

DELFIN · II 1/2D EX H TB IIIC T80°C(INT)/T95°C(EXT) DA/DB

Delfin MTL 301 1/2D



The MTL 301 1/2D is built for the stricter ATEX dust zones where an explosive dust atmosphere is likely during normal operation (Zone 21), and where a brushless motor ensures longer life under frequent or extended use. It is ideal for processes where dust is handled regularly close to production equipment, and where only single-phase power is available.

APPLICATIONS

- Continuous or frequent collection of combustible dust in Zone 21
- Emptying and cleaning of bag-filling stations in pharmaceutical or chemical production
- Production lines with regular dust generation close to equipment
- Cleaning of dust-filter units and cyclones in Zone 21 areas
- Process-adjacent dust collection where three-phase power is unavailable

Technical specifications

ATEX marking	II 1/2D Ex h tb IIIC T80°C(Int)/T95°C(ext) Da/Db
Internal / external zone	20 / 21
Motor type	1 brushless-motor (1,1 kW)
Airflow	215 m ³ /h
Vacuum	221 mbar (2250 mmH ₂ O)
Container	40 L
Sound pressure	74 dB(A)
Filter class	H class
Filter type	HEPA H14 (EN 1822), 99,995 % MPPS, 11.000 cm ²
Primary filter	Stjerne/taske polyester ANT M-klasse antistatisk, 4.000 cm ² , Ø 360 mm
Collection system	Synthetic safebag
Material	AISI 304
IP class	IP64
Power	1.1 kW
Current	8 A
Voltage	115/230 V / 50-60 Hz
Inlet	Diameter 50 mm
Dimensions (L x W x H)	440 x 420 x 840 mm
Weight	26 kg

Questions and answers

What is the difference between 1/2D and 1/3D?

Both have internal Zone 20, but the external zone differs. 1/2D is permitted in Zone 21 (explosive dust atmosphere likely during normal operation), while 1/3D is permitted only in Zone 22 (explosive dust atmosphere rare/short). 1/2D is therefore the stricter -- and more expensive -- class.

Why a brushless motor rather than bypass?

Brushless motors have no carbon brushes and therefore no spark generation in the motor. This yields both longer life and better suitability for continuous operation, matching Zone 21's requirements for equipment that may run during normal operation in the classified zone.

Can it be used in Zone 22?

Yes. A 1/2D-marked vacuum may also be used in less stringent zones such as Zone 22. The reverse does not apply: a 1/3D must NOT be used in Zone 21.

What EPL does it have?

Da/Db -- meaning Zone 20 (Da = high protection under continuous atmosphere) internally and Zone 21 (Db = high protection under likely atmosphere) externally. EPL stands for Equipment Protection Level and describes the equipment's protection level.

Contact and advisory

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