VENTILATION
FOR THE
BUILT ENVIRONMENT

low energy
environmentally friendly
economical

vectaire
ventilation systems

Uniclass L7534	CI/SfB (57.7)

SAP PCDB Listed

Residential
Hotels
Student Accommodation
Apartments
Care Homes
MVHR
MEV
Building Regulations Compliant
Silent Operation

Issue 17
Oct 2024

Whole House Mechanical Ventilation
MVHR, MEV, dMEV

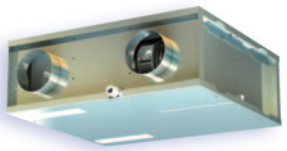
Midi & Midi BY-AT (MVHR) - Pages 8 & 12
- For wall or loft installation in homes and offices
- Midi BY-AT with integral acoustic attenuation - very low noise levels
- Summer bypass and frost-stat
- Up to 94% heat exchange efficiency - sfp from 0.50 W/l/s
- Up to 95 l/s at 50Pa - max 101 l/s capacity
- Models with integral humidistat
- Commissioned via integral LCD or remote LCD commissioning unit

Maxi & Maxi BY-AT (MVHR) - Pages 16 & 20
- For wall or loft installation in homes and offices
- Maxi BY-AT with integral acoustic attenuation - very low noise levels
- Summer bypass and frost-stat
- Up to 92% heat exchange efficiency - sfp from 0.40 W/l/s
- Up to 163 l/s at 50Pa - max 177 l/s capacity
- Models with integral humidistat
- Commissioned via integral LCD or remote LCD commissioning unit

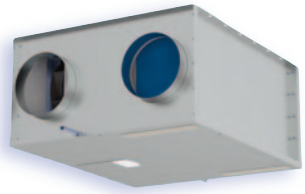
MaxiPlus-BY & MaxiPlus/BY/AT (MVHR) - Pages 24 & 28
- For wall or loft installation in homes and offices
- MaxiPlus/ BY/AT with integral acoustic attenuation - very low noise levels
- Summer bypass and frost-stat
- Up to 89% heat exchange efficiency - sfp from 0.46 W/l/s
- Up to 230 l/s at 50Pa - max 238 l/s capacity
- Models with integral humidistat
- Commissioned via integral LCD or remote LCD commissioning unit

EVO250 (MVHR) - Pages 34
- For in-line installation in homes and offices
- Summer bypass and frost-stat
- Up to 88% heat exchange efficiency
- Up to 80 litre/sec at 50Pa - max 85 l/s capacity
- Specific Fan Power from 0.70 W/l/s
- Models with integral humidistat
- Commissioned via remote LCD commissioning unit

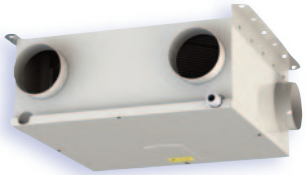
-EVO220 (MVHR) - Page 38
- For in-line installation in homes and offices
- Summer bypass and frost-stat
- Up to 87% heat exchange efficiency - sfp from 0.55 W/l/s
- Up to 70 l/s at 50Pa - max 75 l/s capacity
- Models with integral humidistat
- Commissioned via remote LCD commissioning unit



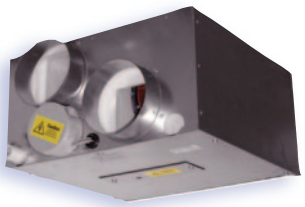
EVO350 (MVHR) - Page 42
- For in-line installation in homes and offices
- Summer bypass and frost-stat
- Up to 88% heat exchange efficiency - sfp from 0.65 W/l/s
- Up to 107 l/s at 50Pa - max 116 l/s capacity
- Models with integral humidistat
- Commissioned via remote LCD commissioning unit

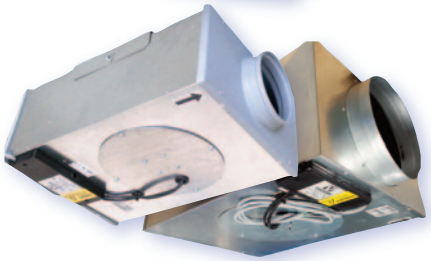


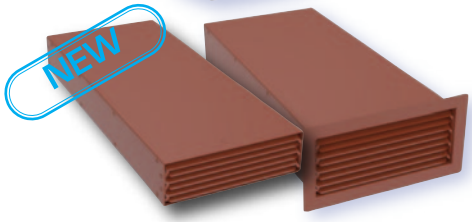
Studio (MVHR) - Page 46
- For in-line installation in multi-occupancy establishments
- With and without summer bypass and frost-stat
- Up to 80% heat exchange efficiency - sfp from 0.87 W/l/s
- Up to 55 l/s at 50Pa - max 59 l/s capacity
- Models with integral humidistat
- Commissioned via remote LCD commissioning unit



Mini (MVHR) - Page 50
- For in-line installation in multi-occupancy establishments
- With and without summer bypass and frost-stat
- Up to 83% heat exchange efficiency - sfp from 1.11 W/l/s
- Up to 30 l/s at 50Pa - max 34 l/s capacity
- Commissioned via remote LCD commissioning unit







Purge Ventilation - Page 54

- 2 capacities for in-line installation in residential dwellings
- For rapid purge ventilation and tackling overheating issues
- Purge Box 100 up to100 l/s at 50Pa - max 200 l/s capacity sfp from 0.20 W/l/s
- Purge Box 200 up to 233 l/s at 50Pa - max 250 l/s capacity sfp from 0.27 W/l/s
- Use as stand alone units or with MVHR and MEV systems

MBOX125/2DC-B//MBOX200/2DC (MEVs) -Pages 58 & 62

- For in-line installation in homes and offices
- MBOX125/2DC-B - ultra low profile - 184mm deep
- Up to 97 l/s at 50Pa - max 108 l/s capacity//Up to 233 l/s at 50Pa - max 251 l/s capacity
- sfp from 0.20 W/l/s//sfp from 0.27 W/l/s
- Optional purge cable factory set
- Available with 204mm x 60mm spigot//Available with 220mm x 90mm spigot
- Continuous running - choice of trickle and boost speeds

Elegance (dMEV) EL1003 & **EL1203** - Pages 66 & 70

- EL1003 - 4"/10cm, EL1203 - 5"/12cm
- Continuous running 3 speed (2 trickle speeds and boost) axial fans
- For installation in any domestic wet room
- Up to 26.9 litre/sec - 44 litre/sec capacity - sfp from 0.09 W/l/s
- **AC motor versions in 100mm dia and 150mm dia available - Page 86**

Elix (dMEV) - Page 74

- Continuous running 3 speed (2 trickle speeds and boost) centrifugal fan
- EC motor for high efficiency low energy usage
- For installation in any domestic wet room
- Up to 27.8 litre/sec capacity - sfp from 0.14 W/l/s

ELPREX (dMEV) - Page 78

- Continuous running 4 speed (1 trickle and choice of 3 boost speeds) centrifugal fan
- Energy efficient motor
- For installation in walls and ceilings in all kitchens
- Up to 60 litre/sec capacity - sfp from 0.35 W/l/s

E-Smile (dMEV) - Page 82

- Continuous running 3 speed (2 trickle speeds and boost) axial fan
- For installation in any domestic wet room
- Up to 21 litre/sec capacity, sfp from 0.37 W/l/s

Heatrec 1003 - Page 89

- Single room heat recovery unit
- EC motors for high efficiency low energy usage
- Recovers up to 75% of heat from extracted, polluted air
- 3 speed for any domestic wet room
- Continuous running - choice of trickle and boost speeds
- Heat exchange tube available in 3 lengths
- With summer bypass and frost-stat

Fire Rated Air Bricks - Page 92

- High performance no-combustible terminals (Approved Document B (fire safety) Volume 1: Dwellings, 2019 Edition
- Manufactured from 0.9mm electro-galvanised sheet steel, fire class A1
- Corrosion resistant-salt spray tested to ISO9227:2022, ASTMB117-19
- Polyester powder coating meeting EN13501-1 classification A2-s1,d0
- Complies with Approved Document F Volume1, 2021 edition

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MVHR

Vertical Models - features and overview

	Midi			Maxi			Maxi Plus		
	S*	H*	AT*	S*	H*	AT*	S*	H*	AT*
Automatic Summer Bypass	✓	✓	✓	✓	✓	✓	✓	✓	✓
Automatic Frost Protection	✓	✓	✓	✓	✓	✓	✓	✓	✓
Filters	✓	✓	✓	✓	✓	✓	✓	✓	✓
Delay Timer	✓	✓	✓	✓	✓	✓	✓	✓	✓
Purge Speed (factory set)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Purge Speed Timer	✓	✓	✓	✓	✓	✓	✓	✓	✓
Built-in Humidistat	✘	✓	on request	✘	✓	on request	✘	✓	on request
Universal Handing (non-humidistat models)	✓	✘	✓	✓	✘	✓	✓	✘	✓
Very low noise levels	✓	✓	✓	✓	✓	✓	✓	✓	✓
Max Airflow at 50Pa - l/s	95	95	95	163	163	163	230	230	230
Max Wet Rooms - Kitchen + SAP2009/2012/10	K+6/4/4	K+6/4/4	K+6/4/4	K+7/7/7	K+7/7/7	K+7/7/7	K+7/7/7	K+7/7/7	K+7/7/7
SFP w/l/s SAP2009/2012/10	.50/.51/.51	.50/.51/.51	.50/.51/.51	.40/.45/.45	.40/.45/.45	.40/.45/.45	.46/.47/.47	.46/.47/.47	.46/.47/.47
% Heat Recovery SAP2009/2012/10	94/93/93	94/93/93	94/93/93	92/92/92	92/92/92	92/92/92	89/89/89	89/89/89	89/89/89
Duct Size - Ømm	125	125	125	150	150	150	150	150	150
Wired Remote Control (optional)	✓	✓	✓	✓	✓	✓	✓	✓	✓
External Condensate	✓	✓	✓	✓	✓	✓	✓	✓	✓
Size mm W x H x D	600 x 564 x 382		648 x 595 x 395	754 x 654 x 535		802 x 703 x 560	754 x 654 x 535		802 x 703 x 560
Weight kg	24		29	37		42	37		42
Approximate Mass kg	24		29	37		42	37		42
Enhanced Acoustic Attenuation	✘	✘	✓	✘	✘	✓	✘	✘	✓

S* - standard models
H* - models with integral humidistat
AT* - models with integral acoustic attenuation

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MVHR

Horizontal Models - features and overview

	EVO250		EVO220		EVO350		Studio		Mini	
	S*	H*	S*	H*	S*	H*	S*	H*	S*	H*
Automatic Summer Bypass	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Automatic Frost Protection	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Filters	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Delay Timer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Purge Speed (factory set)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Purge Speed Timer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Built-in Humidistat	✘	✓	✘	✓	✘	✓	✘	✓	✘	✓
Universal Handing (non-humidistat models)	✓	✘	✘	✘	✓	✘	✘	✘	✘	✘
Very low noise levels	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Max Airflow at 50Pa - l/s	80	80	75	75	107	107	55	55	30	30
Max Wet Rooms - Kitchen+ SAP2009/2012/10	K+6/4/4	K+6/4/4	K+-/5	K+-/5	K+7/5/5	K+7/5/5	K+5/3/3	K+5/3/3	K+2/1/1	K+2/1/1
SFP w/l/s SAP2009/2012/10	0.70/ 0.75/0.75	0.70/ 0.75/0.75	-/0.55/-	-/0.55/-	.65/ .72/.72	.65/ .72/.72	.87/ .93/.93	.87/ .93/.93	1.11/ 1.4/1.4	1.11/ 1.4/1.4
% Heat Recovery SAP2009/2012/10	88/87/ 87	88/87/ 87	-/87/-	-/87/-	88/87/ 87	88/87/ 87	80/79/ 79	80/79/ 79	83/82 /82	83/82 /82
Duct Size - Ømm	-		125		200		125		125	
or mm x mm	204 x 60		-		-		-		-	
Wired Remote Control (optional)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
External Condensate	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Size mm W x H x D	750 x 650 x 250		634 x 554 x 220		795 x 654 x 355		552 x 534 x 220		400 x400 x 220	
Weight kg	21		22		25		17		9	
Approximate Mass kg	21		22		25		17		9	

S* - standard models
H* - models with integral humidistat

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Vertical MVHR

Midi, Maxi and Maxi Plus

Vectaire's range of vertical MVHRs include the Midi, the Maxi and the Maxi Plus. These models provide optimum ventilation by continuously and quietly supplying fresh air. The energy efficient motors automatically remove excess moisture helping to maintain a healthy atmosphere.

They tackle condensation in areas from 60m^2 to 400m^2 making them ideal for all residential dwellings, whether houses, apartments or student accommodation with the most powerful models also being suitable for hotels, care homes, multi-occupancy establishments and other commercial properties.

These models meet the latest requirements of the Building Regulations for whole house ventilation systems with heat recovery (System 4).

How They Work

They incorporate two fans - one extracts stale, damp air from the wet rooms in a building, and the other replaces it with warmed fresh air from outside. The two airflows pass through a heat exchanger which recovers the heat from the outgoing air. This is filtered and tempered before being transferred to the incoming fresh air supply and ducted to the living areas. Thus the dwelling is permanently well ventilated and comfortable with good indoor air quality.

Vectaire MVHRs can recover up to 94% of the heat which might otherwise be lost.

The speed of the two fans can be adjusted independently with a choice of variable trickle, boost and purge speeds at installation.

All models have universal handing apart from 'H' humidistat models (see below).

Summer Bypass

All models incorporate a summer bypass which allows the airflow to bypass the heat exchanger automatically when internal and external temperatures are between adjustable setpoints.

Frost Protection

The integral frost-stat proportionally reduces intake motor speed as the temperature falls. This stops the ingress of cold air and consequently the removal of warm air making sure that the ambient remains comfortable. It is activated when the outside temperature is between +3°C and -8°C.

Humidity Control

Models with an integral humidity sensor (H) increase the speed of the motors proportionally as the humidity rises. It responds to increases in relative humidity ensuring a comfortable ambience throughout the day and night. The speed of the motors will fall back to normal levels once the excess humidity has been cleared making sure the minimum amount of energy is used.

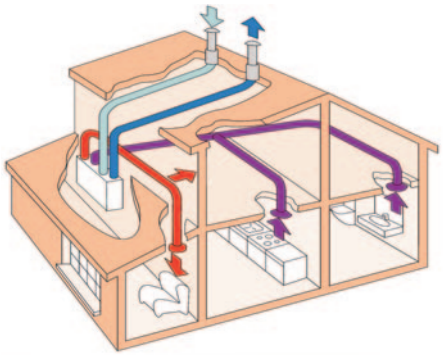
"Super Silent"

The Midi, Maxi and Maxi Plus AT models incorporate additional acoustic attenuation making them ultra quiet - the quietest in the market place.

LCD Control

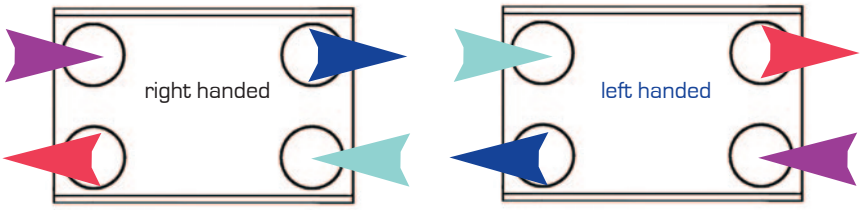
All models can have an integral or remote commissioning state-of-the-art touch screen LCD controller. It is one of the most technologically advanced available giving both installer and user a range of options to ensure that the MVHR is set to provide quiet and efficient ventilation at all times whilst recovering the heat that would otherwise be lost.

TYPICAL INSTALLATION



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

TOP VIEW OF HANDING FOR HUMIDISTAT MODELS



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MVHR LCD Controller

- For use with all Vectaire Heat Recovery Units
- Option of Integral LCD screen with upright MVHRs (Midis and Maxis)
- Remote units can be mounted wherever is convenient to the user (Model No: LCD-DISPLAY)

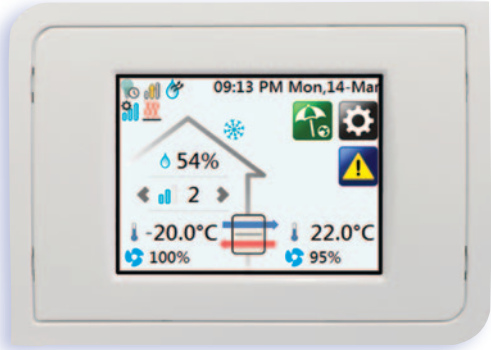
LCD Touch Screen Functions

Display shows:

> motor speeds - for both supply and extract fans. They can be set independently and are variable
> inside and outside temperatures
> status icons - show which functions are currently controlling fan speeds
> date and time
> relative humidity level
> bypass status
> error and service notifications
> filter saturation level - shows when filters need replacing

LCD Touch Screen Functions for USER

> screen allows USER to set and control:
- time
- date
- reset the filter saturation level after filters have been changed
- holiday mode - sets system to minimum running, saving energy whilst maintaining air quality
- operating speed
- language



Commissioning Options - these options are ONLY for use by the installer, and can only be used with a Commissioning Access Code.

If an incorrect passcode is entered 5 times consecutively the system will automatically lock for one hour. Access permissions are lost every time the option screen is exited.

Setting Time: sets up 12 or 24hr format, DST (daylight saving time) and time zone.	Language Selection
Setting Date: sets date format	Touch Screen Calibration
Holiday Mode: sets system to minimum running when required (factory set to maintain air quality)	Commissioning Screen
Boost Speed Time Delay	Night Time Boost Inhibitor
Boost Speed Over-run Timer	Screen Cleaning: wipe screen safely without deleting settings
Run Time Counter and Filter Saturation	Exit to main screen

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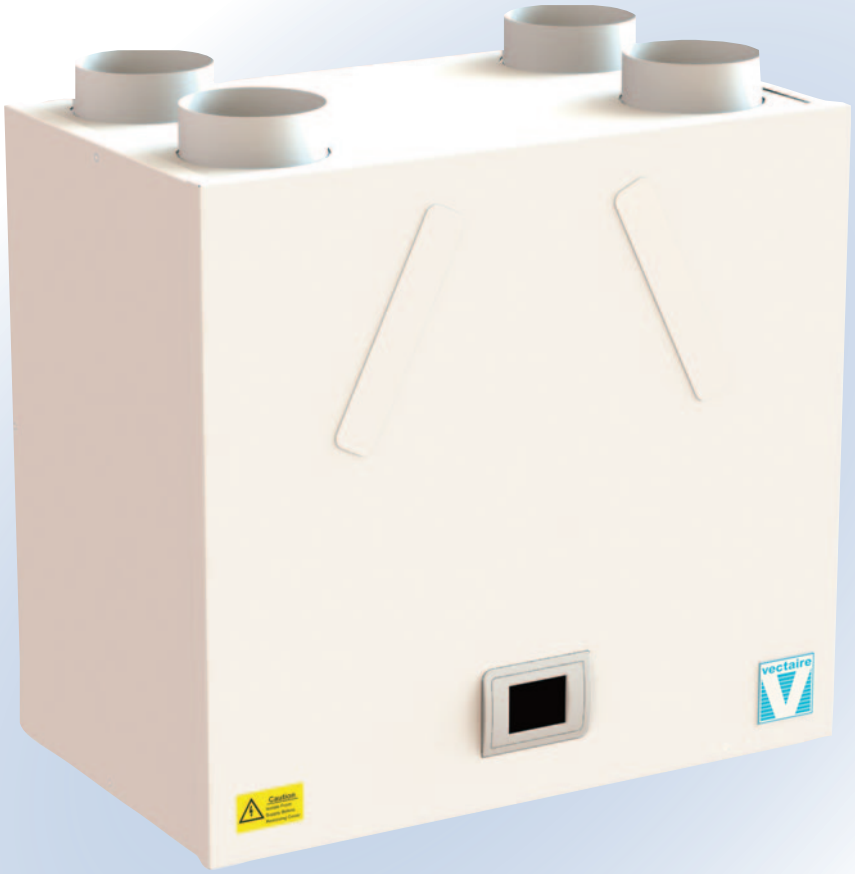
Midi



Midi

- 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
- universal handing for models without humidistat
- very quiet
- low running costs
- complies with Building Regulations
- manufactured in UK to ISO 9001:2015 and 14001:2015
- accurate commissioning via optional integral LCD or remote LCD commissioning unit

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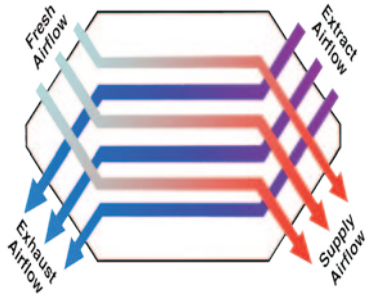
Midi

GENERAL FEATURES

- 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°C and -8°C.
- run-time and power outage counters
- easy to install and maintain
- 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
- 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
- ultra quiet
- 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
- thermo-acoustic lining
- 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



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) - 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
- For installation in any domestic wet room
- CE marked
- SAP PCDB Listed

TYPICAL SPECIFICATION AVAILABLE AT
http://www.vectaire.co.uk/downloads

MODELS AVAILABLE:

- WHHR-Midi/BY - bypass, universal
- WHHR-Midi/LBYH - bypass, left drain, humidistat
- WHHR-Midi/RBYH - bypass, right drain, humidistat
- Midi-BY+LCD - bypass, universal, integral LCD
- Midi-BY+LCDLH - bypass, integral LCD, left drain, humidistat
- Midi-BY+LCDRH - bypass, integral LCD, right drain, humidistat

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

Midi

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

Midi		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% (101 l/sec)	Extract	65	61	58	48	41	34	26	23	
	Supply	70	74	69	60	57	50	44	43	
	Breakout	56	50	55	49	44	42	37	32	33.9
80% (79 l/sec)	Extract	61	56	53	45	37	29	21	16	
	Supply	66	70	65	55	53	44	39	36	
	Breakout	52	51	50	46	41	34	32	28	29.9
60% (58 l/sec)	Extract	55	49	45	39	29	19	10	7	
	Supply	60	62	56	47	45	34	27	21	
	Breakout	47	51	46	43	38	27	25	24	26.6
40% (36 l/sec)	Extract	47	38	38	32	17	8	3	6	
	Supply	52	51	47	38	31	22	13	8	
	Breakout	43	52	43	41	35	23	18	21	24.6
20% (14 l/sec)	Extract	33	31	20	10	4	0	2	6	
	Supply	38	32	27	13	8	1	2	6	
	Breakout	36	50	37	35	27	12	9	14	19.7
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 to BS EN ISO 3743-1:2010										

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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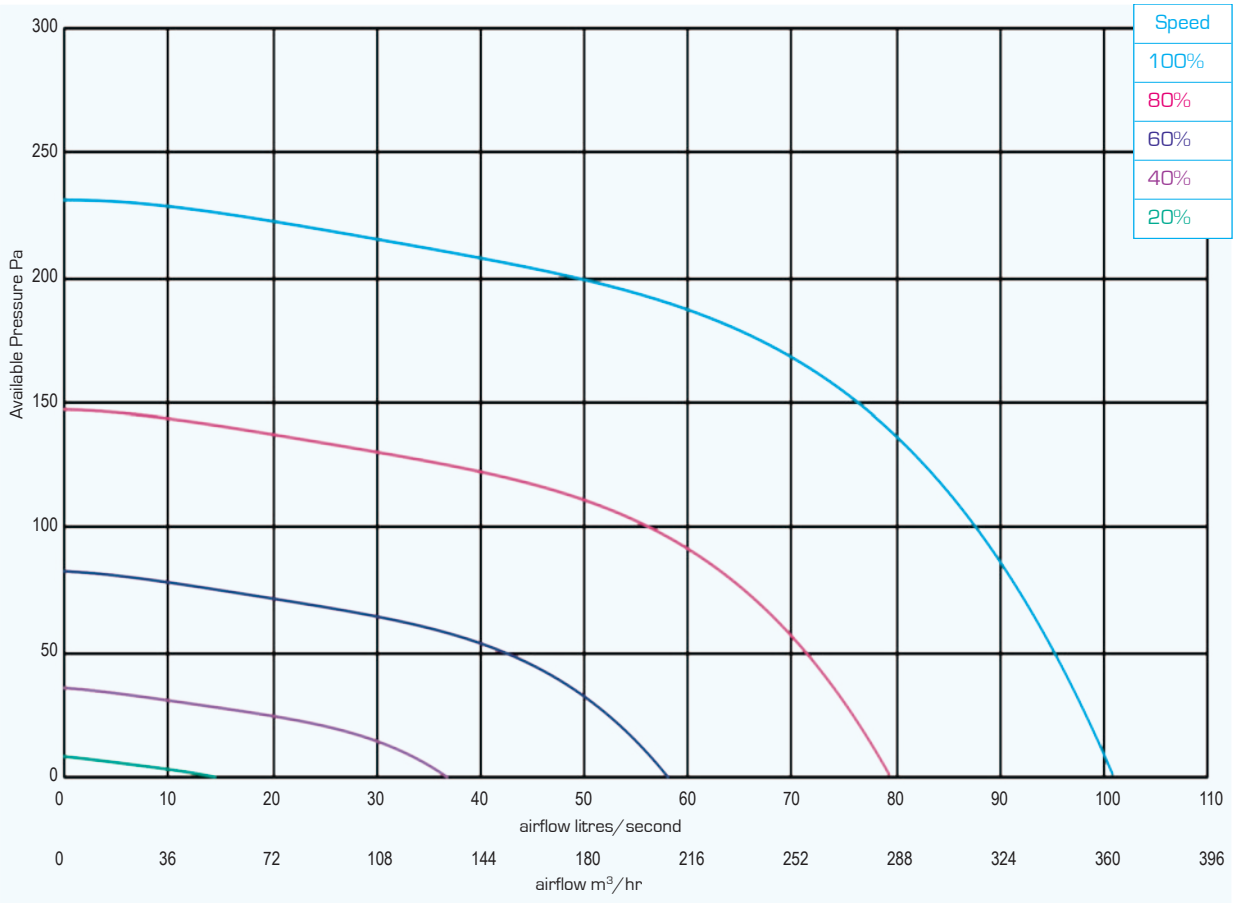
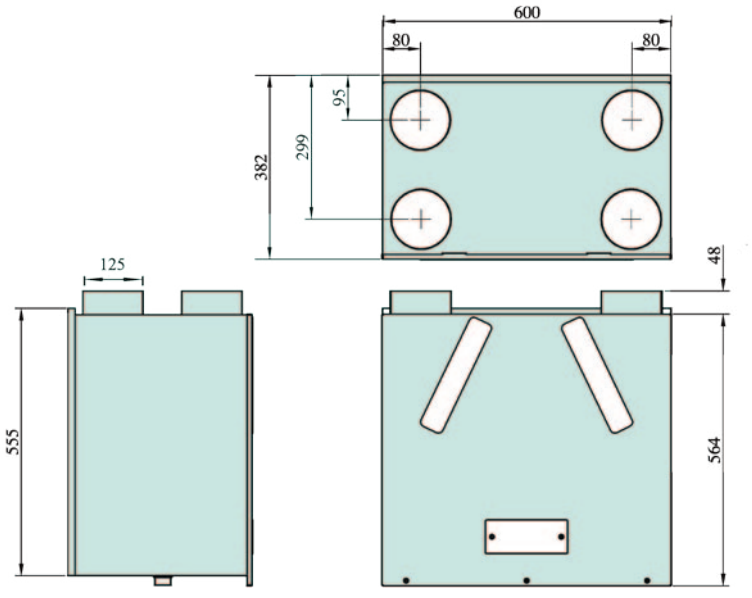
Midi

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



Weight - 24 kg

N.B sufficient access for safe maintenance or removal following installation, MUST be provided for this product.

