DEH-K SERIES · INDUSTRIAL STATIONARY DEHUMIDIFIERS

DanVex DEH-5K

Stationary industrial dehumidifier · 500 L/day · Full Inverter · 4800–5300 m³/h



Stationary industrial dehumidifiers for permanent installation where humidity control is part of the building or process specification — manufacturing sites, large warehouses and logistics hubs, food and pharmaceutical production, and indoor cultivation.

Vertical top-discharge airflow distributes dry air evenly throughout the room volume and reaches the upper layers where moisture collects, while the inverter compressor and fan modulate output to match the load — cutting running costs in large spaces.

Manufacturing · Large warehouses · Food production · Pharmaceutical · Logistics & distribution · Indoor cultivation

KEY FEATURES

- **Full Inverter system** — matches output to real load; up to 40% energy saving, no humidity spikes
- **Top-discharge airflow** — reaches the upper room volume; connects straight to overhead ducting
- **UV Steriliser + Anion Generator** — reduces airborne bacteria, mould spores and pathogens
- **E-Coating heat exchanger** — anti-corrosion layer; resists acids, brines, chlorinated agents
- **5-in-1 air quality sensor** — CO_2 · PM2.5 · TVOC · RH · T°
- **Wi-Fi + Modbus RTU RS-485** — app control and BMS/SCADA integration on every model

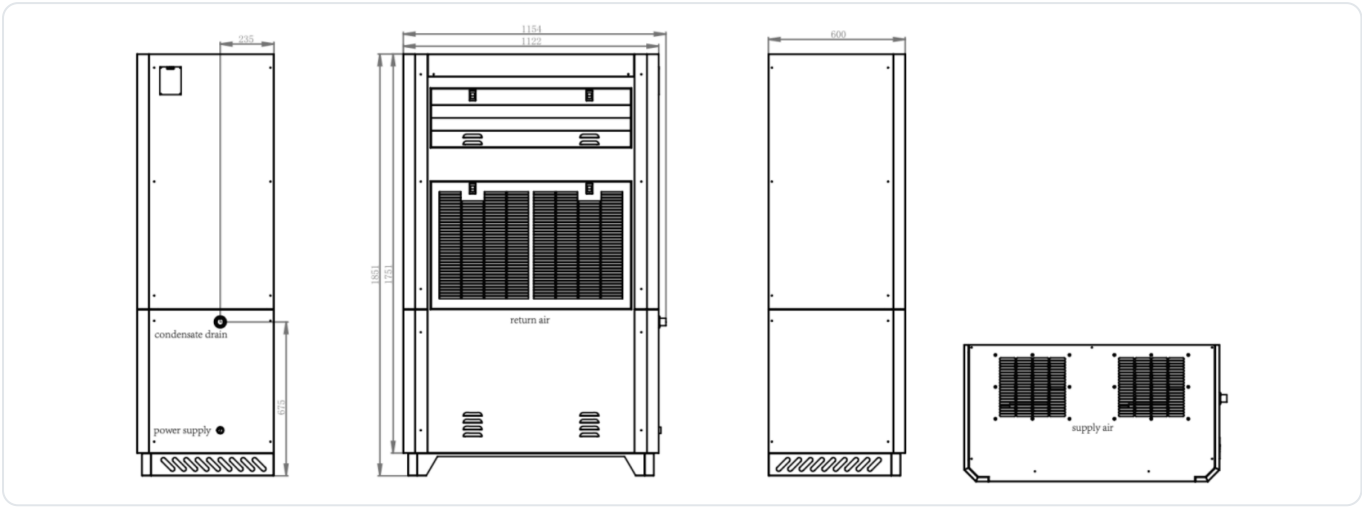
SPECIFICATIONS

Dehumidification	**500 L/day**
Supply airflow	**4800–5300 m³/h**
External static pressure	**250 Pa**
Operating temperature	**+5 … +38 °C**
Working humidity range	**30–100% RH**
Voltage / Frequency	**380–415 V 3-phase / 50–60 Hz**
Compressor	**Full Inverter, R-32**
Fan system	**Smart-Inverter EC (0–100%)**
Heat exchanger protection	**E-Coating**
Defrost system	**Hot Gas Defrost**
Air quality sensor	**5-in-1 (CO_2/PM2.5/TVOC/RH/T°)**
Air purification	**UV Steriliser + Anion**

