



> PROTECTION OF SPECIAL EQUIPMENT POWER SUPPLY

> ATVOLT SERIES

> ATVOLT

Coordinated direct current power supply for overvoltage protection devices



Tested and certified as a **type 3** protector according to the standard EN 61643-11 and GUÍA-BT-23 from the REBT. Suitable for **categories I, II, III and IV equipment** according to the REBT.

- > Protection in common and differential mode is advisable for this type of line.
- > Includes removable module that can be replaced in the event of a breakdown or fault without needing to disconnect the wiring. The power supply is not interrupted when replacing the module.
- > It has a radiofrequency receptor in order to carry out maintenance using only an emitter kit. When the RF SPD Tester is applied and the protector is working, the LED flickers green. If the cartridge is damaged, the LED does not light up.
- > Wide variety of protectors for different working voltages.
- > It remains inactive in normal conditions, without affecting normal operation of the line and or producing leakages.
- > Discharge takes place in an internal encapsulated element, with no external flash.
- > Low residual voltage for all operating voltages.
- > Very fast response time.
- > Mechanical connection of conductors using screws, in order to absorb a higher amount of overvoltage.

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



Connection to earth is a must. Earthing in the whole installation must be bonded either directly or by a spark gap and resistance should be lower than 10 Ω . If the indications on this datasheet are not fulfilled during use or installation of the protectors, the protection provided by this device could be compromised.

- > **AT-8505:** ATVOLT 5: 5 V_{DC} lines
- > **AT-8512:** ATVOLT 12: 12 V_{DC} lines
- > **AT-8515:** ATVOLT 15: 15 V_{DC} lines
- > **AT-8524:** ATVOLT 24: 24 V_{DC} lines
- > **AT-8530:** ATVOLT 30: 30 V_{DC} lines
- > **AT-8548:** ATVOLT 48: 48 V_{DC} lines
- > **AT-8560:** ATVOLT 60: 60 V_{DC} lines
- > **AT-8580:** ATVOLT 80: 80 V_{DC} lines
- > **AT-8510:** ATVOLT 110: 110 V_{DC} lines



> **AT-3501: RF SPD TESTER:**
Radiofrequency SPD tester

Effective protection for **DC supply lines** in modules containing **medium and tight coordinated protection** for one pair of wires.

> INSTALLATION

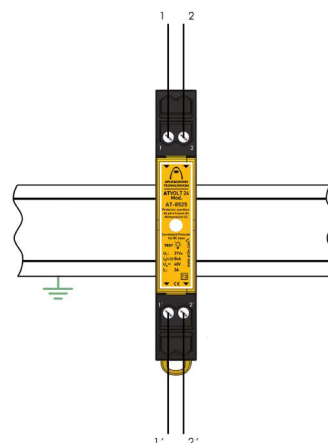
ATVOLT surge protection devices are to be installed **in series** with the DC supply line, cutting the cables and connecting the positive and negative terminals to the corresponding connectors. It is very important to pay close attention to these connections, since a wrong connection could cause short-circuits in the power supply.

It is also essential to correctly connect the input and output terminals. Otherwise the protector components will not work properly.

It is essential to connect the DIN rail to the earth termination system, where the current associated with the overvoltage will have to be channelled.

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

The power should be disconnected during protector installation.