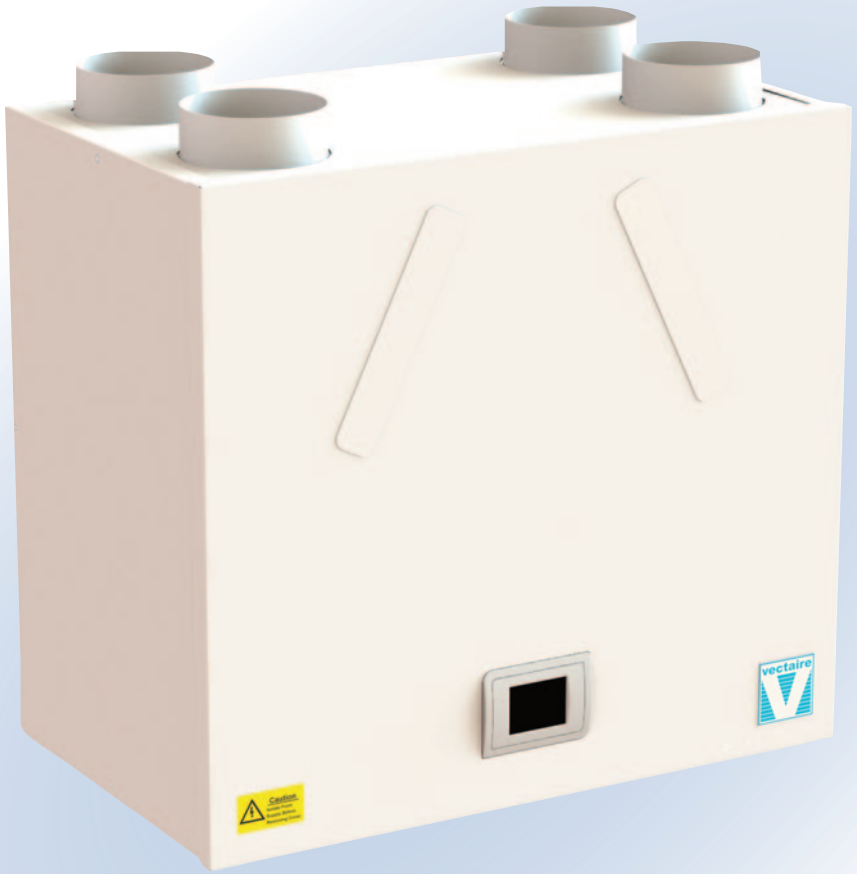
Midi BY-AT

with integral acoustic attenuation

SAP PCDB Listed

NEW

energy efficient-environmentally friendly-economical



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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Midi BY-AT

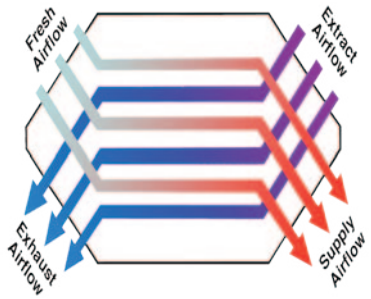
with integral acoustic attenuation

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°C and -8°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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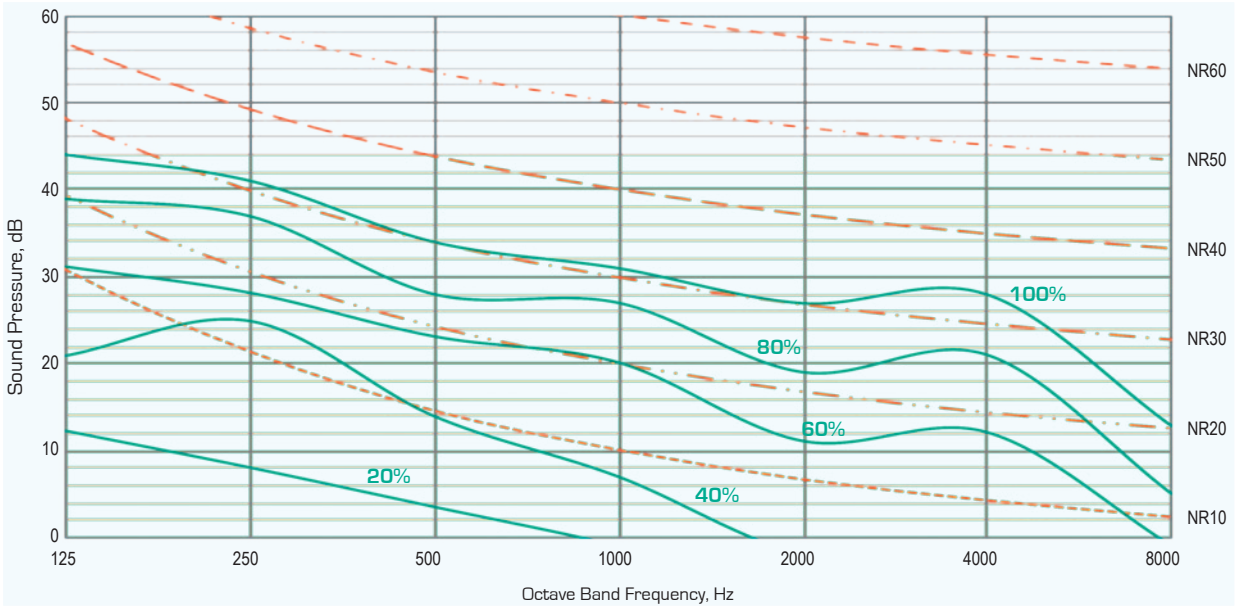
Midi-BY-AT

with integral acoustic attenuation

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)



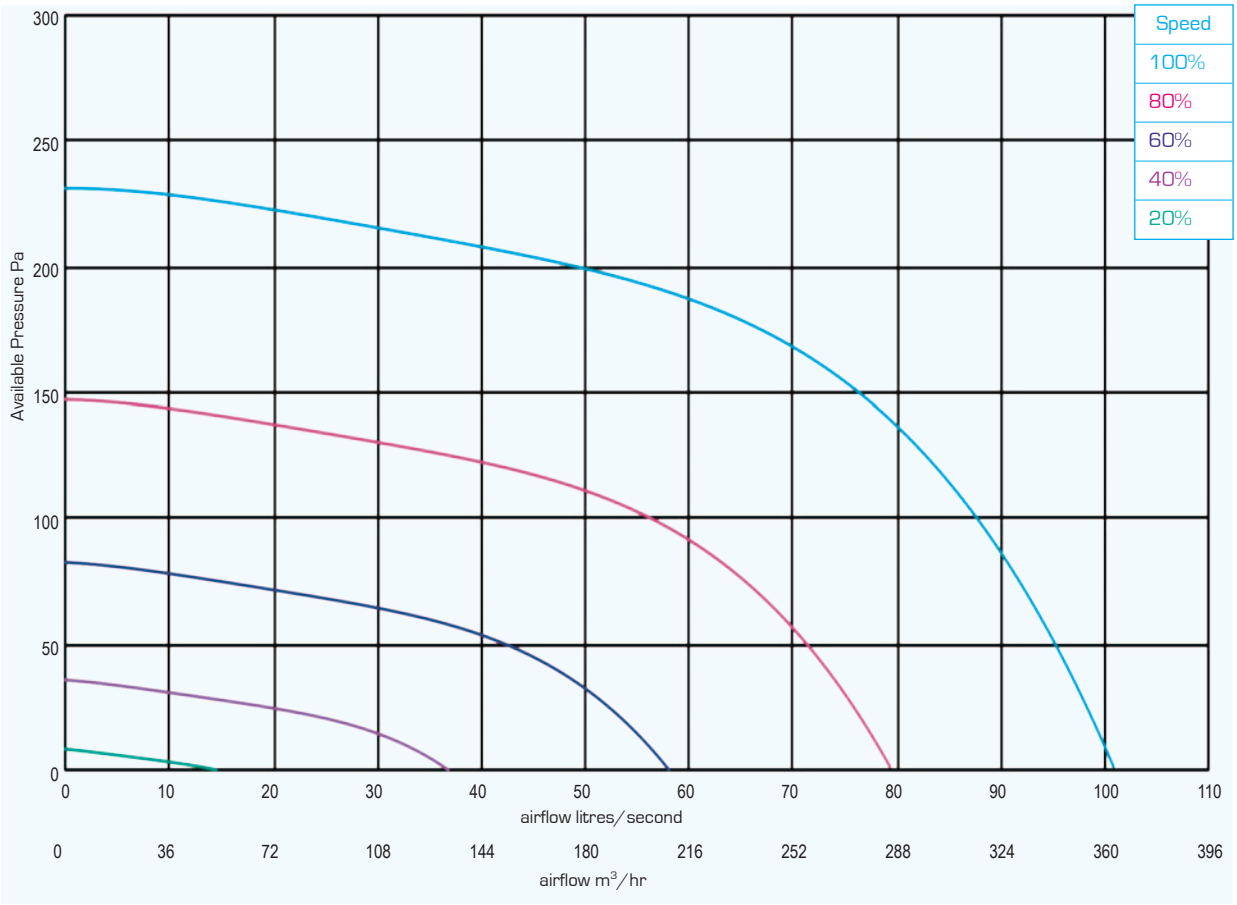
RESULTS for SAP CALCULATIONS ENERGY LEVEL PERFORMANCE - using rigid ducting only						
	2009 Data		2012 Data		SAP 10 Data	
Exhaust Terminal Configuration	Specific Fan Power (W/l/sec)	Heat Exchange Efficiency	Specific Fan Power (W/l/sec)	Heat Exchange Efficiency	Specific Fan Power (W/l/sec)	Heat Exchange 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						

Midi-BY-AT

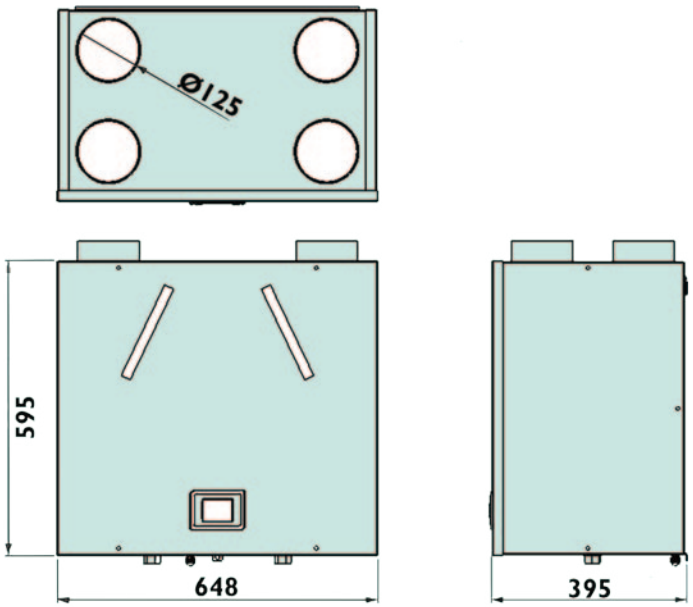
with integral acoustic attenuation

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



Weight - 29kg

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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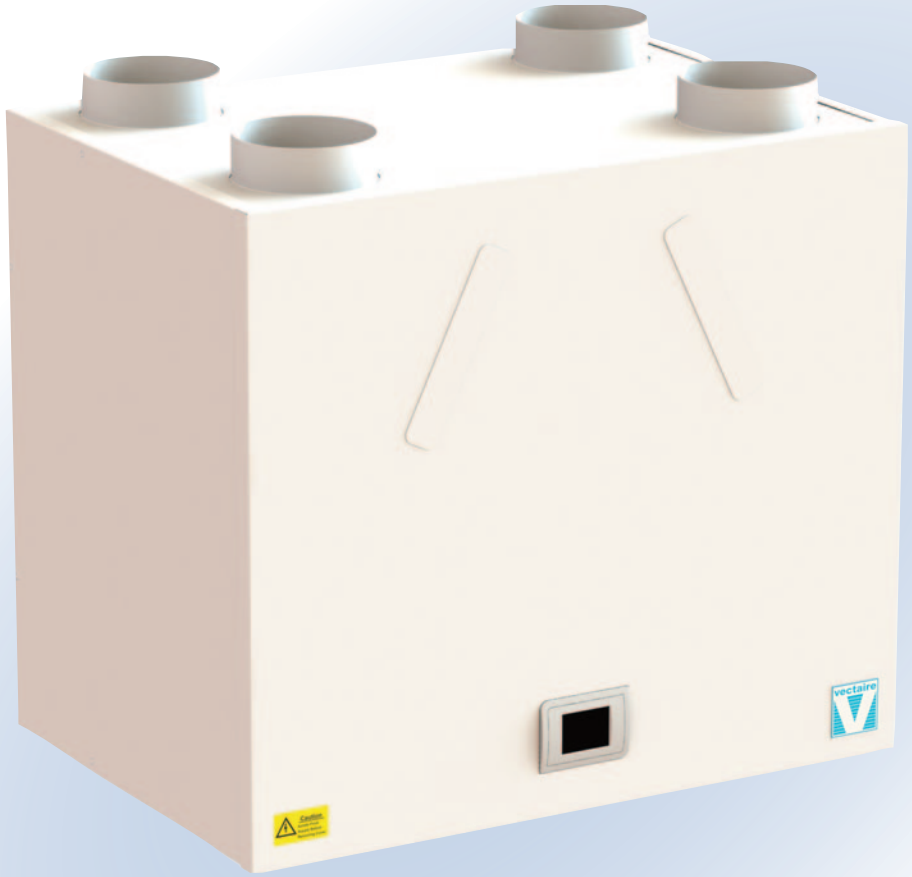
Maxi



Maxi

- with summer bypass and frost-stat
- efficient, low energy solution to controlling condensation and pollution in residential properties up to 250m²
- up to 92% heat exchange efficiency
- variable choice of low (trickle), boost and purge speed at installation
- for wall, cupboard or loft installation
- universal handing for models without humidistat
- very quiet
- low running costs
- complies with Building Regulations
- manufactured in UK to ISO 9001:2015 and 14001:2015
- accurate commissioning via optional integral LCD or remote LCD commissioning unit

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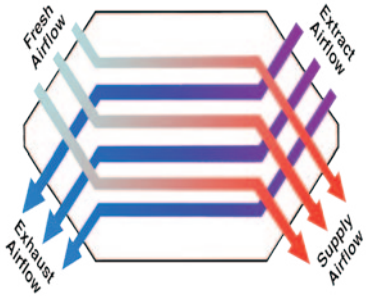
Maxi

GENERAL FEATURES

- up to 163 litre/sec at 50Pa - max 177 litre/sec capacity
- sfp down to 0.40 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°C and -8°C.
- run-time and power outage counters
- easy to install and maintain
- 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
- 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 noise levels
- low running costs
- 5 year warranty - 1 year parts and labour, 4 years parts only

TECHNICAL FEATURES

- casing from steel sheet - epoxy paint finish
- foam construction lining
- EPS internal components provide acoustic and thermal enhancement
- 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



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) - 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

MODELS AVAILABLE:

- WHHR Maxi/ BY - bypass, universal
- WHHR Maxi/ BLH - bypass, left drain humidistat
- WHHR Maxi/ BRH - bypass, right drain, humidistat
- Maxi BY+LCD - bypass, universal, integral LCD
- Maxi+LHHLCD - bypass, left drain, humidistat, integral LCD
- Maxi+RHHLCD - bypass, right drain, humidistat, integral LCD

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

Maxi

TECHNICAL CHARACTERISTICS											
Model	Airflow l/sec					Total Power - Watts					Operating Current (Amps)
	100%	80%	60%	40%	20%	100%	80%	60%	40%	20%	
Maxi	177	138	99	60	23	176	97	44	17	4	1.41

Maxi		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% (177 l/sec)	Extract	52	57	61	58	59	58	55	50	
	Supply	57	62	66	63	64	63	60	55	
	Breakout	54	55	60	56	43	39	30	21	38.1
80% (138 l/sec)	Extract	48	53	55	53	54	52	49	42	
	Supply	53	58	60	58	59	57	54	47	
	Breakout	52	55	57	54	42	37	28	22	35.9
60% (99 l/sec)	Extract	42	47	48	46	47	45	40	32	
	Supply	47	52	53	51	52	50	45	37	
	Breakout	51	54	54	51	41	35	26	22	33.2
40% (60 l/sec)	Extract	36	40	40	37	38	36	30	18	
	Supply	41	45	45	42	43	41	35	23	
	Breakout	48	51	46	40	29	25	19	22	24.2
20% 23 l/sec)	Extract	27	29	27	22	22	19	8	10	
	Supply	32	34	32	27	27	24	15	17	
	Breakout	43	50	41	35	20	16	11	15	20.2
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 to BS EN ISO 3743-1:2010										

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	0.43	92%	0.45	92%	0.45	92%
Kitchen + 2 additional wet rooms	0.40	92.%	0.47	92%	0.47	92%
Kitchen + 3 additional wet rooms	0.42	92%	0.54	91%	0.54	91%
Kitchen + 4 additional wet rooms	0.48	91%	0.66	90%	0.66	90%
Kitchen + 5 additional wet rooms	0.55	91%	0.80	90%	0.80	90%
Kitchen + 6 additional wet rooms	0.63	90%	0.99	89%	0.99	89%
Kitchen + 7 additional wet rooms	0.76	90%	1.21	89%	1.21	89%
Figures at minimum flow rate conditions						

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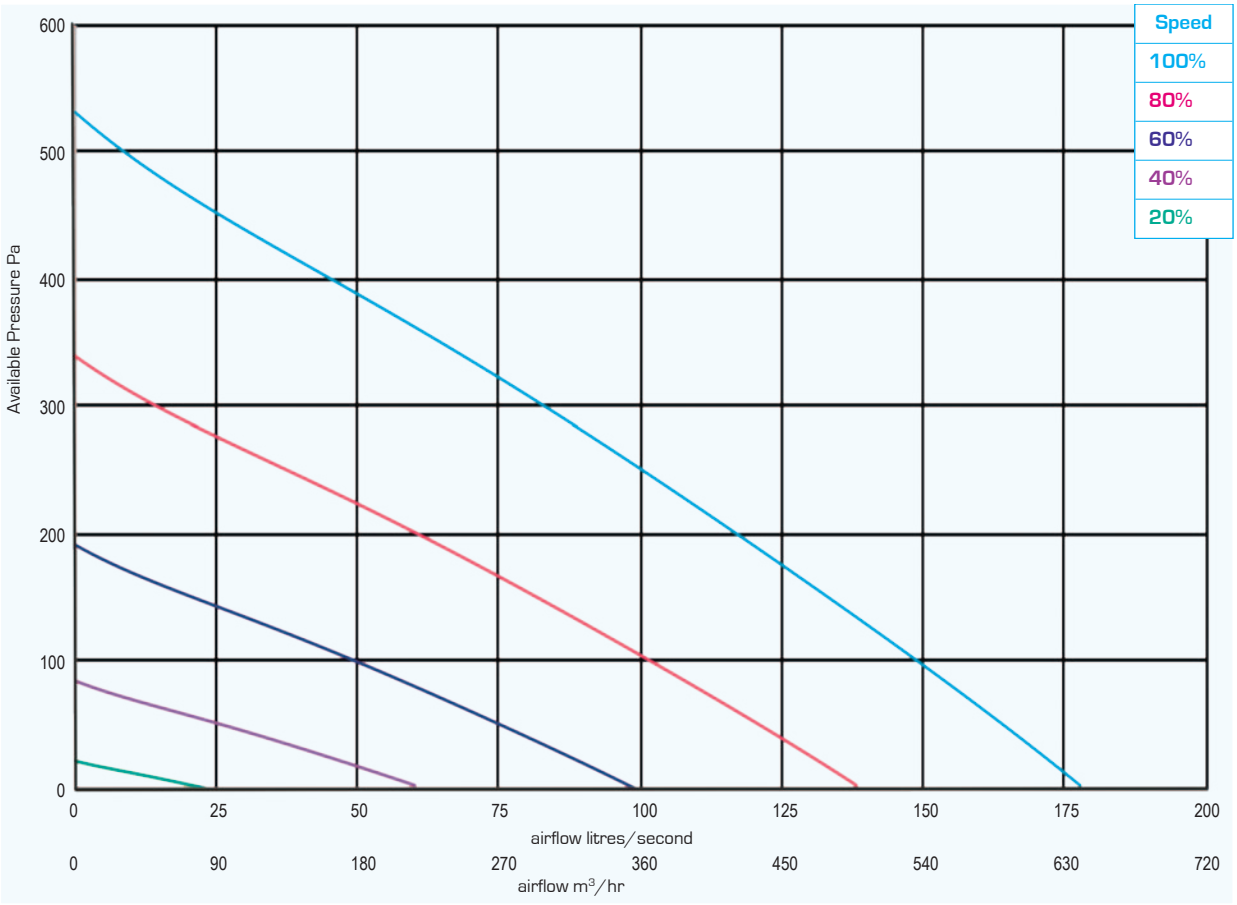
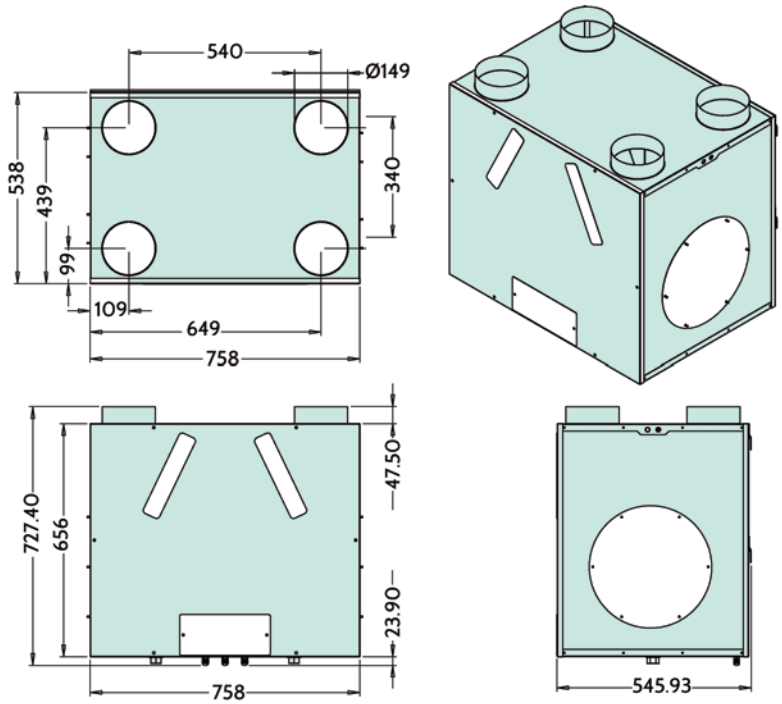
Maxi

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



Weight - 37kg

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

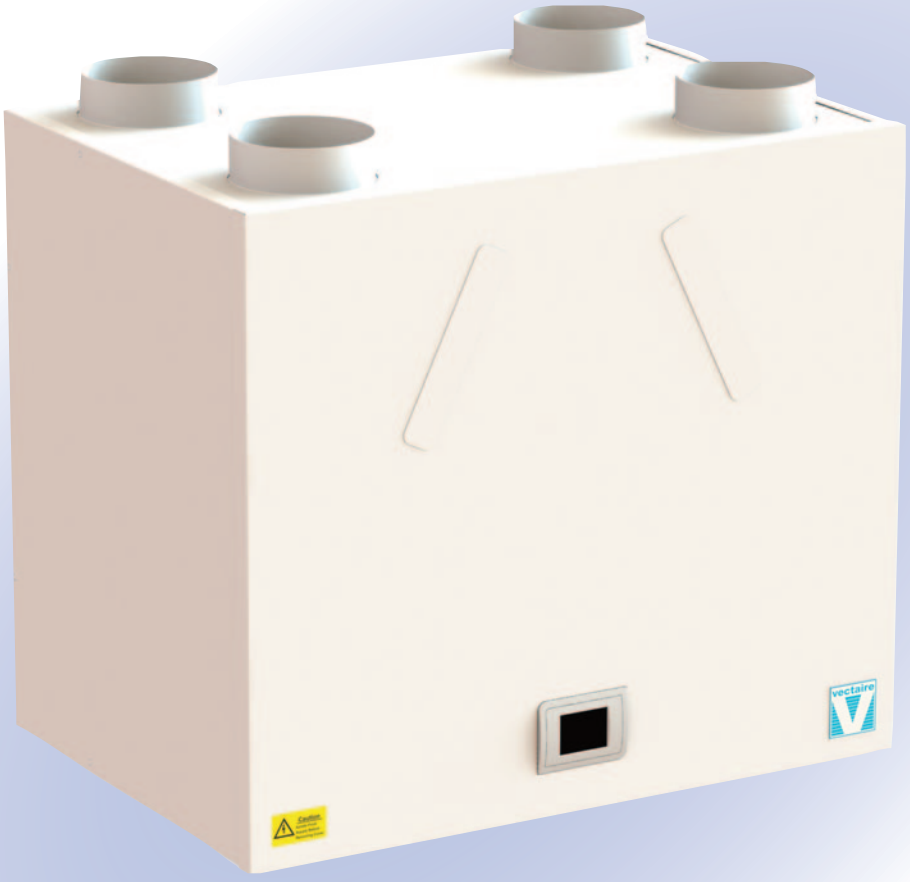
Maxi-BY-AT

with integral acoustic attenuation

SAP PCDB Listed

NEW

energy efficient-environmentally friendly-economical



Maxi-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 250m²
- up to 92% 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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Maxi-BY-AT

with integral acoustic attenuation

GENERAL FEATURES

- extremely low noise levels
- up to 163 litre/sec at 50Pa - max 177 litre/sec capacity
- sfp down to 0.40 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°C and -8°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 42 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

- 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
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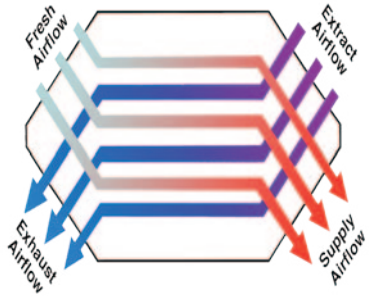
- counter flow heat exchanger



MODELS AVAILABLE:

- Maxi BY-AT+-LCD - bypass, attenuation universal, integral LCD
- Maxi BYAT+LCDLH - bypass, attenuation, left drain, humidistat, integral LCD
- Maxi BYAT+LCDRH - bypass, attenuation, right drain, humidistat, 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
- 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

