

Pluggable Multi-Pole SPD  
**ProTec T1HS 3+1**  
 Class I • Class II • Type 1 • Type 2



Location of Use: Main Distribution Boards  
 Network Systems: TT, TN-S  
 Mode of Protection: L-PE, N-PE  
 Surge Ratings:  $I_{imp} = 25 \text{ kA (10/350}\mu\text{s)}$   
 $I_n = 25 \text{ kA (8/20}\mu\text{s)}$   
 IEC/EN Category: Class I+II / Type 1+2  
 Protective Elements: GDT (L-N) in series with High Energy MOV  
 Housing: Pluggable Design  
 Compliance: IEC 61643-11:2011  
 EN 61643-11:2012

**Technical Data**

**ProTec T1HS-xxx-3+1(-R)**

**300**

**IEC Electrical**

Nominal AC Voltage (50/60Hz)	(L-N) / (N-PE) $U_o/U_n$	240V
Maximum Continuous Operating Voltage (AC)	(L-N) / (N-PE) $U_c$	300V / 305V
Nominal Discharge Current (8/20 $\mu\text{s}$ )	(L-N) / (N-PE) $I_n$	25kA / 100kA
Maximum Discharge Current (8/20 $\mu\text{s}$ )	(L-N) / (N-PE) $I_{max}$	65kA / 130kA
Impulse Discharge Current (10/350 $\mu\text{s}$ )	(L-N) / (N-PE) $I_{imp}$	25kA / 100kA
Specific Energy	(L-N) / (N-PE) W/R	156.2kJ/ $\Omega$ / 2500 kJ/ $\Omega$
Charge	(L-N) / (N-PE) Q	12.5As / 50As
Voltage Protection Level	(L-N) / (N-PE) $U_p$	1500V / 1500V
Rated Load Current	$I_L$	125A
Response Time	(L-N) / (N-PE) $t_A$	$\leq 100 \text{ ns} / \leq 100 \text{ ns}$
Back-Up Fuse (max)		315A gG
Short-Circuit Current Rating (AC)	$I_{SCCR}$	50kA
TOV Withstand 120min	(L-N) $U_T$	442V
TOV Withstand 200ms	(N-PE) $U_T$	1200V
Number of Ports		1

**Mechanical**

Operating Temperature Range	$T_a$	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Altitude		13123 ft [4000m]
Terminal Screw Torque	$M_{max}$	39.9 lbf-in [4.5Nm]
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
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)

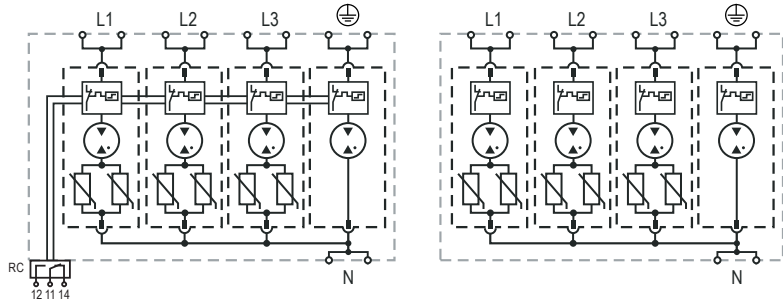
**Order Information**

Order Code	<b>300</b>
ProTec T1HS-xxx-3+1	59.0306
ProTec T1HS-xxx-3+1-R (with remote contacts)	59.0307
ProTec T1HS-xxx-P	59.0302
ProTube T1HS-100-P	59.0303

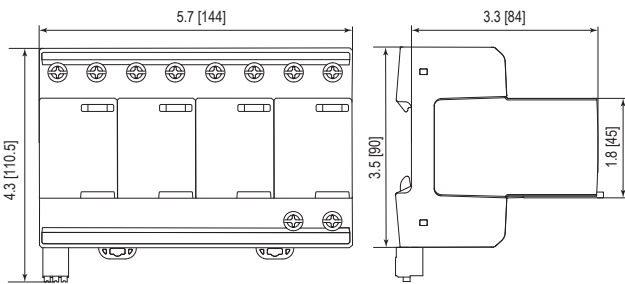
Internal Configuration

Legend

- L Line
- N Neutral
- ⊕ Protective Earth
- RC Remote Contacts Optional



Dimensions & Packaging



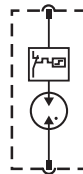
Dimensions & Packaging	
<b>ProTec T1HS-xxx-3+1</b>	<b>300</b>
Single Unit Weight	pounds [grams] 0.92 [420]
<b>ProTec T1HS-xxx-3+1-R</b>	<b>300</b>
Single Unit Weight	pounds [grams] 0.94 [427]
Single Unit DIN 43880 Dimension	8 TE
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Minimum Order Quantity	2 Units

Plug Internal Configuration

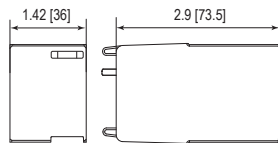
ProTec T1HS-xxx-P



ProTube T1HS-100-P



Dimensions & Packaging



Dimensions & Packaging	
<b>ProTec T1HS-xxx-P</b>	<b>300</b>
Single Unit Weight	pounds [grams] 0.34 [155]
<b>ProTube T1HS-100-P</b>	<b>100</b>
Single Unit Weight	pounds [grams] 0.26 [120]
Single Unit DIN 43880 Dimension	2 TE
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Minimum Order Quantity	14 Units

inches  
[mm]

Information contained in this document is subject to change at any time without notice.

