

MINI | CLIMATE

Ventilation Units

MINI can provide small spaces with fresh and filtered air without opening the windows, which is quite important during cold or warm periods of the year. Notably, MINI is a 3-IN-1 device that provides air purification, ventilation, and comfort for single rooms.

CLIMATE, which uses the same “plug and play” form factor as MINI, is an exhaust and supply fan system for thermal energy (heat) recovery, and can ventilate rooms, apartments, and houses.



PURIFICATION | Clean Air

The units use the principle of mechanical filtration to remove pollutants from the outdoor air that is supplied to your space.

VENTILATION | Fresh Air

The units exhaust stale air and pollutants from your space while simultaneously supplying fresh and filtered air from the outdoors.

COMFORT | Conditioned Air

The units have been developed to utilize air-to-air exchangers that can condition the indoor air that is supplied to your space throughout the year thereby reducing your energy bills.

SPECIFICATIONS

Parameter	MINI	CLIMATE
Air volume flow rate [m³/h] ₁	≤35	≤50
Sound level [dB] ₂	43	23
Power consumption [W] ₃	≥4.0	≥1.6
Maximum voltage [V DC]	12	
Duct diameter [in (mm)]	3 (76.2)	
Weight [lb (kg)]	11.0±2.2 (5±1)	

1. All reported specification values are nominal.
2. The sensible effectiveness, which is rated to ≥80%, is calculated based on an adaptation of ASHRA Standard 106i (2018) when PM2.5 (<1.2 L/s) and MERV4 (<2.5 L/s) filters were used in the supply and exhaust vents.
3. This is the maximum air flow rate of a unit at 12V DC under free-flow conditions. The normal and boost flow rates on the supply and exhaust sides of newer units can be independently adjusted by using the fan controllers. Units may be shipped with 5V (single), 9V, or 12V DC adapters.
4. The measurements represent the minimum controllable level of an operating unit and exclude variants that do not have dedicated fan controllers. The nominal power that is consumed by a unit can reach 6 W depending on the specific combination of fans. The sound measurements were taken at ~3 m from the units.
5. The recommended indoor conditions for the operation of the units are as per the winter and summer comfort zones that are prescribed in ANSI/ASHRAE Standard 55 – 2010.

APPLICATIONS

- Can be permanently installed or used as a portable unit;
- Suitable for both new construction and retrofit projects;
- Suitable for: bedroom; living room; recreation room; office; studio; garage; shop; apartment; tiny house; small house.

INSTALLATION

The units are easily self installed, and can be sited in multiple places such as a table / floor or mounted on a wall / ceiling.

Window/Door. The ducts shall be inserted into two holes that are drilled into a board. A fabric casement seal with two zipper orifices may be used in lieu of a board to avoid drilling.

Wall/Ceiling. The ducts shall be inserted into two holes that are drilled through the wall or ceiling that can support the weight.

CONTROL

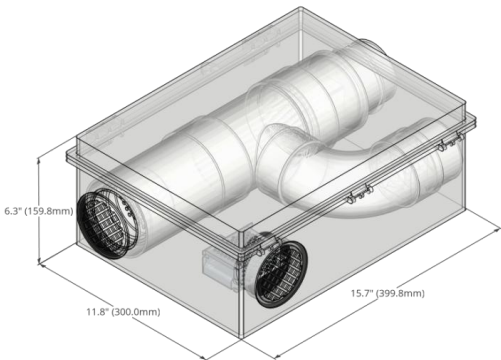
Inbuilt. Switches and controllers can be used to independently set the normal and boost modes for the supply and exhaust sides.

External. The units have ports for boost control through the use of external switches, smart plugs & CO₂ / humidity controllers.

MAINTENANCE

It is recommended to change the filters at least once in three months depending on the outdoor air conditions.

DRAWING



Note. Due to continuous research and development and the diversity of suppliers that are utilized by the manufacturer, the specifications, drawings, and images of the product may vary between the technical data sheet and/or the actual units that are received by customers. We reserve the right to modify the data sheet.

MODEL	QUANTITY	COMMENTS	PROJECT
Location: Architect: Engineer: Contractor: Submitted By:			