









### 5.0 Ducting arrangements-Standard configuration

Figure 9. Typical ducted arrangement for a wall mounted unit using circular ducting.

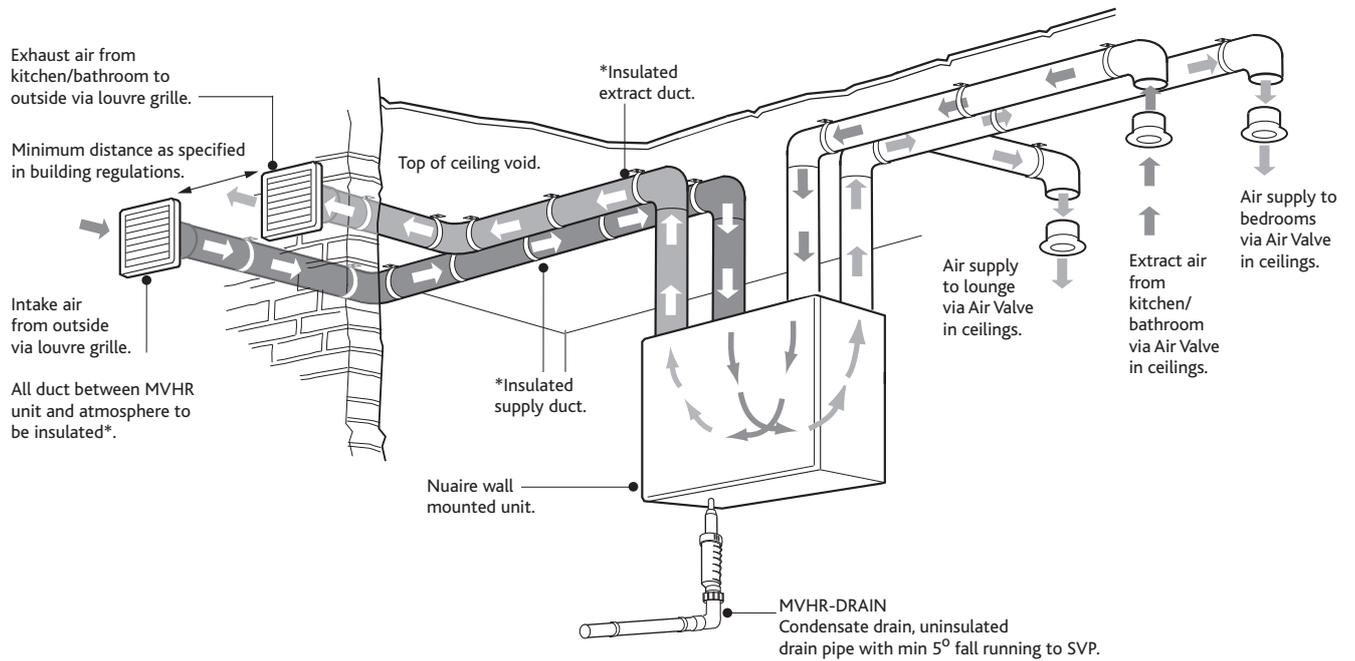
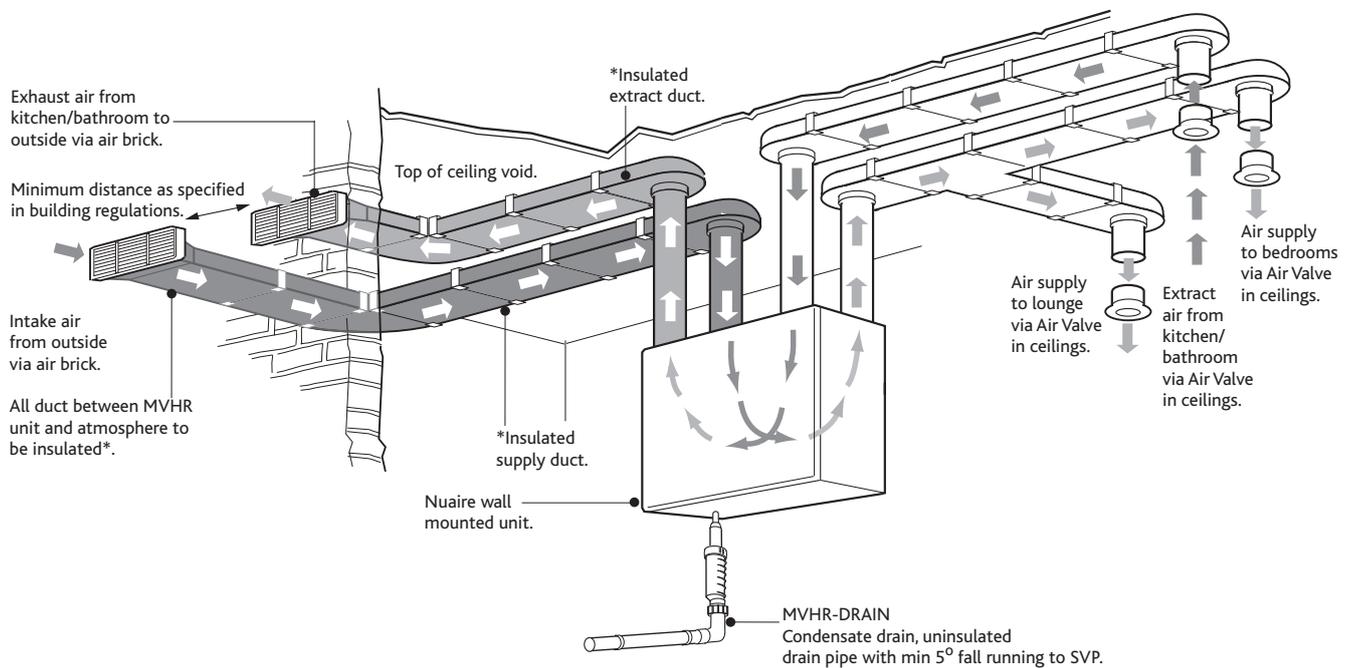


Figure 10. Typical ducted arrangement for a wall mounted unit using rectangular ducting.



ALSO FROM NUAIRE -



New **ductmaster** range of thermal ducting, an all-in-one insulated ducting system. (see installation document 671620).

### 5.0 Electrical Connection

**IMPORTANT**

For good EMC engineering practice, any sensor cables or switched live cables should not be placed within 50mm of other cables or on the same metal cable tray as other cables.

**Please note:** the electrical connection of the unit must be carried out by a qualified electrician.

The unit is supplied with a flexible cord for connection to the mains supply.

**NOTE:** In the event of 1kV transients the fans may stop running, normal operation will be resumed when the interference has ceased.

**Electrical details:-**

**Voltage:** 230V 1ph 50Hz

**Consumption:** 2.5 Amp

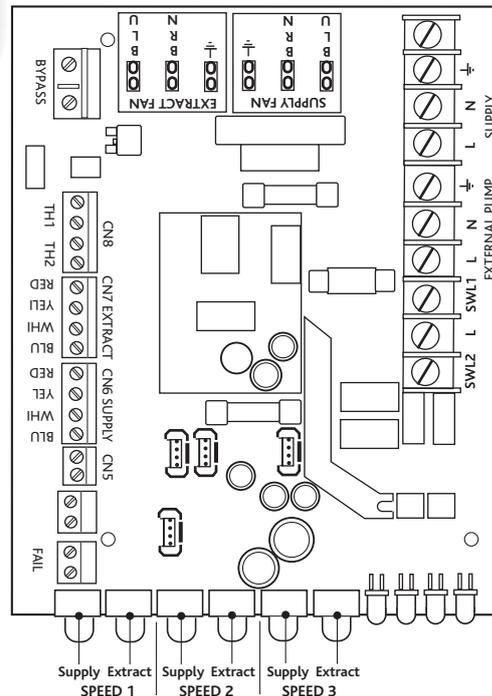
**Fuse rating:** 5 Amp

**NOTE:** This unit must be earthed.

The five core cable from the mains power supply should be connected to a fixed wiring installation, via a fused isolator, in accordance with current IEE wiring regulations.

Figure 11. PCB board.

**NOTE:** Wiring is for reference purposes only as the connections shown are factory fitted. The unit is pre-wired with a 2 metre fly lead.

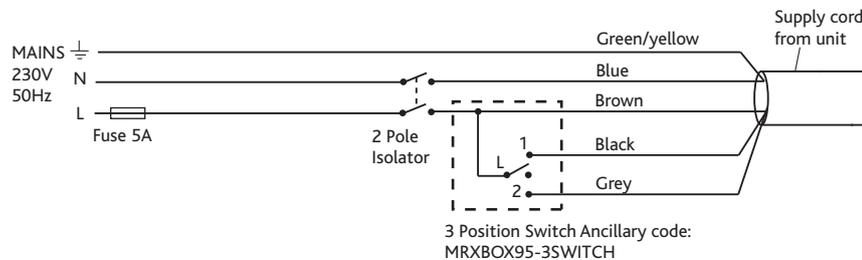


### 5.1 Examples of typical wiring layouts

**MRXBOX95AB-WH2**

Figure 12a. Unit only.

