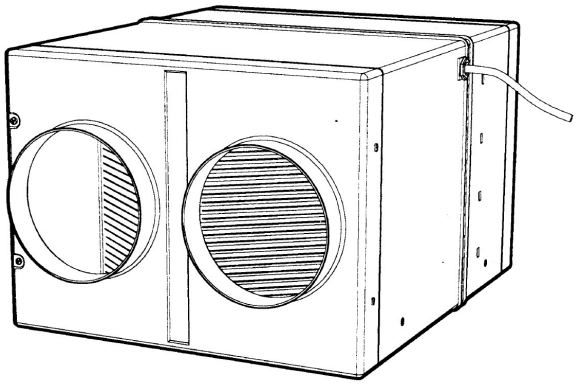
HR200V

Ducted
Heat Recovery Ventilator

Installation and Maintenance Instructions



Stock Ref No:-

HR200V **14120010**

Vent-Axia®

PLEASE READ INSTRUCTIONS IN CONJUNCTION WITH ILLUSTRATIONS. PLEASE SAVE THESE INSTRUCTIONS

UK CA CE

IMPORTANT SAFETY INFORMATION

PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE COMMENCING INSTALLATION.

1. Do not install this product in areas where the following may be present or occur:

- Excessive oil or a grease laden atmosphere.
- Corrosive or flammable gases, liquids or vapours.
- Subject to direct water spray from hoses.
- Ambient temperatures higher than 40°C and lower than -20°C.
- Possible obstructions that may hinder access to or removal of the unit.

2. All wiring must be in accordance with the current IEE wiring regulations BS7671, or appropriate standards of your country. Installation should be inspected and tested by a suitably qualified person after completion.

3. Ensure the mains supply (voltage, frequency and phase) complies with the rating label.

4. The unit should be provided with a local double pole fused spur fitted with a 3A fuse having a contact separation of at least 3mm.

5. These units must be earthed.

6. Precautions must be taken to avoid the back-flow of gases into the building from the open flue of gas or other fuel-burning appliances.

7. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

8. Young children should be supervised to ensure that they do not play with the appliance.

9. CAUTION: In order to avoid a hazard due to inadvertent resetting of the thermal cut-out, this appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.

Disposal

This product should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority for recycling advice.

INSTALLATION GUIDANCE

1. The installer is responsible for the installation and electrical connection of the system on site. It is the responsibility of the installer to ensure that the equipment is safely and securely installed and left only when mechanically and electrically safe.

2. All regulations and requirements must be strictly followed to prevent hazards to life and property, both during and after installation, and during any subsequent servicing and maintenance.

3. Certain applications may require the installation of sound attenuation to achieve the sound levels required.

4. The unit must not be connected directly to a tumble drier.

5. The supply and exhaust valves must be fully opened prior to commissioning.

6. The supply air must be drawn from the exterior of the property.

7. The exhaust grille should be located at least 600mm away from any flue outlet. The inlet grille should be located 2000mm away from any flue outlet.

8. This product and associated duct installation should be carried out in accordance with the domestic ventilation compliance guide.

