

# Telephone lightning protector

## 1. Overview

The surge protector device designs according to the national standard of GB/T18802.21-2004/IEC61643-21:2000

## 2. Function characteristics

Electromagnetic interference for the protection of sensitive types of audio signals using RJ11 connector to protect equipment, such as Modem, phone, fax, data communication equipment; protect the dial-up lines, FAX, to provide cable line, the line between the lightning protection ground or other signal line lightning protection. Product's main features: multi-level protection, through flow capacity, low voltage limit, fast response time, low insertion loss, transmission speed advantages

## 3. Usage Environment

Temperature:  $-40^{\circ}\text{C} \sim 70^{\circ}\text{C}$ ; Relative humidity:  $\leq 95\%$ ; Atmospheric pressure:  $70\text{kPa} \sim 106\text{kPa}$ .

## 4. Working Principle

Surge protector link with the equipment which be protected in the front of the system, when transmission lines were happen to the lightning and other instantaneous overvoltage shock, the impulse current through the surge protector protection branch will discharge into the earth, and the output voltage limit in the device allow voltage range. Ensure the safety of operation equipment.

## 5. Technical Parameters

MODEL	CYL D150T4H
Nominal working voltage $U_n$	110V
Max continuous operation voltage $U_c$	150V
Nominal discharge current $I_n$ (8/20 $\mu\text{s}$ )	5KA
Max discharge current $I_{max}$ (8/20 $\mu\text{s}$ )	10KA
Protection level $U_p$ (10/700 $\mu\text{s}$ )	<250V
Insulation resistance $M\Omega$	$\geq 0.4$
Insertion loss dB	$\leq 0.5$
Bandwidth FG	(0.3~10)M
Transmission rate $V_s$	2M
Response time $T_a$	$\leq 1\text{ns}$
Interface type (optional )	RJ11
Protection level	IP20

## 6 Installation, Use and Maintenance

### 6.1 Installation instructions

- 6.1.1 Protectors access system before, first check grounding resistance, generating should comply with the requirements specification.
- 6.1.2 Protectors by protection equipment front-end, access to reliable connect.
- 6.1.3 Protectors as soon as possible the grounding lines connected to protect grounding busbar.

### 6.2 Precautions

- 6.2.1 Protectors have input (IN), output (OUT) mark, output terminal and protected, don't connect the device to connect. Otherwise it will cause the protector the damage, the equipment can be protected.
- 6.2.2 Due to plug sockets connected factors such as loss of poor should be caused by increased connected or replace protector.
- 6.2.3 Users shall not take remove protector of each place fasteners, lest cause damage, affect the normal work.

### 6.3 Protector examination

With three 6.3.1 in table " $\Omega \times 1$ " gear measurement protector input and output to the HPVV HPVW between about  $4.7 \Omega$  resistance; If open, do not normal, protector should be replaced.

## 7. Product appearance and the wiring diagram

