

DC POWER SUPPLY SPD

ATVOLT P

- AT-8590: ATVOLT P5: 5V_{DC} lines
- AT-8514: ATVOLT P12: 12V_{DC} lines
- AT-8526: ATVOLT P24: 24V_{DC} lines
- AT-8549: ATVOLT P48: 48V_{DC} lines



Installation

ATVOLT P Surge Protective Devices are to be installed **in parallel** connected to positive and negative line.

ATVOLT P can be installed as single protection or in combination with other protectors that withstand higher discharge currents. In this case, it is necessary that both are separated by at least 10 meter cable or, if this is not possible, by a decoupling inductor ATLINK, in order to achieve a **correct coordination** between them.

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

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



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

Tested and certified as **Type 2** 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.
- 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.
- Discharge takes place in an internal encapsulated element, with no external flash.
- Mechanic connection for conductors through screws, which allows absorbing a highest amount of voltage.
- Possibility of connection to a M5 fork terminal
- Suitable for TT, TN-C and TN-S systems.
- Coordinable with other SPDs such as ATSHOCK and ATCOVER.
- Quick response

ATVOLT P 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.*

AT85 Series

Technical Datasheet

Reference		ATVOLT P5 AT-8590	ATVOLT P12 AT-8514	ATVOLT P24 AT-8526	ATVOLT P48 AT-8549
Protection categories according to REBT:		I, II, III, IV			
Type of tests according to EN 61643-11:		Type 2+3			
Nominal voltage:	U_n	5V _{DC}	12V _{DC}	24V _{DC}	48V _{DC}
Maximum working voltage:	U_c	7V _{DC}	15V _{DC}	31V _{DC}	65V _{DC}
Nominal discharge current (wave 8/20μs):	I_n	10kA			
Maximum discharge current (8/20μs wave):	I_{max}	20kA			
Combined wave tension:	$U_{o.c.}$	6kV			
Protection level at I_n (8/20μs wave):	$U_p(I_n)$	500V	570V	630V	730V
Response time:	t_r	< 25ns			
Working temperature:	ϑ	-40°C to +70°C			
SPD location:		Indoor			
Type of connection:		Parallel (one port)			
Number of poles:		2			
Dimensions:		36 x 90 x 80mm (2 mod. DIN43880)			
Fixing:		DIN rail			
Enclosure material:		Polyamide			
Enclosure protection:		IP20			
Insulation resistance:		> 10 ¹⁴ Ω			
Autoextinguish enclosure:		V-0 Type according to UNE-EN 60707 (UL94)			
Connections:		Min/Max section multi-stranded: 4 / 35 mm ² (11/2 AWG) Min/Max section single-stranded: 1 / 35 mm ² (17/2 AWG)			
Certificated tests according to: IEC 61643-1, EN 61643-11					
Complies with requirements of: UL 1449					
Relevant standards: UNE 21186, NFC 17102, IEC 62305					

Dimensions