Contents

1.0 Introduction

1.1 Description (Fig. 1)

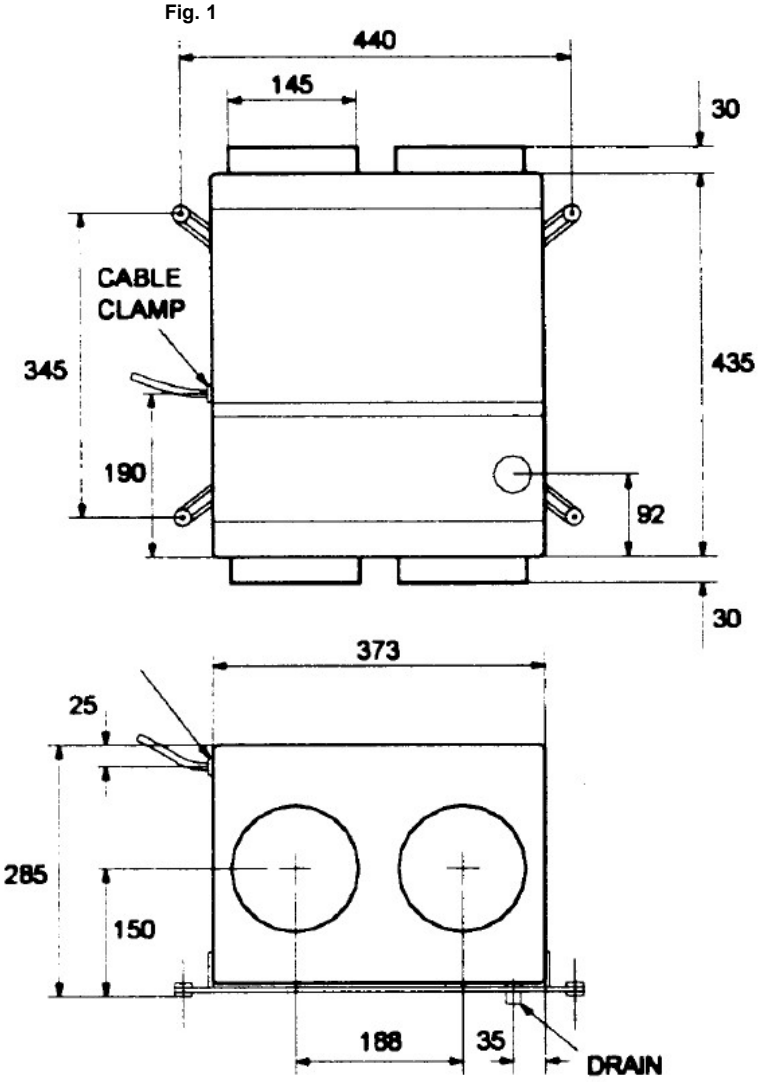
1. The HR200V unit is a void mounting heat recovery ventilator for sealed or internal rooms in domestic, commercial, educational and leisure applications.

2. The HR200V is designed for connection to 150mm diameter standard flexible or rigid ventilation ducting.

3. The maximum power consumption for the unit is 108w.

4. The 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 70% heat recovery from the stale extracted air.

Fig. 1



1.2 Ancillary Equipment

1. The HR200V unit can be used in conjunction with a range of ancillary equipment.

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

2.0 Site Requirement

2.1 Information

1. The unit is designed for mounting in a ceiling void and connected to inlet and outlet grilles with 150mm diameter ducting. Dimensions of the unit are shown In Fig.1.

2. Warning: This appliance is class I and it must therefore be earthed.

3. 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).

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

5. The unit is intended for fixed wiring installation.

6. 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.

7. Ensure that the mains electrical supply is compatible with the rating label attached to the product.

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

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

10. 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.

11. The unit must be installed away from any source of water and out of reach of any person using a fixed bath or shower.

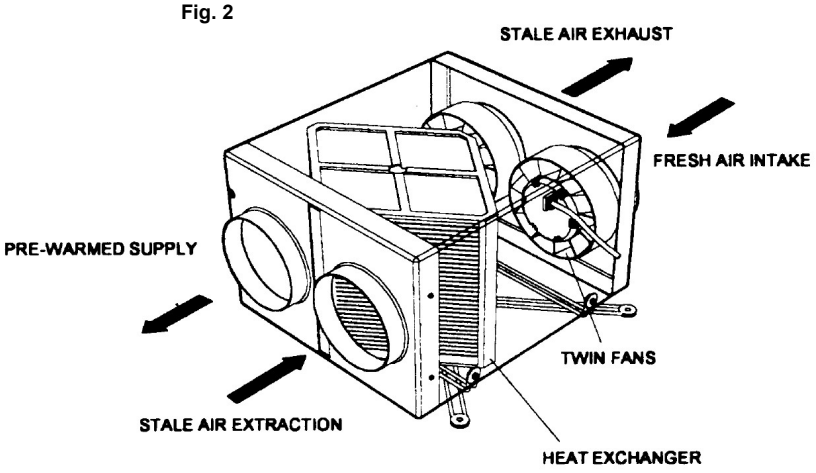
12. In situations where moisture can be present in the air, the unit should be connected to a drainage system.

13. The external grilles 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.

14. 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.

15. Ensure the mains electrical supply is switched off before commencing installation or maintenance.

Fig. 2



3.0 Installation

3.1 Controllers

1. The HR200V 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 bellow 140V.

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

TIM2(370346): The TIM2 is an overrun timer which can also be used to control the HR200V unit via a remote sensor e.g. Humidity Sensor.

3.2 Initial Preparation

1. Select an approved electrical control arrangement for the HR200 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 and ducting runs. Note that the unit must be mounted horizontally with the drainage connection to the bottom. The site selected must allow sufficient space around the unit for removal of ducts, spigot plates and the heat exchanger for servicing and maintenance.

