



> PROTECTION OF POWER SUPPLY LINES

> ATSUB SERIES

> ATSUB140

Single-pole and pluggable protection for power supply lines



- > **AT-8214 ATSUB 140-230**: line protection.
Maximum current 140 kA a $U_n=230\text{ V}_{AC}$
- > **AT-8215 ATSUB 140-130**: line protection.
Maximum current 140 kA a $U_n=130\text{ V}_{AC}$
- > **AT-8213 ATSUB 140-400**: line protection.
Maximum current 140 kA a $U_n=400\text{ V}_{AC}$
- > **AT-8218 ATSUB 140-N**: neutral protection.
Maximum current 140 KA

> NOMENCLATURE

ATSUB **140** – **230**
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.
- > 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).

> INSTALLATION

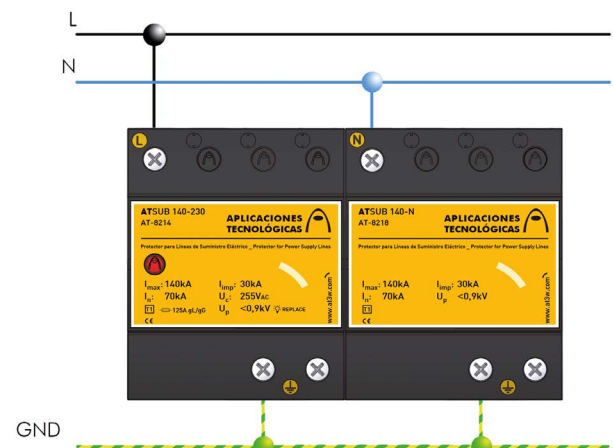
They are installed **in parallel** with the low voltage line, with connections to the phases that are to be protected (or to neutral) and to ground.

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 $10\ \Omega$. 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 140-230 AT-8214	ATSUB 140-400 AT-8213	ATSUB 140-130 AT-8215	ATSUB 140-N AT-8218
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}	400 V _{AC}	130 V _{AC}	-
Maximum continuous operating voltage:	U_c	275 V _{AC}	460 V _{AC}	150 V _{AC}	-
Nominal frequency:		50 - 60 Hz			
Impulse current (10/350 μ s wave):	I_{imp}	30 kA			
Nominal discharge current (8/20 μ s wave):	I_n	40 kA			
Maximum discharge current per pole (8/20 μ s wave):	I_{max}	140 kA			
Protection level 1.2/50 μ s wave:	U_p	900 V	1500 V	500 V	900 V
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:		72 x 90 x 80 mm (4 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)

