

Overvoltage Protection ProTec T2H 1+0

Class II • Type 2 • Type 1CA • Open Type 1 SPD Listed



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,
 Open Type 1 SPD Listed
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018
 UL 1449 5th Edition

Technical Data

ProTec T2H-xxx-1+0(-R) & ProTec T2H-xxx-1+0-US(-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 (8/20 μ s)	I_n	20 kA
Maximum Discharge Current (8/20 μ s)	I_{max}	50 kA
Voltage Protection Level	U_p	1500 V
Response Time	t_A	< 25 ns
Overcurrent Protection (max)		315 A / 250 A gG
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA / 50 kA
TOV Withstand 120min	U_T	442 V
Number of Ports		1

UL Electrical

Maximum Continuous Operating Voltage (AC)	MCOV	300 V
Voltage Protection Rating	VPR	1200 V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA
Short-Circuit Current Rating (AC)	SCCR	200 kA

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

Residual Voltage at 5 kA (8/20 μ s)	U_{res}	1000 V
Overcurrent Protection (min)		80 A gG

Additional Electrical Parameters - Extended (Additionally tested by VDE)

Short-Circuit Current Rating (AC)	I_{SCCR}	100 kA
Overcurrent Protection (max)		250 A gG

Mechanical & Environmental

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}	35 lbf-in per UL 1499 [4.5 Nm]
Conductor Cross Section (max)		6 AWG (Solid, Stranded) per UL 1449 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: 250 V / 1 A, 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A
RC Conductor Cross Section (max)		10 AWG (Solid, Stranded) per UL 1449 [1.5 mm ² (Solid)]

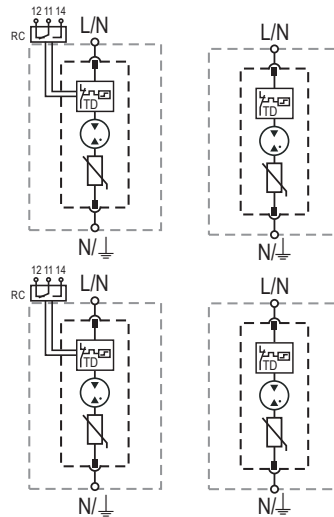
Internal Configuration

Legend

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

UL Listed Products

UL Recognized Products



ProTec T2H-xxx-1+0(-R)

Order Information VDE Certified and UL Recognized Products

Order Code	300
ProTec T2H-xxx-1+0	59.0324
ProTec T2H-xxx-1+0-R (with remote contacts)	59.0325
ProTec T2H-xxx-P (plug)	59.0322

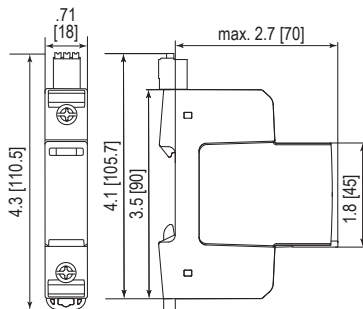
ProTec T2H-xxx-1+0-US(-R)

Order Information VDE Certified and Open Type 1 UL Listed Products

Order Code	300
ProTec T2H-xxx-1+0-US	59.B057
ProTec T2H-xxx-1+0-US-R (with remote contacts)	59.B058
ProTec T2H-xxx-P (plug L-N)	59.0322

Dimensions & Packaging

inches [mm]



Complete Unit UL Recognized Products

ProTec T2H-xxx-1+0	300
Weight	pounds [grams] .264 [120]

ProTec T2H-xxx-1+0-R

Weight	pounds [grams] .279 [127]
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Complete Unit UL Listed Products

ProTec T2H-xxx-1+0-US	300
Weight	pounds [grams] .264 [120]

ProTec T2H-xxx-1+0-US(-R)

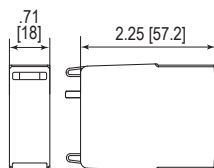
Weight	pounds [grams] .279 [127]
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DIN 43880 Dimension	1 TE / .71" [18]
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Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
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Standard Order Quantity	12 Units
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Spare Plug



Single Unit

ProTec T2H-xxx-P	300
Weight	pounds [grams] .112 [51]