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

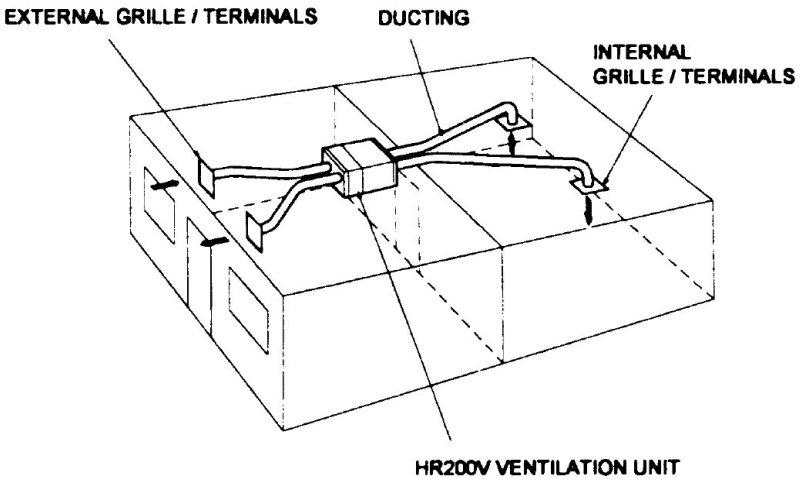
Cable requirements: Suitably (Basec or Har) approved four core cable of appropriate current carrying capacity.

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 ducting holes.

5. Carefully cut the holes in the inner and outer brick courses to form a suitable aperture to receive the ducting and grilles.

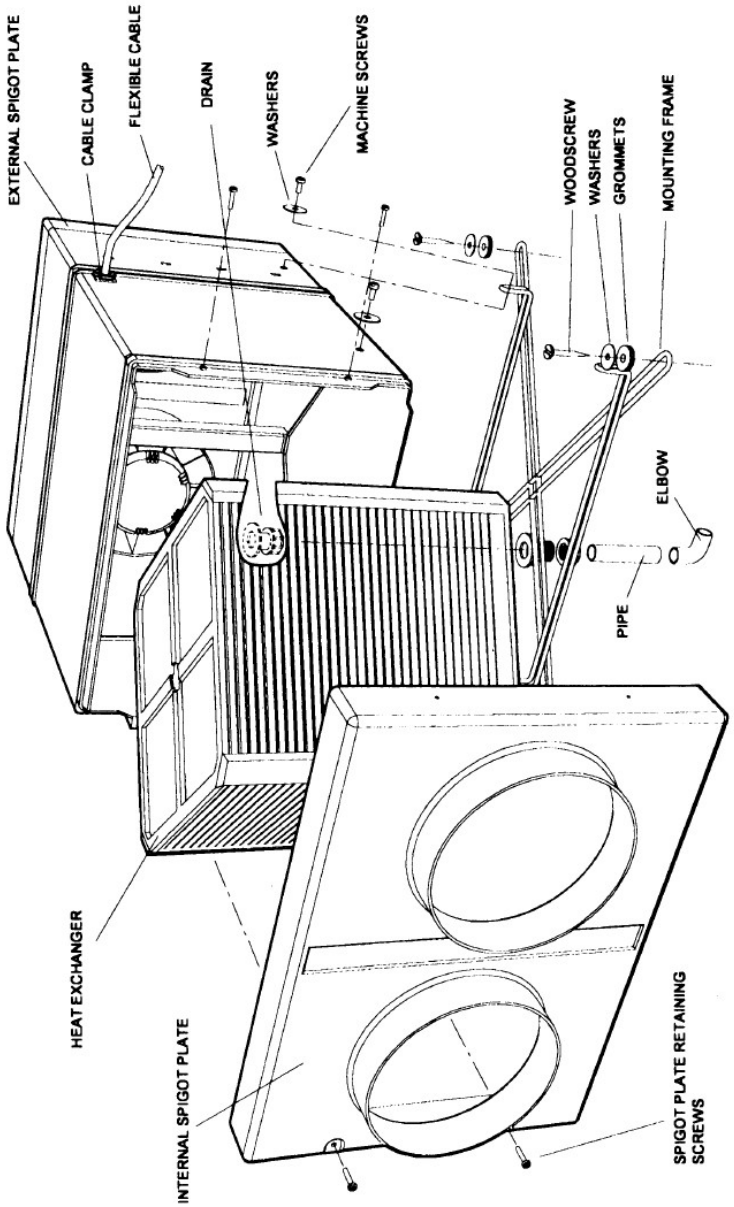
Fig. 3



3.0 Installation

3.3 Installing the Appliance

Fig. 4



1. Offer the mounting frame to the ventilation unit and fix it in position by means of the four machine screws and four of the washers supplied. The washers should be located between the screw heads and the mounting frame.

