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SUPPLY & SERVICE

All sales made by Vent-Axia Limited are made only upon the terms of the Company’s Conditions of Sale, a copy of which may be obtained on request.

As part of the policy of continuous product improvement Vent-Axia reserves the right to alter specifications without notice.
Vent-Axia
Air Minder Plus
The Ultimate Heat Recovery Unit

Wholehouse Heat Recovery Systems

### Energy Conservation
- The unique heat exchanger cube offers a high level of heat recovery – up to 90% of the temperature based differential of the out going air.
- Allows cooler fresh air to be drawn into the property during warmer summer months, eliminating the need to leave windows open.
- Provides free night time cooling reducing the internal building temperature to the required Comfort Temperature.
- User adjustable Comfort Temperature setting (16°C to 30°C).

### Flexibility
- Simple clip together modular design – fits through standard 600mm square loft access even through a 450mm square access hatch.
- New vertical mounting kit – extends the mounting options even further allowing Air Minder Plus to be located in the most convenient position.
- Simple clip together modular design – fits through standard 600mm square loft access.
- New vertical mounting kit – extends the mounting options even further allowing Air Minder Plus to be located in the most convenient position to suit the building design – airing cupboards, lofts and roof voids.

### Comfort Control (FB models only)
- Allows cooler fresh air to be drawn into the property during warmer summer months, eliminating the need to leave windows open.
- Provides free night time cooling helping to reduce the internal building temperature to the required Comfort Temperature.
- User adjustable Comfort Temperature setting (16°C to 30°C).

### Air Quality
- Integral washable EU3 filters effectively filter the incoming air to remove allergens and air borne particulates ensuring the indoor air quality is maintained whatever the season.
- Controller displays the words ‘check filter’ every 3 months - prompting a check on the filters, if necessary, to be cleaned or replaced.

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock Ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Plus Midi F</td>
<td>42 58 09</td>
</tr>
<tr>
<td>AM Plus Maxi F</td>
<td>42 58 10</td>
</tr>
<tr>
<td>AM Plus Midi FB</td>
<td>42 58 11</td>
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<tr>
<td>AM Plus Maxi FB</td>
<td>42 58 12</td>
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Air Minder Plus is the next generation of wholehouse heat recovery ventilation systems. It will effortlessly remove your home’s polluted air and provide a constant supply of clean filtered air, allowing you and your family to live in an ideal indoor environment. Air Minder Plus is available in two models, F (Filter) and FB (Filter and Summer Bypass).

Sized correctly, it will gently ventilate the property at a rate of about half an air change per hour, removing most air and unpleasant smells from the kitchen, bathrooms and toilets and extracting it to the outside. Fresh filtered air is drawn into living spaces such as bedrooms and living rooms, providing continuous ventilation even when the house is sealed up for the day. By keeping humidity levels low and introducing warmed fresh filtered air to replace contaminated air, the quality of the internal environment is significantly improved. Continuous wholehouse ventilation can help reduce relative humidity to below 70% RH, which inhibits the ideal living and breathing conditions of the house dust mite.

### The Developers Choice
**Designed for the UK Market**
- Air Minder Plus has been designed to meet the exacting and specific demands of the UK market.
- SAP Appendix Q listed.
- Available in 2 performance models (290 and 375) has 4 house volume settings ranging from 265m³ to 600m³, with flow rates from 60m³/h to 380m³/h.
- Constant volume LoWatt DC motors within the unit ensure that balanced input and extract air volumes are automatically maintained. Ventilation rates can be boost manually or via a remote sensor.
- Optional automatic summer bypass and defrost functions.

### The Installers Choice
**Easy Installation**
- Unique 270° rotation on duct turrets – facilitates connecting straight onto a duct from any angle without creating resistance or reducing airflow.
- Open flux appliance mode – set at installation, for systems where negative pressure is not permitted. When the external temperature drops below -1°C the summer bypass will open and the supply fan will continue to run, allowing external air to bypass the heat exchanger and enter the dwelling. This unique safety feature prevents products of combustion being drawn back into a dwelling.
- Simple to Commission
  - Suitable for house volumes from 265m³ to 600m³ – simple to configure via 4 switches.
  - Easy to commission via the digital controller – allows installer details to be entered for future reference and service calls.

### The Homeowners Choice
**Energy Conservation**
- Energy recovery – up to 90% of the energy from the extracted air can be recovered from the unique heat exchanger cube.
- Constant volume energy efficient LoWatt DC motors within the unit ensure that balanced input and extract air volumes are automatically maintained.
- Control options – monitor indoor air quality – automatically boosting Air Minder Plus.
- Automatic heating failure detection – switches Air Minder Plus off when the internal temperature drops below 5°C. This helps prevent frost damage as a result of heating failure.

**System Protection**
- Reduces the risk of frost forming in the heat exchanger when the external air temperature drops below 0°C. The supply fan gradually reduces airflow – switching off at -5°C.
- Open flux interlock - the supply fan continues to run during defrost mode.

**Air Quality**
- Integral washable EU3 filters effectively filter the incoming air to remove allergens and air borne particulates ensuring the indoor air quality is maintained whatever the season.
- Controller displays the words ‘check filter’ every 3 months - prompting a check on the filters, if necessary, to be cleaned or replaced.

