

HR100R

Heat Recovery Systems

The Great Indoors



Features and Benefits

- Controls condensation and odours - saves energy.
- Eliminates mould growth.
- 70% Heat Recovery.
- Extremely quiet operation.
- Meets new Building Regulations for bathrooms and WC's.

| Model | Stock Ref: |
|--------|------------|
| HR100R | 37 03 77 |

The HR100R is a self-contained heat recovery unit for mounting in suspended ceilings. The HR100R features balanced ventilation with 70% heat recovery. The unit is supplied without controls to allow for the unit to be tailored to suit the individual requirements. Compatible with standard 100mm flexible ducting for connection to internal grilles and external cowl.

The unit comes fitted with a single 2-speed motor, and provides continuous low volume ventilation with a boost option. A variety of control devices are available for manual or automatic speed control.

An integral heat exchanger transfers heat from the outgoing stale air to the fresh air supply, raising the supply air temperature whilst at the same time reducing its relative humidity.

Up to 77m³/h FID capacity (balanced airflow). As the unit provides superior control of condensation and odours best use would be in bathrooms or small internal rooms.

Typical Specification

Supply and install a HR100R Wholehouse heat recovery unit as manufactured by Vent-Axia Clean Air Systems, Fleming Way, Crawley, West Sussex, RH10 9YX, Telephone: 01293 441520.

| Performance: | m ³ /h | l/s |
|--------------------------|-------------------|-------|
| Maximum ventilation rate | 77.02 | 21.39 |
| N° speed settings | 2 | |

Efficiency: The unit should retain up to 70% of the temperature differential of out going air.

Heat exchanger: should be of a multi plate cross-flow type constructed out of a polymeric plastic with ultra sonic welded joints.

Motor: should be a 2 speed 240V 50Hz A/C with sleeve bearings, greased for life. It shall operate up to an ambient temperature of 40°C and be fitted with a one shot thermal overload protective device.

Fan: The two polymeric fan wheels should be a centrifugal forward curve type on a common shaft.

Controls: The unit should be operated via a remote Trickle Boost switch or a humidistat. A light switch can be used providing a 'timed out' device is employed.

Ducting spigots: The unit should provide 100mm Ø x 50mm spigots for all duct connections. The unit cannot be handed. (Can be converted to flat ducting).

Filter: not fitted.

Condensation: The outlet provided should be 22mm Ø located on the underside of the unit.

Construction: the unit outer case is manufactured from white powder coated sheet metal.

| Sound Levels | dB(A) @ 3m |
|--------------|------------|
| Minimum: | 20.0 |
| Maximum: | 30.0 |

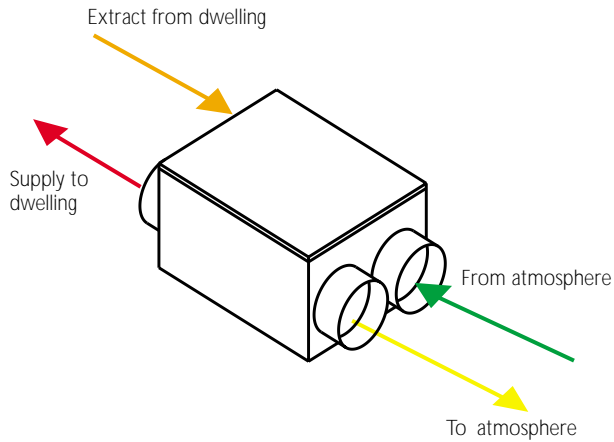
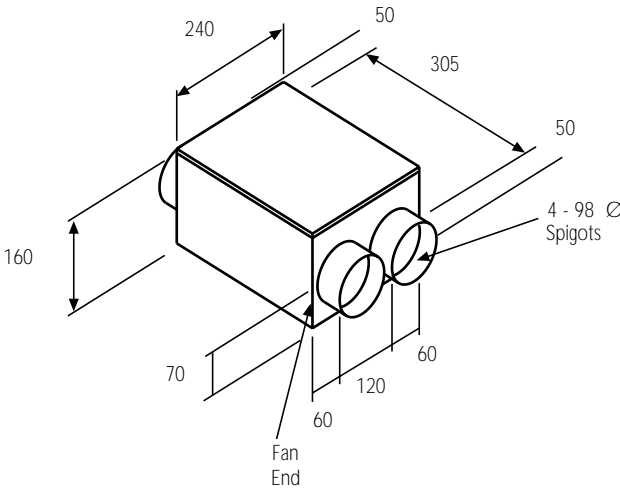
Mains electrical supply: 230VAC 50Hz.

Complies to the following directive:

CE.

Dimensions (mm)

Weight: 5.60kg



Installation

The HR100R is compatible with 100mm diameter flexible ducting which fits onto the unit via the metal spigots and can be fastened using tape or worm drive clips.

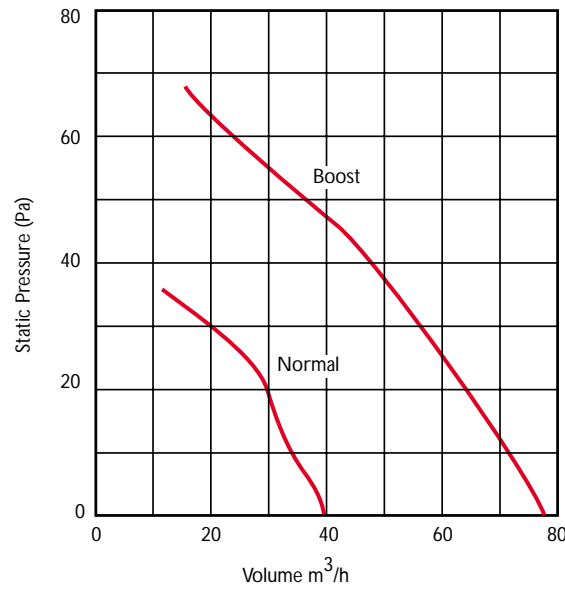
A 22mm diameter condensate drain connection is situated on the base of the unit, this should be connected to a suitable outlet for condensate drainage.

The HR100R comes complete with a four core flying lead for connection to the chosen controller/power supply.

Power Consumption

| | |
|---------|-------|
| Minimum | 35.0W |
| Maximum | 67.0W |

Performance



| Motor Speed | 1 | 2 |
|--------------------------------|----|----|
| Volume m ³ /h (FID) | 35 | 77 |

Controllers & Sensors

| Controller Options | | | | | |
|----------------------|------------------|-----------------------------|--------------|----------|------------------|
| | | | | | |
| Trickle Boost Switch | Switch with Neon | Ambient Response Humidistat | Visionex PIR | TIM2 | 7 Day Timeswitch |
| 45 52 13 | 45 97 46 | 56 35 50 | 45 96 23 | 37 03 46 | 56 35 15 |

For further details on controls & sensors please refer to pages 98-102. For accessories details, please refer to pages 103-105. For wiring diagrams details please refer to page 122.