Filtration	**G4**
Rated power (variable)	**6080–9224 W**
Current	**5.5–7.6 A**
Refrigerant	**R-32 × 2800 g**
Noise level at 1 m	**38–45 dB(A)**
Water protection	**IPX4**
Dimensions (L×W×H)	**1154 × 600 × 1850 mm**
Package size (L×W×H)	**1200 × 650 × 2000 mm**
Net weight	**207 kg**
Gross weight	**250 kg**
Condensate drain connection	**Ø 32 mm**
Connectivity / BMS	**Wi-Fi + Modbus RTU RS-485**

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DIMENSIONS & VIEWS



Dimensions in mm. side panel with condensate drain and power supply, front view with return-air intake, side view, plan view with top supply-air outlet.

UNIT L×W×H	PACKAGE L×W×H	NET / GROSS WEIGHT	CONDENSATE DRAIN
1154 × 600 × 1850 mm	**1200 × 650 × 2000 mm**	**207 kg / 250 kg**	**Ø 32 mm**

SCOPE OF SUPPLY

- Stationary dehumidifier unit — G4 filter fitted; UV air sanitiser, anion generator, 5-in-1 sensor, Wi-Fi and Modbus RTU RS-485 integrated; factory refrigerant charge (R-32)
- Electronic controller with built-in humidity sensor
- Remote control module

INSTALLATION & CONNECTIONS

Mounting — Floor-standing unit for permanent installation in production halls, warehouses and process areas; place on a level floor with free space in front of the intake grille and above the top outlet.

Air distribution — Top vertical discharge distributes dry air through the upper zone of high rooms and avoids short-circuiting to the intake. The top outlet can be connected to ductwork for distribution to several zones.

Condensate drain — Ø 32 mm drain connection on the side panel; connect to a drain line with continuous fall.

Electrical supply — 380–415 V, 3-phase, 50–60 Hz. Dedicated circuit with circuit breaker sized per model current and local code; connection by a certified electrician.

Control & BMS — Electronic controller with built-in humidity sensor or remote control module (both included). Modbus RTU RS-485 for BMS/SCADA; Wi-Fi for app control.

Service — Filter access through the front panel; G4 filter cleaned or replaced per the manual.

DEH-K SERIES — MODEL RANGE

Parameter	DEH-2K	DEH-2K Inverter	DEH-3K	DEH-5K	DEH-10K
Dehumidification	200 L/day	240 L/day	300 L/day	**500 L/day**	1000 L/day
Supply airflow	2500 m³/h	2800–3200 m³/h	2800–3500 m³/h	**4800–5300 m³/h**	9500–12000 m³/h
External static pressure	200 Pa	200 Pa	200 Pa	**250 Pa**	300 Pa
Voltage / Frequency	380–415 V 3-phase / 50–60 Hz	220–230 V 1-phase / 50–60 Hz	380–415 V 3-phase / 50–60 Hz	**380–415 V 3-phase / 50–60 Hz**	380–415 V 3-phase / 50–60 Hz
Compressor	R-32	Full Inverter, R-32	Full Inverter, R-32	**Full Inverter, R-32**	Full Inverter, R-32
Fan system	Step-Control AC (multi-speed)	Smart-Inverter EC (0–100%)	Smart-Inverter EC (0–100%)	**Smart-Inverter EC (0–100%)**	Smart-Inverter EC (0–100%)
Heat exchanger protection	Blue Fin	E-Coating	E-Coating	**E-Coating**	E-Coating
Rated power (variable)	4000 W	3040–4200 W	3260–4930 W	**6080–9224 W**	18500–21130 W

Specifications, dimensions and drawings are subject to change without notice and may differ from the delivered unit; verify critical dimensions against the installation manual before design work. Dehumidification capacity measured at 30 °C / 80% RH.