Midi BY-AT

with integral acoustic attenuation

NEW

Midi BY-AT

- very low noise levels - lined with Class "O" fire resistant acoustic foam
- with summer bypass and frost-stat
- efficient, low energy solution to controlling condensation and pollution in residential properties up to 170m²
- up to 94% heat exchange efficiency
- variable choice of low (trickle), boost and purge speed at installation
- for wall, cupboard or loft installation - no extra cabinet required
- universal handing for models without humidistat
- low running costs
- complies with Building Regulations
- manufactured in UK to ISO 9001:2015 and 14001:2015
- accurate commissioning via integral touch screen LCD

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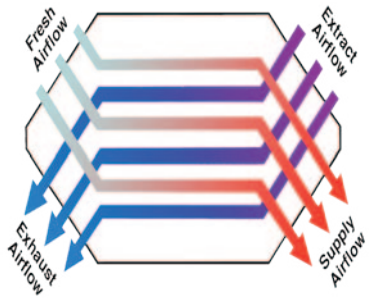
GENERAL FEATURES

- extremely low noise levels
- up to 95 litre/sec at 50Pa - max 101 litre/sec capacity
- sfp down to 0.50 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 +3^{0}C and -8^{0}C.
- run-time and power outage counters
- easy to install and maintain - no extra cabinet required
- easy to access G3 filters
- universal handing for models without humidistat - left or right (see separate diagram on page 6 for handing on humidistat models)
- for fitting vertically into lofts, or cupboards - wall fixing bracket supplied - weight only 29 kgs
- 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
- low running costs
- 5 year warranty - 1 year parts and labour, 4 years parts only

TECHNICAL FEATURES

- compact unit - casing from steel sheet - epoxy paint finish
- lined with Class "O" fire resistant acoustic foam
- low energy EC brushless motor with single width, single inlet, direct drive, forward curved impellors
- operates in temperature up to 60ºC
- easy to access standard, disposable G3 filters
- counter flow heat exchanger



MODELS AVAILABLE:

- MidiBY-AT - bypass, attenuation, universal, integral LCD
- MidiBYATH/LH - bypass, attenuation, humidistat, left drain, integral LCD
- MidiBYATH/RH - bypass, attenuation, humidistat, right drain, integral LCD

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 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)
- 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

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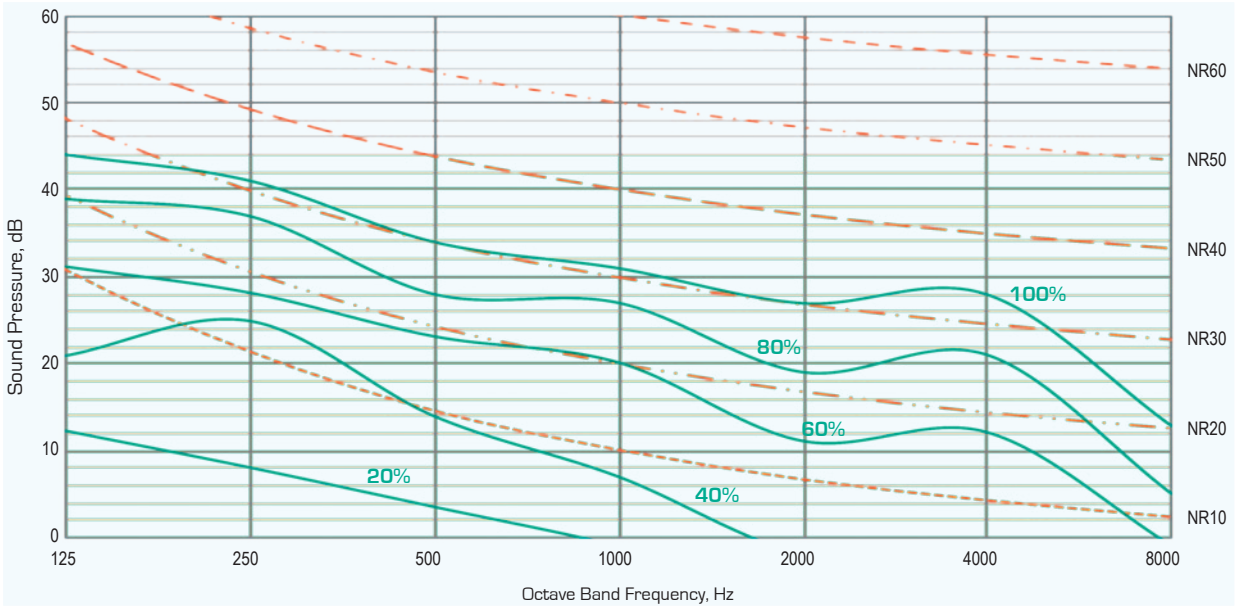
Midi-BY-AT		Sound Power Levels, L_w (dB) - Octave Bands Frequency Hz.							Sound Pressure dBA @ 3m	Noise Rating based on dB @ 1m
Curve Ref		125	250	500	1k	2k	4k	8k		
100% (101 l/sec)	Extract	61	58	48	41	34	26	23		
	Supply	74	69	60	57	50	44	43		
	Breakout	**52**	**49**	**42**	**39**	**35**	**36**	**21**	**28.3**	**34**
80% (79 l/sec)	Extract	56	53	45	37	29	21	16		
	Supply	70	65	55	53	44	39	36		
	Breakout	**47**	**45**	**36**	**35**	**27**	**29**	**13**	**23.4**	**28**
60% (58 l/sec)	Extract	49	45	39	29	19	10	7		
	Supply	62	56	47	45	34	27	21		
	Breakout	**39**	**36**	**31**	**28**	**19**	**20**	**7**	**15.8**	**21**
40% (36 l/sec)	Extract	38	38	32	17	8	3	6		
	Supply	51	47	38	31	22	13	8		
	Breakout	**29**	**33**	**22**	**15**	**6**	**5**	**6**	**9.8**	**15**
20% (14 l/sec)	Extract	31	20	10	4	0	2	6		
	Supply	32	27	13	8	1	2	6		
	Breakout	**20**	**16**	**12**	**7**	**1**	**2**	**6**	**<5.0**	**<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										
All the above data has been independently tested and verified by BRE to BS EN 13141-7:2010 and BS EN ISO 3741:2010										

BREAKOUT - NR (SPL curves based on breakout dB values at 1m)



RESULTS for SAP CALCULATIONS ENERGY LEVEL PERFORMANCE - using rigid ducting only						
	2009 Data		2012 Data		SAP 10 Data	
Exhaust Terminal Configuration	Specific Fan Power (W/l/sec)	Heat Exchange Efficiency	Specific Fan Power (W/l/sec)	Heat Exchange Efficiency	Specific Fan Power (W/l/sec)	Heat Exchange Efficiency
Kitchen + 1 additional wet room	0.50	94%	0.51	93%	0.51	93%
Kitchen + 2 additional wet rooms	0.50	93%	0.61	91%	0.61	91%
Kitchen + 3 additional wet rooms	0.55	92%	0.75	90%	0.75	90%
Kitchen + 4 additional wet rooms	0.65	91%	0.92	89%	0.92	89%
Kitchen + 5 additional wet rooms	0.76	89%	-	-	-	-
Kitchen + 6 additional wet rooms	0.88	89%	-	-	-	-
Figures at minimum flow rate conditions						

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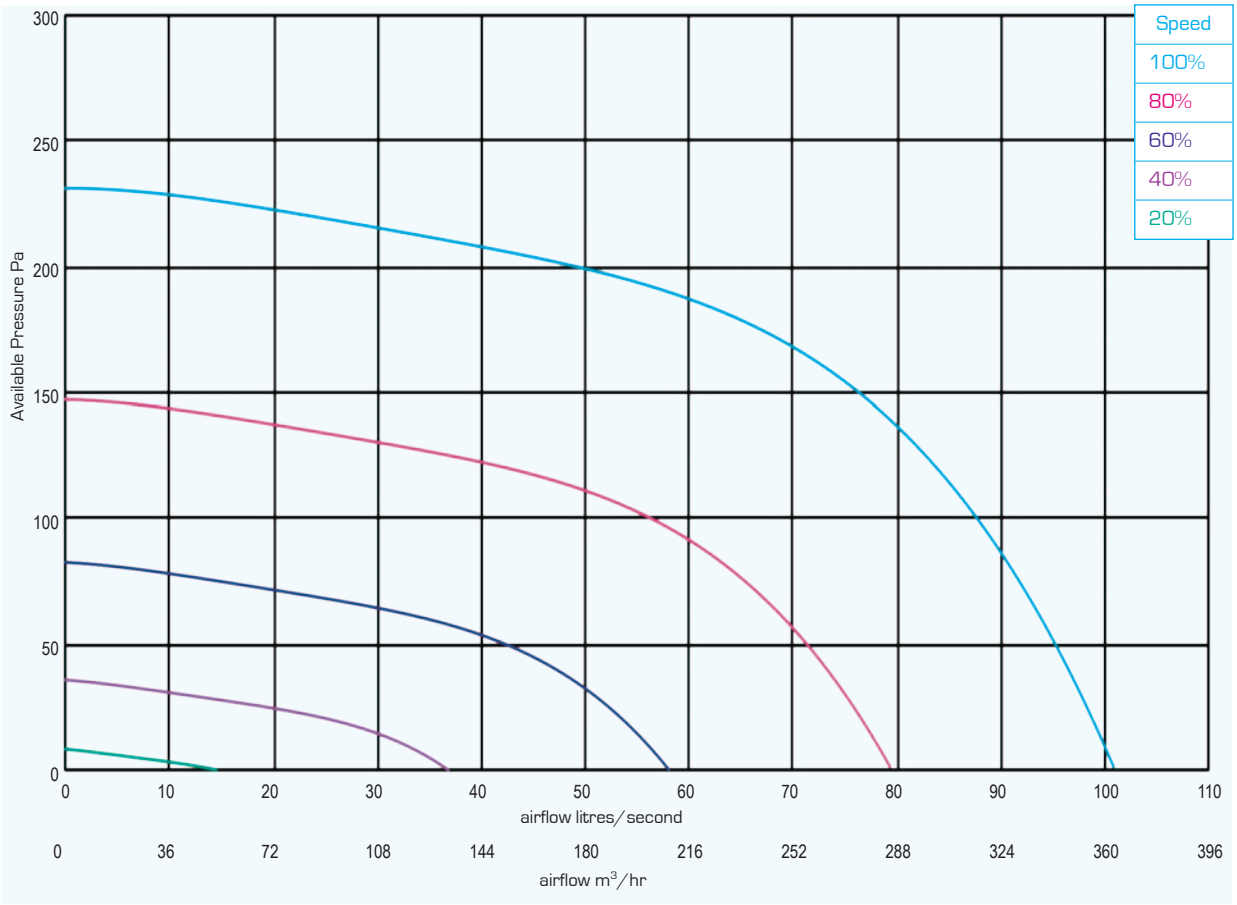
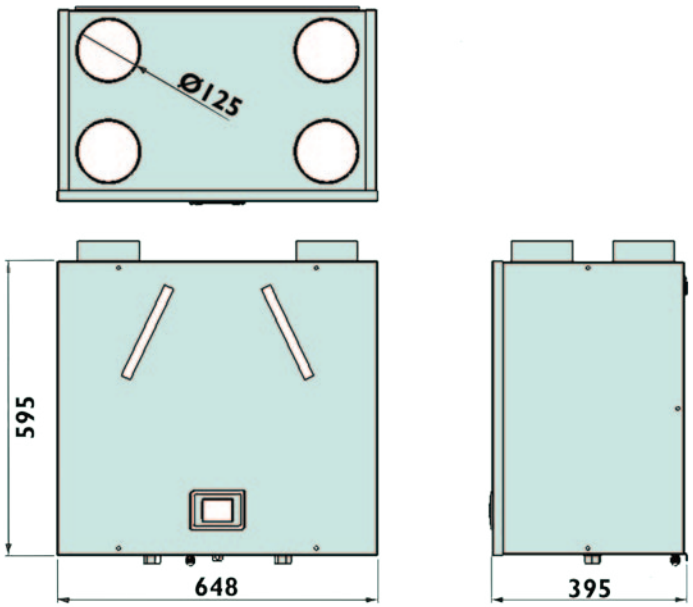
TECHNICAL CHARACTERISTICS											
Model	Airflow l/sec					Total Power - Watts					Operating Current (Amps)
	100%	80%	60%	40%	20%	100%	80%	60%	40%	20%	
Midi-BY-AT	101	79	58	36	14	120	69	31	11	2.2	1.21

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



N.B a clearance of 200 mm should be allowed on each side of the cabinet for access to the motors

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