

TIGER-VAC · II 2GD EX D IIA T3 GB / EX T IIIC T200°C DB IP6X -- LCIE 03 ATEX 6297 -- EN 17348 DT/LC

Tiger-Vac EXP1-55 (TC) RE HEPA



The Tiger-Vac EXP1-55 (TC) RE HEPA is the largest model in the TC series -- a high-volume ATEX combined vacuum certified II 2GD to EN 17348 DT/LC for simultaneous dry and wet recovery in Zone 1/21. Collection capacity is 151 litres dry / 170 litres wet, about 4 times the capacity of the EXP1-15 -- suited for centralised cleaning across multiple production lines, high-volume pharmaceutical production and process cleaning after full shifts. 50 mm inlet (upgraded from 38 mm on smaller TC units) gives higher flow capacity. 1.0 kW TEFC motor, 224 m³/h, 1550 mmH₂O. Tilt cart is essential at this size -- a full 170 L liquid tank weighs about 170 kg plus the housing, and manual lifting is not an option. AISI 304 stainless construction (except cart), ISO Class 4 cleanroom compatible, HEPA H14 standard.

APPLICATIONS

- High-volume pharmaceutical production with multiple production lines
- Centralised cleaning of large-scale facilities and warehouses
- Process cleaning after full shifts with large accumulated dust/liquid
- Biotech production with large coating or granulation batches
- Chemical pilot production and pharmaceutical commissioning with daily cleaning

Technical specifications

ATEX marking	II 2GD Ex d IIA T3 Gb / Ex t IIIC T200°C Db IP6X -- LCIE 03 ATEX 6297 -- EN 17348 DT/LC
Internal / external zone	-- / 21
Motor type	1-faset TEFC-motor, eksplosionssikret (Ex d IIA T3 Gb / Ex t IIIC T200°C Db), 1.0 kW / 4.5 A
Airflow	224 m ³ /h
Vacuum	152 mbar (1550 mmH ₂ O)
Container	151 L
Sound pressure	78 dB(A)
Filter class	H class
Filter type	HEPA H14 (EN 1822-5, 99,995 % @ 0,3 µm MPPS), 211027B
Primary filter	Main filter assembly SD (211019) + forfilter (212108) + liquid filter assembly SD (211016), dedikeret til 55 gallon eksplosionssikre enheder
Cleaning system	Ingen (manuel) -- filter skiftes eller bankes rent
Collection system	Detachable container
Material	AISI 304 rustfri staal (undtagen vogn)
IP class	IP6X
Power	1.0 kW
Current	4.5 A
Voltage	230 V / 50 Hz / 1~
Inlet	Diameter 50 mm
Dimensions (L x W x H)	? x 710 x 1270 mm
Weight	70 kg

Questions and answers

Why does the EXP1-55 (TC) have a 50 mm inlet while the 15/25 (TC) have 38 mm?

A larger inlet provides higher flow capacity per unit time -- important for high-volume recovery where task duration is the governing factor. 50 mm (2") inlet accepts a larger conductive Kanaflex hose and provides about 2.5 times the cross-sectional area compared to 38 mm (1.5"), which helps with coarser material or higher bulk loss problems. 1.5" system accessories can still be used via a reduction adapter if finer work is part of the task.

Why is the length not specified?

Tiger-Vac's official EU factsheet (April 2026 revision) specifies width (71 cm) and height (127 cm) but not length for the EXP1-55 (TC) RE HEPA. This is likely an editorial oversight, as earlier TC models have 79 cm length. Ask Particulair at a concrete installation, and we will obtain the data directly from Tiger-Vac Europe.

Is the motor large enough for 151 L volume?

Yes. The motor is the same 1.0 kW TEFC as on the smaller TC models -- same flow (224 m³/h) and same vacuum (1550 mmH₂O) regardless of tank size. The motor drives suction, not the tank, so the higher capacity just means you empty less often, not that suction is slower. For wet recovery of 170 L liquid, the floater system takes about 30-45 minutes to fill at full suction, depending on liquid viscosity.

How often do I empty a 151 L tank in practice?

For typical pharma daily cleaning in medium-sized facilities, a full 151 L dry tank can last 2-5 days between emptying, depending on dust density. For fine powders (lactose, polymer powder), 1 week is not unusual. Wet recovery fills faster -- 170 L can be filled in a single cleaning session of a large production area. Plan the emptying schedule according to your specific dust/liquid volume.

Contact and advisory

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