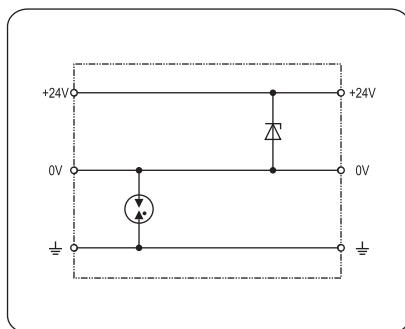


# BlitzShield **DIREKTRONIK** SPD

Basic circuit diagram



## • Technical data

Type		
Art.-No.		650 002
Nominal voltage	$U_N$	24V-
Rated voltage(max. continuous voltage)	$U_c$	35V-
Nominal current	$I_L$	10A
Nominal discharge current(8/20)	$I_n$	1kA
Voltage protection level at $I_n$	$U_p$	$\leq 70V$ (line-line) $\leq 700V$ (line-PG)
Voltage protection level at 1kV/ $\mu s$	$U_b$	$\leq 50V$ (line-line) $\leq 700V$ (line-PG)
Response time	$t_A$	$\leq 1ns$ (line-line) $\leq 100ns$ (line-PG)
Capacitance	$C$	$\leq 7nF$ (line-line) $\leq 10pF$ (line-PG)
Operating temperature range		$-40^\circ C \sim +80^\circ C$
Cross-sectional area		Max. 4mm <sup>2</sup> flexible
Mounting on		35mm DIN rail
Enclosure material		Orange thermoplastic material, UL94-V0
Test standards		IEC 61643-21; GB 18802.21; YD/T 1542
Certification		CE (LVD, EMC)

## • Product introduction

### 1. Summary

According to IEC 61643-21; GB 18802.21; YD/T 1542, BS AD 24 is specially designed for the 24V DC power supply. Usually used to protect PLC 24V power supply from EMC, for installation at LPZ1-2 or higher.

### 2. Main character

- Quick response
- Connected excellent EMC protection
- Low voltage protection level

### 3. Application

BS AD 24 is applied for devices supplied by 24V DC power.

### 4. Application environment

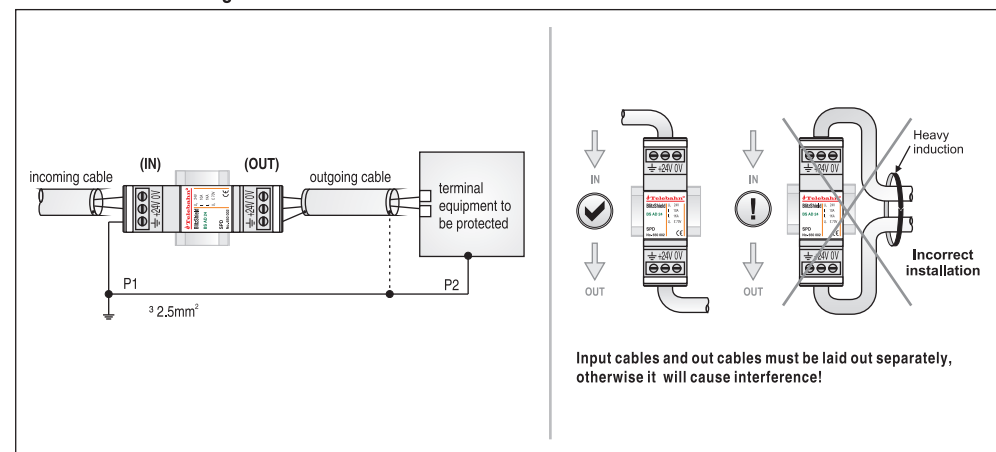
- Temperature:  $-40^\circ C \sim +80^\circ C$
- Relative humidity:  $\leq 95\%$  ( $25^\circ C$ )

## • Installation instruction

1. This product is connected in series to the protected device.
2. Mount the SPD on 35 mm DIN rail.
3. The output terminals should be connected to the protected devices.
4. There is a earthing terminal at input side. Earth lead must be connected to the lightning earthing system, ideally using 2.5mm<sup>2</sup> 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 the SPD.**

### BS AD 24 Installation diagram:



	<b>WARNING:</b>
	<ol style="list-style-type: none"> <li>1. The device must be installed by electrically skilled person, conforming to national standards and safety regulations.</li> <li>2. It is recommended that installation should be done under power off condition.</li> </ol>