

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 DT

Tiger-Vac CD-36L EX DT (MFS) HEPA



The Tiger-Vac CD-36L EX DT (MFS) HEPA is the HEPA variant of the CD-36L MFS 1/2GD model -- marked II 1/2GD to EN 17348 DT (Z1-2-21-22), i.e. category 1/2 for dust and gas simultaneously. It is identical to the CD-36L EX DT (MFS) ULPA WITH SS CART in all physical respects except two: (1) chassis in painted steel rather than full stainless SS304, and (2) final filter in HEPA H14 rather than ULPA U15. This makes it the right choice in Zone 1/21 environments where standard HEPA filtration is sufficient and painted chassis suits the application -- e.g. mechanical process maintenance or production where cleanroom compatibility is not required. The Manual Filter Shaker (MFS) cleaning system knocks dust cake off the primary filter manually without opening the machine, and the detachable 36 L tank can be lifted off the cart for quick emptying. Three-phase TEFC motor at 2.2 kW is standard (single-phase 1.5 kW as option).

APPLICATIONS

- Chemical process plants in Zone 1/21 where HEPA H14 is sufficient
- Mechanical process maintenance with mixed gas/dust exposure
- Pharmaceutical wash rooms (non-cleanroom) in 1/2GD zones
- Production rooms where painted chassis suits concept and budget
- Mobile applications requiring 1/2GD with MFS cleaning and HEPA exhaust

Technical specifications

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|---------------------------------|---|
| 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 DT |
| Internal / external zone | 20 / 21 |
| Motor type | 3-faset TEFC-motor (standard), eksplosionssikret (Ex db h IIB T4 Gb / Ex h tb IIIC T135°C Db), 2,2 kW / 4,8 A, 400 V / 50 Hz |
| Airflow | 212 m ³ /h |
| Vacuum | 249 mbar (2540 mmH ₂ O) |
| Container | 36 L |
| Sound pressure | 72 dB(A) |
| Filter class | H class |
| Filter type | HEPA H14 (EN 1822-5, 99,995 % @ 0,3 µm MPPS) |
| Primary filter | Statisk ledende epitropic polyester primaerfilter med MFS-rystersamling |
| Cleaning system | Manual Filter Shaker (MFS) -- operatoer-aktiveret ryster paa siden roeger stoevkaken af filtret og lader den falde i beholderen |
| Collection system | Detachable container |
| Material | Lakeret staal chassis (tank og filterkammer i rustfri staal) |
| IP class | IP65 |
| Power | 2.2 kW |
| Current | 4.8 A |
| Voltage | 400 V / 50 Hz / 3~ (standard) -- 230 V / 50 Hz / 1~ option |
| Inlet | Diameter 50 mm |
| Dimensions (L x W x H) | 780 x 560 x 1780 mm |
| Weight | 99 kg |

Questions and answers

What is the difference from CD-36L EX DT (MFS) ULPA WITH SS CART?

Same II 1/2GD certification, same MFS cleaning system, same motor options, same 36 L tank -- but two real differences: (1) chassis in painted steel rather than stainless SS304; and (2) final filter HEPA H14 (99.995 % at MPPS) rather than ULPA U15 (99.999 %). This gives lower cost and less chassis cleaning between batches, but excludes ISO Class 4 cleanroom use. Choose the HEPA variant when cleanroom compatibility is not required and standard HEPA filtration is sufficient.

What does Z1-2-21-22 in the model name mean?

Z1-2-21-22 is Tiger-Vac's internal designation indicating the ATEX zones the model is intended for: Zone 1 and Zone 2 for gas, Zone 21 and Zone 22 for dust. It is a usage note, not a separate ATEX marking. The actual certified marking is II 1/2GD (external Zone 1/21, internal Zone 0/20). Zone 2 and Zone 22 are by definition less strict than Zone 1 and Zone 21 respectively, so the machine covers them automatically -- so Tiger-Vac can write all four zones in the model name without changing the certification.

Can I upgrade to ULPA later if requirements change?

The standard HEPA variant ships with HEPA H14, but ULPA U15 can in principle be retrofitted. Note however: if you plan for ISO Class 4 cleanrooms or handling particularly toxic active substances where U15 is required, it is more effective to specify the ULPA SS CART variant (cd-36l-ex-dt-mfs-ulpa-ss-cart) from the start. The reason is that U15 requirements often come with stainless SS304 chassis requirements for cross-contamination minimisation -- and this is only available on the SS CART model. HEPA + painted chassis + ULPA upgrade gives an inelegant hybrid that rarely satisfies audit requirements.

How does the operator perform an MFS cleaning?

The procedure takes less than a minute. The operator shuts down suction, activates the shaker handle on the side of the filter housing (typically 5-10 strokes up and down) which shakes the primary filter mechanically. Dust cake releases and falls into the detachable 36 L tank. The operator can then restart suction -- vacuum returns to normal. Cleaning is typically performed after each shift or when vacuum drops. Note that the downstream HEPA H14 final filter is not cleaned by MFS -- it must be replaced periodically (typically annually under normal duty).

Contact and advisory

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