

## AT82 Series

# SINGLE-POLE PROTECTOR FOR POWER SUPPLY LINES



## ATSUB 100

**AT-8256 ATSUB 100:**  
Line protection. Max current of 100kA at  $U_n=230V_{ac}$

**AT-8257 ATSUB 100-120:**  
Line protection. Max current of 100kA at  $U_n=120V_{ac}$

**AT-8259 ATSUB 100-N:**  
Neutral protection. Max current of 100kA

Efficient protection against transient overvoltages, using Metal Oxide Varistors, for Power Supply lines with or without neutral. **Medium** protection according to scaled protection recommended in Low Voltage Regulation (REBT ITC23).

Tested and Certified as Type **1 and 2** protectors according to EN 61643-11 and GUIA-BT-23 from REBT. Suitable for equipment of **categories I, II, III and IV** according to ITC-BT-23 form REBT.

- Containing Zinc Oxide Varistors, able to withstand very high currents.
- Short response time.
- Don't produce deflagration.
- Single-pole protection.
- Do not cause at any moment any interruption in the supply lines.
- Thermodynamic control device and light alarm.

AT82 Series SPDs have been tested in official, independent laboratories, obtaining their characteristics according to relevant standards (related in the table).

There exists the possibility of selecting a protector for the working voltage in each particular case. In the technical datasheet the 230V and 130V versions of nominal voltage are included as common examples.

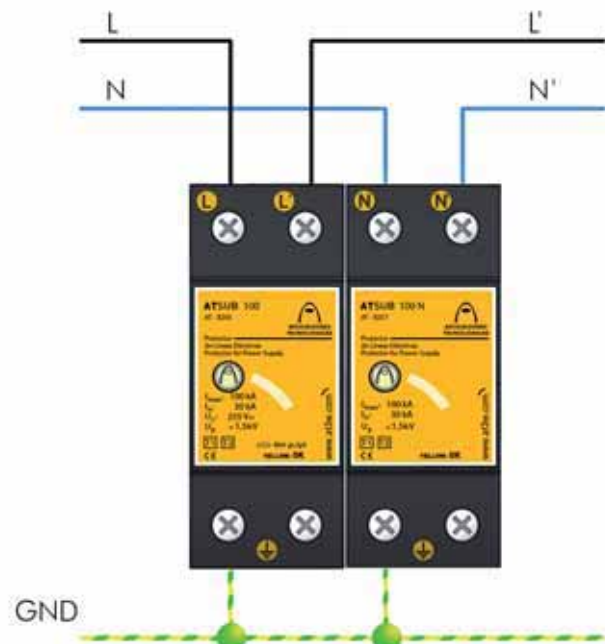
**⚠** Earth connection is a must. Earthing in all the installation must be bonded either directly or by a spark gap and resistance should be lower than  $10\Omega$ . If the indications of this datasheet are not fulfilled during the use or installation of the SPDs, the protection assured by this device could be endangered.

**ATSUB 100 - 120**  
Max. discharge current in kA      Voltage line-ground

## Installation

ATSUB Surge Protective Devices are to be installed in parallel with the Low Voltage supply line, connected to the line (or neutral) to be protected and ground.

The **power should be disconnected** during the installation of the SPD. Their installation is recommended in places where important overvoltages can occur after the main switchboard and when these lines are not connected to very sensitive equipment.



## AT82 Series

### Technical Datasheet

Reference		ATSUB 100 AT-8256	ATSUB 100-120 AT-8257	ATSUB 100-N AT-8259
Protection categories according to REBT:			I, II, III, IV	
Type of tests according to EN 61643-11:			Type 1 + 2	
Nominal Voltage:	$U_n$	230V <sub>AC</sub>	120V <sub>AC</sub>	-
Maximum continuous operating voltage:	$U_c$	255V <sub>AC</sub>	140V <sub>AC</sub>	-
Nominal frequency:			50 - 60Hz	
Impulse current (10/350μs wave):	$I_{imp}$		24kA	60kA
Nominal discharge current (8/20μs wave):	$I_n$		30kA	65kA
Maximum current (8/20μs wave):	$I_{max}$		100kA	
Protection level for 1,2/50μs wave:	$U_p$	900V	700V	1.5kV
Response time:	$t_r$		< 25ns	
Backup fuse <sup>(1)</sup> :			125A gL/gG	
Maximum short-circuit current:			25kA (for maximum fuse)	
Working temperature:	ϑ		-40°C to +70°C	
SPD location:			Indoor	
Type of connection:			Parallel (one port)	
Dimensions:			72 x 90 x 80mm (4 mod. DIN43880)	
Fixing:			DIN Rail	
Enclosure material:			Polyamide	
Enclosure protection:			IP20	
Insulation resistance:			> 10 <sup>14</sup> Ω	
Autoextinguish enclosure:			V-0 Type according to UNE-EN 60707 (UL94)	
Connections L/N/GND:			Min/Max section multi-stranded: 4 / 35 mm <sup>2</sup> (11/2 AWG) Min/Max section single-stranded: 1 / 35 mm <sup>2</sup> (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				

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

### Dimensions

