

TIGER-VAC · II 1/2D EX H TB IIIC T135 C DB IP65 -- INTERN: EX H IIIC T50 C DA -- LCIE 03 ATEX 6295 X -- IECEx LCI 10.0040X -- EN 17348 DT

Tiger-Vac CD-4 EX (MRP) 2D Z21



The Tiger-Vac CD-4 EX (MRP) 2D Z21 is the MRP variant of the CD-4 series -- marked II 1/2D to EN 17348 DT. The model uses a static-dissipative aluminized spun bond reverse-purge cartridge (214219A, 18"H x 6.73"ID x 11.085"OD, 13.6 sq ft) as the main filter. When vacuum drops or after a shift the operator activates a lever on the side of the removable filter chamber, and airflow is briefly reversed through the cartridge so the dust cake falls into the detachable 56.8 L tank. The MRP system requires no electronic valves and can be cleaned without opening the machine, giving longer intervals between filter changes compared to MFS. The three-phase TEFC motor (3.4 kW, 8 A) delivers 306 m³/h at 2540 mmH₂O and is dimensioned for continuous duty. A muffler is included and reduces noise from 90 dB(A) to 68 dB(A).

APPLICATIONS

- General cleanup in hazardous locations
- High-frequency cleaning cycles where cartridge durability matters more than simplicity
- Production with dust forming hard cakes (spun bond cartridge tolerates more cleaning cycles than flat filter)
- Continuous 24/7 duty in Zone 20/21 environments
- Installations where lowest possible noise level is required (68 dB(A) with muffler)

Technical specifications

ATEX marking	II 1/2D Ex h tb IIIC T135 C Db IP65 -- Intern: Ex h IIIC T50 C Da -- LCIE 03 ATEX 6295 X -- IECEx LCI 10.0040X -- EN 17348 DT
Internal / external zone	20 / 21
Motor type	3-faset TEFC-motor, eksplosionssikret (Ex h tb IIIC T135 C Db), 3,4 kW / 8 A, 400 V / 50 Hz
Airflow	306 m ³ /h
Vacuum	249 mbar (2540 mmH ₂ O)
Container	56.8 L
Sound pressure	68 dB(A)
Filter class	H class
Filter type	HEPA H14 (212202, 11" high, 99,995 % @ 0,3 um) eller ULPA U15 (212203, 11" / 28 cm). External HEPA housing (217851) eller lang variant (212204) er tilvalg
Primary filter	Statisk ledende aluminized spun bond polyester reverse-purge patron (214219A, 18"H x 6,73"ID x 11,085"OD, 13,6 sq ft, med gasket)
Cleaning system	Manual Reverse Purge (MRP) -- manuel omvending af luftstroemmen gennem patronen, ingen aabning af maskinen
Collection system	Detachable container
Material	AISI 304 rustfri staa (undtagen cart: powder coated)
IP class	IP65
Power	3.4 kW
Current	8 A
Voltage	400 V / 50 Hz / 3~
Inlet	Diameter 63.5 mm
Dimensions (L x W x H)	1190 x 690 x 1730 mm
Weight	177 kg

Questions and answers

Why choose MRP over MFS?

MRP (Manual Reverse Purge) uses a cylindrical spun bond cartridge (214219A) where airflow is briefly reversed through the cartridge to dislodge the cake. MFS (Manual Filter Shaker) instead mechanically shakes a flat main filter. Benefits of MRP: the cartridge has significantly more surface area (13.6 sq ft vs typical 14 sq ft for MFS, but distributed over a deep cylindrical form), tolerates more cleaning cycles over time, and the cake falls more consistently. Drawback: the MRP variant is not ESD Safe designed (the MFS variant is), so it's less suited for particularly conductive pyrotechnic metal substances. In short: MRP for high duty intensity and non-conductive dust; MFS for conductive metal dust and pyrotechnics.

What is the SD skirt and when is it relevant?

The SD* skirt (214221, 18" high x 11.085" OD) is a cylindrical static-dissipative sleeve that fits around the reverse-purge cartridge. It acts as a pre-filter and keeps larger particles away from the cartridge itself, so the cartridge stays cleaner longer. The skirt is particularly relevant if the dust contains larger fragments (metal chips, plastic pieces, fibres) that would clog the cartridge quickly without pre-treatment. It's an optional component -- standard delivery does not include the skirt.

What is the difference between standard cart and SS cart?

The standard cart is powder coated (painted steel), robust and suited for most industrial environments. The SS cart (stainless steel) is optional for applications where cleaning is critical (pharma, food) or the environment is corrosive (liquids on the floor, salt air). Both carts have conductive wheels supporting static dissipation from tank through cart to floor. Contact us for price difference and delivery time on the SS upgrade.

Can the reverse-purge cartridge be replaced by the operator?

Yes. The cartridge (214219A) sits in a removable filter chamber that can be opened without special tools -- typically 4-6 screws or clips. The cartridge is ATEX certified and may ONLY be replaced with an original Tiger-Vac part (same part number). Using non-approved filters voids the ATEX certificate and can cause accidents. We recommend the operator keep a log of cartridge changes and verify ground-continuity with the supplied multimeter (211065B) after each change.

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-dust/cd-4-ex-mrp-2d/

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