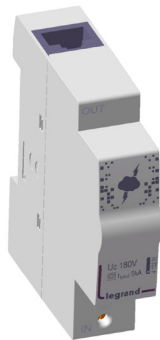


4 122 00



4 122 01



4 123 19

**SOMMAIRE**

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**1. GENERAL CHARACTERISTICS**

**1.1 Brief description**

Surge protective devices for telephone lines and analogue/STN – digital/xDSL communication networks<sup>(1)</sup>. Provide protection against voltage surges on devices such as telephones, fax machines, modems (routers).

4 122 00 : C2<sup>(2)</sup>+D1<sup>(3)</sup> type surge protective device without status indicator<sup>(4)</sup>, dual connection wired and RJ45 connectors, RJ11 compatible.

4 122 01 : C2<sup>(2)</sup> type surge protective device without feedback<sup>(4)</sup>, RJ45 connectors, RJ11-compatible. Version only available in ready-to-install multimedia distribution boxes.

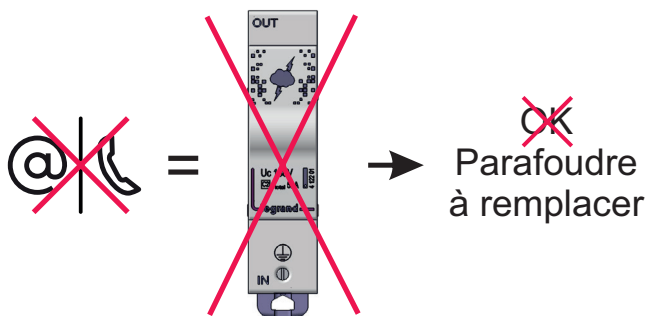
4 123 19 : Non-modular C2<sup>(2)</sup> type surge protective device, without status indicator<sup>(4)</sup>, wired connectors.

<sup>(1)</sup> : Compatible with VDSL 2+ up to 100 Mbps. Very low losses along the line for all xDSL networks up to and over 100 Mbps (< 1 dB).

<sup>(2)</sup> C2 : Surge protective devices tested in accordance with C2 overvoltage category (8/20 μs waveform according to standard EN/IEC 61643-21). Surge protective devices similar to Type 2/class II surge protective devices (standard EN/IEC 61643-11) for 230/400 V~ low voltage networks.

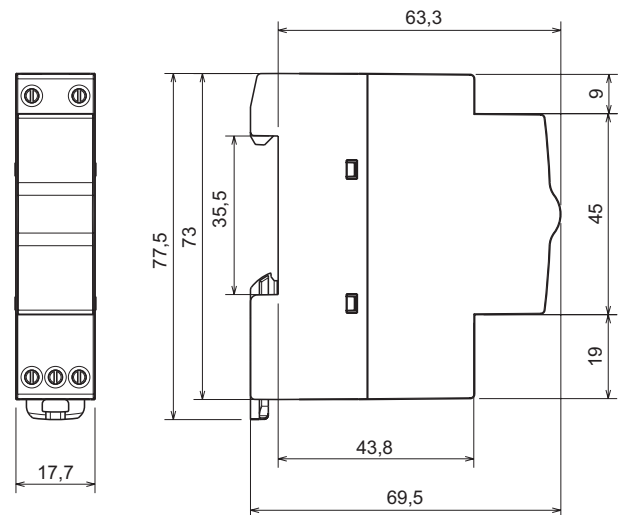
<sup>(3)</sup> D1 : Surge protective devices tested in accordance with D1 overvoltage category (10/350 μs waveform according to standard EN/IEC 61643-21). Surge protective devices similar to Type 1/class I surge protective devices (standard EN/IEC 61643-11) for 230/400 V~ low voltage networks.

<sup>(4)</sup> End of life : Short-circuiting of the line and loss of ring tone.

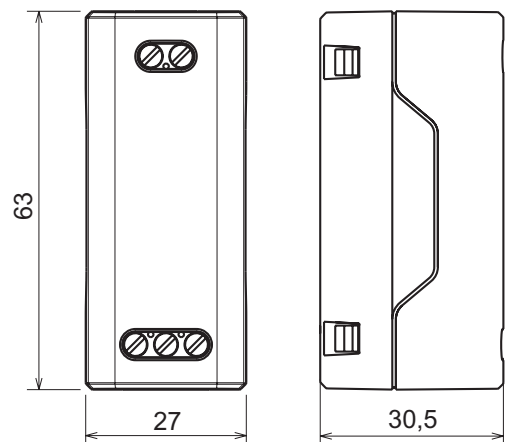


**2. DIMENSIONS**

**2.1 Cat. Nos 4 122 00 - 4 122 01**



**2.2 Cat. No 4 123 19**

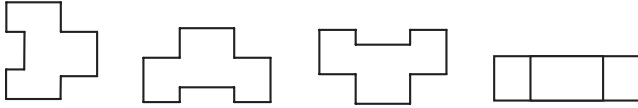


**3. TECHNICAL CHARACTERISTICS**

**3.1 Operating positions**

**3.1.1 Cat. Nos 4 122 00 - 4 122 01**

- Vertical, horizontal, reverse, sideways



On EN 60715 or DIN 35 symmetrical rail

**3.1.2 Cat. No 4 123 19**

All positions

**3.2 Enclosure materials**

Base/Plinth/Terminal supports :

