

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

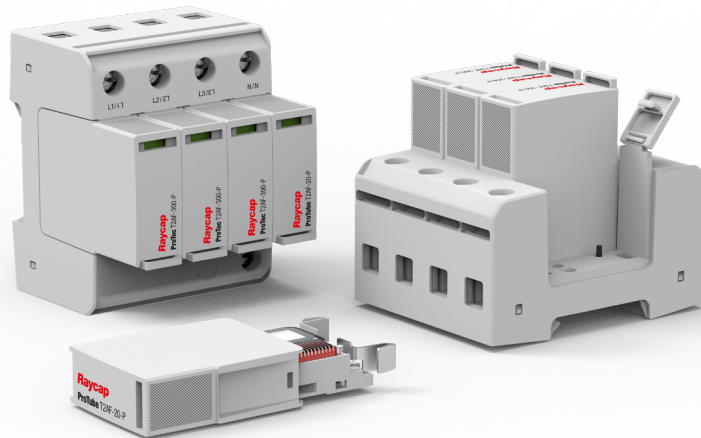


Overvoltage Protection with Integrated Fuse **ProTec T2AF**



Special features:

- Faster and space-saving installation – no back-up fuse needed
- Improved voltage protection level due to shorter wiring and no dedicated fuse
- 6mm² wiring can always be used
- Visual and remote signalization of fuse and SPD status
- Improved power availability in case of SPD failure



IEC 61643-11:2025

EN IEC 61643-11:2025



The practical 2-in-1 device simplifies planning, installation, and maintenance. The Type 2 arrester has an integrated back-up fuse, a protection level of 1,500V, a maximum discharge capacity of 40kA 8/20 μ s and a rated discharge current of 20 kA 8/20 μ s. In-house developed fuse is tailored made for SPD performance and features improved low fault current performance – $I_{scor\ min}$ 300A within 1 s. The ProTec T2AF Series offers protection independent of installed fuses found in equipment inside large industrial installations.



More Product Information



Overvoltage Protection with Integrated Fuse

ProTec T2AF 1+0

Class II • Class III • Type 2 • Type 3



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 Category: Class II+III/Type 2+3
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2025
 EN IEC 61643-11:2025



Technical Data

ProTec T2AF-xxx-1+0(-R)

300

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o/U_n	240V
Maximum Continuous Operating Voltage (AC)	U_c	300V
Nominal Discharge Current (8/20µs)	I_n	20 kA
Maximum Discharge Current (8/20µs)	I_{max}	40 kA
Open Circuit Voltage of Combination Wave Generator (1.2/50µs)	U_{oc}	6 kV
Short Circuit Current of Combination Wave Generator (8/20µs)	I_{cw}	3 kA
Voltage Protection Level	U_p	1500V
Response Time	t_A	< 25ns
Overvoltage Category		III
Overcurrent Protection (max)		Not Required
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA
TOV Withstand 5s	U_T	337V
TOV Safe Fail 120min	U_T	442V
Number of Ports		1

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

Residual Voltage at 5 kA (8/20 µs)	U_{res}	1150V
Minimum Overcurrent Protection, if required		Not Required

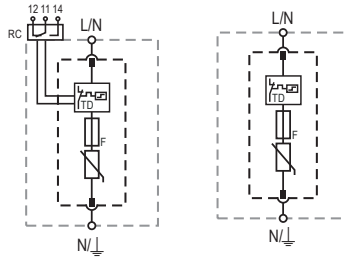
Mechanical & Environmental

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
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 Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect
- F Integrated Surge Adapted Overcurrent Protection

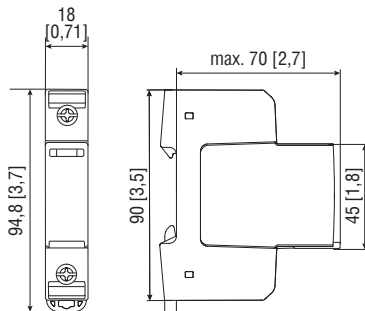


Order Information

Order Code	300
ProTec T2AF-xxx-1+0	59.E101
ProTec T2AF-xxx-1+0-R (with remote contacts)	59.E102
ProTec T2AF-xxx-P (plug)	59.E117

