



DESCRIPTION

The DVUT 300 HB EC floor-mounted air handling units are intended for single-room ventilation of schools, offices and other public and commercial spaces.

These air handling units do not require a duct system and provide a simple yet efficient ventilation solution for newly built and renovated spaces.

Efficient supply and exhaust single-room ventilation with air flow up to 188 CFM.

DESIGN

✓ Air dampers

Supply and exhaust dampers are closed automatically while the unit is off to prevent drafts.

✓ Air filtration

Supply air purification is provided by a MERV8 and a MERV14 panel filters (PM2.5 > 75 %). To meet more stringent air quality requirements, the unit can be upgraded with a MERV14 carbon filter and a HEPA filter (PM2.5 > 95 %) (purchased separately).

Exhaust air is purified by a MERV8 panel filter.

MOTOR

The units feature high-performance electronically commutated (EC) external rotor motors with forward curved blades. These state-of-the-art units offer excellent energy efficiency. In addition to that, EC motors combine high performance and optimum control over the entire speed

range. EC motors have an excellent power efficiency (up to 90 %).

KEY FEATURES

- ✓ Efficient supply and exhaust ventilation of individual spaces.
- ✓ Modification with an enthalpy heat exchanger available.
- ✓ Low-energy EC fans.
- ✓ Low noise operation (1.6 Sones).
- ✓ Supply air purification by means of two built-in MERV8 and MERV14 filters with the option of carbon or HEPA filters.
- ✓ Simple installation.
- ✓ Contemporary design.

BYPASS

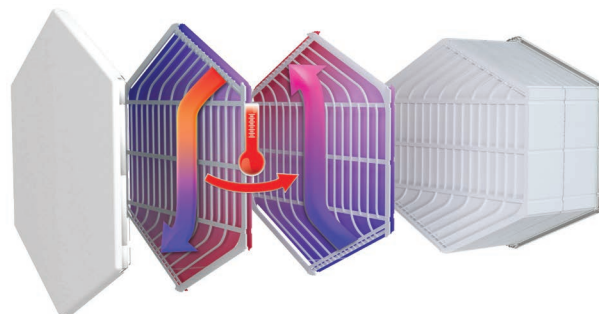
The units are equipped with a summer bypass function.

HEAT EXCHANGER

The DVUT units feature a counter-flow heat exchanger made of polystyrene.

The heat from the extract air is transferred to the supply air via the heat exchanger which greatly helps reduce ventilation heat losses. This can lead to formation of condensate that is collected in a special drain pan and discharged into the sewage system.

In warm weather, the unit can either be used in its summer bypass mode (fresh intake air is directly supplied to the room, bypassing the heat exchanger and not coming in contact with warm extract air) or, if air conditioning is being used, the extract air will cool the heat exchanger and bring fresh air at the same temperature as the air-conditioned air that is being extracted.



CONTROL UNIT AND OPERATION

✓ Freeze protection

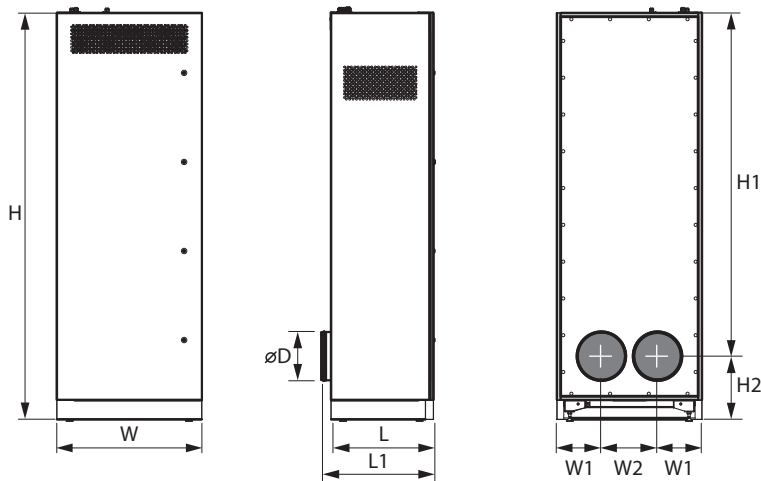
In units without an electric preheater the supply fan is shut down automatically, using the feedback from the exhaust air temperature sensor, to let the warm extract air thaw the heat exchanger. Then the supply fan turns on and the unit reverts to normal operation.

✓ Control

The units may have a built-in or remote control panel. There are three types of control panels available: A14, A17, A18.

