



## EVO250



### EVO250DC

- with summer bypass and frost-stat
- efficient, low energy solution to controlling condensation and pollution in residential properties up to 150m<sup>2</sup>
- up to 88% heat exchange efficiency
- variable choice of low (trickle), boost and purge speed at installation
- for ceiling, loft or void installation
- low noise levels
- low running costs
- complies with Building Regulations Parts L1A 2013 and F 2013
- manufactured in UK to ISO 9001
- accurate commissioning via remote LCD commissioning unit



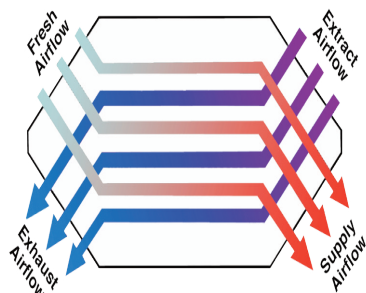
## EVO250

### GENERAL FEATURES

- up to 80 litre/sec at 50Pa - max 85 litre/sec capacity
- sfp down to 0.70 W/l/s
- summer bypass which allows the airflow to bypass the heat exchanger automatically when internal and external temperatures are between adjustable setpoints.
- frost-stat - proportionally reduces intake motor speed as temperature falls - activated when the outside temperature between +8°C and -3°C.
- run-time and power outage counters
- easy to install and maintain
- for ceiling, loft or void in-line installation
- variable low (trickle), boost and purge options for each motor
- boost speed can be activated by a 230V switched live from:
  - A light switch (if more than one light switch is used, each one must be a double pole switch)
  - Remote humidistat (230V - DRH240)
  - Passive infra red (230V - PIRFF)
  - Thermostat (230V - THM)
  - Remote switch/pull cord - 230V
- very low noise levels
- low running costs
- 5 year warranty - 1 year parts and labour, 4 years parts only

### TECHNICAL FEATURES

- compact low profile unit
- spigot size 204mm x 60mm
- casing from galvanised sheet steel
- thermo-acoustic lining
- pre-wired for easy electrical connection
- low energy EC brushless motor with single width, single inlet, direct drive, backward curved impellers
- operates in temperature up to 60°C
- easy to access standard, disposable G3 filters
- counter flow heat exchanger
- all models bottom access only



### MODELS AVAILABLE:

- EVO250DC/BABY - bottom access, bypass
- EVO250DC/BALBYH - bottom access, left hand, bypass, humidistat
- EVO250DC/BARBYH - bottom access, right hand, bypass, humidistat

### CONTROL FEATURES - STANDARD

- independent variable speed adjustment for each motor for trickle, boost and purge speeds.
- adjustable boost speed over-run timer from 0 to 90 minutes.
- adjustable boost speed delay from 0 to 5 minutes
- remote purge - adjustable over-run timer from 0 to 250 minutes, pre-set to 15 minutes (adjustable at factory).
- adjustable night time boost and purge inhibitor
- integral frost-stat - proportionally reduces intake motor speed as temperature falls
- automatic summer bypass

### CONTROL FEATURES - FACTORY SET

- change of ductwork handing on humidistat version (trip point can be set at manufacture)
- integral humidistat - proportionally increases motor speeds with rising humidity
- 0-10V connections can be added for:
  - BMS - for remote motor shut-off
  - CO<sub>2</sub> detector
  - home automation system
- relay for external pre-heater
- 3 speed selector switch
- remote purge
- purge speed over-run time
- holiday mode for reduced speeds when property is unoccupied (factory set option) - default setting is 50% of trickle speed
- run-time and power outage counters downloadable via QR code.

### COMPLIES WITH

- Part L1A 2013 of Building Regulations for enhanced energy saving capability
- Part F 2013 of Building Regulations for reliable, efficient ventilation
- EU RoHS Directive Compliant.
- Complies with IEC60335-2-80, LVD2006/95/CE and EMC2014/30/UE (European Directive against radio interference and electro-magnetic compatibility)
- manufactured in UK to ISO 9001
- CE marked
- SAP PCDB Listed

### TYPICAL SPECIFICATION AVAILABLE AT

<http://www.vectaire.co.uk/downloads>

Vectaire Ltd can supply all accessories for use with these units, including product filters, 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.



