



■ TSTLP®/TS-SC series Surge Arrester for Information Technology System

- ❖ **INTRODUCTION:** TS-SC series is installed at LPZ 0_B -2 or higher. Applied in measuring and controlling system, providing coarse and fine protection. Designed according to IEC 61643-21; GB 18802.21; YD/T 1542. mainly used in industry controlling system, measuring system and controlling devices and so on.
- ❖ We're able to make **different CIRCUIT, Voltage & Technical Data** according to customers' requirement, just tell exact product application needed or send us sample(s) to make.

Product Photo	Dimension(mm)	TS-SC12 BCD

❖ TECHNICAL DATA

Model		TS-SC12	TS-SC24	TS-SC48	TS-SC110
Nominal voltage	U _n	12V-	24V	48V	110V
Rated voltage (max. continuous voltage)	U _c	14V- / 9.5V~	33V- / 23V~	55V- / 38.5V~	170V- / 120V~
Nominal current	I _L	0.5A	0.5A	0.5A	0.5A
Nominal discharge current (8/20)	I _n	5kA (per line) 10kA (total)			
Voltage protection level at I _n	U _p	≤ 55V (line-line) ≤ 40V (line-PG)	≤ 110V (line-line) ≤ 65V (line-PG)	≤ 175V (line-line) ≤ 100V (line-PG)	≤ 500V (line-line) ≤ 270V (line-PG)
Voltage protection level at 1kV/μs	U _p	≤ 36V (line-line) ≤ 19V (line-PG)	≤ 90V (line-line) ≤ 45V (line-PG)	≤ 160V (line-line) ≤ 80V (line-PG)	≤ 460V (line-line) ≤ 230V (line-PG)
Response time	t _A	≤ 1ns (line-line) ≤ 1ns (line-PG)			
Bandwidth	f _G	2.5MHz (line-PG)	6MHz (line-PG)	10MHz (line-PG)	16MHz (line-PG)
Series impedance per line	R	1.8Ω			
Capacitance	C	≤ 1.2nF (line-line) ≤ 2.4nF (line-PG)	≤ 0.5nF (line-line) ≤ 1nF (line-PG)	≤ 0.3nF (line-line) ≤ 0.6nF (line-PG)	≤ 0.2nF (line-line) ≤ 0.4nF (line-PG)
Operating temperature range		-40°C...+80°C			
Cross-sectional area		Max. 2.5m ² flexible			
Mounting on		35mm DIN rail			
Enclosure material		Yellow thermoplastic, UL94-V0			
Standards		IEC 61643-21; GB 18802.21; YD/T 1542			
Compliance		CE (LVD, EMC)			

❖ MAIN CHARACTER

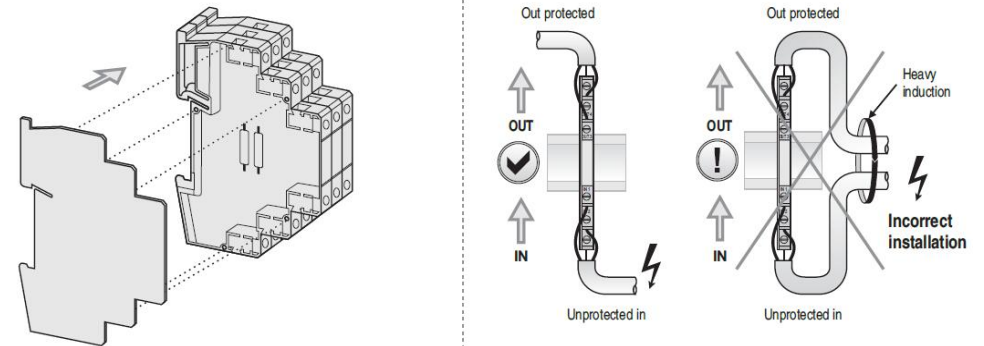
- ✓ Small size, only 6mm wide module
- ✓ Connected to earth by DIN rail or earth terminal

INSTALLATION INSTRUCTION

1. This product is connected in series to the protected device.
2. Mount the SPD on the 35 mm DIN rail.
3. The out terminal should be connected to the protected devices.
4. There is a earthing terminal in each side, and it is recommended to use the one at output side, earth lead must be connected to the earthing system, ideally using 2.5mm² cable. The cable should be as short as possible.
5. After above, you should ensure the circuit is functioning.

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

TS-SC12 INSTALLATION DIAGRAM



In order to reduce the installation room, this product can be installed as follow with only one cover.

Note: Input cable and output cable must be laid out separately, otherwise it will cause interference!

WARNING:

1. The device must be installed by electrically skilled person, conforming to national standards and safety regulations.
2. It is recommended that installation should be done under power off condition.