HR200WK
Through the wall
Heat Recovery Ventilator

Installation and Maintenance Instructions

PLEASE READ INSTRUCTIONS IN CONJUNCTION WITH ILLUSTRATIONS. PLEASE SAVE THESE INSTRUCTIONS
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 Introduction</td>
<td>4</td>
</tr>
<tr>
<td>2.0 Site Requirements</td>
<td>5</td>
</tr>
<tr>
<td>3.0 Installation</td>
<td>6</td>
</tr>
<tr>
<td>4.0 Electrical</td>
<td>8</td>
</tr>
<tr>
<td>5.0 Maintenance</td>
<td>10</td>
</tr>
</tbody>
</table>
1. **Introduction**

1.1 **Description** (Fig. 1)

1. The HR200WK unit is a through the wall heat recovery ventilator for use in kitchens and utility rooms. It is designed for installation in external walls having a thickness up to 335mm.

2. The unit’s twin impeller and heat exchanger arrangement simultaneously supplies and extracts air while transferring heat from the stale exhaust airflow to the fresh intake airflow. This provides up to 75% heat recovery from the stale extracted air.

3. The power consumption for the unit is 20W trickle speed, 60W normal speed and 130W boost speed.

4. The three selectable speeds provide ventilation rates of 60m³/h trickle, 110m³/h normal and 220m³/h boost.

1.2 **Ancillary Equipment**

1. The HR200WK unit can be used in conjunction with a range of ancillary equipment.

**Controller:** A range of controllers - see section 3.1 Controllers.

**Humidity sensors:**
Vent-Axia Ambient Response Humidistat (563550)
Ecotronic Humidistat (563532)
Vent-Axia Humidiswitch (563501)
2.0 Site Requirement

2.1 Information

1. The unit must be sited and connected by a suitably competent person and be in accordance with current UK Building Regulations and I.E.E. Wiring Regulations (BS 7671).

2. The unit is intended for permanent connection to the mains electrical supply.

3. Wiring to the unit in the UK must be via a switched fused spur. The switched fused spur must have a 3mm minimum contact gap in all poles.

4. Ensure that the mains electrical supply is compatible with the rating label attached to the product. Warning: this appliance is class 1 and it must therefore be earthed.

5. The unit must be sited such that the ambient temperature will not exceed 40° C.

6. Do not site the appliance in the vicinity of excessive levels of airborne oil or grease.

7. If the unit is installed in a room containing a fuel burning appliance, the installer must ensure that air replacement is adequate for both appliances.

8. The unit must not be installed at a level below 500mm from the floor.

9. The internal grille surround must be sited at least 125mm away from any wall or projecting surface.

10. The external grille of the unit must be sited at least 600mm away from any flue of gas or solid fuel appliances. This is to avoid back flow of gases entering the room.

11. All safety regulations and requirements must be strictly followed to prevent hazards to life and property both during and after installation and during subsequent maintenance or servicing.

12. Ensure the mains electrical supply is switched off before commencing installation or maintenance.
3.0 Installation

3.1 Controllers
1. The HR200WK unit can be installed in conjunction with a number of controllers.

VCON6(370356): The VCON6 controller can be used to provide Off/Low/Normal/Boost/Sensor control. (The HS6 humidistat or TIM2 over-run timer can be used in conjunction with the VCON6 controller to provide automatic control.

150VA (563538): The 150VA transformer, when used with a trickle/boost switch (455213), allows for a trickle and boost speed to be selected. Only terminals providing 140V or higher should be used as the unit will not operate reliably below 140V.

Ecotronic 1.5A controller (W300310): Provides variable speed control and on/off and auto (sensor) modes.

TIM2(370346): The TIM2 is an over-run timer which can also be used to control the HR200 unit via a remote sensor e.g. Humidity Sensor.

3.2 Initial Preparation
1. Select an approved electrical control arrangement for the HR200WK unit (above).

2. After considering the site requirements (Section 2.0), select a suitable site for the unit and controllers and work out the cable runs.

**WARNING:** Before deciding on the final position for the unit, check there are no buried cables, pipes or obstructions on the outside wall.