DIN 43880 Dimension	1 TE / .71" [18]
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Packaging Dimensions (HxWxL)	3.2 x 4.5 x 12" [83 x 116 x 305 mm]
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Standard Order Quantity	24 Units
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Overvoltage Protection ProTec T2H 2+0

Class II • Type 2 • Type 1CA • Open Type 1 SPD Listed



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,
 Open Type 1 SPD Listed
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018
 UL 1449 5th Edition

Technical Data

ProTec T2H-xxx-2+0(-R) & ProTec T2H-xxx-2+0-US(-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 (8/20 μ s)	I_n	20 kA
Maximum Discharge Current (8/20 μ s)	I_{max}	50 kA
Voltage Protection Level	U_p	1500 V
Response Time	t_A	< 25 ns
Overcurrent Protection (max)		315 A / 250 A gG
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA / 50 kA
TOV Withstand 120min	U_T	442 V
Number of Ports		1

UL Electrical

Maximum Continuous Operating Voltage (AC)	MCOV	300 V
Voltage Protection Rating	VPR	1200 V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA
Short-Circuit Current Rating (AC)	SCCR	200 kA

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

Residual Voltage at 5 kA (8/20 μ s)	U_{res}	1000 V
Overcurrent Protection (min)		80 A gG

Additional Electrical Parameters - Extended (Additionally tested by VDE)

Short-Circuit Current Rating (AC)	I_{SCCR}	100 kA
Overcurrent Protection (max)		250 A gG

Mechanical & Environmental

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}	35 lbf-in per UL 1499 [4.5 Nm]
Conductor Cross Section (max)		6 AWG (Solid, Stranded) per UL 1449 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: 250 V / 1 A, 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A
RC Conductor Cross Section (max)		10 AWG (Solid, Stranded) per UL 1449 [1.5 mm ² (Solid)]

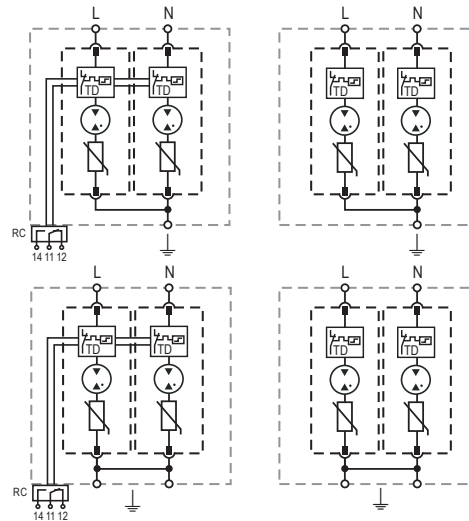
Internal Configuration

Legend

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

UL Listed Products

UL Recognized Products



ProTec T2H-xxx-2+0(-R)

Order Information VDE Certified and UL Recognized Products

Order Code	300
ProTec T2H-xxx-2+0	59.0326
ProTec T2H-xxx-2+0-R (with remote contacts)	59.0327
ProTec T2H-xxx-P (plug)	59.0322

ProTec T2H-xxx-2+0-US(-R)

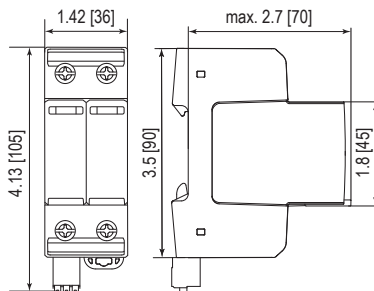
For UL Listed products one PE/G Conductor Terminal is covered/closed.

Order Information VDE Certified and Open Type 1 UL Listed Products

Order Code	300
ProTec T2H-xxx-2+0-US	59.B059
ProTec T2H-xxx-2+0-US-R (with remote contacts)	59.B060
ProTec T2H-xxx-P (plug L-N)	59.0322

Dimensions & Packaging

inches [mm]



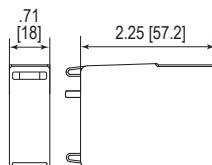
Complete Unit UL Recognized Products

ProTec T2H-xxx-2+0	300
Weight	pounds [grams]
	.514 [233]
ProTec T2H-xxx-2+0-R	
Weight	pounds [grams]
	.534 [242]

