

# Overvoltage Protection

## ProTec T2-ADV 3+0

### Class II • Type 2 • Type 1CA



Location of Use: Sub-Distribution Boards  
 Network Systems: TN-C  
 Mode of Protection: L-PEN  
 IEC/EN/UL Category: Class II / Type 2 / Type 1CA  
 Housing: Pluggable Design  
 Compliance: IEC 61643-11:2011  
 EN 61643-11:2012  
 UL 1449 4th Edition

## Technical Data

### ProTec T2-ADV-xxx-3+0(-R)

		150	300	350	480
<b>IEC Electrical</b>					
Nominal AC Voltage (50/60Hz)	$U_o/U_n$	120V	240V	277V	400V
Maximum Continuous Operating Voltage (AC)	$U_c$	150V	300V	350V	480V
Nominal Discharge Current (8/20 $\mu$ s)	$I_n$	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20 $\mu$ s)	$I_{max}$	50 kA	50 kA	50 kA	50 kA
Voltage Protection Level	$U_p$	1000V	1300V	1700V	2000V
Response Time	$t_A$	< 25 ns			
Overcurrent Protection (max)		160A gG			
Short-Circuit Current Rating (AC)	$I_{SCCR}$	50 kA			
TOV Withstand 5s	$U_T$	229V	337V	403V	581V
TOV 120min	$U_T$	229V	442V	528V	762V
	mode	Withstand	Safe Fail	Safe Fail	Safe Fail
Number of Ports		1			

### UL Electrical

Maximum Continuous Operating Voltage (AC)	MCOV	150V	300V	350V	480V
Voltage Protection Rating	VPR	600V	900V	1200V	1500V
Nominal Discharge Current (8/20 $\mu$ s)	$I_n$	20 kA	20 kA	20 kA	20 kA
Short-Circuit Current Rating (AC)	SCCR	200 kA	150 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 [4000m]			
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 <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) / 1.5 mm <sup>2</sup> (Solid)			

### Order Information

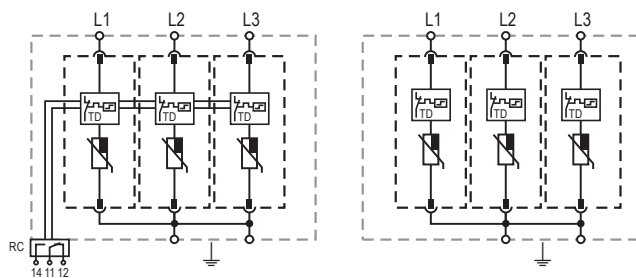
Order Code	150	300	350	480
ProTec T2-ADV-xxx-3+0	59.0228	59.0230	59.0232	59.0234
ProTec T2-ADV-xxx-3+0-R (with remote contacts)	59.0229	59.0231	59.0233	59.0235
ProTec T2-ADV-xxx-P (plug)	59.0203	59.0204	59.0205	59.0206

## ProTec T2-ADV 3+0

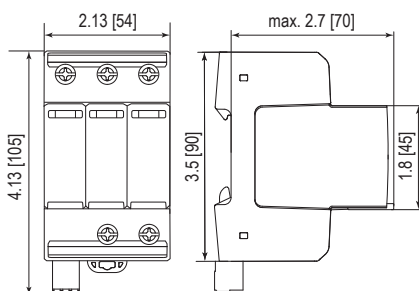
### Internal Configuration

#### Legend

- L Line Conductor Terminal
- ⊥ PE/G Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect



### Complete Unit

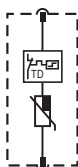


#### Complete Unit Dimensions & Packaging

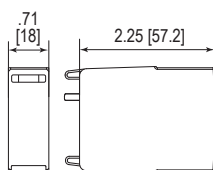
		150	300	350	480
ProTec T2-ADV-xxx-3+0	Weight				
	pounds	.787	.833	.866	.899
	grams	357	378	393	408
ProTec T2-ADV-xxx-3+0-R					
Weight	pounds	.809	.855	.888	.921
	grams	367	388	403	418
DIN 43880 Dimension		3 TE / 2.13" [54]			
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]			
Standard Order Quantity		5 Units			

### Plug Internal Configuration

#### ProTec T2-ADV-xxx-P



### Spare Plug



#### Single Unit Dimensions & Packaging

		150	300	350	480
ProTec T2-ADV-xxx-P	Weight				
	pounds	.127	.143	.154	.165
	grams	58	65	70	75
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			

inches  
[mm]