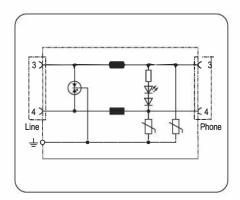
# Telephone Surge Protector **SPD**



TSP-101-DIN



# Basic circuit diagram:



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## Technical data

Туре		TSP-101-DIN
Nominal voltage	U <sub>N</sub>	110V-
Rated voltage (max. continuous voltage)	U <sub>c</sub>	170V- / 120V~
Nominal current	l <sub>L</sub>	0.5A
Lightning impulse current (10/350)	l <sub>imp</sub>	5kA
Nominal discharge current (8/20)	I <sub>n</sub>	5kA (per line) 10kA (total)
Voltage protection level at I,	Up	≤ 700V (line-line) ≤ 570V (line-PG)
Voltage protection level at 1kV/μs	Up	≤ 460V (line-line) ≤ 230V (line-PG)
Response time	t <sub>A</sub>	≤ 1ns (line-line) ≤ 100ns (line-PG)
Bandwidth	f <sub>G</sub>	16MHz (line-PG)
Series impedance per line	R	1.8Ω
Operating temperature range		-40°C+80°C
Connection		RJ11 shield socket
Shield earthing		Screw terminal
Mounting on		35mm DIN rail
Enclosure material		Aluminum
Test standards		IEC 61643-21; GB 18802.21; YD/T 1542
Certification		CE (LVD, EMC); Rohs

### Product Details

#### Summary

TSP-101-DIN protects telephone systems(analogue or digital), ADSL and ISDN systems from disruptions caused by surge voltages; Surge protective device with RJ11 interface.

Designed according to IEC 61643-21; GB 18802.21; YD/T 1542

#### **Features**

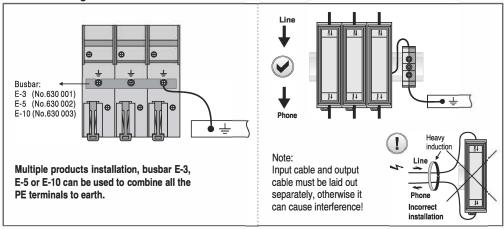
- · Used for protecting telephone systems, ADSL and ISDN systems, and similar 2 wire data applications
- Good discharge capacity, low voltage protection level
- · Quick response, high transmission speed, low signal attenuation
- Off-hook LED indicator
- RJ11 in-line connection, easy installation with supplied short 2 wire telephone cable
- · Convenient DIN rail installation with built-in TS-35 mounting bracket
- screw down grounding wire and available earthing copper bars for multiple side-by-side protector installations
- Operating Temperature: -40°C +80°C
- Relative humidity: less than 95% (25°C)

### Installation instructions

- This product must connect "in-line" to the protected device. Please observe polarity! Line port should connect unprotected telephone line, Phone port should connect to protected handset device(phone, fax machine, modem, etc.)
- 2. Mount the SPD on 35 mm DIN rail when possible.
- 3. The out terminal should be connected to the protected devices.
- 4. SPD's earthing terminal must be connected to nearby earthing BusBar or the metal earthing enclosure of protected device.
- 5. When the red LED indicator is OFF, the line communication is normal, & telephone on hook; When the red LED indicator is flashing, incoming calls/ringing; When red LED indicator is ON, it means the call is in progress, telephone off hook.

Regularly inspect the operating status, especially after lightning. Once the communication is off, electrician should check the SPD.

## Installation diagram:





#### **WARNING:**

- 1. The device should be installed by qualified personnel.
- 2. It is recommended that installation should be done under power off condition.