**Cable requirements:** Suitably (Basec or Har) approved four core cable of appropriate current carrying capacity.

3. Install the cable runs and appropriate controllers in conjunction with a fused connection unit. Contact gap must not be less than 3mm.

4. Working from the inside, mark out the position of the mounting hole - 250mm wide x 250mm high.

5. Carefully cut the holes in the inner and outer brick courses to form a suitable aperture to receive the unit. Ensure that this is level.

**NOTE:** Bricks will cut more easily and accurately if a series of holes are drilled close together along the marked lines.
3.0 Installation

3.3 Installing the Appliance

From Inside
1. Remove the grille, heat exchanger, from the unit. Note: it is not necessary to remove the fan assembly from the housing to carry out the installation.

2. Slide the unit into the mounting hole and ensure that the flange around its open end is not held off the mounting surface by the threaded bushes located in the flange. Remove the housing assembly and if necessary clear the wall to suit these bushes and the screws which will project through them.

3. Offer the housing to the mounting hole. As the housing is being located in the mounting hole, feed the electrical supply cable through the entry hole (located on the top right hand side of the housing). Note: for the purpose of condensation drainage a prop is fitted to the underside of the housing to cause it to adopt a downwards tilt to the outside wall.

4. Fix the housing assembly in the wall using suitable gap filler between it and the mounting hole. The housing can also be fixed to the wall through the holes in the side using suitable wood screws and wall plugs. Make good around the internal and external wall faces.

   **CAUTION:** Ensure the case does not distort during fixing and making good.

From Outside
1. Offer the frame to the housing and mark its fixing hole positions on the external wall face. Remove the frame and drill the wall to accept suitable wall fixing plugs.

2. Slide the frame over the housing and seal it against the external wall face using silicone sealant or mastic. Fix it in position with suitable screws.
4.0 Electrical

4.1 Electrical Connections

230V 50Hz 130W max

1. Wiring must be via a 3A fused switched spur with a 3mm contact separation in each pole. The wiring should be suitably (Basec or Har) approved cable of appropriate current carrying capacity.

2. Ensure that the mains power supply is isolated prior to installation.

3. Remove the terminal cover after unscrewing the retaining screw.

4. Remove the appropriate amount of sheath and insulation from the supply cable and leads. Connect the conductors of the cable to the appropriate terminals in accordance with the appropriate wiring diagram (Fig. 5, 6, 7, 8, 9).

**NOTE:** Refer to the fitting and wiring instructions provided with the controller used. The wiring diagrams shown here are not a complete list of possible combinations.

5. Position the cable in the clamp such that the sheath is held and tighten the cable clamp nuts to secure the cable in position.

6. Replace the terminal enclosure cover and tighten retaining screw. Replace the heat exchanger.

7. Replace the grille surround complete with the removable grilles and tighten the retaining screws.

8. Switch on the mains electrical supply and check the operation of the unit.
4.0 Electrical

Fig. 8

220-240V 50Hz. SUPPLY

PROPRIETARY CONNECTION UNIT

ECOTRONIC HUMIDISTAT (stock ref. 583532) or AMBIENT RESPONSE HUMIDISTAT (stock ref. 583550)

* NOTE: TRICKLE LOW/BOOST NORMAL – CONNECT 5 TO L1, 3 TO 5 AND 4 TO L2
TRICKLE LOW/BOOST HIGH – CONNECT 5 TO L1 AND 4 TO L3
TRICKLE NORMAL/BOOST HIGH – CONNECT 5 TO L1 & L2 AND 4 TO L3

HR200WK HRVU (stock ref. no. 141 20 020)

Fig. 9

PROPRIETARY CONNECTION UNIT

1.5A VARIABLE SPEED CONTROLLER (stock ref. no. 30 03 10)

LOW = L1
NORMAL = L1+L2
HIGH = L3

HR200WK HRVU (stock ref. no. 141 20 020)
5.0 Maintenance

5.1 Cleaning the Unit (Fig.9)

1. In addition to removing odours, providing fresh air and recovering heat, this unit extracts airborne impurities such as dust, dirt and grease. These gradually build up and detract from the efficiency and appearance of the unit.

