

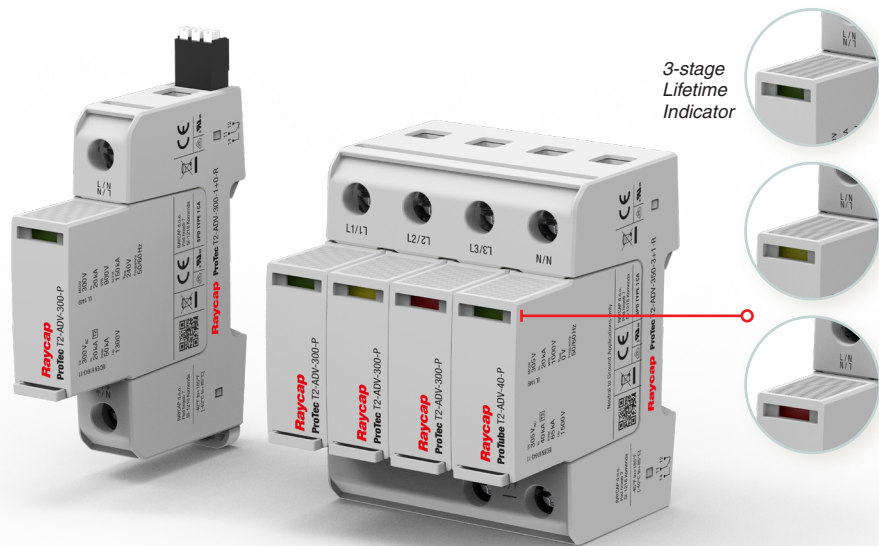
Pluggable Single Pole & Multi-pole Surge Protective Devices (SPDs)

Overvoltage Protection

ProTec T2-ADV

Special features:

- Early warning system with clear green-yellow-red indicators
- Available in a wide variety of operating voltages from 75V to 480V
- High maximum discharge current capability of 50kA
- Short circuit current rating up to 100kA*
- State-of-the-art thermal disconnecter
- Backup fuse up to 160AgG
- Vibration and shock withstand capability
- Optional remote contact (RC) signaling



IEC 61643-11:2011

EN 61643-11:2012+A11:2018

UL 1449 5th Edition



ProTec T2-ADV features an advanced three-stage life status indicator showing an intermediate degradation status before the arrester's end-of-life state, thus indicating possible problems or needed maintenance from overvoltage activity before complete failure. During the SPDs end-of-life transition, green-yellow-red, the connected equipment is continually protected against fatal overvoltage effects. The specially treated atomous varistors provide reliable determination of the first switching disconnecter, and the redundancy of two powerful separate varistors, both of which are functionally connected, provide a unique safety advantage. These safety reserve systems are imperative for the growing need for notifications or alerts when changes in conditions occur, and are ideally suited in a variety of environments that protect critical infrastructure. In addition to the visual mechanical indicator, an optional remote contact (RC) enables users to remotely monitor the operating state of the device.

* VDE certified up to 50kA, 100kA additionally tested by VDE.



More Product Information



Overvoltage Protection

ProTec T2-ADV 1+0

Class II • Type 2 • Type 1CA



Location of Use: Sub-Distribution Boards
 Network Systems: TN-S, TN-C, TT (only L-N)
 Mode of Protection: L-PE, N-PE (only TN-S), L-PEN, L-N
 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

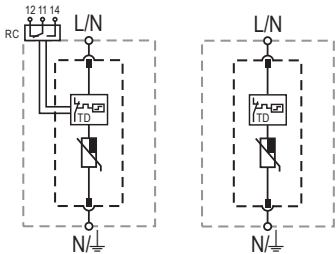
ProTec T2-ADV-xxx-1+0(-R)

