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

Tiger-Vac CD-25 EX MRAC (HY-C)

The Tiger-Vac CD-25 EX MRAC (HY-C) is the TE series' highest certification level: ATEX II 1/2GD -- internal Zone 20/0 (Ga/Da) and external Zone 1/21 (Gb/Db). Internal T6 (Tmax 50 °C), external T4 (Tmax 135 °C). Dual-certified under ATEX (LCIE 03 ATEX 6295 X) and IECEx (LCI 10.0040X). Hydro Cart (HY-C) is a hydraulic lift cart that can raise the 56.8 L tank to working height -- critical when a full 64 L liquid tank weighs 70+ kg and must be lifted to a waste container. MRAC = Manual Reverse Airflow Cleaning for cartridge cleaning without opening the unit. Available in two electric variants: 400V three-phase TEFC (2.2 kW / 4.8 A, part 112600B1) and 230V single-phase TEFC (1.5 kW / 12.3 A, part 112600B3). Both deliver 212 m3/h and 2540 mmH2O.

APPLICATIONS

- Defueling and depuddling of military aircraft (F-35, legacy fighters) in hangars
- Recovery of JP-8, Jet A-1 and diesel spills around refueling stations
- Depot work with fuel residues in defense logistics (NSN/NATO)
- Civilian aviation MRO -- wing-tank emptying during service checks
- Chemical industry with flammable solvents (toluene, acetone, alcohols) in Zone 1/21

Technical specifications

ATEX marking	II 1/2GD External Ex db h IIB T4 Gb / Ex h tb IIIC T135°C Db IP65 -- Internal Ex h IIC T6 Ga / Ex h IIIC T50°C Da -- LCIE 03 ATEX 6295 X -- IECEx LCI 10.0040X -- EN 17348 LC
Internal / external zone	-- / 21
Motor type	3-faset TEFC-motor (standard), eksplosionssikret (External 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 m³/h
Vacuum	249 mbar (2540 mmH_2O)
Container	56.8 L
Sound pressure	72 dB(A)
Filter class	Stainless steel mesh filter
Filter type	Rustfri stål mesh-filter (213433) + aktivt kulfilter inkluderet -- inline i stainless steel housing
Primary filter	Rustfri stål mesh (213433) + aktivt kulfilter-patron (211045) inkluderet + strainer basket.
Cleaning system	MRAC (Manual Reverse Airflow Cleaning) -- patron-rensning uden aabning af enheden
Collection system	Detachable container
Material	AISI 304 rustfri stål
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 38 mm
Dimensions (L x W x H)	1350 x 510 x 1520 mm
Weight	203 kg

Questions and answers

What does II 1/2GD mean and why does it matter over II 2GD?

II 1/2GD is a higher ATEX class than II 2GD. The first digit is the INTERNAL category (the part of the unit in contact with fuel/dust), the second is the EXTERNAL category (the unit seen from outside): 1 = Zone 0/20 (permanent risk), 2 = Zone 1/21 (periodic risk). The CD-25 therefore has internal '1' (Zone 20 construction -- dust may be present more than 1000 h/year) and external '2' (Zone 1/21). The rest of the TE series has '2' internally. The difference matters during emptying and maintenance where the operator may contact the unit's interior: on II 2GD, the unit must cool down and zone classification be checked each time; on II 1/2GD, the internal zone classification is inherently certified.

Why a hydraulic lift cart (Hydro Cart)?

A 64 L liquid tank with 1.0 kg/L fuel weighs 64 kg -- plus the tank's own weight, a full unit reaches about 70-80 kg just for the tank. Lifting that manually to a 90 cm waste container is not realistic. The Hydro Cart uses a hydraulic pump (not electric, for ATEX reasons) to raise the entire tank to working height. This eliminates manual lifting, reduces spill risk, and makes emptying possible for a single operator. In defense contexts where the same unit is used by multiple operators over a 24-hour rotation, ergonomics is a real operational factor.

400V or 230V -- which variant should I choose?

Both deliver the same performance (212 m3/h, 2540 mmH2O). The choice depends on your electrical infrastructure: 400V three-phase (112600B1) is standard industrial mains in Europe with typically lower current (4.8 A) and more stable operation; 230V single-phase (112600B3) is wall-outlet level and suited to mobile operations where three-phase is unavailable, but requires 12.3 A which can be problematic on weak circuits. Defense procurements typically choose 400V three-phase for their hangars. Field work and mobile operations choose 230V single-phase.

Contact and advisory

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