

Lightning and Overvoltage Protection  
**ProTec T1 4+0 LH**  
 Class I • Class II • Type 1 • Type 2



Location of Use: Main Distribution Boards  
 Network Systems: TN-S  
 Mode of Protection: L-PE, N-PE  
 IEC/EN Category: Class I+II / Type 1+2  
 Housing: Pluggable Design  
 Compliance: IEC 61643-11:2011  
 EN 61643-11:2012+A11:2018

**Technical Data**

**ProTec T1-xxx-4+0-LH(-R)**

**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 $\mu$ s)	$I_n$	20 kA
Maximum Discharge Current (8/20 $\mu$ s)	$I_{max}$	40 kA
Impulse Discharge Current (10/350 $\mu$ s)	$I_{imp}$	12.5 kA
Specific Energy	W/R	39 kJ/ $\Omega$
Charge	Q	6.25 As
Voltage Protection Level	$U_p$	1500V
Response Time	$t_A$	< 25 ns
Overcurrent Protection (max)		160 A gG
Short-Circuit Current Rating (AC)	$I_{SCCR}$	50 kA
TOV Withstand 5s	$U_T$	337V
TOV 120min	$U_T$	442V
	mode	Safe Fail
Number of Ports		1

**Additional Electrical Parameters** (Tests performed within Raycap testing laboratory only)

Residual Voltage at 5 kA (8/20 $\mu$ s)	$U_{res}$	700V
Overcurrent Protection (min)		160 A gG

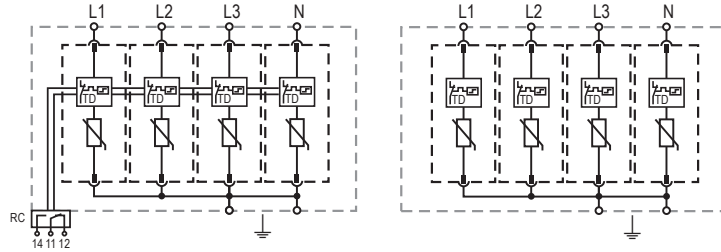
**Mechanical & Environmental**

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 <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
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) / 1.5 mm <sup>2</sup> (Solid)

## Internal Configuration

### Legend

- L Line Conductor Terminal
- N Neutral Conductor Terminal
- ⏚ PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect



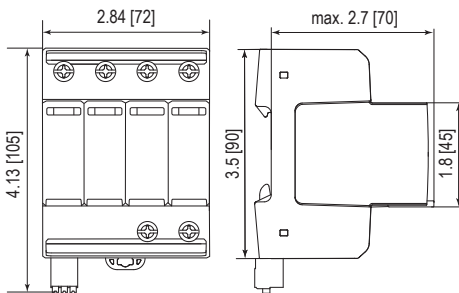
### ProTec T1-xxx-4+0-LH(-R)

#### Order Information

Order Code	300
ProTec T1-xxx-4+0-LH	59.A377
ProTec T1-xxx-4+0-LH-R (with remote contacts)	59.A378
ProTec T1-xxx-LH-P (plug)	59.A383

## Dimensions & Packaging

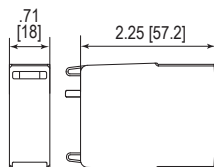
inches [mm]



#### Complete Unit

ProTec T1-xxx-4+0-LH		300
Weight	pounds	1.558
	grams	707
ProTec T1-xxx-4+0-LH-R		
Weight	pounds	1.576
	grams	715
DIN 43880 Dimension	4 TE / 2.84" [72]	
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]	
Standard Order Quantity	4 Units	

## Spare Plug



#### Single Unit

ProTec T1-xxx-LH-P		300
Weight	pounds	.255
	grams	116
DIN 43880 Dimension	1 TE / .71" [18]	
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 116 x 352 mm]	
Standard Order Quantity	24 Units	