

Lightning and Overvoltage Protection  
**ProTube T1H 50 0+1**  
 Class I • Class II • Type 1 • Type 2 • Type 4CA

12.5 kA Series



Location of Use: Main Distribution Boards  
 Network Systems: TT, TN-S  
 Mode of Protection: N-PE  
 IEC/EN/UL Category: Class I+II / Type 1+2 / Type 4CA  
 Technology: Hybrid  
 Leakage Current Free: Yes  
 Housing: Pluggable Design  
 Compliance: IEC 61643-11:2011  
 EN 61643-11:2012  
 UL 1449 4th Edition

**Technical Data**

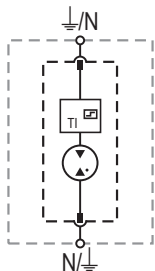
ProTube T1H-xxx-0+1		50
<b>IEC Electrical</b>		
Maximum Continuous Operating Voltage (AC)	$U_c$	305 V
Nominal Discharge Current (8/20 $\mu$ s)	$I_n$	50 kA
Maximum Discharge Current (8/20 $\mu$ s)	$I_{max}$	100 kA
Impulse Discharge Current (10/350 $\mu$ s)	$I_{imp}$	50 kA
Specific Energy	W/R	625 kJ/ $\Omega$
Charge	Q	25 As
Voltage Protection Level	$U_p$	1500 V
Follow Current Interrupt Rating	$I_{fi}$	100 A <sub>RMS</sub>
Response Time	$t_A$	< 100 ns
TOV Withstand 200ms	$U_T$	1200 V
Number of Ports		1
<b>UL Electrical</b>		
Maximum Continuous Operating Voltage (AC)	MCOV	305 V
Measured Limiting Voltage	MLV	1800 V
Nominal Discharge Current (8/20 $\mu$ s)	$I_n$	20 kA
<b>Mechanical &amp; Environmental</b>		
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	$M_{max}$	39.9 lbf-in [4.5 Nm]
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 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
<b>Order Information</b>		
Order Code		50
ProTube T1H-xxx-0+1		59.0340
ProTube T1H-50-P (plug)		59.0309

## ProTube T1H 50 0+1

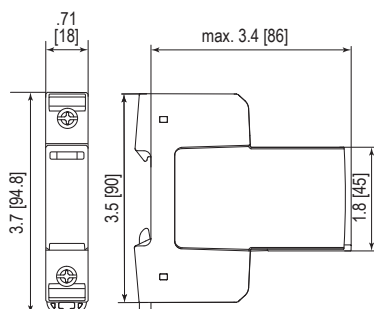
### Internal Configuration

#### Legend

- N Neutral Conductor Terminal
- ⏏ PE/G Conductor Terminal
- TI Thermal Indication



### Complete Unit

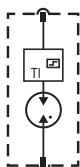


#### Complete Unit Dimensions & Packaging

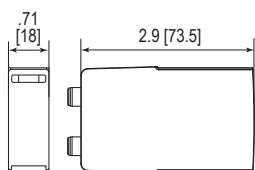
ProTube T1H-50-0+1		50
Weight	pounds [grams]	.395 [179]
DIN 43880 Dimension		1 TE / .71" [18]
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity		12 Units

### Plug Internal Configuration

#### ProTube T1H-50-P



### Spare Plug



#### Single Unit Dimensions & Packaging

ProTube T1H-50-P		50
Weight	pounds [grams]	.214 [97]
DIN 43880 Dimension		1 TE / .71" [18]
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity		28 Units

inches  
[mm]