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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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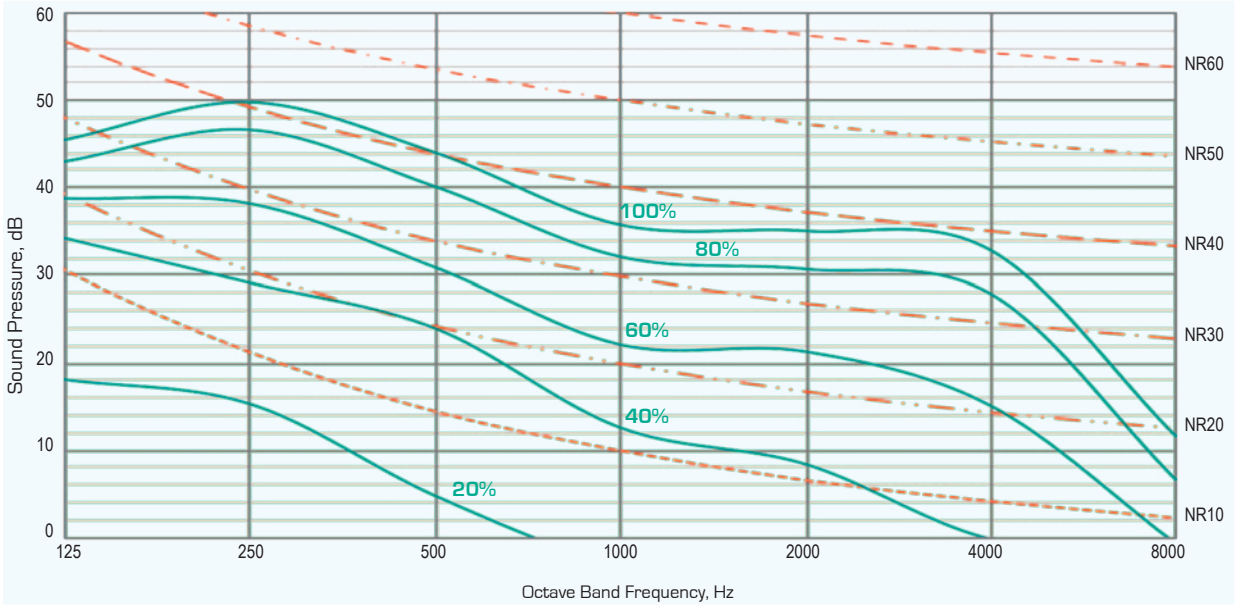
Maxi-BY-AT

with integral acoustic attenuation

Maxi 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% (177 l/sec)	Extract	60	64	51	46	38	30	24		
	Supply	70	74	69	59	53	46	42		
	Breakout	**54**	**58**	**52**	**44**	**43**	**41**	**20**	**36.8**	**41**
80% (138 l/sec)	Extract	57	63	51	42	33	24	18		
	Supply	69	70	67	56	50	41	37		
	Breakout	**51**	**55**	**48**	**40**	**39**	**36**	**15**	**32.4**	**38**
60% (99 l/sec)	Extract	52	51	39	30	21	8	6		
	Supply	68	63	54	53	44	38	36		
	Breakout	**47**	**46**	**39**	**30**	**29**	**23**	**7**	**23.4**	**29**
40% (60 l/sec)	Extract	47	45	29	21	9	2	6		
	Supply	58	49	45	34	27	12	7		
	Breakout	**42**	**37**	**32**	**21**	**16**	**8**	**6**	**15.1**	**20**
20% (23 l/sec)	Extract	32	28	13	11	0	2	6		
	Supply	39	31	27	14	5	2	6		
	Breakout	**26**	**23**	**13**	**5**	**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	0.43	92%	0.45	92%	0.45	92%
Kitchen + 2 additional wet rooms	0.40	92.%	0.47	92%	0.47	92%
Kitchen + 3 additional wet rooms	0.42	92%	0.54	91%	0.54	91%
Kitchen + 4 additional wet rooms	0.48	91%	0.66	90%	0.66	90%
Kitchen + 5 additional wet rooms	0.55	91%	0.80	90%	0.80	90%
Kitchen + 6 additional wet rooms	0.63	90%	0.99	89%	0.99	89%
Kitchen + 7 additional wet rooms	0.76	90%	1.21	89%	1.21	89%
Figures at minimum flow rate conditions						

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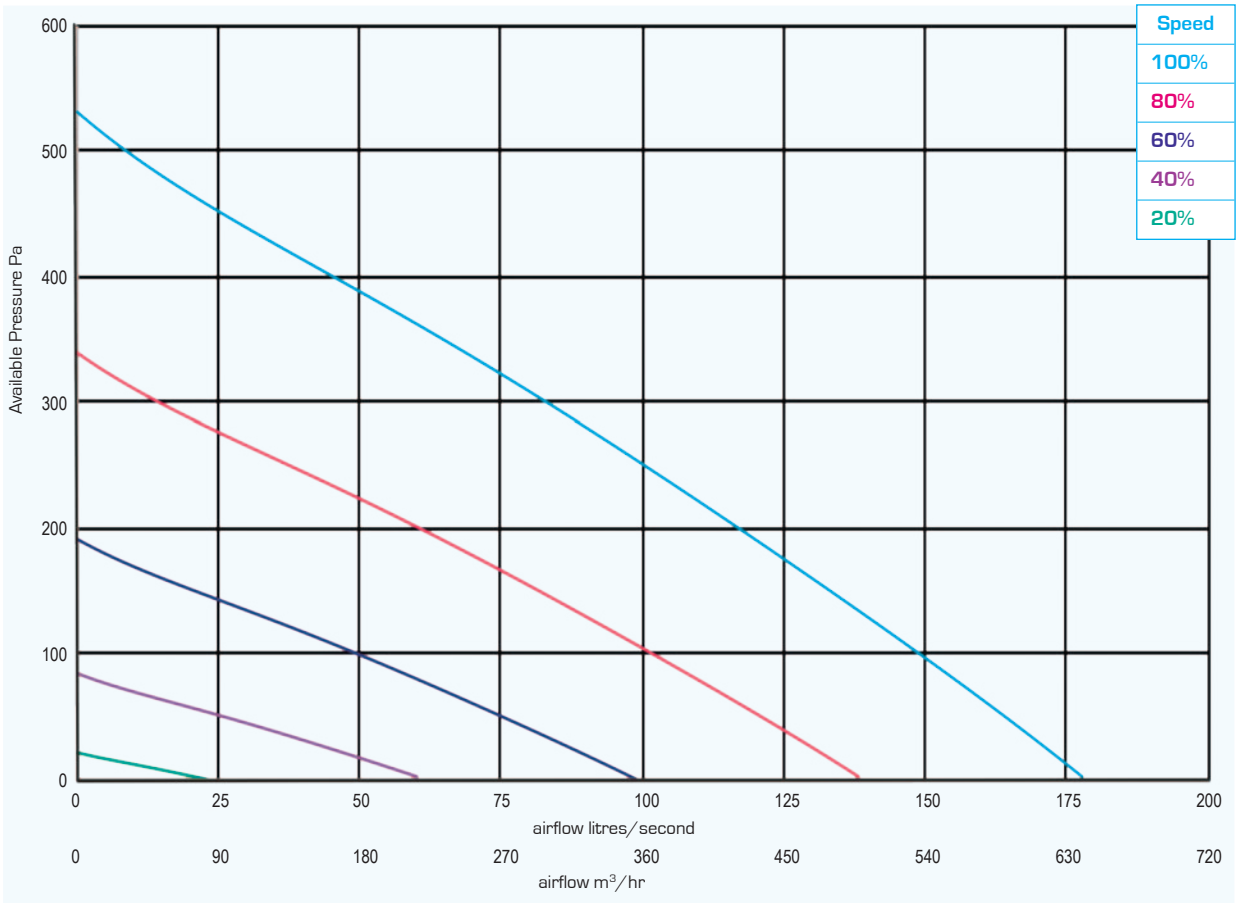
Maxi-BY-AT

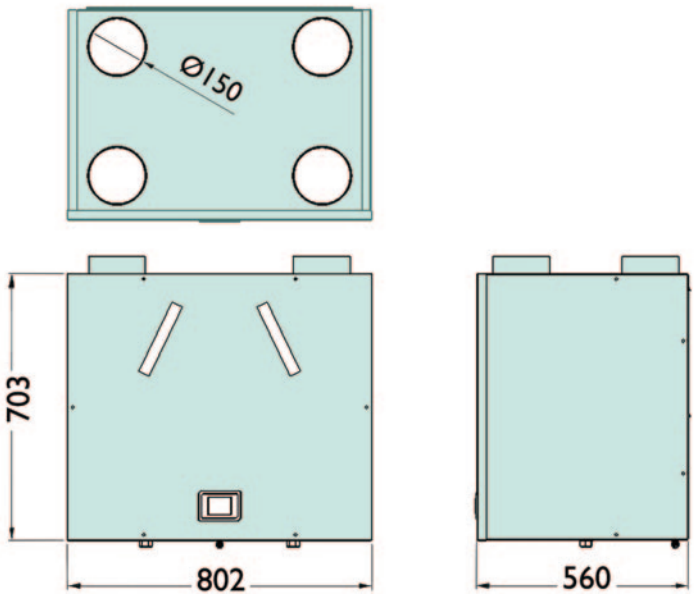
with integral acoustic attenuation

TECHNICAL CHARACTERISTICS											
Model	Airflow l/sec					Total Power - Watts					Operating Current (Amps)
	100%	80%	60%	40%	20%	100%	80%	60%	40%	20%	
Maxi BY AT	177	138	99	60	23	176	97	44	17	4	1.41

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



Weight - 42 kg

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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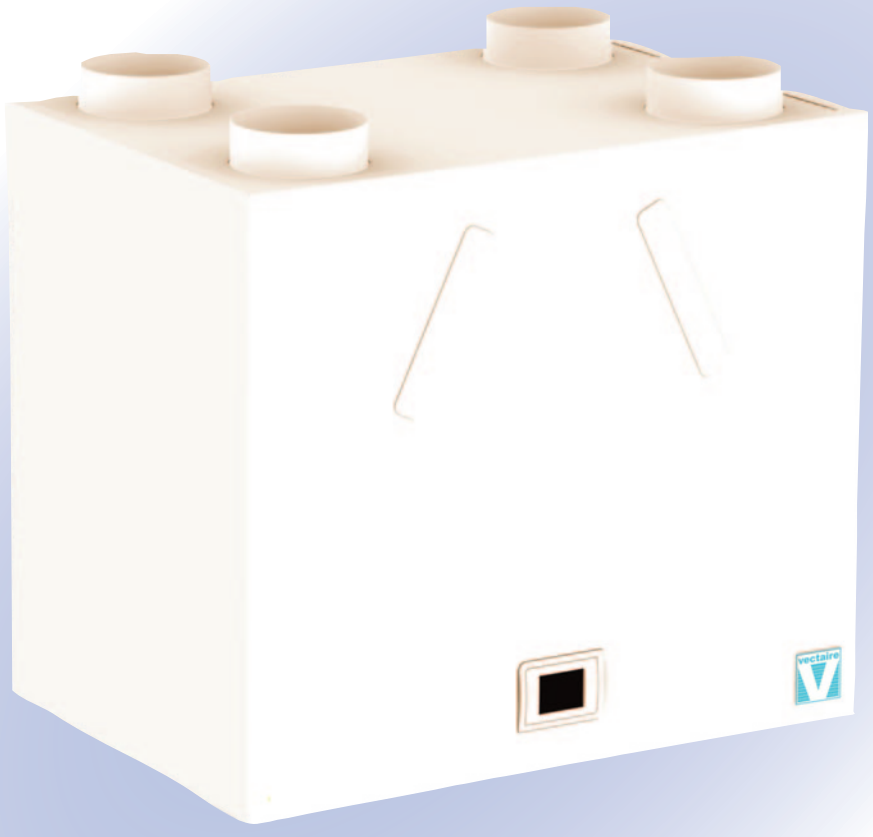
Maxi Plus BY

SAP PCDB Listed

NEW

energy efficient-environmentally friendly-economical



Maxi Plus BY

- with summer bypass and frost-stat
- efficient, low energy solution to controlling condensation and pollution in residential properties up to 400m²
- up to 89% heat exchange efficiency
- variable choice of low (trickle), boost and purge speed at installation
- for wall, cupboard or loft installation
- universal handing for models without humidistat
- very quiet
- low running costs
- complies with Building Regulations
- manufactured in UK to ISO 9001:2015 and 14001:2015
- accurate commissioning via optional integral LCD or remote LCD commissioning unit

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Cool Breeze 100126.pdf

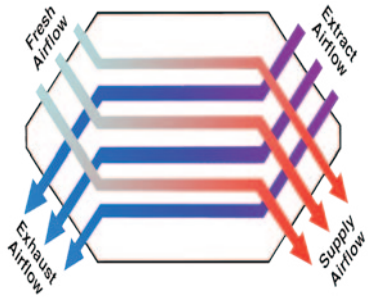
Maxi Plus BY

GENERAL FEATURES

- up to 230 litre/sec at 50Pa - max 238 litre/sec capacity
- sfp down to 0.46 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°C and -8°C.
- run-time and power outage counters
- easy to install and maintain
- 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
- 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

- casing from steel sheet - epoxy paint finish
- foam construction lining
- EPS internal components provide acoustic and thermal enhancement
- 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



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) - 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

MODELS AVAILABLE:

- Maxi Plus/BY - bypass, universal,
- Maxi Plus/ BLH - bypass, left drain, humidistat
- Maxi Plus /BRH - bypass, right drain, humidistat
- MaxiPlus BYLCD - bypass, universal, integral LCD
- MaxiPlus BLHLCD - bypass, left drain, humidistat, integral LCD
- MaxiPlus BRHLCD - bypass, right drain, humidistat, integral LCD

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

Maxi Plus BY

TECHNICAL CHARACTERISTICS											
Model	Airflow l/sec					Total Power - Watts					Operating Current (Amps)
	100%	80%	60%	40%	20%	100%	80%	60%	40%	20%	
Maxi Plus BY	238	186	135	84	35	355	184	85	32	8	2.81

Maxi Plus BY		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% (238 l/sec)	Extract	67	63	66	64	64	61	58	54	
	Supply	72	68	71	69	69	66	63	59	
	Breakout	67	65	64	57	51	53	49	32	43.1
80% (186 l/sec)	Extract	63	58	61	59	58	55	51	46	
	Supply	68	63	66	64	63	60	56	51	
	Breakout	62	59	60	52	45	44	39	28	37.4
60% (135 l/sec)	Extract	58	52	53	51	51	48	43	35	
	Supply	63	57	58	56	56	53	48	40	
	Breakout	58	54	57	45	39	37	31	25	32.8
40% (84 l/sec)	Extract	51	44	44	42	42	37	31	21	
	Supply	56	49	49	47	47	42	36	26	
	Breakout	52	47	48	41	36	31	26	23	26.0
20% (35 l/sec)	Extract	40	32	30	29	27	24	14	16	
	Supply	45	37	35	34	32	29	22	25	
	Breakout	44	36	34	33	31	28	20	21	20.4
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 to BS EN ISO 3743-1:2010										

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	0.75	89%	0.56	89%	0.56	89%
Kitchen + 2 additional wet rooms	0.56	89%	0.47	89%	0.47	89%
Kitchen + 3 additional wet rooms	0.46	89%	0.50	88%	0.50	88%
Kitchen + 4 additional wet rooms	0.46	88%	0.56	87%	0.56	87%
Kitchen + 5 additional wet rooms	0.49	88%	0.66	86%	0.66	86%
Kitchen + 6 additional wet rooms	0.55	87%	0.78	85%	0.78	85%
Kitchen + 7 additional wet rooms	0.63	86%	0.94	84%	0.94	84%
Figures at minimum flow rate conditions						

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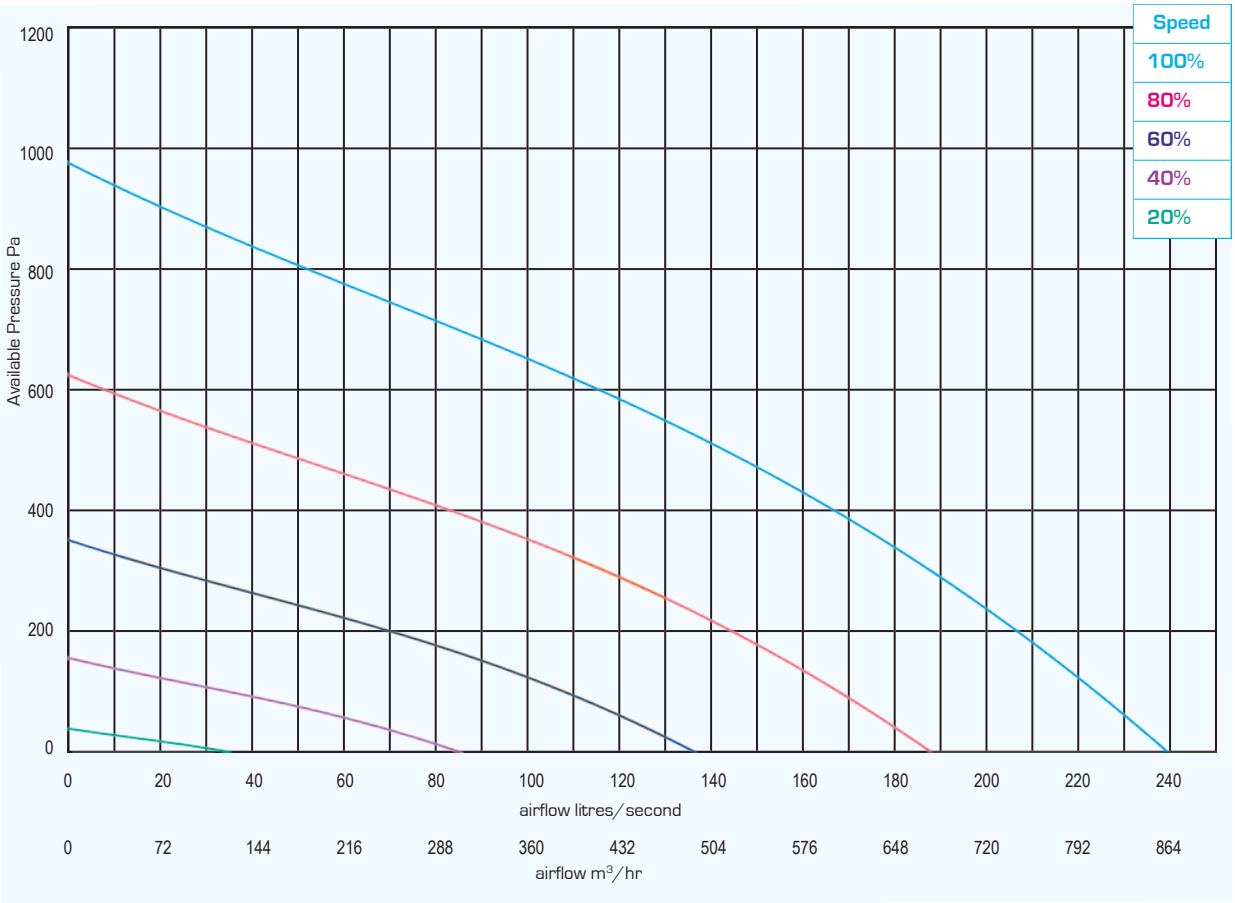
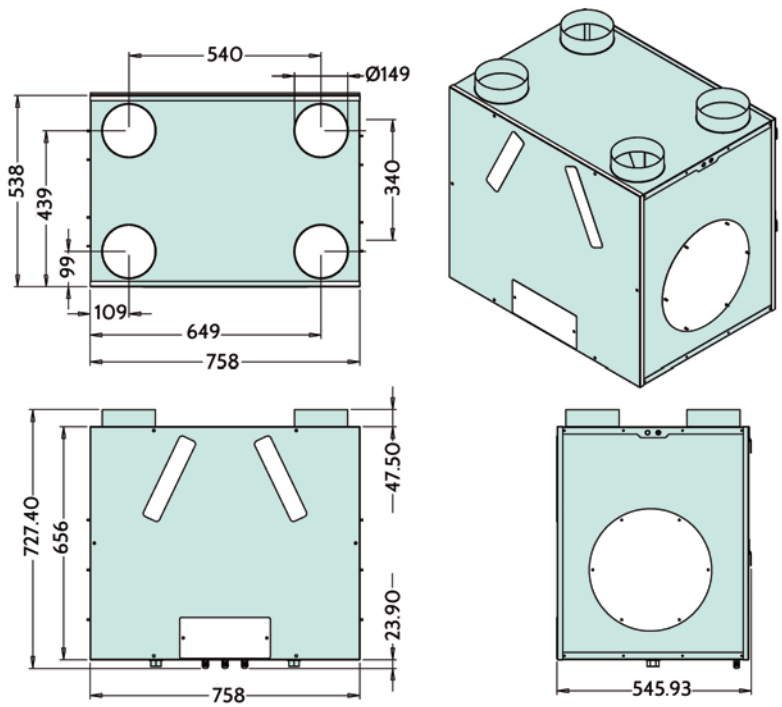
Maxi Plus BY

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



Weight - 37kg

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

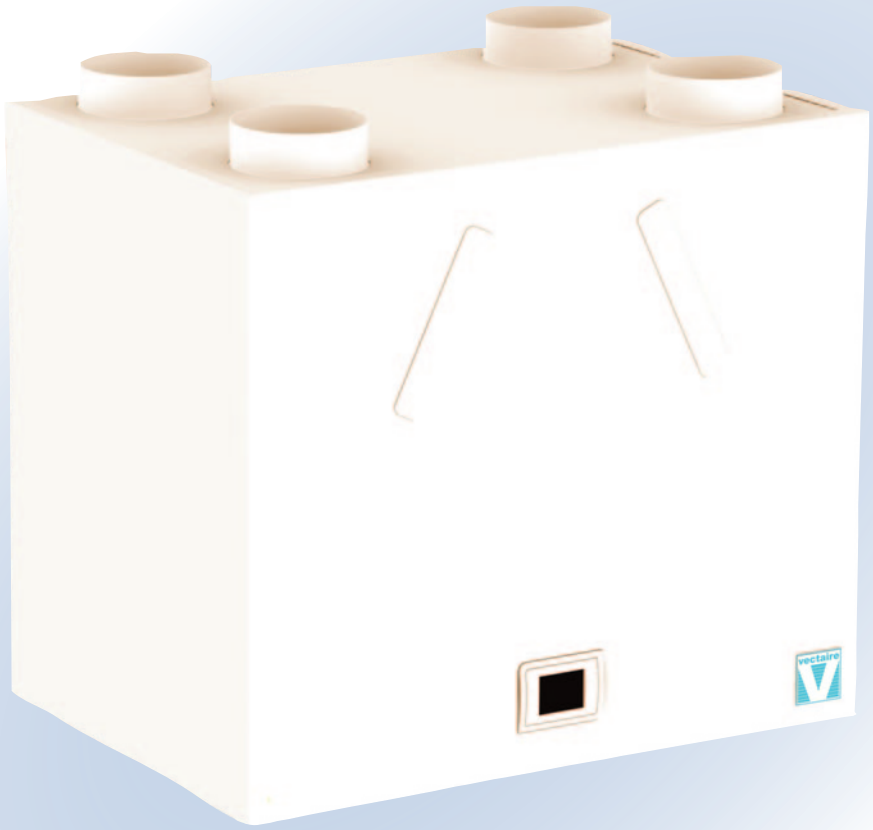
Maxi-Plus-BY-AT

with integral acoustic attenuation

SAP PCDB Listed

NEW

energy efficient-environmentally friendly-economical



Maxi-Plus-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 400m²
- up to 89% 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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Maxi-Plus-BY-AT

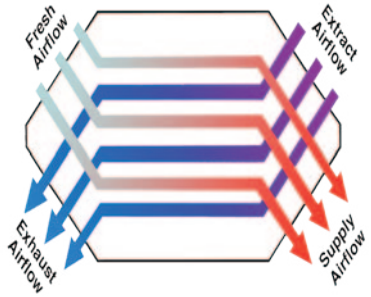
with integral acoustic attenuation

GENERAL FEATURES

- extremely low noise levels
- Up to 230 litre/sec at 50Pa - max 238 litre/sec capacity
- sfp down to 0.46 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°C and -8°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 42 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

- 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:

- MaxiPlus/ BYATLCD - bypass, attenuation, universal, integral LCD
- MaxiPlus/ ATLCDLH - bypass, attenuation, left drain, humidistat, integral LCD
- MaxiPlus/ ATLCDRH - bypass, attenuation, right drain, 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 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

Maxi-Plus-BY-AT

with integral acoustic attenuation

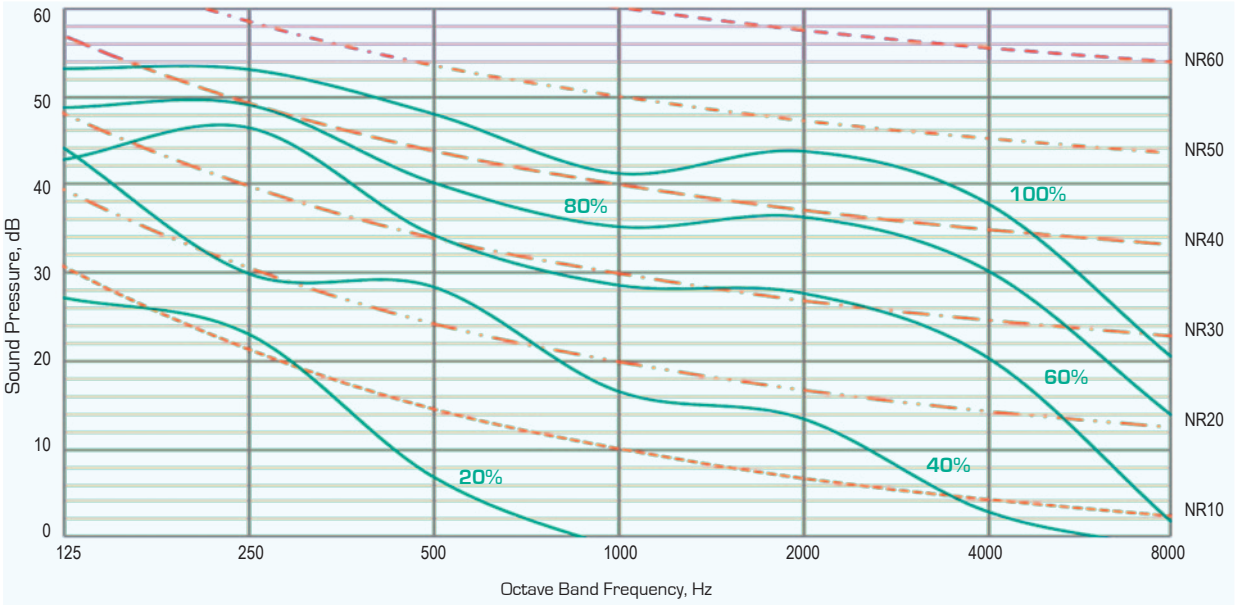
Maxi Plus BY AT		Sound Power Levels, L_w (dB) - Octave Bands Frequency Hz.							Sound Pressure dBA @ 3m	Noise Rating based on dB @1m
Curve Ref		125	250	500	1k	2k	4k	8k		
100% (238 l/sec)	Extract	61	63	57	49	43	34	28		
	Supply	75	79	74	66	63	52	52		
	Breakout	**61**	**61**	**56**	**49**	**52**	**46**	**29**	**41.1**	**47**
80% (186 l/sec)	Extract	57	59	51	44	37	28	23		
	Supply	71	71	66	60	58	46	47		
	Breakout	**57**	**57**	**48**	**43**	**44**	**38**	**22**	**34.9**	**40**
60% (135 l/sec)	Extract	51	55	45	36	27	15	8		
	Supply	64	68	60	51	48	34	29		
	Breakout	**51**	**54**	**42**	**37**	**36**	**28**	**10**	**28.9**	**37**
40% (84 l/sec)	Extract	49	44	35	26	17	4	6		
	Supply	59	52	48	41	36	19	12		
	Breakout	**52**	**38**	**36**	**25**	**21**	**11**	**7**	**20.7**	**26**
20% 35 l/sec)	Extract	36	36	28	12	3	2	6		
	Supply	42	41	31	21	12	2	6		
	Breakout	**35**	**31**	**15**	**7**	**1**	**3**	**7**	**5.8**	**12**