Dimensions & Packaging

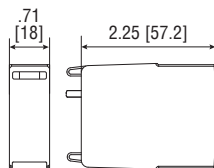
inches [mm]



Complete Unit

ProTec T2AF-xxx-1+0	300
Weight	pounds [grams] .25 [111]
ProTec T2AF-xxx-1+0-R	
Weight	pounds [grams] .28 [128]
DIN 43880 Dimension	1 TE/.71" [18]
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity	12 Units

Spare Plug



Single Unit

ProTec T2AF-xxx-P	300
Weight	pounds [grams] .13 [57]
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



Location of Use: Sub-Distribution Boards
 Network Systems: TN-S
 Mode of Protection: L-PE, N-PE
 IEC/EN Category: Class II+III/Type 2+3
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2025
 EN IEC 61643-11:2025



Technical Data

ProTec T2AF-xxx-2+0(-R)

300

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o/U_n	240 V
Maximum Continuous Operating Voltage (AC)	U_c	300 V
Nominal Discharge Current (8/20µs)	I_n	20 kA
Maximum Discharge Current (8/20µs)	I_{max}	40 kA
Voltage Protection Level	U_p	1500 V
Open Circuit Voltage of Combination Wave Generator (1.2/50µs)	U_{oc}	6 kV
Short Circuit Current of Combination Wave Generator (8/20µs)	I_{cw}	3 kA
Follow Current Interrupt Rating (N-PE)	I_{fi}	100 A
Response Time (L-PE)/(N-PE)	t_A	< 25 ns / < 100 ns
Overvoltage Category		III
Overcurrent Protection (max)		Not Required
Short-Circuit Current Rating (AC) (L-PE)	I_{SCCR}	25 kA
TOV Withstand 5s (L-PE)	U_T	337 V
TOV Safe Fail 120min (L-PE)	U_T	442 V
Number of Ports		1

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

Restspannung bei 5 kA (8/20 µs) (L-PE)/(N-PE)	U_{res}	1150V/300V
Minimum Overcurrent Protection, if required		Not Required

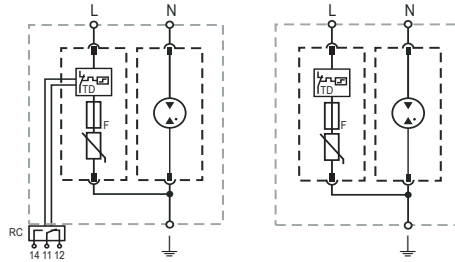
Mechanical & Environmental

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 mm ² (Solid, Stranded) / 25 mm ² (Flexible)
Mounting		35mm DIN Rail, EN 60715
Degree of Protection		IP 20 (built-in)
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0
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) / 1.5mm ² (Solid)
Overvoltage Category		III

Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- PE PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnecter
- F Integrated Surge Adapted Overcurrent Protection



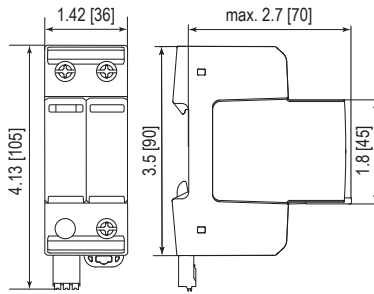
Two PE terminals available per request.

