

Overvoltage Protection with Integrated Fuse

**ProTec T2F 2+0**

**Class II • Class III • Type 2 • Type 3**



Location of Use: Sub-Distribution Boards  
 Network Systems: TN-S  
 Mode of Protection: L-PE, N-PE  
 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-2+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
Voltage Protection Level	$U_p$	1500V
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
Response Time	$t_A$	< 25ns
Overcurrent Protection		Not Required
Short-Circuit Current Rating (AC)	$I_{scCR}$	100 kA
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 $\mu$ 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 <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**

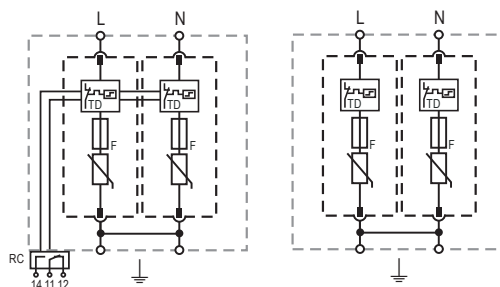
Order Code		<b>300</b>
ProTec T2F-xxx-2+0		59.A252
ProTec T2F-xxx-2+0-R (with remote contacts)		59.A253
ProTec T2F-xxx-P (plug)		59.A258

## ProTec T2F 2+0

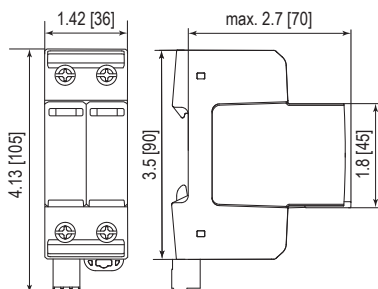
### Internal Configuration

#### 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]

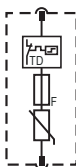


#### Complete Unit Dimensions & Packaging

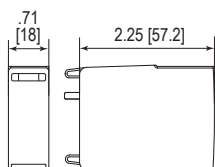
ProTec T2F-xxx-2+0		300
Weight	pounds	.591
	grams	268
ProTec T2F-xxx-2+0-R		
Weight	pounds	.613
	grams	278
DIN 43880 Dimension	2 TE / 1.42" [36]	
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]	
Standard Order Quantity	7 Units	

### 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]	
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.