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	0.75	89%	0.56	89%	0.56	89%
Kitchen + 2 additional wet rooms	0.56	89%	0.47	89%	0.47	89%
Kitchen + 3 additional wet rooms	0.46	89%	0.50	88%	0.50	88%
Kitchen + 4 additional wet rooms	0.46	88%	0.56	87%	0.56	87%
Kitchen + 5 additional wet rooms	0.49	88%	0.66	86%	0.66	86%
Kitchen + 6 additional wet rooms	0.55	87%	0.78	85%	0.78	85%
Kitchen + 7 additional wet rooms	0.63	86%	0.94	84%	0.94	84%

Figures at minimum flow rate conditions

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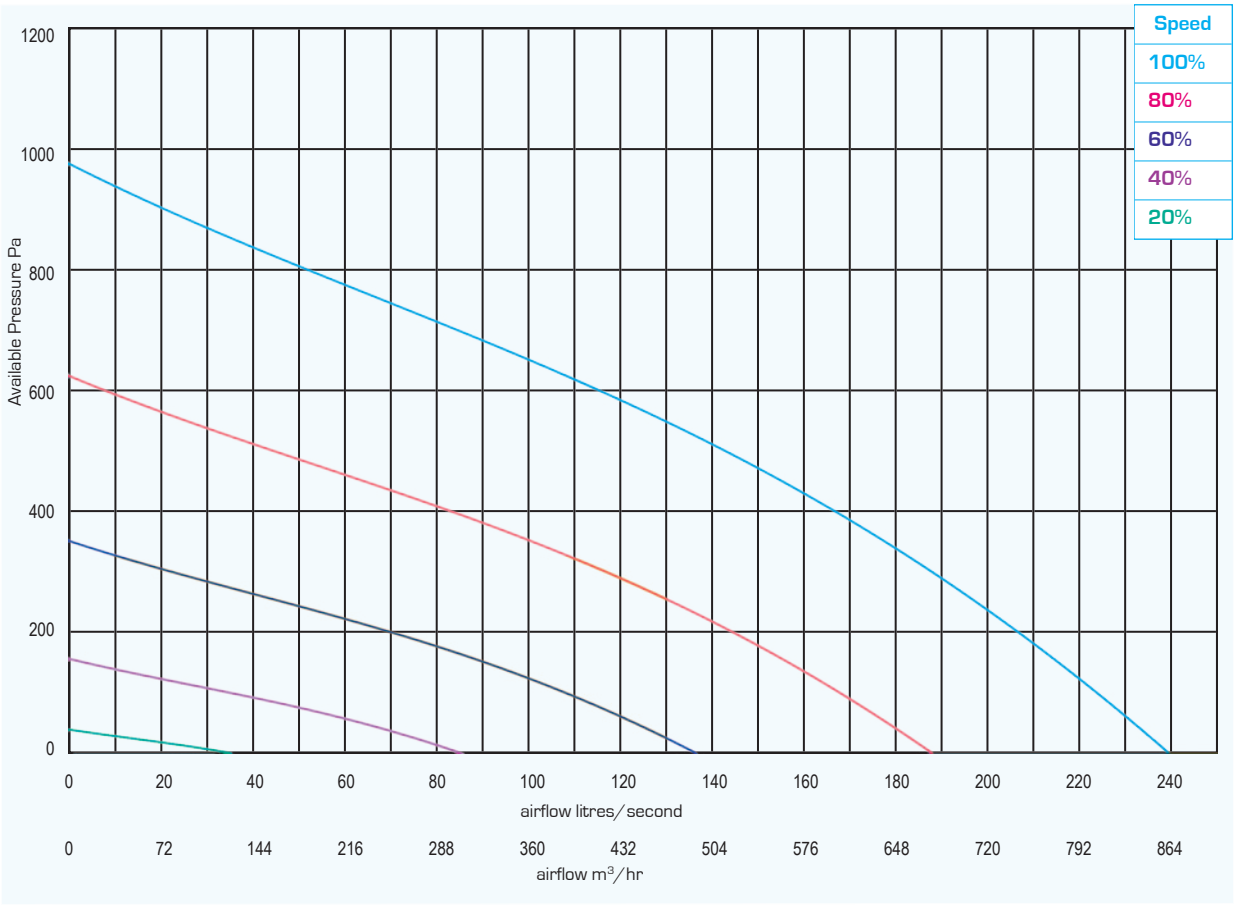
Maxi-Plus-BY-AT

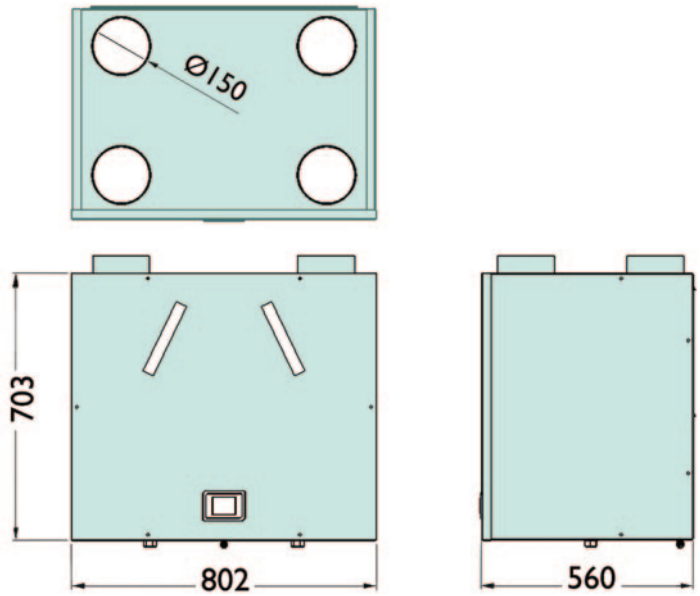
with integral acoustic attenuation

TECHNICAL CHARACTERISTICS											
Model	Airflow l/sec					Total Power - Watts					Operating Current (Amps)
	100%	80%	60%	40%	20%	100%	80%	60%	40%	20%	
Maxi Plus BY AT	238	186	135	84	35	355	184	85	32	8	2.81

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



Weight - 42kg

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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Horizontal MVHR

EVOs, Mini and Studio

Vectaire's range of horizontal MVHRs include the EVOs, Mini and Studio. All these models provide optimum ventilation by continuously and quietly supplying fresh air. The energy efficient motors automatically remove excess moisture helping to maintain a healthy atmosphere.

They tackle condensation in areas between 60m^2 and 200m^2 making them ideal for all residential dwellings, whether houses, apartments or student accommodation with the most powerful models also being suitable for hotels, care homes, multi-occupancy establishments and other commercial properties.

These MVHRs meet the latest requirements of the Building Regulations for whole house ventilation systems with heat recovery (System 4).

How They Work

They incorporate two fans - one extracts stale, damp air from the wet rooms in a building, and the other replaces it with warmed fresh air from outside. The two airflows pass through a heat exchanger which recovers the heat from the outgoing air. This is filtered and tempered before being transferred to the incoming fresh air supply and ducted to the living areas. Thus the dwelling is permanently well ventilated and comfortable with good indoor air quality.

Vectaire MVHRs can recover up to 94% of the heat which might otherwise be lost.

The speed of the two fans can be adjusted independently with a choice of variable trickle, boost and purge speeds at installation

Summer Bypass

All models incorporate a summer bypass which allows the airflow to bypass the heat exchanger automatically when internal and external temperatures are between adjustable setpoints.

Frost Protection

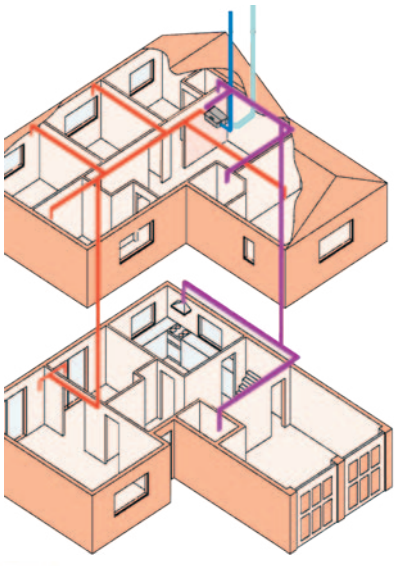
The integral frost-stat proportionally reduces intake motor speed as the temperature falls. This stops the ingress of cold air and consequently the removal of warm air making sure that the ambient remains comfortable. It is activated when the outside temperature is between +3°C and -8°C.

Humidity Control

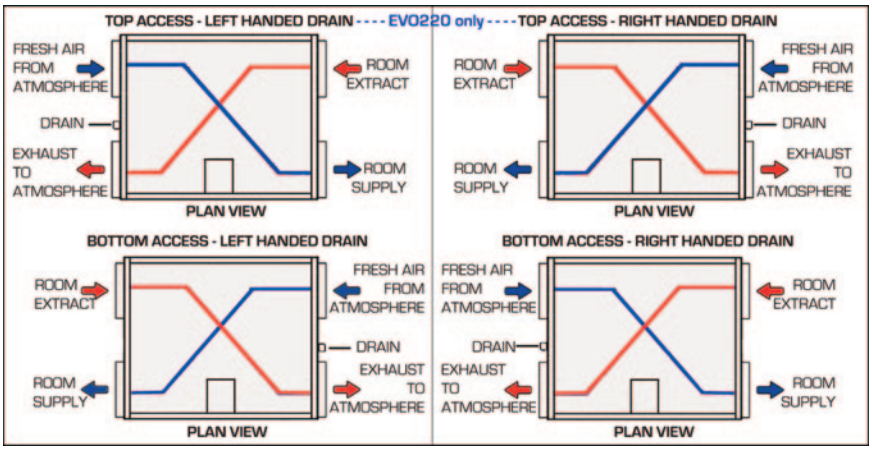
Models with an integral humidity sensor (H) increase the speed of the motors proportionally as the humidity rises. It responds to increases in relative humidity ensuring a comfortable ambience throughout the day and night. The speed of the motors will fall back to normal levels once the excess humidity has been cleared making sure the minimum amount of energy is used.

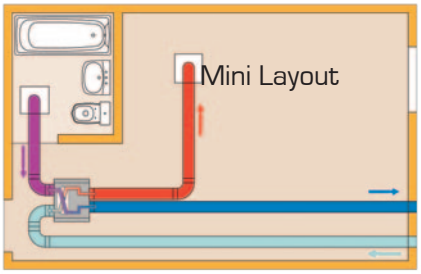
LCD Control

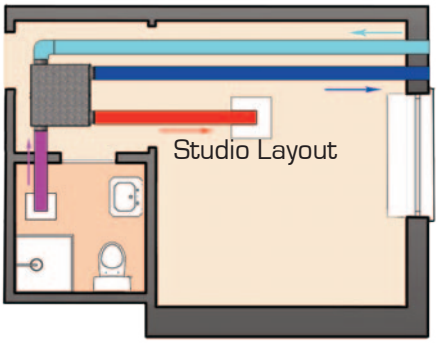
All models can have a remote commissioning state-of- the-art touch screen LCD controller. It is one of the most technologically advanced available giving both installer and user a range of options to ensure that the MVHR is set to provide quiet and efficient ventilation at all times whilst recovering the heat that would otherwise be lost.



Incoming fresh air
Warmed fresh air
Extracted warm, moist, stale air
Cooled outgoing stale air
MVHR







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MVHR LCD Controller

- For use with all Vectaire Heat Recovery Units
- Remote units can be mounted wherever is convenient to the user ((Model No: LCD-DISPLAY)
- (Option of Integral LCD screen with upright MVHRs Midis and Maxis)

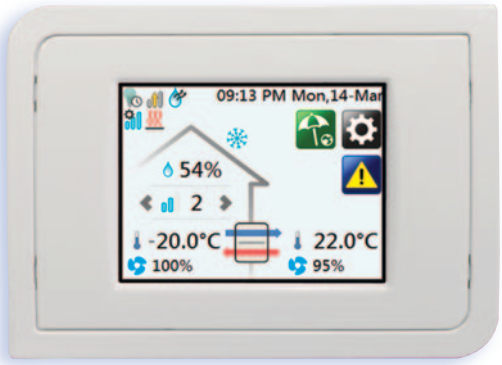
LCD Touch Screen Functions

Display shows:

> motor speeds - for both supply and extract fans. They can be set independently and are variable
> inside and outside temperatures
> status icons - show which functions are currently controlling fan speeds
> date and time
> relative humidity level
> bypass status
> error and service notifications
> filter saturation level - shows when filters need replacing

LCD Touch Screen Functions for USER

> screen allows USER to set and control:
- time
- date
- reset the filter saturation level after filters have been changed
- holiday mode - sets system to minimum running, saving energy whilst maintaining air quality
- operating speed
- language



Commissioning Options - these options are ONLY for use by the installer, and can only be used with a Commissioning Access Code.

If an incorrect passcode is entered 5 times consecutively the system will automatically lock for one hour. Access permissions are lost every time the option screen is exited.

Setting Time: sets up 12 or 24hr format, DST (daylight saving time) and time zone.	Language Selection
Setting Date: sets date format	Touch Screen Calibration
Holiday Mode: sets system to minimum running when required (factory set to maintain air quality)	Commissioning Screen
Boost Speed Time Delay	Night Time Boost Inhibitor
Boost Speed Over-run Timer	Screen Cleaning: wipe screen safely without deleting settings
Run Time Counter and Filter Saturation	Exit to main screen

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EVO250

EVO250DC

- with summer bypass and frost-stat
- efficient, low energy solution to controlling condensation and pollution in residential properties up to 150m²
- 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

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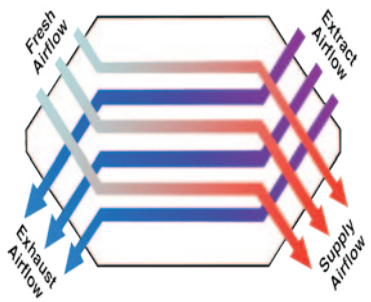
EVO250

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 +3°C and -8°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 impellors
- operates in temperature up to 60ºC
- 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 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

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EVO250

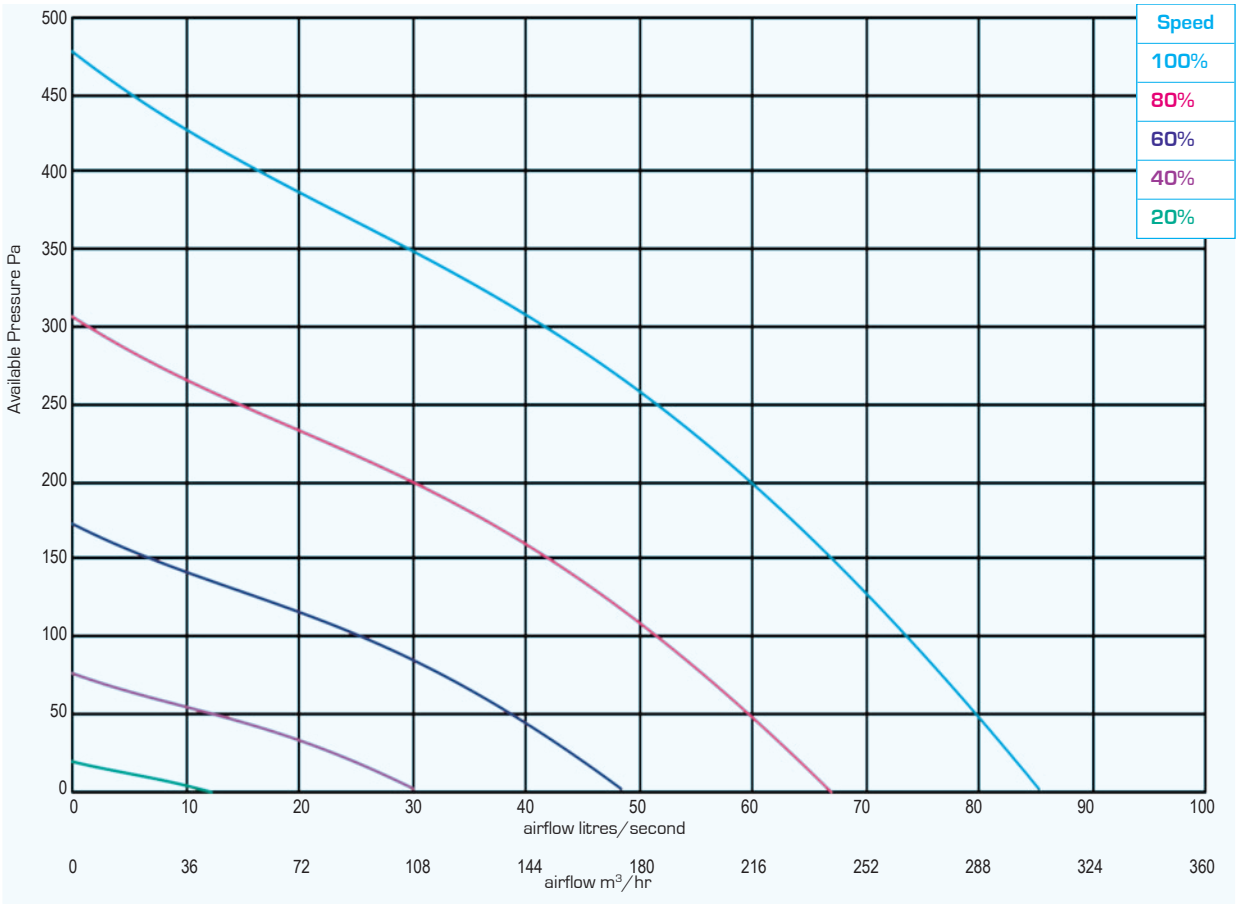
TECHNICAL CHARACTERISTICS											
Model	Airflow l/sec					Total Power - Watts					Operating Current (Amps)
	100%	80%	60%	40%	20%	100%	80%	60%	40%	20%	
EVO250	85	67	48	30	12	101	53	23	9	2	0.93

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	
	Supply	68	65	67	69	66	64	65	55	
	Breakout	66	58	54	50	41	33	28	16	33.4
80% (67 l/sec)	Extract	59	57	58	58	56	53	53	42	
	Supply	64	62	63	63	61	58	58	47	
	Breakout	62	55	50	44	36	27	21	8	28.7
60% (48 l/sec)	Extract	54	51	51	52	49	46	43	31	
	Supply	59	56	56	57	54	51	48	36	
	Breakout	57	49	43	38	29	20	11	< 5	22.4
40% (30 l/sec)	Extract	46	44	43	42	40	36	31	17	
	Supply	51	49	48	47	45	41	36	22	
	Breakout	49	42	35	28	20	10	< 5	< 5	14.1
20% (12 l/sec)	Extract	33	33	29	28	24	20	5	3	
	Supply	38	38	34	33	29	25	10	8	
	Breakout	36	31	21	14	< 5	< 5	< 5	< 5	< 10.0
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										

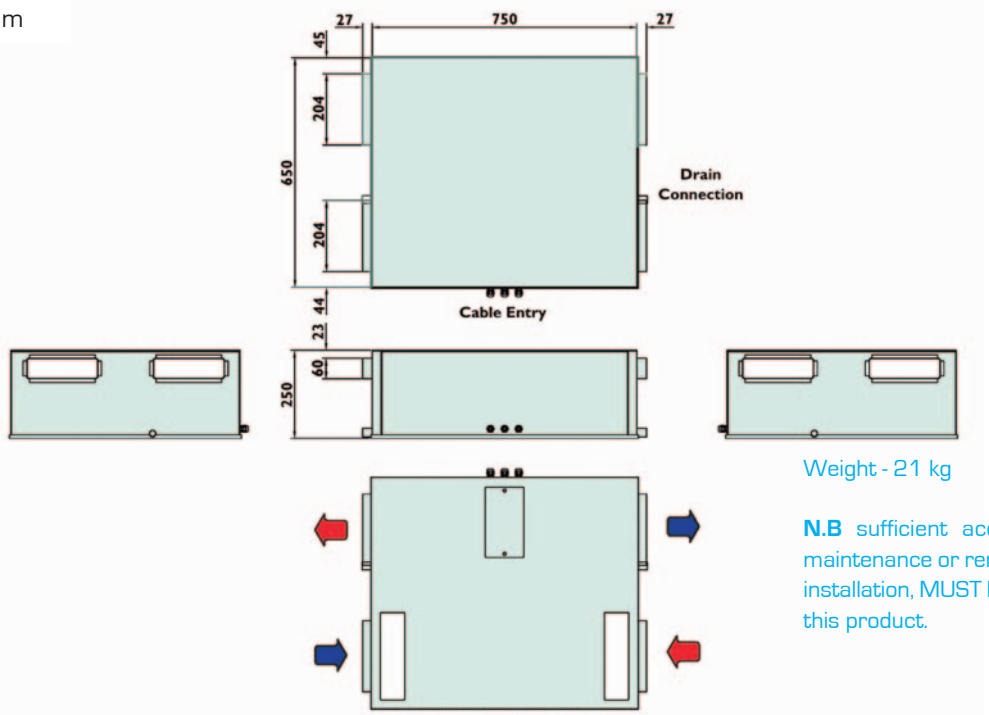
RESULTS for SAP CALCULATIONS ENERGY LEVEL PERFORMANCE - using rigid ducting only						
	2009 Data		2012 Data		SAP 10 Data	
Exhaust Terminal Configuration	Specific Fan Power (W/l/sec)	Heat Exchange Efficiency	Specific Fan Power (W/l/sec)	Heat Exchange Efficiency	Specific Fan Power (W/l/sec)	Heat Exchange Efficiency
Kitchen + 1 additional wet room	0.70	88%	0.75	87%	0.75	87%
Kitchen + 2 additional wet rooms	0.72	87%	0.89	86%	0.89	86%
Kitchen + 3 additional wet rooms	0.82	87%	1.00	85%	1.00	85%
Kitchen + 4 additional wet rooms	0.99	86%	1.37	84%	1.37	84%
Kitchen + 5 additional wet rooms	1.01	85%				
Kitchen + 6 additional wet rooms	1.35	84%				
Figures at minimum flow rate conditions						

EVO250

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



Weight - 21 kg

N.B sufficient access for safe maintenance or removal following installation, MUST be provided for this product.

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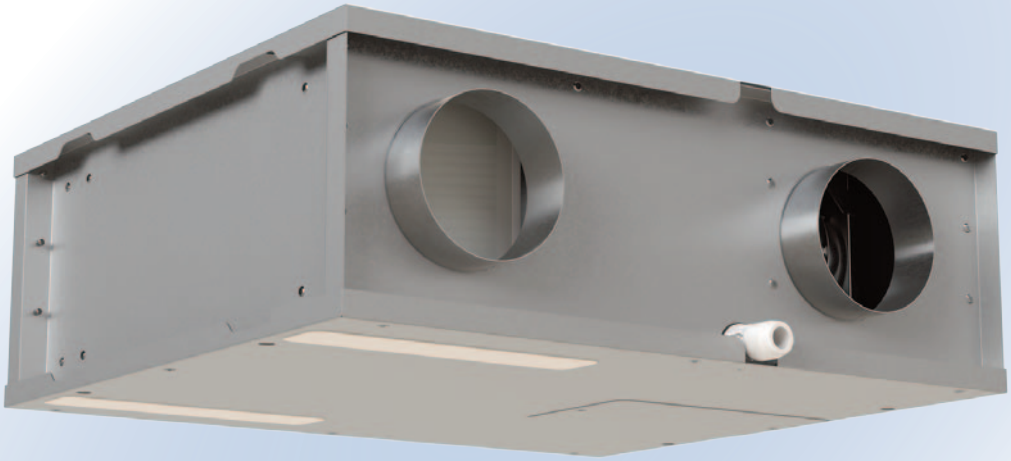
EVO220



EVO220DC

- with summer bypass and frost-stat
- efficient, low energy solution to controlling condensation and pollution in residential properties
- up to 87% 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

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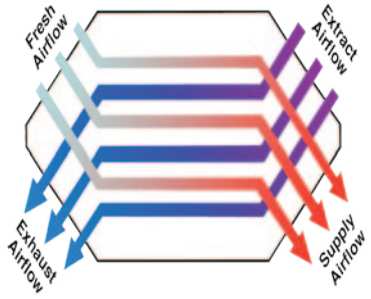
EVO220

GENERAL FEATURES

- up to 70 litre/sec at 50Pa - max 75 litre/sec capacity
- sfp down to 0.55 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-protection - proportionally reduces intake motor speed as temperature falls - activated when the outside temperature between +3°C and -8°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 60ºC
- easy to access standard, disposable G3 filters
- counter flow heat exchanger



MODELS AVAILABLE:

- EVO220DC/BALBY - bottom access, left drain, bypass
- EVO220DC/BARBY - bottom access, right drain, bypass
- EVO220DC/TALBY - top access, left drain, bypass
- EVO220DC/TARBY - top access, right drain, bypass
- Humidistat models available

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) - 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

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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EVO220

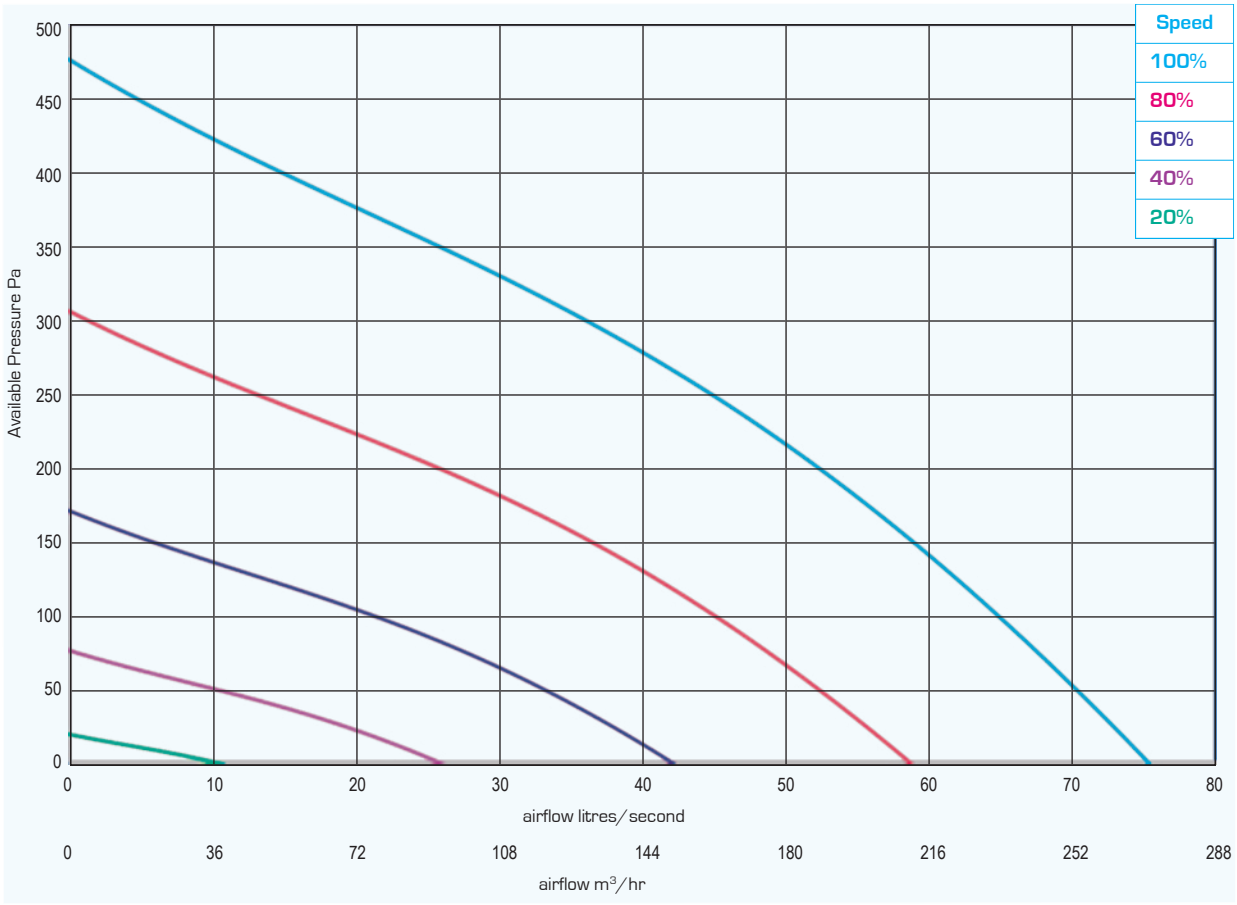
TECHNICAL CHARACTERISTICS											
Model	Airflow l/sec					Total Power - Watts					Operating Current (Amps)
	100%	80%	60%	40%	20%	100%	80%	60%	40%	20%	
EVO220DC	75	58	42	26	10	96	52	26	11	5	0.93

