



> PROTECTION OF POWER SUPPLY LINES

> ATSUB SERIES

> ATSUB-D M 1DIN

Compact single-phase protection for domestic use



> **AT-8200 ATSUB-D M 1DIN:** peak current 15 kA U_n 230 V

Effective protection against transient overvoltages for single-line electrical supply lines with TT type neutral, using metal oxide varistors and gas discharge tubes. Medium protection according to the cascade protection recommended in the Spanish Low Voltage Regulations (REBT ITC23). Especially made to be installed in houses according to ITC-25 from REBT.

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.

- > Can be coordinated with other protectors such as ATSHOCK, ATSHIELD and ATCOVER series.
- > Made up of zinc oxide varistors and gas discharge tubes able to withstand very high currents.
- > Thermodynamic control device with mechanical warning. The warning light will be red if the protector is not in good condition.
- > Short response time.
- > Compact protection.

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** to the low voltage line, with connections to the phase, neutral and ground. Installation should be carried out **without power running through the line**.

When ATSUB protectors are installed as medium protection, they must be separated from the coarse and/or tight protectors 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 especially recommended for the main switchboard of houses according to article 16.3 from the REBT.



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-D M 1DIN AT-8200
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	230 V _{AC}
Maximum continuous operating voltage:	U_c	320 V _{AC}
Nominal frequency:		50 - 60 Hz
Nominal discharge current per pole (8/20 μ s wave)	I_n	5 kA
Maximum discharge current per pole (8/20 μ s wave):	I_{max}	15 kA
Protection level at I_n (8/20 μ s wave):	$U_p(I_n)$	1500 V
Response time:	t_r	< 25 ns
Backup fuses ⁽¹⁾ :		50 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:		2
Dimensions:		18 x 90 x 80 mm (1 module 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:		6 mm ² maximum section

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