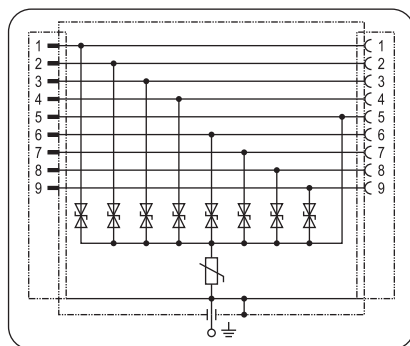


Basic circuit diagram:



## • Technical data

Type		
Art.-No.		
Nominal voltage	$U_N$	12V-
Rated voltage (max. continuous voltage)	$U_C$	15V-
Nominal discharge current (8/20)	$I_n$	100A (line-SG) 100A (SG-PG)
Max. discharge current (8/20)	$I_{max}$	200A (line-SG) 200A (SG-PG)
Voltage protection level at $I_n$	$U_p$	$\leq 24V$ (line-SG) $\leq 200V$ (SG-PG)
Voltage protection level at 1kV/ $\mu$ s	$U_p$	$\leq 21V$ (line-SG) $\leq 90V$ (SG-PG)
Response time	$t_A$	$\leq 1ns$ (line-SG) $\leq 25ns$ (SG-PG)
Max. data transmission rates	$V_s$	1Mbits/s
Operating temperature range		-40°C...+80°C
Protective lines		Line: 8 / SG / PG
Pinning		Line: 1/2/3/4/6/7/8/9, SG: 5 (standby lines disconnected)
Mounting in		D-Sub, 2 threaded screws
Connection (input / output)		D-sub socket/plug, 9 pins
Shield earthing		Outgoing cable 1.5mm <sup>2</sup> x 300mm
Enclosure material		Plastic, metallised
Dimension		64mm x 35.5mm x 21mm
Test standards		IEC 61643-21; GB 18802.21; YD/T 1542
Certification		CE (LVD, EMC)

## • Product introduction

### 1. Summary

BS RS 9P is used at LPZ 2-3 boundary, provide surge protection for RS485, RS422 or RS432 signal devices from damages, such as surge voltages, operating over voltages, electrostatic discharging and so on. Designed according to IEC 61643-21; GB 18802.21; YD/T 1542.

### 2. Main character

- High discharge capacity, low voltage protection level, quick response
- Do not impact the normal work of data management devices and system
- Apply for high speed transmission devices

### 3. Application

BS RS 9P is designed to protect D-sub signal system; e.g. RS485, RS422 or RS432 signal devices from damages.

### 4. Application environment

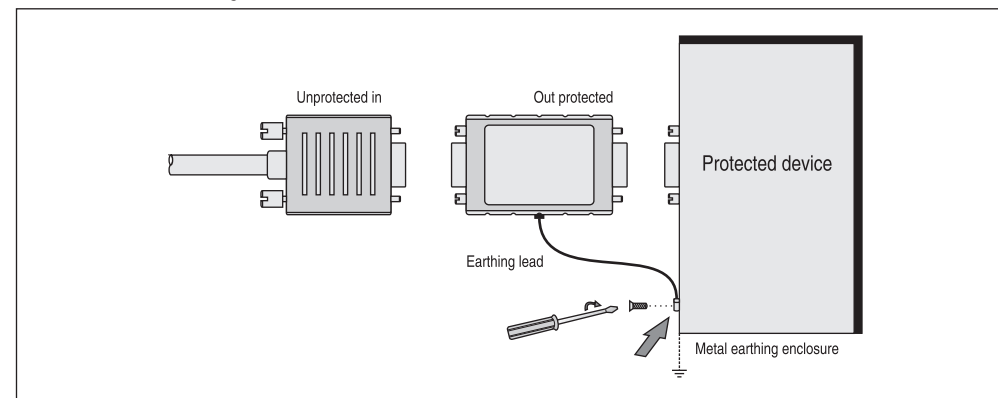
- Temperature: -40°C ~ +80°C
- Relative humidity:  $\leq 95\%$  (25°C)

## • Installation instruction

1. This product is connected in series to the protected device, installation in the partition of LPZ 2-3 interface;  
In order to prevent lightning induction, LPZ 0<sub>A</sub>-1 and LPZ 1-2 interface must install additional surge protection products.
2. The out terminal should be connected to the protected devices.
3. SPD's earthing lead must be connected to nearby earthing BusBar or the metal earthing enclosure of the protected device.
4. 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.**

BS RS 9P installation diagram:



### 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.