EVO220DC		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% (75 l/sec)	Extract	63	62	63	64	61	59	58	49	
	Supply	68	67	68	69	66	64	63	54	
	Breakout	66	60	55	50	41	33	26	21	34.0
80% (58 l/sec)	Extract	59	58	58	58	56	53	51	41	
	Supply	64	63	63	63	61	58	56	46	
	Breakout	62	56	50	44	36	27	19	15	28.9
60% (42 l/sec)	Extract	54	53	52	52	49	47	43	32	
	Supply	59	58	57	57	54	52	48	37	
	Breakout	57	51	44	38	29	21	11	9	23.2
40% (26 l/sec)	Extract	47	47	45	44	41	38	32	19	
	Supply	52	52	50	49	46	43	37	24	
	Breakout	50	45	37	30	21	12	7	6	16.2
20% (10 l/sec)	Extract	37	40	36	35	29	25	18	11	
	Supply	42	45	41	40	34	30	23	16	
	Breakout	40	38	28	21	9	7	6	5	7.9
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										

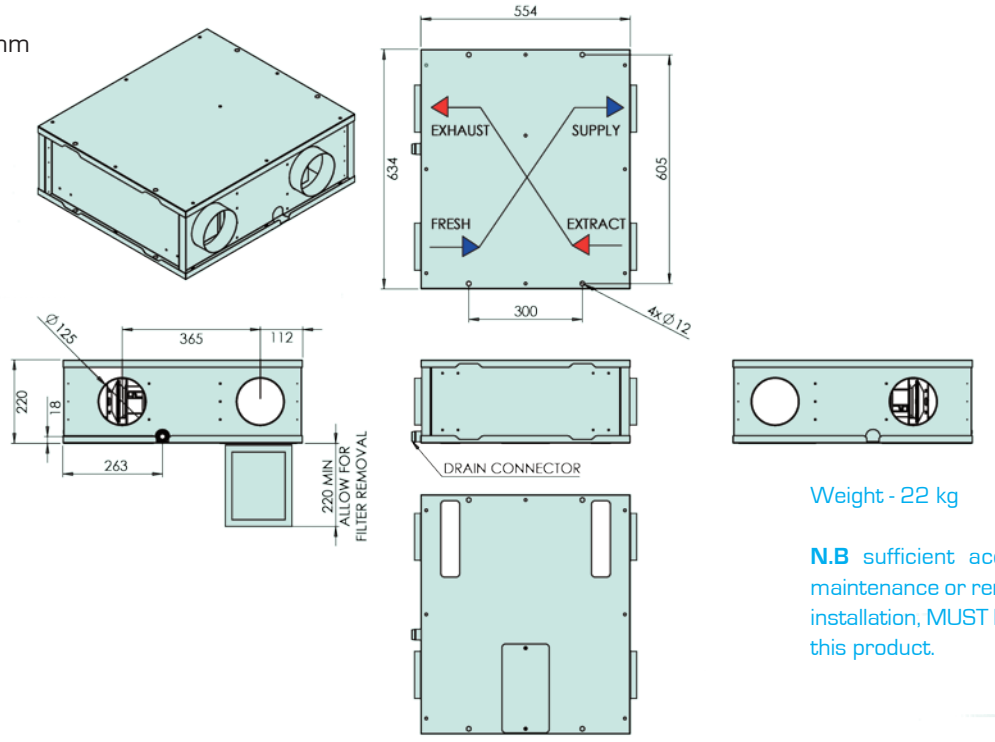
RESULTS for SAP CALCULATIONS ENERGY LEVEL PERFORMANCE - using rigid ducting only			
	2012 Data		
Exhaust Terminal Configuration	Airflow (l/sec)	Specific Fan Power (W/l/sec)	Heat Exchange Efficiency
Kitchen + 1 additional wet room	21	0.55	87%
Kitchen + 2 additional wet rooms	29	0.69	84%
Kitchen + 3 additional wet rooms	37	0.88	81%
Kitchen + 4 additional wet rooms	45	1.16	79%
Kitchen + 5 additional wet rooms	53	1.48	77%
Figures at minimum flow rate conditions - tested by our own laboratory			

EVO220

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



Weight - 22 kg

N.B sufficient access for safe maintenance or removal following installation, MUST be provided for this product.

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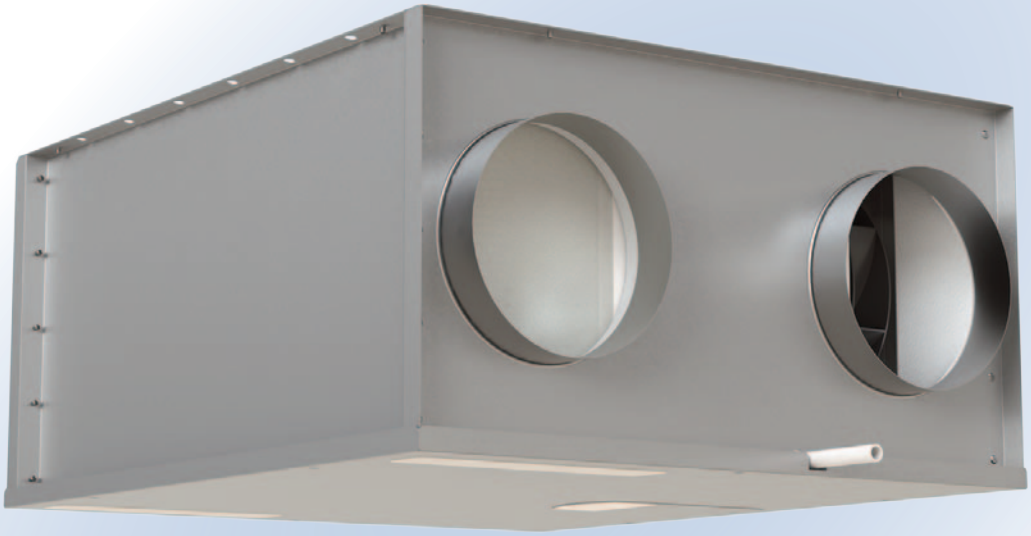
EVO350



EVO350

- 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

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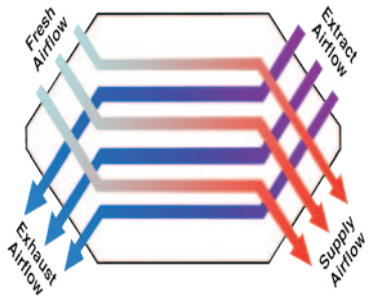
EVO350

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 +3°C and -8°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 60ºC
- easy to access standard, disposable G3 filters
- counter flow heat exchanger
- all models bottom access only



MODELS AVAILABLE:

- EVO350DC/BABY - bottom access, bypass
- EVO350DC/BALBYH - bottom access, left drain, bypass, humidistat
- EVO350DC/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
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EVO350

TECHNICAL CHARACTERISTICS											
Model	Airflow l/sec					Total Power - Watts					Operating Current (Amps)
	100%	80%	60%	40%	20%	100%	80%	60%	40%	20%	
EVO350	116	90	64	38	14	157	83	39	15	4	1.41

EVO350		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% (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 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	0.72	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						

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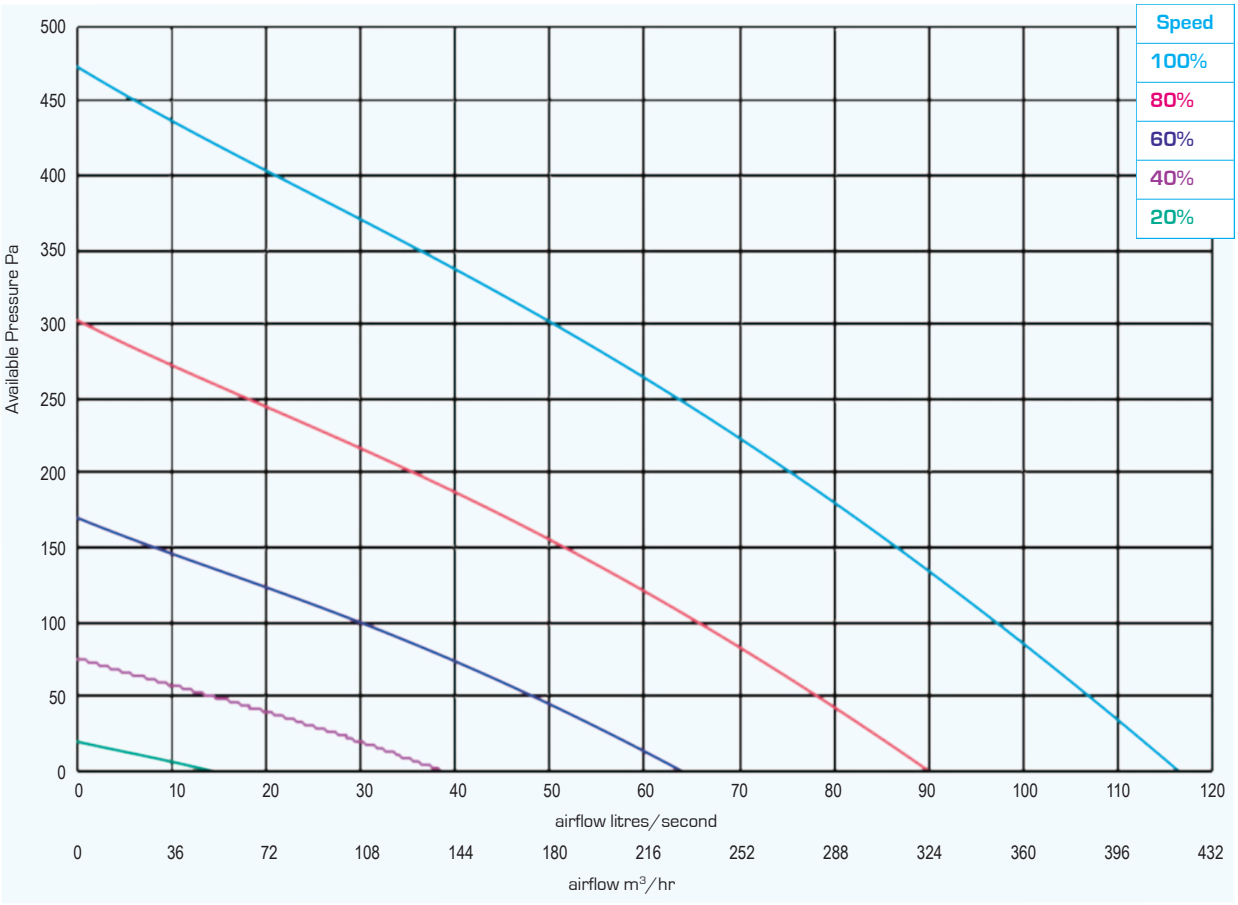
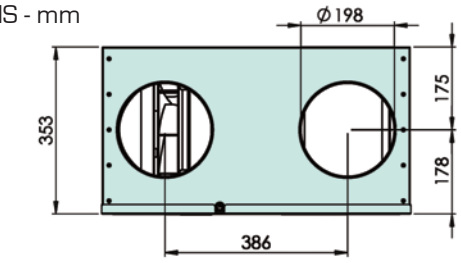
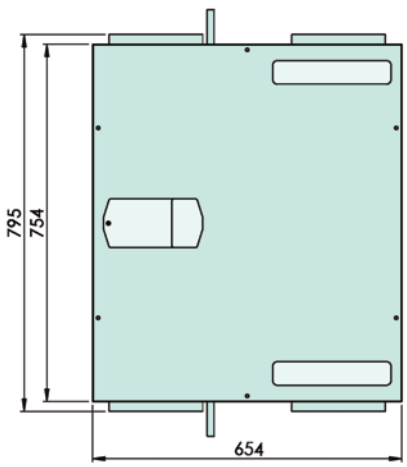
EVO350

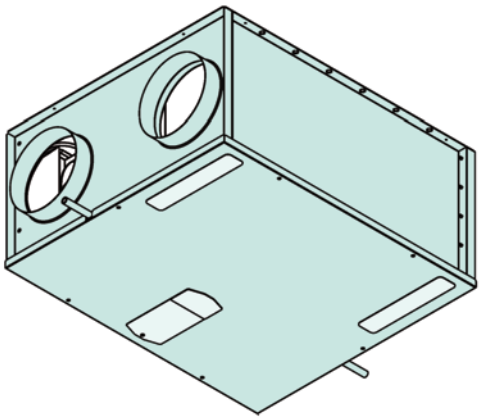
PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm







Weight - 25 kg

N.B sufficient access for safe maintenance or removal following installation, MUST be provided for this product.

Studio

Studio

- with summer bypass and frost-stat
- efficient, low energy solution to controlling condensation and pollution in residential properties up to 100m²
- up to 80% 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

* non-bypass models available

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Studio

GENERAL FEATURES

- for 1 or 2 bedroom apartments, hotel rooms, student accommodation, extra care facilities, multi-occupancy establishments etc
- Up to 55 litre/sec at 50Pa - max 59 litre/sec capacity
- sfp down to 0.87 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°C and -8°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 with galvanised sheet steel casing
- 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 50ºC
- easy to access standard, disposable G3 filters
- counter flow heat exchanger
- all models bottom access only with right or left drain

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

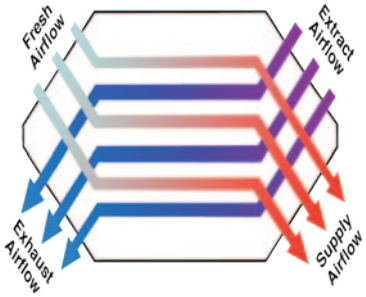
- change of ductwork handing on humidistat version (humidity threshold can be set at manufacture)
- integral humidistat - proportionally increases motor speeds with rising humidity
- 0-10V connections can be added for:
  - BMS - for remote motor shut-off
  - CO_2 detector
  - home automation system
- 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) - default setting is 50% of trickle speed
- run-time and power outage counters downloadable via QR code.

COMPLIES WITH

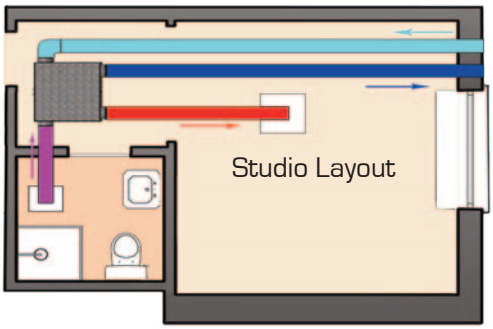
- Building Regulations for enhanced energy saving capability
- Building Regulations for reliable, efficient ventilation
- EU RoHS Directive Compliant.
- Complies with IEC60335-2-80, LVD2006/95/CE and EMC2014/30/UE (European Directive against radio interference and electro-magnetic compatibility
- manufactured in UK to ISO 9001:2015 and 14001:2015
- CE marked
- SAP PCDB Listed

TYPICAL SPECIFICATION AVAILABLE AT

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



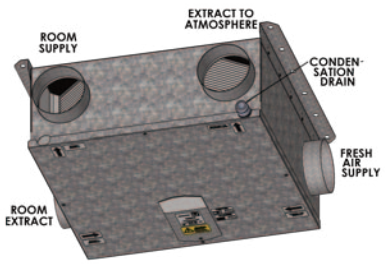
Incoming fresh air
Warmed fresh air
Extracted warm, moist, stale air
Cooled outgoing stale air
MVHR



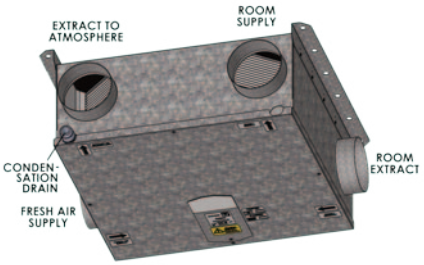
MODELS AVAILABLE:

- Studio LB - left drain, bypass
- Studio RB - right drain, bypass
- Studio LBH - left drain, bypass, humidistat
- Studio RBH - right drain, bypass, humidistat
- Studio L - left drain
- Studio R - right drain
- Studio LH - left drain, humidistat
- Studio RH - right drain, humidistat

STUDIO - OPTION 1 (RIGHT HAND DRAIN)



STUDIO - OPTION 2 (LEFT HAND DRAIN)



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Studio

TECHNICAL CHARACTERISTICS											
Model	Airflow l/sec					Total Power - Watts					Operating Current (Amps)
	100%	80%	60%	40%	20%	100%	80%	60%	40%	20%	
Studio	59	45	30	17	6	100	57	25	10	2	0.93

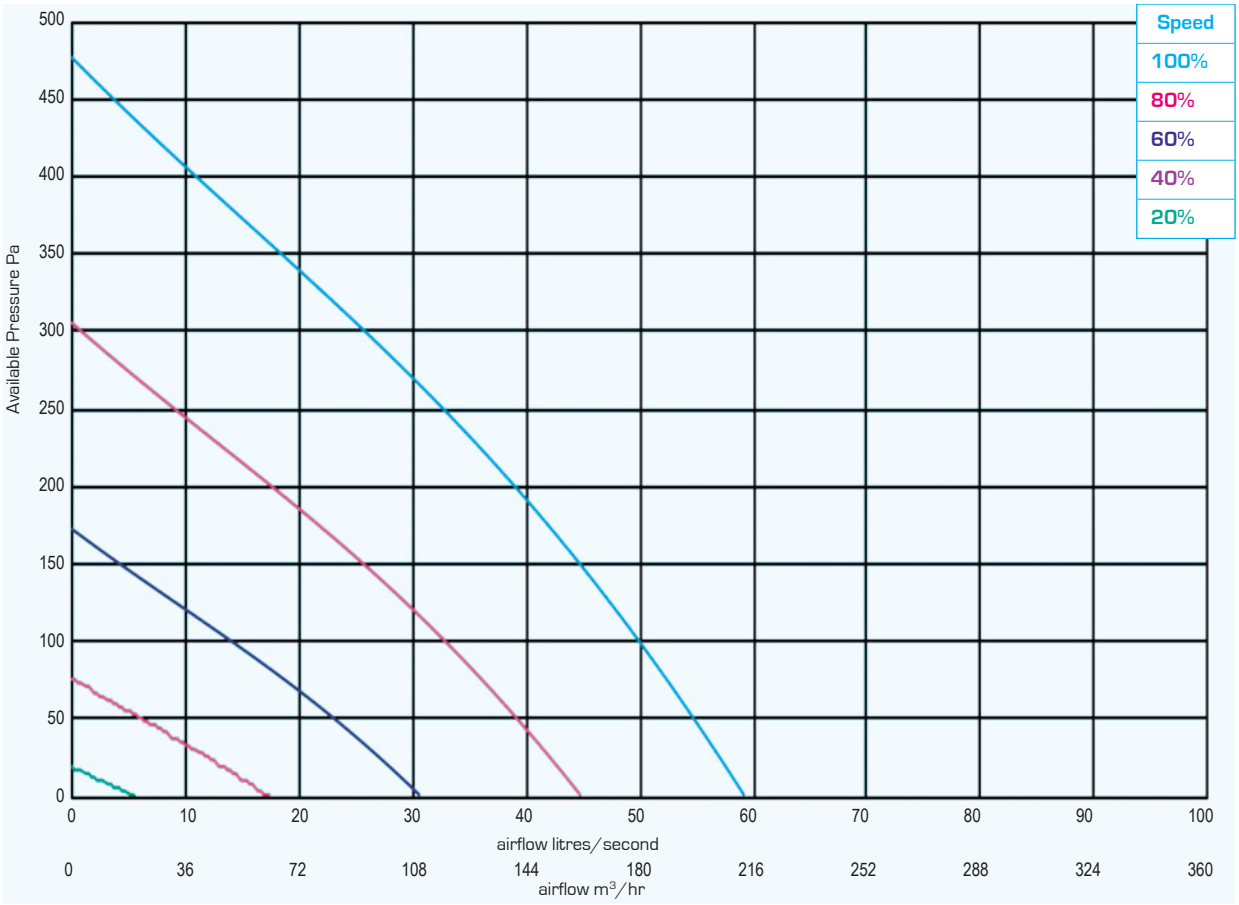
Studio		Sound Power Levels, L_w (dB) - Octave Bands Frequency Hz.								Sound Pressure dBA @ 3m
Curve Ref		63	125	250	500	1k	2k	4k	8k	
100% (59 l/sec)	Extract	63	65	66	66	62	59	57	49	
	Supply	68	70	71	71	67	64	62	54	
	Breakout	66	63	58	52	42	33	25	15	36.3
80% (45 l/sec)	Extract	59	62	61	61	57	54	50	42	
	Supply	64	67	66	66	62	59	55	47	
	Breakout	62	60	53	47	37	28	18	8	31.8
60% (30 l/sec)	Extract	53	57	55	55	50	47	41	32	
	Supply	58	62	60	60	55	52	46	37	
	Breakout	56	55	47	41	30	24	9	< 5	26.1
40% (17 l/sec)	Extract	46	50	47	47	41	37	30	18	
	Supply	51	55	52	52	46	42	35	23	
	Breakout	49	48	39	33	21	11	< 5	< 5	18.4
20% 6 l/sec)	Extract	34	38	33	33	27	22	12	3	
	Supply	39	43	38	38	32	27	17	8	
	Breakout	37	36	25	19	7	< 5	< 5	< 5	<10.0
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 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	0.87	80%	0.93	79%	0.93	79%
Kitchen + 2 additional wet rooms	0.89	79%	1.09	78%	1.09	78%
Kitchen + 3 additional wet rooms	1.02	78%	1.36	77%	1.36	77%
Kitchen + 4 additional wet rooms	1.21	77%				
Kitchen + 5 additional wet rooms	1.43	77%				
Figures at minimum flow rate conditions						

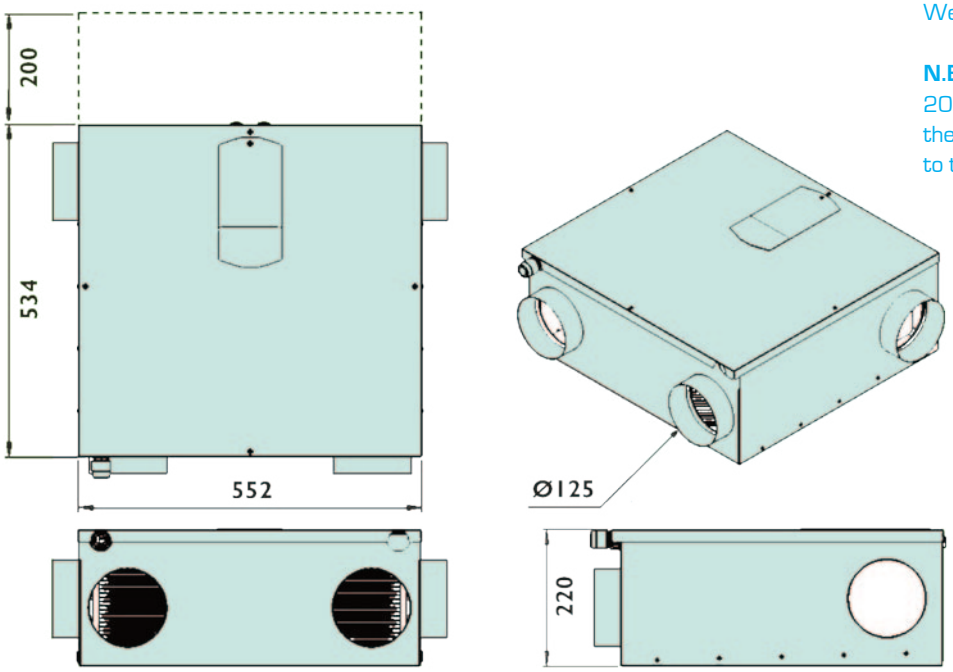
Vectaire Ltd can supply all accessories for use with these units, including product filters. air filter cassettes, silencers, fire dampers, air valves, ducting, outside grilles and wall cowls. Additionally, Vectaire offers a design service to ensure that the unit installed is the best possible to provide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

Studio

PERFORMANCE (curves are for guidance only)



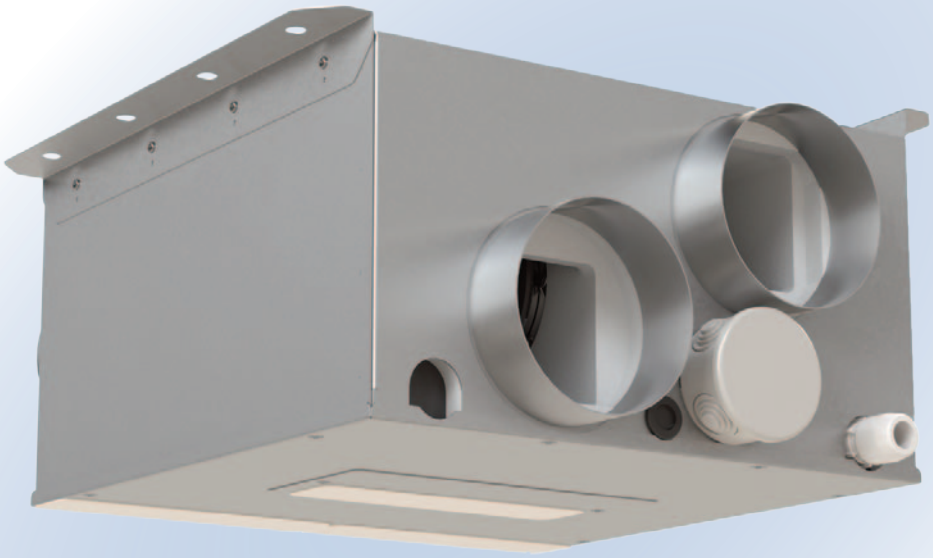
DIMENSIONS - mm



Weight - 17 kg

N.B a clearance of at least 200 mm should be allowed at the back of the unit for access to the filters,

Mini



Mini

- with summer bypass and frost-stat
- efficient, low energy solution to controlling condensation and pollution in residential properties up to 70m²
- up to 83% 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

* non-bypass models available

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Mini

GENERAL FEATURES

- for 1 or 2 bedroom apartments, hotel rooms, student accommodation, extra care facilities, multi-occupancy establishments etc
- Up to 30 litre/sec at 50Pa - max 34 litre/sec capacity
- sfp down to 1.11 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°C and -8°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 with galvanised sheet steel casing
- 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 60ºC
- easy to access standard, disposable G3 filters
- counter flow heat exchanger
- all models bottom access only with right or left drain. Allow clearance on discharge side of unit for access to wiring connections. Sufficient allowance also required to remove lid

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 (except non-bypass models)

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.

