

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 |

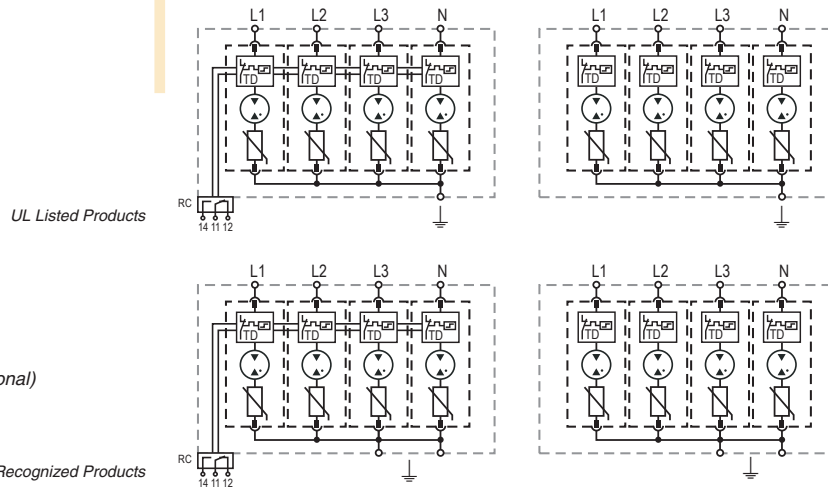
Additional Electrical Parameters - Extended (Additionally tested by VDE)

| | | |
|-----------------------------------|------------|----------|
| 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 Disconnecter

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)

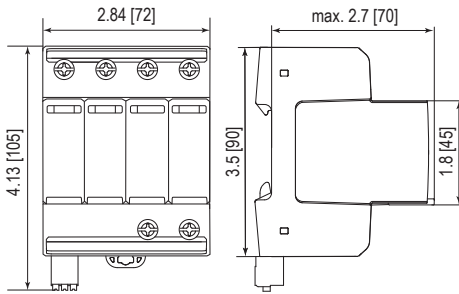
For UL Listed products one PE/G Conductor Terminal is covered/closed.

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]



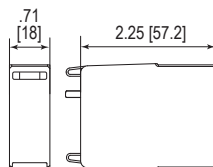
Complete Unit UL Recognized Products

| 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 |