



⚠ DANGER

Hazardous Voltage

Will cause severe injury or death.

Working on or near energized circuits poses a serious risk of electrical shock. De-energize all circuits before installing or servicing this equipment and follow all prescribed safety procedures.

Technical Data

Catalog Number	BSPD5DING	BSPD12DING	BSPD24DING	BSPD48DING	BSPD5DINLHF	BSPD24DINLHF
Nominal voltage (U _N)	5V	12V	24V	48V	5V	24V
Nominal current at 45°C (I _n)	1.0A	0.75A	0.75A	0.75A	1.0A	1.0A
Operating temp. range	-40°C to +80°C					
Degree of protection	IP20					
Agency information	ATEX, UL, CSA,					

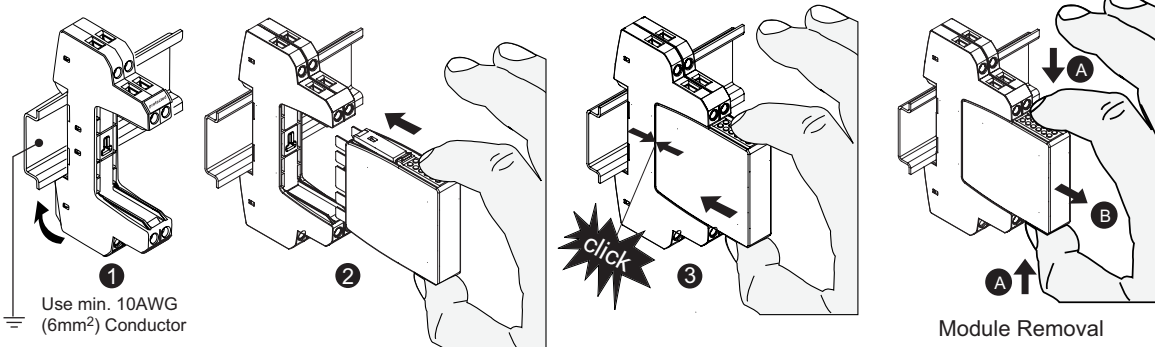


Warranty

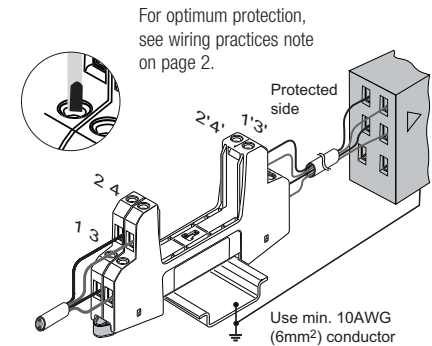
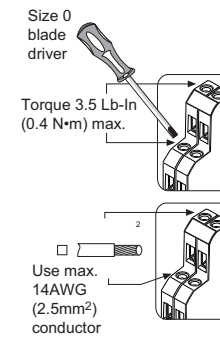
See document 3A1502 at www.cooperbussmann.com/surge for details of limited warranty.

Installation Instructions

Mounting

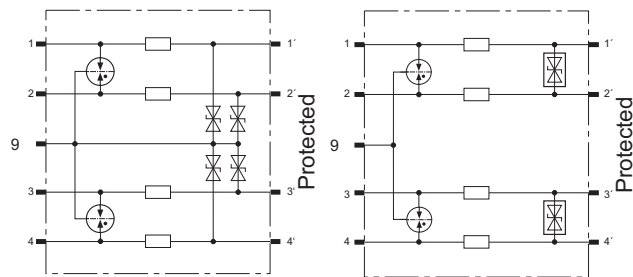


Wire Connections



NOTE: When wiring the DIN-Rail base, observe the terminal assignment of the surge arrester module according to the circuit diagram.

