

Lightning and Overvoltage Protection

ProTube T1 0+1

Class I • Class II • Type 1 • Type 2 • Type 1CA



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 1CA
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012 +A11:2018
 UL 1449 5th Edition

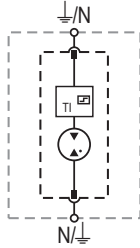
Technical Data

ProTube T1-xxx-0+1		50	100
IEC Electrical			
Maximum Continuous Operating Voltage	U_c	305 V	305 V
Nominal Discharge Current (8/20 μ s)	I_n	50 kA	100 kA
Maximum Discharge Current (8/20 μ s)	I_{max}	100 kA	150 kA
Impulse Discharge Current (10/350 μ s)	I_{imp}	50 kA	100 kA
Specific Energy	W/R	625 kJ/ Ω	2500 kJ/ Ω
Charge	Q	25 As	50 As
Voltage Protection Level	U_p	1500 V	1500 V
Follow Current Interrupt Rating (AC)	I_{fi}	100 A	100 A
Response Time	t_A	< 100 ns	< 100 ns
TOV Withstand 200ms	U_T	1200 V	1200 V
Number of Ports		1	1
UL Electrical			
Maximum Continuous Operating Voltage (AC)	MCOV	305V	305V
Voltage Protection Rating	VPR	1200V	1200V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA	20 kA
Additional Electrical Parameters (Tests performed within Raycap testing laboratory only)			
Residual Voltage at 5 kA (8/20 μ s)	U_{res}	305V	305V
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}	40 lbf-in [4.5 Nm]	
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm ² (Solid, Stranded) / 25 mm ² (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	

Internal Configuration

Legend

- N* Neutral Conductor Terminal
- \perp PE/G Conductor Terminal
- T1* Thermal Indication

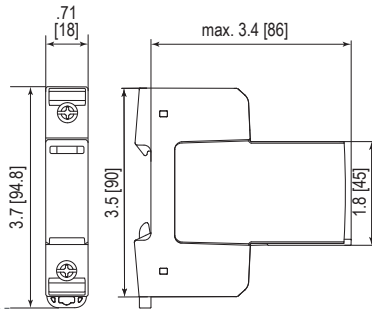


ProTube T1-xxx-0+1(-R)

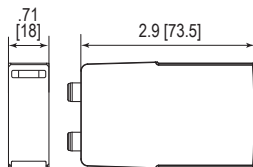
Order Information		
Order Code	50	100
ProTube T1-xxx-0+1	59.0276	59.0278
ProTube T1-50-P (plug)	59.0269	-
ProTube T1-100-P (plug)	-	59.0271

Dimensions & Packaging

inches [mm]



Spare Plug



Complete Unit			
ProTube T1-xxx-0+1		50	100
Weight	pounds	.395	.434
	grams	179	197
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	

Single Unit			
ProTube T1-xxx-P		50	100
Weight	pounds	.214	.251
	grams	97	114
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	