

**DATA SHEET**

## Pluggable Single and Multi-Pole SPD

**ProTec T1H 3+0**

Class I • Class II • Type 1 • Type 2



Location of Use: Main Distribution Boards  
 Network Systems: TN-C  
 Mode of Protection: L-PEN  
 Surge Ratings:  $I_{imp} = 12.5 \text{ kA (10/350}\mu\text{s)}$   
 $I_n = 20 \text{ kA (8/20}\mu\text{s)}$   
 IEC/EN Category: Class I+II / Type 1+2  
 Protective Elements: GDT in series with High Energy MOV  
 Housing: Pluggable Design  
 Compliance: IEC 61643-11:2011  
 EN 61643-11:2012

**Technical Data**

ProTec T1H-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 (8/20 $\mu\text{s}$ )   | $I_n$      | 20kA           |
| Maximum Discharge Current (8/20 $\mu\text{s}$ )   | $I_{max}$  | 65kA           |
| Impulse Discharge Current (10/350 $\mu\text{s}$ ) | $I_{imp}$  | 12.5kA         |
| Specific Energy                                   | W/R        | 39kJ/ $\Omega$ |
| Charge  | Q          | 6.25As         |
| Voltage Protection Level                          | $U_p$      | 1500V          |
| Response Time                                     | $t_A$      | < 25ns         |
| Back-Up Fuse (max)                                |            | 315A / 250A gG |
| Short-Circuit Current Rating (AC)                 | $I_{SCCR}$ | 25kA / 50kA    |
| TOV Withstand 120min                              | $U_T$      | 442V           |
| Number of Ports                                   |            | 1              |

**Mechanical & Environmental**

|                                    |           |  |
|------------------------------------|-----------|--|
| Operating Temperature Range        | $T_a$     | -40 °F to +185 °F [-40 °C to +85 °C]   |
| Permissible Operating Humidity     | RH        | 5%...95%   |
| Altitude                           |           | 13123 ft [4000m]   |
| Terminal Screw Torque              | $M_{max}$ | 39.9 lbf-in [4.5Nm]  |
| Conductor Cross Section (max)      |           | 2 AWG (Solid, Stranded) / 4 AWG (Flexible)<br>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: 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 <sup>2</sup> (Solid)   |

**Order Information**

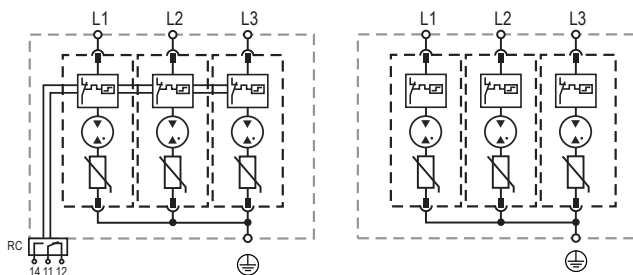
|   |  |         |
|---|--|---------|
| Order Code                                  |  | 300     |
| ProTec T1H-xxx-3+0                          |  | 59.0314 |
| ProTec T1H-xxx-3+0-R (with remote contacts) |  | 59.0315 |
| ProTec T1H-xxx-P                            |  | 59.0308 |

## ProTec T1H 3+0

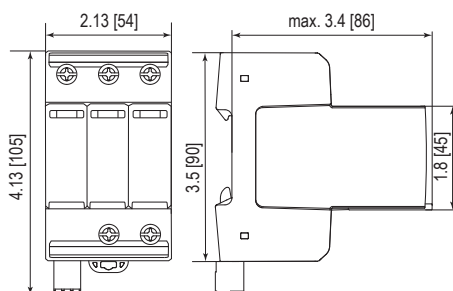
### Internal Configuration

#### Legend

- L Line
- N Neutral
- ⊕ Protective Earth
- RC Remote Contacts Optional



### Dimensions & Packaging



#### Dimensions & Packaging

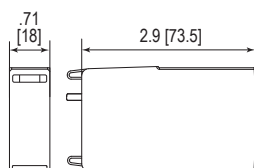
| ProTec T1H-xxx-3+0              |                | 300                                    |
|---------------------------------|----------------|--|
| Single Unit Weight              | pounds [grams] | 1.266 [574]                            |
| ProTec T1H-xxx-3+0-R            |                | 300                                    |
| Single Unit Weight              | pounds [grams] | 1.286 [583]                            |
| Single Unit DIN 43880 Dimension |                | 3 TE                                   |
| Packaging Dimensions (HxWxL)    |                | 4.3 x 4.5 x 13.8" [109 x 115 x 352 mm] |
| Minimum Order Quantity          |                | 5 Units                                |

### Plug Internal Configuration

#### ProTec T1H-xxx-P



### Dimensions & Packaging



#### Dimensions & Packaging

| ProTec T1H-xxx-P                |                | 300                                    |
|---------------------------------|----------------|--|
| Single Unit Weight              | pounds [grams] | .286 [130]                             |
| Single Unit DIN 43880 Dimension |                | 1 TE                                   |
| Packaging Dimensions (HxWxL)    |                | 4.3 x 4.5 x 13.8" [109 x 115 x 352 mm] |
| Minimum Order Quantity          |                | 28 Units                               |

inches  
[mm]

Information contained in this document is subject to change at any time without notice.

