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- The guarantee is offered to you as an extra benefit, and does not affect your legal rights.  
 ● The guarantee is offered to you as an extra benefit, and does not affect your legal rights.  
 ● evidence of date and source of purchase.  
 ● by a letter clearly marked 'Guarantee Claim' stating the nature of the fault and providing  
 ● Centre, by post or personal visit. Please ensure that it is adequately packed and accompanied  
 ● please return the complete product, carriage paid to your original supplier or nearest Vent-Axia  
 ● IF CLAIMING UNDER TERMS OF GUARANTEE  
 ● (4) has not been modified or repaired by any person not authorised by the company.  
 ● (3) has not been subjected to misuse, neglect or damage.  
 ● voltage is shown on the product rating label attached to the unit.  
 ● (2) has not been connected to an unsuitable electricity supply. (The correct electricity supply  
 ● (1) has been installed and used in accordance with the instructions given with each unit.  
 ● 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  
 ● Vent-Axia guarantees its products for one year from the 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  
 ● outside the United Kingdom contact your local supplier.  
 ● Applicable only to products installed and used in the United Kingdom. For details of guarantee  
 ● The Vent-Axia Guarantee

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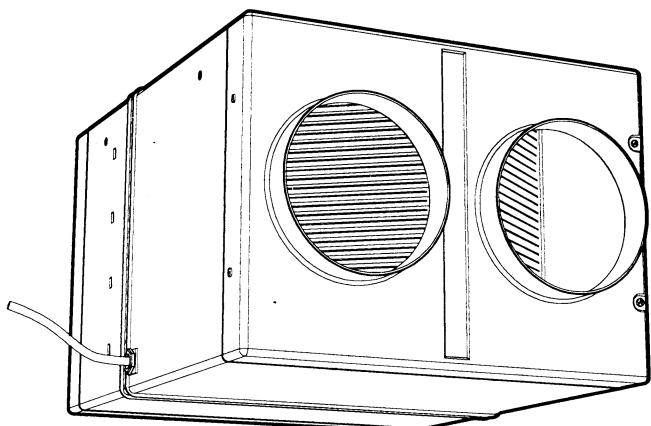
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## VENT-AXIA SALES CENTRES

PLEASE LEAVE THESE INSTRUCTIONS WITH THE END USER

**220-240V/1/50HZ 100W**

- ◆ High performance
- ◆ High efficiency
- ◆ Easy to install
- ◆ Energy saving
- ◆ Easy maintenance



Stock Ref: 141 20 010

Void mounting heat recovery, extract and intake unit for sealed or internal rooms in domestic, commercial, educational and leisure applications.

### Installation and Maintenance Instructions

## HR200V HEAT RECOVERY VENTILATION UNIT

**Vent-Axia**

### VENT-AXIA HR200V - HEAT RECOVERY VENTILATION UNIT INSTALLATION AND MAINTENANCE INSTRUCTIONS

Read the following instructions fully in conjunction with the illustrations before commencing installation.

#### PRODUCT DESCRIPTION

The HR200V is a void mounting heat recovery ventilation unit for sealed or internal rooms in domestic, commercial, educational and leisure applications. It is designed for connection to 150mm diameter standard flexible or rigid ventilation ducting.

The unit's twin mixed flow fans 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. Separation of the exhaust airflow and intake airflow is maintained throughout the unit.

The specially designed mixed flow fan impellers provide high pressure performance at low noise levels.

The fan motors have maintenance free self-aligning long life bearings and are fitted with thermal overload protection, which in the event of a fault causing a motor to overheat will cut off the electrical supply to that motor.

The electrical power consumption of the unit is 100 watts when running at full speed.

The unit may be connected through a Vent-Axia 1.5A Variable Speed Controller (W300310), a 150VA Transformer (563538), a HumidiSwitch (563501), an Ecotronic Humidistat (563532) or an Ambient Response Humidistat (563550) to achieve various manual and/or automatic ventilation and humidity control options (See Fig. 5).