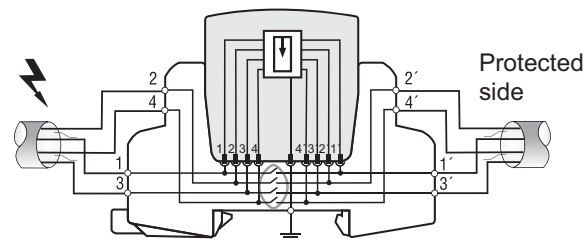
Circuit Diagram



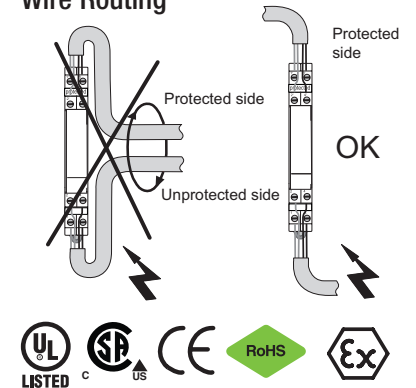
BSPD5 to 48DING

BSPD5 to 24DINLHF

Module / Base "Make-Before-Break" Schematic



Wire Routing



UL Requirements

1. This Surge Protective Device (SPD) is intended for ordinary indoor use on communication loop circuits that are isolated from the Public Switched Telephone Network.
2. The SPD module shall be secured to the compatible base before applying power to the communication loop.
3. The base shall be secured to a compatible DIN-Rail ground bar using the methods described in this instruction.
4. Proper grounding continuity shall be determined.
5. Please install the protector module in accordance with the applicable requirements of the National Electrical Code®, Article 800 or other applicable local codes.
6. Screw terminal ratings with the applicable wire gauge sizes shall be noted.
7. The maximum circuit current for UL 497 B application is limited to 100mA.

**Tabulation Strike voltage in accordance with UL 497
(Protectors for Data Communication and Fire Alarm Circuits)**

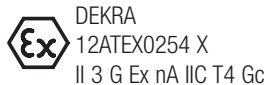
Catalog Number	Strike Voltage 100V / sec				Strike Voltage 100V / μ sec			
	Line-to-Ground		Line-to-Line		Line-to-Ground		Line-to-Line	
BSPD5DING	6.7Vmin	8.5Vmax	13.4Vmin	17Vmax	6.7Vmin	9Vmax	13.4Vmin	18Vmax
BSPD12DING	16.5Vmin	18.7Vmax	33Vmin	37.5Vmax	16Vmin	19Vmax	33Vmin	38Vmax
BSPD24DING	35Vmin	42Vmax	70Vmin	83Vmax	35Vmin	42Vmax	70Vmin	90Vmax
BSPD48DING	59Vmin	67Vmax	72Vmin	133Vmax	59Vmin	70Vmax	118Vmin	140Vmax
BSPD5DINLHF	70Vmin	110Vmax	7.5Vmin	11Vmax	70Vmin	550Vmax	7.5Vmin	11Vmax
BSPD24DINLHF	70Vmin	110Vmax	36Vmin	43Vmax	70Vmin	550Vmax	36Vmin	47Vmax

Instruction for Surge Protective Device Use In Zone 2 Explosive Atmospheres

1. When installed in potentially explosive atmospheres, the Data Signal DIN Series shall be installed into an enclosure which meets the requirements of a recognized type of protection, in accordance with EN 60079-0.
2. The Data Signal DIN Series as transient suppressor. This approval applies to the following equipment types:
 - BSPD5DING
 - BSPD12DING
 - BSPD24DING
 - BSPD48DING
 - BSPD5DINLHF
 - BSPD24DINLHF

Ambient and Temperature Class:

- - 40°C to +80°C, T4



Standards Used For:

- ATEX: EN 60079-0: 2009, EN 60079-15: 2005

Safety Instructions

This Surge Protective Device (SPD) for coaxial connection may only be installed by qualified electrical personnel. All applicable national and local electrical standards and safety regulations must be observed. The SPD must be checked for external damage prior to installation. If any damage or other defects are detected, do not install the device.

The installation and application of this SPD is only permitted within the limits shown and stated in these installation instructions. The SPD and the equipment connected to it can be destroyed by loads exceeding the stated values.

Opening, modifying or otherwise tampering with the SPD invalidates the warranty.

Wiring Practices

For optimum protection please observe the following good wiring practices:

- Avoid routing signal wires parallel to power wiring or cables.
- Cross power and other cables at a right angle to minimize inductance or capacitance coupling.
- Keep length of protected signal wires as short as possible.
- Use shielded wires whenever possible.
- Connect wire shields to equipotential bonding/ground on both sides of the SPD and protected equipment.