

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

Delfin DG 70 EXP



The Delfin DG 70 EXP is the mid-range model in Delfin's 100-litre DG range: a 5.5 kW side-channel blower delivering 530 m³/h airflow and 3600 mmH₂O theoretical vacuum — the peak value in the family. The HEPA filter area is doubled from the DG 50 EXP to 52,000 cm², reducing pressure drop and extending filter life under continuous operation. Self-certified per EN 17348:2022 in category 3D and suited to productions with high dust loads in Zone 22.

APPLICATIONS

- Large ATEX Zone 22 production areas with high dust loads
- Continuous operation requiring 100 L collection and extended filter life
- Metal and composite industry with fine abrasive dust
- Pharmaceutical process plants requiring high airflow and HEPA fine filtration
- Process plants where both flow and vacuum must be kept high across the shift

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	530 m³/h
Vacuum	353 mbar (3600 mmH ₂ O)
Container	100 L
Sound pressure	72 dB(A)
Filter class	H class
Filter type	Klasse H HEPA, 52.000 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	5.5 kW
Current	11.0 A
Voltage	400 V / 50 Hz / 3~
Inlet	Diameter 80 mm
Dimensions (L x W x H)	660 x 1200 x 1450 mm
Weight	150 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 (3000 mmH²O) and thereby prevents the side-channel blower from being overloaded by blocked filters or a closed hose. The higher value (3600 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

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/dg-70-exp/

SMARTER THINKING • BETTER WORKING

This datasheet is generated deterministically from Particulair product data. Prices and availability provided on request. All specifications subject to change without notice.