		75	150	300	350	480
IEC Electrical						
Nominal AC Voltage (50/60Hz)	U_o / U_n	60V	120V	240V	277V	400V
Maximum Continuous Operating Voltage (AC)	U_c	75V	150V	300V	350V	480V
Nominal Discharge Current (8/20 μ s)	I_n	20kA	20kA	20kA	20kA	20kA
Maximum Discharge Current (8/20 μ s)	I_{max}	50kA	50kA	50kA	50kA	50kA
Voltage Protection Level	U_p	600V	1000V	1300V	1700V	2000V
Response Time	t_A			< 25ns		
Overvoltage Category				III		
Maximum Backup fuse, if required				160A gG		
Short-Circuit Current Rating (AC)	I_{SCCR}			50kA		
TOV Withstand 5s	U_T	114V	229V	337V	403V	581V
TOV 120min	U_T	114V	229V	442V	528V	762V
	mode	Withstand	Withstand	Safe Fail	Safe Fail	Safe Fail
Number of Ports				1		
UL Electrical						
Maximum Continuous Operating Voltage (AC)	MCOV	75V	150V	300V	350V	480V
Voltage Protection Rating	VPR	400V	600V	900V	1200V	1500V
Nominal Discharge Current (8/20 μ s)	I_n	20kA	20kA	20kA	20kA	20kA
Short-Circuit Current Rating (AC)	SCCR	100kA	200kA	150kA	200kA	200kA
Additional Electrical Parameters - Standard (Tests performed within Raycap testing laboratory only)						
Residual Voltage at 5 kA (8/20 μ s)	U_{res}	400V	700V	1000V	1300V	1600V
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 [4.5 Nm]				
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm ² (Solid, Stranded) / 25 mm ² (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 ² (Solid)				
Overvoltage Category		III				

Internal Configuration

Legend

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



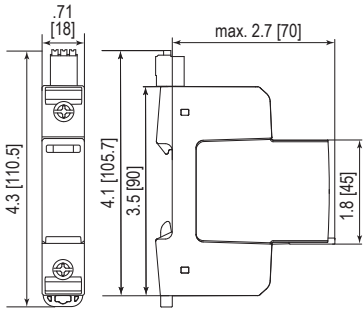
ProTec T2-ADV-xxx-1+0(-R)

Order Information

Order Code	75	150	300	350	480
ProTec T2-ADV-xxx-1+0	59.0208	59.0210	59.0212	59.0214	59.0216
ProTec T2-ADV-xxx-1+0-R (with remote contacts)	59.0209	59.0211	59.0213	59.0215	59.0217
ProTec T2-ADV-xxx-P (plug)	59.0202	59.0203	59.0204	59.0205	59.0206

Dimensions & Packaging

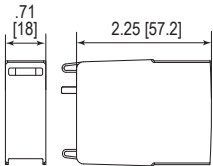
inches [mm]



Complete Unit

ProTec T2-ADV-xxx-1+0		75	150	300	350	480
Weight	pounds	.266	.275	.291	.302	.304
	grams	121	125	132	137	144
ProTec T2-ADV-xxx-1+0-R						
Weight	pounds	.283	.291	.306	.317	.328
	grams	128	132	139	144	149
DIN 43880 Dimension			1 TE / .71" [18mm]			
Packaging Dimensions (HxWxL)			4.3 x 4.5 x 13.8" [109 x 115 x 352mm]			
Standard Order Quantity			12 Units			

Spare Plug



Single Unit

ProTec T2-ADV-xxx-P		75	150	300	350	480
Weight	pounds	.120	.127	.143	.154	.165
	grams	54	58	65	70	75
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			

Overvoltage Protection

ProTec T2-ADV 2+0

Class II • Type 2 • Type 1CA



Location of Use: Sub-Distribution Boards
 Network Systems: TN-S
 Mode of Protection: L-PE, 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-2+0(-R)

		75	150	300	350	480
IEC Electrical						
Nominal AC Voltage (50/60Hz)	U_o/U_n	60V	120V	240V	277V	400V
Maximum Continuous Operating Voltage (AC)	U_c	75V	150V	300V	350V	480V
Nominal Discharge Current (8/20 μ s)	I_n	20kA	20kA	20kA	20kA	20kA
Maximum Discharge Current (8/20 μ s)	I_{max}	50kA	50kA	50kA	50kA	50kA
Voltage Protection Level	U_p	600V	1000V	1300V	1700V	2000V
Response Time	t_A	< 25ns				
Overvoltage Category		III				
Maximum Backup fuse, if required		160A gG				
Short-Circuit Current Rating (AC)	I_{SCCR}	50kA				
TOV Withstand 5s	U_T	114V	229V	337V	403V	581V
TOV 120min	U_T	114V	229V	442V	528V	762V
	mode	Withstand	Withstand	Safe Fail	Safe Fail	Safe Fail
Number of Ports		1				