2. Engage the four rubber mounting grommets in the ends of the mounting frame arms. The grommets reduce the transmission of noise and vibration from the ventilation unit to the mounting surface.

3. Offer the ventilation unit to the installation site and fix it in position using four suitable screws and the remaining four supplied washers. The washers should be located between the screw heads and the mounting grommets.

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

4. Using the pipe and elbow, if appropriate, connect the drain of the unit to the drainage system. For watertight joints, use proprietary PVC pipe cement between mating components.

5. Install suitable internal and external grilles and connect them to the ventilation unit using suitable 150mm flexible or rigid ventilation ducting and ducting components. If flexible ducting is used, it should be stretched fully to obtain the best performance.

Fig.5. Normal Running

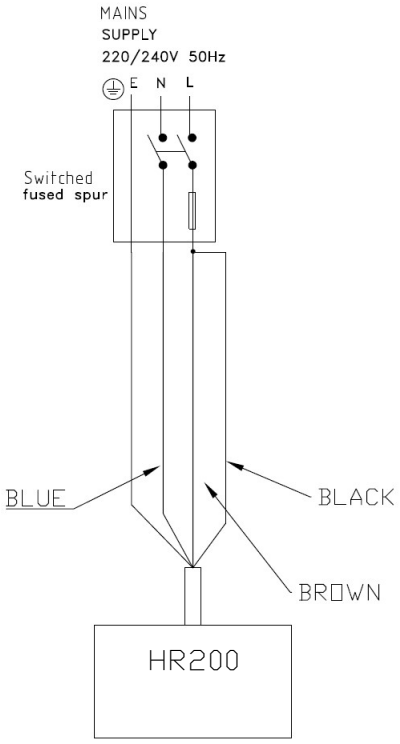
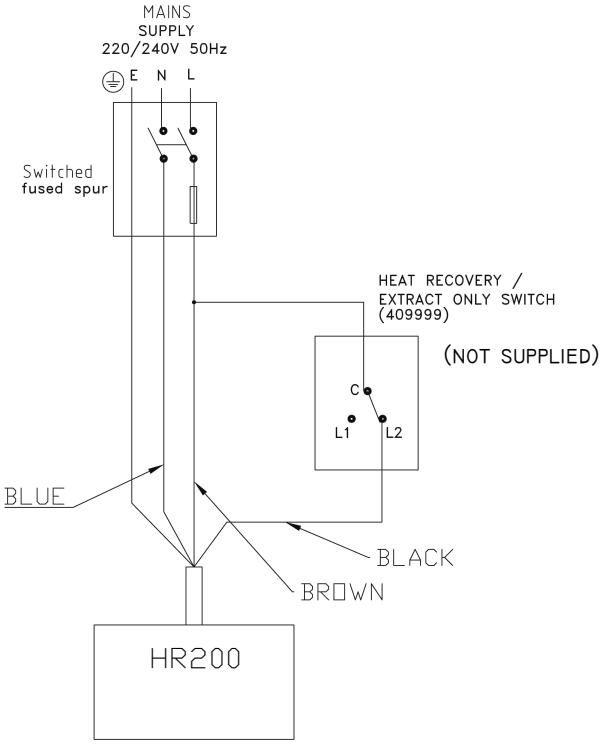


Fig.6. Extract only



4.0 Electrical

4.1 Electrical Connections

230V 50Hz 108W 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. The HR200V is supplied with a length of cable attached from the factory. This can be extended with the use of 4 core cable as required.

4. Connect the wires as shown in Fig.5 to a Switched fused spur or a control unit. If a controller is used follow the fitting and wiring instructions supplied with the controller ensuring that the black and brown wires are connected to the same terminal on the controller.

5. If an extract only switch (409999) is to be fitted refer to Fig.6. The switch should be connected to the black wire. With the switch in the extract only position the unit will no longer provide supply air.

6. Switch on the mains electrical supply and check the operation of the unit.

NOTE: On operation there is a delay of 30 seconds prior to the shutter opening.

5.0 Maintenance

5.1 Cleaning the Unit

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. Remove the ducting to internal grilles. Undo the two grille securing screws and remove the spigot plate (Fig. 7).