#### IMPORTANT POINTS TO NOTE

1. THIS APPLIANCE IS INTENDED FOR PERMANENT CONNECTION TO THE MAINS ELECTRICAL SUPPLY FIXED WIRING AND MUST BE INSTALLED BY A SUITABLY QUALIFIED PERSON.
2. THIS APPLIANCE MUST BE SITED AND CONNECTED IN ACCORDANCE WITH CURRENT UK BUILDING, FACTORY AND IEE WIRING REGULATIONS (BS7871) OR THE APPROPRIATE NATIONAL REGULATIONS IN YOUR COUNTRY.
3. WIRING TO THE APPLIANCE IN THE UK MUST BE VIA A FUSED AND SWITCHED CONNECTION UNIT INCORPORATING A DOUBLE POLE SWITCH WITH 3mm CONTACT SEPARATION AND CONFORMING TO BS5733 OR BS1363 PART 4. A 3 AMP BS1362 FUSE SHOULD BE FITTED TO THE CONNECTION UNIT, WHICH MUST BE LOCATED OUTSIDE OF A ROOM CONTAINING A FIXED BATH OR SHOWER.
4. WARNING: THIS APPLIANCE IS CLASS I AND IT MUST THEREFORE BE EARTHED.
5. CHECK THE RATING LABEL ON THE APPLIANCE TO ENSURE THAT THE ELECTRICAL SUPPLY IS COMPATIBLE WITH THE APPLIANCE WHICH IS RATED AT 220-240V 50 Hz AC.
6. THIS APPLIANCE MUST BE SITED AWAY FROM ANY SOURCE OF WATER AND OUT OF REACH OF ANY PERSON USING A FIXED BATH OR SHOWER.
7. IN SITUATIONS WHERE MOISTURE CAN BE PRESENT IN THE AIR, THE APPLIANCE SHOULD BE CONNECTED TO A DRAINAGE SYSTEM.
8. IF THE APPLIANCE IS SITED IN AN UNHEATED ROOF VOID IT SHOULD BE INSULATED TOGETHER WITH ITS ASSOCIATED DUCTING.
9. DO NOT SITE AN ASSOCIATED INTERNAL EXTRACT GRILLE/TERMINAL IN THE VICINITY OF EXCESSIVE LEVELS OF AIRBORNE OIL/GREASE.
10. THIS APPLIANCE MUST BE SITED AWAY FROM DIRECT SOURCES OF HEAT IN EXCESS OF 40 DEGREES C.
11. SITE THE APPLIANCE AND ARRANGE THE ASSOCIATED DUCTING AND GRILLES TO PROVIDE A BALANCED CIRCULATION OF AIR (SEE FIG. 2).
12. WHEN INSTALLED IN A ROOM CONTAINING A FUEL BURNING APPLIANCE, THE INSTALLER MUST ENSURE THAT AIR REPLACEMENT IS ADEQUATE FOR BOTH APPLIANCES.

13. THE EXTERNAL GRILLES/TERMINALS ASSOCIATED WITH THIS APPLIANCE MUST BE SITED AT LEAST 600mm AWAY FROM THE FLUE OF A FUEL BURNING APPLIANCE.

14. ALL SAFETY REGULATIONS AND REQUIREMENTS MUST BE STRICTLY FOLLOWED TO PREVENT HAZARDS TO LIFE AND PROPERTY BOTH DURING AND AFTER INSTALLATION AND DURING ANY SUBSEQUENT MAINTENANCE AND SERVICING.

15. SWITCH OFF THE MAINS ELECTRICAL SUPPLY BEFORE COMMENCING INSTALLATION, MAINTENANCE OR SERVICING.

#### FITTING INSTRUCTIONS (SEE FIG. 4)

1. Remove the ventilation unit, mounting frame, drainage pipe, drainage elbow and mounting components from the packaging.
2. After noting the positions of the duct spigots, flexible cable and drainage connection on the ventilation unit (see Fig. 1), select a suitable installation site. 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 the removal of ducts, spigot plates and heat exchanger for maintenance and servicing purposes.
3. If appropriate, provide a mains electrical supply and drainage system in the vicinity of the installation site.
4. Offer the mounting frame to the ventilation unit and fix it in position by means of the four machine screws and four of the eight washers supplied. The washers must be located between the screw heads and the mounting frame.
5. 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.
6. Offer the ventilation unit to the installation site and fix it in position using four suitable woodscrews and the remaining four washers supplied. The washers must be located between the screw heads and the mounting grommets.
7. Using the pipe and elbow, if appropriate, connect the drain of the ventilation unit to the drainage system. For watertight joints, use proprietary pvc pipe cement between the mating components.
8. Install suitable internal and external grilles/terminals 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 in order to obtain the best performance.

