

uniX UNI-X MECHANICAL VENTILATION CONSULTANTS SPECIFICATION

UNIT SPECIFICATION

The unit shall be manufactured from high density EPS (Expanded polystyrene) with galvanised sheet steel casing to provide excellent thermal and acoustic characteristics, while providing a lightweight and low profile casing.

Incorporating a high efficiency, aluminium counter flow heat exchanger block with a thermal efficiency of up to 90%.

The heat exchanger will be protected by two G3 grade filters in the fresh inlet and system extract air streams, with both filters being accessible from the underside of the unit allowing for quick and easy maintenance.

The unit shall have a maximum height less than 295mm to fit within ceiling voids.

The unit will contain two, low energy, high efficiency EC fan assemblies, with centrifugal backward curved impellers offering IP54 rating and stepless speed control. The fans will have the facility for variable speed control at trickle (continuous background ventilation), and boost speed to allow for individual specific adjustment during commissioning.

The motors shall be suitable for use in ambient temperatures of 40°C.

CONTROL OPTIONS

The control shall be capable of 3 speed operation.

All versions shall have the following functions integrally mounted with the fan unit on a purpose made PCB, all such components are pre-wired and factory fitted by the manufacturer:

- Independent control of background supply and extract flow rates
- Independent control of boost speed supply and extract flow rates
- Independent control of secondary boost speed supply and extract flow rates
- Integral fan failure indication
- Integral Switch Live terminal for boost speed commission level, from remote switch e.g light switch
- Integral Switch Live terminal for secondary boost to commission level from remote switch, e.g wall switch
- Integral heat exchanger frost protection.
- Automatic summer bypass

The unit shall be supplied complete with a condensate drip tray and 21.5mm drain connection.

The unit shall be fitted as standard with an automatic 100% bypass facility.

The bypass opens automatically when the supply air exceeds 20°C, this opens the bypass channel via actuators and allow the outside air to bypass the heat exchanger. The air which is bypassed will still pass through the filter to ensure that the air quality remains the same regardless of the external temperatures.

The breakout noise level and power requirements shall be as detailed by the unit manufacturer and in accordance with the ventilation equipment schedule.

OPERATION

The unit shall be positioned as indicated on the drawings and shall be in accordance with the particular fan schedule in the specification.

The combined supply and heat recovery unit shall supply filtered fresh air to each to the habitable rooms whilst extracting moisture-laden air from wet area's e.g Bathrooms.

The supply air shall be tempered via the counterflow heat exchanger.

The unit shall boost its speed and therefore the ventilation rate as it receives a signal from light/remote switch.

The unit shall have a secondary boost speed in addition to the standard boost speed.

The unit shall have the facility to commission the supply and extract fan independently at all 3 speeds.

UNITS WITH RECTANGULAR SPIGOTS

UNI-X220: The unit shall be suitable for 220 x 90mm Rectangular ducting.

UNI-X360: The unit shall be suitable for 220 x 90mm Rectangular ducting.

UNI-X580: The unit shall be suitable for 220 x 90mm Rectangular ducting.

UNITS WITH CIRCULAR SPIGOTS

UNI-X220-C: The unit shall be suitable for Ø150mm Circular ducting.

UNI-X360-C: The unit shall be suitable for Ø150mm Circular ducting.

UNI-X580-C: The unit shall be suitable for Ø150mm Circular ducting.

CODE DESCRIPTION

UNI-X360-C
| | |
1 2 3

1. UNI-X = Range
2. 360 = Unit model 220, 360 or 580
3. C = Circular spigots,
No 'C' = Rectangular spigots