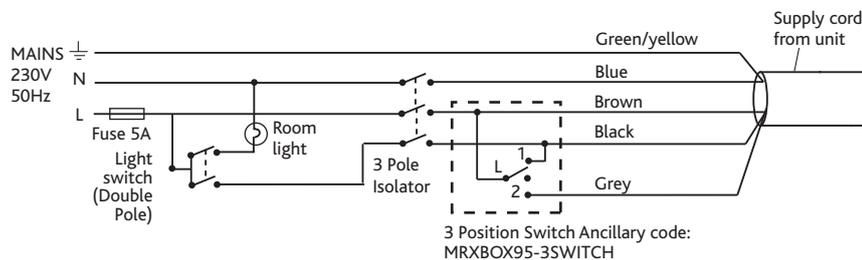
Disconnection from the supply mains must be incorporated within the fixed wiring in accordance with the wiring regulations and shall have a minimum contact separation of 3mm.



**MRXBOX95AB-WH2**

Figure 12b. Unit serving one bathroom.

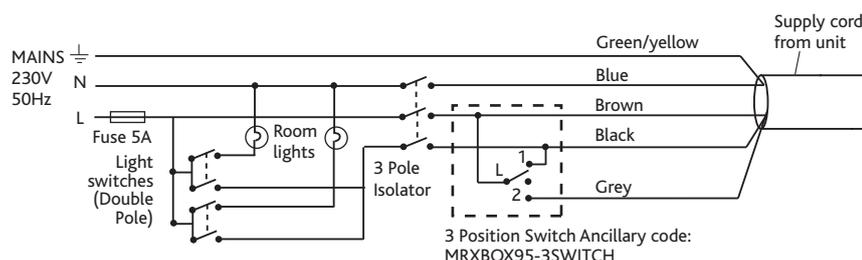
Disconnection from the supply mains must be incorporated within the fixed wiring in accordance with the wiring regulations and shall have a minimum contact separation of 3mm.



**MRXBOX95AB-WH2**

Figure 12c. Unit serving two bathrooms.

Disconnection from the supply mains must be incorporated within the fixed wiring in accordance with the wiring regulations and shall have a minimum contact separation of 3mm.



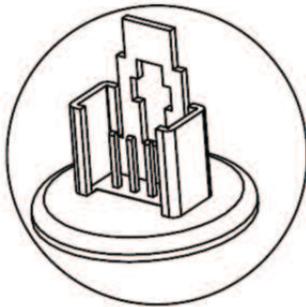
### 5.0 Switch

To fix the switch to a wall or back box remove the front fascia by inserting a terminal screwdriver into the two openings along the bottom edge and prize open gently. The fixing points on the back plate can then be accessed, once the switch has been secured the front fascia can then be re-fitted.

### 5.1 Ecosmart controls

A single Ecosmart sensor can be connected to the unit using the connector situated on the top panel (see fig. 13), If more than one Ecosmart sensor is required please use MRXBOX95-JB and refer to leaflet No. 671700 for installation instructions.

Figure 13. Ecosmart sensor connector on the top panel of the unit.



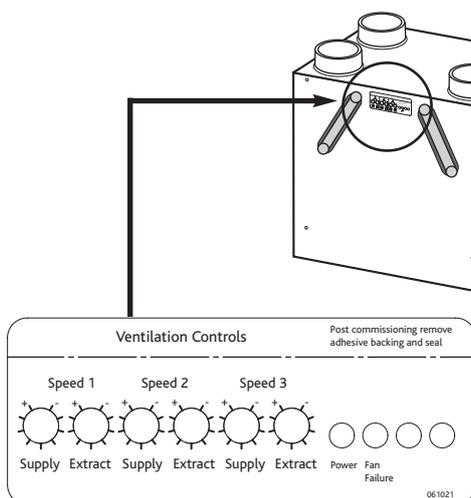
## 6.0 Commissioning

### IMPORTANT

The filters fitted inside the unit are protected with a plastic film. Prior to commissioning remove the covers (fig 13), take off the film and replace.

1. For required air flow rates please refer to the design specification for the property, follow 2.4 or refer to building regulations ADF 2010.
2. The unit should be run for a minimum of 10 minutes to reach steady state before commencing commissioning.
3. The humidity sensor is initially set to its least sensitive position, this should be adjusted during commissioning. Depending on storage and site conditions the unit may boost due to high relative humidity levels, this will continue until the level drops below the specified set point.
4. The unit is supplied with independent control for both normal and boost airflows. (see fig. 14).

Figure 14. Detail of unit control on front panel.



