

## AT81 Series - ATCOVER TNC

ATCOVER TNC

# Multi-pole protector for power supply lines

Efficient protection against transient overvoltages for TN-C and IT power supply lines in only one device. Medium and low internal coordination protection stages, recommended in Regulation of Low Voltages (RBT2002 ITC23).

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 earth.

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.

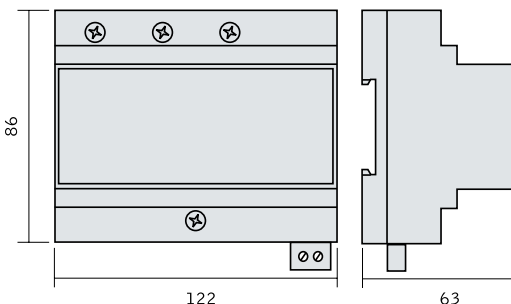
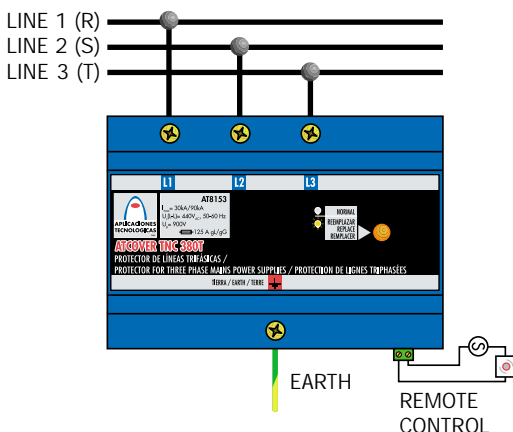
Their installation is recommended in:

- Main switchboard,
- 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  $10\Omega$ . 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.

### AT81 SERIES - ATCOVER

- AT8153 ATCOVER TNC 380T:** three-phase with no neutral, 380V<sub>AC</sub> line
- AT8152 ATCOVER TNC 220T:** three-phase with no neutral, 220V<sub>AC</sub> line




**AT8153 ATCOVER TNC 380T:**

 three-phase with no neutral, 380V<sub>AC</sub> line

**AT8152 ATCOVER TNC 220T:**

 three-phase with no neutral, 220V<sub>AC</sub> line

Reference	ATCOVER TNC 380T		ATCOVER TNC 220T	
	AT8153		AT8152	
Protection categories according to RBT2002:	I, II, III, IV			
Nominal voltage:	U <sub>n</sub>	380V <sub>AC</sub> (L-L) 220V <sub>AC</sub> (L-G)	220V <sub>AC</sub> (L-L) 130V <sub>AC</sub> (L-G)	
Maximum continuous operating voltage:	U <sub>c</sub>	440V <sub>AC</sub> (L-L) 255V <sub>AC</sub> (L-G)	255V <sub>AC</sub> (L-L) 145V <sub>AC</sub> (L-G)	
Nominal frequency:	50/60Hz			
Nominal discharge current (8/20μs wave):	I <sub>n</sub>	10kA / 30kA	10kA / 30kA	
Maximum discharge current (8/20μs wave):	I <sub>max</sub>	30kA / 90kA	30kA / 90kA	
Lightning impulse current (10/350μs wave):	I <sub>imp</sub>	6kA / 18kA	6kA / 18kA	
Protection level (1,2/50μs): L - N, L(N) - E	U <sub>p</sub>	700V	500V	
Protection level at I <sub>n</sub> (8/20μs): L - N, L(N) - E	U <sub>p</sub> (I <sub>n</sub> )	900V	700V	
Residual voltage with combination wave 6kV/3kA (L-N, L-E): U <sub>o.c.</sub>		700V	450V	
Response time:	t <sub>r</sub>	< 25ns		
Backup fuse <sup>(1)</sup> :		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 <sup>14</sup> Ω		
Autoextinguish enclosure:		V-0 type according to UNE-EN 60707 (UL94)		
Connections L/N/G:		Max/Min section multi-stranded: 16 / 45mm <sup>2</sup> (5/1 AWG) Max/Min section single-stranded: 4 / 45mm <sup>2</sup> (11/1 AWG)		
<b>Open, voltage-free contact for the remote control</b>				
Connection:		Maximum section single-wire / multi-wire: 1,5mm <sup>2</sup>		
Contact output:		Normally open		
Working voltage:		250V <sub>AC</sub> (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.