

**Overvoltage Protection**  
**ProTec T2-ADV 3+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

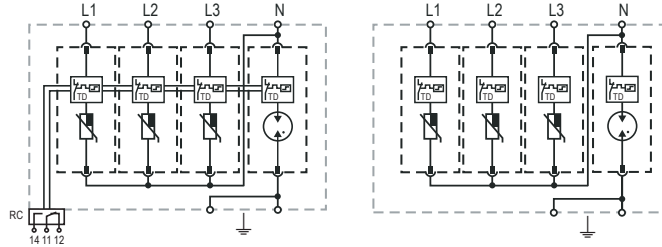
**Technical Data**

ProTec T2-ADV-xxx-3+1(-R)		300	350
<b>IEC Electrical</b>			
Nominal AC Voltage (50/60Hz)	$U_o/U_n$	240V	277V
Maximum Continuous Operating Voltage (AC)	(L-N) $U_c$	300V	350V
	(N-PE) $U_c$	305V	305V
Nominal Discharge Current (8/20 $\mu$ s)	(L-N)/(N-PE) $I_n$	20 kA / 40 kA	20 kA / 40 kA
Maximum Discharge Current (8/20 $\mu$ s)	(L-N)/(N-PE) $I_{max}$	50 kA / 65 kA	50 kA / 65 kA
Voltage Protection Level	(L-N)/(N-PE) $U_p$	1300V / 1500V	1700V / 1500V
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)			160 A gG
Short-Circuit Current Rating (AC)	$I_{SCCR}$		50 kA
TOV Withstand 5s	(L-N) $U_T$	337V	403V
	(L-N) $U_T$	442V	528V
TOV 120min	mode	Safe Fail	Safe Fail
	(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	300V / 305V	350V / 305V
Voltage Protection Rating	(L-N)/(N-G) VPR	900V / 1000V	1200V / 1000V
Nominal Discharge Current (8/20 $\mu$ s)	(L-N)/(N-G) $I_n$		20 kA / 20 kA
Short-Circuit Current Rating (AC)	(L-N) SCCR	150 kA	200 kA
<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) $U_{res}$	1000V / 305V	1300V / 305V
Overcurrent Protection (min)			80 A gG
<b>Additional Electrical Parameters - Extended</b> (Additionally tested by VDE)			
Short-Circuit Current Rating (AC)	$I_{SCCR}$		100 kA
Overcurrent Protection (max)			160 A 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 / 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 Conductor Terminal
- N Neutral Conductor Terminal
- ⏏ PE/G Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnecter



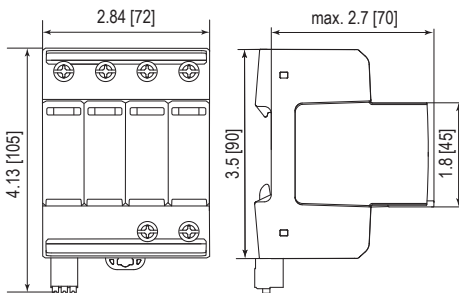
### ProTec T2-ADV-xxx-3+1(-R)

#### Order Information

Order Code	300	350
ProTec T2-ADV-xxx-3+1	59.0256	59.0258
ProTec T2-ADV-xxx-3+1-R (with remote contacts)	59.0257	59.0259
ProTec T2-ADV-xxx-P (plug L-N)	59.0204	59.0205
ProTube T2-ADV-40-P (plug N-PE)	59.0275	59.0275

## Dimensions & Packaging

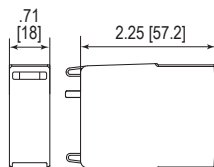
inches [mm]



#### Complete Unit

ProTec T2-ADV-xxx-3+1		300	350
Weight	pounds	1.080	1.113
	grams	490	505
ProTec T2-ADV-xxx-3+1-R			
Weight	pounds	1.100	1.133
	grams	499	514
DIN 43880 Dimension	4 TE / 2.84" [72]		
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]		
Standard Order Quantity	4 Units		

## Spare Plug



#### Single Unit

ProTec T2-ADV-xxx-P		300	350
Weight	pounds	.143	.154
	grams	65	70
ProTube T2-ADV-40-P		40	
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		