



> PROTECTION OF POWER SUPPLY LINES

> ATSUB SERIES

> ATSUB100

Single-pole and pluggable protection for power supply lines



- > **AT-8256 ATSUB 100:** line protection.
Maximum current 100 kA a $U_n=230 V_{AC}$
- > **AT-8257 ATSUB 100-120:** line protection
Maximum current 100 kA a $U_n=120 V_{AC}$
- > **AT-8258 ATSUB 100-400:** line protection.
Maximum current 100 kA a $U_n=400 V_{AC}$
- > **AT-8259 ATSUB 100-N:** neutral protection.
Maximum current 100 kA

> NOMENCLATURE

ATSUB **100** - **120**
Max. discharge voltage in kA Line - ground nominal voltage

Effective protection against transient overvoltages, using metal oxide varistors, for power supply lines with or without a neutral. Medium protection according to the cascade protection recommended in the Spanish Low Voltage Regulations (REBT ITC23).

Tested and certified as a **type 1 and 2** 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.

- > Containing zinc oxide varistors, able to withstand very high currents.
- > Double connection in order to facilitate wiring (limited to 63 A).
- > Short response time.
- > Do not produce deflagration.
- > Single-pole protection.
- > Their activation causes no interruption in power supply.
- > Thermodynamic control device and visual alarm.

ATSUB series protectors have been tested in **official, independent laboratories**, obtaining their characteristics according to relevant standards (listed in the table). It is possible to select a protector for the alternating voltage suitable for each particular case.

> INSTALLATION

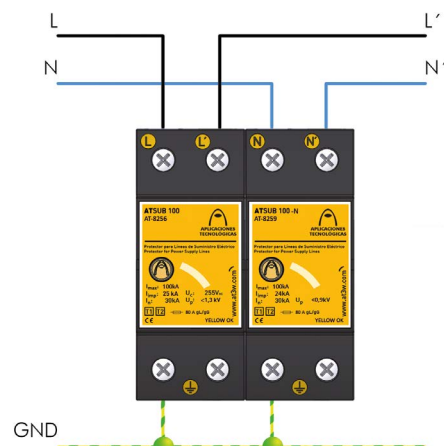
They are installed **in parallel** with the low voltage line, with connections to the phases that are to be protected (or neutral) and ground.

Installation should be carried out **without power running through the line**.

They are recommended for installations where large overvoltages can occur after the main switchboard and when these lines are not connected to very sensitive equipment.



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.





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> TECHNICAL DATASHEET

Reference:		ATSUB 100 AT-8256	ATSUB 100-120 AT-8257	ATSUB 100-400 AT-8258	ATSUB 100-N AT-8259
Protection categories according to the REBT:		I, II, III, IV			
Type of tests according to EN 61643-11:		Type 1 + 2			
Nominal voltage:	U_n	230 V _{AC}	120 V _{AC}	400 V _{AC}	-
Maximum continuous operating voltage:	U_c	275 V _{AC}	150 V _{AC}	460 V _{AC}	-
Nominal frequency:		50 - 60 Hz			
Impulse current (10/350 µs wave):	I_{imp}	25 kA			
Nominal discharge current (8/20 µs wave):	I_n	30 kA			
Maximum discharge current per pole (8/20 µs wave):	I_{max}	100 kA			
Protection level 1.2/50 µs wave:	U_p	1.3 kV	0.9 kV	1.5 kV	1.3 kV
Response time:	t_r	< 25 ns			
Backup fuse ⁽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)			
Dimensions:		36 x 90 x 80 mm (2 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			

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)

