

Service

This product contains a self-cleaning backward curved impeller that requires no servicing.

The fan has sealed for life bearings, which do not require lubrication.

Specification:



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice

ADDVENT

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Installation and Operating Instructions for AVWH2N Wholehouse Vent Unit



IMPORTANT SAFEGUARDS

WHEN USING ANY ELECTRICAL APPLIANCE, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED.

PLEASE READ ALL INSTRUCTIONS CAREFULLY AND RETAIN FOR FUTURE REFERENCE

IF IN ANY DOUBT ABOUT THE INSTALLATION OR USE OF THIS PRODUCT, CONSULT A COMPETENT ELECTRICIAN.

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IMPORTANT NOTES

- 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.
 - Ambient exhaust air temperatures higher than 40°C or less than -5°C.
 - Relative humidity above 90%
 - Possible obstructions which would hinder access or removal of the unit.
 - Sudden ductwork bends or transformations close to the Unit.
- All wiring to be in accordance with the current I.E.E. Regulations, or the appropriate standards of your country and MUST be installed by a suitably qualified person.
- The fan should be provided with a 3A fused, isolator switch capable of disconnecting all poles, having a contact separation of at least 3mm.
- Ensure that the mains supply (voltage, frequency, and phase) complies with the fan's rating label.
- When the fan extracts air from a room containing an open flue of a gas or fuel burning appliance, precautions must be taken to avoid the back-flow of gases into the room.
- The fan should not be used where it is liable to be subjected to direct water spray.
- The fan should be mounted at the highest point in the system to protect it from condensation build up.
- This fan should be vented to the outdoors.
- 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.
- Children should be supervised to ensure that they do not play with the appliance.
- **PLEASE NOTE:** Some older fluorescent and low energy lighting products can interfere with other electronic/timing circuits. For reliable operation of timers use post 2000 low energy bulbs or tungsten filament bulbs in the room lighting circuit.

Introduction

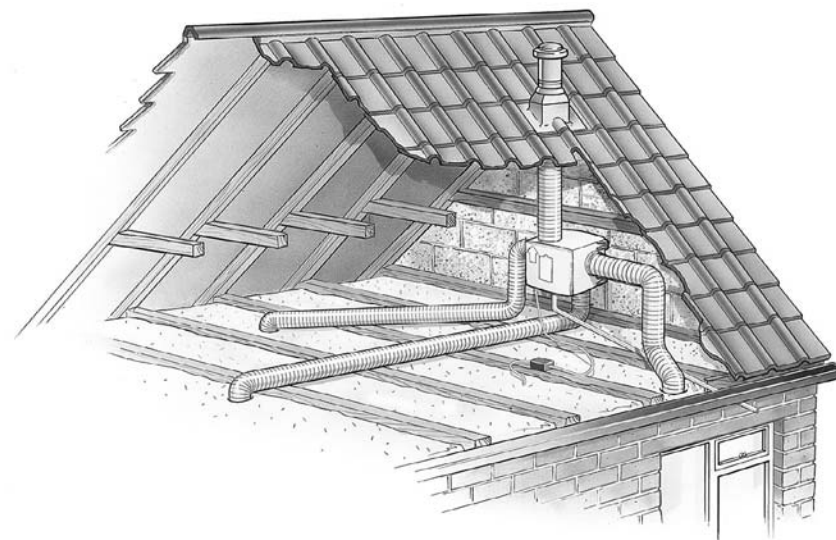
The AVWH2N is a Mechanical Extract Ventilation unit designed for simultaneous extract ventilation of multiple areas such as bathrooms, kitchens and toilets. The AVWH2N employs a highly efficient backward curved centrifugal motor impeller set and is designed for continuous 24-hour use.

The AVWH2N has 3 speed settings (Normal, Boost and Purge). Normal and Boost speeds are adjustable, whilst Purge is maximum speed. To achieve these 3 speed selections there are 2 LS inputs.

The product will run at Normal speed unless the input from an accessory calls for a change to Boost or Purge speed.

