

DEPURECO · II 3/3G EX H IIB T3 GC/GC

Depureco DF 22 DEX 3/3G



The Depureco DF 22 DEX 3/3G is a stationary dust collector certified for gas-classified Zone 2 (ATEX II 3/3G Ex h IIB T3 Gc/Gc). A 2.2 kW ATEX-certified centrifugal fan delivers up to 1,400 m³/h at 350 mmH₂O vacuum through a 24,000 cm² star filter in antistatic polyester M class. The variant is used in plants where the surrounding environment may contain flammable gas or vapour (gas group IIB, T3), even though the process itself is dust-based -- typically refinery, petrochemical and chemical production. 65 L detachable AISI 304 bin. Grounding included.

APPLICATIONS

- Fixed installation in gas-classified Zone 2 (internal and external)
- Dust collection in plants where the surroundings may also contain flammable gas or vapour
- Process venting on refinery and chemical plants
- Collection of technical dust in environments with periodic gas risk
- Dust collector in plants where dual certification (gas + dust) is specified

Technical specifications

ATEX marking	II 3/3G Ex h IIB T3 Gc/Gc
Internal / external zone	2 / 2
Motor type	3G ATEX-certificeret centrifugalventilator, 2,2 kW
Airflow	1400 m ³ /h
Vacuum	34.3 mbar (350 mmH ₂ O)
Container	65 L
Sound pressure	73 dB(A)
Filter class	M class
Filter type	Stjernefilter antistatisk polyester klasse M, 24.000 cm ² (IFA/BGIA M-PES per EN 60335-2-69)
Primary filter	Stjernefilter antistatisk polyester klasse M, 24.000 cm ²
Cleaning system	Manuel filterrens
Collection system	Detachable container
Material	AISI 304 rustfrit stålbeholder + lakeret stål-filterhus
IP class	IP55
Power	2.2 kW
Voltage	400 V / 50-60 Hz
Dimensions (L x W x H)	660 x 800 x 1630 mm
Weight	120 kg

Questions and answers

What does the ATEX marking II 3/3G Ex h IIB T3 Gc/Gc mean?

The model is EU type-approved under ATEX directive 2014/34/EU for stationary operation in gas-classified Zone 2 (internal and external). 'Ex h' is the construction protection type per EN ISO 80079-36/37. 'IIB' covers gas group IIB (e.g. ethylene, acetaldehyde). 'T3' is the temperature class (maximum surface temperature 200 degrees C). 'Gc/Gc' is the EPL code for gas Zone 2. This variant is used in plants where the surrounding environment may contain flammable gas or vapour.

How does the DF 22 DEX 3/3G differ from the other variants in the same kW class?

Depureco offers DF 22 DEX in three variants with the same chassis, same fan (2.2 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 (24,000 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 22 DEX 3/3G 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

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