

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	300V
Voltage Protection Rating	VPR	1200V
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}	1000V
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: 250V/1A, 125V/1A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A
RC Conductor Cross Section (max)		10 AWG (Solid, Stranded) per UL 1449 [1.5 mm ² (Solid)]

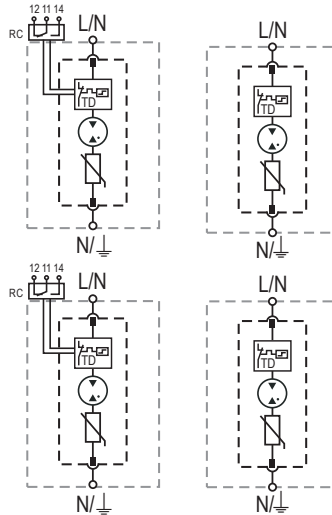
Internal Configuration

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

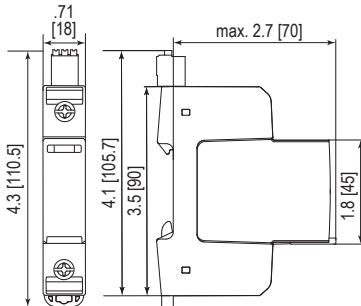
ProTec T2H-xxx-1+0-US(-R)

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]



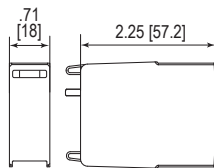
Complete Unit UL Recognized Products

ProTec T2H-xxx-1+0	300
Weight	pounds [grams] .264 [120]
ProTec T2H-xxx-1+0-R	
Weight	pounds [grams] .279 [127]

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]
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 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