

WHHR125DC-Aera



MVHR - WHHR125DC - Aera

- energy efficient EC motor
- efficient, low energy solution to controlling condensation and pollution
- provides low level continuous ventilation in a kitchen and up to 6 wet rooms
- up to 93% heat exchange efficiency
- variable choice of low (trickle) and boost speed at installation
- for wall, cupboard or loft installation
- low noise levels and running costs
- complies with Building Regulations Parts L1 2010 and F 2010

WHHR125DC-Aera

GENERAL FEATURES

- Up to 90 litre/sec at 50Pa - max 95 litre/sec capacity
- for areas up to 230m²
- up to 93% of heat recovered
- easy to install and maintain
- for fitting vertically into lofts, or cupboards - wall fixing bracket supplied
- variable low (trickle) and boost options
- boost speed triggered by a switched live connection from:
 - a light switch (if more than one light switch is used, **each one must be a double pole switch**)
 - DRH240 (dynamic remote humidistat)
 - PIRFF (passive infra red)
 - THM (thermostat)
 - a remote switch/pull cord
- low noise levels
- low running costs
- extra security - no need to open windows
- 3 year warranty

TECHNICAL FEATURES

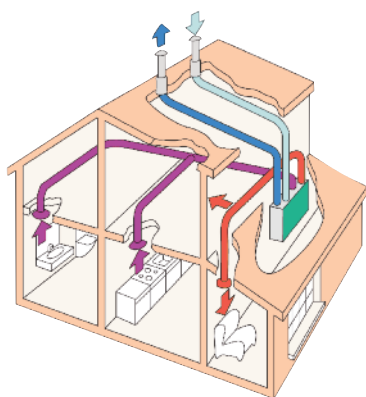
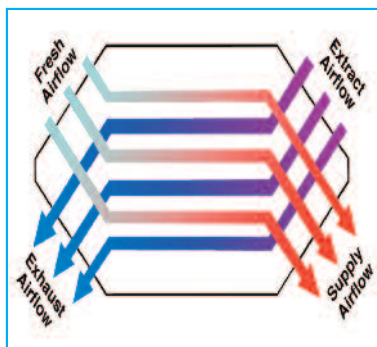
- compact unit
- casing from galvanised sheet with epoxy finish
- thermo-acoustic lining
- low energy EC brushless motor
- single width, single inlet, direct drive, forward curved impellers
- operates in temperature up to 60°C
- uses standard, disposable G4 filters with thermostat/froststat for automatic switching off the intake fan when outside temperatures are unusually low
- 2 condensation drains for differing climatic conditions
- counter flow heat exchanger

COMPLIES WITH

- Part L1 2010 of Building Regulations for enhanced energy saving capability
- Part F 2010 of Building Regulations for reliable, efficient ventilation
- EU RoHS Directive Compliant.
- Conforms to requirements of EC Council directives relating to Electromagnetic Compatibility and Electrical Safety: 2006/95/CE (LVD), 2004/108/CE (EMC), EN 60335-2-80
- CE marked
- **SAP Q eligible**
- **EST Best Practice Performance compliant**

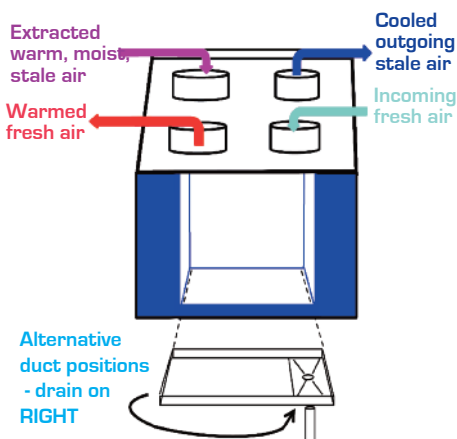
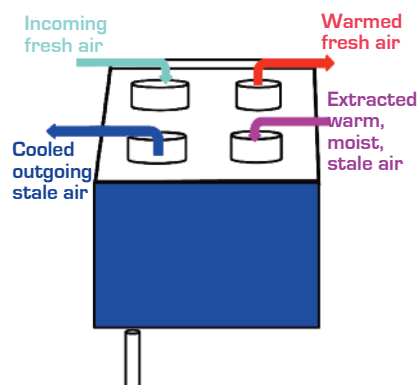
CONTROL FEATURES