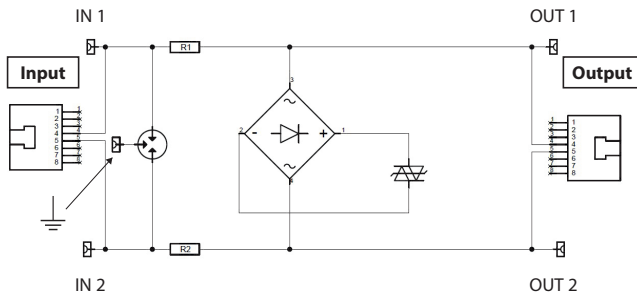
- Polycarbonate (PC)
- Self-extinguishing : 850°/30s
- Colour : Light Grey RAL 7035

**3.3 Metal components materials**

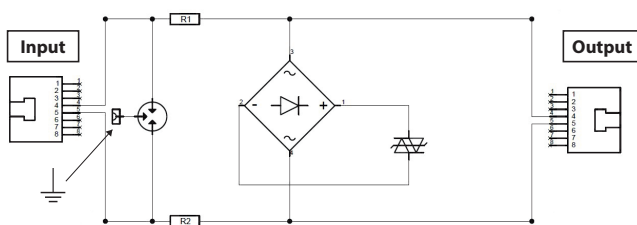
- Cage terminals : Zinc-plated steel
- Terminal screws : Zinc-plated steel
- Contacts : Tinned copper

**3.4 Schematic diagrams**

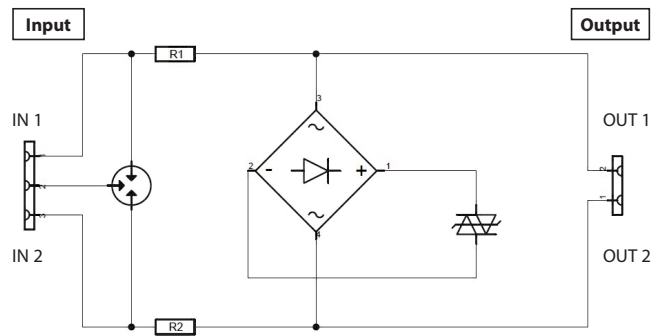
**3.4.1 Cat. No 4 122 00**



**3.4.2 Cat. No 4 122 01**



**3.4.3 Cat. No 4 123 19**



### ■ 3.5 Operating characteristics

Cat. No(s)		4 122 00	4 122 01	4 123 19	
Number of protected pairs (1 line = 1 pair)		1	1	1	
Test category		D1 ; C2			
Network		STN / xDSL			
Protection mode		Symmetrical (IN1/IN2) and Asymmetrical (IN1 or IN2/Earth)			
Max. steady state voltage (Uc)		180 V			
Attenuation (insertion loss) at:		0 à 30 MHz	≤ 0,6 dB		
		100 MHz	1,6 dB		
		200 MHz	3,8 dB		
C2	Nominal discharge current In (8/20µs)	IN1-IN2 <sup>(1)</sup>	10 kA (RJ : 2,5 kA)	2,5 kA	5 kA
		(IN1, IN2)-Earth <sup>(2)</sup>	10 kA (RJ : 2,5 kA)	2,5 kA	5 kA
	Current Imax (8/20µs) IN1-IN2 and (IN1, IN2)-Earth		20 kA (RJ : 5 kA)	2,5 kA	10 kA
	Total discharge current Itotal (8/20 µs) (IN1+IN2)-Earth		20 kA (RJ : 5 kA)	5 kA	10 KA
	Protection level (Up) at In	IN1-IN2 <sup>(1)</sup>	380 V (RJ : 280 V)	280 V	280 V
		(IN1, IN2)-Earth <sup>(2)</sup>	800 V (RJ : 600 V)	600 V	600 V
Protection level (Up) at 5 kA	IN1-IN2 <sup>(1)</sup>	280 V		280 V	
	(IN1, IN2)-Earth <sup>(2)</sup>	600 V		600 V	
D1	Nominal discharge current in 10/350µs waveform	IN1-IN2 <sup>(1)</sup>	2,5 kA		2,5 kA
		(IN1, IN2)-Earth <sup>(2)</sup>	2,5 kA		2,5 kA
	Total discharge current Itotal in 10/350µs waveform		5 kA		5 kA
	Protection level in 10/350µs waveform	IN1-IN2 <sup>(1)</sup>	280 V		280 V
(IN1, IN2)-Earth <sup>(2)</sup>		600 V		600 V	
Rated current (I <sub>n</sub> )		450 mA			
Serial resistance		2,2 Ω			
Reseting time		≤ 5 ms			
Terminal capacity		0,08 à 2,5 mm <sup>2</sup>		0,2 à 2,5 mm <sup>2</sup>	
Location category		Indoor			
Installation method		Permanent			
Width (number of modules)		1	1	see 2.2	
Protection index		IP20 / IK04			
End of life		Loss of ring tone/Loss of line (xDSL) on the router			
Humidity level		HR : 5 à 95%			
Operating temperature		-25° / +70°C			
Storage temperature		-40° / +70°C			

