

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

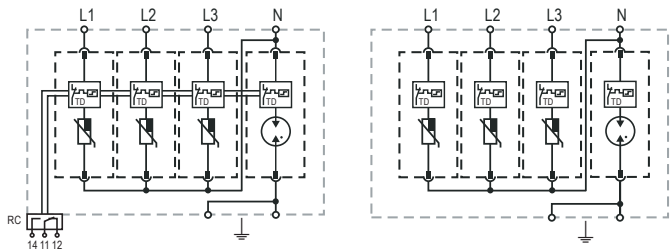
ProTec T2-ADV-xxx-3+1(-R)

ProTec T2-ADV-xxx-3+1(-R)		300	350
IEC Electrical			
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 (8/20μs)	(L-N)/(N-PE) I _n	20kA / 40kA	20kA / 40kA
Maximum Discharge Current (8/20μs)	(L-N)/(N-PE) I _{max}	50kA / 65kA	50kA / 65kA
Voltage Protection Level	(L-N)/(N-PE) U _p	1300V / 1500V	1700V / 1500V
Follow Current Interrupt Rating	(N-PE) I _{fi}	100A	
Response Time	(L-N)/(N-PE) t _A	< 25ns / < 100ns	
Overvoltage Category		III	III
Maximum Backup fuse, if required		160A gG	
Short-Circuit Current Rating (AC)	I _{SCCR}	50kA	
TOV Withstand 5s	(L-N) U _T	337V	403V
TOV 120min	(L-N) U _T	442V	528V
	mode	Safe Fail	Safe Fail
TOV Withstand 200ms	(N-PE) U _T	1200V	
Number of Ports		1	
UL Electrical			
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 (8/20μs)	(L-N)/(N-G) I _n	20kA / 20kA	
Short-Circuit Current Rating (AC)	(L-N) SCCR	150kA	200kA
Additional Electrical Parameters - Standard (Tests performed within Raycap testing laboratory only)			
Residual Voltage at 5 kA (8/20 μs)	(L-N) / (N-PE) U _{res}	1000V / 305V	1300V / 305V
Minimum Backup fuse, if required		80A gG	
Additional Electrical Parameters - Extended (Additionally tested by VDE)			
Short-Circuit Current Rating (AC)	I _{SCCR}	100kA	
Maximum Backup fuse, if required		160A gG	
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}	40 lbf·in [4.5Nm]	
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible)	
		35 mm² (Solid, Stranded) / 25 mm² (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 mm² (Solid)	
Overvoltage Category		III	

Internal Configuration

Legend

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

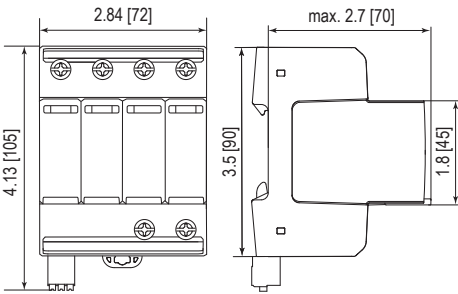


ProTec T2-ADV-xxx-3+1(-R)

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

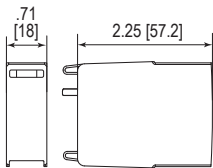
Dimensions & Packaging



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 mm]	
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 mm]	
Packaging Dimensions (HxWxL)		3.2 x 4.5 x 12" [83 x 116 x 305 mm]	
Standard Order Quantity		24 Units	