- > **variable adjustment** - trickle and boost speeds set at installation
- > **boost setting** (via switched live)
- > **frost protection** - air temperature switches off intake motor when temperatures fall to near freezing
- > **change of ductwork handing**



- Incoming fresh air
- Warmed fresh air
- Extracted warm, moist, stale air
- Cooled outgoing stale air
- WHHR125DC-Aera

Normal duct positions - drain on LEFT



Vectaire Ltd can supply all accessories for use with these units, including air filter cassettes, silencers, fire dampers, air valves, ducting, outside grilles and wall cowls. Additionally, Vectaire offers a design service to ensure that the unit installed is the best possible to provide efficient, effective, low energy and low running cost ventilation. Vectaire can also organise installation, commissioning and maintenance of these products



WHHR125DC-Aera

| TECHNICAL CHARACTERISTICS | | | | | | | | | | |
|---------------------------|---------------|-------------|-----|-----|-----|---------------|-------------|-----|-----|-----|
| Model | Airflow l/sec | | | | | Power - Watts | | | | |
| | max boost | max trickle | 80% | 60% | 40% | max boost | max trickle | 80% | 60% | 40% |
| WHHR125DC-Aera | 95 | 80 | 65 | 50 | 35 | 140 | 80 | 51 | 29 | 12 |

| RESULTS for SAP CALCULATIONS ENERGY LEVEL PERFORMANCE - using rigid ducting only | | | | | RESULTS for Approved Document F | |
|---|-------------------|----------------------------|--------------------------|---|---------------------------------|--------------------------------|
| Exhaust Terminal Configuration | Fan Speed Setting | Specific Fan Power (W/l/s) | Heat Exchange Efficiency | EST Best Practice Performance Compliant | Total Exhaust Flow Rate (l/sec) | Total Supply Flow Rate (l/sec) |
| Kitchen + 1 additional wet room | 100% variable | 0.62 | 93 % | Yes | 15.0 | 15.0 |
| Kitchen + 2 additional wet rooms | 100% variable | 0.60 | 93 % | Yes | 21.0 | 21.0 |
| Kitchen + 3 additional wet rooms | 100% variable | 0.64 | 92 % | Yes | 27.0 | 27.0 |
| Kitchen + 4 additional wet rooms | 100% variable | 0.74 | 91 % | Yes | 33.0 | 33.0 |
| Kitchen + 5 additional wet rooms | 100% variable | 0.83 | 90 % | Yes | 39.0 | 39.0 |
| Kitchen + 6 additional wet rooms | 100% variable | 0.98 | 90 % | Yes | 45.0 | 45.0 |

Figures from BRE test results at minimum flow rate conditions

| WHHR125DC-Aera | | Characteristic in-Duct Sound Power Levels Mid Octave Frequency band | | | | | | | | Case-radiated LpA(dB) @3m* |
|----------------|---------|--|-----|-----|-----|----|----|----|----|----------------------------|
| Curve Ref | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | |
| Max Boost | Extract | 85 | 74 | 64 | 57 | 52 | 44 | 39 | 36 | 31 |
| | Supply | 83 | 74 | 75 | 67 | 64 | 58 | 54 | 51 | |
| Max Trickle | Extract | 82 | 70 | 60 | 53 | 49 | 40 | 35 | 31 | 29 |
| | Supply | 81 | 72 | 72 | 64 | 61 | 53 | 50 | 47 | |
| 80% | Extract | 78 | 65 | 56 | 48 | 44 | 33 | 29 | 26 | 26 |
| | Supply | 77 | 67 | 67 | 59 | 56 | 46 | 44 | 39 | |
| 60% | Extract | 70 | 60 | 50 | 42 | 37 | 25 | 20 | 22 | 23 |
| | Supply | 68 | 61 | 60 | 53 | 48 | 37 | 33 | 26 | |
| 40% | Extract | 31 | 59 | 49 | 41 | 35 | 23 | 18 | 21 | 22 |
| | Supply | 65 | 60 | 58 | 52 | 46 | 35 | 31 | 23 | |