Complete Unit UL Listed Products

ProTec T2H-xxx-2+0-US	300
Weight	pounds [grams]
	.484 [224]
ProTec T2H-xxx-2+0-US(-R)	
Weight	pounds [grams]
	.514 [233]
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 T2H-xxx-P	300
Weight	pounds [grams]
	.112 [51]
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 ProTec T2H 3+0

Class II • Type 2 • Type 1CA • Open Type 1 SPD Listed



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,
 Open Type 1 SPD Listed
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018
 UL 1449 5th Edition

Technical Data

ProTec T2H-xxx-3+0(-R) & ProTec T2H-xxx-3+0-US(-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 (8/20 μ s)	I_n	20 kA
Maximum Discharge Current (8/20 μ s)	I_{max}	50 kA
Voltage Protection Level	U_p	1500 V
Response Time	t_A	< 25 ns
Overcurrent Protection (max)		315 A / 250 A gG
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA / 50 kA
TOV Withstand 120min	U_T	442 V
Number of Ports		1

UL Electrical

Maximum Continuous Operating Voltage (AC)	MCOV	300 V
Voltage Protection Rating	VPR	1200 V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA
Short-Circuit Current Rating (AC)	SCCR	200 kA

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

Residual Voltage at 5 kA (8/20 μ s)	U_{res}	1000 V
Overcurrent Protection (min)		80 A gG

Additional Electrical Parameters - Extended (Additionally tested by VDE)

Short-Circuit Current Rating (AC)	I_{SCCR}	100 kA
Overcurrent Protection (max)		250 A gG

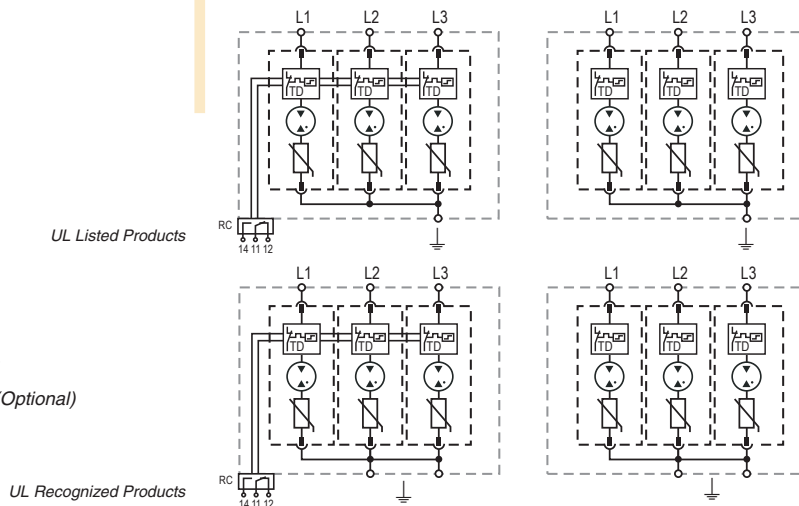
Mechanical & Environmental

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}	35 lbf-in per UL 1499 [4.5 Nm]
Conductor Cross Section (max)		6 AWG (Solid, Stranded) per UL 1449 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: 250 V / 1 A, 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A
RC Conductor Cross Section (max)		10 AWG (Solid, Stranded) per UL 1449 [1.5 mm ² (Solid)]

Internal Configuration

Legend

L	Line Conductor Terminal
⏏	PEN/G Conductor Terminal
RC	Remote Contacts Terminal (Optional)
TD	Thermal Disconnect



ProTec T2H-xxx-3+0(-R)

Order Information VDE Certified and UL Recognized Products

Order Code	300
ProTec T2H-xxx-3+0	59.0328
ProTec T2H-xxx-3+0-R (with remote contacts)	59.0329
ProTec T2H-xxx-P (plug)	59.0322

ProTec T2H-xxx-3+0-US(-R)

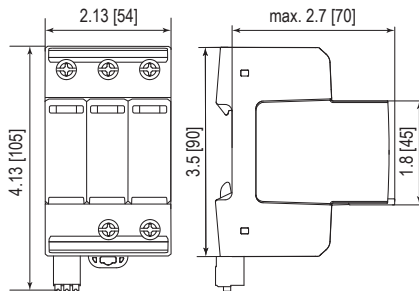
For UL Listed products one PE/G Conductor Terminal is covered/closed.

