

TIGER-VAC · II 1/2GD EX DB H IIB T4 GB / EX H TB IIIC T135°C DB IP65 -- INTERN: EX H IIC T6 GA / EX H IIIC T50°C DA -- LCIE 03
ATEX 6295 X -- IECEx LCI 10.0040X -- EN 17348

Tiger-Vac CD-230V EX MRPFT HEPA



The Tiger-Vac CD-230V EX MRPFT HEPA is a stationary ATEX combined vacuum certified II 1/2GD to EN 17348 -- that is category 1/2 for dust (internal Zone 20, external Zone 21) and category 2 for gas (internal Zone 0, external Zone 1). It is typically used connected to process extraction in life science, pharmaceutical production and chemical process plants where the machine is permanently tied to a fixed installation. A 1.5 kW TEFC motor (explosion-proof Ex d IIA T4 Gb) delivers 212 m³/h at 2540 mmH₂O vacuum, ample for piped recovery on process equipment. Filter cleaning is Manual Reverse Purge with Filter Tubes (MRPFT): active filter tubes can be manually reverse-pulsed to remove the filter cake without opening the machine, significantly extending service intervals between filter changes. HEPA H14 final filter (EN 1822-5, 99.995 % at MPPS) is standard, and the whole housing is built in AISI 304 stainless steel with IP65 protection.

APPLICATIONS

- Stationary connection to process extraction in pharmaceutical tablet production
- Permanent installation at reactors and mixers in chemical process
- Life-science cleanrooms with internal Zone 20 (piped recovery of API powders)
- Zone 0/1 gas environments where the unit must withstand flammable vapours
- Process filtration where MRPFT manual cleaning extends filter service intervals

Technical specifications

ATEX marking	II 1/2GD Ex db h IIB T4 Gb / Ex h tb IIIC T135°C Db IP65 -- Intern: Ex h IIC T6 Ga / Ex h IIIC T50°C Da -- LCIE 03 ATEX 6295 X -- IECEX LCI 10.0040X -- EN 17348
Internal / external zone	20 / 21
Motor type	1-faset TEFC-motor, eksplosionssikret (Ex d IIA T4 Gb / Ex t IIIC T135°C Db), 1,5 kW / 12,3 A
Airflow	212 m ³ /h
Vacuum	249 mbar (2540 mmH ₂ O)
Container	50 L
Sound pressure	68 dB(A)
Filter class	H class
Filter type	HEPA H14 (EN 1822-5, 99,995 % @ 0,3 µm MPPS), 211027B
Primary filter	SD epitropic polyester med PTFE fingers-filter samling (219150) + cloth fingers filter SD (219154)
Cleaning system	Manual Reverse Purge with Filter Tubes (MRPFT) -- manuel omvendt-puls af filterroer uden aabning
Collection system	Detachable container
Material	AISI 304 rustfri staal
IP class	IP65
Power	1.5 kW
Current	12.3 A
Voltage	230 V / 50 Hz / 1~
Inlet	Diameter 50 mm
Dimensions (L x W x H)	640 x 480 x 1510 mm
Weight	97 kg

Questions and answers

What does II 1/2GD mean in the ATEX marking?

II 1/2GD means the unit is category 1 internally and category 2 externally -- for both gas (G) and dust (D). In practice: the inside of the vacuum (filter chamber, suction hose, container) may be exposed to Zone 0 for gas or Zone 20 for dust, where explosive atmospheres are continuously or long-term present. The surrounding environment may be Zone 1 for gas or Zone 21 for dust, where explosive atmospheres occur occasionally under normal operation. This makes the model suitable for piped recovery from process equipment that itself maintains Zone 0/20 internally.

Why is the mobility filter set to stationary when the unit has wheels?

The CD-230V EX pair (MRPFT and CFB) is physically mobile on a 4-wheel Carriage Base, but in life science and chemical process they are almost exclusively used as stationary central connections to process extraction or fixed pipe runs. We therefore categorise them as "stationary" in the catalogue -- it reflects real-world use, not physical movability. The wheels make it easy to wheel the machine to another piece of process equipment during changeover or service.

What is MRPFT versus the CFB variant?

The CD-230V EX is available in two versions: MRPFT (Manual Reverse Purge with Filter Tubes) and CFB (Conductive Filter Bag). MRPFT uses fixed filter tubes that can be manually reverse-pulsed -- the operator activates a lever that briefly reverses airflow, releasing the cake from the filter. This extends service intervals significantly and suits continuous large volumes (pharma tablet production, chemical process). CFB uses a static-dissipative filter bag that continuously collects dust; when full, the bag is sealed and disposed -- suited where dust must be disposed in sealed units (API powders, toxic active ingredients). Both share the same motor, flow, vacuum, container size and ATEX class.

Can it pick up liquids?

No. The CD-230V EX MRPFT HEPA is dry-only -- EN 17348 DT. For wet + dry in the same ATEX class, choose the Delfin 802 WD AIREX 1/2D-2/2G, which is also II 1/2GD and covers both dust and gas. For dust only (not simultaneous gas), the Delfin 202 DS 3 AIREX is a slimmer choice.

Contact and advisory

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