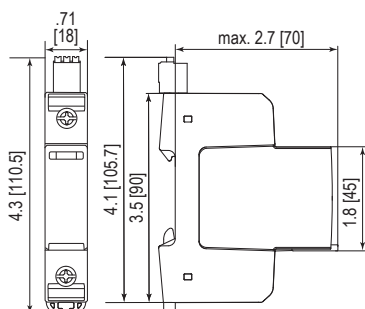
### Internal Configuration

#### Legend

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



### Complete Unit

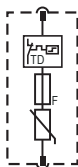


#### Complete Unit Dimensions & Packaging

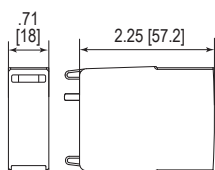
<b>ProTec T2F-xxx-1+0</b>	<b>300</b>
Weight	pounds .320
	grams 145
<b>ProTec T2F-xxx-1+0-R</b>	
Weight	pounds .342
	grams 155
DIN 43880 Dimension	1 TE / .71" [18 mm]
Packaging Dimensions (HxWxL)	4.3 × 4.5 × 13.8" [109 × 115 × 352 mm]
Standard Order Quantity	12 Units

### Plug Internal Configuration

#### ProTec T2F-xxx-P



### Spare Plug



#### Single Unit Dimensions & Packaging

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

inches  
[mm]

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

