



> PROTECTION OF POWER SUPPLY LINES

> ATCOVER SERIES

> ATCOVER TNC

Compact protector for TNC and IT three-phase power supply lines in common and differential mode



- > **AT-8153 ATCOVER TNC 400T**: three-phase 400 V_{AC} lines
- > **AT-8152 ATCOVER TNC 230T**: three-phase 230 V_{AC} lines

Effective protection against transient overvoltages for TT and IT electrical supply lines in only one device. Internal coordination of **medium and tight** protection according to the cascade protection recommended in the Spanish Low Voltage Regulations (REBT ITC23).

Tested and certified as a **type 2 and 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.

- > Discharge takes place in an internal encapsulated element with no external flash.
- > Double connection in order to facilitate wiring (limited to 63 A).
- > It remains inactive in normal conditions, without affecting the normal working of the line or producing leakages.
- > Can be coordinated with other ATSHOCK, ATSHIELD and ATSUB series protectors.
- > Both common and differential protection for the three lines and neutral.
- > No interruptions in power supply, thus no data loss or any other inconveniences for the user.
- > Low residual voltage.
- > Double 'no protection' warning by means of a light indicating faults and a green light indicating good operation.
- > With remote control alarm.
- > Robust connectors, suitable for all types of connection.

ATCOVER protectors have been tested in **official, 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.

> INSTALLATION

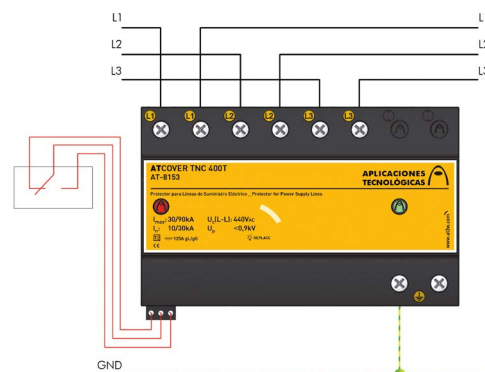
ATCOVER surge protection devices are to be installed **in parallel** with the low voltage supply line, connected to the phases and ground. Installation should be carried out **without power running through the line**.

When connecting the protector, the green light must light up indicating proper operation. If the fault warning lights up or the green pilot turns off, replace the protector.

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

They are recommended for installation in:

- > Secondary boards supplying systems sensitive to overvoltages (electronic or computer systems).
- > Power supply of important equipment such as UPSs, PLCs, etc.





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> TECHNICAL DATASHEET

Reference:		ATCOVER 400T AT-8153	ATCOVER 230T AT-8152
Protection categories according to the REBT:		I, II, III, IV	
Type of tests according to EN 61643-11:		Type 2 + 3	
Nominal voltage:	U _n	400 V _{AC} (L-L) 220 V _{AC} (L-N, L-GND)	230 V _{AC} (L-L) 130 V _{AC} (L-N, L-GND)
Maximum continuous operating voltage:	U _c	440 V _{AC} (L-L) 275 V _{AC} (L-GND)	275 V _{AC} (L-L) 150 V _{AC} (L-GND)
Nominal frequency:		50 - 60 Hz	
Nominal discharge current per pole (8/20 μs wave):	I _n	10 kA	
Maximum discharge current per pole (8/20 μs wave):	I _{max}	30 kA	
Protection level (1.2/50 μs wave):	U _p	700 V	500 V
Protection level at I _n (8/20 μs wave):	U _p (I _n)	900 V	700 V
Combined wave voltage:	U _{o.c.}	6 kV	
Residual voltage with 6 kV/3 kA combination wave:		700 V	450 V
Response time:	t _r	< 25 ns	
Backup fuses ⁽¹⁾ :		125 A gL/gG	
Maximum short-circuit current:		25 kA (for maximum fuse)	
Working temperature:	ϑ	-40 °C to +70 °C	
Protector location:		Indoor	
Type of connection:		Parallel (one port)	
No. of poles:		3	
Dimensions:		144 x 90 x 80 mm (8 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 L/N/G:		Min/Max multi-stranded section: 4 / 35 mm ² Min/Max single-stranded section: 1 / 35 mm ²	
Voltage-free contact for the remote control			
Connection:		Max. single-stranded/multi-stranded section: 1.5 mm ²	
Contact output:		Switch	
Operating voltage:		250 V _{AC} (Maximum working voltage of the alarm supply)	
Maximum current:		2 A (Maximum current of the alarm power supply)	
Certificated tests according to: UNE-EN 61643-11 Complies with requirements of: UL 1449 Relevant standards: UNE 21186, NF C 17-102, IEC 62305			

(1) Required in cases where there is higher nominal current installed upstream from the protector

> DIMENSIONS (MM)

