

**Combined Lightning Current and Surge Arrester**  
**ProTec 60 T2F 3+1**  
**Class II • Class III • Type 2 • Type 3**



**Location of Use:** Main Distribution Boards,  
60mm Busbar Systems  
**Network Systems:** TT, TN-S  
**Mode of Protection:** L-N, N-PE  
**IEC/EN:** Class II+III / Type 2+3  
**Housing:** Pluggable design  
**Compliance:** IEC 61643-11:2011  
EN 61643-11:2012 + A11:2018



**Technical Data**

**ProTec 60 T2F-xxx-3+1(-R)**

**300**

**IEC Electrical**

Nominal AC Voltage (50/60Hz)	$U_o / U_n$	240 V
Maximum Continuous Operating Voltage (AC)	(L-N) $U_c$	300 V
	(N-PE) $U_c$	305 V
Nominal Discharge Current (8/20 $\mu$ s)	(L-N)/(N-PE) $I_n$	20 kA / 40 kA
Maximum Discharge Current (8/20 $\mu$ s)	(L-N)/(N-PE) $I_{max}$	40 kA / 65 kA
Voltage Protection Level	(L-N)/(N-PE) $U_p$	1500V / 1500V
Open Circuit Voltage of Combination Wave Generator (1.2/50 $\mu$ s)	(L-N)/(N-PE) $U_{oc}$	6 kA / 6 kA
Short Circuit Current of Combination Wave Generator (8/20 $\mu$ s)	(L-N)/(N-PE) $I_{cw}$	3 kA / 3 kA
Follow Current Interrupt Rating	(N-PE) $I_{fi}$	100 A
Response Time	(L-N)/(N-PE) $t_A$	< 25 ns / < 100 ns
Overcurrent Protection (max)		Not Required
Short-Circuit Current Rating (AC)	$I_{SCCR}$	100 kA
TOV Withstand 5s	(L-N) $U_T$	337 V
TOV SafeFail 120min	(L-N) $U_T$	442 V
TOV Withstand 200ms	(N-PE) $U_T$	1200 V
Number of Ports		1

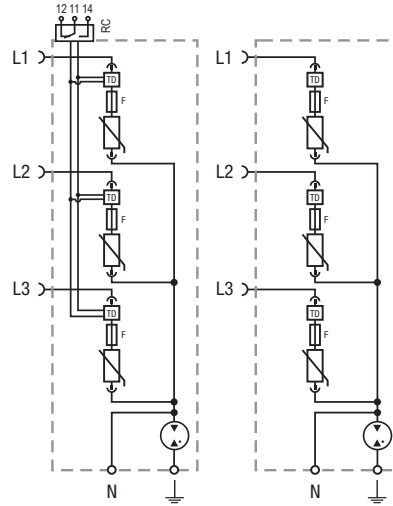
**Mechanical & Environmental**

Operating Temperature Range	$T_a$	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Pollution Degree		2
Altitude (max)		13123 ft [4000m]
Terminal Screw Torque	$M_{max}$	PH2 / 40 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		60mm Busbar Systems
		Width: 12, 15, 20, 25, 30 mm
		Thickness: 5 mm, 10 mm (with removed spacers)
Degree Of Protection		IP 20*
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0
Operating State / Fault Indication		Green Flag / Not Green Flag
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/1 A, 125V/1 A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm <sup>2</sup> (Solid)

## Internal Configuration

### Legend

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

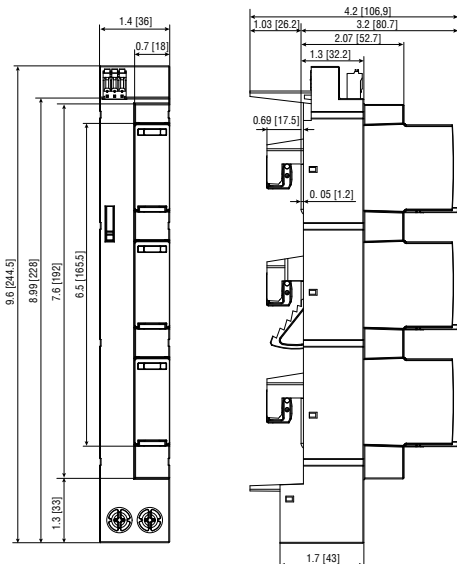


### Order Information

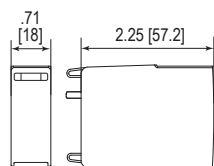
Order Code	<b>300</b>
ProTec 60 T2F-xxx-3+1	515 951
ProTec 60 T2F-xxx-3+1-R (with remote contacts)	515 952
ProTec T2F-xxx-P (plug)	59.C347

\*IP 40 (in combination with cover)

## Complete Unit



### Spare Unit



### Complete Unit Dimensions & Packaging

<b>ProTec 60 T2F-xxx-3+1</b>	<b>300</b>
Weight	pounds [grams] 1.100 [499]
Packaging Dimensions (HxWxL)	270 x 375 x 395" [10.6 x 14.8 x 15.5]
<b>ProTec 60 T2F-xxx-3+1-R</b>	<b>300</b>
Weight	pounds [grams] 1.118 [507]
Packaging Dimensions (HxWxL)	270 x 375 x 395" [10.6 x 14.8 x 15.5]
Standard Order Quantity	20 Units

### Single Unit

<b>ProTec T2F-xxx-P</b>	<b>300</b>
Weight	pounds [grams] .152 [69]
DIN 43880 Dimension	1 TE / .71 [18]
Packaging Dimensions (HxWxL)	3.2 x 4.5 x 12" [83 x 116 x 305 mm]
Standard Order Quantity	24 Units