Order Information

Order Code	300
ProTec T2AF-xxx-2+0	59.E103
ProTec T2AF-xxx-2+0-R (with remote contacts)	59.E104
ProTec T2AF-xxx-P (plug L-PE)	59.E117
ProTube T2AF-20-P (plug N-PE)	59.E118

Dimensions & Packaging

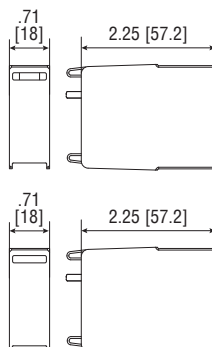
inches [mm]



Complete Unit

ProTec T2AF-xxx-2+0	300
Weight	pounds [grams] .46 [211]
ProTec T2AF-xxx-2+0-R	
Weight	pounds [grams] 214 [47]
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 T2AF-xxx-P	300
Weight	pounds [grams] .13 [57]
ProTube T2AF-xx-P	20
Weight	pounds [grams] .07 [31]
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

Overvoltage Protection with Integrated Fuse

ProTec T2AF 3+0

Class II • Class III • Type 2 • Type 3



Location of Use: Sub-Distribution Boards
 Network Systems: TN-C
 Mode of Protection: L-PEN
 IEC/EN Category: Class II+III/Type 2+3
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2025
 EN IEC 61643-11:2025



Technical Data

ProTec T2AF-xxx-3+0(-R)

300

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o/U_n	240V
Maximum Continuous Operating Voltage (AC)	U_c	300V
Nominal Discharge Current (8/20µs)	I_n	20 kA
Maximum Discharge Current (8/20µs)	I_{max}	40 kA
Open Circuit Voltage of Combination Wave Generator (1.2/50µs)	U_{oc}	6 kV
Short Circuit Current of Combination Wave Generator (8/20µs)	I_{cw}	3 kA
Voltage Protection Level	U_p	1500V
Response Time	t_A	< 25ns
Overvoltage Category		III
Overcurrent Protection (max)		Not Required
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA
TOV Withstand 5s	U_T	337V
TOV Safe Fail 120min	U_T	442V
Number of Ports		1

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

Residual Voltage at 5 kA (8/20 µs)	U_{res}	1150V
Minimum Overcurrent Protection, if required		Not Required

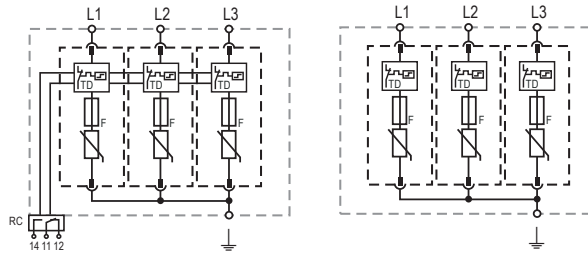
Mechanical & Environmental

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
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 Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect
- F Integrated Surge Adapted Overcurrent Protection



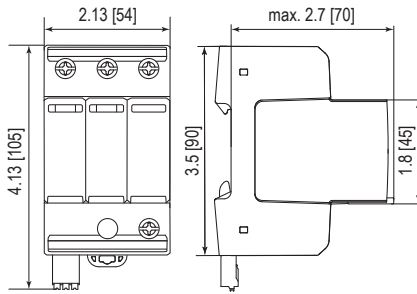
Two PE terminals available per request.

Order Information

Order Code	300
ProTec T2AF-xxx-3+0	59.E105
ProTec T2AF-xxx-3+0-R (with remote contacts)	59.E106
ProTec T2AF-xxx-P (plug)	59.E117

Dimensions & Packaging

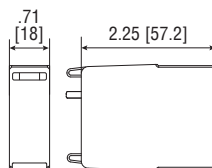
inches [mm]



Complete Unit

ProTec T2AF-xxx-3+0	300
Weight	pounds [grams] .76 [346]
ProTec T2AF-xxx-3+0-R	
Weight	pounds [grams] .77 [351]
DIN 43880 Dimension	3 TE/2.13" [54]
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity	5 Units

Spare Plug



Single Unit

ProTec T2AF-xxx-P	300
Weight	pounds [grams] .13 [57]
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

Overvoltage Protection with Integrated Fuse

ProTec T2AF 4+0

Class II • Class III • Type 2 • Type 3



Location of Use: Sub-Distribution Boards
 Network Systems: TN-S
 Mode of Protection: L-PE, N-PE
 IEC/EN Category: Class II+III/Type 2+3
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2025
 EN IEC 61643-11:2025



Technical Data

ProTec T2AF-xxx-4+0(-R)

