

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

# Tiger-Vac EXP1-35L (DT) RE HEPA (MFS)



The Tiger-Vac EXP1-35L (DT) RE HEPA (MFS) is the largest detachable-tank variant in the EXP1 line -- 35 L capacity, PTFE main filter (218627) and a manual filter shaker (MFS) for sustained airflow during operation. Certified II 2GD to EN 17348 DT for simultaneous Zone 1 gas and Zone 21 dust, and ISO Class 4 cleanroom compatible. The PTFE filter media outperforms cloth with very fine or chemically aggressive dusts -- API powders and certain pigments among them -- and H14 HEPA secures the exhaust.

## APPLICATIONS

- Pharmaceutical API production with fine, hygroscopic or aggressive powders
- Longer cleaning windows where 25 L runs short -- 35 L reduces tank-change frequency
- Pigment industry and specialty chemistry where standard cloth does not withstand the media
- Inspection and decommissioning of production cells with accumulated process combustible dust
- Cleanroom class 4 high-throughput production with detachable-tank workflow

# Technical specifications

<b>ATEX marking</b>	II 2GD Ex d IIA T3 Gb / Ex t IIIC T200°C Db IP6X -- LCIE 03 ATEX 6297 -- EN 17348
<b>Internal / external zone</b>	-- / 21
<b>Motor type</b>	1-faset TEFC-motor, eksplosionssikret (Ex d IIA T3 Gb / Ex t IIIC T200°C Db), 1.0 kW / 4.5 A
<b>Airflow</b>	224 m <sup>3</sup> /h
<b>Vacuum</b>	152 mbar (1550 mmH <sub>2</sub> O)
<b>Container</b>	35 L
<b>Sound pressure</b>	78 dB(A)
<b>Filter class</b>	H class
<b>Filter type</b>	HEPA H14 (EN 1822-5, 99.995 % @ 0.3 µm MPPS), 211027B
<b>Primary filter</b>	Statisk ledende PTFE-hovedfilter 218627 (bedre kemisk modstand og finkorn-effektivitet end standard klud)
<b>Cleaning system</b>	Manual Filter Shaker (MFS) -- manuel rystemekanisme paa motortoppen
<b>Collection system</b>	Detachable container
<b>Material</b>	AISI 304 rustfri staa
<b>IP class</b>	IP6X
<b>Power</b>	1.0 kW
<b>Current</b>	4.5 A
<b>Voltage</b>	230 V / 50 Hz / 1~
<b>Inlet</b>	Diameter 50 mm
<b>Dimensions (L x W x H)</b>	660 x 560 x 1190 mm
<b>Weight</b>	47 kg

# Questions and answers

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## What does II 2GD mean in the ATEX marking?

II 2GD means category 2 for both gas and dust. The unit may be used in areas where explosive atmospheres OCCASIONALLY occur during normal operation -- that is external Zone 1 for gas and Zone 21 for dust. Category 2 does NOT cover the interior of the equipment (Zone 0/20) -- that requires category 1. EN 17348:2022 is the harmonised standard that specifies test requirements for vacuums in this category.

## Can I use the model in Zone 0 or Zone 20?

No. II 2GD requires category 2 externally -- Zone 1 gas and Zone 21 dust. Zone 0 (gas continuously present) and Zone 20 (dust continuously present) require category 1 equipment, which for vacuums is typically marked II 1/2GD or II 1GD. Choose e.g. the Delfin AIREX 1/2D-2/2G range for internal Zone 20 + external Zone 1/21.

## Why a PTFE main filter instead of cloth?

The PTFE membrane (218627) has a lower friction coefficient and higher chemical resistance than static-dissipative cloth. This means longer service life on fine API powders, aggressive pigments and hygroscopic dusts where cloth quickly clogs or degrades. MFS shaking is also more effective on PTFE because dust cake releases more easily from a smooth membrane surface.

## When should I choose the EXP1-35L over the EXP1-20L?

Simple rule: choose the 35L if you typically empty the 25 L tank more than once per shift, or if the media is hygroscopic/aggressive (the PTFE filter outlasts cloth). Choose the 20L if tank-change is infrequent, the overall height must stay below 1.1 m, or the job is less continuous. Specs (motor, airflow, vacuum, sound pressure) are identical between the two models.

# Contact and advisory

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