

**Overvoltage Protection**  
**ProTec T2-ADV 1+1**  
**Class II • Type 2 • Type 1CA**



Location of Use: Sub-Distribution Boards  
 Network Systems: TT, TN-S  
 Mode of Protection: L-N, N-PE  
 IEC/EN/UL Category: Class II / Type 2 / Type 1CA  
 Housing: Pluggable Design  
 Compliance: IEC 61643-11:2011  
 EN 61643-11:2012+A11:2018  
 UL 1449 5th Edition

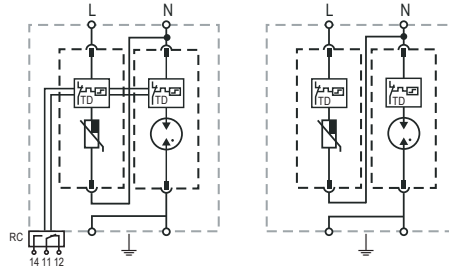
**Technical Data**

ProTec T2-ADV-xxx-1+1(-R)		75	150	300	350
<b>IEC Electrical</b>					
Nominal AC Voltage (50/60Hz)	$U_o/U_n$	60V	120V	240V	277V
Maximum Continuous Operating Voltage (AC)	(L-N) $U_c$	75V	150V	300V	350V
	(N-PE) $U_c$	305V	305V	305V	305V
Nominal Discharge Current (8/20 $\mu$ s)	(L-N)/(N-PE) $I_n$	20kA / 40kA	20kA / 40kA	20kA / 40kA	20kA / 40kA
Maximum Discharge Current (8/20 $\mu$ s)	(L-N)/(N-PE) $I_{max}$	50kA / 65kA	50kA / 65kA	50kA / 65kA	50kA / 65kA
Voltage Protection Level	(L-N)/(N-PE) $U_p$	600V / 1500V	1000V / 1500V	1300V / 1500V	1700V / 1500V
Follow Current Interrupt Rating	(N-PE) $I_{fi}$		100A		
Response Time	(L-N)/(N-PE) $t_A$		< 25 ns / < 100 ns		
Overcurrent Protection (max)			160A gG		
Short-Circuit Current Rating (AC)	$I_{SCCR}$		50kA		
TOV Withstand 5s	(L-N) $U_T$	114V	229V	337V	403V
	mode	Withstand	Withstand	Safe Fail	Safe Fail
TOV 120min	(L-N) $U_T$	114V	229V	442V	528V
	(N-PE) $U_T$			1200V	
TOV Withstand 200ms	(N-PE) $U_T$			1200V	
Number of Ports			1		
<b>UL Electrical</b>					
Maximum Continuous Operating Voltage (AC)	(L-N)/(N-G) MCOV	75V / 305V	150V / 305V	300V / 305V	350V / 305V
Voltage Protection Rating	(L-N)/(N-G) VPR	400V / 1000V	600V / 1000V	900V / 1000V	1200V / 1000V
Nominal Discharge Current (8/20 $\mu$ s)	(L-N)/(N-G) $I_n$		20kA / 20kA		
Short-Circuit Current Rating (AC)	(L-N) SCCR	100kA	200kA	150kA	200kA
<b>Additional Electrical Parameters - Standard</b> (Tests performed within Raycap testing laboratory only)					
Residual Voltage at 5 kA (8/20 $\mu$ s)	(L-N) / (N-PE) $U_{res}$	400V / 305V	700V / 305V	1000V / 305V	1300V / 305V
Overcurrent Protection (min)			160A gG		
<b>Additional Electrical Parameters - Extended</b> (Additionally tested by VDE)					
Short-Circuit Current Rating (AC)	$I_{SCCR}$		100kA		
Overcurrent Protection (max)			160A gG		
<b>Mechanical &amp; Environmental</b>					
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	$M_{max}$	40 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)			

## Internal Configuration

### Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⏏ PE/G Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnecter



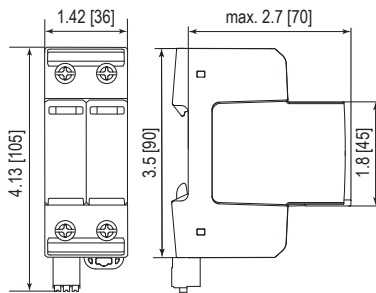
### ProTec T2-ADV-xxx-1+1(-R)

#### Order Information

Order Code	75	150	300	350
ProTec T2-ADV-xxx-1+1	59.0244	59.0246	59.0248	59.0250
ProTec T2-ADV-xxx-1+1-R (with remote contacts)	59.0245	59.0247	59.0249	59.0251
ProTec T2-ADV-xxx-P (plug L-N)	59.0202	59.0203	59.0204	59.0205
ProTube T2-ADV-40-P (plug N-PE)	59.0275	59.0275	59.0275	59.0275

## Dimensions & Packaging

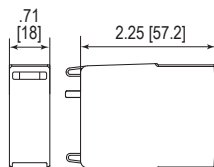
inches [mm]



#### Complete Unit

ProTec T2-ADV-xxx-1+1	75	150	300	350	
Weight	pounds	.520	.529	.544	.555
	grams	236	240	247	252
<b>ProTec T2-ADV-xxx-1+1-R</b>					
Weight	pounds	.533	.542	.557	.568
	grams	242	246	253	258
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				

## Spare Plug



#### Single Unit

ProTec T2-ADV-xxx-P	75	150	300	350	
Weight	pounds	.120	.127	.143	.154
	grams	54	58	65	70
<b>ProTube T2-ADV-40-P</b>					
Weight	pounds	.093			
	grams	42			
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				