#### WIRING INSTRUCTIONS (SEE FIG. 5)

1. Ensure the mains electrical supply is switched off.
2. Cut the flexible cable to the length required and strip the minimum amount of sheath and insulation from the wires.
3. Connect the wires, colour coded brown-live (L), blue-neutral (N) and green/yellow-earth (E ↓), of the flexible cable to the electrical supply in accordance with the wiring arrangements shown in Fig. 5.  
 For circuits incorporating the 150VA Transformer (See Figs. 5.4, 5.5 and 5.6) note that connections should only be made to terminals providing a voltage of 140 or more. The reason for this being that the HR200V unit will not operate reliably below 140V. Three combinations of trickle and boost ventilation rates can be obtained by connecting the "TRICKLE" wire to either terminal L4(140V) or L5(160V) and the "BOOST" wire to either terminal L5(160V) or L2(240V), provided it has a higher voltage than the terminal selected for the "TRICKLE" wire. Note that the circuit must include change over switching arrangements similar to those shown in Figs. 5.4, 5.5 and 5.6 in order to avoid simultaneously energising two transformer windings. Failure to observe this instruction will result in damaging the transformer.
4. Ensure the flexible cable is securely clamped at the electrical supply flex outlet box.
5. Switch on the mains electrical supply and check for satisfactory operation of the ventilation unit and duct system.

FIG 1. DIMENSIONS (mm)

