



1. Product description

This HUBER+SUHNER Data Line Protector is a general-purpose symmetric pair surge arrester. It is used to protect sensitive system components with RJ45 ports against transients caused by natural or manmade energy surges. It is suitable for screened (STP) and unshielded (UTP) twisted pair cables.

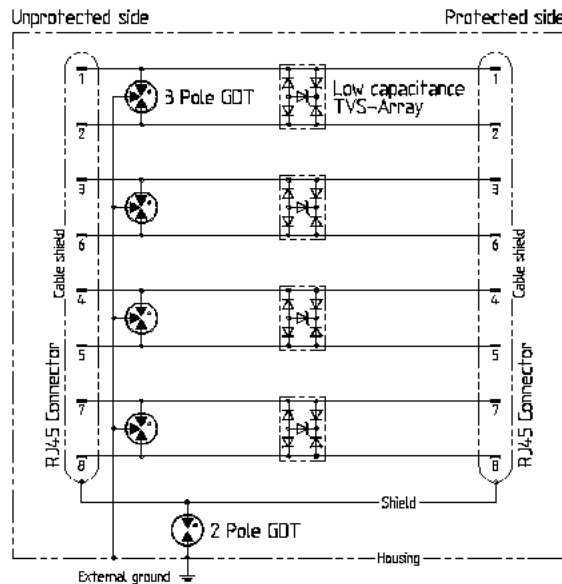
sients caused by natural or manmade energy surges. It is suitable for screened (STP) and unshielded (UTP) twisted pair cables.

2. Technical Data

Type Data Line Protector series 3414.99.0007B

Rated voltage U_c	± 6 V	Line-Line (Pair)
Bypass voltage	N/A	
Current rating	1.5 A max	
Nominal discharge current (8/20 μ s)	6 kA (IEC 61000-4-5)	Screen-GND
	2.5 kA (IEC 61000-4-5)	Line-GND
	100 A (IEC 61000-4-5)	Line-Line (Pair)
Clamping voltage	15 V	Line-Line (Pair)
	90 V	Line-GND
	90 V	Screen-GND
Response time	2 ns	
Cable category	Cat 5e (ISO 11801, EN50173, TIA/EIA 568)	
Frequency range	DC - 100 MHz	
Impedance	100 Ω	
Connectors	RJ45 jack	
Earthing via	earth cable AWG 16, housing (protector body)	
IP rating	IP20	
Operating temperature range	-40 °C ... 85 °C	

Circuit Diagram



The Data Line Protector is designed to meet the above technical specification when correctly installed. Any additional or different requirements arising from specific cus-

tomers should be discussed with the manufacturer.

other applications, or environmental conditions not covered by the above are subject to request.

3. Safety Instruction

The Data Line Protector must be installed by a qualified installer in accordance with the relevant national installation and safety rules. Its usage is only permitted under the conditions stated and shown in this instruction.

The Data Line Protector and the equipment connected to it can be destroyed by EM surges exceeding the given specification, e.g. due to a direct lightning strike.

The operation voltage of the system / equipment to be protected must not exceed the maximum permissible operating voltage (rated voltage U_c) of the Data Line Protector.

Warning:

Never open the Data Line Protector!

Opening the Data Line Protector will void the warranty and may result in the accidental destruction of electronic components. Disconnect or switch off in-line equipment when installing or removing Data Line Protectors.

4. Earthing

To ensure that the specified protection performance is met, it is important that the Data Line Protector is properly grounded. This can be achieved by connecting the unit directly or via the attached grounding cable to a grounding bar (a & b) or by mounting it directly into a grounded front panel (c).

Important: The shields of STP cables are indirectly connected to the protector body. Therefore grounding must be carried out via the housing of the protector and not over the cable shield.

5. Maintenance

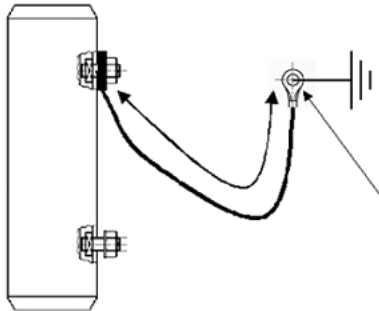
The Data Line Protector is maintenance-free provided that it is properly installed, grounded and operated in compliance with its specifications.

6. General Information

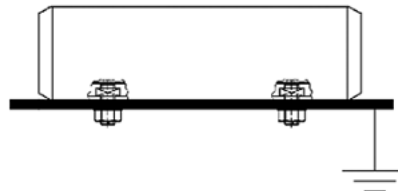
The effective surge protection of a system can only be achieved if all relevant system elements are properly bonded to ground. (Active lines via surge arresters)

7. Earthing / Grounding

a) Grounding via a grounding cable



b) Grounding to a grounding bar



c) Mounting directly into a grounded front panel. Remove plastic cover and fit the housing with two sheet-metal screw ST 2.9 to the panel.