300

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o/U_n	240 V
Maximum Continuous Operating Voltage (AC)	U_c	300 V
Nominal Discharge Current (8/20µs)	I_n	20 kA
Maximum Discharge Current (8/20µs)	I_{max}	40 kA
Voltage Protection Level	U_p	1500 V
Open Circuit Voltage of Combination Wave Generator (1.2/50µs)	U_{oc}	6 kV
Short Circuit Current of Combination Wave Generator (8/20µs)	I_{cw}	3 kA
Follow Current Interrupt Rating (N-PE)	I_{fi}	100 A
Response Time (L-PE)/(N-PE)	t_A	< 25 ns / < 100 ns
Overvoltage Category		III
Overcurrent Protection (max)		Not Required
Short-Circuit Current Rating (AC) (L-PE)	I_{SCCR}	25 kA
TOV Withstand 5s (L-PE)	U_T	337 V
TOV Safe Fail 120min (L-PE)	U_T	442 V
Number of Ports		1

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

Restspannung bei 5 kA (8/20 µs) (L-PE)/(N-PE)	U_{res}	1150V/300V
Minimum Overcurrent Protection, if required		Not Required

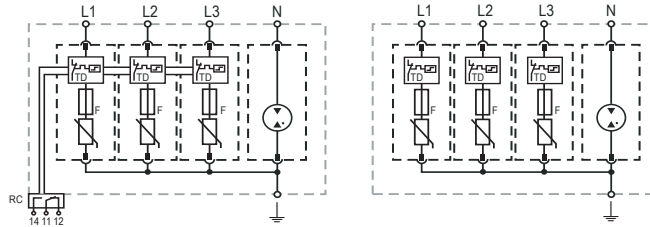
Mechanical & Environmental

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 mm ² (Solid, Stranded) / 25 mm ² (Flexible)
Mounting		35mm DIN Rail, EN 60715
Degree of Protection		IP 20 (built-in)
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0
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) / 1.5mm ² (Solid)
Overvoltage Category		III

Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⏏ PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect
- F Integrated Surge Adapted Overcurrent Protection



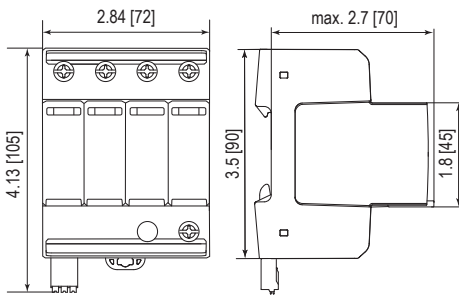
Two PE terminals available per request.

Order Information

Order Code	300
ProTec T2AF-xxx-4+0	59.E107
ProTec T2AF-xxx-4+0-R (with remote contacts)	59.E108
ProTec T2AF-xxx-P (plug L-PE)	59.E117
ProTube T2AF-20-P (plug N-PE)	59.E118

Dimensions & Packaging

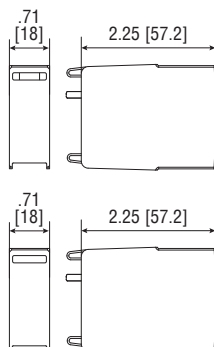
inches [mm]



Complete Unit

ProTec T2AF-xxx-4+0	300
Weight	pounds [grams] .95 [430]
ProTec T2AF-xxx-4+0-R	
Weight	pounds [grams] .96 [436]
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



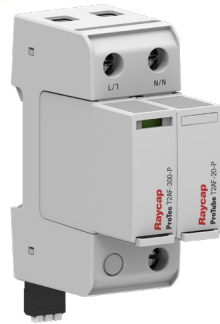
Single Unit

ProTec T2AF-xxx-P	300
Weight	pounds [grams] .13 [57]
ProTube T2AF-xx-P	20
Weight	pounds [grams] .07 [31]
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

Overvoltage Protection with Integrated Fuse

ProTec T2AF 1+1

Class II • Class III • Type 2 • Type 3



Location of Use: Sub-Distribution Boards
 Network Systems: TT, TN-S
 Mode of Protection: L-N, N-PE, L-PE (combined)
 IEC/EN Category: Class II+III/Type 2+3
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2025
 EN IEC 61643-11:2025



Technical Data

ProTec T2AF-xxx-1+1(-R)

300

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o/U_n	240 V
Maximum Continuous Operating Voltage (AC)	U_c	300 V
Nominal Discharge Current (8/20µs)	I_n	20 kA
Maximum Discharge Current (8/20µs)	I_{max}	40 kA
Voltage Protection Level	(L - N)/(N - PE)(L - PE) U_p	1500 V / 1500 V / 1600 V
Open Circuit Voltage of Combination Wave Generator (1.2/50µs)	U_{oc}	6 kV
Short Circuit Current of Combination Wave Generator (8/20µs)	I_{cw}	3 kA
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
Overcurrent Protection (max)		Not Required
Short-Circuit Current Rating (AC)	(L - N) I_{SCCR}	25 kA
TOV Withstand 5s	(L - N) U_T	337 V
TOV Safe Fail 120min	(L - N) U_T	442 V
TOV Withstand 200ms	(N - PE) U_T	1200 V
Number of Ports		1

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

Residual Voltage at 5 kA (8/20 µs)	(L - N)/(N - PE) U_{res}	1150 V / 300 V
Minimum Overcurrent Protection, if required		Not Required

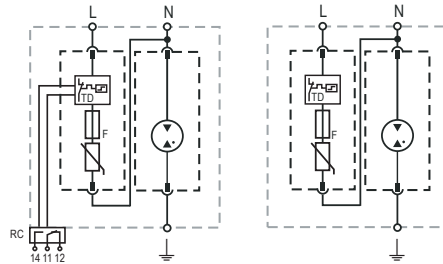
Mechanical & Environmental

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 mm ² (Solid, Stranded) / 25 mm ² (Flexible)
Mounting		35mm DIN Rail, EN 60715
Degree of Protection		IP 20 (built-in)
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0
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) / 1.5mm ² (Solid)
Overvoltage Category		III

Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- PE PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect
- F Integrated Surge Adapted Overcurrent Protection



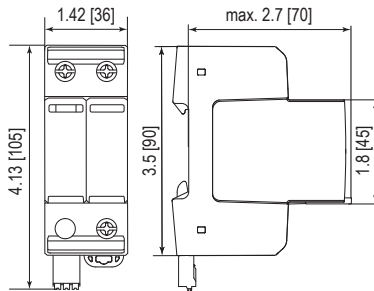
Two PE terminals available per request.

Order Information

Order Code	300
ProTec T2AF-xxx-1+1	59.E109
ProTec T2AF-xxx-1+1-R (with remote contacts)	59.E110
ProTec T2AF-xxx-P (plug L-N)	59.E117
ProTube T2AF-20-P (plug N-PE)	59.E118

Dimensions & Packaging

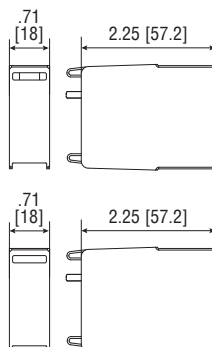
inches [mm]



Complete Unit

ProTec T2AF-xxx-1+1	300	
Weight	pounds [grams]	.49 [220]
ProTec T2AF-xxx-1+1-R		
Weight	pounds [grams]	.49 [223]
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 T2AF-xxx-P	300	
Weight	pounds [grams]	.13 [57]
ProTube T2AF-xx-P	20	
Weight	pounds [grams]	.07 [31]
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

DATASHEET

Overvoltage Protection with Integrated Fuse

ProTec T2AF 3+1

Class II • Class III • Type 2 • Type 3



Location of Use: Sub-Distribution Boards
 Network Systems: TT, TN-S
 Mode of Protection: L-N, N-PE, L-PE (combined)
 IEC/EN Category: Class II+III/Type 2+3
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2025
 EN IEC 61643-11:2025



Technical Data

ProTec T2AF-xxx-3+1(-R)