2. To ensure optimum performance, the unit should be cleaned every 3 to 6 months or at periods determined by the level of contamination experienced and according to the following procedure.

3. Isolate the mains power supply.

4. Release the catches on either side of the grille surround and remove the two filter holders.

5. Remove the filter from the filter holders.

6. Remove the grille surround after unscrewing its retaining screws. Slide out the heat exchanger.

7. Wash the grille, filter and heat exchanger in warm water using a mild detergent and dry thoroughly.

   **CAUTION:** Keep water away from all electrical components and wiring within the unit.

8. Reassemble in reverse order ensuring the filter and heat exchanger are seated correctly.

9. Switch power supply on and check the operation of the unit.

5.2 Inlet Blank

1. An inlet blanking plate is provided with the unit. With this in place the HR200WK acts as an extract only fan.

2. Release the catch for the supply side (left side) grille and remove the grille.

3. Place the inlet blanking plate between the grille and the filter.

4. Replace the grilled with the blanking plate in place. The unit will now operate as an extract only ventilation unit.
The unit is supplied with four, 6-month Timestrip indicators. A Timestrip is a single use self-adhesive label that once activated will turn red over 6 months. It should be used to keep track of when the filter and cell need cleaning/replacement. Using the self-adhesive backing the strip can stuck near the units controls, or in a easily visible place. A normal cleaning schedule for a unit would be as follows:

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>After installation</td>
<td>Activate the 1st Timestrip</td>
</tr>
<tr>
<td>After 6 months</td>
<td>Clean cell, clean filter, activate 2nd Timestrip</td>
</tr>
<tr>
<td>After 12 months</td>
<td>Clean cell, clean filter, activate 3rd Timestrip</td>
</tr>
<tr>
<td>After 18 months</td>
<td>Clean cell, clean filter, activate 4th Timestrip</td>
</tr>
<tr>
<td>After 24 months</td>
<td>Clean cell, replace filters, the new filters will be supplied with 4 additional Timestrip indicators</td>
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</table>

Note: The above is the minimum requirement; more frequent cleaning intervals may be needed depending on the environment the unit is installed in.

Activating the Timestrip.

1. Activation: Fully squeeze the activation button between thumb and finger. A red line will appear within 1-2 minutes to show that the Timestrip has been activated.

2. Peel off the backing liner and stick the Timestrip to the Unit or near the controls of the unit. The location should make it obvious to the person responsible for maintenance that the unit needs attention.

3. Once activated, the red dye will indicate elapsed time by moving through the white window and past each time marker. The progress of the red dye is irreversible and each Timestrip can only be used once.
**PRODUCT FICHE**

**For Residential Ventilation Units (Complying Commission Delegated Regulation (EU) No 1254/2014)**

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<td>SEC Value ('Cold')</td>
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<td><a href="http://www.vent-axia.com">www.vent-axia.com</a></td>
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<tr>
<td>AHS: Warm</td>
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Notes:-
Notes:-
The Vent-Axia Guarantee

Applicable only to products installed and used in the United Kingdom. For details of guarantee outside the United Kingdom contact your local supplier.

Vent-Axia guarantees its products for two years from date of purchase against faulty material or workmanship. In the event of any part being found to be defective, the product will be repaired, or at the Company’s option replaced, without charge, provided that the product:

- Has been installed and used in accordance with the instructions given with each unit.
- Has not been connected to an unsuitable electricity supply. (The correct electricity supply voltage is shown on the product rating label attached to the unit).
- Has not been subjected to misuse, neglect or damage.
- Has not been modified or repaired by any person not authorised by the company.

IF CLAIMING UNDER TERMS OF GUARANTEE

Please return the complete product, carriage paid to your original supplier or nearest Vent-Axia Centre, by post or personal visit. Please ensure that it is adequately packed and accompanied by a letter clearly marked “Guarantee Claim” stating the nature of the fault and providing evidence of date and source of purchase.

The guarantee is offered to you as an extra benefit, and does not affect your legal rights.