

MVHR - WHHR100/90DC-B

- energy efficient EC motor
- very low profile - only 200mm deep
- 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 79% heat exchange efficiency
- variable choice of low (trickle) and boost speed at installation
- for ceiling, loft or void installation
- top or bottom access
- low noise levels and running costs
- compliant with Building Regulations Parts L1 2010 and F 2010
- manufactured in UK to ISO 9001



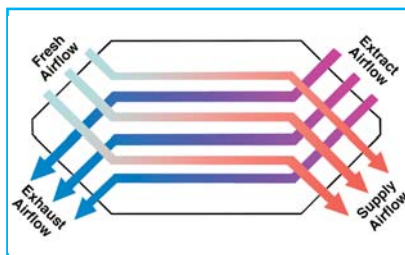
WHHR100/90DC

GENERAL FEATURES

- Up to 74 litre/sec at 50Pa - max 80 litre/sec capacity
- for areas up to 210m²
- up to 79% of heat recovered
- easy to install and maintain
- for fitting into lofts, voids, false ceilings or cupboards
- 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
- 2 year warranty

TECHNICAL FEATURES

- compact low profile unit - **only 200mm deep**
- casing in galvanised sheet steel
- thermo-acoustic lining
- low energy EC brushless motor
- single width, single inlet, direct drive, backward curved impellers
- operates in temperature up to 60°C
- pre-wired for easy electrical connection
- uses standard, disposable G3 filters
- counter flow heat exchanger
- manufactured in UK to ISO 9001



CONTROL FEATURES -

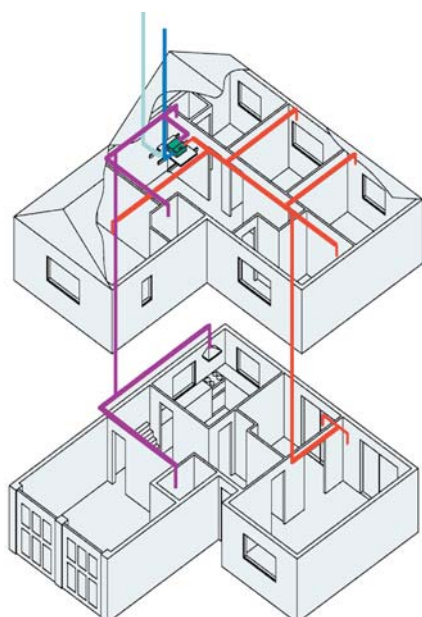
- > **variable adjustment** - trickle and boost speeds set at installation
- > **boost setting** (via switched live)
- > **frost protection** - air temperature switches off intake motor when temperatures fall to near freezing
- > **change of ductwork handing**

MODELS AVAILABLE:

- WHHR100/90DCTAL - top access, left hand
- WHHR100/90DCBAL - bottom access, left hand
- WHHR100/90DCTAR - top access, right hand
- WHHR100/90DCBAR - bottom access, right hand

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**



- Incoming fresh air
- Warmed fresh air
- Extracted warm, moist, stale air
- Cooled outgoing stale air
- WHHR100/90DC

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



WHHR100/90DC

TECHNICAL CHARACTERISTICS										
Model	Airflow l/sec					Power - Watts				
	max boost	max trickle	80%	60%	40%	maboost	max trickle	80%	60%	40%
WHHR100/90DC	80	63	52	38	28	109	66	46	25	17

RESULTS for SAP CALCULATIONS ENERGY LEVEL PERFORMANCE - using rigid ducting only			RESULTS for Approved Document F	
Exhaust Terminal Configuration	Specific Fan Power (W/l/s)	Heat Exchange Efficiency	Total Exhaust Flow Rate (l/sec)	Total Supply Flow Rate (l/sec)
Kitchen + 1 additional wet room	0.71	79 %	15.0	15.0
Kitchen + 2 additional wet rooms	0.78	79 %	21.0	21.0
Kitchen + 3 additional wet rooms	0.91	78 %	27.0	27.0
Kitchen + 4 additional wet rooms	0.99	78 %	33.0	33.0
Kitchen + 5 additional wet rooms	1.22	78 %	39.0	39.0
Kitchen + 6 additional wet rooms	1.39	77 %	45.0	45.0