DIMENSIONS

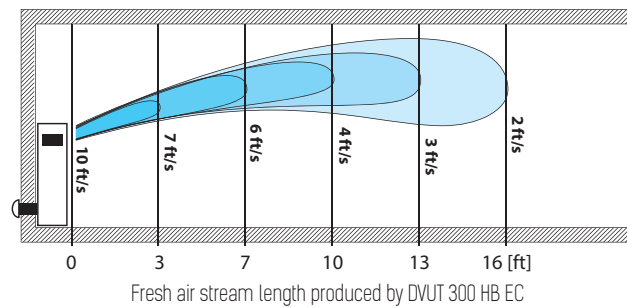
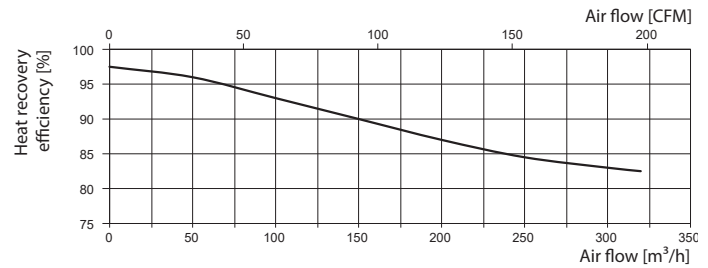
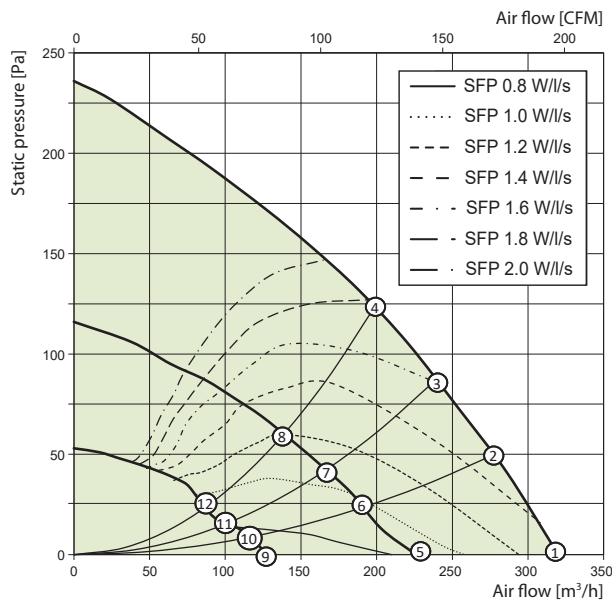
| Model | W | W1 | W2 | L | L1 | H | H1 | H2 | D |
|----------------|---------------------------------|--------------------------------|---------------------------------|--------------------------------|--------------------------------|----------------------------------|--------------------------------|---------------------------------|-------------------------------|
| DVUT 300 HB EC | 24 ⁷ / ₁₆ | 9 ¹ / ₁₆ | 7 ¹¹ / ₁₆ | 18 ¹ / ₂ | 20 ¹ / ₂ | 69 ¹¹ / ₁₆ | 58 ¹ / ₈ | 11 ⁹ / ₁₆ | 7 ⁷ / ₈ |



PERFORMANCE

| Model | | DVUT 300 HB EC |
|--|---------|---|
| Voltage [V / 50 (60) Hz] | | 1~120 |
| Maximum power consumption without an electric heater [W] | | 123 |
| Maximum current consumption [A] | | 1.8 |
| Maximum air flow [CFM (l/s)] | | 188 (89) |
| RPM [min ⁻¹] | | 2150 |
| Sound pressure level at 10 ft [Sones] | | 1.6 |
| Transported air temperature [°F] | | -13...+122 |
| Casing material | | painted steel |
| Insulation | | 1 9/16" mineral wool |
| Filter: | extract | MERV8 |
| | supply | MERV8 and MERV14 (Option: MERV14 Carbon; HEPA Filter) |
| Connected air duct diameter [in] | | 7 7/8 |
| Weight [lb] | | 304±3 % |
| Heat recovery efficiency [%] | | from 82 to 97 |
| Heat exchanger type | | counter-flow |
| Heat exchanger material | | polystyrene |
| SEC class | | A |

DVUT 300 HB/HBE



| MODEL | QUANTITY | COMMENTS | PROJECT |
|-------|----------|----------|---------------|
| | | | location: |
| | | | architect: |
| | | | engineer: |
| | | | contractor: |
| | | | submitted by: |