DELFIN · II 1/3D EX H IIIC T80°C DA/DC

Delfin DM AIREX 25V 1/3D

The Delfin DM AIREX 25V 1/3D is the flagship of the AIREX range -- 25 venturi units deliver 590 m³/h airflow and 5000 mmH■O vacuum. 100-litre tank, 30,000 cm² star-pocket filter and 26,000 cm² HEPA H14. Notified-body certified to ATEX II 1/3D Ex h with internal Zone 20 per EN 17348:2022. Used where the task demands central suction on a large facility, high airflow through multiple simultaneous suction points, or rapid cleaning of large production halls. Air consumption is 2500 nl/min at 6 bar -- requires well-dimensioned compressor infrastructure.

APPLICATIONS

- Central vacuuming at large facilities with multiple simultaneous operators
- Rapid cleaning of large production halls in Zone 22
- Fixed suction installations requiring high airflow through long hoses
- Refineries, chemical plants and larger pharmaceutical factories
- Tasks where the DM AIREX 19V lacks sufficient airflow capacity

Technical specifications

ATEX marking	II 1/3D Ex h IIIC T80°C Da/Dc
Internal / external zone	20 / 22
Motor type	25 venturi-enheder, pneumatisk drift (trykluft)
Airflow	590 m³/h
Vacuum	490 mbar (5000 mmH_2O)
Container	100 L
Sound pressure	74 dB(A)
Filter class	H class
Filter type	HEPA H14 (EN 1822-5), 99,995 % ved MPPS, 26.000 cm² filterflade
Primary filter	Antistatisk polyester klasse ANT M (star/lommefilter, 30.000 cm², diameter 500 mm). Option: PTFE klasse M antistatisk.
Cleaning system	Manuel ryste-rensning af lommefilter
Collection system	Plastic bag
Material	Malet staal (AISI 304 som option)
Air consumption	2500 nl/min
Supply pressure	6 bar
Air supply hose	Diameter 12 mm
Venturi units	25 pcs
Inlet	Diameter 80 mm
Dimensions (L x W x H)	620 x 620 x 1600 mm
Weight	80 kg

Questions and answers

Why pneumatic venturi drive instead of an electric motor?

Venturi units have no moving parts, no brushes and no motor windings. That eliminates two things at once: a potential ignition source in an explosive atmosphere, and the maintenance burden of motor, bearings and cooling. The vacuum can run continuously for as long as compressed air is supplied, and there are no electrical components to certify or inspect. The trade-off is air consumption -- venturi makes most sense where compressed air is already available (production plants, refineries, pharmaceutical facilities).

What does the II 1/3D marking mean?

The marking reads as two digits: "1" is the internal category (Zone 20 inside the vacuum -- continuous dust atmosphere in the collection tank), and "3" is the external category (Zone 22 in the surrounding room -- rare or short-term dust atmosphere). "D" stands for dust. The internal Zone 20 certification is exactly what EN 17348:2022 has raised the bar on, and it is only obtained through notified-body certification.

What compressed-air installation is required?

The unit requires clean, dry compressed air at 6 bar with a 12 mm ID supply hose. Air consumption at full load is 2500 nl/min, which corresponds to a mid-range industrial compressor, so the installation must be able to sustain this. Always fit an air filter upstream to protect the venturi nozzles.

When is 25V overkill -- and when should I choose 19V instead?

25V consumes 2500 nl/min versus 19V's 1530 nl/min -- 63 % more compressed air for 27 % more airflow (590 vs 465 m³/h). If your compressed-air installation cannot sustain 2500 nl/min, or if the task can be handled with 465 m³/h, the DM AIREX 19V is the economical choice. Choose 25V only when airflow truly needs to go up -- for example very long central hoses or many parallel suction points.

Contact and advisory

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