For the AVWH2N the Boost setting is activated using a switched live supply (LS input). The other remaining LS input can be used to switch the unit to Purge speed.

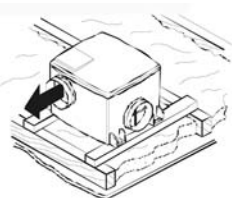
Figure 1 Typical Installation



Siting

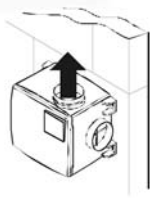
The AVWH2N can be mounted in 3 orientations for convenient installation in roof voids with a height >250mm.

Figure 2



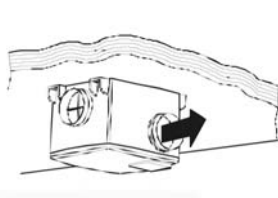
Base mounted installation with ducting radiating out horizontally.

Figure 3



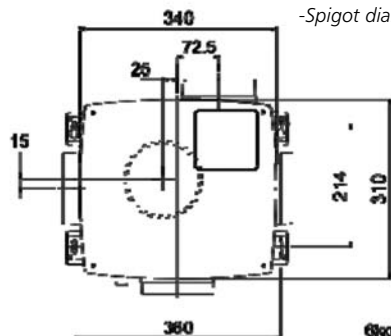
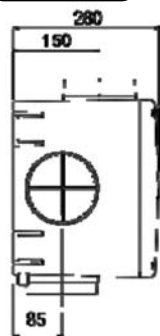
Vertically mounted Installation with the exhaust spigot at top. The electrical connections must come out of the bottom of the unit in order to maintain the water ingress protection.

Figure 4



Ceiling mounted installation

Figure 5



-Spigot diameters are 125mm

Installation

To reduce the system resistance in your duct system, and therefore lower the speed, power consumption and noise of the fan, please follow these instructions:

- Keep the length of duct runs to a minimum, particularly the exhaust duct run.
- Use larger diameter ducting rather than smaller.
- If you need to use flexible ducting, make sure that it is fully extended and not crushed, sagging or torn.

Installation

- Try to minimise the use of dampers by having similar length duct runs to the inlets.
- The bend radius, (measured to the inside of the bend), should be at least 1x the duct diameter. The larger, the better.
- Avoid having any bends, filters or other obstructions within 250mm of the fan inlets and outlet.
- Position the AVWH2N, taking into consideration the position of the rooms to be ventilated, the exhaust position, the drainage position and the electrical services. Ensure there is adequate access for installation and maintenance. Securely mount the AVWH2N through the mounting brackets on the casing using the appropriate anti-vibration mounts, screws, washers, rubber bushes etc.
- Ducting passing through an unheated space should be insulated. The AVWH2N can be connected to either Ø125mm or Ø100mm ducting. Remove the blanking caps to connect Ø125mm ducting. To connect Ø100mm ducting, peel out the centre of the cap with a screwdriver as indicated on the cap and leave the cap surround in position.

PLEASE NOTE that the exhaust duct must always be Ø125mm ducting. The AVWH2N is an M.E.V (Mechanical Extract Ventilation) unit designed for simultaneous extract ventilation of multiple areas such as bathrooms, kitchens and toilets. The AVWH2N employs a highly efficient backward curved centrifugal motor impeller set and is designed for continuous 24-hour use.

- The AVWH2N has 3 speed settings (Normal, Boost and Purge). Normal and Boost speeds are adjustable, whilst Purge is maximum speed. To achieve these 3 speed selections there are 2 LS inputs.
- The product will run at Normal speed unless the input from an accessory calls for a change to Boost or Purge speed.
- For the AVWH2N the Boost setting is activated using a switched live supply (LS input). The other remaining LS input can be used to switch the unit to Purge speed.

Wiring

WARNING: THE AVWH2N AND ANCILLARY CONTROL EQUIPMENT MUST BE ISOLATED FROM THE POWER SUPPLY DURING THE INSTALLATION / OR MAINTENANCE. THE UNIT MUST BE EARTHED.