5. Correct commissioning is essential to ensure the ventilation air flow rates are met. It also ensures the unit is not over ventilating and causing excessive power consumption.
6. Commissioning should be carried out in accordance with building regulations document "Domestic ventilation compliance guide". [www.planningportal.gov.uk/building-regulations/approved-documents/partf/associated](http://www.planningportal.gov.uk/building-regulations/approved-documents/partf/associated)  
A calibrated moving vane anemometer and hood will be required to carry out commissioning.
7. Adjustment valves should be locked in place to prevent further adjustment.
8. Once commissioned the home owner / tenant should be informed that the unit should not be adjusted as it will have a detrimental effect on the indoor air quality and could result in condensation and mould growth. The label covering the control has an adhesive panel which should be removed post commissioning to prevent tampering.

### 6.1 Humidity adjustment

This product contains an internal humidity sensor fitted into the airflow extracting from the wet rooms. When the unit senses that the humidity exceeds the set point the unit will boost to that set by the commissioned boost speed. The set point can be found on the side of the unit (see fig 7) and is at its most sensitive when turned fully clockwise. Note that the sensor is measuring humidity from all the wet rooms at the same time and should not be relied on to solely boost the unit.

Additional switch should be used local to the wet rooms (see wiring diagrams).

### 7.0 Status Indication

The status of the unit is indicated by a series of LED's on the front cover. The variants are listed below.

Speed 1	●	○	○	○
Speed 2	●	○	☀	○
Speed 3	●	○	●	○
Supply Fan Fault	●	●	○	○
Extract Fan Fault	●	●	○	○
Frost Protection	●	○	●	●
Filter Change	●	○	○	☀
HX Bypass (AB units only)	●	○	☀	☀

060923

## 8.0 Maintenance/Cleaning

### IMPORTANT

Isolation - Before commencing work make sure that the unit, switched live and Nuair control are electrically isolated from the mains supply and switched live supply.

We recommend that the two G3 filters are inspected and cleaned after 6 months and replaced every 12 months. This will be indicated by the first LED from the right hand side flashing, the LED will flash for 5 days and then reset itself.

The filters can be removed from the unit by removing the two filter covers on the front panel of the unit. Take hold of the two circular tabs either end of the filter covers and pull out.

The filter can now be extracted by pulling the removal loop on the front edge of the filter. Once the filters have been inspected return or replace them as necessary.

Inspect the heat exchanger every 5 years. Generally check for damage and security of components. The heat exchanger should be fitted in the same orientation as originally assembled e.g. front label facing removable cover and top label nearest PCB.

Figure 14. Removing the two filter covers on the front panel of the unit.

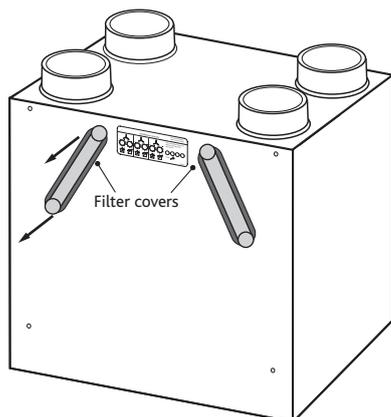
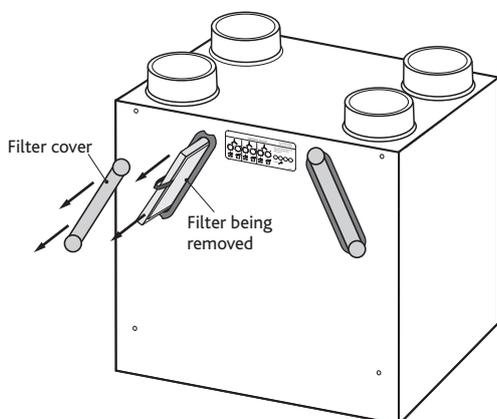


Figure 15. The filters can be removed by pulling on the black tab on the visible end of the filters.



## 9.0 Replacement of Parts

Should any component need replacing extensive stocks are available for quick delivery. Ensure that the unit is electrically isolated, before carrying out any work.

**Note:** The supply cable must be replaced by an electrically competent person.

When ordering spare parts, please quote the serial number of the unit and the ARC number of the purchase if possible.

(This information will be available on the fan label).

## 10.0 Warranty

The 5 year warranty starts from the day of delivery and includes parts and labour for the first year and parts only for the remaining 4 years.

This warranty is void if the equipment is modified without authorisation, is incorrectly applied, misused, disassembled, or not installed, commissioned and maintained in accordance with the details contained in this manual and general good practice.

The product warranty applies to the UK mainland and in accordance with Clause 14 of our Conditions of Sale. Customers purchasing from outside of the UK should contact Nuair International Sales office for further details.

## 11.0 After Sales Enquiries

For technical assistance or further product information, including spare parts and replacement components, please contact the After Sales Department.

**Telephone 02920 858 400**

Technical or commercial considerations may, from time to time, make it necessary to alter the design, performance and dimensions of equipment and the right is reserved to make such changes without prior notice.