(1) : Inter-line protection (differential mode)

(2) : Protection in common mode (line-earth)

## 4. STANDARDS

Conform to standards EN 61643-21/IEC 61643-21

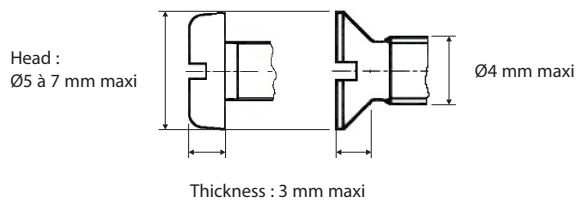
## 5. INSTALLATION

### 5.1 Cat. Nos 4 122 00 - 4 122 01

On 35 mm DIN rail according to DIN 35 profile or EN 60715, rails 7.5 or 15 mm deep.

### 5.2 Cat. No 4 123 19

- No fixing (held in place by the cables)
- Wall fixing or on a plate : with screws



- Fixed on 35 mm wide DIN rail with «Fixomega» accessories for M4 screws Cat. No 0 364 69 or 0 739 79.

### 5.3 Connections

#### 5.3.1 Cat. No 4 122 00

Line connection :

- Wired (input and output): Screw terminals, 4 mm<sup>2</sup> max. capacity
- RJ45 (input and output): For RJ45 or RJ11 connectors
- Dual: Wired/RJ45 or RJ45/wired

Earth connection: Screw terminal, 4 mm<sup>2</sup> max. capacity  
1.5 mm<sup>2</sup> min. cross-section recommended

#### 5.3.2 Cat. No 4 122 01

Line connection (input and output): RJ45 or RJ11  
Earth connection: Screw terminal, 4 mm<sup>2</sup> max. capacity  
1.5 mm<sup>2</sup> min. cross-section recommended

#### 5.3.3 Cat. No 4 123 19

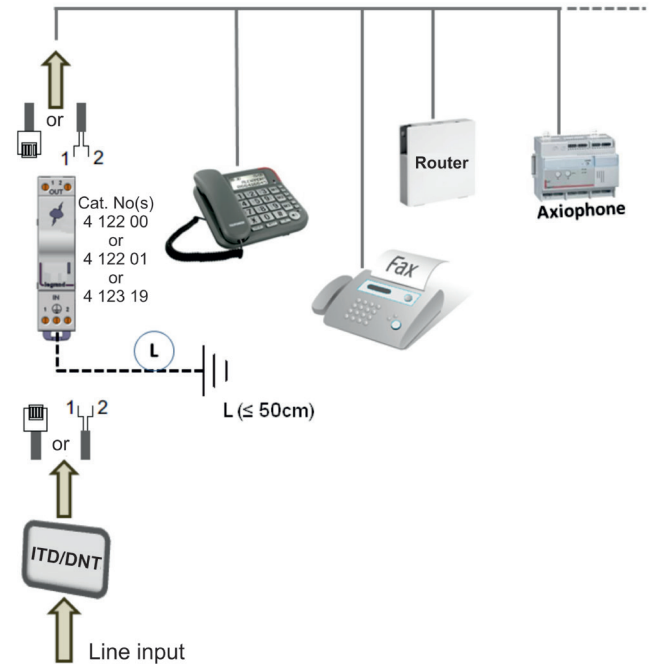
Line connection (input and output): Screw terminals, 4 mm<sup>2</sup> max. capacity  
Earth connection: Screw terminal, 4 mm<sup>2</sup> max. capacity  
1.5 mm<sup>2</sup> min. cross-section recommended

### 5.3.4 Wiring diagram

For mounting

- Downstream of the Indoor Termination Device (ITD) or Digital Network Termination (DNT)
- Upstream of the equipment to be protected

See diagram below



## 6. ACCESSORIES

Cat. No 4 123 19

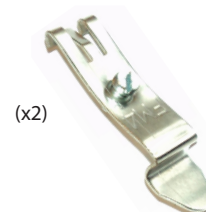
For fixing on a symmetrical rail

- Cat No 0 364 69



Fixomega for EN 60715 rail, M4 screws (not supplied)

- Cat. No 0 739 79



Fixomega for EN 60715 rail, M4 screws