

## AT85 Series

### COORDINATED DC POWER SUPPLY SPD



AT-3501: RF SPD TESTER:  
Radiofrequency SPD tester.

## ATVOLT

- AT-8505: ATVOLT 5: 5V<sub>DC</sub> lines
- AT-8512: ATVOLT 12: 12V<sub>DC</sub> lines
- AT-8515: ATVOLT 15: 15V<sub>DC</sub> lines
- AT-8524: ATVOLT 24: 24V<sub>DC</sub> lines
- AT-8530: ATVOLT 30: 30V<sub>DC</sub> lines
- AT-8548: ATVOLT 48: 48V<sub>DC</sub> lines
- AT-8560: ATVOLT 60: 60V<sub>DC</sub> lines
- AT-8580: ATVOLT 80: 80V<sub>DC</sub> lines
- AT-8510: ATVOLT 110: 110V<sub>DC</sub> lines

Efficient protection for **DC supply lines** in modules containing **coordinated** protection for one pair of lines.

Tested and certified as **Type 3** according to regulations EN 61643-11 and GUIDE-BT-23 from REBT. Suitable for **Categories I, II, III and IV** equipment according to ITC-BT-23 from REBT.

- Recommended protection in both common and differential mode.
- Pluggable modules for its easier substitution in case of failure without the need of disconnecting the wiring. When substituting the module the line suffers no interruptions.
- It has a radiofrequency receptor in order to do the maintenance only with issuer equipment. When the RF SPD Tester is applied and the protector is working, the LED flickers green. If the cartridge is damage the LED does not flick.
- Earthing implemented through a metallic sheet opposite to the fixing DIN rail.
- Wide variety of SPDs for different working voltages.
- It remains inactive in normal conditions, without affecting the normal working of the line and without leakage.
- Low residual voltage for all working voltages.
- Very fast response.
- Mechanic connection for conductors through screws, which allows absorbing a highest amount of overvoltage

ATVOLT SPDs have been tested in **official, independent laboratories**, obtaining their characteristics according to relevant standards (related in the table).

**⚠ Earth connection is a must.** Earthing in all the installation must be bonded either directly or by a spark gap and resistance should be lower than 10Ω. If the indications of this datasheet are not fulfilled during the use or installation of the SPDs, the protection assured by this device could be endangered.

### Installation

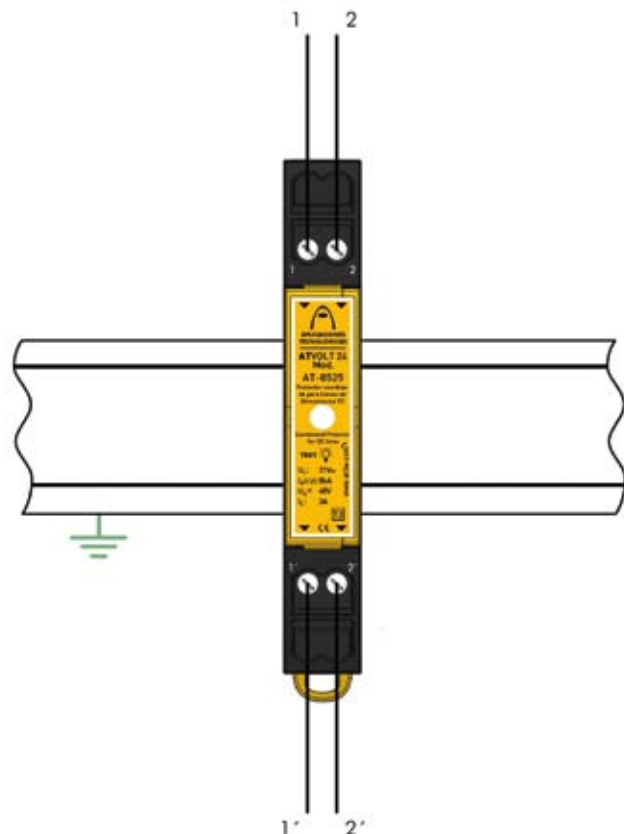
ATVOLT Surge Protective Devices are to be installed in series with the DC supply line, cutting the cables and connecting the positive and negative terminals to the corresponding connectors. It is very important to pay especial attention to these connections since a wrong connection can cause short-circuits at the equipment supply.

On another side, it is essential to connect correctly the input and output terminals. Otherwise the SPD components will not work properly.

The lower terminal must be connected to the Earth Termination System, where the surge associated current must be derived.

ATVOLT SPDs should be installed preferably as close to the equipment as possible.

The power should be disconnected during the installation of the SPD.