Order Information VDE Certified and Open Type 1 UL Listed Products

Order Code	300
ProTec T2H-xxx-3+0-US	59.B061
ProTec T2H-xxx-3+0-US-R (with remote contacts)	59.B062
ProTec T2H-xxx-P (plug L-N)	59.0322

Dimensions & Packaging

inches [mm]



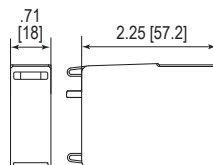
Complete Unit UL Recognized Products

ProTec T2H-xxx-3+0	300
Weight	pounds [grams] .747 [339]
ProTec T2H-xxx-3+0-R	
Weight	pounds [grams] .767 [348]

Complete Unit UL Listed Products

ProTec T2H-xxx-3+0-US	300
Weight	pounds [grams] .727 [330]
ProTec T2H-xxx-3+0-US(-R)	
Weight	pounds [grams] .747 [339]
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 T2H-xxx-P	300
Weight	pounds [grams] .112 [51]
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 ProTec T2H 4+0

Class II • Type 2 • Type 1CA • Open Type 1 SPD Listed



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,
 Open Type 1 SPD Listed
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018
 UL 1449 5th Edition

Technical Data

ProTec T2H-xxx-4+0(-R) & ProTec T2H-xxx-4+0-US(-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 (8/20 μ s)	I_n	20 kA
Maximum Discharge Current (8/20 μ s)	I_{max}	50 kA
Voltage Protection Level	U_p	1500 V
Response Time	t_A	< 25 ns
Overcurrent Protection (max)		315 A / 250 A gG
Short-Circuit Current Rating (AC)	I_{SCCR}	25 kA / 50 kA
TOV Withstand 120min	U_T	442 V
Number of Ports		1

UL Electrical

Maximum Continuous Operating Voltage (AC)	MCOV	300 V
Voltage Protection Rating	VPR	1200 V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA
Short-Circuit Current Rating (AC)	SCCR	200 kA

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

Residual Voltage at 5 kA (8/20 μ s)	U_{res}	1000 V
Overcurrent Protection (min)		80 A gG

Additional Electrical Parameters - Extended (Additionally tested by VDE)

Short-Circuit Current Rating (AC)	I_{SCCR}	100 kA
Overcurrent Protection (max)		250 A gG

Mechanical & Environmental

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}	35 lbf-in per UL 1499 [4.5 Nm]
Conductor Cross Section (max)		6 AWG (Solid, Stranded) per UL 1449 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: 250 V / 1 A, 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A
RC Conductor Cross Section (max)		10 AWG (Solid, Stranded) per UL 1449 [1.5 mm ² (Solid)]

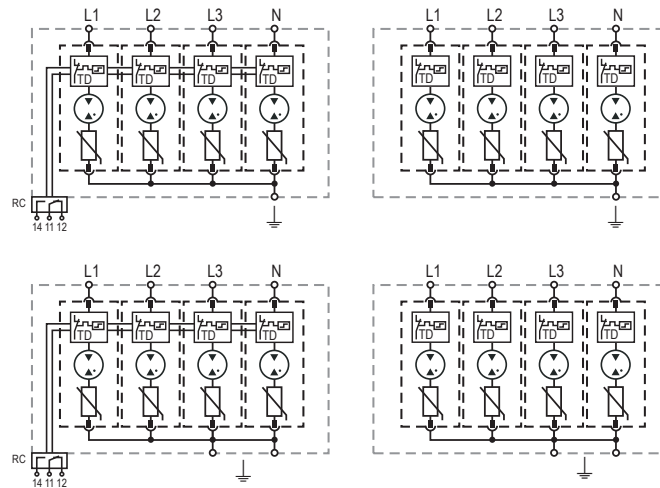
Internal Configuration

Legend

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

UL Listed Products

UL Recognized Products



ProTec T2H-xxx-4+0(-R)

Order Information VDE Certified and UL Recognized Products

Order Code	300
ProTec T2H-xxx-4+0	59.0330
ProTec T2H-xxx-4+0-R (with remote contacts)	59.0331
ProTec T2H-xxx-P (plug)	59.0322