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TECHNICAL CHARACTERISTICS										
Model	Airflow l/sec					Total Power - Watts				
	100%	80%	60%	40%	20%	100%	80%	60%	40%	20%
EVO250	85	67	48	30	12	101	53	23	9	2

EVO250		Sound Power Levels, $L_w$ [dB] - Octave Bands Frequency Hz.								Sound Pressure dBA @ 3m
Curve Ref		63	125	250	500	1k	2k	4k	8k	
100% (85 l/sec)	Extract	63	60	62	64	61	59	60	50	33.4
	Supply	68	65	67	69	66	64	65	55	
	Breakout	66	58	54	50	41	33	28	16	
80% (67 l/sec)	Extract	59	57	58	58	56	53	53	42	28.7
	Supply	64	62	63	63	61	58	58	47	
	Breakout	62	55	50	44	36	27	21	8	
60% (48 l/sec)	Extract	54	51	51	52	49	46	43	31	22.4
	Supply	59	56	56	57	54	51	48	36	
	Breakout	57	49	43	38	29	20	11	< 5	
40% (30 l/sec)	Extract	46	44	43	42	40	36	31	17	14.1
	Supply	51	49	48	47	45	41	36	22	
	Breakout	49	42	35	28	20	10	< 5	< 5	
20% (12 l/sec)	Extract	33	33	29	28	24	20	5	3	< 10.0
	Supply	38	38	34	33	29	25	10	8	
	Breakout	36	31	21	14	< 5	< 5	< 5	< 5	

The breakout dB(A) sound pressure values are given for hemispherical free field propagation at a distance of 3m from the unit

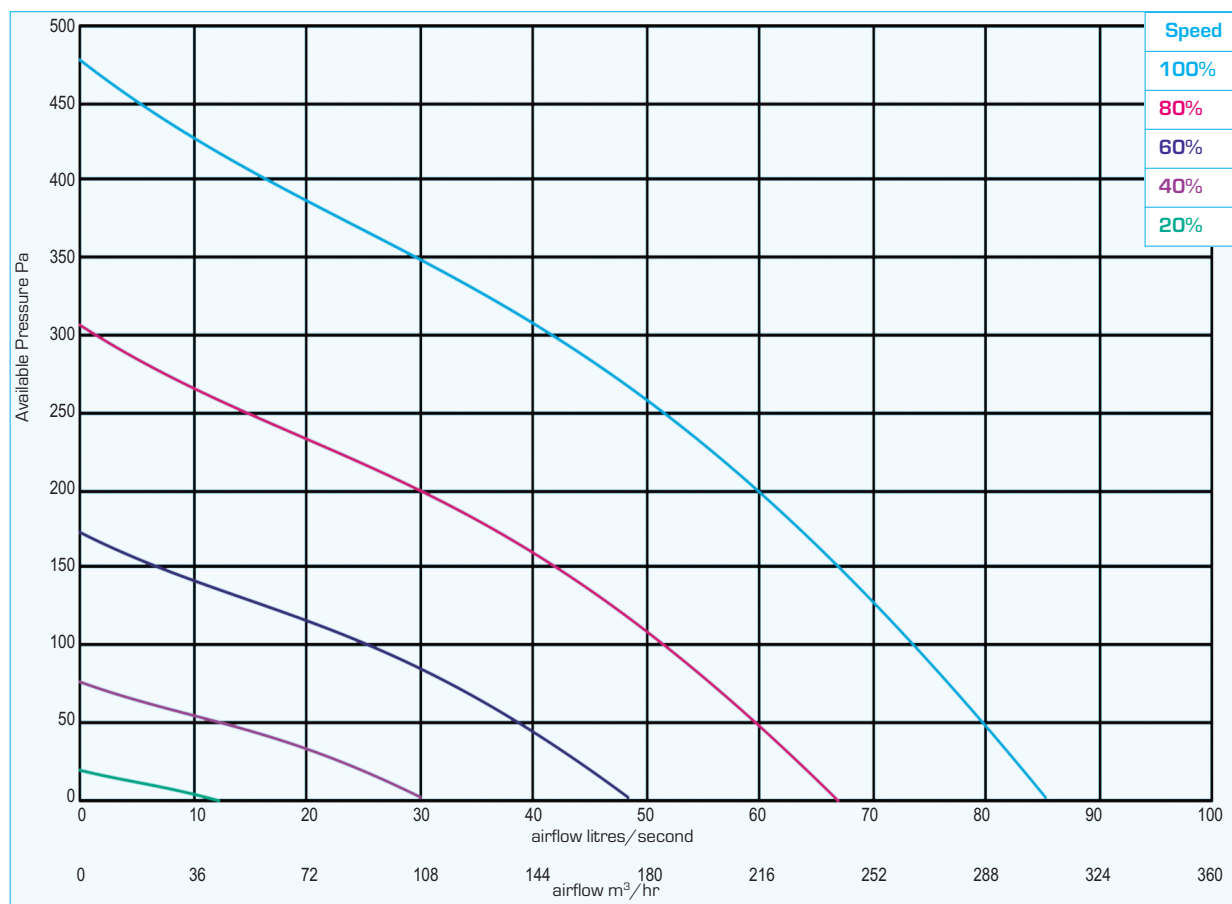
RESULTS for SAP CALCULATIONS						
ENERGY LEVEL PERFORMANCE - using rigid ducting only						
Exhaust Terminal Configuration	2009 Data			2012 Data		
	Airflow [l/sec]	Specific Fan Power [W/l/sec]	Heat Exchange Efficiency	Airflow [l/sec]	Specific Fan Power [W/l/sec]	Heat Exchange Efficiency
Kitchen + 1 additional wet room	15	0.70	88%	21	0.75	87%
Kitchen + 2 additional wet rooms	21	0.72	87%	29	0.89	86%
Kitchen + 3 additional wet rooms	27	0.82	87%	37	1.00	85%
Kitchen + 4 additional wet rooms	33	0.99	86%	45	1.37	84%
Kitchen + 5 additional wet rooms	39	1.01	85%			
Kitchen + 6 additional wet rooms	45	1.35	84%			

