

TIGER-VAC · II 2GD EX H IIC T6 GB EX H IIIC T85 C DB -4 C <= TA <= +37 C EN 17348 DT

Tiger-Vac ATEX-12A (4W)



The Tiger-Vac ATEX-12A (4W) is a pneumatic single-venturi industrial vacuum certified II 2GD per EN 17348 DT -- approved for combined gas Zone 1 plus dust Zone 21 areas where electric power is not an option. The entire suction is driven by compressed air through a venturi nozzle, so there is no electrical ignition source in the suction circuit -- only the external compressor, which remains in a safe area. With a 38 L dust tank, 47.3 L liquid capacity, AISI 430 stainless construction and a 4-wheel dolly, the unit handles general housekeeping and the recovery of combustible or hazardous dusts (asbestos, lead, silica, mould) in refineries, chemical plants and battery manufacturing. HEPA H14 (212304B-HD) is aerosol leak-tested, OSHA compliant and included as standard.

APPLICATIONS

- Pneumatic operation where electric ATEX vacuums are unsuitable (refineries, gas plants, chemical industry)
- Wet and dry recovery in Zone 1/21 -- the same unit handles liquids, slurries and combustible dust
- Asbestos and lead housekeeping per OSHA and EN 1822 H14 (HEPA is aerosol leak-tested)
- General housekeeping in process production where a 4-wheel dolly enables fast manoeuvring
- Sites without electrical supply where a 15 HP minimum compressor is available

Technical specifications

ATEX marking	II 2GD Ex h IIC T6 Gb Ex h IIIC T85 C Db -4 C <= Ta <= +37 C EN 17348 DT
Internal / external zone	-- / 21
Motor type	Single venturi, pneumatisk drift -- ingen elektriske dele i sugekredsen
Airflow	187 m ³ /h
Vacuum	274 mbar (2790 mmH ₂ O)
Container	38 L
Sound pressure	68 dB(A)
Filter class	H class
Filter type	HEPA H14 (EN 1822, 99,995 % MPPS) aerosol leak-testet, OSHA-compliant -- Tiger-Vac 212304B-HD
Primary filter	Main filter assembly PTFE-lamineret med ring 214279 til poly tanks (211430T)
Cleaning system	Ingen aktivt filterrens-system -- HEPA og hovedfilter skiftes ved fuld mætning
Collection system	Detachable container
Material	AISI 430 rustfri stål, krop og opsamlingskank
Supply pressure	5,5 bar
Air supply hose	Diameter 12.7 mm
Venturi units	1 pcs
Inlet	Diameter 50 mm
Dimensions (L x W x H)	520 x 480 x 810 mm
Weight	11.3 kg

Questions and answers

Why pneumatic and not electric?

In combined zones with both gas Zone 1 and dust Zone 21 electric drive is generally not allowed -- even ATEX-certified electric motors have hot surfaces and contact elements that can act as ignition sources under fault conditions. Pneumatic venturi drive has no moving electrical parts: the compressed air alone creates the vacuum through the venturi nozzle. That is the safest construction for Category 2 areas.

Which compressor do I need?

A minimum of 15 HP (about 11 kW) installed compressor capacity is recommended. The compressed-air supply must be 5.5 bar with a flow of 16.5–21.2 L/s (approximately 990–1272 NI/min), fed through a 1/2" (12.7 mm) air hose. Refrigerant-dried air (PDP +3 °C or better) is recommended to avoid condensation in the venturi nozzles, and a separate pressure regulator (219841) ensures stable operation.

Can it pick up liquids?

Yes. The ATEX-12A (4W) is certified for wet and dry recovery -- 47.3 L liquid capacity with a dedicated liquid filter (211394) that engages automatically when liquid is detected. The unit also handles combustible liquids because venturi drive is spark-free. For dry-only recovery with automatic poly-liner emptying, see the 2+2W MR variant.

What is the difference between 4W, 2+2W and 2+2W MR?

Drive and filter specs are identical (187 m³/h, 38 L tank, 68 dB(A), HEPA H14). The difference is in cart configuration and recovery type: the 4W has a 4-wheel dolly and the largest liquid capacity (47.3 L). The 2+2W has 2 fixed plus 2 swivel wheels for better manoeuvrability but only 28.5 L liquid capacity. The 2+2W MR is dry recovery only and is supplied with a poly-liner system (212100S-5 + 213780 retainer plate) for safe disposal of the recovered material.

Contact and advisory

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