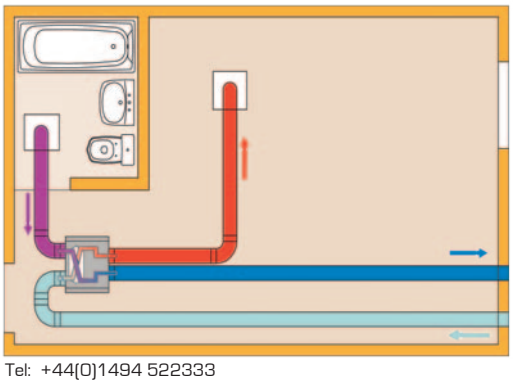
COMPLIES WITH

- 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

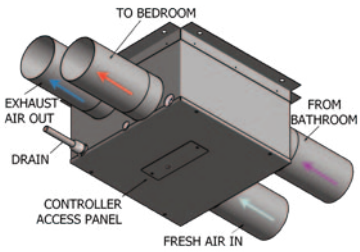
TYPICAL SPECIFICATION AVAILABLE AT

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

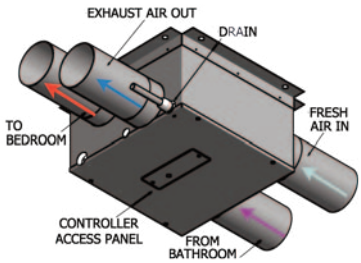
- Incoming fresh air
- Warmed fresh air
- Extracted warm, moist, stale air
- Cooled outgoing stale air
- WHHR Mini DC



WHHR MINI DC OPTION 2 (LEFT HAND DRAIN)



WHHR MINI DC OPTION 1 (RIGHT HAND DRAIN)



MODELS AVAILABLE:

- WHHR Mini LB - left drain, bypass
- WHHR Mini RB - right drain, bypass
- WHHR Mini LBH - left drain, bypass, humidistat,
- WHHR Mini RBH - right drain, bypass, humidistat
- WHHR Mini L - left drain
- WHHR Mini R - right drain
- WHHR Mini LH - left drain, humidistat
- WHHR Mini RH - right drain, humidistat

also available with 100mm spigot

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Mini

TECHNICAL CHARACTERISTICS											
Model	Airflow l/sec					Total Power - Watts					Operating Current (Amps)
	100%	80%	60%	40%	20%	100%	80%	60%	40%	20%	
Mini	34	24	15	7	2	83	42	19	7	2	0.93

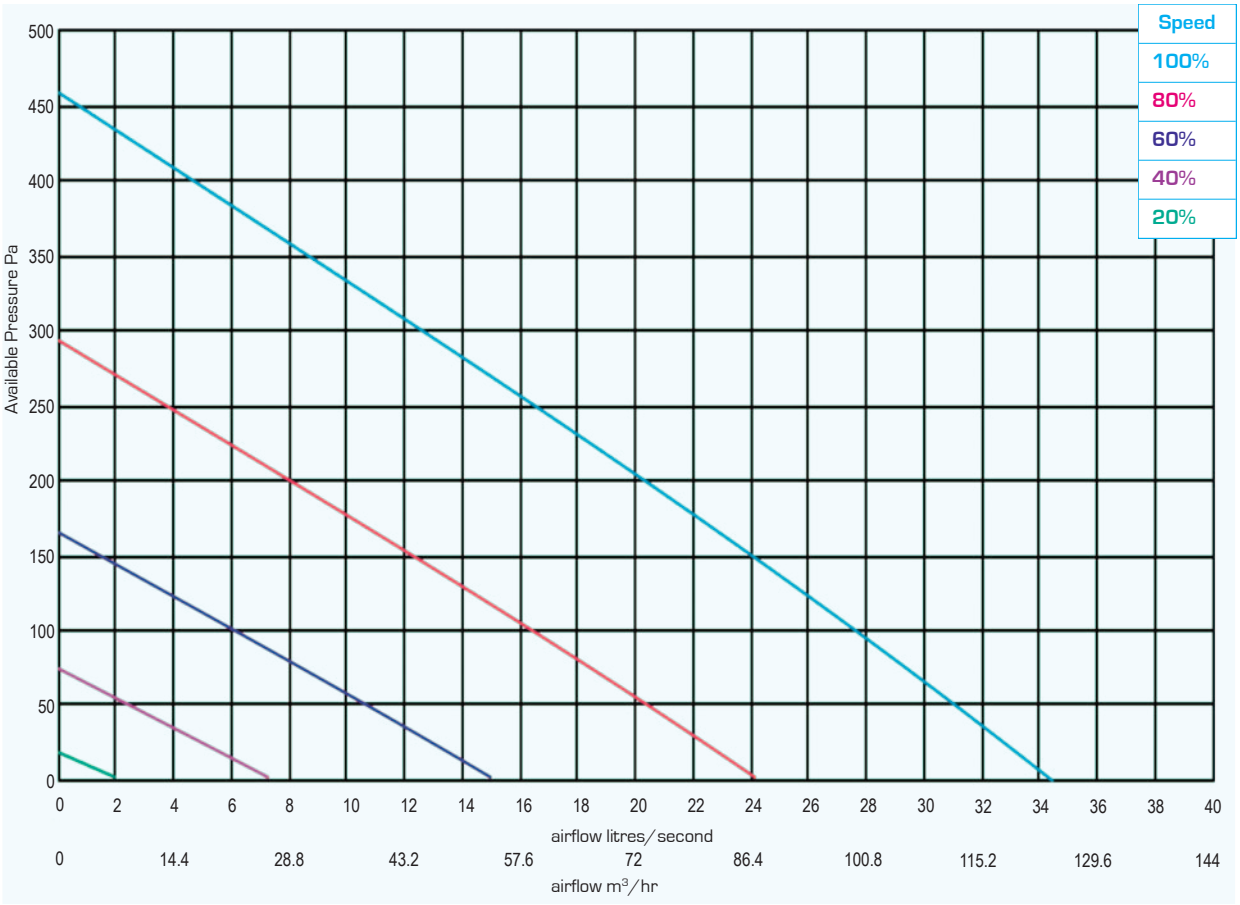
Mini		Sound Power Levels, L_w (dB) - Octave Bands Frequency Hz.								Sound Pressure dBA @ 3m
Curve Ref		63	125	250	500	1k	2k	4k	8k	
100% (34 l/sec)	Extract	63	69	69	69	63	59	56	50	
	Supply	68	74	74	74	68	64	61	55	
	Breakout	66	67	61	55	43	33	24	16	39.3
80% (24 l/sec)	Extract	59	65	64	64	58	54	50	43	
	Supply	64	70	69	69	63	59	55	48	
	Breakout	62	63	56	50	38	28	18	9	34.6
60% (15 l/sec)	Extract	54	59	58	58	51	47	42	33	
	Supply	59	64	63	63	56	52	47	38	
	Breakout	57	57	50	44	31	21	10	<5	28.6
40% (7 l/sec)	Extract	47	52	50	49	43	39	32	21	
	Supply	52	57	55	54	48	44	37	26	
	Breakout	50	50	42	35	23	13	<5	<5	20.7
20% (2 l/sec)	Extract	36	41	37	36	29	24	15	<5	
	Supply	41	46	42	41	34	29	20	7	
	Breakout	39	39	29	22	9	5	<5	<5	<10.0
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 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	1.11	83%	1.40	82%	1.40	82%
Kitchen + 2 additional wet rooms	1.40	82%				
Figures at minimum flow rate conditions						

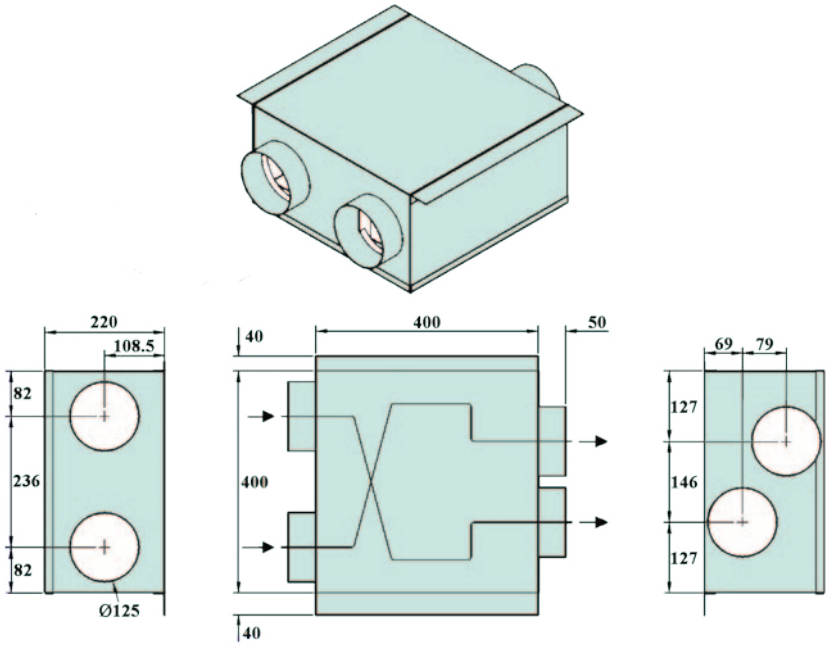
Vectaire Ltd can supply all accessories for use with these units, including product filters. air filter cassettes, silencers, fire dampers, air valves, ducting, outside grilles and wall cowls. Additionally, Vectaire offers a design service to ensure that the unit installed is the best possible to provide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

Mini

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



Weight - 9 kg

N.B sufficient access for safe maintenance or removal following installation, MUST be provided for this product.

Purge-Box 100
Purge-Box 200

Purge-Box

- Vectaire Purge-Box units are designed to provide purge ventilation as required by Building Regulations
- they are an efficient, low energy solution to creating a healthier ambient by removing humidity, poor quality air, and stale odours QUICKLY in residential dwellings
- Vectaire Purge-Box units can be used as stand alone units or in conjunction with a Vectaire MVHR or MEV system
- available in two capacities
- the two sizes of Vectaire Purge-Box will help tackle overheating issues (Building Regulations, Part O)
- variable adjustment - trickle, boost and purge speeds set at installation
- for ceiling, loft or void mounting
- Vectaire Purge Boxes are easy to install using 220mm x 90mm ducting
- low profile units
- require only one discharge grille
- low sound levels
- low running costs
- manufactured in UK to ISO 9001:2015 and 14001:2015

Purge-Box 100
Purge-Box 200

GENERAL FEATURES

- Purge-Box 100 - up to 188 l/s at 50Pa - max 200 l/s capacity - sfp down to 0.20 W/l/s
- Purge-Box 200 - up to 233 l/s at 50Pa - max 251 l/s capacity - sfp down to 0.27 W/l/s
- powerful performance levels for rapid purge ventilation
- easy and economical to install and maintain
- for ceiling, loft or void in-line installation
- can be angled horizontally or vertically
- easy connection to 220mm x 90mm flat ducting
- variable boost speeds 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 sound levels
- low running costs
- 3 year warranty - 1 year parts and labour, 2 years parts only

TECHNICAL FEATURES

- compact, low profile units
- casing from galvanised sheet steel
- pre-wired for easy electrical connection
- service and maintenance panel easily accessible from underneath
- low energy, high efficiency EC external rotor motor with sealed for life bearings and dynamically balanced backward curved impellors
- operates in temperature up to 60ºC
- complete with mounting bracket
- IPX4 rated

CONTROL FEATURES

- 3 integrated, fully adjustable speeds
- integral, adjustable over-run timer - adjustable from 0-30 minutes set at installation

COMPLIES WITH

- Building Regulations
- The Ecodesign for Energy-Related Products and Energy Information (Amendment) (EU Exit) Regulations 2019
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012
- Electromagnetic Compatibility Regulations 2016
- Electrical Equipment (Safety) Regulations 2016
- manufactured in UK to ISO 9001:2015 and 14001:2015
- UKCA/CE marked

MODELS AVAILABLE:

- PURGE-BOX100 - max 200 l/s capacity
- PURGE-BOX 200 - max 251 l/s capacity

Vectaire Ltd can supply all ancillaries 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.

Purge-Box 100
Purge-Box 200

TECHNICAL CHARACTERISTICS									
Model	Airflow l/sec				Total Power - Watts				Operating Current (Amps)
	100%	80%	60%	40%	100%	80%	60%	40%	
PURGE-BOX100	200	148	111	74	99	62	29	13	0.74
PURGE-BOX200	251	188	141	94	84	31	21	15	0.70

PURGE-BOX 100		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% (200 l/sec)	Extract	58	64	65	61	59	57	53	57	
	Supply	64	69	70	66	65	63	58	63	
	Breakout	62	62	56	45	37	29	18	20	33.2
80% (148 l/sec)	Extract	53	58	58	54	53	51	44	46	
	Supply	58	64	64	59	58	56	50	52	
	Breakout	56	56	50	39	31	22	9	9	27.0
60% (111 l/sec)	Extract	50	54	52	47	46	43	35	35	
	Supply	55	59	57	53	52	48	41	41	
	Breakout	53	52	43	32	24	21	6	6	21.5
40% (74l/sec)	Extract	44	46	44	40	39	34	26	13	
	Supply	50	52	50	45	44	40	32	19	
	Breakout	47	44	35	24	17	5	5	5	13.9
The breakout dB(A) sound pressure values are given for hemispherical free field propagation at a distance of 3m from the unit										

PURGE-BOX 200		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% (251 l/sec)	Extract	58	60	65	63	64	62	58	58	
	Supply	63	65	70	68	69	67	63	63	
	Breakout	61	58	57	49	44	36	26	24	34.4
80% (188 l/sec)	Extract	53	55	59	56	57	55	50	48	
	Supply	58	60	64	61	62	60	55	53	
	Breakout	56	53	51	42	37	29	18	14	28.2
60% (141 l/sec)	Extract	49	50	52	49	50	48	42	39	
	Supply	54	55	57	54	55	53	47	44	
	Breakout	52	48	44	35	30	22	10	5	21.6
40% (94 l/sec)	Extract	43	42	43	40	41	38	32	25	
	Supply	48	47	48	45	46	43	37	30	
	Breakout	46	40	35	26	21	12	< 5	< 5	13.0
The breakout dB(A) sound pressure values are given for hemispherical free field propagation at a distance of 3m from the unit										

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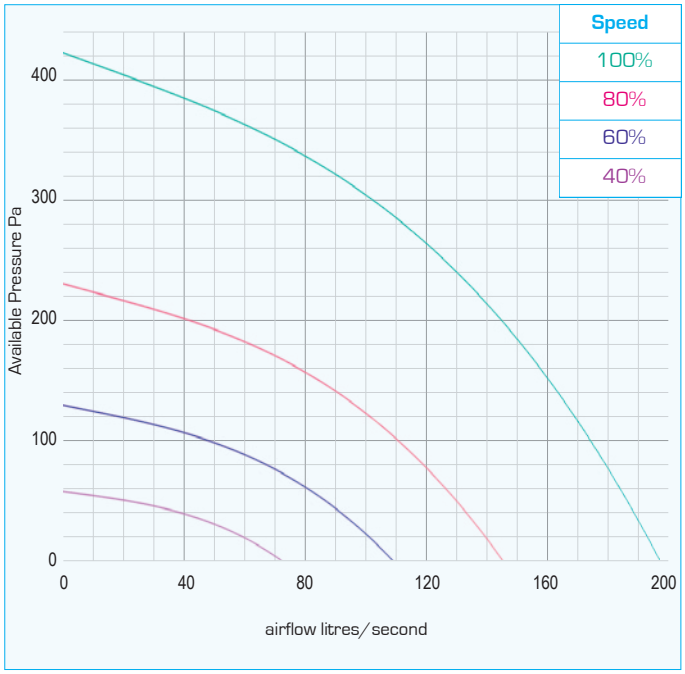
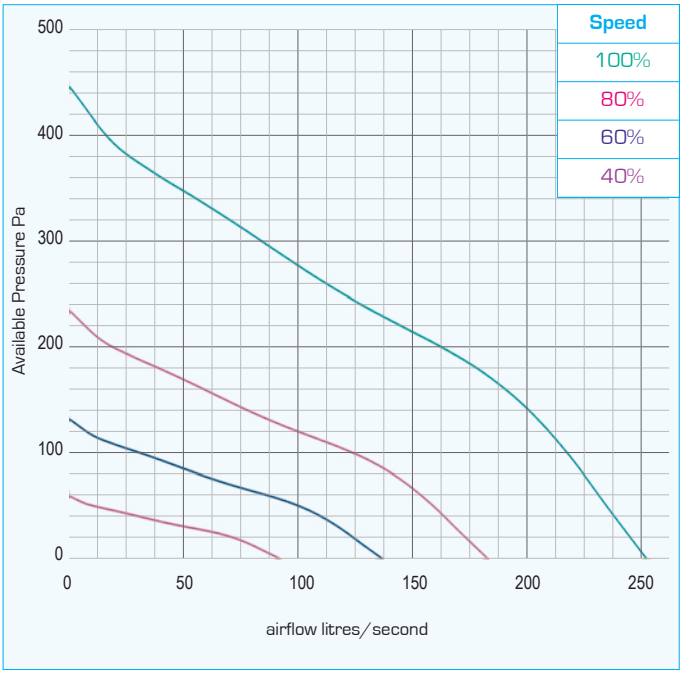
Purge-Box 100
Purge-Box 200

PERFORMANCE (curves are for guidance only)

Purge-Box 100

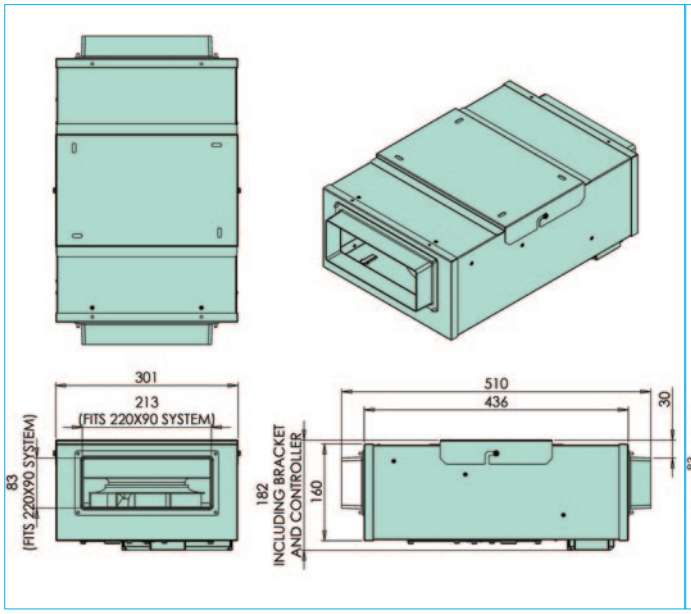


Purge-Box 200

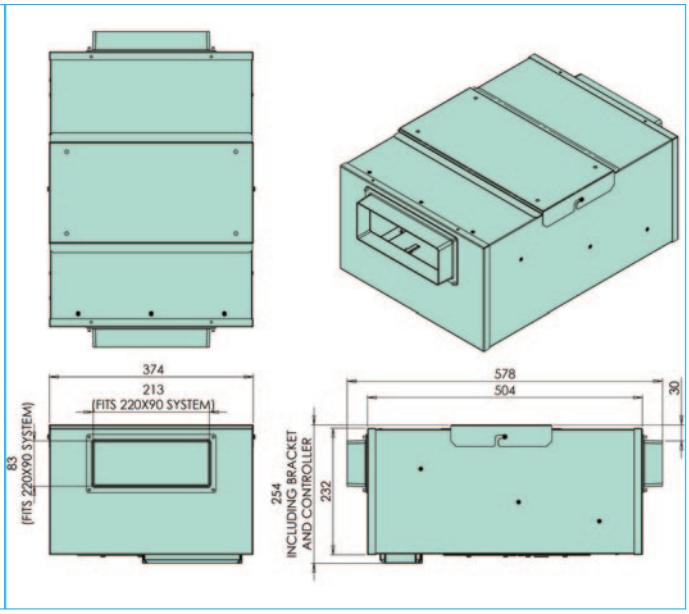


DIMENSIONS - mm

Purge-Box 100 - 7kgs

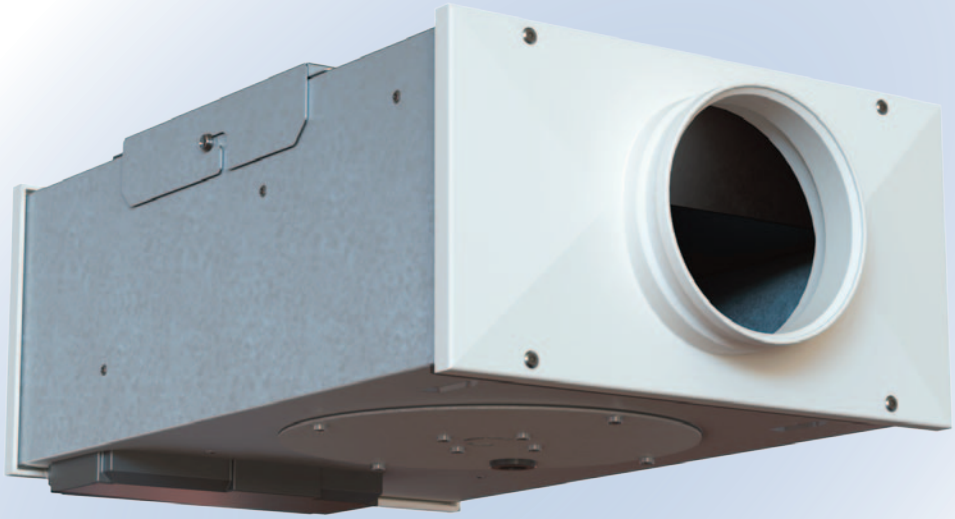


Purge-Box 200 - 10 kgs



N.B - sufficient access for safe maintenance or removal following installation, MUST be provided for this product -

Microbox 125/2DC-B



Microbox 125/2DC

- efficient, low energy solution to controlling condensation and pollution in residential properties up to 185m²
- variable choice of low (trickle), boost and purge speed at installation
- for ceiling, loft or void installation
- compact, ultra low profile unit
- requires only one discharge grille
- cost savings compared to multi-spigot installation
- low noise levels
- low running costs
- available with 204 x 60mm spigot
- humidistat model available
- complies with Building Regulations
- manufactured in UK to ISO 9001:2015 and 14001:2015

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Microbox 125/2DC-B

GENERAL FEATURES

- up to 97 litre/sec at 50Pa - max 108 litre/sec capacity
- sfp down to 0.20 W/l/s
- easy and economical to install and maintain
- for ceiling, loft or void in-line installation
- can be angled horizontally or vertically
- variable low (trickle), boost and purge options - purge option using own volt-free purge cable.
- 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
- 3 year warranty - 1 year parts and labour, 2 years parts only

TECHNICAL FEATURES

- compact, low profile unit
- casing from galvanised sheet steel
- thermal overload protection
- pre-wired for easy electrical connection
- service and maintenance panel easily accessible
- low energy EC external rotor motor with sealed for life bearings and dynamically balanced backward curved impellors
- operates in temperature up to 60ºC
- complete with mounting bracket and anti-vibration plate
- IPX4 rated

CONTROL FEATURES

- variable adjustment - trickle, boost and purge speeds set at installation (purge option using own volt-free purge cable)
- boost setting (via switched live)
- integral, adjustable over-run timer - adjustable from 0-30 minutes set at installation

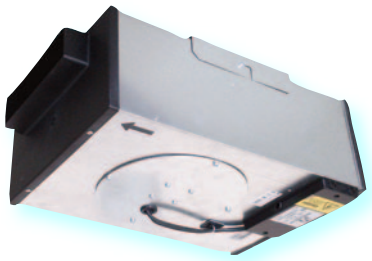
COMPLIES WITH

- 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
- Energy Saving Trust Best Practice Compliant

TYPICAL SPECIFICATION AVAILABLE AT

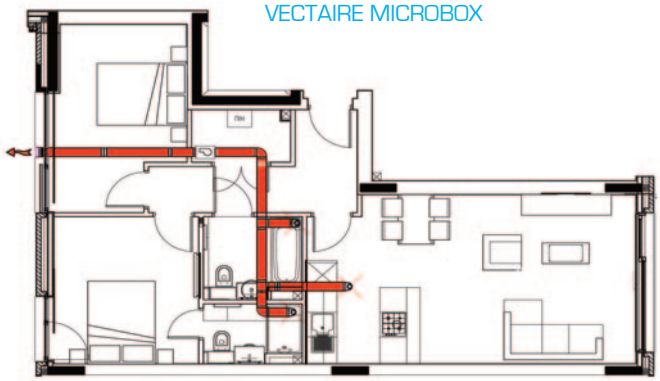
http://www.vectaire.co.uk/downloads

MBOX125/2DC204 - with rectangular spigots - 204mm x 60mm

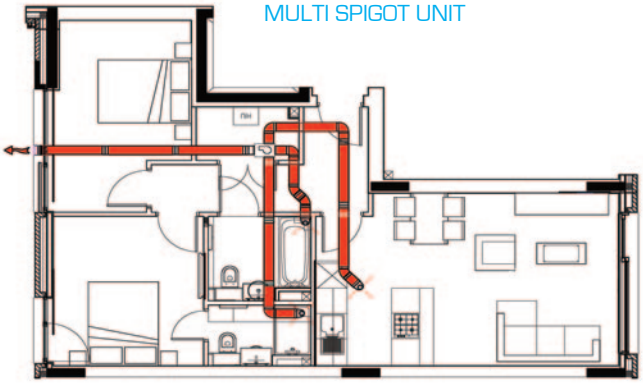


DUCT RUN COST SAVINGS

VECTAIRE MICROBOX



MULTI SPIGOT UNIT



TYPICAL MICROBOX SAVING - £249 PER SYSTEM - less ducting, fewer fire dampers and less coring, easier to install

MODELS AVAILABLE:

- MBOX125/2DC - standard model
- MBOX125/2DCH - with integral humidistat
- MBOX125/2DC204 - spigot - 204mm x 60mm
- MBOX125/2DC204H - spigot - 204mm x 60mm and integral humidistat

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.

