

SPD for Signal Network







- Surveillance Camera
- POE Equipment
- Switch
- Control System Interface
- Instrument





Glossary

Item	Description
U p	Voltage Protection Level Maximum voltage to be expected at the SPD terminals due to an impulse stress with defined voltage steepness and an impulse stress with a discharge current with given amplitude and wave shape. — (IEC 61643-11)
8/20 µs	8/20 Current Impulse
	Current impulse with a nominal virtual front time of 8 µs and a nominal time to half-value of 20 µs. — (IEC 61643-11)
1.2/50 µs	1.2/50 Voltage Impulse Voltage impulse with a nominal virtual front time of 1.2 μs and a nominal time to half-value of 50 μs. — (IEC 61643-11)
U c	Maximum Continuous Operating Voltage Maximum r.m.s. voltage, which may be continuously applied to the SPD's mode of protection. — (IEC 61643-11)
I _n	Nominal Discharge Current Crest value of the current through the SPD having a current waveshape of 8/20 μs. — (IEC 61643-11)
Modes of Protection	Modes of Protection An intended current path, between terminals that contains protective components, e.g. line-to-line, line-to-earth, line-to-neutral, neutral-to-earth. — (IEC 61643-11)
IP	Degrees of Protection Provided by Enclosure (IP Code) Classification preceded by the symbol IP indicating the extent of protection provided by an enclosure against access to hazardous parts, against ingress of solid foreign objects and possibly harmful ingress of water.

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Surge Protective Device

Schematics

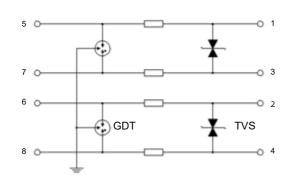


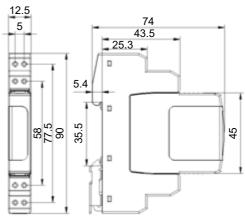


Features

- Hot-plug Module
- DIN Rail 35 mm Installation
- Pluggable Module for Easy Replacement
- Epoxy Sealing Material, Flame-retardant to V0 (UL 94)
- Small Size

Dimensions (mm)





Features		Specifications		
Model		SSPA0K5BT05	SSPA0K5BT12	SSPA0K5BT24
Nominal System Voltage (Un)		5 VDC	12 VDC	24 VDC
Max. Continuous Operating \	/oltage (<i>U</i> _c)	6 VDC	15 VDC	33 VDC
Nominal Discharge Current (8/20 µs) (/ _n)	5 kA	5 kA	5 kA
Rated Current (I _L)		1.0 A	1.0 A	1.0 A
Voltage Protection Level (U_0)	Line to Line @In	≤ 15 V	≤ 27 V	≤ 55 V
Voltage Protection Level (Op)	Line to PE @In	≤ 600 V	≤ 600 V	≤ 600 V
Cut-off frequency		10 MHz		
Wiring Ability		(0.2 to 2.5) mm ² (Flexible) / (0.2 to 0.4) mm ² (Rigid)		
Degrees of Protection		IP20		
Installation		DIN rail 35 mm		
Standard		IEC/EN 61643-21, GB/T 18802.21		
Operational Temperature Ra	nge	(-40 to 85) °C		



Usage

- 1. Frequency range is from 47 Hz to 63 Hz.
- 2. The voltage applied continuously to the SPD must not exceed its maximum continuous operating voltage U_c.
- 3. When atmosphere press is from 80 kPa to 106 kPa, the related altitude shall be from 2000 m to 500 m.
- 4. Do not touch the product body or wires directly when power is on, to avoid electric shock.

Replacement

As SPD is a non-repairable product, for safety sake, please use the same type of SPD for replacement.

Storage

Do not store SPD at high temperature, high humidity or corrosive gas environment, to avoid oxidation of the wires. Use them up within 1 year after receiving the goods.

Installation

- 1. Installation and startup may only be carried out by qualified personnel. The relevant country-specific regulations must be observed.
- 2. Check the device for external damage before installation. If the device is defective, it must not be used.
- 3. Pay attention to risk of electric shock. Please cutoff all electrical power before installation or service.
- 4. Lay the output cables to the surge protective devices (SPDs) as short as possible, without loops.
- 5. Please install proper backup protection devices in front of SPD.
- 6. Do not apply mechanical stress to the SPD body during or after the installation.

Maintenance

- 1. Check SPD status according to instructions before and after the thunderstorm season each year.
- 2. If the indicator of "failure state" appears, the SPD is damaged. Replace the SPD with same type.
- 3. Ensure electrical connections and mountings are correct before energizing the circuit.
- 4. SPD's quality is well controlled and strictly inspected before delivery. If non-functional ones are found during operation, please contact us early enough.