UL Electrical

Maximum Continuous Operating Voltage (AC)	MCOV	75V	150V	300V	350V	480V
Voltage Protection Rating	VPR	400V	600V	900V	1200V	1500V
Nominal Discharge Current (8/20 μ s)	I_n	20kA	20kA	20kA	20kA	20kA
Short-Circuit Current Rating (AC)	SCCR	100kA	200kA	150kA	200kA	200kA

Additional Electrical Parameters - Standard (Tests performed within Raycap testing laboratory only)

Residual Voltage at 5 kA (8/20 μ s)	U_{res}	400V	700V	1000V	1300V	1600V
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				

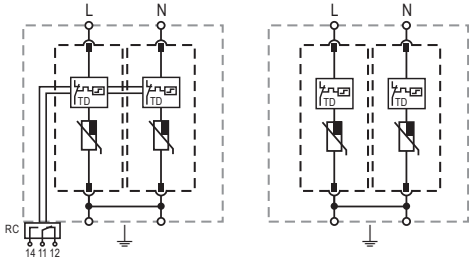
Mechanical & Environmental

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}	39.9 lbf-in [4.5Nm]				
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible)				
		35 mm ² (Solid, Stranded) / 25 mm ² (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 ² (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 Disconnect



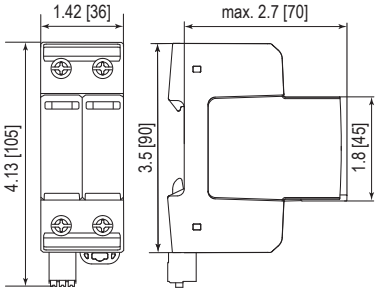
ProTec T2-ADV-xxx-2+0(-R)

Order Information

Order Code	75	150	300	350	480
ProTec T2-ADV-xxx-2+0	59.0347	59.0220	59.0222	59.0224	59.0226
ProTec T2-ADV-xxx-2+0-R (with remote contacts)	59.0348	59.0221	59.0223	59.0225	59.0227
ProTec T2-ADV-xxx-P (plug)	59.0202	59.0203	59.0204	59.0205	59.0206

Dimensions & Packaging

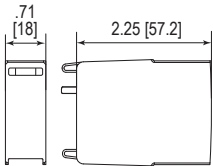
inches [mm]



Complete Unit

ProTec T2-ADV-xxx-2+0		75	150	300	350	480
Weight	pounds	.544	.562	.593	.615	.637
	grams	247	255	269	279	289
ProTec T2-ADV-xxx-2+0-R						
Weight	pounds	.575	.593	.610	.646	.668
	grams	261	269	267	293	303
DIN 43880 Dimension			2 TE / 1.42" [36mm]			
Packaging Dimensions (HxWxL)			4.3 x 4.5 x 13.8" [109 x 115 x 352mm]			
Standard Order Quantity			7 Units			

Spare Plug



Single Unit

ProTec T2-ADV-xxx-P		75	150	300	350	480
Weight	pounds	.120	.127	.143	.154	.165
	grams	54	58	65	70	75
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			

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

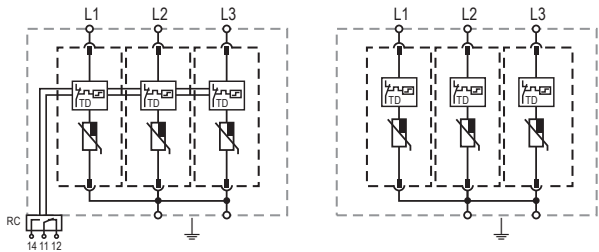
ProTec T2-ADV-xxx-3+0(-R)

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



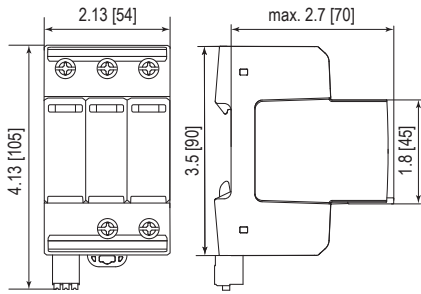
ProTec T2-ADV-xxx-3+0(-R)

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

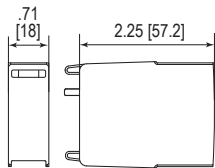
inches [mm]



