

DELFIN · II 3D EX H IIC T80°C (INT) / T135°C (EXT) DC

Delfin ZFR EV AP 560 K2 Z22



The Delfin ZFR EV AP 560 K2 Z22 is the middle variant in the AP 560 chassis -- a stationary ATEX deduster with a 2.2 kW centrifugal fan delivering 2,500 m³/h airflow at 210 mmH₂O (21 mbar) static vacuum. It is the most selected variant among centrifugal-fan based dedusters on Danish industrial plants, because it strikes the optimal balance between operating economy and capacity for typical multi-point installations. Antistatic polyester ANT M primary filter (50,000 cm², 560 mm diameter) and HEPA H14 final filter provide complete ESD control and exhaust that meets even stringent workplace requirements. The 100-litre detachable steel container with internal plastic liner supports intervals of 1-3 operating shifts depending on dust density. ATEX-certified II 3D Ex h IIC per EN 17348:2022 -- built for Zone 22 classified production plants.

APPLICATIONS

- Central suction on larger production plants in Zone 22 with 3-4 simultaneous collection points
- Extraction-arm installation for welding fume capture in modern ATEX-conscious halls
- Dust collection from granulator, mixer and sieve stations in pharmaceutical and chemical industries
- Fixed suction circuits at bakeries and feed plants where dust demands Zone 22 discipline
- Permanent installation in woodworking and MDF production with ATEX classification

Technical specifications

ATEX marking	II 3D Ex h IIIC T80°C (int) / T135°C (ext) Dc
Internal / external zone	22 / 22
Motor type	Centrifugalventilator IE3 (2,2 kW, 3-faset 400 V), Ex h IIIC T135°C ekstern / T80°C intern, Ex tb Dust Tight Certified
Airflow	2500 m ³ /h
Vacuum	21 mbar (210 mmH ₂ O)
Container	100 L
Sound pressure	72 dB(A)
Filter class	H class
Filter type	HEPA H14 (EN 1822-5), 99,995 % MPPS, 10 m ² filterflade -- standard inkluderet
Primary filter	Stjerne/taske polyester ANT M-klasse antistatisk (IEC 60335-2-69), 50.000 cm ² , diameter 560 mm, manuel rensning
Cleaning system	Manuel filterrensning via udvendig hank
Collection system	Plastic bag
Material	Malet staalkonstruktion (AISI 304 som option)
IP class	IP55
Power	2.2 kW
Voltage	400 V / 50 Hz / 3~
Inlet	Diameter 200 mm
Dimensions (L x W x H)	780 x 850 x 2140 mm
Weight	100 kg

Questions and answers

Why is the K2 variant the most popular motor choice on the AP 560 chassis?

The K2 (2.2 kW) is the largest 'standard' motor choice before stepping up to a 4 kW industrial motor, and it strikes a particularly good balance in the centrifugal characteristic. At 2,500 m³/h airflow and 21 mbar vacuum it handles 3-4 simultaneous extraction arms without visible capacity loss, and the IE3 motor is operationally economical, quiet and with moderate current draw (typically 4-5 A). The K1 (1.1 kW) is often too weak for continuous multi-point operation, and the K4 (4 kW) is often overkill with double current draw and higher purchase price. Statistically 60-70 % of Danish ATEX installations choose K2 for typical welding, grinding and powder handling applications.

How long piping can a K2 draw through without capacity loss?

With 21 mbar static vacuum the model typically handles 8-12 metres of smooth oe200 steel pipe without visible loss of suction-point vacuum -- provided simple, short bends and clean filters. If you reach 15-20 metres or introduce several 90° bends, the suction-point vacuum will drop by 3-5 mbar per additional length-metre once bends and transitions are accounted for. For installations over 20 metres the K4 (370 mmH₂O = 36 mbar vacuum, 60-70 % greater) is the correct choice. Note that pressure drop is not linear: a clogged primary filter or a 90° bend costs more than the equivalent length-metre of clean hose.

What dust volume can the K2 realistically collect over an 8-hour shift?

It depends naturally on the process source, but for typical welding fume extraction on MAG steel the measured aerosol level in the source zone is ca. 5-15 mg/m³. With 2,500 m³/h airflow and 80 % capture rate the deduster collects ca. 10-30 g/h -- 80-240 g per 8-hour shift, corresponding to 0.5-1.5 L volume. This means the 100-litre container on the K2 typically needs emptying every 1-3 months for welding applications. For heavier applications such as grinding dust (50-150 mg/m³) or granulator (100-500 mg/m³) the container must be emptied every shift or every day. Dust density governs the container interval far more than the airflow figure.

What is the difference between LOC REM remote control and local start/stop?

The standard model is supplied with a local start/stop button on the deduster itself -- an operator must be physically nearby to start and stop. LOC REM (Local/Remote) is an option that adds a 24V remote control input plus electrical panel, so the unit can be started/stopped from a central control station, a PLC, or via a compressed-air signal from the processing equipment the deduster serves. It is mandatory on larger central suction systems where the deduster stands in a separate technical room and is not to be accessed manually during production. LOC REM is Delfin code +1,562.50 EUR (2026 price level) -- typically quickly recouped in automated applications.

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/zfr-ev-ap-560-k2-z22/

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