

Lightning and Overvoltage Protection
ProTec T1S 3+0
 Class I • Class II • Type 1 • Type 2



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

Technical Data

ProTec T1S-xxx-3+0(-R)

275

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o/U_n	240V
Maximum Continuous Operating Voltage (AC)	U_c	275V
Nominal Discharge Current (8/20 μ s)	I_n	25 kA
Maximum Discharge Current (8/20 μ s)	I_{max}	65 kA
Impulse Discharge Current (10/350 μ s)	I_{imp}	25 kA
Specific Energy	W/R	156.2 kJ/ Ω
Charge	Q	12.5 As
Voltage Protection Level	U_p	1500V
Response Time	t_A	< 100ns
Overcurrent Protection (max)		315 A gG
Short-Circuit Current Rating (AC)	I_{SCCR}	50 kA
Follow Current Interrupt Rating	I_{fi}	50 kA _{RMS}
TOV Withstand 120min	U_T	442V
Number of Ports		1

Mechanical & Environmental

Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Altitude		6562 ft [2000m]
Terminal Screw Torque	M_{max}	39.9 lbf-in [4.5Nm]
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: 250V/1A, 125V/1 A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5 A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)

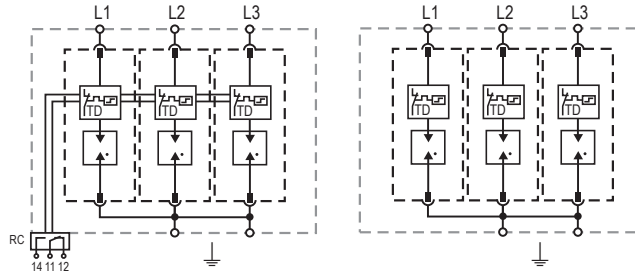
Order Information

Order Code	275
ProTec T1S-xxx-3+0	59.0742
ProTec T1S-xxx-3+0-R (with remote contacts)	59.0743
ProTec T1S-xxx-P (plug)	59.0384

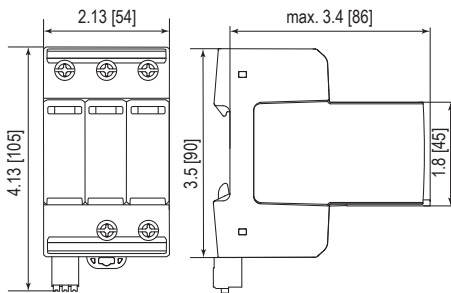
Internal Configuration

Legend

- L Line Conductor Terminal
- ⊥ PE/G Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect



Complete Unit

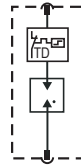


Dimensions & Packaging

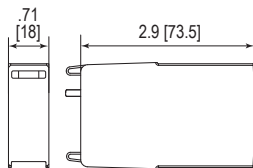
ProTec T1S-xxx-3+0	275
Single Unit Weight pounds [grams]	1.100 [499]
ProTec T1S-xxx-3+0-R	275
Single Unit Weight pounds [grams]	1.119 [508]
Single Unit DIN 43880 Dimension	3TE / 2.13 [54]
Packaging Dimensions (HxWxL)	4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity	5 Units

Plug Internal Configuration

ProTec T1S-xxx-P



Spare Plug



Dimensions & Packaging

ProTec T1S-xxx-P	275
Single Unit Weight pounds [grams]	.231 [105]
Single Unit 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

inches
[mm]

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