ProTec T2H-xxx-4+0-US(-R)

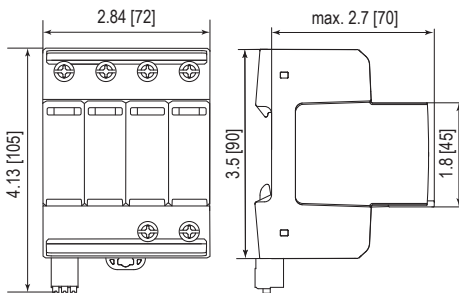
For UL Listed products one PE/G Conductor Terminal is covered/closed.

Order Information VDE Certified and Open Type 1 UL Listed Products

Order Code	300
ProTec T2H-xxx-4+0-US	59.B063
ProTec T2H-xxx-4+0-US-R (with remote contacts)	59.B064
ProTec T2H-xxx-P (plug L-N)	59.0322

Dimensions & Packaging

inches [mm]



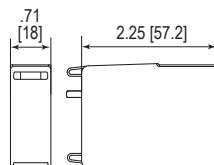
Complete Unit UL Recognized Products

ProTec T2H-xxx-4+0	300
Weight	pounds [grams]
	.944 [428]
ProTec T2H-xxx-4+0-R	
Weight	pounds [grams]
	.964 [437]

Complete Unit UL Listed Products

ProTec T2H-xxx-4+0-US	300
Weight	pounds [grams]
	.924 [419]
ProTec T2H-xxx-4+0-US(-R)	
Weight	pounds [grams]
	.944 [428]
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 T2H-xxx-P	300
Weight	pounds [grams]
	.112 [51]
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 ProTec T2H 1+1

Class II • Type 2 • Type 1CA • Open Type 1 SPD Listed



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,
 Open Type 1 SPD Listed
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018
 UL 1449 5th Edition

Technical Data

ProTec T2H-xxx-1+1(-R) & ProTec T2H-xxx-1+1-US(-R)

300

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o / U_n	240 V
Maximum Continuous Operating Voltage (AC)	(L-N) / (N-PE) U_c	300 Vc
Nominal Discharge Current (8/20 μ s)	(L-N) / (N-PE) I_n	20 kA / 40 kA
Maximum Discharge Current (8/20 μ s)	(L-N) / (N-PE) I_{max}	50 kA / 65 kA
Voltage Protection Level	(L-N) / (N-PE) U_p	1500 V / 1500 V
Response Time	(L-N) / (N-PE) t_A	< 25 ns / < 100 ns
Overcurrent Protection (max)		315 A / 250 A gG
Short-Circuit Current Rating (AC)	(L-N) I_{SCCR}	25 kA / 50 kA
Follow Current Interrupt Rating	(N-PE) I_{fi}	100 A
TOV Withstand 120min	(L-N) U_T	442 V
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	300 V / 305 V
Voltage Protection Rating	(L-N)/(N-G) VPR	1200 V / 1000 V
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	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}	1000 V / 305 V
Overcurrent Protection (min)		80 A gG

Additional Electrical Parameters - Extended (Additionally tested by VDE)

Short-Circuit Current Rating (AC)	I_{SCCR}	100 kA
Overcurrent Protection (max)		250 A gG

