

TIGER-VAC · II 3D EX H TC IIIB T200 C DC IP6X -- -5 C <= TA <= +37 C -- EN 17348 DT -- ATEX 1ST PARTY CERTIFIED

Tiger-Vac 4D-35L EX DT MRP HEPA



The Tiger-Vac 4D-35L EX DT MRP HEPA is the Manual Reverse Purge version of the 4D-35L platform. Marked II 3D, EN 17348 DT, ATEX 1st party certified. The reverse-purge system uses a conductive aluminised spun bond cartridge instead of the classic filter-shaker cloth, and a gate valve that can be closed one-handed. When the valve is closed and the purger is activated, air flows backwards through the cartridge and breaks the whole filter cake loose. This is the preferred solution for sticky, damp or very fine non-conductive dust that does not shake off in a standard MFS. 35 L AISI 430 detachable tank, dual bypass motor (375 m³/h, 2180 mmH₂O), 5 HEPA H14 filters. Conductive poly-liner recovery bag included.

APPLICATIONS

- Sticky or damp non-conductive dust from filled processes (sugar, flour, fermentation)
- Pharma CMR powders where effective filter cleaning is critical
- Powder handling where dust emission during filter cleaning must be minimal
- Fine powders (sub 5 micron) where MFS vibration does not loosen the filter cake
- Process production with continuous operation where MRP extends filter life

Technical specifications

ATEX marking	II 3D Ex h tc IIIB T200 C Dc IP6X -- -5 C <= Ta <= +37 C -- EN 17348 DT -- ATEX 1st party certified
Internal / external zone	-- / 22
Motor type	Dual bypass / dual speed Ametek heavy-duty motors -- 2100 W (2400 W max), Dust ignition protection by enclosure 't'
Airflow	375 m ³ /h
Vacuum	214 mbar (2180 mmH ₂ O)
Container	35 L
Filter class	H class
Filter type	5 x HEPA H14 (EN 1822, 99,99 % MPPS) individuelt fabriks-testet, OSHA-compliant -- 2 upstream og 3 downstream (215373A-01)
Primary filter	Conductive Aluminized Spun Bond reverse purge cartridge -- statisk afladende m/safety filter og cage som baggrund
Cleaning system	Manual Reverse Purge (MRP) -- conductive aluminized spun bond reverse purge cartridge med gate valve, en-håndsbetjening
Collection system	Detachable container
Material	AISI 430 rustfri stål (krop og tank)
IP class	IP6X
Power	2.1 kW
Current	10 A
Voltage	240 V
Inlet	Diameter 50 mm
Dimensions (L x W x H)	740 x 600 x 1380 mm

Questions and answers

What does "4D" stand for in the model name?

4D is Tiger-Vac's model designation for the dual-motor single-phase platform -- not a reference to four dimensions or four venturis. The entire 4D series shares the same Carriage with Suspended Motor Top (CSMT) construction where the two bypass motors hang from a common frame design above the tank platform itself. It is an industry-standard solution at Tiger-Vac for high-flow single-phase ATEX models.

Why IIIB and not IIIC?

IIIB means "non-conductive dust" (dust group B) and covers organic and insulating dust like wood dust, textile fibres, sugar, flour and polymer powder. IIIC covers conductive dust (metal, coal, graphite) where the ignition energy is lower and requires stricter construction. The Tiger-Vac 4D series is certified for IIIB; for IIIC dust (metal powder from 3D printing, coal dust, graphite) the C series (II 1/3D IIIC) or CD series (Z22 IIIC) must be used. If you are unsure of your dust group, contact us -- we will do a dust assessment together with you.

What is Dust Ignition Protection "t"?

"t" (tightness) is a protection method per EN 60079-31 where the entire motor enclosure is tight (IP6X) so fine dust cannot penetrate into the electrical parts. Combined with limitation of the surface temperature (T200 C), this ensures the unit cannot ignite dust in Zone 22 -- even if a layer of dust settles on top of the enclosure. It is the most robust construction method for industrial ATEX vacuums.

What is the difference between 4D-35L and 4D-55L?

Drive specs are identical (375 m³/h, 2180 mmH₂O, 2100 W, 5 HEPA H14). The difference is tank size: 4D-35L has a 35 L tank and 4D-55L has a 55 L tank. The 4D-55L platform is also somewhat wider (98 cm vs 60 cm) and more robust for continuous operation. Choose the 4D-35L for standard housekeeping; choose the 4D-55L if collection volume is high or frequent emptying must be avoided.

Contact and advisory

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