AT85 Series - ATVOLT

ATVOLT

DC Power Supply SPD

Efficient protection for DC supply lines in modules containing coordinated protection for one pair of lines Protection for DC lines and also for the equipment connected to these lines..

- 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.
- Low residual voltage for all working voltages.
- Very fast response.
- Mechanic connection for conductors.

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

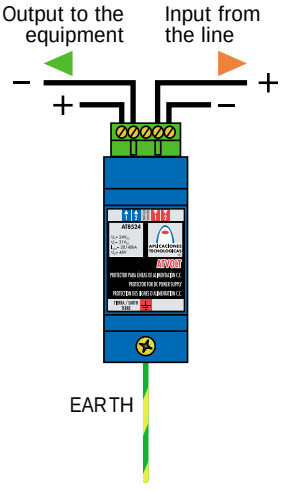
AT85 SERIES- ATVOLT

AT8505 ATVOLT 5:
5VDC lines
AT8512 ATVOLT 12:
12VDC lines
AT8515 ATVOLT 15:
15VDC lines
AT8524 ATVOLT 24:
24VDC lines
AT8530 ATVOLT 30:
30VDC lines
AT8548 ATVOLT 48:
48VDC lines
AT8560 ATVOLT 60:
60VDC lines
AT8580 ATVOLT 80:
80VDC lines
AT8510 ATVOLT 110:
110VDC lines

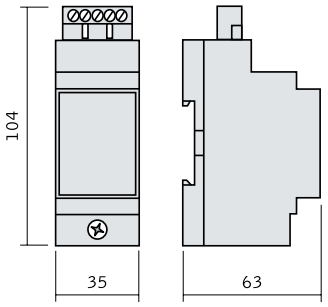
INSTALLATION

*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 special 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.*



***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.*



AT8505 ATVOLT 5: 5V_{DC} lines
AT8512 ATVOLT 12: 12V_{DC} lines
AT8515 ATVOLT 15: 15V_{DC} lines
AT8524 ATVOLT 24: 24V_{DC} lines
AT8530 ATVOLT 30: 30V_{DC} lines

		ATVOLT 5	ATVOLT 12	ATVOLT 15	ATVOLT 24	ATVOLT 30
Reference		AT8505	AT8512	AT8515	AT8524	AT8530
Nominal voltage:	U_n	5V_{DC}	12V_{DC}	15V_{DC}	24V_{DC}	30V_{DC}
Maximum continuous operating voltage:	U_c	7V_{DC}	15V_{DC}	18V_{DC}	31V_{DC}	37V_{DC}
Nominal discharge current (8/20µs wave):	I_n	10kA / 20kA				
Maximum discharge current (8/20µs wave):	I_{max}	20kA / 40kA				
Impulse current (10/350µs wave):	I_{imp}	4kA / 8kA				
Protection level (1,2/50µs):	U_p	9V	18V	20V	35V	40V
Protection level at I_n (8/20µs):	$U_p(I_n)$	13V	25V	25V	40V	45V
Response time:	t_r	< 1ns				
SPD location:		Indoor				
Type of connection:		Series (two ports)				
Mounting method:		Fixed				
Working temperature:	ϑ	-55ºC to +85ºC				
Dimensions:		35 x 104 x 63mm (2 mod. DIN43880)				
Fixing:		DIN Rail				
Enclosure material		Polycarbonate				
Enclosure protection:		IP20				
Insulation Resistance:		> $10^{14}\Omega$				
Autoextinguish enclosure:		V-0 Type according to UNE-EN 60707 (UL94)				
Connections to line:		Maximum section 2,5mm^2 (AWG 9)				
Connections to ground:		Max/Min section multi-stranded: 16 / 45mm^2 (5/1 AWG) Max/Min section single-stranded: 4 / 45mm^2 (11/1 AWG)				

Certificated tests according to: IEC 61643-21 / NFC 61-0740

Relevant standards: UNE21186 / NFC 17102 / UNE21185 / IEC61024-1 / IEC61312-3

AT8548 ATVOLT 48: 48V_{DC} lines
AT8560 ATVOLT 60: 60V_{DC} lines
AT8580 ATVOLT 80: 80V_{DC} lines
AT8510 ATVOLT 110: 110V_{DC} lines

		ATVOLT48	ATVOLT60	ATVOLT80	ATVOLT110
Reference		AT8548	AT8560	AT8580	AT8510
Nominal voltage:	U_n	48V_{DC}	60V_{DC}	80V_{DC}	110V_{DC}
Maximum continuous operating voltage:	U_c	65V_{DC}	72V_{DC}	96V_{DC}	132V_{DC}
Nominal discharge current (8/20µs wave):	I_n	10kA / 20kA			
Maximum discharge current (8/20µs wave):	I_{max}	20kA / 40kA			
Impulse current (10/350µs wave):	I_{imp}	4kA / 8kA			
Protection level (1,2/50µs):	U_p	70V	90V	120V	160V
Protection level at I_n (8/20µs):	$U_p(I_n)$	75V	100V	135V	180V
Response time:	t_r	< 1ns			
SPD location:		Indoor			
Type of connection:		Series (two ports)			
Mounting method:		Fixed			
Working temperature:	ϑ	-55ºC to +85ºC			
Dimensions:		35 x 104 x 63mm (2 mod. DIN43880)			
Fixing:		DIN rail			
Enclosure material:		Polycarbonate			
Enclosure protection:		IP20			
Insulation resistance:		> $10^{14}\Omega$			
Autoextinguish enclosure:		V-0 Type according to UNE-EN 60707 (UL94)			
Connections to line:		Maximum section 2,5mm^2 (AWG 9)			
Connections to ground:		Max/Min section multi-stranded: 16 / 45mm^2 (5/1 AWG) Max/Min section single-stranded: 4 / 45mm^2 (11/1 AWG)			

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