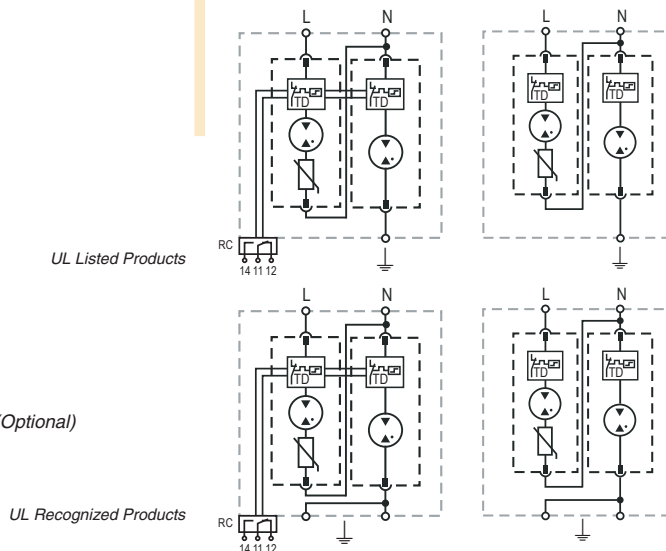
Mechanical & Environmental

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}	35 lbf-in per UL 1499 [4.5 Nm]
Conductor Cross Section (max)		6 AWG (Solid, Stranded) per UL 1449 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: 250 V / 1 A, 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A
RC Conductor Cross Section (max)		10 AWG (Solid, Stranded) per UL 1449 [1.5 mm ² (Solid)]

Internal Configuration

Legend

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



ProTec T2H-xxx-1+1(-R)

Order Information VDE Certified and UL Recognized Products

Order Code	300
ProTec T2H-xxx-1+1	59.0332
ProTec T2H-xxx-1+1-R (with remote contacts)	59.0333
ProTec T2H-xxx-P (plug L-N)	59.0322
ProTube T2H-40-P (plug N-PE)	59.0323

ProTec T2H-xxx-1+1-US(-R)

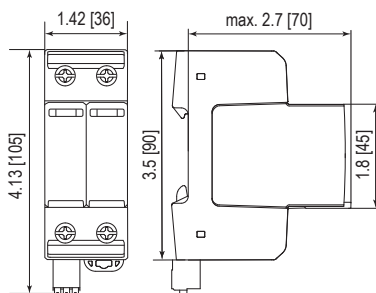
For UL Listed products one PE/G Conductor Terminal is covered/closed.

Order Information VDE Certified and Open Type 1 UL Listed Products

Order Code	300
ProTec T2H-xxx-1+1-US	59.B065
ProTec T2H-xxx-1+1-US-R (with remote contacts)	59.B066
ProTec T2H-xxx-P (plug L-N)	59.0322
ProTube T2H-40-P (plug N-PE)	59.0323

Dimensions & Packaging

inches [mm]



Complete Unit UL Recognized Products

ProTec T2H-xxx-1+1	300
Weight	pounds [grams] .516 [234]

ProTec T2H-xxx-1+1-R	
Weight	pounds [grams] .525 [238]

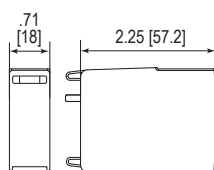
Complete Unit UL Listed Products

ProTec T2H-xxx-1+1-US	300
Weight	pounds [grams] .496 [225]

ProTec T2H-xxx-1+1-US(-R)	
Weight	pounds [grams] .505 [229]

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 T2H-xxx-P	300
Weight	pounds [grams] .112 [51]

ProTube T2H-40-P	40
Weight	pounds [grams] .093 [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

Overvoltage Protection ProTec T2H 3+1

Class II • Type 2 • Type 1CA • Open Type 1 SPD Listed



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,
 Open Type 1 SPD Listed
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018
 UL 1449 5th Edition

Technical Data

ProTec T2H-xxx-3+1(-R) & ProTec T2H-xxx-3+1-US(-R)

300

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o / U_n	240 V
Maximum Continuous Operating Voltage (AC)	(L-N) / (N-PE) U_c	300 V / 305 V
Nominal Discharge Current (8/20 μ s)	(L-N) / (N-PE) I_n	20 kA / 40 kA
Maximum Discharge Current (8/20 μ s)	(L-N) / (N-PE) I_{max}	50 kA / 65 kA
Voltage Protection Level	(L-N) / (N-PE) U_p	1500 V / 1500 V
Response Time	(L-N) / (N-PE) t_A	< 25 ns / < 100 ns
Overcurrent Protection (max)		315 A / 250 A gG
Short-Circuit Current Rating (AC)	(L-N) I_{SCCR}	25 kA / 50 kA
Follow Current Interrupt Rating	(N-PE) I_{fi}	100 A
TOV Withstand 120min	(L-N) U_T	442 V
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	300 V / 305 V
Voltage Protection Rating	(L-N)/(N-G) VPR	1200 V / 1000 V
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	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}	1000 V / 305 V
Overcurrent Protection (min)		80 A gG