300

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o/U_n	240 V
Maximum Continuous Operating Voltage (AC)	U_c	300 V
Nominal Discharge Current (8/20µs)	I_n	20 kA
Maximum Discharge Current (8/20µs)	I_{max}	40 kA
Voltage Protection Level (L - N)/(N - PE)(L-PE)	U_p	1500 V / 1500 V / 1600 V
Open Circuit Voltage of Combination Wave Generator (1.2/50µs)	U_{oc}	6 kV
Short Circuit Current of Combination Wave Generator (8/20µs)	I_{cw}	3 kA
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
Overcurrent Protection (max)		Not Required
Short-Circuit Current Rating (AC) (L - N)	I_{SCCR}	25 kA
TOV Withstand 5s (L - N)	U_T	337 V
TOV Safe Fail 120min (L - N)	U_T	442 V
TOV Withstand 200ms (N - PE)	U_T	1200 V
Number of Ports		1

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

Residual Voltage at 5 kA (8/20 µs) (L - N)/(N - PE)	U_{res}	1150V/300 V
Minimum Overcurrent Protection, if required		Not Required

Mechanical & Environmental

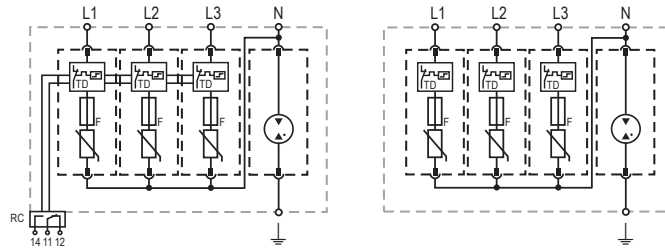
Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Pollution Degree		2
Altitude (max)		13123 ft [4000m]
Terminal Screw Torque	M_{max}	40 lbf-in [4.5Nm]
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm ² (Solid, Stranded) / 25 mm ² (Flexible)
Mounting		35mm DIN Rail, EN 60715
Degree of Protection		IP 20 (built-in)
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0
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) / 1.5mm ² (Solid)
Overvoltage Category		III



Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⏏ PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect
- F Integrated Surge Adapted Overcurrent Protection



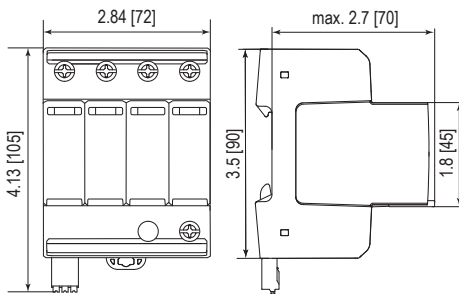
Two PE terminals available per request.

Order Information

Order Code	300
ProTec T2AF-xxx-3+1	59.E113
ProTec T2AF-xxx-3+1-R (with remote contacts)	59.E114
ProTec T2AF-xxx-P (plug L-N)	59.E117
ProTube T2AF-20-P (plug N-PE)	59.E118

Dimensions & Packaging

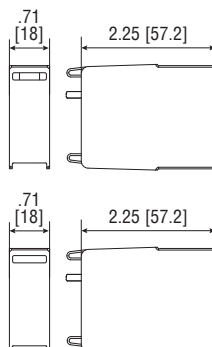
inches [mm]



Complete Unit

ProTec T2AF-xxx-3+1	300
Weight	pounds [grams] .96 [435]
ProTec T2AF-xxx-3+1-R	
Weight	pounds [grams] .97 [440]
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 T2AF-xxx-P	300
Weight	pounds [grams] .13 [57]
ProTube T2AF-xx-P	20
Weight	pounds [grams] .07 [31]
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

Overvoltage Protection with Integrated Fuse

ProTec T2AF 3+1 40

Class II • Class III • Type 2 • Type 3



Location of Use: Sub-Distribution Boards
 Network Systems: TT, TN-S
 Mode of Protection: L-N, N-PE, L-PE (combined)
 IEC/EN Category: Class II+III/Type 2+3
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2025
 EN IEC 61643-11:2025