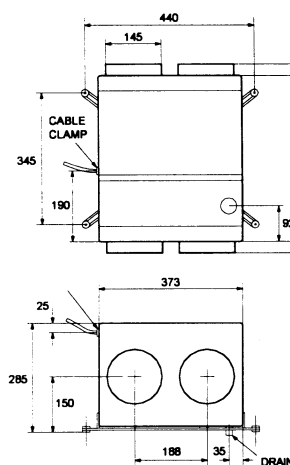


FIG. 2. TYPICAL INSTALLATION

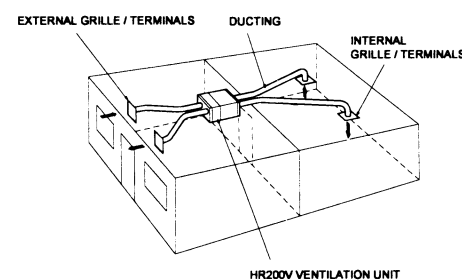


FIG. 3. AIRFLOW

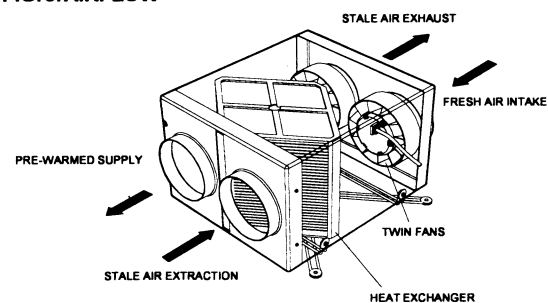


FIG. 4. INSTALLATION DETAILS

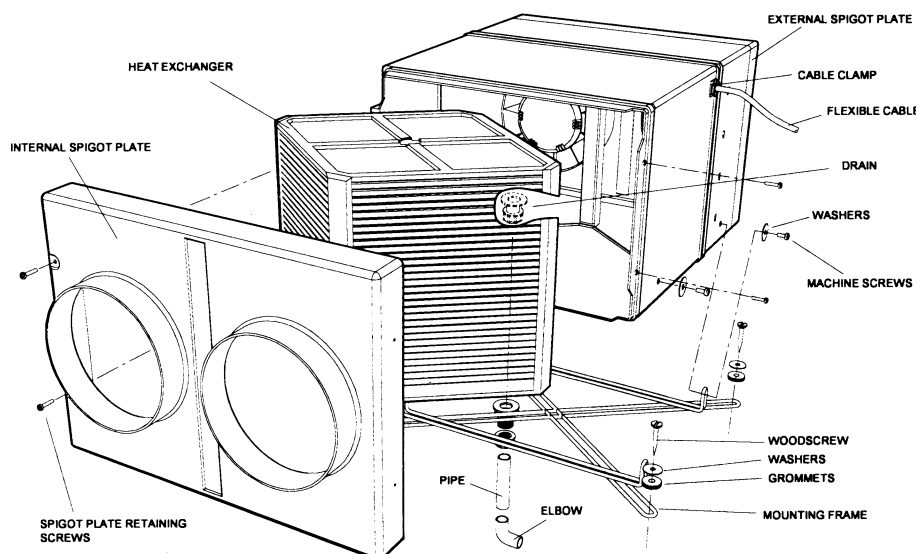
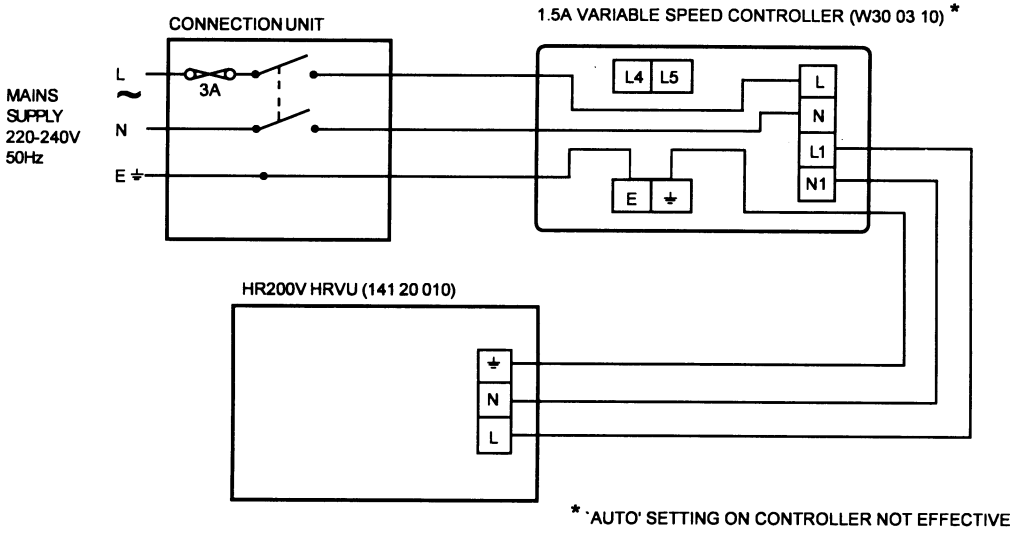
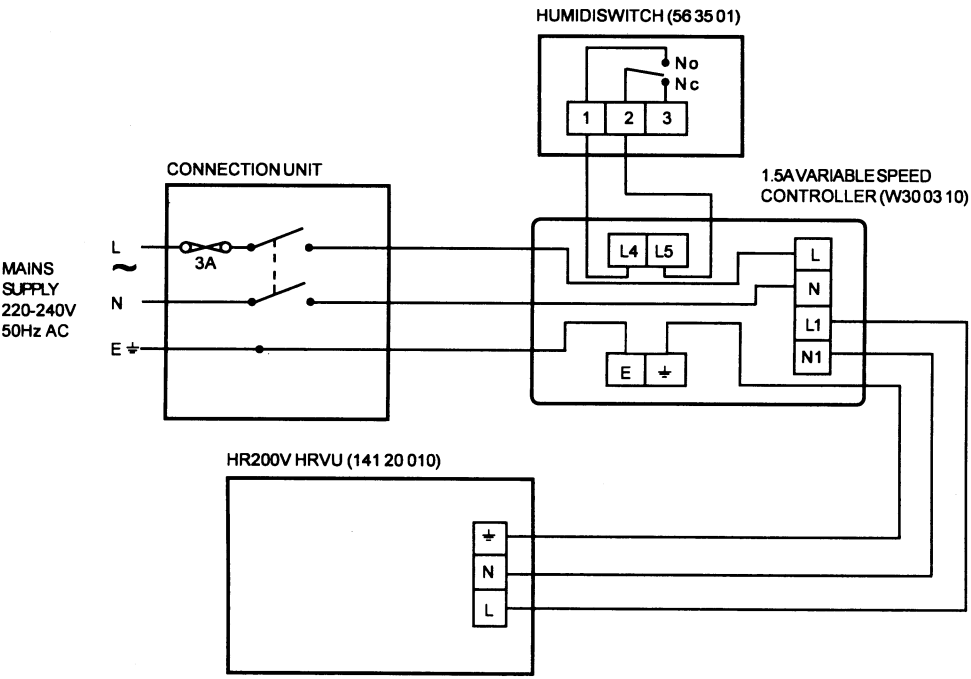


