

DEPURECO · II 3 D EX HTC IIIB T140 DC

HF 30S Z22



The Depureco HF 30S Z22 is the Heavy Duty variant of the HF chassis -- a stationary ATEX central vacuum cleaner for Zone 22, supplied WITHOUT an integrated dust bin. The motor tuning is the S (Suction) type. A 18,5-25 kW ATEX-certified side-channel blower (top-mounted) pulls air through cylindrical cartridge filters (180,000 cm² M class, antistatic polyester -- 50% more filter area than the standard HF) and delivers 1,100 m³/h at 380 mBar vacuum. The inlet is Ø130 mm, tangential with cyclone pre-separation. Dust is discharged continuously via a flange connection at the bottom to the customer's own discharge system (big-bag, Longopac cassette, rotary valve + container, or direct pipe to process silo). SP automatic reverse-jet pulsejet keeps differential pressure stable under high dust loads. Safety valve, remote vacuum control and inlet silencer are included from factory. Footprint 1240x1910 mm, height 3488 mm -- requires clear ceiling height or outdoor placement. Typical use: heavy central systems with high dust loads or long pipe runs requiring capacity headroom. ATEX marking II 3 D Ex htc IIIB T140 Dc (dust Zone 22 external).

APPLICATIONS

- Heavy central vacuum plants in Zone 22 where dust load exceeds HF capacity
- Production plants with many open extraction points or large pipe diameter (Ø130 mm inlet)
- Localized discharge to big-bag, Longopac cassette, rotary valve + container or direct pipe
- Continuous operation without stopping to empty a bin
- ATEX-regulated production environments with non-conductive dust (class 3D, IIIB)
- Installations with clear ceiling height above 3.8 m or outdoors / under canopy

Technical specifications

ATEX marking	II 3 D Ex htc IIIB T140 Dc
Internal / external zone	- / 22
Motor type	1x 3-faset ATEX-sidekanalblaeser (Ex h IIIB Dc, top-monteret, Heavy Duty)
Airflow	1100 m ³ /h
Vacuum	380 mbar
Sound pressure	74 dB(A)
Filter class	M class
Filter type	Cylindriske patroner (Heavy Duty)
Primary filter	Cylindriske patroner, 180.000 cm ² total, klasse M, antistatisk polyester
Cleaning system	SP-automatisk reverse jet (pulsejet)
Collection system	Localized discharge (container not included)
Material	Lakeret staal-filterhus (beholder leveres ikke -- se lokaliseret udledning)
IP class	IP55
Power	25.0 kW
Voltage	400 V / 50-60 Hz
Dimensions (L x W x H)	1240x1910x3488 mm

Questions and answers

What does the ATEX marking II 3 D Ex htc IIIB T140 Dc mean?

The model is EU type-approved under ATEX directive 2014/34/EU for stationary operation in external Zone 22 (dust, low risk). 'Ex h' is the construction protection type per EN ISO 80079-36/37, and 'tc' specifies the enclosure protection level against dust ignition. 'IIIB' covers non-conductive dust (paper, fibres, grain, bag dust etc.) -- note that class IIIC (conductive metallic dust) requires separate approval. 'T140' is maximum surface temperature in operation (140 degrees C). 'Dc' is the EPL code for Zone 22.

What is the difference between HF 30P and HF 30S -- which should I choose?

HF HD comes in two variants with the same chassis and the same filter area, but different motor tunings: ****P = Performance**** (HF 30P, 22-30 kW) prioritises airflow -- 1,856 m³/h at 300 mBar vacuum. Suitable when the plant has many extraction points open simultaneously or large pipe diameters, where it is air volume that drives the capture of dust. ****S = Suction**** (HF 30S, 18.5-25 kW) prioritises vacuum -- 1,100 m³/h at 380 mBar. Suitable when the plant has long pipe runs or high resistances (many bends, small diameter transitions, HEPA after-filter), where it is pressure drop that limits suction at the hose end. In short: many open points / large pipes = P, long pipes / high pressure drop = S. The P/S logic is also known from the PUMA series (e.g. PUMA 15P/15S). We are happy to calculate for your specific plant.

Why is the HF 30S Z22 supplied without a dust bin?

The HF HD chassis is designed for central systems where dust is not emptied at one point but discharged continuously to an external system. The catalogue calls this 'localized discharge'. A flange connection sits at the bottom of the filter chamber, and the customer fits the discharge system that suits the process. Typical choices are: (1) big-bag connection with drawstring clamp, suitable for high volume and easy disposal; (2) Longopac cassette, suitable for contaminated dust where containment matters; (3) rotary valve + container below, suitable for fixed service cycles; or (4) direct pipe to process silo or central collection. The HD variant has 50% more filter area and a larger inlet (Ø130 mm) than the standard HF -- adding capacity headroom, but it does not change the approach to discharge. We are happy to help size the right discharge system for your plant.

When do I choose the HF 30S Z22 over the standard HF Z22?

HF HD uses the same chassis as HF but has three differences that make it a heavier workhorse: (1) ****50% more filter area**** (180,000 vs 120,000 cm²) -- handles higher dust concentrations without reverse-jet cleaning running constantly; (2) ****Larger inlet Ø130 mm**** (vs Ø100 mm) -- lower inlet pressure drop and room for slightly coarser material; (3) ****Higher power 22-30 kW**** (vs max 25 kW on HF 25 Z22) -- more capacity headroom at high resistance. The standard HF Z22 covers most central installations for ordinary construction, production and food dust. HF HD is the choice when dust load is above normal (fibre, biomass, large volumes) or when the pipe network has many open points or high resistances requiring capacity headroom. The price difference between HF and HF HD is typically 50-80%, so the choice is best made based on specific plant sizing.

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/hf-30s-z22/

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.