Microbox 125/2DC-B

TECHNICAL CHARACTERISTICS											
Model	Airflow l/sec					Total Power - Watts					Operating Current (Amps)
	Max Boost	Max Trickle	80%	60%	40%	Max Boost	Max Trickle	80%	60%	40%	
Microbox 125/2DC	108	101	80	60	40	46	45	26	12	6	0.74

Microbox 125/2DC		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 (108 l/sec)	Extract	53	58	59	55	54	52	48	52	
	Supply	58	63	64	60	59	57	53	57	
	Breakout	56	56	51	41	34	26	16	18	28.2
Max Trickle (101 l/sec)	Extract	52	57	58	54	53	51	46	50	
	Supply	57	62	63	59	58	56	51	55	
	Breakout	55	55	50	40	33	25	14	16	27.2
80% (80 l/sec)	Extract	48	53	53	49	48	46	40	42	
	Supply	53	58	58	54	53	51	45	47	
	Breakout	51	51	45	35	28	20	8	8	22.5
60% (60 l/sec)	Extract	45	49	47	43	42	39	32	32	
	Supply	50	54	52	48	47	44	37	37	
	Breakout	48	47	39	29	22	19	< 5	< 5	17.4
40% (40 l/sec)	Extract	40	42	40	36	35	31	24	12	
	Supply	45	47	45	41	40	36	29	17	
	Breakout	43	40	32	22	15	5	< 5	< 5	10.5
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 only			
	2009 Data	2012 Data	SAP 10 Data
Exhaust Terminal Configuration	Specific Fan Power (W/l/sec)	Specific Fan Power (W/l/sec)	Specific Fan Power (W/l/sec)
Kitchen + 1 additional wet room	0.20	0.20	0.20
Kitchen + 2 additional wet rooms	0.26	0.26	0.26
Kitchen + 3 additional wet rooms	0.34	0.34	0.34
Kitchen + 4 additional wet rooms	0.44	0.44	0.44
Kitchen + 5 additional wet rooms	0.55	0.55	0.55
Figures at minimum flow rate conditions			

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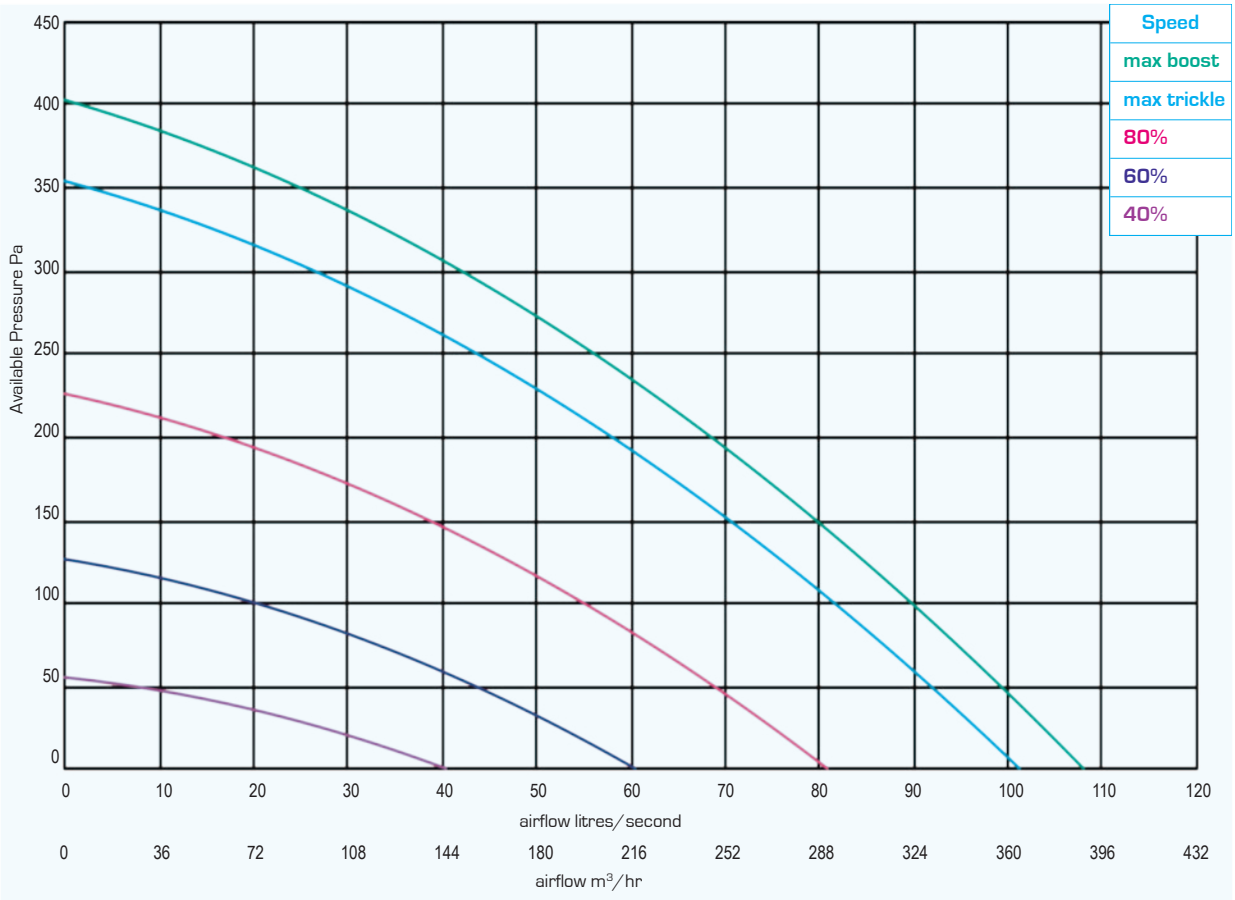
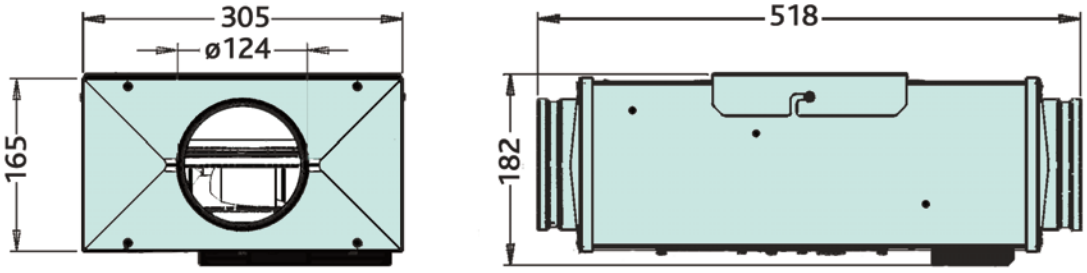
Microbox 125/2DC-B

PERFORMANCE (curves are for guidance only)

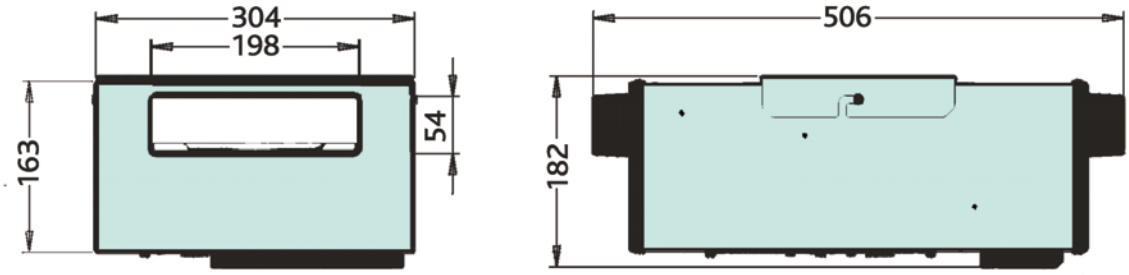


DIMENSIONS - mm

MBOX125/2DC

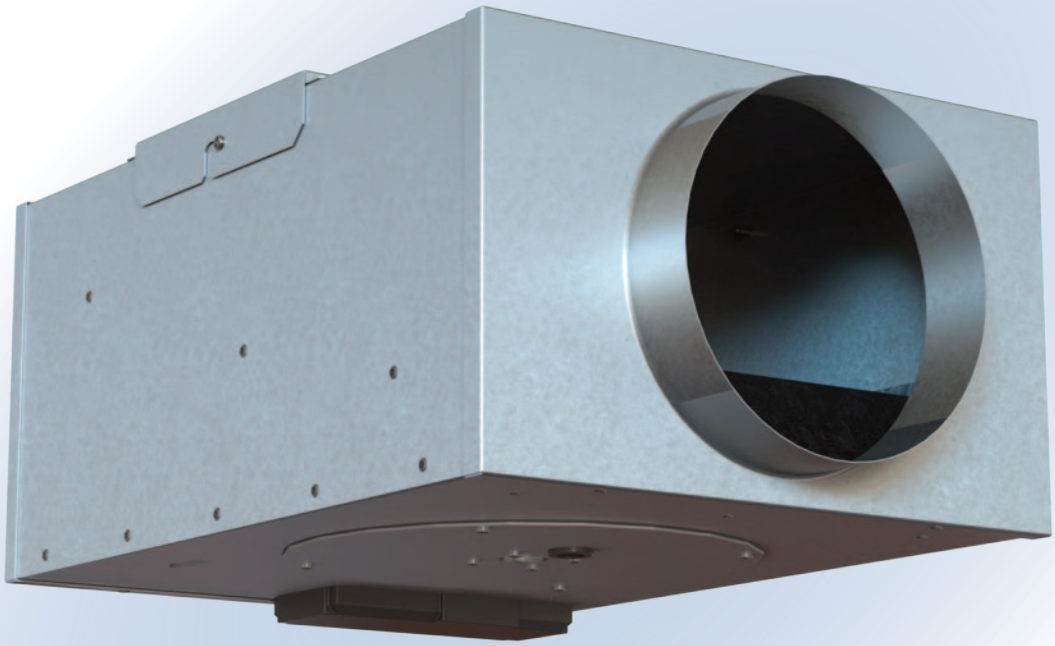


MBOX125/2DC204



N.B sufficient access for safe maintenance or removal following installation, MUST be provided for this product - kg 7.

Microbox 200/2DC



Microbox 200/2DC

- efficient, low energy solution to controlling condensation and pollution in residential properties up to 335m²
- variable choice of low (trickle), boost and purge speed at installation
- for ceiling, loft or void installation
- powerful low profile unit
- requires only one discharge grille
- cost savings compared to multi-spigot installation
- low noise levels
- low running costs
- humidistat model available
- complies with Building Regulations
- manufactured in UK to ISO 9001:2015 and 14001:2015

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Microbox 200/2DC

GENERAL FEATURES

- up to 233 litre/sec at 50Pa - max 251 litre/sec capacity
- sfp down to 0.27 W/l/s
- easy and economical to install and maintain
- for ceiling, loft or void in-line installation
- can be angled horizontally or vertically
- variable low (trickle), boost and purge options - purge option using own volt-free purge cable.
- 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
- 3 year warranty - 1 year parts and labour, 2 years parts only

TECHNICAL FEATURES

- powerful, low profile unit, 232mm deep 234mm with control box)
- casing from galvanised sheet steel
- pre-wired for easy electrical connection
- service and maintenance panel easily accessible
- low energy EC external rotor motor with sealed for life bearings and dynamically balanced backward curved impellors
- operates in temperature up to 60ºC
- complete with mounting bracket and anti-vibration plate
- IPX4 rated

CONTROL FEATURES

- variable adjustment - trickle, boost and purge speeds set at installation (purge option using own volt-free purge cable)
- boost setting (via switched live)
- integral, adjustable over-run timer - adjustable from 0-30 minutes set at installation

COMPLIES WITH

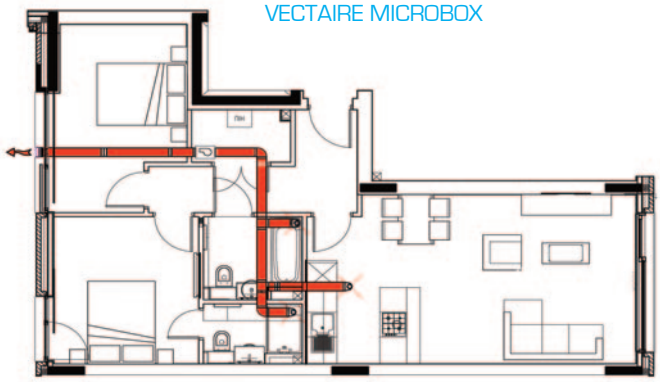
- Building Regulations for enhanced energy saving capability
- Building Regulations for reliable, efficient ventilation
- EU RoHS Directive Compliant.
- Complies with IEC60335-2-80, LVD2006/95/CE
- EMC2014/30/UE (European Directive against radio interference and electro-magnetic compatibility
- manufactured in UK to ISO 9001:2015 and 14001:2015
- CE marked
- SAP PCDB Listed

TYPICAL SPECIFICATION AVAILABLE AT

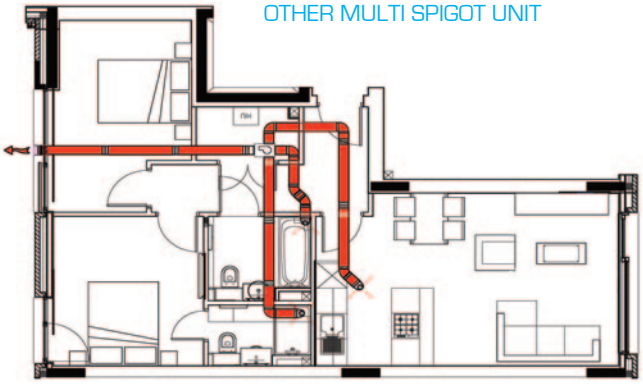
http://www.vectaire.co.uk/downloads

DUCT RUN COST SAVINGS

VECTAIRE MICROBOX



OTHER MULTI SPIGOT UNIT



TYPICAL MICROBOX SAVING - £249 PER SYSTEM - less ducting, fewer fire dampers and less coring, easier to install

MODELS AVAILABLE:

- MBOX200/2DC - standard model
- MBOX200/2DCH - with integral humidistat

also available with 150mm dia spigot or rectangular spigot 220mm x 90mm

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.

Microbox 200/2DC

TECHNICAL CHARACTERISTICS											
Model	Airflow l/sec					Total Power - Watts					Operating Current (Amps)
	Max Boost	Max Trickle	80%	60%	40%	Max Boost	Max Trickle	80%	60%	40%	
Microbox 200/2DC	251	235	188	141	94	84	48	31	21	15	0.70

Microbox 200/2DC		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 (251 l/sec)	Extract	58	60	65	63	64	62	58	58	
	Supply	63	65	70	68	69	67	63	63	
	Breakout	61	58	57	49	44	36	26	24	34.4
Max Trickle (235 l/sec)	Extract	57	59	64	61	62	60	57	56	
	Supply	62	64	69	66	67	65	62	61	
	Breakout	60	57	56	47	42	34	25	22	33.0
80% (188 l/sec)	Extract	53	55	59	56	57	55	50	48	
	Supply	58	60	64	61	62	60	55	53	
	Breakout	56	53	51	42	37	29	18	14	28.2
60% (141 l/sec)	Extract	49	50	52	49	50	48	42	39	
	Supply	54	55	57	54	55	53	47	44	
	Breakout	52	48	44	35	30	22	10	5	21.6
40% (94 l/sec)	Extract	43	42	43	40	41	38	32	25	
	Supply	48	47	48	45	46	43	37	30	
	Breakout	46	40	35	26	21	12	< 5	< 5	13.0
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 only			
	2009 Data	2012 Data	SAP 10 Data
Exhaust Terminal Configuration	Specific Fan Power (W/l/sec)	Specific Fan Power (W/l/sec)	Specific Fan Power (W/l/sec)
Kitchen + 1 additional wet room	0.28	0.28	0.28
Kitchen + 2 additional wet rooms	0.27	0.27	0.27
Kitchen + 3 additional wet rooms	0.28	0.28	0.28
Kitchen + 4 additional wet rooms	0.36	0.36	0.36
Kitchen + 5 additional wet rooms	0.42	0.42	0.42
Kitchen + 6 additional wet rooms	0.52	0.52	0.52
Figures at minimum flow rate conditions			

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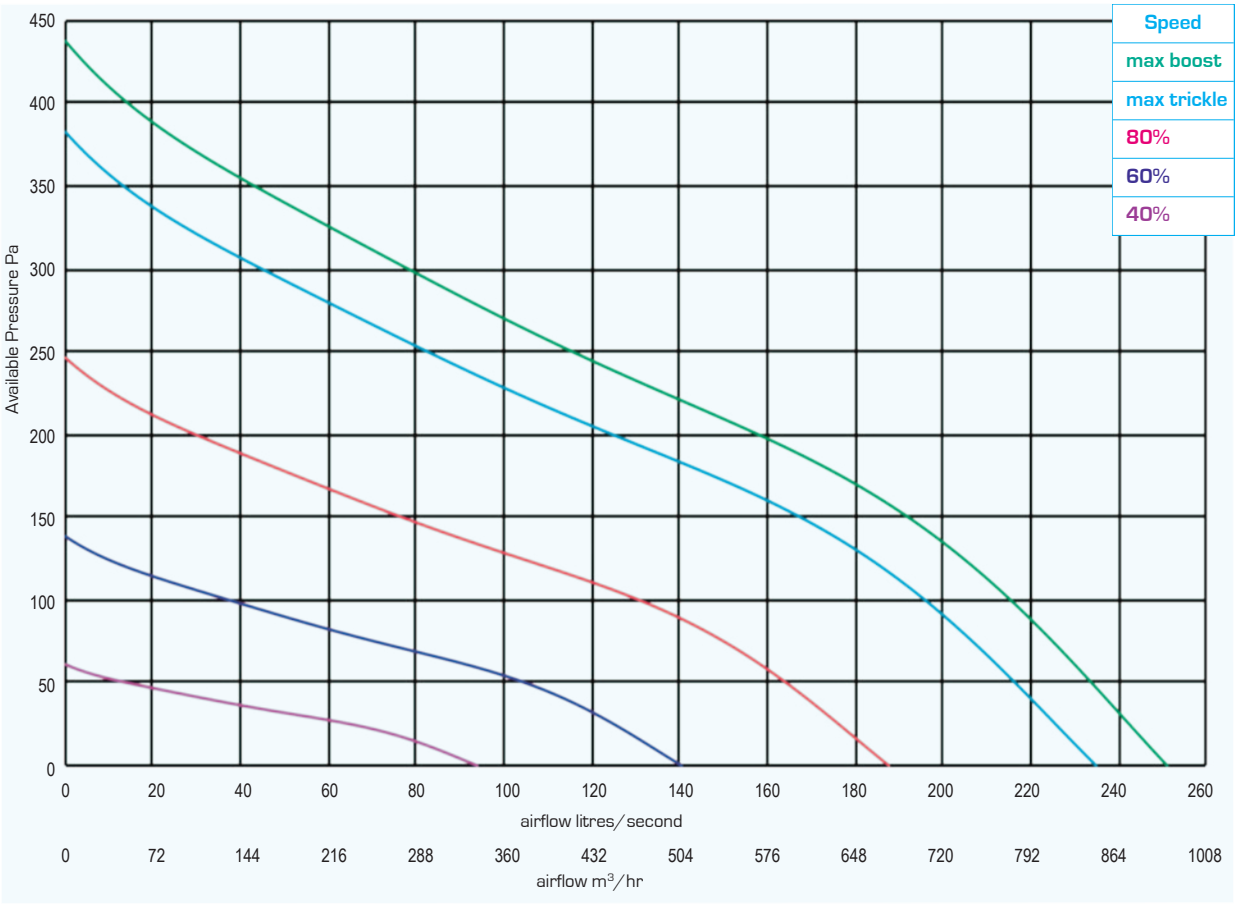
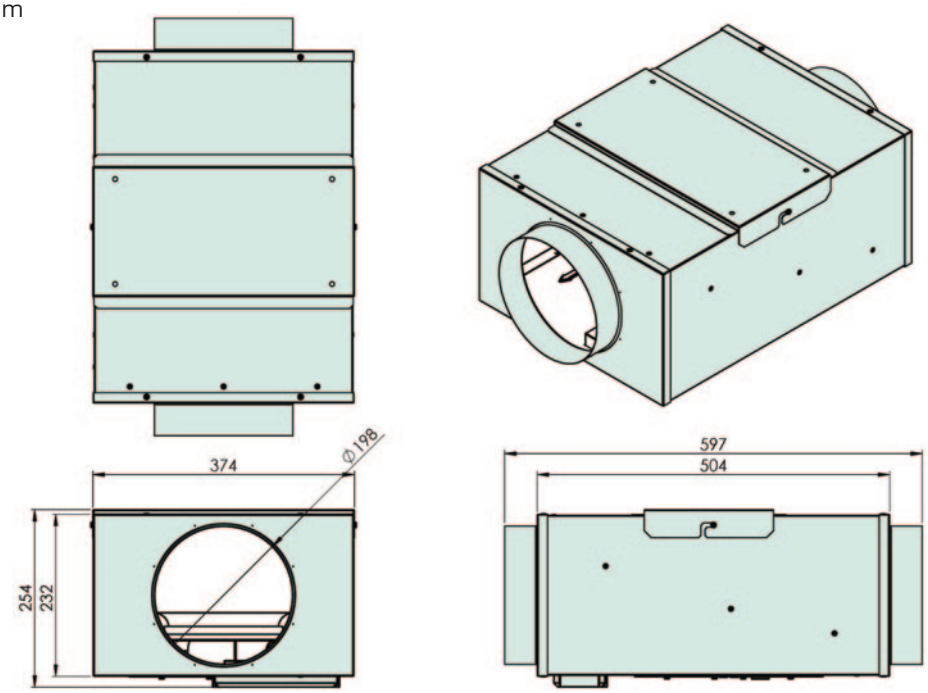
Microbox 200/2DC

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



N.B sufficient access for safe maintenance or removal following installation, MUST be provided for this product - kg 10.

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Elegance "16"

16 l/s Trickle Speed 2

SAP PCDB Listed

energy efficient-environmentally friendly-economical

Elegance "16" - EL1003

- energy efficient EC motor - lowest energy consumption of comparable fan in the UK
- provides low level continuous ventilation to control condensation
- 3 speed axial fan - exceeds **16** l/sec at Trickle Speed 2
- powerful low profile unit
- wall, ceiling or window (with additional window kit)
- low noise levels
- low running costs
- for any domestic wet room
- complies with Building Regulations

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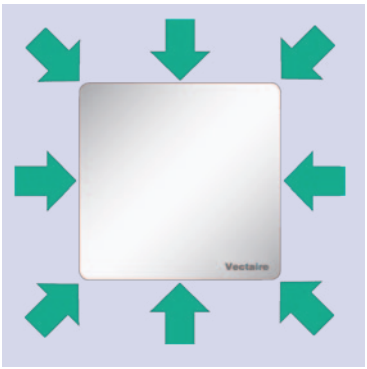
Elegance "16" - EL1003

GENERAL FEATURES

- exhausts directly to the outside (through wall, or window installation with additional window kit, or with medium length ducting
- sfp down to 0.09 W/l/s
- easy and economical to install and maintain
- runs continuously at pre-selected choice of two speeds (fixed at installation)
- Speed 1 operates at 12 l/s (factory set)
- Speed 2 operates at **17** l/s
- speed boosted to maximum (26.7 l/s) using integral pull cord or by:
  - remote switch/light switch
  - PIR sensor
  - DRH240 (dynamic remote humidistat)
- anti-vibration gasket
- patented anti-turbulence deflectors ensure very low noise levels and optimum performances
- energy saving ventilation
- extremely low running costs
- low carbon footprint
- 5 year warranty

TECHNICAL FEATURES

- shockproof, high quality technopolymer casing
- designed using latest wind tunnel technology and CFD simulations
- EC induction motor with thermal protection
- 43,000 hour life motors with maintenance free and long life ball bearings
- operates in ambient temperatures up to 40ºC
- double insulated - no earth required
- IPX4 Splashproof rated - can safely be installed in Zones I and II, SELV models IPX7 rated



ELEGANCE "16" MODELS AVAILABLE:

- EL1003 - 3 speed, continuous running, cord or remote
- EL1003DT - 3 speed, continuous running with comfort timer (timer does not activate unless fan has been running for 2 minutes to avoid unnecessary night-time operation) and pull-cord
- EL1003HDT - with comfort timer, humidistat and pull-cord
- EL1003LV - 3 speed, continuous running with pull-cord - LOW VOLT (SELV)
- EL1003DTLV -3 speed, continuous running, with comfort timer, and pull-cord LOW VOLT (SELV)
- EL1003HDTLV - 3 speed, continuous running, with comfort timer, humidistat and pull-cord - LOW VOLT (SELV)

N.B timer adjustable from 0-30 minutes

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
- CE marked
- SAP PCDB Listed
- Energy Saving Trust Best Practice Compliant

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.