Additional Electrical Parameters - Extended (Additionally tested by VDE)

Short-Circuit Current Rating (AC)	I_{SCCR}	100 kA
Overcurrent Protection (max)		250 A gG

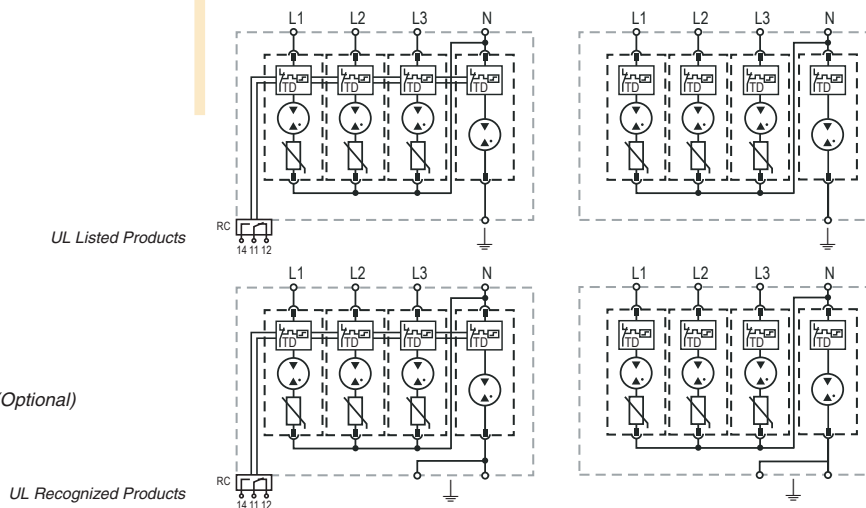
Mechanical & Environmental

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 [4000 m]
Terminal Screw Torque	M_{max}	35 lbf-in per UL 1499 [4.5 Nm]
Conductor Cross Section (max)		6 AWG (Solid, Stranded) per UL 1449 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)

Internal Configuration

Legend

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



ProTec T2H-xxx-3+1(-R)

Order Information VDE Certified and UL Recognized Products

Order Code	300
ProTec T2H-xxx-3+1	59.0334
ProTec T2H-xxx-3+1-R (with remote contacts)	59.0335
ProTec T2H-xxx-P (plug L-N)	59.0322
ProTube T2H-40-P (plug N-PE)	59.0323

ProTec T2H-xxx-3+1-US(-R)

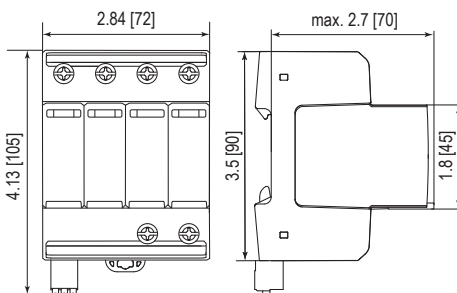
For UL Listed products one PE/G Conductor Terminal is covered/closed.

Order Information VDE Certified and Open Type 1 UL Listed Products

Order Code	300
ProTec T2H-xxx-3+1-US	59.B067
ProTec T2H-xxx-3+1-US-R (with remote contacts)	59.B068
ProTec T2H-xxx-P (plug L-N)	59.0322
ProTube T2H-40-P (plug N-PE)	59.0323

Dimensions & Packaging

inches [mm]



Complete Unit UL Recognized Products

ProTec T2H-xxx-3+1	300
Weight	pounds [grams] .947 [429]

ProTec T2H-xxx-3+1-R	
Weight	pounds [grams] .958 [434]

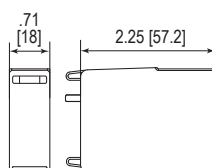
Complete Unit UL Listed Products

ProTec T2H-xxx-3+1-US	300
Weight	pounds [grams] .927 [420]

ProTec T2H-xxx-3+1-US-R	
Weight	pounds [grams] .938 [425]

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 T2H-xxx-P	300
Weight	pounds [grams] .112 [51]

ProTube T2H-40-P	40
Weight	pounds [grams] .093 [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