FIG. 5. WIRING DIAGRAMS

5.1 VARIABLE CONTINUOUS VENTILATION



5.2 VARIABLE HUMIDITY ACTIVATED VENTILATION



5.3 VARIABLE TRICKLE VENTILATION WITH HUMIDITY ACTIVATED BOOST VENTILATION

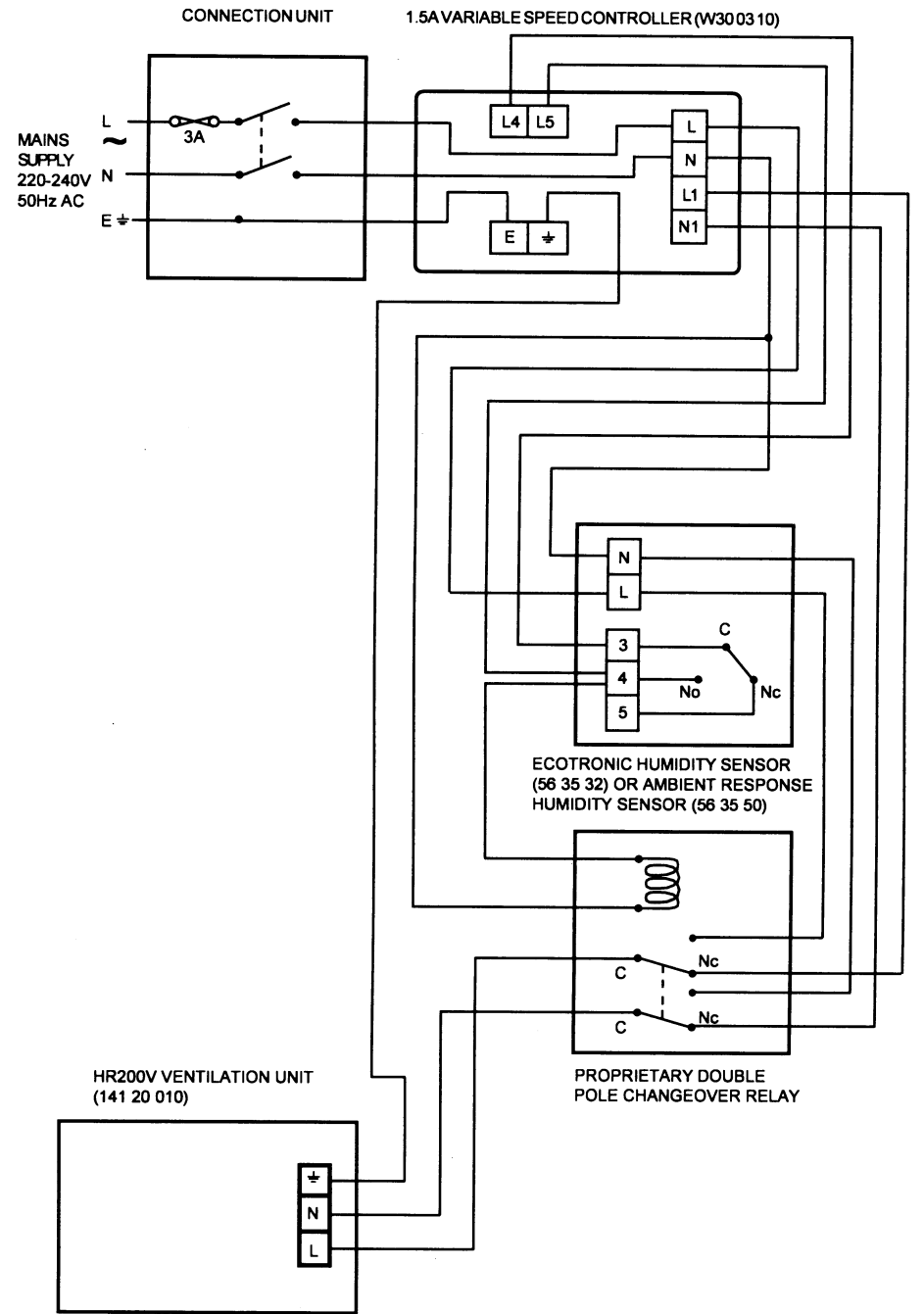
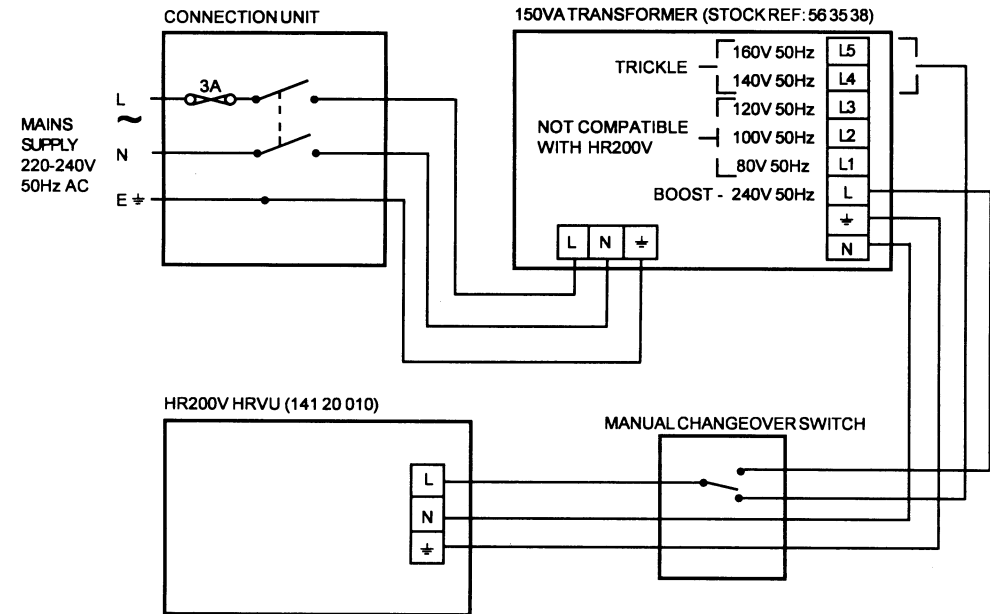
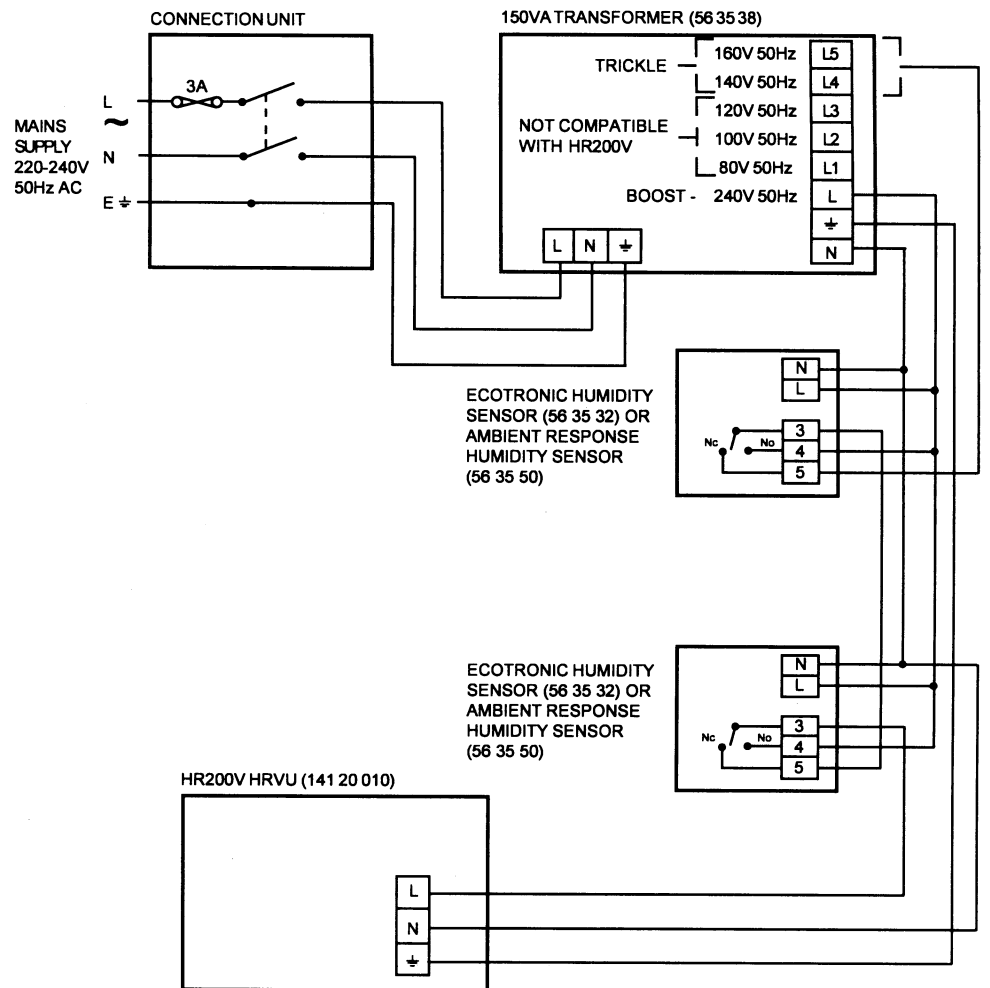