Figures from BRE test results at minimum flow rate conditions

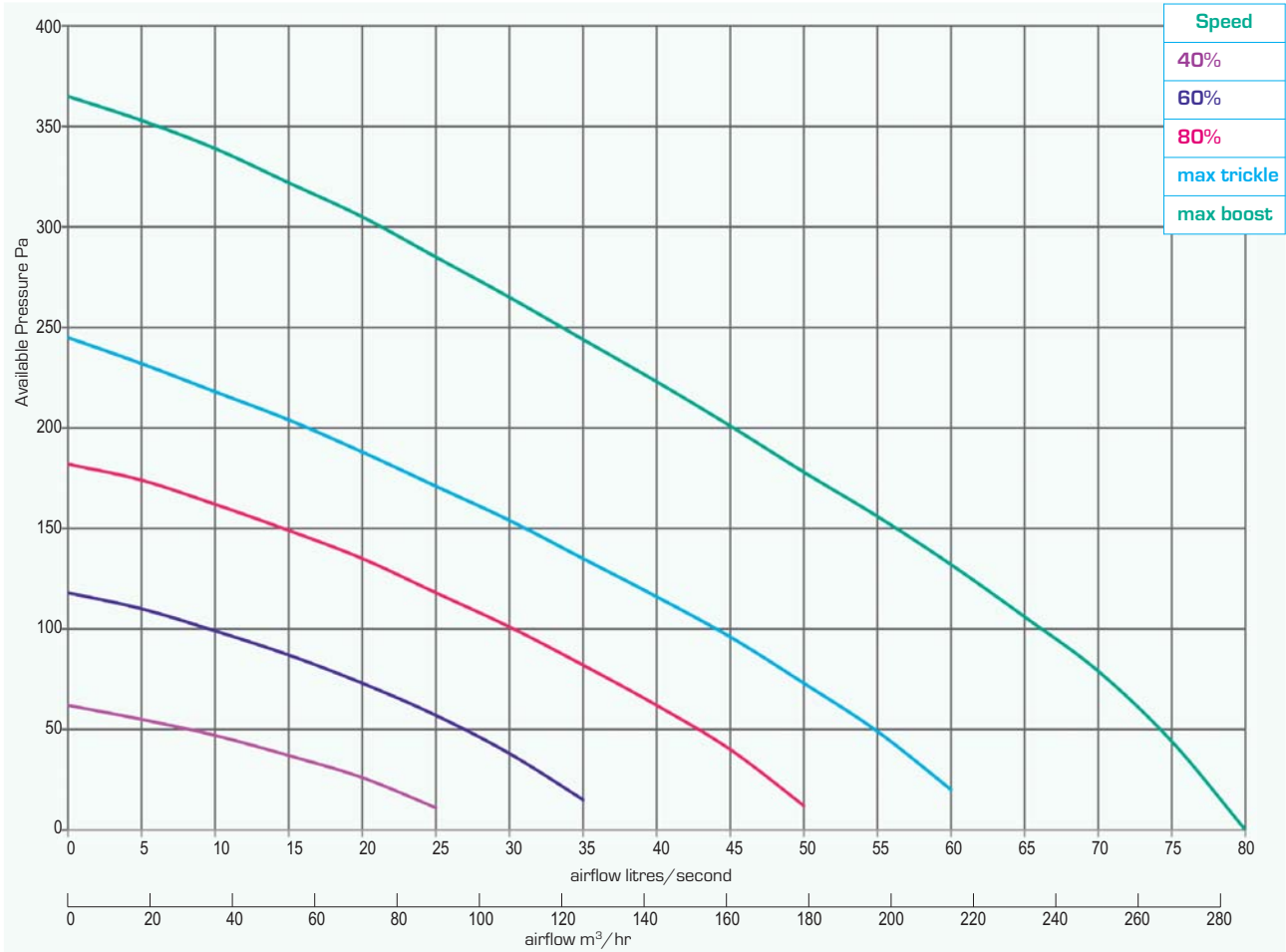
WHHR100/90DC		Sound Power Levels, L_w [dB] - Octave Bands Frequency Hz.								Sound Pressure dBA @3m
Curve Ref		63	125	250	500	1k	2k	4k	8k	
Max Boost (80 l/sec)	Extract	55	55	58	62	49	44	40	29	37
	Supply	62	62	63	75	63	63	63	54	
	Breakout	58	56	59	59	49	44	40	30	
Max Trickle (63 l/sec)	Extract	52	51	55	56	44	38	33	24	32
	Supply	57	59	60	66	58	59	57	46	
	Breakout	67	54	56	51	45	40	33	26	
80% (52 l/sec)	Extract	51	49	53	53	42	35	29	22	29
	Supply	55	57	59	62	55	56	54	43	
	Breakout	72	53	54	48	43	37	30	24	
60% (38 l/sec)	Extract	43	41	46	43	33	24	21	21	23
	Supply	45	50	53	52	45	44	38	29	
	Breakout	49	46	51	39	33	27	21	22	
40% (28 l/sec)	Extract	39	37	43	38	28	19	16	21	21
	Supply	40	47	50	48	40	38	30	22	
	Breakout	39	43	49	34	29	22	17	21	

TYPICAL SPECIFICATION

Supply and install a Vectaire WHHR100/90DC energy efficient MVHR which has been tested and is SAP Q Eligible as manufactured by Vectaire Ltd, Lincoln Road, Cressex Business Park, High Wycombe, Bucks, HP12 3RH. The unit is to give low level, continuous ventilation to a kitchen and six other wet rooms. The unit should be for loft, void, false ceiling or cupboard installation and be no more than 200mm deep. It should recover up to 79% of heat from extracted air, separating the air-flows 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 0.71. It should have a variable choice of low (trickle) speed and boost options for optimum setting. The unit should be pre-wired for easy electrical connection. The unit should comply with Part L1 2010 and Part F 2010 of Building Regulations, be EU RoHS Directive Compliant, conform to the requirements of EC Council directives relating to Electromagnetic Compatibility and Electrical Safety: 2006/95/CE (LVD), 2004/108/CE (EMC), EN 60335-2-80, be CE marked and be SAP Q eligible.

WHHR100/90DC

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm (shown top access, l/h drain)

