DUNE

Residential Ceiling-mounted Dehumidifier

Features

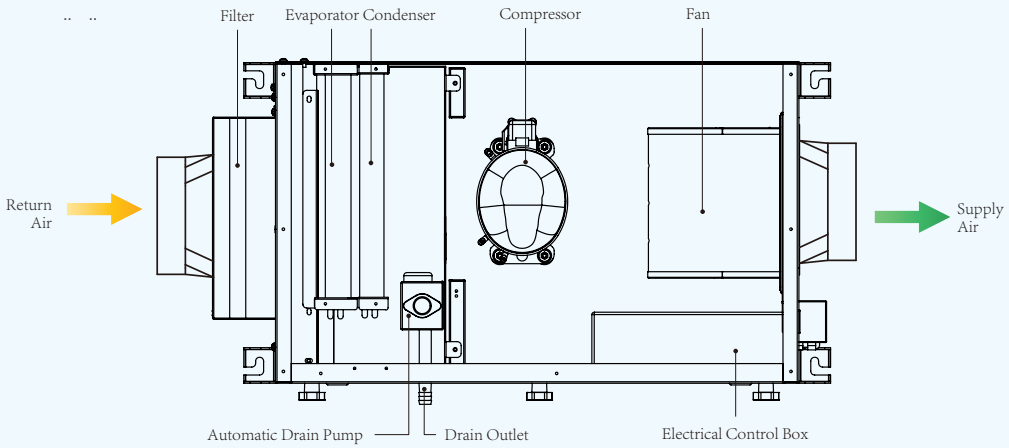
- The dehumidifier is suitable for high-humidity areas such as villa basements and underground parking lots.
- Internal circulation dehumidification, preventing the introduction of external humid air for better humidity control.
- Flange size: 146mm.

Design

- Made of galvanized sheet metal with built-in thermal and acoustic insulation, providing both heat preservation and noise reduction.
- The side of the unit is equipped with a removable panel for easy maintenance and filter cleaning or replacement.
- Flanges are installed on both ends of the dehumidifier.
- The sheet metal structure includes mounting brackets for ceiling installation.

Compressor

- Depending on the model, either a piston-type or rotary-type compressor is used.
- Compact compressor with low energy consumption and low noise.
- Buffer-mounted to effectively reduce vibration transmission.



Isothermal Dehumidification Process

- The first process is that the fan sucks the humid air from the indoor space into the machine.
- The second process is that the humid air sucked in passes through the evaporator (cooling copper tubes and fins), where it is liquefied into water droplets and then drained out through the hose.
- The third process is that the dried air, after being cooled by the evaporator, passes through the condenser (high-temperature copper tubes and fins) where it is heated and then sent into the room through the air outlet.
- This process cycles multiple times, thereby reducing the indoor air humidity.

Filter

- The air inlet is equipped with a coarse filter to filter out large particles, protecting the compressor, evaporator, and condenser from dust accumulation.

Control and Automation

Dune series dedicated controller:

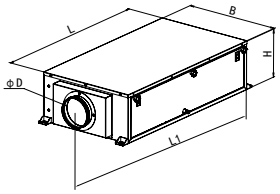
- Device On/Off
- Operation mode switching (Dehumidification, Ventilation)
- Humidity setting (20-95%)
- Airflow control (High, Low)
- Timer function

Installation

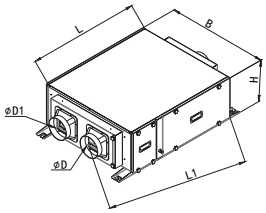
- Due to the ultra-thin design of the device, it is ideal for ceiling installation in spaces with limited room.
- The installation location must provide enough space for future maintenance and servicing.
- Condensate drainage must be considered during installation.

Dimensions

Model	D/D1	B	H	L	L1
Dune 20L	146	351	201	646	865
Dune 50L	146	472	240	778	1000
Dune 90L	146	721	310	803	1067



DUNE 20L/50L



DUNE 90L

Technical Parameters

Parameters	Dune 20L	Dune 50L	Dune 90L
Applicable Area [m²]	25-40	40-100	100-160
Maximum Static Pressure [Pa]	150	370	450
Rated Voltage [V]	220~		
Rated Frequency [Hz]	50		
Dehumidification Capacity [L/D] (30°C/80%)	20	50	90
Air Flow [m³/h]	200	450	700
Rated Power [W]	400	1150	1350
Noise [dB (A)]	38	45	47
Shell Material	Polymer Coated Steel Plate		
Refrigerant/Charging Amount [g]	R134a/260	R134a/900	R410A/900
Supply Air Filter	G2		
Air Outlet Flange [mm]	ϕ146		
Weight [kg]	28	47	65

Notes:

1.The input power, dehumidification capacity, noise level, airflow, and other data are all tested under dehumidification mode.

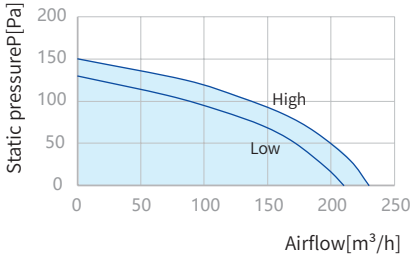
2.Airflow, input power, dehumidification capacity, and other data are measured with 1-meter ducts connected to both the intake and exhaust openings, with a static pressure of 50 Pa.

3.The noise level is the A-weighted average sound pressure level, which is the central value of laboratory test results with a tolerance range of ±3 dB.

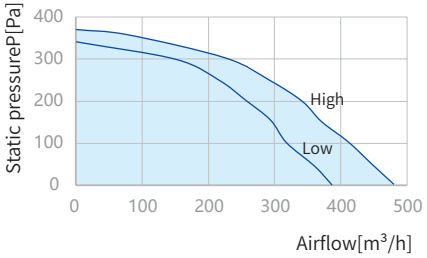
4.The noise level is measured at a distance of 1.5 meters below the product in a soundproof test room (with a 1-meter soundproof duct connected to the outlet and a 1-meter duct connected to the intake).

5.The airflow is the average value of the company's test results, with a tolerance range of ±10%.

Dune 25L



Dune 50L



Dune 90L