

AT81 Series - ATCOVER

ATCOVER

Multi-pole protector for power supply lines

Efficient protection against transient overvoltages for TT and TNS electrical supply lines in only one device. Medium and low internal coordination protection stages, recommended in Regulation of Low Voltages (RBT2002 ITC23).

SERIES AT81 – ATCOVER

AT8133 ATCOVER 380T:

three-phase, 380V_{ac} line

AT8132 ATCOVER 220T:

three-phase, 220V_{ac} line

Tested and certified as **Class I, II and III** according to regulations IEC61643-1, EN61643-11. Suitable for **Categories I, II, III and IV** equipment according to RBT2002.

- Discharge takes place in an internal encapsulated element, with no external flash, without affecting the normal working of the line and without leakage.
- Coordinable with other SPDs such as ATSHOCK, ATSHIELD and ATSUB series.
- Both common and differential protection for the three lines and neutral.
- No interruptions in power supply, thus avoiding data loss and other inconvenients for the user.
- Low residual voltage.
- With remote control and light alarm.
- Robust connectors, suitable for all type of connection.



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

INSTALLATION

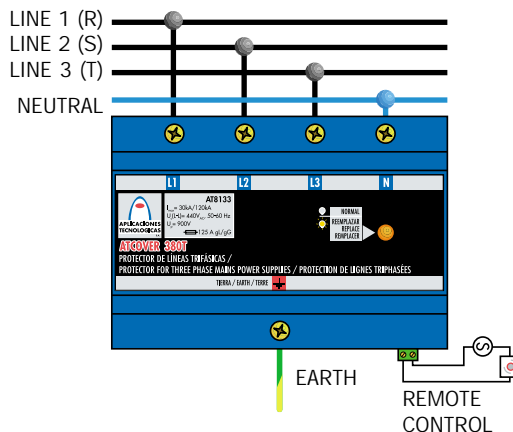
ATCOVER Surge Protective Devices are to be installed **in parallel** with the Low Voltage supply line, connected to line/s, neutral and ground.

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

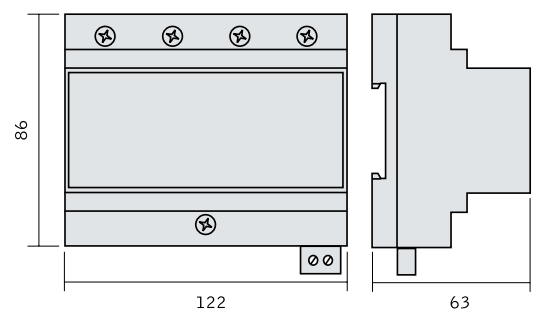
ATCOVERs can be installed as single protection or in combination with other protectors that withstand higher discharge currents. In this case, it is necessary that both are separated by at least 10 meter cable or, if this is not possible, by a decoupling inductor ATLINK, in order to achieve a **correct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

Their installation is recommended in:

- Main switchboards,
- Secondary boards supplying sensitive systems.
- Power supply of important equipment such as UPSs, PLCs, etc.



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.





AT8133 ATCOVER 380T:

three-phase, 380V_{AC} line

AT8132 ATCOVER 220T:

three-phase, 220V_{AC} line

	ATCOVER 380T		ATCOVER 220T	
	AT8133		AT8132	
Reference				
Protection categories according to RBT2002:	I, II, III, IV			
Nominal voltage:	U _n	380V _{AC} (L-L) 220V _{AC} (L-N, L-G)	220V _{AC} (L-L) 130V _{AC} (L-N, L-G)	
Maximum continuous operating voltage:	U _c	440V _{AC} (L-L) 255V _{AC} (L-N, L-G)	255V _{AC} (L-L) 145V _{AC} (L-N, L-G)	
Nominal frequency:	50/60Hz			
Nominal discharge current (8/20μs wave):	I _n	10kA / 40kA	10kA / 40kA	
Maximum discharge current (8/20μs wave):	I _{max}	30kA / 120kA	30kA / 120kA	
Lightning impulse current (10/350μs wave):	I _{imp}	6kA / 24kA	6kA / 24kA	
Protection level (1,2/50μs): L - N, L(N) - E	U _p	700V	500V	
Protection level at I _n (8/20μs): L - N, L(N) - E	U _p (I _n)	900V	700V	
Residual voltage with combination wave 6kV/3kA (L-N, L-G): U _{o.c.}		700V	450V	
Response time:	t _r	< 25ns		
Backup fuse ⁽¹⁾ :		125A gL/gG		
Maximum short-circuit current:		25kA (for maximum fuse)		
SPD location:		Indoor		
Type of connection:		Parallel (one port)		
Mounting method:		Fixed		
Working temperature:	θ	-55°C to +85°C		
Dimensions:		122 x 86 x 63mm (7 mod. DIN43880)		
Fixing:		DIN Rail		
Enclosure material:		Polycarbonate		
Enclosure protection:		IP20		
Insulation resistance:		> 10 ¹⁴ Ω		
Autoextinguish enclosure:		V-0 type according to UNE-EN 60707 (UL94)		
Connections L/N/G:		Max/Min section multi-stranded: 16 / 45mm ² (5/1 AWG) Max/Min section single-stranded: 4 / 45mm ² (11/1 AWG)		
Open, voltage-free contact for the remote control				
Connection:		Maximum section single-wire / multi-wire: 1,5mm ²		
Contact output:		Normally open		
Working voltage:		250V _{AC} (Maximum working voltage of the alarm supply)		
Maximum current:		2A (Maximum current of the alarm supply)		

Certificated tests according to: IEC 61643-1/BS 6651/EN 61000-4-5/NFC 61-0740/EN 61643-11/IEC 61312-3

Complies with requirements of: UL 1449

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

(1) Needed in cases where there is no equal or less nominal current installed "upstream" from the protector.