Figures at minimum flow rate conditions

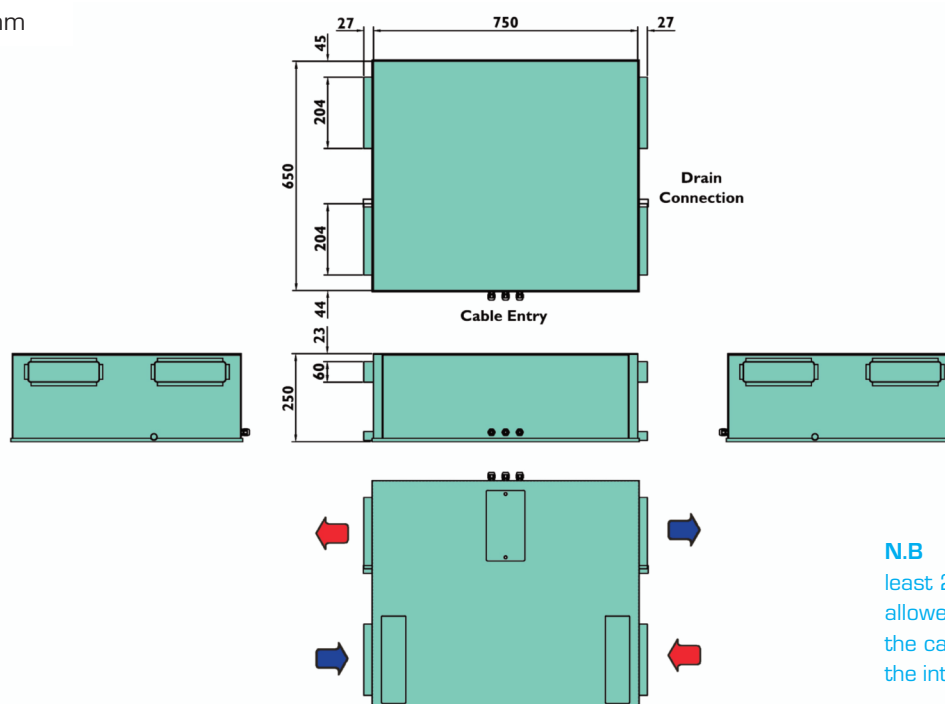


## EVO250

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



**N.B** a clearance of at least 200 mm should be allowed on each side of the cabinet for access to the interior