

DEPURECO · II 1/3D EX H IIIC T140 DA/DC

Depureco DF 40 DEX 1/3D



The Depureco DF 40 DEX 1/3D is a stationary dust collector for Zone 22 external + Zone 20 internal (ATEX II 1/3D Ex h IIIC T140 Da/Dc). A 4.0 kW ATEX-certified centrifugal fan delivers up to 2,700 m³/h at 370 mmH₂O vacuum through a 45,000 cm² star filter in antistatic polyester M class. Dust is collected in a 65 L detachable AISI 304 bin beneath the filter (option: 100 L on 65 L variants). Manual filter cleaning via external handle. Designed for fixed installations -- process venting, silo breathing, production exhaust -- where a mobile trolley doesn't solve the problem. Grounding included as standard.

APPLICATIONS

- Fixed installation in Zone 22 external + Zone 20 internal
- Process venting on mixing, sieving and packaging lines
- Silo breathing and conveyor belt exhaust
- Centralised dust collection from multiple points piped into one unit
- Replacement of mobile trolleys where fixed installation lowers total cost

Technical specifications

ATEX marking	II 1/3D Ex h IIIC T140 Da/Dc
Internal / external zone	20 / 22
Motor type	3D ATEX-certificeret centrifugalventilator, 4 kW
Airflow	2700 m ³ /h
Vacuum	36.3 mbar (370 mmH ₂ O)
Container	65 L
Sound pressure	77 dB(A)
Filter class	M class
Filter type	Stjernefilter antistatisk polyester klasse M, 45.000 cm ² (IFA/BGIA M-PES per EN 60335-2-69)
Primary filter	Stjernefilter antistatisk polyester klasse M, 45.000 cm ²
Cleaning system	Manuel filterrens
Collection system	Detachable container
Material	AISI 304 rustfrit stålbeholder + lakeret stål-filterhus
IP class	IP55
Power	4.0 kW
Voltage	400 V / 50-60 Hz
Dimensions (L x W x H)	630 x 1100 x 2150 mm
Weight	145 kg

Questions and answers

What does the ATEX marking II 1/3D Ex h IIIC T140 Da/Dc mean?

The model is EU type-approved under ATEX directive 2014/34/EU for stationary operation with internal Zone 20 (dust, high risk) and external Zone 22 (dust, low risk). 'Ex h' is the construction protection type per EN ISO 80079-36/37. 'IIIC' covers all dust types including conductive metallic dust. 'T140' is maximum surface temperature in operation (140 degrees C). 'Da/Dc' is the EPL code for the two zones.

How does the DF 40 DEX 1/3D differ from the other variants in the same kW class?

Depureco offers DF 40 DEX in three variants with the same chassis, same fan (4.0 kW) and same bin -- but different certification and filter configurations. **DEX 1/3D variant** has a star filter and manual filter cleaning; it covers dust Zone 22 external + Zone 20 internal. **SP ATEX variant** has 3x cartridge filter (90,000 cm²) and automatic reverse-jet cleaning for high dust loads -- dust Zone 22 external. **DEX 3/3G variant** is certified for gas Zone 2 instead (II 3/3G), for plants where the surrounding environment has gas risk even though the process is dust-based. All three share the same chassis construction but have different product codes.

Which filter option should I choose for fine-particle emissions?

The standard configuration is the star filter M class (45,000 cm², antistatic polyester). For fine-particle emissions or emission requirements below 0.1 mg/m³, Depureco offers a HEPA H13 secondary filter option (120,000 cm² fibreglass). The combination gives a filter stack that meets requirements for hazardous, pharmaceutical or metallic fine dust. A PTFE antistatic membrane option (38,000 cm²) is also available for dusts with high binding properties.

Can the DF 40 DEX 1/3D be installed outdoors or in humid environments?

Yes -- IP55 enclosure and insulation class F make it suitable for outdoor installation under a canopy or in humid production environments. Operating temperature range is -20 to +40 degrees C per catalogue. For permanent outdoor installation, the GX option (AISI 304 stainless steel filter chamber + bin) is recommended as corrosion protection. Ensure that grounding is maintained and drainage from the filter housing works in case of condensation.

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/df-40-dex-1-3d/

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.