DEH-i SERIES · INDUSTRIAL MOBILE DEHUMIDIFIERS

DanVex DEH-500i

Mobile industrial dehumidifier · 59 L/day · R-290



The DanVex DEH-500i is a professional mobile industrial dehumidifier rated at 59 L/day, built specifically for demanding sites and industrial applications. It uses R-290 refrigerant, an E-Coating heat exchanger, Hot Gas Defrost and a high-pressure centrifugal fan.

Mounted on a wheeled trolley, it moves between rooms and floors, and integrates with building management systems over Modbus RTU RS-485.

Construction drying · Warehouses · Food & pharma production · Flood restoration · Drying chambers · Indoor cultivation

KEY FEATURES

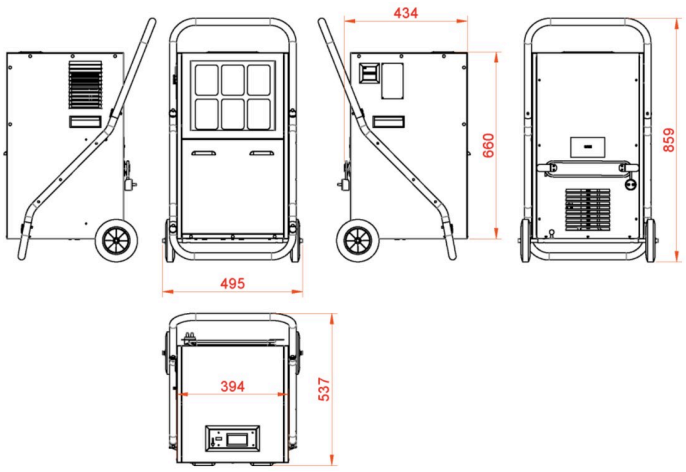
- **E-Coating heat exchanger** — electrochemical anti-corrosion coating, standard across the series
- **High-pressure centrifugal fan** — drives air across large volumes
- **Modbus RTU RS-485** — BMS integration on every model
- **Hot Gas Defrost** — 3-minute defrost cycle — dehumidification continues, no 20–30 min stop
- **R-290 refrigerant** — low-GWP, hermetically sealed circuit
- **Mobile chassis** — trolley / rolling cabinet for repositioning on site

SPECIFICATIONS

Dehumidification (30 °C / 80% RH)	**59 L/day**
Process airflow	**500 m³/h**
Form factor	**Wheeled trolley**
Power consumption	**880 W**
Voltage / Frequency	**220–230 V / 50–60 Hz**
Operating temperature range	**+10 … +35 °C**
Working humidity range	**30–100% RH**
Current	**3.8 A**
Refrigerant	**R-290 × 180 g**
Defrost system	**Hot Gas Defrost**
Heat exchanger coating	**E-Coating**

Fan	**High-pressure centrifugal**
Noise level at 1 m	**< 64 dB(A)**
Condensate tank	**10 L**
Control	**Digital controller + Modbus RTU RS-485**
Dimensions (L×W×H)	**495 × 434 × 660 mm**
Package size (L×W×H)	**520 × 520 × 860 mm**
Net weight	**39 kg**
Gross weight	**51 kg**
Duct connection	**—**
Ingress protection	**IP22**
Air filter	**G1 (washable)**

DIMENSIONS & VIEWS



Dimensions in mm. Views: side, front, side and rear, plan view. Overall dimensions in the specification table are body dimensions; height and depth with handle as shown.

UNIT L×W×H	PACKAGE L×W×H	NET / GROSS WEIGHT	CONDENSATE TANK
495 × 434 × 660 mm	**520 × 520 × 860 mm**	**39 kg / 51 kg**	**10 L**

SCOPE OF SUPPLY

- Mobile unit with wheels / handle
- G1 washable air filter
- Digital controller with integrated temperature and humidity sensors
- Modbus RTU RS-485 interface
- Factory refrigerant charge (R-290)

INSTALLATION & CONNECTIONS

Placement	Mobile unit on a wheeled chassis for construction drying, warehouses, production areas and water-damage restoration; position in the zone to be dried with free space around the intake and outlet.
Condensate	Built-in condensate tank (10 L) with automatic shut-off when full, or continuous operation via the direct drain connection.
Electrical supply	220–230 V, 1-phase, 50–60 Hz, plug-in connection to a socket protected per local code.
Control & BMS	Digital controller with humidity setpoint; Modbus RTU RS-485 for integration into automated climate control systems.
Service	Washable G1 air filter; rinse and refit per the manual.

MORE VIEWS









DEH-i SERIES — MODEL RANGE

Parameter	DEH-500i	DEH-900i	DEH-1200i	DEH-1900i
Dehumidification (30 °C / 80% RH)	**59 L/day**	90 L/day	120 L/day	180 L/day
Process airflow	**500 m³/h**	840 m³/h	1400 m³/h	2000 m³/h
Form factor	**Wheeled trolley**	Wheeled trolley	Wheeled trolley	Rolling cabinet
Power consumption	**880 W**	1150 W	1380 W	1700 W
Current	**3.8 A**	5.3 A	6.8 A	7.2 A
Refrigerant	**R-290 × 180 g**	R-290 × 250 g	R-290 × 300 g	R-290 × 465 g
Noise level at 1 m	**< 64 dB(A)**	< 64 dB(A)	< 64 dB(A)	< 60 dB(A)
Condensate tank	**10 L**	10 L	10 L	— (direct drain only)

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.

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