

DELFIN · II 3D EX H TC III C T80°C (INT)/T165°C (EXT) DC

Delfin DG 50 EXP



The Delfin DG 50 EXP is the entry model in Delfin's 100-litre DG range for Zone 22: a robust industrial vacuum with a 4 kW side-channel blower, 420 m³/h airflow and 30,000 cm² primary star/pocket filter. Built on painted steel with an ABS accessory basket and self-certified per EN 17348:2022 in category 3D. It targets medium-sized ATEX productions where container volume and filter area matter more than compact mobility.

APPLICATIONS

- Medium-sized ATEX Zone 22 productions requiring 100 L collection
- Continuous operation in process plants with steady dust generation
- Wood, metal and chemical industry where container size reduces emptying frequency
- Fixed collection points with three-phase supply and mobile placement
- Cleaning of larger classified areas with longer shift intervals

Technical specifications

ATEX marking	II 3D Ex h tc IIIC T80°C (Int)/T165°C (Ext) Dc
Internal / external zone	22 / 22
Motor type	Sidekanalblæser, 3-faset (trifase)
Airflow	420 m³/h
Vacuum	314 mbar (3200 mmH ₂ O)
Container	100 L
Sound pressure	72 dB(A)
Filter class	H class
Filter type	Klasse H HEPA, 26.000 cm² filterflade, H14-efficiens (99,995 % MPPS, EN 1822-5)
Primary filter	Stjerne/taske antistatisk polyester M, 30.000-500 cm²-mm
Collection system	Plastic bag
Material	Lakeret stål med ABS-tilbehørskurv
IP class	IP65
Power	4.0 kW
Current	8.4 A
Voltage	400 V / 50 Hz / 3~
Inlet	Diameter 80 mm
Dimensions (L x W x H)	660 x 1180 x 1450 mm
Weight	137 kg

Questions and answers

Is it ATEX-certified or self-certified?

It is self-certified by Delfin per EN 17348:2022 in category 3D. For category 3, the ATEX Directive permits manufacturer self-certification, provided the requirements of the harmonised standard are met. The marking is II 3D Ex h tc IIIC T80°C (Int)/T165°C (Ext) Dc.

Why are two vacuum values shown on the datasheet?

The model has a pressure relief valve fitted as standard. The valve admits false air at a set vacuum (2600 mmH²O) and thereby prevents the side-channel blower from being overloaded by blocked filters or a closed hose. The higher value (3200 mmH²O) is the theoretical maximum vacuum without valve activation. Both values are indicative and measured in new condition.

How is the dust collected — is there a bag?

The dust is collected in an open antistatic plastic bag placed in the container. The bag is held in place by a vacuum kit fitted at commissioning, which uses the container vacuum to press the bag against the container wall. This prevents the bag from collapsing or being drawn into the filter during operation.

Is it certified for Zone 21 or Zone 20?

No. The model is categorised as 3D Dc, which only covers Zone 22. For Zone 21 or internal Zone 20, a 1/2D or 1/3D model must be used — for example the Delfin MTL 301 1/3D, MTL 201 1/2D or DM2 EL 1/2D LP. Contact Particulair if you are unsure which zone classification your production requires.

Contact and advisory

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