

# 823.B.020

Transient Surge Protection Device (SPD) for electro-electronic equipments connected to data communication lines.

- Plastic box
- According to IEC 61643-3 / Telebras 235-430-727 Practice / ITU -T K.21 / UL 497
- Installation in high exposition areas

#### Application

It is used for the protection of Programmable Logic Controllers, modems (LPCD or xDSL), safety systems, among others.



823.B.020 SPD was developed for the protection of electroelectronic equipments against induced electrical transient surges.

It may be connected to data communication private lines, RS-422 and RS-485 interfaces. Suitable for the protection of equipments installed in high exposition areas to electrical surges due to atmospheric discharges (lightning) or other types of electrical transient disturbances. Its physical configuration is made of a three stage cascade, using Gas Discharge Tube – GDT, Silicon Avalanche Diode - SAD and Metal Oxide Varistor - MOV technologies, coordinated through a series impedance, giving an effective and extremely fast protection.

Electrical connection is made by a screw connector and it is enclosed in an ABS injected plastic box, fireless propagating. Easily fixed in flat surfaces by means of screws or mounted on 35 mm DIN rail (DIN EN 50022 Standard).

#### Performance Characteristics:

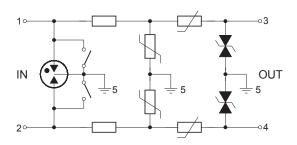
S 800	Maximum Service Voltage	Maximum Service Voltage at	Máxima corrente de surto a 8/20µs	Tensão de Clamping @ I <sub>PP</sub>	Máxima corrente de surto a 10/1000 μs	weight
Model	U	IIMP	IMAX	UC	IPP	g
823.B.020	20 V	2 kA	10 kA	< 33.2 V	45 A	40 g
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## Functional Characteristics:

Characteristics	Unity	823.B.020	
Standard	-	61643-2/ Telebras 235-430-727 Practice / ITU -T K.21/ UL 497	
Protection technology	-	Gas Discharge Tube – GDT, Silicon Avalanche Diode – SAD and	
Metal Oxide Varistor - MOV	-	Moderado	
Exposition level	-	High	
Response time – GDT	ns	100	
Response time – MOV	ns	10	
Response time - SAD	ps	1	
Connection	-	Cable	
Service protection signaling	-	End of lifetime, line in short-circuit	
Number of protected conductors	unity	2	
Operation temperature	° C	-30+85	
Series resistance	Ω	10	
Impedance	Ω	Not Applied	
Capacitance	pF	Not Applied	
Insertion loss	dB	-	
Input connection	-	3-position screw connector for 4 mm <sup>2</sup> section cables	
Output connection	-	2-position screw connector for 4 mm <sup>2</sup> section cables	
Packing	-	ABS injected plastic box, fireless propagating	
Protection degree	IP	20	
Weight g		40	
Dimension	mm	79,5 x 63,0 x 12,0	

### Electrical Circuit:



### Mechanical Drawing:

