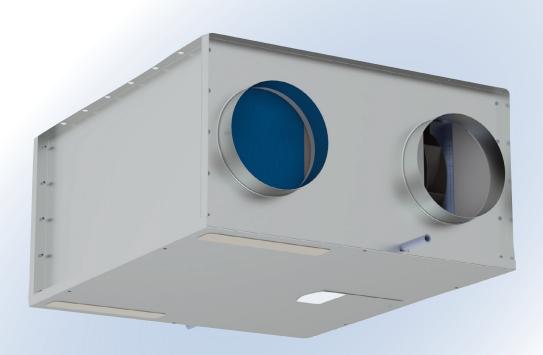
### Whole House Mechanical Ventilation with Heat Recovery - MVHR

# EV0350









### EV0350

- with summer bypass and frost-stat
- efficient, low energy solution to controlling condensation and pollution in residential properties up to 200m²
- 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
- manufactured in UK to ISO 9001:2015 and 14001:2015
- accurate commissioning via remote LCD commissioning unit

### Whole House Mechanical Ventilation with Heat Recovery - MVHR

## EV0350

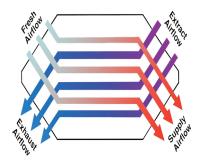


#### **GENERAL FEATURES**

- up to 107 litre/sec at 50Pa max 116 litre/sec capacity
- sfp down to 0.65 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
- · 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 impellors
- 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:**

- EV0350DC/BABY bottom access, bypass
- EV0350DC/BALBYH bottom access, left drain, bypass, humidistat
- EV0350DC/BARBYH-bottom access, right drain, 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 30 minutes.
- adjustable boost speed delay from 0 to 5 minutes
- remote purge cable connection on circuit board (for optional purge facility)
- · 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 (humidity threshold 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
  - $CO_2$  detector
  - home automation system
- relay for external pre-heater
- 3 speed selector switch
- optional remote purge cable factory connected adjustable over-run timer from 0 to 250 minutes, Pre-set to 15 minutes (adjustable at factory)
- 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**

- Building Regulations for enhanced energy saving capability
- 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 9001:2015 and 14001:2015
- 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

## Whole House Mechanical Ventilation with Heat Recovery - MVHR





TECHNICAL CHARACTERISTICS											
Model	Airflow I/sec					Total Power - Watts					Operating Current
	100%	80%	60%	40%	20%	100%	80%	60%	40%	20%	(Amps)
EV0350	116	90	64	38	14	157	83	39	15	4	1.41

EV0350		Sound Power Levels, $L_{\scriptscriptstyle W}$ (dB) - Octave Bands Frequency Hz.								Sound Pressure
Curve Ref		63	125	250	500	1k	2k	4k	8k	dBA @ 3m
100% [116 l/sec]	Extract	63	65	64	63	60	57	54	49	
	Supply	68	70	69	68	65	62	59	54	
	Breakout	66	63	56	49	40	31	22	15	34.6
80% (90 l/sec)	Extract	59	61	60	58	54	52	48	41	
	Supply	64	66	65	63	59	57	53	46	
	Breakout	62	59	52	44	34	26	16	9	30.3
60% (64 l/sec)	Extract	53	55	54	52	48	45	40	32	
	Supply	58	60	59	57	53	50	45	37	
	Breakout	56	53	46	38	28	19	8	5	24.3
40% (38 l/sec)	Extract	46	48	46	43	39	35	29	17	
	Supply	51	53	51	48	44	40	34	22	
	Breakout	49	46	38	29	19	9	7	< 5	16.5
20% [14 l/sec]	Extract	35	36	32	28	24	20	7	5	
	Supply	40	41	37	33	29	25	12	10	
	Breakout	38	34	24	14	8	6	< 5	< 5	<10

The breakout dB(A) sound pressure values are given for hemispherical free field propagation at a distance of 3m from the unit Extract and Supply values are in-duct sound power levels

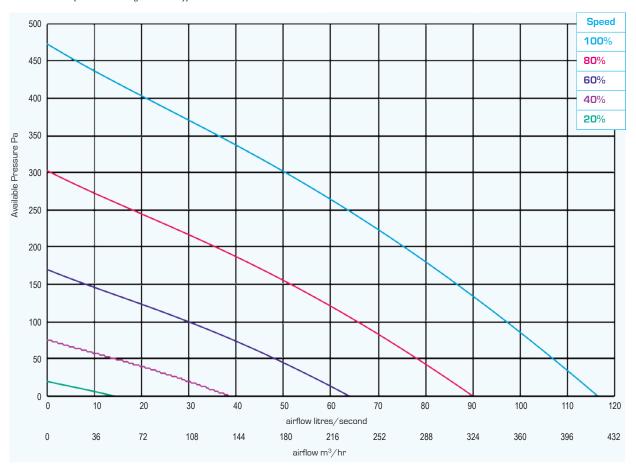
RESULTS for SAP CALCULATIONS	
ENERGY LEVEL PERFORMANCE - using rigid ducting o	nly

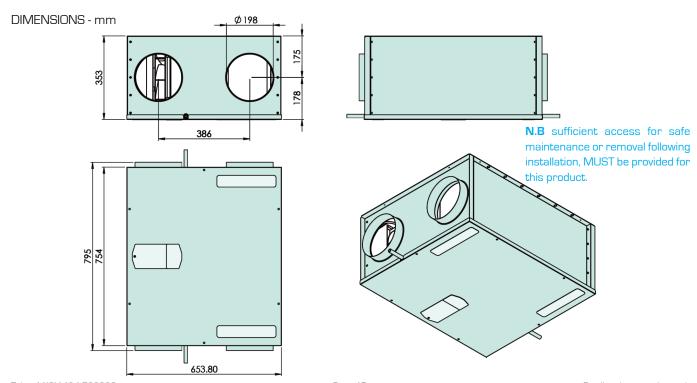
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	2009	Data	2012	Data	SAP 10 Data					
Exhaust Terminal Configuration	Specific Fan Power (W/I/sec)	Heat Exchange Efficiency	Specific Fan Power (W/I/sec)	Heat Exchange Efficiency	Specific Fan Power (W/I/sec)	Heat Exchange Efficiency				
Kitchen + 1 additional wet room	0.72	88%	0.72	87%	0.72	87%				
Kitchen + 2 additional wet rooms	0.65	87%	0.75	85%	0.75	85%				
Kitchen + 3 additional wet rooms	0.67	85%	0.85	84%	0.85	84%				
Kitchen + 4 additional wet rooms	0.76	84%	1.04	83%	1.04	83%				
Kitchen + 5 additional wet rooms	0.87	83%	1.23	82%	1.23	82%				
Kitchen + 6 additional wet rooms	1.01	83%								
Kitchen +7 additional wet rooms	1.18	82%								
Figures at minimum flow rate conditions										

# EV0350



#### PERFORMANCE (curves are for guidance only)





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