Technical Data

ProTec T2AF-xxx-3+1-40(-R)

300

IEC Electrical

Nominal AC Voltage (50/60Hz)		U_o/U_n	240V
Maximum Continuous Operating Voltage (AC)	(L-N)/(N-PE)	U_c	300V/305V
Nominal Discharge Current (8/20µs)	(L-N)/(N-PE)	I_n	20kA/40kA
Maximum Discharge Current (8/20µs)	(L-N)/(N-PE)	I_{max}	40kA/65kA
Voltage Protection Level	(L-N)/(N-PE)(L-PE)	U_p	1500V/1500V/1600V
Open Circuit Voltage of Combination Wave Generator (1.2/50µs)		U_{oc}	6kV
Short Circuit Current of Combination Wave Generator (8/20µs)		I_{cw}	3kA
Follow Current Interrupt Rating	(N-PE)	I_{fi}	100A
Response Time	(L-N)/(N-PE)	t_A	< 25ns / < 100ns
Overvoltage Category			III
Overcurrent Protection (max)			Not Required
Short-Circuit Current Rating (AC)	(L-N)	I_{SCCR}	25kA
TOV Withstand 5s	(L-N)	U_T	337V
TOV Safe Fail 120min	(L-N)	U_T	442V
TOV Withstand 200ms	(N-PE)	U_T	1200V
Number of Ports			1

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

Residual Voltage at 5 kA (8/20 µs)	(L-N)/(N-PE)	U_{res}	1150V/305V
Minimum Overcurrent Protection, if required			Not Required

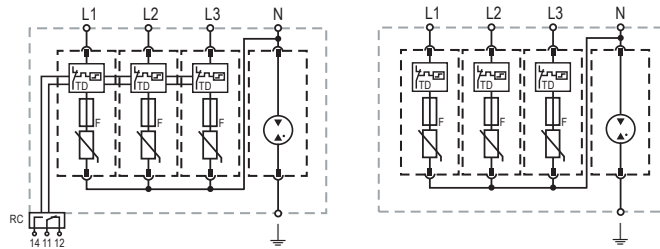
Mechanical & Environmental

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 mm ² (Solid, Stranded) / 25 mm ² (Flexible)
Mounting		35mm DIN Rail, EN 60715
Degree of Protection		IP 20 (built-in)
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0
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) / 1.5mm ² (Solid)
Overvoltage Category		III

Internal Configuration

Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⏏ PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnecter
- F Integrated Surge Adapted Overcurrent Protection



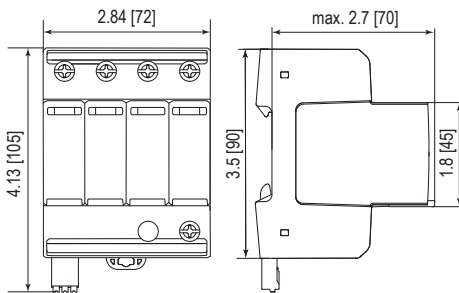
Two PE terminals available per request.

Order Information

Order Code	300
ProTec T2AF-xxx-3+1-40	59.E120
ProTec T2AF-xxx-3+1-40-R (with remote contacts)	59.E121
ProTec T2AF-xxx-P (plug L-N)	59.E117
ProTube T2AF-40-P (plug N-PE)	59.E119

Dimensions & Packaging

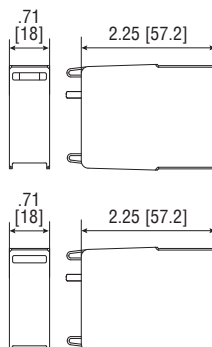
inches [mm]



Complete Unit

ProTec T2AF-xxx-3+1-40	300	
Weight	pounds [grams]	.96 [435]
ProTec T2AF-xxx-3+1-40-R		
Weight	pounds [grams]	.97 [440]
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 T2AF-xxx-P	300	
Weight	pounds [grams]	.13 [57]
ProTube T2AF-xx-P	40	
Weight	pounds [grams]	.07 [31]
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