FIG. 5. WIRING DIAGRAMS cont.

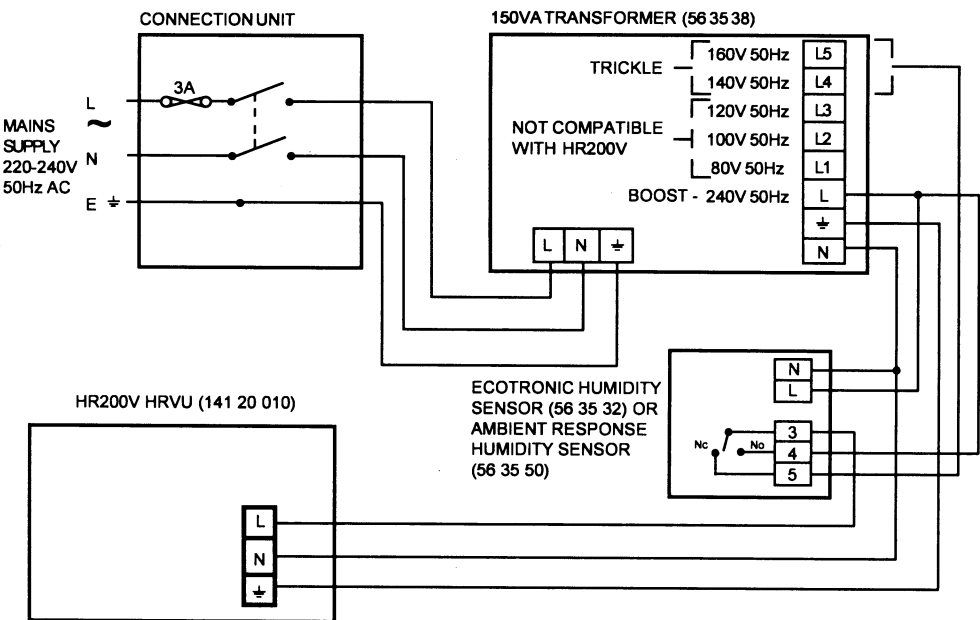
5.4 FIXED CONTINUOUS TRICKLE OR BOOST VENTILATION



5.6 FIXED CONTINUOUS TRICKLE VENTILATION WITH HUMIDITY ACTIVATED BOOST VENTILATION - MULTIPLE HUMIDITY SENSORS



5.5 FIXED CONTINUOUS TRICKLE VENTILATION WITH HUMIDITY ACTIVATED BOOST VENTILATION - SINGLE HUMIDITY SENSOR



CLEANING INSTRUCTIONS

Apart from removing odours, providing fresh air and recovering heat, this appliance extracts airborne impurities such as dust, dirt and grease. These gradually build up and detract from the efficiency of the appliance. Therefore, to ensure peak performance, the appliance should be cleaned regularly at intervals determined by the level of contamination experienced and according to the procedure listed below.

1. Switch off the mains electrical supply to the appliance.
2. If necessary, to be able to remove the external spigot plate, disconnect the ducts on the external side of the ventilation unit.
3. Unscrew and remove the four screws retaining the external spigot plate.
4. Remove the external spigot plate.

5. Withdraw the heat exchanger from the ventilation unit by grasping and gently but firmly pulling on its central vertical member.
6. Wash the heat exchanger in warm water using a mild detergent and subsequently dry it thoroughly. **N.B. keep water away from all electrical components and wiring inside and outside the appliance.**
7. Replace the heat exchanger with the "FRONT" marking facing out of the unit.
8. Replace the external spigot plate.
9. Replace and tighten the four spigot plate retaining screws.
10. Reconnect the ducts to the external spigot plate, if appropriate.
11. Switch on the mains electrical supply and check for satisfactory fan operation.