

**DATA SHEET**

## Combined Lightning Current and Surge Arrester

**ProTec ZP T1H 3+0 E**

Class I • Class II • Type 1 • Type 2



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

Network Systems: TN-C

Mode of Protection: L-PEN

Surge Ratings:  $I_{imp} = 7.5 \text{ kA (10/350}\mu\text{s)}$   
 $I_n = 20 \text{ kA (8/20}\mu\text{s)}$

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

Technology: Hybrid

Leakage Current: No

Line Follow Current: No

Housing: Compact design

Compliance: IEC 61643-11:2011  
EN 61643-11:2012

**Technical Data**

ProTec ZP 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 $\mu\text{s}$ )	$I_n$	20 kA
Maximum Discharge Current (8/20 $\mu\text{s}$ )	$I_{max}$	50 kA
Impulse Discharge Current (10/350 $\mu\text{s}$ )	$I_{imp}$	7.5 kA
Specific Energy	W/R	14 kJ/ $\Omega$
Charge	Q	3.75 As
Voltage Protection Level	$U_p$	1500V
Response Time	$t_A$	< 100ns
Back-Up Fuse (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		13123 ft [4000 m]
Terminal Screw Torque	$M_{max}$	PZ1 / 13.3 lbf-in [1.5Nm] PZ2 / 39.9 lbf-in [4.5Nm]
Conductor Cross Section (max)		35mm <sup>2</sup> (Solid, Stranded) / 25mm <sup>2</sup> (Flexible) 2 AWG (Solid, Stranded) / 4 AWG (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)		1.5mm <sup>2</sup> (Solid) / 16 AWG (Solid)

**Order Information**

Order Code	<b>300</b>
ProTec ZP T1H-xxx-3+0-E	59.0635
ProTec ZP T1H-xxx-3+0-E-R (with remote contacts)	59.0362

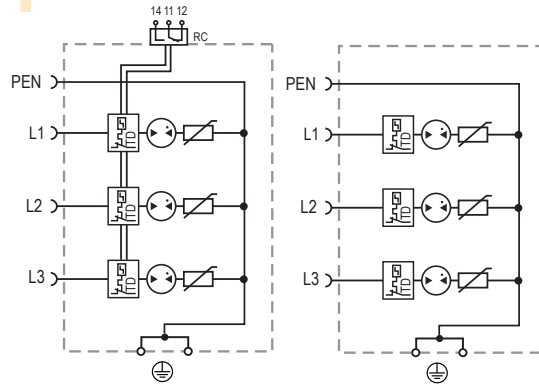
\*IP 30 (in combination with cover)

## ProTec ZP T1H 3+0 E

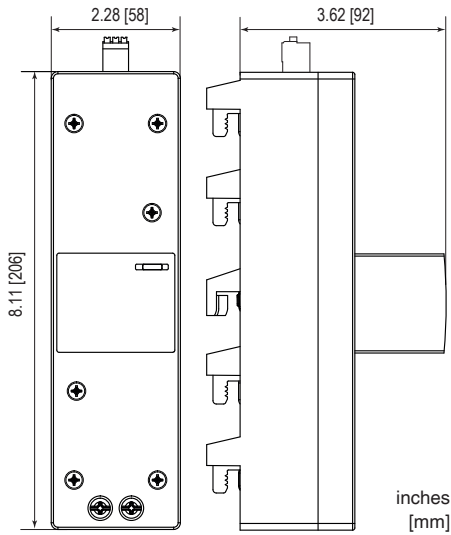
### Internal Configuration

#### Legend

- L Terminal for Line Busbar
- PEN Terminal for PEN Busbar
- ⊕ Terminal for PE/G Busbar/Conductor
- RC Terminal for Remote Contacts (Optional)
- TD Thermal Disconnect



### Dimensions & Packaging



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ProTec ZP T1H-xxx-3+0-E-R		300
Single Unit Weight	pounds [grams]	1.918 [870]
Packaging Dimensions (HxWxL)		2.9 x 4.5 x 8.6" [75 x 116 x 220 mm]
Standard Order Quantity		1 Unit

inches  
[mm]

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