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			

Overvoltage Protection

ProTec T2-ADV 4+0

Class II • Type 2 • Type 1CA



Location of Use: Sub-Distribution Boards
 Network Systems: TN-S
 Mode of Protection: L-PE, 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-4+0(-R)

		150	300	350	480
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 (8/20 μ s)	I_n	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current (8/20 μ 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			
Overvoltage Category		III			
Maximum Backup fuse, if required		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 μ 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

Additional Electrical Parameters - Standard (Tests performed within Raycap testing laboratory only)

Residual Voltage at 5 kA (8/20 μ s)	U_{res}	700V	1000V	1300V	1600V
Minimum Backup fuse, if required		80A gG			

Additional Electrical Parameters - Extended (Additionally tested by VDE)

Short-Circuit Current Rating (AC)	I_{SCCR}	100 kA			
Maximum Backup fuse, if required		160A gG			

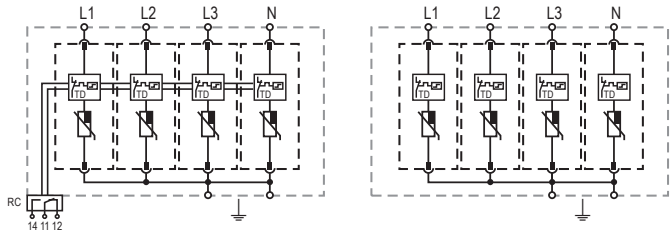
Mechanical & Environmental

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 mm ² (Solid, Stranded) / 25 mm ² (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 ² (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

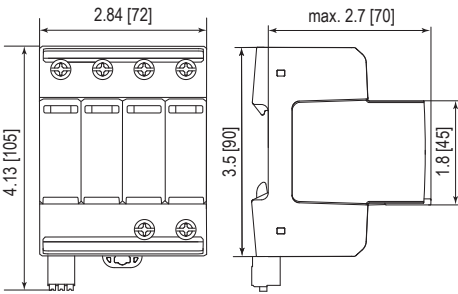


ProTec T2-ADV-xxx-4+0(-R)

Order Information

Order Code	150	300	350	480
ProTec T2-ADV-xxx-4+0	59.0236	59.0238	59.0240	59.0242
ProTec T2-ADV-xxx-4+0-R (with remote contacts)	59.0237	59.0239	59.0241	59.0243
ProTec T2-ADV-xxx-P (plug)	59.0203	59.0204	59.0205	59.0206

Dimensions & Packaging

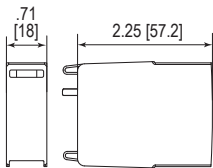


inches [mm]

Complete Unit

ProTec T2-ADV-xxx-4+0)		150	300	350	480
Weight	pounds	1.087	1.148	1.192	1.236
	grams	493	521	5411	561
ProTec T2-ADV-xxx-4+0-R					
Weight	pounds	1.106	1.168	1.212	1.256
	grams	502	530	550	570
DIN 43880 Dimension			4 TE / 2.84" [72mm]		
Packaging Dimensions (HxWxL)			4.3 x 4.5 x 13.8" [109 x 115 x 352mm]		
Standard Order Quantity			4 Units		

Spare Plug



Single Unit

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

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
IEC Electrical					
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 μ s)	(L-N)/(N-PE) I_n	20 kA / 40 kA	20 kA / 40 kA	20 kA / 40 kA	20 kA / 40 kA
Maximum Discharge Current (8/20 μ s)	(L-N)/(N-PE) I_{max}	50 kA / 65 kA	50 kA / 65 kA	50 kA / 65 kA	50 kA / 65 kA
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}	100 A			
Response Time	(L-N)/(N-PE) t_A	< 25 ns / < 100 ns			
Overvoltage Category		III			
Maximum Backup fuse, if required		160A gG			
Short-Circuit Current Rating (AC)	I_{SCCR}	50kA			
TOV Withstand 5s	(L-N) U_T	114V	229V	337V	403V
TOV 120min	(L-N) U_T	114V	229V	442V	528V
	mode	Withstand	Withstand	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	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 μ s)	(L-N)/(N-G) I_n	20 kA / 20 kA			
Short-Circuit Current Rating (AC)	(L-N) SCCR	100 kA	200 kA	150 kA	200 kA

