

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

Delfin MTL 451 1/2D



The MTL 451 1/2D is the mid-size ATEX sibling to the MTL 452 ACD, certified for Zone 21 with internal Zone 20. The model features a 45-litre container, a single-phase brushless motor at 115/230 V, and a large star/pocket filter (20,000 cm²) with manual cleaning. The brushless motor with no carbon brushes handles extended running times, and the stricter ATEX class Da/Db makes the model suited to process-adjacent cleaning in pharmaceutical or chemical production.

APPLICATIONS

- Mid-sized production areas in Zone 21 with regular dust generation
- Pharmaceutical or chemical production with longer running times
- Cleaning around cyclones and filter units in Zone 21
- Bag-filling stations where direct container emptying is acceptable
- Process-adjacent dust collection with higher capacity requirements

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	45 L
Sound pressure	74 dB(A)
Filter class	H class
Filter type	HEPA H14 (EN 1822), 99,995 % MPPS, 20.600 cm ²
Primary filter	Stjerne/taskefilter polyester ANT M-klasse antistatisk, 20.000 cm ² , Ø 420 mm -- manuel rystning
Collection system	Plastic bag
Material	AISI 304 (inox)
IP class	IP64
Power	1.1 kW
Current	8 A
Voltage	115/230 V / 50-60 Hz
Inlet	Diameter 80 mm
Dimensions (L x W x H)	550 x 690 x 1470 mm
Weight	57 kg

Questions and answers

What is the difference between the MTL 451 1/2D and MTL 452 ACD?

The MTL 451 1/2D is ATEX-certified for Zone 21 (II 1/2D, EPL Da/Db) with one brushless motor at 1.1 kW and 215 m³/h airflow. The MTL 452 ACD is ACD-certified (non-ATEX) with two bypass motors at 2.2 kW and 360 m³/h. Choose 451 1/2D if the area is classified as Zone 21 or stricter; choose 452 ACD if the area is not ATEX-classified but the dust is combustible.

Why a star/pocket filter?

The star/pocket filter has a larger total filter area than a cartridge filter and a lower air load per filter area (108 m³/m²/h). It suits tasks with large dust volumes over longer periods. Cleaning is done manually by shaking the filter -- robust and simple without compressed air.

What does the marking II 1/2D mean?

"II" means surface installation, "1" indicates the internal category (Zone 20), "2" indicates the external category (Zone 21 -- explosive dust atmosphere likely during normal operation), and "D" stands for dust. EPL Da/Db confirms high protection both internally and externally.

Can it be used in Zone 22?

Yes. A 1/2D-marked vacuum may also be used in Zone 22, as 1/2D is the stricter class. The reverse does not apply: a 1/3D must NOT be used in Zone 21.

Contact and advisory

PARTICULAIR

Particulair

Højtoften 12

2690 Karlslunde, Denmark

CVR: 34129894

Phone: (+45) 70 23 12 03

E-mail: sales@particulair.com

Web: particulair.eu

Product page: particulair.eu/ex-vac/en/atex-dust/mtl-451-1-2d/

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