

**ProTec T1 1+1 LH**

**Class I • Class II • Type 1 • Type 2**



Location of Use: Main Distribution Boards  
 Network Systems: TT, TN-S  
 Mode of Protection: L-N, 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-1+1-LH(-R)**

**300**

**IEC Electrical**

Nominal AC Voltage (50/60Hz)	$U_o / U_n$	240 V
Maximum Continuous Operating Voltage	(L-N) $U_c$	300 V
	(N-PE) $U_c$	305 V
Nominal Discharge Current (8/20 $\mu$ s)	(L-N)/(N-PE) $I_n$	20 kA / 50 kA
Maximum Discharge Current (8/20 $\mu$ s)	(L-N)/(N-PE) $I_{max}$	40 kA / 100 kA
Impulse Discharge Current (10/350 $\mu$ s)	(L-N)/(N-PE) $I_{imp}$	12.5 kA / 50 kA
Specific Energy	(L-N)/(N-PE) W/R	39 kJ/ $\Omega$ / 625 kJ/ $\Omega$
Charge	(L-N)/(N-PE) Q	6.25 As / 25 As
Voltage Protection Level	(L-N)/(N-PE) $U_p$	1500 V / 1500 V
Follow Current Interrupt Rating (AC)	(N-PE) $I_{fi}$	100 A
Response Time	(L-N)/(N-PE) $t_A$	< 25 ns / < 100 ns
Overcurrent Protection (max)		160 A gG
Short-Circuit Current Rating (AC)	(L-N) $I_{SCCR}$	50 kA
TOV Withstand 5s	(L-N) $U_T$	337 V
TOV 120min	(L-N) $U_T$	442 V
	mode	Safe Fail
TOV Withstand 200ms	(N-PE) $U_T$	1200 V
Number of Ports		1

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

Residual Voltage at 5 kA (8/20 $\mu$ s)	$U_{res}$	700 V / 305 V
Overcurrent Protection (min)		160 A gG

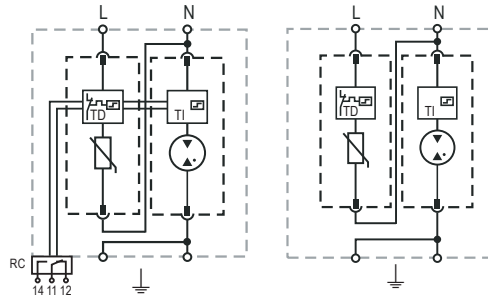
**Mechanical & Environmental**

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
TI	Thermal Indication



### ProTec T1-xxx-1+1-LH(-R)

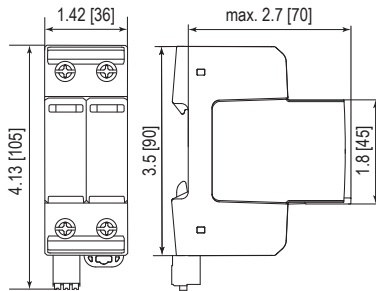
300

#### Order Information

Order Code	300
ProTec T1-xxx-1+1-LH	59.A379
ProTec T1-xxx-1+1-LH-R (with remote contacts)	59.A380
ProTec T1-xxx-LH-P (plug L-N)	59.A383
ProTube T1-50-LH-P (plug N-PE)	59.A385

## Dimensions & Packaging

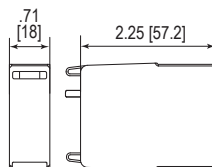
inches [mm]



#### Complete Unit

<b>ProTec T1-xxx-1+1-LH</b>	<b>300</b>
Weight	pounds .679
	grams 308
<b>ProTec T1-xxx-1+1-LH-R</b>	
Weight	pounds .687
	grams 312
DIN 43880 Dimension	2 TE / 1.42" [36]
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity	7 Units

## Spare Plug



#### Single Unit

<b>ProTec T1-xxx-LH-P</b>	<b>300</b>
Weight	pounds .255
	grams 116
<b>ProTube T1-50-LH-P</b>	<b>50</b>
Weight	pounds .112
	grams 51
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