

Combined Lightning Current and Surge Arrester

ProTec ZPN T1H 3+0 E(-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-E(-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}	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	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 [4000 m]
Terminal Screw Torque	M_{max}	PH2 / 40 lbf-in [4.5 Nm]
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-E	59.A604
ProTec ZPN T1H-xxx-3+0-E-R (with remote contacts)	59.0605

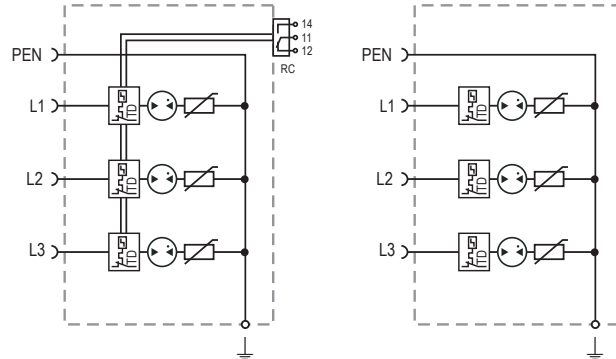
*IP 40 (in combination with cover)

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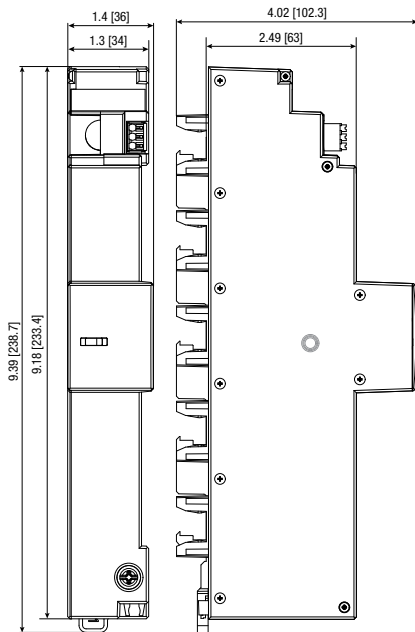
Internal Configuration

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-E		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-E-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.