

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

## Tiger-Vac EXP1-55 (TC) TE



The Tiger-Vac EXP1-55 (TC) TE is the largest single-phase explosion-proof vacuum in the TE series for the recovery of fuel and flammable liquids in ATEX Zone 1 (gas) and Zone 21 (dust). Certified to EN 17348 LC class, covering both flammable and non-flammable liquids -- the critical distinction from the standard DT/LC class, which covers only non-flammable. The Tilt Cart (TC) construction allows the operator to tip the entire tank for emptying without lifting, a real ergonomic and safety advantage for a 170 litre full liquid tank. 1.0 kW TEFC motor delivering 224 m<sup>3</sup>/h and 1550 mmH<sub>2</sub>O. AISI 304 stainless construction, optional activated carbon filter for VOC vapours, designed for defueling and hangar clean-up.

### 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

<b>ATEX marking</b>	II 2GD Ex d IIA T3 Gb / Ex t IIIC T200°C Db IP6X -- LCIE 03 ATEX 6297 -- EN 17348 LC
<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>	151 L
<b>Sound pressure</b>	78 dB(A)
<b>Filter class</b>	Stainless steel mesh filter
<b>Filter type</b>	Rustfri staa mesh-filter med clamp (part 213433) -- aktivt kulfilter (211045) som tilvalg for VOC/dampe
<b>Primary filter</b>	Rustfri staa mesh-filter (213433). Strainer basket inkluderet. Statisk ledende konstruktion (< 10 ohm resistivitet).
<b>Cleaning system</b>	Ingen (manuel) -- mesh-filter aftages og skylles rent
<b>Collection system</b>	Detachable container
<b>Material</b>	AISI 304 rustfri staa (undtagen vogn)
<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>	1020 x 760 x 1270 mm
<b>Weight</b>	68 kg

# Questions and answers

---

## What's the difference between EXP1-(TC) TE and EXP1-(TC) RE HEPA?

The TE series is specifically built for fuel and flammable liquid recovery (EN 17348 LC class), while the RE HEPA series is an ATEX-combi unit for combustible dust and non-flammable liquids (EN 17348 DT/LC). They share the same chassis, motor, airflow and vacuum -- but filtration is fundamentally different: TE has a stainless steel mesh filter that can be washed and reused, RE HEPA has an HEPA H14 filter for fine particles. Choose TE for JP-8, Jet A-1, solvents or other flammable liquids. Choose RE HEPA for pharma dust, water-based cleaning or other non-flammable media where HEPA efficiency is required.

## Why a stainless steel mesh filter instead of HEPA on the TE variant?

HEPA media is typically glass fibre or synthetic polyester -- materials that can swell, degrade or chemically react when exposed to flammable hydrocarbons such as JP-8 or organic solvents. A stainless steel mesh has no chemical reaction with these substances, can be washed between jobs and reused for years, and is compatible with the EN 17348 LC class liquid test protocols. The mesh captures the particles and sludge typically found in fuel residues (rust particles, sand, combustion residue) -- not micro-particles a HEPA filter is designed for. For tasks where VOC vapours also need filtration, an activated carbon filter can be added as an option.

## Which liquids does EN 17348 LC cover?

LC (Liquid Collection) is the EN 17348 class for flammable liquid recovery. It covers JP-8 and Jet A-1 (typical flash point 38-66 °C), diesel, MEK, acetone, toluene, alcohols and other organic solvents with flash point below 60 °C. Non-flammable liquids are ALSO covered -- LC is the highest liquid class in the standard. For comparison, DT/LC (available on the EXP1 RE HEPA series) covers only non-flammable liquids. EN 17348 was harmonised in the EU standard in March 2023 and is today the normal requirement in defense procurement and the chemical industry.

## Can I retrofit with an activated carbon filter?

Yes. The activated carbon filter is supplied as an option in a stainless steel filter housing (part 211046B for 25 gal, 211046C for 55 gal) mounted on the exhaust, with a replaceable activated carbon cartridge (211045). The carbon filter adsorbs VOC vapours (toluene, acetone, benzene, alcohols, aerosolised hydrocarbons) before exhausting into room air. Service life depends on exposure -- typically 50-200 operating hours before replacement. Strongly recommended for work in enclosed spaces such as hangars or depot warehouses, where vapours can otherwise accumulate at working height.

# Contact and advisory

---

## PARTICULAIR

### Particulair

Højtoften 12

2690 Karlslunde, Denmark

CVR: 34129894

Phone: (+45) 70 23 12 03

E-mail: [sales@particulair.com](mailto:sales@particulair.com)

Web: [particulair.eu](http://particulair.eu)

**Product page:** [particulair.eu/ex-vac/en/fuel-solvent/exp1-55-tc-te/](http://particulair.eu/ex-vac/en/fuel-solvent/exp1-55-tc-te/)

---

## SMARTER THINKING • BETTER WORKING

This datasheet is generated deterministically from Particulair product data. Prices and availability provided on request. All specifications subject to change without notice.