

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

Tiger-Vac EXP1-55L DT EXTENDED (MFS) RE HEPA



The Tiger-Vac EXP1-55L DT EXTENDED (MFS) RE HEPA is an extended version of the DT family with a 55 litre detachable tank and reinforced filter chamber. Certified II 2GD to EN 17348 for simultaneous Zone 1 gas and Zone 21 dust, and built with a Manual Filter Shaker (MFS) system based on an SD PTFE-laminated main cloth filter (214690AT). PTFE lamination provides better release of sticky dust during mechanical shake, extending intervals between filter service. A 1.0 kW TEFC motor delivers 224 m³/h at 1550 mmH₂O, ISO Class 4 cleanroom compatibility is standard, and HEPA H14 final filter (EN 1822-5) ensures clean exhaust. Construction is AISI 304 (except cart) with an option for stainless cart for GMP environments.

APPLICATIONS

- Larger pharmaceutical production areas with high-volume dust
- Chemical blending and filling with frequent cleaning needs
- ISO Class 4 cleanrooms where a 55 L container reduces emptying
- Biotech and API production with sticky powders (PTFE lamination)
- Maintenance teams needing large capacity in a single unit

Technical specifications

ATEX marking	II 2GD Ex d IIA T3 Gb / Ex t IIIC T200°C Db IP6X -- LCIE 03 ATEX 6297 -- EN 17348
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	55 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	SD PTFE-lamineret main cloth filter med laces, filter-support ring og staaibur (214690AT) + cage for filter (214686). Forfilter 214694 tilvalg.
Cleaning system	Manual Filter Shaker (MFS) -- manuel mekanisk filterryss
Collection system	Detachable container
Material	AISI 304 rustfri staa (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)	760 x 610 x 1780 mm

Questions and answers

What does "extended" construction mean?

"Extended" refers to a reinforced filter chamber and a taller, narrower container profile compared to a standard DT unit. It accommodates a larger main filter area (PTFE-laminated SD cloth) without significantly increasing footprint, and it makes room for the poly liner + retainer plate for easy disposal. Price and filter service are typically comparable to the 35L MRP, but you gain 55 L capacity and the PTFE lamination's advantages for sticky dust.

Why are dimensions and weight not specified?

Tiger-Vac's official EU factsheet (April 2026 revision) does not specify length, width, height or weight for this model. This is because the "extended" configuration is built as a customer-specific assembly of standard components, and the dimensions depend on whether you choose a standard or stainless cart, whether you include a filter cartridge skirt, etc. Ask Particulair for concrete data on your order configuration -- we obtain it directly from Tiger-Vac Europe.

Why PTFE-laminated filter?

PTFE (polytetrafluoroethylene) is a smooth, low-friction material. A cloth filter with PTFE lamination has a surface that is very difficult for dust to adhere to, so the filter cake releases more easily during MFS mechanical shake. This gives three advantages: longer intervals between filter service, better airflow over time (less pressure drop), and cleaner changes (dust releases more easily without clumping). The downside is that PTFE is more expensive than standard cloth, but the service cost savings pay back at high volume.

Can it pick up liquids?

No. The EXP1-55L DT EXTENDED (MFS) is dry recovery only (EN 17348 DT). For dry + wet (non-flammable liquids) with large capacity, choose the EXP1-55 (TC) RE HEPA (151 L dry / 170 L wet, EN 17348 DT/LC).

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-combi/exp1-55l-dt-extended-mfs-re-hepa/

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