* Savings are based on continuous running

- Let your home breathe
Controllers and Sensors
Air Minder Plus can be used with a wide range of Vent-Axia controllers and sensors. Ranging from remote controllers to wired remote sensors Air Minder Plus can control your indoor air quality, letting your home breathe.

Controller

- Manual boost
- Integral clock – 7 day display
- User programmable – set switching times to suit lifestyle
- Set indoor comfort level temperature
- Elapsed time meter – hours run indicator
- Filter check indicator
- System indicator – details of the service provider

Ambient Response Humidity Sensor
- Pullcord override and neon indicator
- Changeover relay switch
- Operating range: 30% - 90% RH
- Ambient operating temp: 5°C to 40°C
- 240V DC
- Dimensions (mm): 87 x 87 x 33 (H x W x D)
- Will fit single gang box for surface mounting

Ecotronic Humidity Sensor
- Set Point adjustable
- Maximum switching load 1 amp inductive
- Pullcord override indicator
- Ambient operating temp: 0°C to 50°C
- Dimensions (mm): 87 x 87 x 33 (H x W x D)
- Supply voltage 240V DC

Air Quality Sensor
- Ambient operating temp: 0°C to 50°C
- MIN - MAX mode or direct Damper control
- Dimensions: 87 x 157 x 47mm (H x W x D)
- Surface mounted
- 1 - 25 min O/R timer
- Supply voltage 240V DC

Visionex PIR Sensor
- Fits any UK single gang mounting box
- Adjustable timer overrun (3 - 25 minutes)
- Range of detection up to 10 metres
- Designed to meet IP43
- Ambient operating temp: 0°C to 50°C
- Supply voltage 240V DC

Clean Air for a Better Environment
Wholehouse Heat Recovery Systems

Air flow and air distribution

The air supply and extract rates must be specified to meet the requirements of Building Regulations Part F (Tables 1.1a and 1.1b). Considerations must also be given to the design guidance in the Building Regulations Part L1A (Conservation of fuel and power). As a rule of thumb, a ventilation rate of 0.3 ACH [Air Changes per Hour] based on the volume of the dwelling will keep water vapour and other pollutants below accepted maximum. In UK dwellings, supply and extract rates should be kept to a minimum, particularly during winter months.

To maximise the effect of mechanical ventilation incorporating heat recovery in domestic dwellings, it is important that a balanced ventilation is achieved to ensure that air migrates throughout the property.

Step 1

First consider the location of the Air Minder Plus unit itself. Air Minder Plus may be sited either in an existing cupboard or in the loft area. The unit may be sited anywhere in the dwelling provided there is adequate access for cleaning and maintenance, and that any noise produced by the system will not disturb the occupants or their neighbours. It can be installed either vertically or horizontally. Give careful consideration to the positioning of the unit as it may radically affect the routing, length and number of bends necessary for the ducting system.

A condensate pipe is provided with the unit. It will be necessary to drain the condensation to the dwellings foul water drainage system. A 240 volt single phase connection unit will be required complete with a Jumo fuse to be sited adjacent to the heat recovery unit.

The ducts extracting stale air to atmosphere and supplying fresh air to the heat recovery unit may terminate either through an air inlet wall termination or via the soffit grilles. Alternatively, roof tile vents can be used, or roof terminals with a free area on AM Plus Midi of 180cm² and on AM Plus Maxi of 310cm².

Step 2

Consider the extract side of the system. Particularly well-insulated areas, such as the loft space or between roof timbers, should be insulated. Similarly, in the toilet, bathroom or shower, site the extract grille furthest away from the air replacement or directly over a shower and ensure that there is a minimum 10mm gap under the door for air replacement or that a door grille is fitted. For bathrooms we recommend Archcheck Grilles.

The ducts from bathrooms, toilets, shower rooms, kitchens and utility rooms should join close to the Air Minder Plus unit.

Step 3

Consider the supply side of the system. To ensure that warmed fresh air is delivered throughout the property into bedrooms, living room, dining room, etc. This is achieved by using a circular supply diffuser in each room, using rigid plastic, flexible ducting and fittings. The diffusers should be positioned in the corner of the room diagonally from the door. All ducting in unheated areas, such as the loft space or between roof timbers, should be insulated.

Advisory Notes

Ductwork

Size the duct system and terminal fittings, taking into account the air flow rate and pressure performance available from the Air Minder Plus. All joints should be properly sealed to avoid air leaks into or out of the ducts. In unheated areas, insulated ducting should be used. Use of flexible ducting should be kept to a minimum.

The air supply duct between the fresh air intake and the heat exchanger must be insulated and wrapped with a vapour barrier where it passes through heated areas. The fresh-air intake fitting must be installed away from boiler and chimney or flue outlets, foul and surface water drain vents and contaminated air outlets. Normal practice for separation between drain vent pipes, chimneys, etc. and windows/air brick should be followed, please refer to BS55440 (ie balanced flue terminals). The present minimum vertical separation distance is 600mm. It is advisable not to locate the intake above a wall-mounted flue outlet.

A louvre, cowl or similar device is recommended to prevent rain, birds, large insects and rodents from entering the duct system.

Sound Levels

Air Minder Plus units are extremely stable and transmit very little vibration. It is good practice to site the unit over the hall and away from bedroom areas. For very sensitive applications, additional vibration insulation may be selected.

Speed dB(A) @ 3m

Night 19
Day 40
Boost 50

Air Minder Midi: House Volume Setting 1