## AT85 Series

### Technical Datasheet

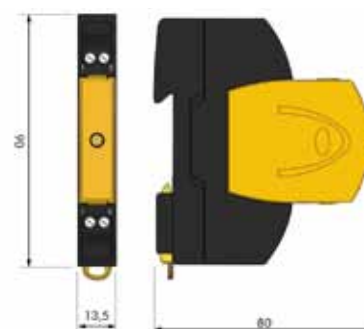
Reference		ATVOLT 5 AT-8505	ATVOLT 12 AT-8512	ATVOLT 15 AT-8515	ATVOLT 24 AT-8524	ATVOLT 30 AT-8530
Protection categories according to REBT:		I, II, III, IV				
Type of tests according to EN 61643-11:		Type 3				
Nominal voltage:	$U_n$	5V <sub>DC</sub>	12V <sub>DC</sub>	15V <sub>DC</sub>	24V <sub>DC</sub>	30V <sub>DC</sub>
Maximum working voltage:	$U_c$	7V <sub>DC</sub>	15V <sub>DC</sub>	18V <sub>DC</sub>	31V <sub>DC</sub>	37V <sub>DC</sub>
Maximum working current:	$I_L$	3A				
Nominal discharge current (wave 8/20μs):	$I_n$	5kA				
Combined wave tension:	$U_{o.c.}$	10kV				
Protection level (1,2/50μs wave):	$U_p$	9V	18V	20V	35V	40V
Protection level at $I_n$ (8/20μs wave):	$U_p(I_n)$	13V	25V	25V	40V	45V
Response time:	$t_r$	< 10ns				
Working temperature:	$\vartheta$	-40°C to +70°C				
SPD location:		Indoor				
Type of connection:		Series (two ports)				
Number of poles:		2				
Dimensions:		13,5 x 90 x 80mm (0,75 mod. DIN43880)				
Fixing:		DIN rail				
Enclosure material:		Polyamide				
Enclosure protection:		IP20				
Insulation resistance:		> 10 <sup>14</sup> Ω				
Autoextinguish enclosure:		V-0 Type according to UNE-EN 60707 (UL94)				
Connections:		Maximum Section: 4mm <sup>2</sup>				
Certificated tests according to: IEC 61643-1, EN 61643-11						
Complies with requirements of: UL 1449						
Relevant standards: UNE 21186, NFC 17102, IEC 62305						

### Accessories



- AT-8506: ATVOLT 5 Mod.: 5V<sub>DC</sub> lines
- AT-8513: ATVOLT 12 Mod.: 12V<sub>DC</sub> lines
- AT-8516: ATVOLT 15 Mod.: 15V<sub>DC</sub> lines
- AT-8525: ATVOLT 24 Mod.: 24V<sub>DC</sub> lines
- AT-8531: ATVOLT 30 Mod.: 30V<sub>DC</sub> lines

### Dimensions



## AT85 Series

### Technical Datasheet

Reference		ATVOLT 48 AT-8548	ATVOLT 60 AT-8560	ATVOLT 80 AT-8580	ATVOLT 110 AT-8510
Protection categories according to REBT:		I, II, III, IV			
Type of tests according to EN 61643-11:		Type 3			
Nominal voltage:	$U_n$	48V <sub>DC</sub>	60V <sub>DC</sub>	80V <sub>DC</sub>	110V <sub>DC</sub>
Maximum working voltage:	$U_c$	65V <sub>DC</sub>	72V <sub>DC</sub>	96V <sub>DC</sub>	132V <sub>DC</sub>
Maximum working current:	$I_L$	3A			
Nominal discharge current (wave 8/20μs):	$I_n$	5kA			
Combined wave tension:	$U_{o.c.}$	10kV			
Protection level (1,2/50μs wave):	$U_p$	70V	90V	120V	160V
Protection level at $I_n$ (8/20μs wave):	$U_p(I_n)$	75V	100V	135V	180V
Response time:	$t_r$	< 10ns			
Working temperature:	$\vartheta$	-40°C to +70°C			
SPD location:		Indoor			
Type of connection:		Series (two ports)			
Number of poles:		2			
Dimensions:		13,5 x 90 x 80mm (0,75 mod. DIN43880)			
Fixing:		DIN rail			
Enclosure material:		Polyamide			
Enclosure protection:		IP20			
Insulation resistance:		> 10 <sup>14</sup> Ω			
Autoextinguish enclosure:		V-0 Type according to UNE-EN 60707 (UL94)			
Connections:		Maximum Section: 4mm <sup>2</sup>			
Certificated tests according to: IEC 61643-1, EN 61643-11					
Complies with requirements of: UL 1449					
Relevant standards: UNE 21186, NFC 17102, IEC 62305					

### Accessories



- AT-8550: ATVOLT 48 Mod.: 48V<sub>DC</sub> lines
- AT-8561: ATVOLT 60 Mod.: 60V<sub>DC</sub> lines
- AT-8581: ATVOLT 80 Mod.: 80V<sub>DC</sub> lines
- AT-8511: ATVOLT 110 Mod.: 110V<sub>DC</sub> lines

### Dimensions

