

Combined Lightning Current and Surge Arrester

ProTec ZPN T1H 3+0 E(-R)-F

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-E(-R)-F

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 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} | 7.5 kA |
| Specific Energy | W/R | 14 kJ/ Ω |
| Charge | Q | 3.75 As |
| 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 | 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 (max) | | 13123 ft [4000 m] |
| 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) |

Auxiliary Terminal (LA)

| | | |
|------------------------------------|-------|--|
| Rated Current Integrated Fuse | I_n | 6.3A |
| Fuse Link | | FF, 5 x 20 mm, 6.3A |
| Short Circuit Interrupt Capability | | 25 kA |
| Wire Connection Method | | Push In |
| Conductor Cross Section (max) | | 14 AWG / 2.5 mm ² (Solid, Flexible) |

Order Information

| | | |
|--|--|------------|
| Order Code | | 300 |
| ProTec ZPN T1H-xxx-3+0-E-F (with protected auxiliary terminal) | | 59.A606 |
| ProTec ZPN T1H-xxx-3+0-E-R-F (with remote contacts and protected auxiliary terminal) | | 59.0607 |

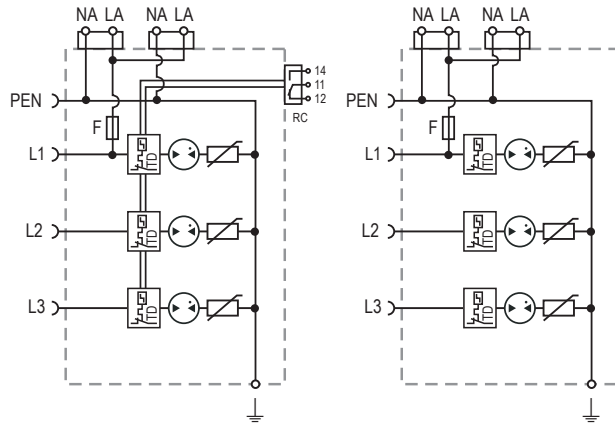
*IP 40 (in combination with cover)

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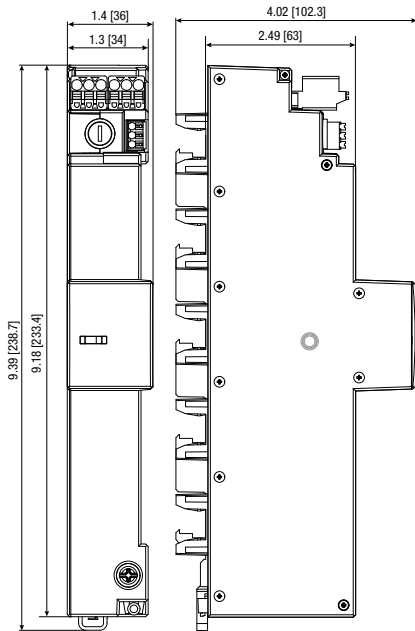
Internal Configuration

Legend

- F* Integrated Fuse Link
- NA* Neutral Auxiliary Terminal
- LA* Line Auxiliary Terminal
- L* Line Busbar Terminal
- N* Neutral Busbar Terminal
- PEN* PEN Busbar Terminal
- Terminal for Main Earthing Terminal
- RC* Remote Contacts Terminal (Optional)
- TD* Thermal Disconnecter



Complete Unit



Complete Unit Dimensions & Packaging

| | |
|-------------------------------------|------------------------------|
| ProTec ZPN T1H-xxx-3+0-E-F | 300 |
| Weight | pounds [grams] 1.402 [636] |
| Packaging Dimensions (HxWxL) | 270x375x395 [10.6x14.8x15.5] |
| Standard Order Quantity | 24 Units |
| ProTec ZPN T1H-xxx-3+0-E-R-F | 300 |
| Weight | pounds [grams] 1.413 [641] |
| 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.