

ATEX ZONE 21 · DELFIN · DUST-FREE LONGOPAC EMPTYING

Delfin DM2 EL 1/2D LP ATEX

Stationary vacuum cleaner certified to ATEX Zone 21 with Longopac endless bags for completely dust-free emptying. No operator exposure. H14 HEPA filter included. Third-party certified by IMQ — designed for continuous collection in aggressive dust environments.

- ATEX Zone 21 third-party certified per EN 17348 DT and IMQ accreditation
- Category 1/2D approved for dust exposure areas Zone 21 and Zone 20
- Longopac endless bags with 20 m continuous capacity without dust exposure
- H14 HEPA absolute filter for 99.995% particle retention at MPPS
- Single-phase 2.2 kW vacuum motor with Ex tb dust tight IP64 vacuum head
- 430 m³/h airflow ideal for continuous industrial collection operations



Delfin DM2 EL 1/2D LP ATEX Zone 21 vacuum cleaner with Longopac endless bags

II 1/2D — ATEX Directive 2014/34/EU · IMQ — Notified Body · IECEx Da/Db — Zone 20 internal / Zone 21 external · EN 17348 DT — Combustible dust collection · IP64 (vacuum head)

Key Facts	
Category	ATEX 1/2D
Zone	Zone 21
Power	2.2 kW
Airflow	430 m³/h
Max vacuum	2,250 mmH ₂ O
Noise	74 dB(A)
Emptying	20 m Longopac
Weight	72 kg

Features and Technology

The Delfin DM2 EL 1/2D LP is a stationary vacuum cleaner designed for permanent installation in ATEX Zone 21 areas. Zone 21 means explosive dust-air mixtures can occur 10-1,000 hours per year under normal operating conditions—higher risk than Zone 22 and requiring more robust construction. The machine is third-party certified by IMQ per EN 17348 DT and EU Directive 2014/34/EU as category 1/2D, approved for explosive dust-air atmospheres.

The Longopac system is the central innovation of this machine. Endless bags in 20 meters of continuous length remove dust completely without opening the collection container. When the bag is full, it is simply pulled from the machine without operator dust exposure. This is crucial for work environment safety in aggressive dust areas, pharmaceutical and cleanroom production.

The single-phase 2.2 kW vacuum motor with Ex tb dust tight IP64-classified vacuum head ensures maximum safety. The H14 HEPA filter with 99.995% particle retention at MPPS ensures extremely high purity. At 430 m³/h airflow and 2,250 mmH₂O maximum vacuum, the DM2 EL 1/2D LP is suitable for large-scale industrial processes, silo and process outlet cleaning, and continuous collection without operator exposure.

Zone 21 certification and dust-free emptying: This unit is third-party certified by IMQ for Zone 21 operation. The Longopac system ensures dust-free emptying. Category 1/2D means higher safety level. You receive full EU documentation, technical file, and IECEx certification. Installation must be performed per ATEX guidelines. Includes accessory kit TA.1305.0000.

Technical Specifications

Parameter	Value
ATEX certification	II 1/2D Ex h tb IIIC T80°C (Int) / T95°C (ext) Da/Db
ATEX category	1/2D (CE EX 21)
Zone approval	Zone 20 internal / Zone 21 external
Standard	EN 17348 DT - Combustible dust collection
Motor type	Single-phase vacuum motor with vacuum head (Ex tb Dust Tight IP64)
Power	2.2 kW
Current	16 A
Voltage	115/230 V, 50/60 Hz, single-phase
Max airflow	430 m³/h
Max vacuum	2,250 mmH ₂ O
Inlet	Ø80 mm
Primary filter type	Star/pocket, polyester ANT M (antistatic)
Primary filter area	30,000 cm², Ø500 mm
Primary filter cleaning	Manual
Filter air load	180 m³/m²/h
HEPA filter	H14, 99.995% at MPPS — INCLUDED
HEPA filter area	26,000 cm²
Emptying system	Longopac endless bags (20 m continuous)
Noise level	74 dB(A) at EN ISO 3744
IP class	IP64 (vacuum head)
Dimensions (W×D×H)	80 × 66 × 168 cm
Weight	72 kg
Included	Accessory kit TA.1305.0000

CONTACT

Particulair — Life Science Hub

Nordic specialist in industrial vacuum for pharma & life science

Højtoften 12, 2690 Karlslunde, Denmark

Tel: +45 70 23 12 03 · sales@particulair.com · particulair.eu/life-science/