Overvoltage Protection ProTube T2H 40 0+1

Class II • Type 2 • Type 1CA • Open Type 1 SPD Listed



Location of Use: Sub-Distribution Boards
 Network Systems: TT, TN-S
 Mode of Protection: N-PE
 IEC/EN/UL Category: Class II / Type 2 / Type 1CA,
 Open Type 1 SPD Listed
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018
 UL 1449 5th Edition

Technical Data

ProTube T2H-xxx-0+1(-R) & ProTube T2H-xxx-0+1-US(-R)

40

IEC Electrical

Maximum Continuous Operating Voltage (AC)	U_c	305 V
Nominal Discharge Current (8/20 μ s)	I_n	40 kA
Maximum Discharge Current (8/20 μ s)	I_{max}	65 kA
Voltage Protection Level	U_p	1500 V
Follow Current Interrupt Rating	I_{fi}	100 A
Response Time	t_A	< 100 ns
TOV Withstand 120min	U_T	1200 V
Number of Ports		1

UL Electrical

Maximum Continuous Operating Voltage (AC)	MCOV	305 V
Voltage Protection Rating	VPR	1000 V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA

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

Residual Voltage at 5 kA (8/20 μ s)	U_{res}	305 V
Overcurrent Protection (min)		80 A gG

Mechanical & Environmental

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 [4000 m]
Terminal Screw Torque	M_{max}	35 lbf-in per UL 1499 [4.5 Nm]
Conductor Cross Section (max)		6 AWG (Solid, Stranded) per UL 1449 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: 250 V / 1 A, 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A
RC Conductor Cross Section (max)		10 AWG (Solid, Stranded) per UL 1449 [1.5 mm ² (Solid)]

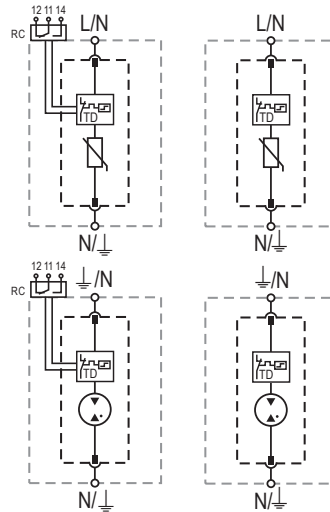
Internal Configuration

Legend

N	Neutral Conductor Terminal
⏏	PE/G Conductor Terminal
RC	Remote Contacts Terminal (Optional)
TD	Thermal Disconnect

UL Listed Products

UL Recognized Products



ProTube T2H-xxx-0+1(-R)

Order Information VDE Certified and UL Recognized Products

Order Code	40
ProTube T2H-xxx-0+1	59.0341
ProTube T2H-xxx-0+1-R (with remote contacts)	59.0342
ProTube T2H-40-P (plug)	59.0323

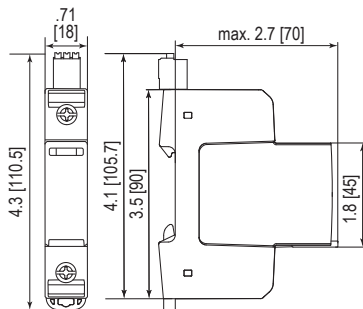
ProTec T2H-xxx-0+1-US(-R)

Order Information VDE Certified and Open Type 1 UL Listed Products

Order Code	40
ProTube T2H-xxx-0+1-US	59.B069
ProTube T2H-xxx-0+1-US-R (with remote contacts)	59.B070
ProTube T2H-40-P (plug)	59.0323

Dimensions & Packaging

inches [mm]



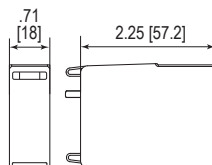
Complete Unit UL Recognized Products

ProTube T2H-xxx-0+1	40
Weight	pounds [grams]
	.244 [111]
ProTube T2H-xxx-0+1-R	40
Weight	pounds [grams]
	.259 [118]

Complete Unit UL Listed Products

ProTube T2H-xxx-0+1-US	40
Weight	pounds [grams]
	.244 [111]
ProTube T2H-xxx-0+1-US(-R)	40
Weight	pounds [grams]
	.259 [118]
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

ProTube T2H-40-P	40
Weight	pounds [grams]
	.093 [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