

UNIT SPECIFICATON - DV82 Entro-V

The mechanical ventilation with heat recovery unit shall be the DV82 Entro-V as manufactured by Airflow, shall be sized as indicated on the drawings and shall be in accordance with the specification.

The unit shall be a highly efficient top-entry MVHR (mechanical ventilation with heat recovery) that can recover over 85% of the wasted heat. The unit's casing shall be manufactured from galvanised steel, white powder paint coated lined (RAL9016) with 20mm insulation for great level of air tightness, thermal insulation and sound absorption.

The plastic counterflow heat exchanger shall prevent the air-streams from mixing and shall be easy to clean and maintain.

The unit shall have low energy EC fans that minimise the unit's energy consumption with a quiet operation and low specific fan power achieving an 'A' energy efficiency in the average climate. The sound power level requirements shall be detailed by the unit's manufacturer and in accordance with the ventilation equipment operation schedule.

The unit shall be designed with a double filter facility that comes with two ISO Coarse 55% (G4) filters as standard with an optional ISO ePM1 60% (F7) pollen filter which provides additional protection against invisible, harmful particles creating an ultra-hygienic environment.

The plastic spigots coming at the top-side of the ventilation unit as standard shall benefit from an interchangeability feature which allows them to be moved from top to aside. The mounting positions and flexibility in product specification, installation and storage shall be as described in the product's datasheet and instruction manual provided by Airflow.

The unit shall be equipped with an automatic, 100% bypass actuator which isolates the heat exchanger so that no air passes through it, based on the temperature sensor's input. This ensures ventilation without adding to seasonal high indoor temperatures.

The unit shall have an M10 connection for the condensation drain fitting. The unit shall be suitable for 160 mm (4 ports) duct diameter installed at the top entry. The ventilation unit shall be suitable for left- and right-hand configurations.

The DV82 Entro-V ventilation unit shall be installed in vertical mounting positions, on the wall or on the floor.

The unit shall be DV82 Entro-V as manufactured by Airflow and shall be SAP eligible.

KEY FEATURES

- For use in dwellings up to 184 m²
- Over 85% thermal efficiency and low SFP
- 'A' energy rating
- Double filter design with ISO Coarse 55% (G4) filters and an optional ePM1 60% (F7) supply air filter
- Automatic, 100% summer by-pass
- Vertical mounting position
- Compact design
- Wall and floor mounting kits
- Easy filter change with no tools needed
- Choice of spigot locations (top entry as standard)
- Durable metal casing with 20 mm insulation
- Built-in humidity sensor as standard
- Optional electric heater
- Complies with Building Regulations

OPERATION

The supply and extract sides shall be positioned as indicated on the project's drawing and shall be in accordance with the ventilation unit's schedule.

The mechanical ventilation with heat recovery unit shall extract stale air from all wet rooms such as bathroom, kitchen, en-suite, W.C., utility rooms and supply fresh warm air to all habitable rooms such as bedrooms and living areas. The incoming air which is the supply air shall be warmed up by the extracted indoor air through the highly efficient heat exchanger. Also, both air flow paths, the extract and supply sides, shall be filtered in order to protect the heat exchanger.

The ventilation unit shall have a variable speed control depending upon the control option chosen in the specification. The unit shall have be easy to commission the supply and extract fans according to the specification requirements.

CONTROL OPTIONS

The DV82 Entro-V unit shall be controlled by one of the following:

- Basic controller
- Digital controller
- Modbus through a PC or a central automated unit
- Additional external sensors achieving on-demand ventilation
- Boost switch

BASIC CONTROLLER

The basic controller compatible with the DV82 Entro-V heat recovery unit allows multiple standard functions such as:

- Fan speed control
- Boost function
- Free cooling via the by-pass actuator
- Frost protection based on input signals from humidity and temperature sensors
- Modbus function
- Faults indicator
- Filter reminder
- Fire alarm function
- Child-proof protection by locking the controller's keypad