- Remove the cover by undoing the four screws and lifting it away.
- With the power off, connect a suitable mains power cable from a switched, fused spur to the power supply PCB. Use the cable clamps and clip provided to secure the lead.

Wiring

Figure 6 Connection Diagram

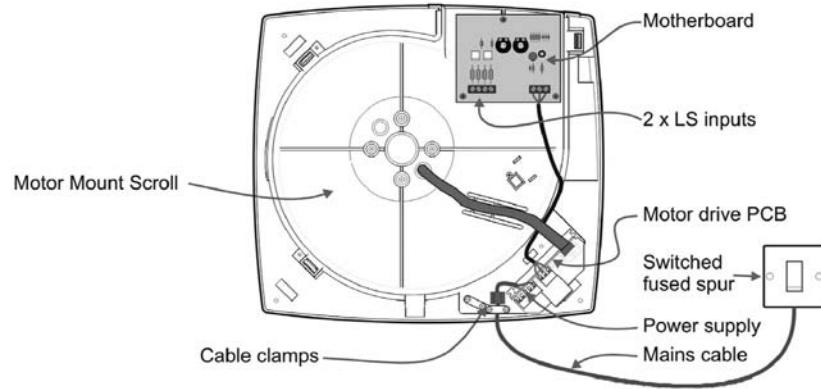
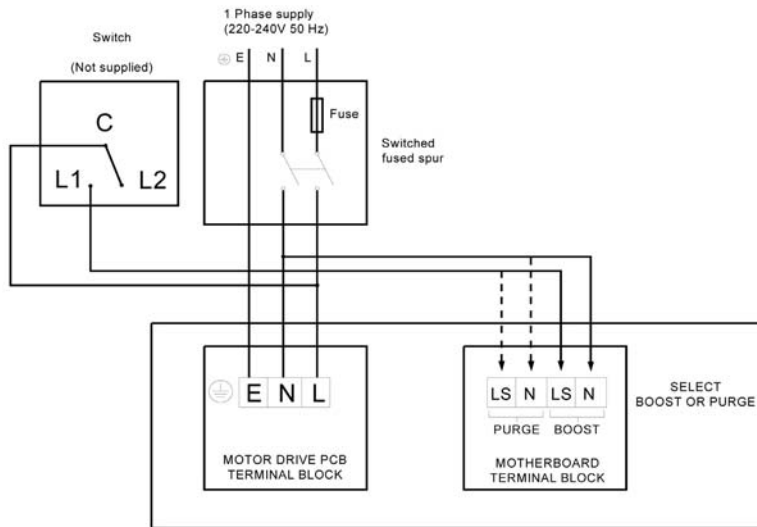


Figure 7 Wiring Diagram



Wiring

- Ensure all connections are correct and that all terminal screws and cable clamps are securely fastened.
- To enable the fan to switch to boost or purge speed when a light is turned on, connect the switched live connection from the lighting circuit to one of the LS connections on the mother board.
- The switched live output (230V) from any other switch or controller (such as a pullcord or push button switch, humidistat or PIR detector) can be connected to the LS terminal instead of connecting to a lighting circuit.
- Following these set-up instructions, switch the mains supply on and check the system is operating correctly.

Commissioning

- The speed and boost settings are fully adjustable via the potentiometers located on the front of the unit.
- However, for ease of adjustment during commissioning there are 4 pre-marked settings to assist in speed selection.
- As marked on the unit, the left hand potentiometer controls the 'Normal' speed, the right hand potentiometer controls the 'Boost' speed.
- USING A SMALL FLAT BLADED DRIVER. Turn the potentiometer clockwise to increase the speed.
- If a purge switch is installed this activates the unit at maximum speed.
- Once the AVWH2N is commissioned, apply white label over marked area containing 'Boost' and 'Normal' holes to ensure the potentiometers are inaccessible and that the unit returns to an IP22 rated status.

Figure 8

