

ProTec T1 1+1 LH**Class I • Class II • Type 1 • Type 2 • Type 4CA**

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 / Type 4CA
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018
 UL 1449 5th Edition

**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 μ s)	(L-N)/(N-PE) I_n	20 kA / 50 kA
Maximum Discharge Current (8/20 μ s)	(L-N)/(N-PE) I_{max}	40 kA / 100 kA
Impulse Discharge Current (10/350 μ s)	(L-N)/(N-PE) I_{imp}	12.5 kA / 50 kA
Specific Energy	(L-N)/(N-PE) W/R	39 kJ/ Ω / 625 kJ/ Ω
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
Overvoltage Category		III
Maximum Backup fuse, if required		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

UL Electrical

Maximum Continuous Operating Voltage (AC)	(L-N)/(N-G) MCOV	300 V / 305 V
Measured Limiting Voltage	(L-N)/(N-G) MLV	1200 V / 1500 V
Nominal Discharge Current (8/20 μ s)	(L-N)/(N-G) 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}	700 V / 305 V
Minimum Backup fuse, if required		160 A gG

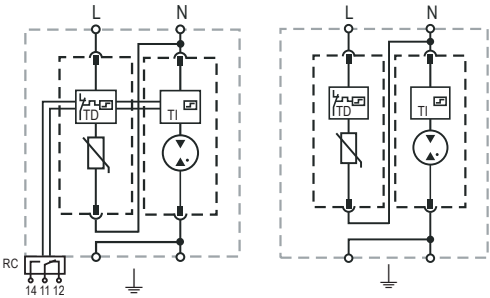
Mechanical & Environmental

Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Pollution Degree		2
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
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250 V / 1 A, 125 V / 1 A; DC: 48 V / 0.5 A, 24 V / 0.5 A, 12 V / 0.5 A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)
Overvoltage Category		III

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)

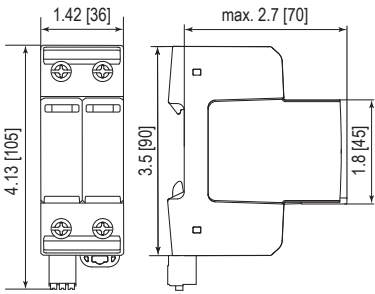
300

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

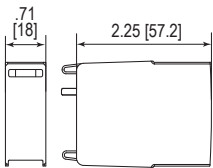
Dimensions & Packaging

inches [mm]



Complete Unit	
ProTec T1-xxx-1+1-LH	300
Weight	pounds .679
	grams 308
ProTec T1-xxx-1+1-LH-R	
Weight	pounds .687
	grams 312
DIN 43880 Dimension	2 TE / 1.42" [36 mm]
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	
ProTec T1-xxx-LH-P	300
Weight	pounds .255
	grams 116
ProTube T1-50-LH-P	50
Weight	pounds .112
	grams 51
DIN 43880 Dimension	1 TE / .71" [18 mm]
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 116 x 352 mm]
Standard Order Quantity	24 Units