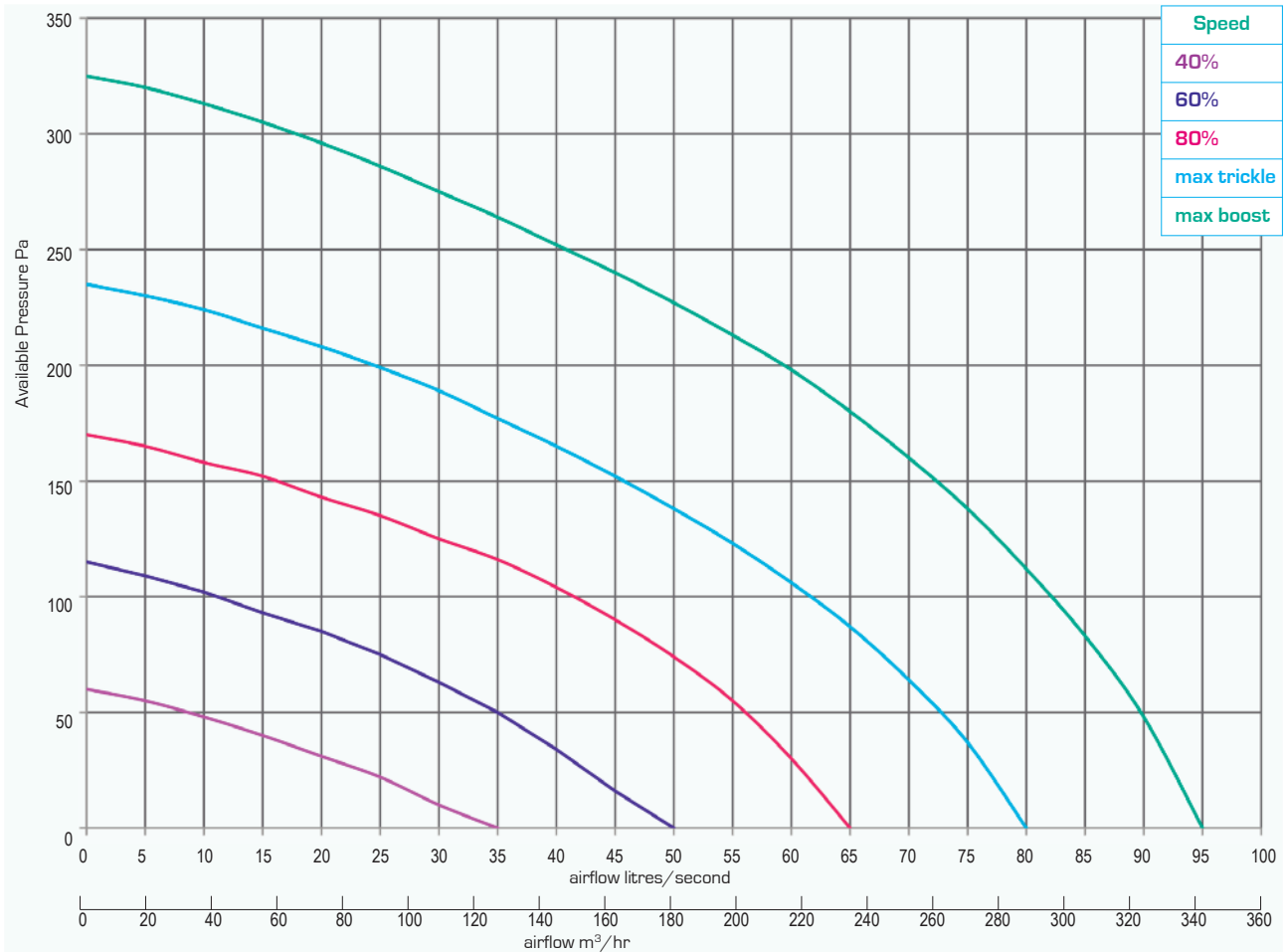
* Assumes spherical radiation under anechoic conditions

TYPICAL SPECIFICATION

Supply and install a Vectaire WHHR125DC-Aera which gives low level, continuous ventilation to a kitchen and six other wet rooms. The unit should be for cupboard, loft or false ceiling installation and recover up to 93% of heat from extracted air separating the airflows using a counter flow heat exchanger. The unit should incorporate a low energy EC brushless motor for low noise levels and low energy consumption with an SFP down to 0.60. It should have as standard independent variable speed adjustment for boost and trickle for optimum setting. The unit should have two condensation drains for differing climatic conditions, which allow for right or left handing. It should comply with all current IEE, EC and Building Regulations requirements and be SAP Q Eligible and EST Best Practice Performance Compliant.

WHHR125DC-Aera

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm

