

Combined Lightning Current and Surge Arrester

ProTec ZPN T1H 3+0(-R)

Class I • Class II • Class III • Type 1 • Type 2 • Type 3



Location of Use: Main Distribution Boards,
40mm Busbar Systems

Network Systems: TN-C

Mode of Protection: L-PEN

IEC/EN: Class I+II+III / Type 1+2+3

Technology: Hybrid

Leakage Current Free: Yes

Line Follow Current: No

Housing: Compact design

Compliance: IEC 61643-11:2011
EN 61643-11:2012 + A11:2018

Technical Data

ProTec ZPN T1H-xxx-3+0(-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} | 40 kA |
| Impulse Discharge Current (10/350 μ s) | I_{imp} | 12.5 kA |
| Specific Energy | W/R | 39 kJ/ Ω |
| Charge | Q | 6.25As |
| Open Circuit Voltage of Combination Wave Generator | U_{oc} | 6 kV |
| Voltage Protection Level | U_p | 1500V |
| Response Time | t_A | < 100ns |
| Overcurrent Protection (max) | | 160 A gG |
| Short-Circuit Current Rating (AC) | I_{SCCR} | 25 kA |
| TOV Withstand 120min | U_T | 442 V |
| 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 (max) | | 13123 ft [4000m] |
| Terminal Screw Torque | M_{max} | PH2 / 40 lbf-in [4.5Nm] |
| Conductor Cross Section (max) | | 2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35mm ² (Solid, Stranded) / 25mm ² (Flexible) |
| Mounting | | 40mm Busbar Systems |
| Degree Of Protection | | IP 20* |
| Housing Material | | Thermoplastic: Extinguishing Degree UL 94 V-0 |
| 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) / 1.5mm ² (Solid) |

Order Information

| | |
|---|------------|
| Order Code | 300 |
| ProTec ZPN T1H-xxx-3+0 | 59.A600 |
| ProTec ZPN T1H-xxx-3+0-R (with remote contacts) | 59.A601 |

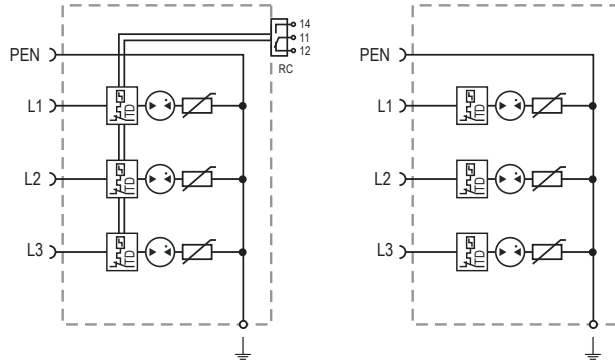
*IP 40 (in combination with cover)

ProTec ZPN T1H 3+0(-R)

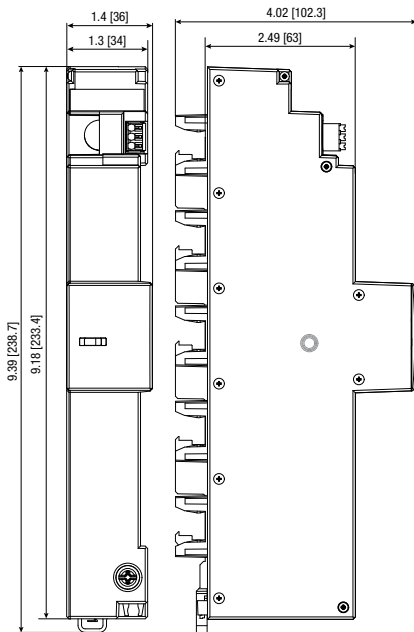
Internal Configuration

Legend

- L Line Busbar Terminal
- PEN PEN Busbar Terminal
- ⏚ Terminal for Main Earthing Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect



Complete Unit



Complete Unit Dimensions & Packaging

| | |
|---------------------------------|------------------------------|
| ProTec ZPN T1H-xxx-3+0 | 300 |
| Weight | pounds [grams] 1.351 [613] |
| Packaging Dimensions (HxWxL) | 270x375x395 [10.6x14.8x15.5] |
| Standard Order Quantity | 24 Units |
| ProTec ZPN T1H-xxx-3+0-R | 300 |
| Weight | pounds [grams] 1.362 [618] |
| Packaging Dimensions (HxWxL) | 270x375x395 [10.6x14.8x15.5] |
| Standard Order Quantity | 24 Units |

inches
[mm]

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