

# 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 $\mu$ s)	$I_n$	20 kA
Maximum Discharge Current (8/20 $\mu$ 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 $\mu$ 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 $\mu$ 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

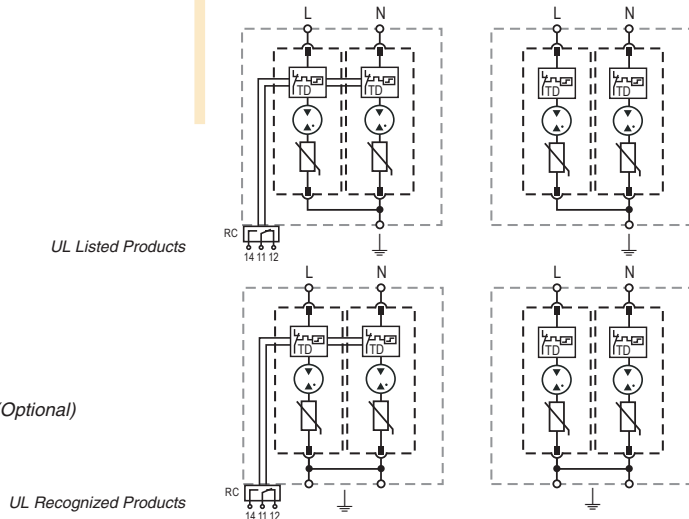
### Mechanical & Environmental

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 <sup>2</sup> (Solid, Stranded) / 25 mm <sup>2</sup> (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 <sup>2</sup> (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-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)

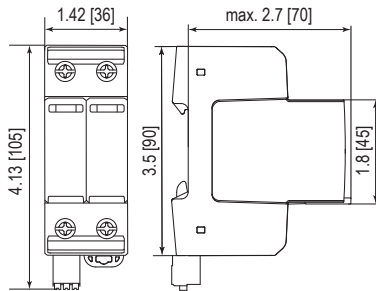
For UL Listed products one PE/G Conductor Terminal is covered/closed.

#### 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]



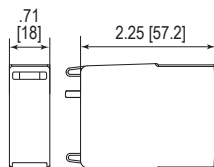
#### Complete Unit UL Recognized Products

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