

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+A11:2018
 UL 1449 5th Edition



Technical Data

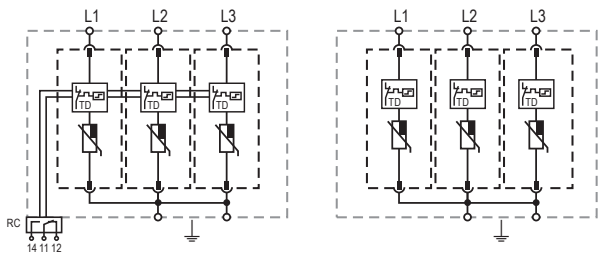
ProTec T2-ADV-xxx-3+0(-R)

IEC Electrical					
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 (8/20μs)	I _n	20kA	20kA	20kA	20kA
Maximum Discharge Current (8/20μs)	I _{max}	50kA	50kA	50kA	50kA
Voltage Protection Level	U _p	1000V	1300V	1700V	2000V
Response Time	t _A	< 25 ns			
Overvoltage Category	III				
Maximum Backup fuse, if required	160A gG				
Short-Circuit Current Rating (AC)	I _{SCCR}	50kA			
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 (8/20μs)	I _n	20kA	20kA	20kA	20kA
Short-Circuit Current Rating (AC)	SCCR	200kA	150kA	200kA	200kA
Additional Electrical Parameters - Standard <i>(Tests performed within Raycap testing laboratory only)</i>					
Residual Voltage at 5 kA (8/20 μs)	U _{res}	700V	1000V	1300V	1600V
Minimum Backup fuse, if required	80A gG				
Additional Electrical Parameters - Extended <i>(Additionally tested by VDE)</i>					
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 [4.5 Nm]			
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/1 A; 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
- ⏏ PEN/G Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect



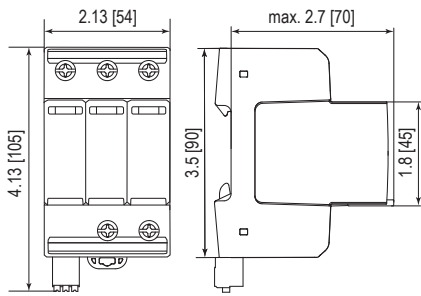
ProTec T2-ADV-xxx-3+0(-R)

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

Dimensions & Packaging

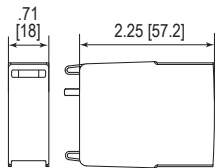
inches [mm]



Complete Unit

ProTec T2-ADV-xxx-3+0	150	300	350	480
Weight	pounds	.807	.853	.886
	grams	366	387	402
ProTec T2-ADV-xxx-3+0-R				
Weight	pounds	.829	.875	.908
	grams	376	397	412
DIN 43880 Dimension	3 TE / 2.13" [54mm]			
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352mm]			
Standard Order Quantity	5 Units			

Spare Plug



Single Unit

ProTec T2-ADV-xxx-P	150	300	350	480
Weight	pounds	.127	.143	.154
	grams	58	65	70
DIN 43880 Dimension	1 TE / .71" [18mm]			
Packaging Dimensions (HxWxL)	3.2 x 4.5 x 12" [83 x 116 x 305 mm]			
Standard Order Quantity	24 Units			