5. Remove the filter from rear of grille.

6. Slide out the heat exchanger (Fig 7).

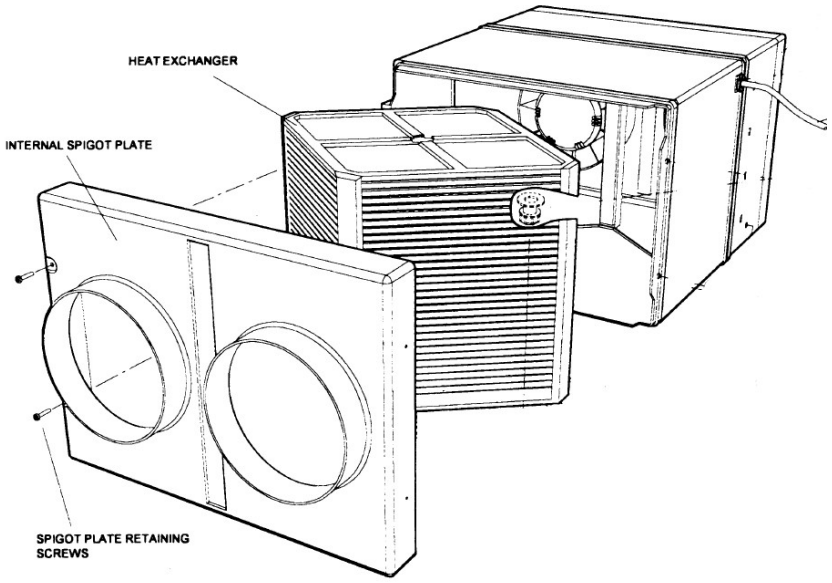
7. Wash the heat exchanger in warm water using a mild detergent and dry thoroughly.

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

8. Reassemble in reverse order ensuring the heat exchanger is seated correctly.

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

Fig. 7



PRODUCT FICHE

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

Name:	Vent-Axia
Model ID (Stock Ref.) :	HR 200 V - 14120010
SEC Class	C
SEC Value ('Average')	-25.44
SEC Value ('Warm')	-4.28
SEC Value ('Cold')	-63.16
Label Required? (Yes/No=Out of scope)	Yes
Declared as: RVU or NRVU/UVU or BVU	RVU/BVU
Speed Drive	Multi-Speed
Type HRS (Recuperative, Regenerative, None)	Recuperative
Thermal Eff: [(%), NA(if none)]	70
Max. Flow Rate (m3/h)	198.0
Max. Power Input (W): (@Max.Flow Rate)	110
LWA: Sound Power Level (dB)	66.13
Ref. Flow Rate (m3/s)	0.039
Ref. Pressure Diff. (Pa)	80
SPI [W/(m3/h)]	0.43
Control Factor & Control Typology: (CTRL/ Typology)	
Control Factor; CTRL	1.00
Control Typology	Manual Control
Declared: -Max Internal & External Leakage Rates(%) for BVUs or carry over (for regenerative heat exchangers only), - &Ext. Leakage Rates (%) for Ducted UVUs;	<5% Internal, <5% External
Mixing Rate of Non-Ducted BVUs not intended to be equipped with one duct connection on either supply or extract air side;	N/A
Position and description of visual filter warning for RVUs intended for use with filters, including text pointing out the importance of regular filter changes for performance and energy efficiency of the unit	N/A
For UVUs (Instructions Install Regulated Supply/Extract Grilles Façade)	N/A
Internet Address (for Disassembly Instructions)	www.vent-axia.com
Sensitivity p. Variation@+20/-20 Pa: (for Non-Ducted VUs)	N./A
Air Tightness-ID/OD-(m3/h) (for Non-Ducted VUs)	N./A
Annual Electricity Consumption: AEC (kWh/a)	5.87
Annual Heating Saved: AHS (kWh/a)	
AHS: Average	39.45
AHS: Warm	17.84
AHS: Cold	77.17

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

Vent-Axia

Head Office: Fleming Way, Crawley, West Sussex, RH10 9YX.
EU Authorised Representative: Vent-Axia Bedrijvenweg 17 7442 CX Nijverdal Nederland.
authorisedrep@vent-axia.nl

UK NATIONAL CALL CENTRE, Newton Road, Crawley, West Sussex, RH10 9JA
SALES ENQUIRIES: Tel: 0344 8560590 Fax: 01293 565169
TECHNICAL SUPPORT: Tel: 0344 8560594 Fax: 01293 532814

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