Additional Electrical Parameters - Standard (Tests performed within Raycap testing laboratory only)

Residual Voltage at 5 kA (8/20 μ s)	(L-N) / (N-PE) U_{res}	400V / 305V	700V / 305V	1000V / 305V	1300V / 305V
Minimum Backup fuse, if required		160A gG			

Additional Electrical Parameters - Extended (Additionally tested by VDE)

Short-Circuit Current Rating (AC)	I_{SCCR}	100kA			
Maximum Backup fuse, if required		160A gG			

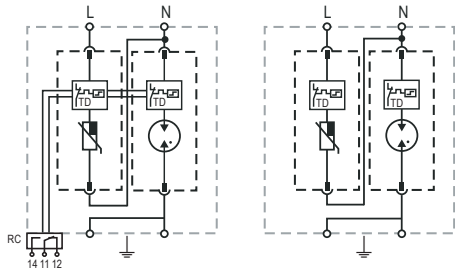
Mechanical & Environmental

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 Disconnect



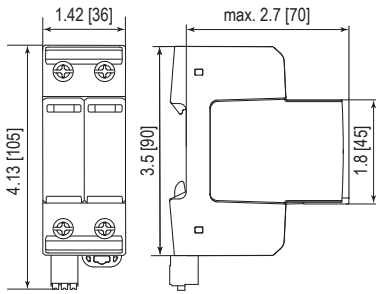
ProTec T2-ADV-xxx-1+1(-R)

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

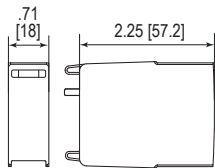
inches [mm]



Complete Unit

ProTec T2-ADV-xxx-1+1		75	150	300	350
Weight	pounds	.520	.529	.544	.555
	grams	236	240	247	252
ProTec T2-ADV-xxx-1+1-R					
Weight	pounds	.533	.542	.557	.568
	grams	242	246	253	258
DIN 43880 Dimension			2 TE / 1.42" [36mm]		
Packaging Dimensions (HxWxL)			4.3 x 4.5 x 13.8" [109 x 115 x 352mm]		
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
ProTube T2-ADV-40-P			40		
Weight	pounds	.093			
	grams	42			
DIN 43880 Dimension			1 TE / .71" [18mm]		
Packaging Dimensions (HxWxL)			3.2 × 4.5 × 12" [83 × 116 × 305 mm]		
Standard Order Quantity			24 Units		

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

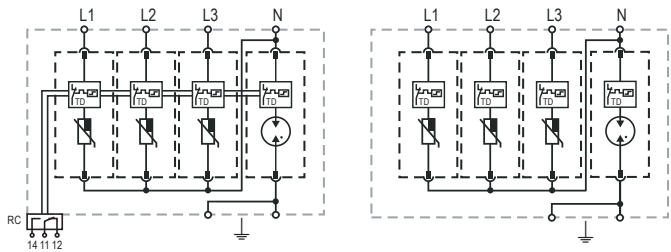
ProTec T2-ADV-xxx-3+1(-R)

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	20 kA / 40 kA	20 kA / 40 kA
Maximum Discharge Current (8/20μs)	(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	
Overvoltage Category		III	III
Maximum Backup fuse, if required		160A gG	
Short-Circuit Current Rating (AC)	I _{SCCR}	50 kA	
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	1200 V	
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	20 kA / 20 kA	
Short-Circuit Current Rating (AC)	(L-N) SCCR	150 kA	200 kA
Additional Electrical Parameters - Standard <i>(Tests performed within Raycap testing laboratory only)</i>			
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 <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 [4.5Nm]	
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

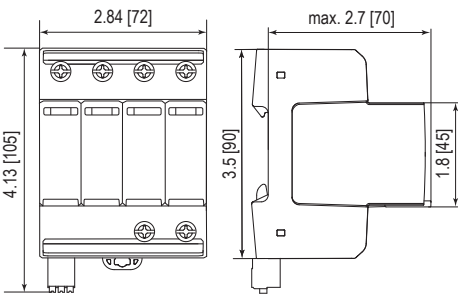


ProTec T2-ADV-xxx-3+1(-R)

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

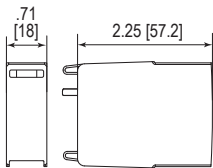


inches [mm]

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	