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> TECHNICAL DATASHEET

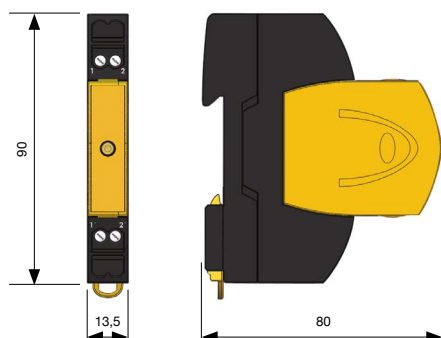
Reference:		ATVOLT 5 AT-8505	ATVOLT 12 AT-8512	ATVOLT 15 AT-8515	ATVOLT 24 AT-8524	ATVOLT 30 AT-8530
Protection categories according to the REBT:		I, II, III, IV				
Type of tests according to EN 61643-11:		Type 3				
Nominal voltage:	U_n	5 V _{DC}	12 V _{DC}	15 V _{DC}	24 V _{DC}	30 V _{DC}
Maximum continuous operating voltage:	U_c	7 V _{DC}	15 V _{DC}	18 V _{DC}	31 V _{DC}	37 V _{DC}
Maximum operating current:	I_L	3 A				
Nominal discharge current per pole (8/20 μ s):	I_n	5 kA				
Combined wave voltage:	$U_{o.c.}$	10 kV				
Protection level at I_n : 8/20 μ s wave	$U_p(I_n)$	100 V			120 V	150 V
Response time:	t_r	< 10 ns				
Working temperature:	θ	-40 °C to +70 °C				
Protector location:		Indoor				
Type of connection:		Series (two ports)				
No. of poles:		2				
Dimensions:		13.5 x 90 x 80 mm (0.75 modules DIN 43880)				
Fixing:		DIN Rail				
Enclosure material:		Polyamide				
Enclosure protection:		IP20				
Insulation resistance:		> 10 ¹⁴ Ω				
Self-extinguishing enclosure:		V-0 Type according to UNE-EN 60707 (UL94)				
Connections:		4 mm ² maximum section				

Certificated tests according to: UNE-EN 61643-11

Complies with requirements of: UL 1449

Relevant standards: UNE 21186, NF C 17-102, IEC 62305

> DIMENSIONS (MM)



> ACCESSORIES



- > AT-8506: ATVOLT 5 Mod.: 5 V_{DC} lines
- > AT-8513: ATVOLT 12 Mod.: 12 V_{DC} lines
- > AT-8516: ATVOLT 15 Mod.: 15 V_{DC} lines
- > AT-8525: ATVOLT 24 Mod.: 24 V_{DC} lines
- > AT-8531: ATVOLT 30 Mod.: 30 V_{DC} lines



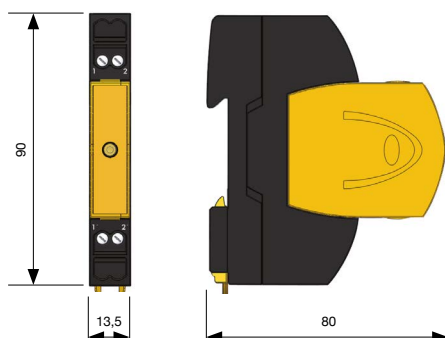
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> TECHNICAL DATASHEET

Reference:		ATVOLT 48 AT-8548	ATVOLT 60 AT-8560	ATVOLT 80 AT-8580	ATVOLT 110 AT-8510
Protection categories according to the REBT:		I, II, III, IV			
Type of tests according to EN 61643-11:		Type 3			
Nominal voltage:	U _n	48 V _{DC}	60 V _{DC}	80 V _{DC}	110 V _{DC}
Maximum continuous operating voltage:	U _c	65 V _{DC}	72 V _{DC}	96 V _{DC}	132 V _{DC}
Maximum operating current:	I _L	3 A			
Nominal discharge current per pole (8/20 μs):	I _n	5 kA			
Combined wave voltage:	U _{o.c.}	10 kV			
Protection level for I _n (8/20 μs wave):	U _p (I _n)	240 V	300 V	400 V	
Response time:	t _r	< 10 ns			
Working temperature:	θ	-40 °C to +70 °C			
Protector location:		Indoor			
Type of connection:		Series (two ports)			
No. of poles:		2			
Dimensions:		13.5 x 90 x 80 mm (0.75 modules DIN 43880)			
Fixing:		DIN Rail			
Enclosure material:		Polyamide			
Enclosure protection:		IP20			
Insulation resistance:		> 10 ¹⁴ Ω			
Self-extinguishing enclosure:		V-0 Type according to UNE-EN 60707 (UL94)			
Connections:		4 mm² maximum section			
Certificated tests according to: UNE-EN 61643-11					
Complies with requirements of: UL 1449					
Relevant standards: UNE 21186, NF C 17-102, IEC 62305					

> DIMENSIONS (MM)



> ACCESSORIES



- > AT-8550: ATVOLT 48 Mod.: 48 V_{DC} lines
- > AT-8561: ATVOLT 60 Mod.: 60 V_{DC} lines
- > AT-8581: ATVOLT 80 Mod.: 80 V_{DC} lines
- > AT-8511: ATVOLT 110 Mod.: 110 V_{DC} lines