N.B These fans are NOT suitable for use with Gravity Grilles. They should be installed using either Cowls or Fixed Grilles. Only approved accessories should be used:

Wall Plates – as required
Window kits – as required
Wall terminations – all wall terminations must use the approved wall cowl or high rise kit

Elegance "16" - EL1003

TECHNICAL CHARACTERISTICS									
Model	Airflow l/sec			Power - Watts			dBA (@ 3m in free field)		
	Trickle 1	**Trickle 2**	Boost	Trickle 1	Trickle 2	Boost	Trickle 1	Trickle 2	Boost
EL1003	12	**17**	26.7	0.7	1.2	3.5	14	22	33

RESULTS for SAP CALCULATIONS - SAP2012 data ENERGY LEVEL PERFORMANCE - using rigid ducting only			
Unit Configuration	Specific Fan Power (W/l/s)	EST Best Practice Performance Compliant	Flow Rate (l/sec)
In room - kitchen	0.12	Yes	13.0
In room - wetroom	0.11	Yes	8.0
Through wall - kitchen	0.09	Yes	13.0
Through wall - wetroom	0.09	Yes	8.0
Figures from BRE test results at minimum flow rate conditions			

RESULTS for SAP CALCULATIONS - SAP2012 data ENERGY LEVEL PERFORMANCE - using flexible ducting only			
Unit Configuration	Specific Fan Power (W/l/s)	EST Best Practice Performance Compliant	Flow Rate (l/sec)
In room - kitchen	0.13	Yes	13.0
In room - wetroom	0.11	Yes	8.0
Through wall - kitchen	0.09	Yes	13.0
Through wall - wetroom	0.09	Yes	8.0
Figures from BRE test results at minimum flow rate conditions			

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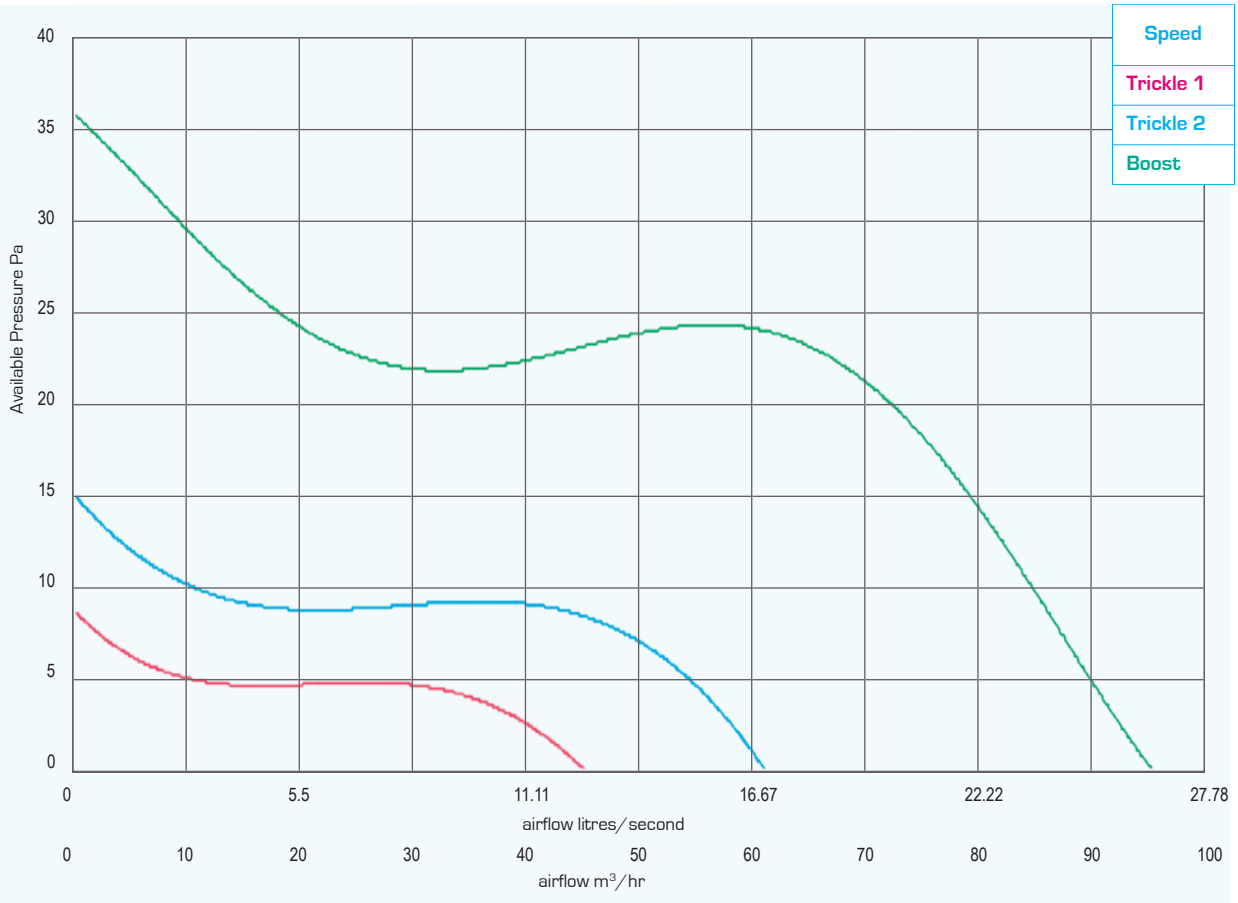
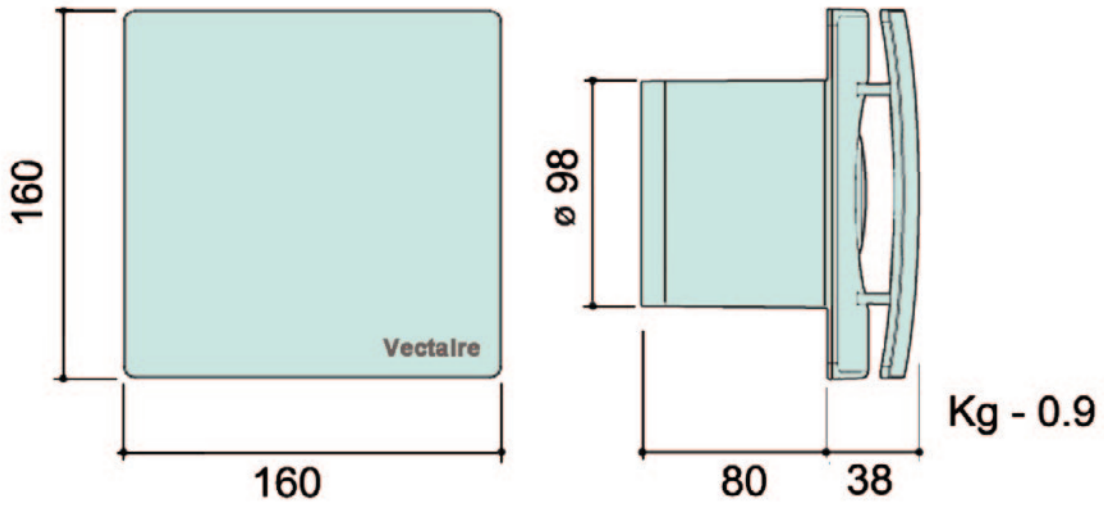
Elegance "16" - EL1003

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



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Elegance - EL1203
120 mm 3 Speed Fan

NEW

Elegance - EL1203

- 120mm diameter
- energy efficient EC motor
- provides low level continuous ventilation to control condensation
- 3 speed axial fan
- powerful low profile unit
- wall or ceiling
- low noise levels
- low running costs
- for all domestic wet room
- complies with Building Regulations

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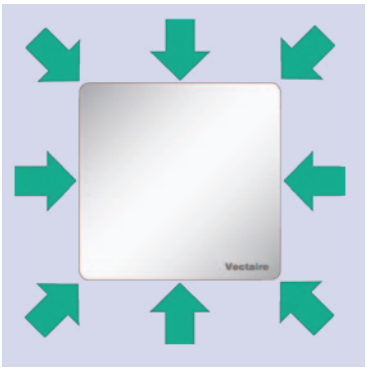
Elegance - EL1203

GENERAL FEATURES

- exhausts directly to the outside (through wall, or with medium length ducting)
- easy and economical to install and maintain
- runs continuously at pre-selected choice of two speeds (fixed at installation)
- Speed 1 operates at 13 l/s (factory set)
- Speed 2 operates at 19 l/s
- speed boosted to maximum (44 l/s) by::
  - remote switch/light switch
  - PIR sensor
  - DRH240 (dynamic remote humidistat)
- anti-vibration gasket
- patented anti-turbulence deflectors ensure very low noise levels and optimum performances
- energy saving ventilation
- extremely low running costs
- low carbon footprint
- 5 year warranty

TECHNICAL FEATURES

- shockproof, high quality technopolymer casing
- designed using latest wind tunnel technology and CFD simulations
- EC induction motor with thermal protection
- 43,000 hour life motors with maintenance free and long life ball bearings
- operates in ambient temperatures up to 40ºC
- double insulated - no earth required
- IPX4 Splashproof rated - can safely be installed in Zones I and II



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
- CE marked

MODELS AVAILABLE:

- EL1203 - 3 speed, continuous running
- EL1203DT - 3 speed, continuous running with comfort timer (timer does not activate unless fan has been running for 2 minutes to avoid unnecessary night-time operation).
- EL1203HDT - with humidistat, comfort timer

N.B timer adjustable from 0-30 minutes
humidistat adjustable from between 40% and 90% relative humidity

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.
N.B These fans are NOT suitable for use with Gravity Grilles. They should be installed using either Cowls or Fixed Grilles. Only approved accessories should be used:

Wall Plates – as required
Window kits – as required
Wall terminations – all wall terminations must use the approved wall cowl or high rise kit

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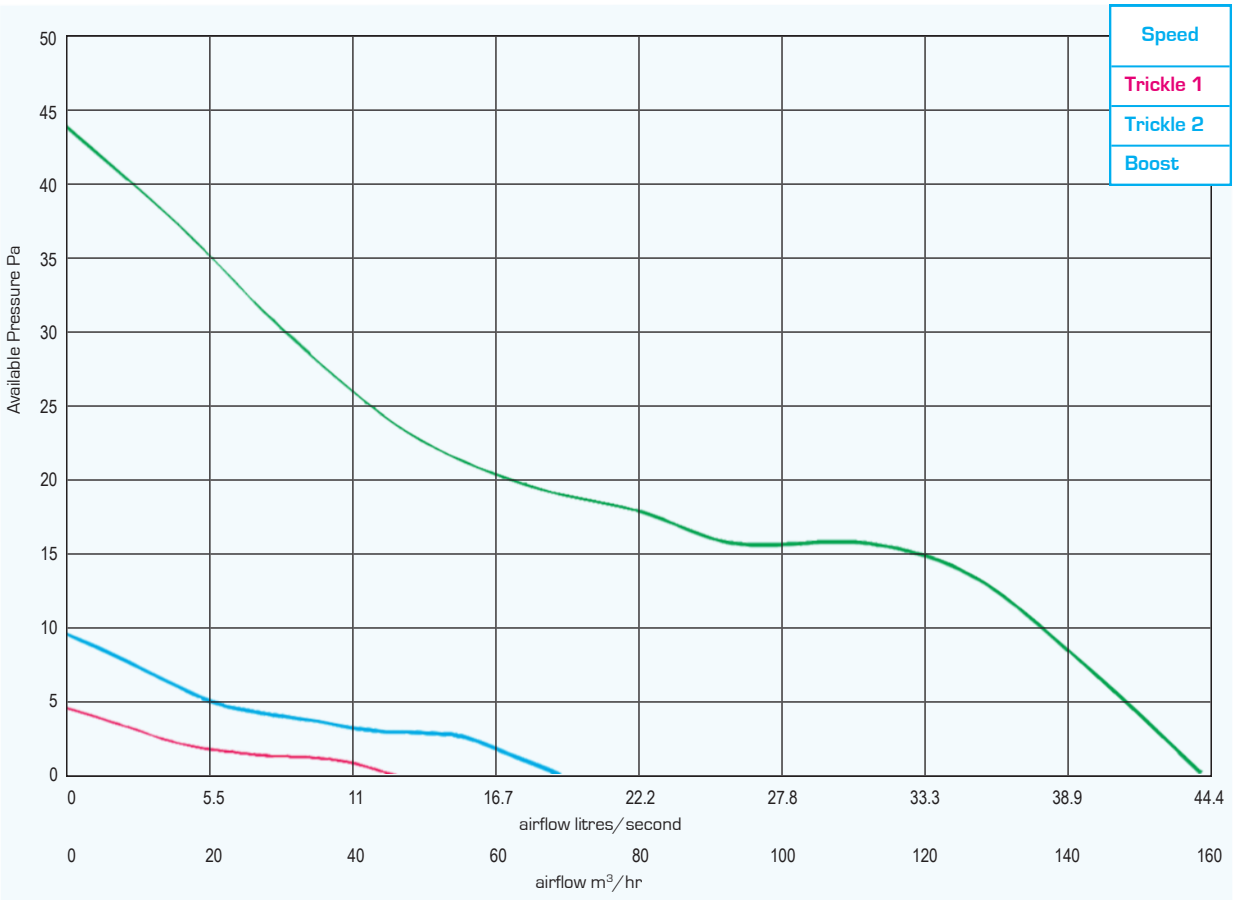
Elegance - EL1203

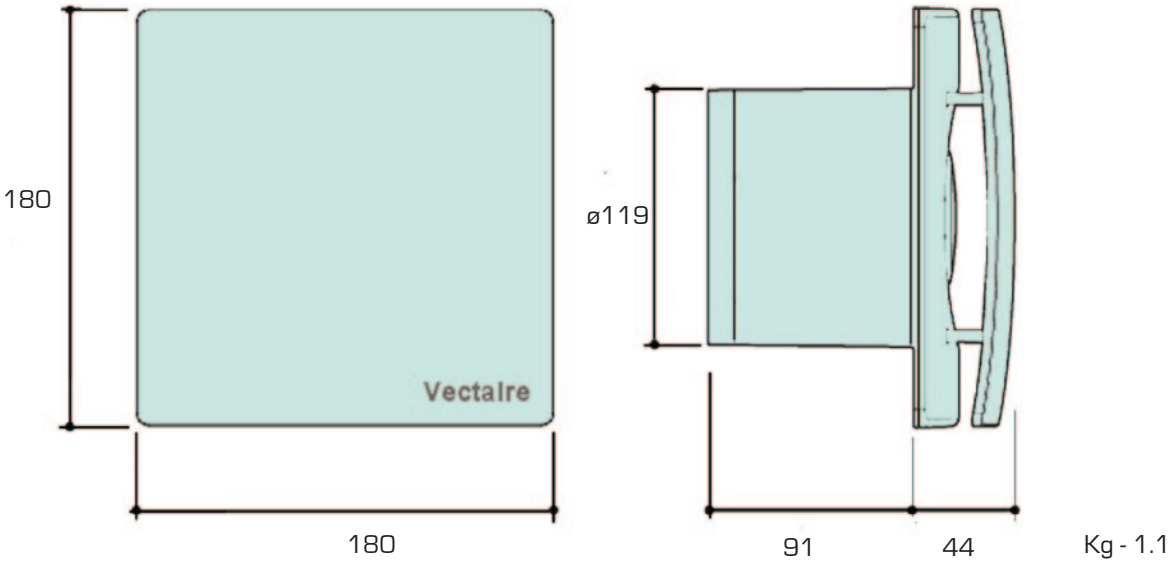
TECHNICAL CHARACTERISTICS									
Model	Airflow l/sec			Power - Watts			dBA (@ 3m in free field)		
	Trickle 1	Trickle 2	Boost	Trickle 1	Trickle 2	Boost	Trickle 1	Trickle 2	Boost
EL1203	13	19	44	0.5	0.8	5	15.1	17.3	32.4

PERFORMANCE (curves are for guidance only)



Elegance - EL1203

DIMENSIONS - mm



Kg - 1.1

Elix "**16**" - ELX1003

16 l/s Trickle Speed 2

SAP PCDB Listed

energy efficient-environmentally friendly-economical

Elix "**16**" - ELX1003

- energy efficient EC motor
- provides low level continuous ventilation to control condensation
- 3 speed centrifugal fan - **16** l/sec Trickle Speed 2
- powerful low profile unit
- wall or ceiling
- low noise levels
- low running costs
- for any domestic wet room
- complies with Building Regulations

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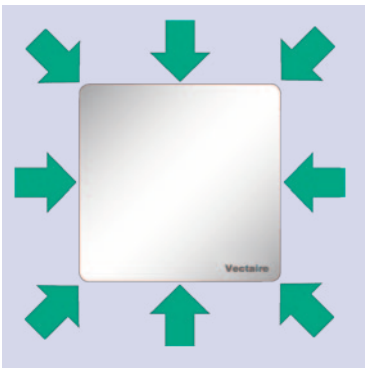
Elix "16" - ELX1003

GENERAL FEATURES

- exhausts directly to the outside or through longer lengths of ducting
- sfp down to 0.14 W/l/s
- easy and economical to install and maintain
- runs continuously at pre-selected choice of two speeds (fixed at installation)
- Speed 1 operates at 8.9 l/s (factory set)
- Speed 2 operates at **16** l/s
- speed boosted to maximum (27.8 l/s) using integral pull cord or by:
  - remote switch/light switch
  - PIR sensor
  - DRH240 (dynamic remote humidistat)
- anti-vibration gasket
- easily removable, washable polypropylene filter
- energy saving ventilation
- extremely low running costs
- low carbon footprint
- 5 year warranty

TECHNICAL FEATURES

- shockproof, high quality technopolymer casing
- designed using latest wind tunnel technology and CFD simulations
- EC induction motor with thermal protection
- 43,000 hour life motors with maintenance free and long life ball bearings
- operates in ambient temperatures up to 40ºC
- double insulated - no earth required
- IPX4 Splashproof rated - can safely be installed in Zones I and II, SELV models IPX7 rated



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
- CE marked
- SAP PCDB Listed
- Energy Saving Trust Best Practice Compliant

TYPICAL SPECIFICATION AVAILABLE AT

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

ELIX "16" MODELS AVAILABLE:

- ELX1003 - 3 speed, continuous running, cord or remote
- ELX1003DT - 3 speed, continuous running with comfort timer (timer does not activate unless fan has been running for 2 minutes to avoid unnecessary night-time operation) and pull-cord
- ELX1003HDT - with comfort timer, humidistat and pull-cord
- ELX1003DL - with datalogging facility for number of hours run and number of power outages
- ELX1003LV - 3 speed, continuous running with pull-cord - LOW VOLT (SELV)
- ELX1003DTLV - 3 speed, continuous running, with comfort timer, over-run timer and pull-cord LOW VOLT (SELV)
- ELX1003HDTLV - 3 speed, continuous running, with comfort timer, humidistat and pull-cord - LOW VOLT (SELV)

N.B timer adjustable from 0-30 minutes

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.

N.B These fans are NOT suitable for use with Gravity Grilles. They should be installed using either Cowls or Fixed Grilles. Only approved accessories should be used:

Wall Plates – as required

Wall terminations – all wall terminations must use the approved wall cowl or high rise kit

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Elix "16" - ELX1003

TECHNICAL CHARACTERISTICS									
Model	Airflow l/sec			Power - Watts			dBA (@ 3m in free field)		
	Trickle 1	**Trickle 2**	Boost	Trickle 1	Trickle 2	Boost	Trickle 1	Trickle 2	Boost
ELX1003	8.9	**16**	27.8	1.6	3.5	15	15.5	17.5	35

RESULTS for SAP CALCULATIONS - SAP2012 data ENERGY LEVEL PERFORMANCE - using rigid ducting only			
Unit Configuration	Specific Fan Power (W/l/s)	EST Best Practice Performance Compliant	Flow Rate (l/sec)
In room - kitchen	0.22	Yes	13.0
In room - wetroom	0.16	Yes	8.0
Through wall - kitchen	0.17	Yes	13.0
Through wall - wetroom	0.14	Yes	8.0
Figures from BRE test results at minimum flow rate conditions			

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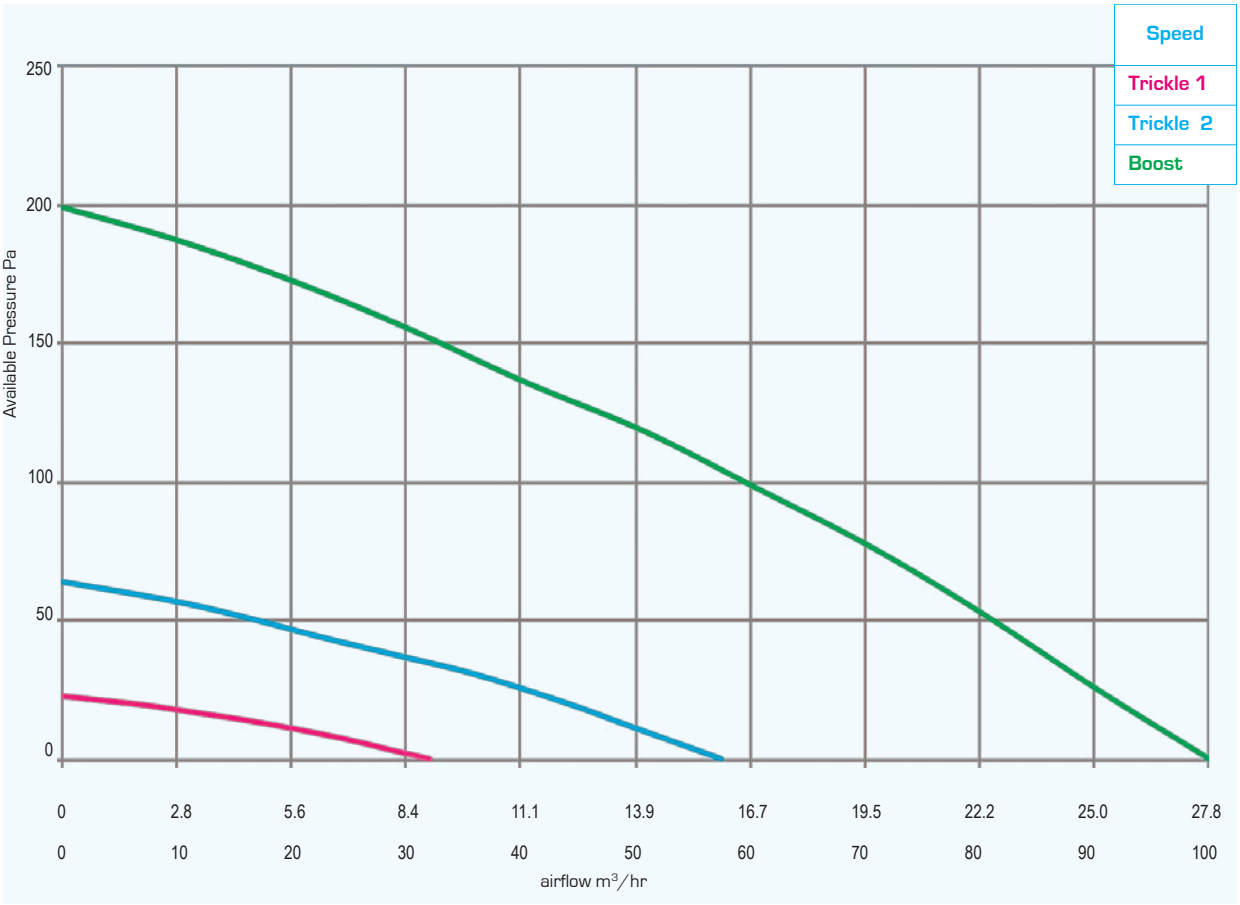
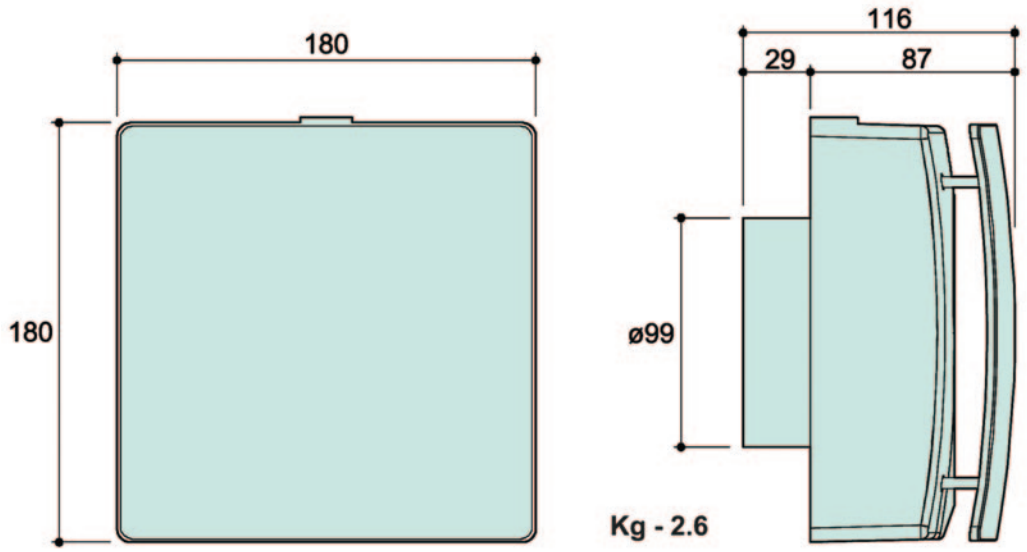
Elix "16" - ELX1003

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



Elprex "16" - ELP2204

16 l/s Trickle Speed 1

Elprex - ELP2204

- energy efficient motor
- provides low level continuous ventilation to control condensation
- 4 speed centrifugal fan - **16** l/sec Trickle Speed 1
- choice of three speeds at installation
- wall or ceiling
- for any kitchen
- low noise levels
- low running costs
- complies with Building Regulations

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Elprex "16" - ELP2204

GENERAL FEATURES

- exhausts directly to the outside or through long lengths of ducting (up to 15m)
- sfp down to 0.35 W/l/s
- easy and economical to install and maintain
- runs continuously at trickle speed with choice of 3 boost speeds (fixed at installation)
- Trickle speed 1 operates at **16** l/s (factory set)
- Boost speed 2 operates at 30 l/s
  Boost speed 3 operates at 45 l/s
  Boost speed 4 operates at 60 l/s
- speed boosted to maximum using integral pull cord or by:
  - remote switch/light switch
  - PIR sensor
  - DRH240 (dynamic remote humidistat)
- ELP2204HDT operates at Speed 2 if boost speed is automatically started by the integral humidistat when relative humidity reaches pre-set level. Fan runs at this sped until excess humidity dispersed. It then reverts to Trickle Speed 1. Boost speed can also be boosted manually by remote switch/light switch/PIR sensor or remote humidistat.
- anti-vibration gasket
- robust and anti-reverse (removable) backdraught shutter
- energy saving ventilation
- extremely low running costs
- low carbon footprint
- 2 year warranty

TECHNICAL FEATURES

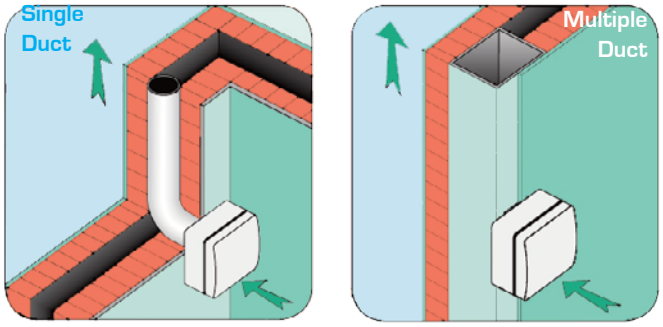
- shockproof, high quality technopolymer casing
- designed using latest wind tunnel technology and CFD simulations
- motor with thermal protection
- 30,000 hour life motor with maintenance free and long life ball bearings
- operates in ambient temperatures up to 40ºC
- double insulated - no earth required
- IPX4 Splashproof rated - can safely be installed in Zones I and

COMPLIES WITH

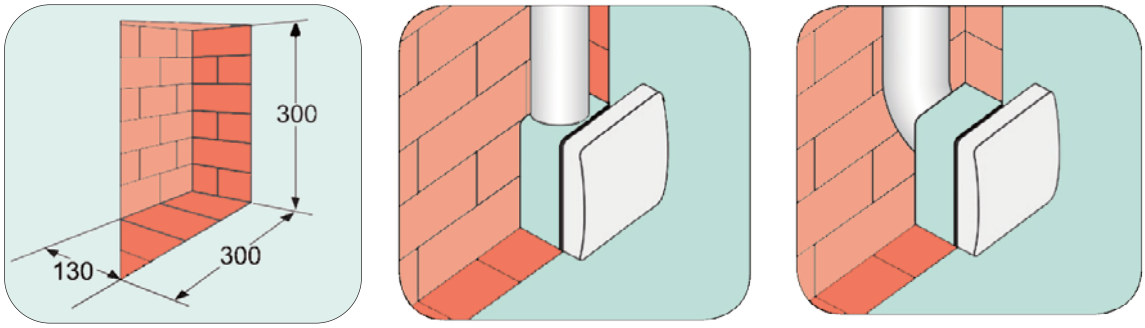
- Building Regulations for enhanced energy saving capability
- Building Regulations for reliable, efficient ventilation
- EU RoHS Directive Compliant.
- Complies with IEC60335-2-80, LVD2006/95/CE and EMC2014/30/UE (European Directive against radio interference and electro-magnetic compatibility
- CE marked

TYPICAL SPECIFICATION AVAILABLE AT
http://www.vectaire.co.uk/downloads

Surface Mounted Installation



Built-in Installation



MODELS AVAILABLE:

- ELP2204 - 4 speed, continuous running, cord or remote
- ELP2204DT - 4 speed, continuous running with comfort timer (timer does not activate unless fan has been running for 2 minutes to avoid unnecessary night-time operation) and pull-cord
- ELP2204HDT - with comfort timer, humidistat and pull-cord
- ELP2204DL - 4 speed, continuous running with pull-cord and integral data logger
- ELP2204DTDL - with comfort timer, pull-cord and integral data logger
- ELP2204HDTDL - with comfort timer, humidistat, pull-cord and integral data logger

N.B timer adjustable from 0-30 minutes

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.

N.B These fans are NOT suitable for use with Gravity Grilles. They should be installed using either Cowls or Fixed Grilles. Only approved accessories should be used:

Wall Plates – as required

Wall terminations – all wall terminations must use the approved wall cowl or high rise kit

Elprex "16" - ELP2204

TECHNICAL CHARACTERISTICS												
Model	Airflow l/sec				Power - Watts				dBA (@ 3m in free field)			
	Trickle 1	Boost 2	Boost 3	Boost 4	Trickle 1	Boost 2	Boost 3	Boost 4	Trickle 1	Boost 2	Boost 3	Boost 4
ELP2204	**16**	30	45	60	8.7	15.1	22.3	28.4	21	30	39	48

RESULTS for SAP CALCULATIONS			
Specific Fan Power (W/l/s)			
Speed 1	Speed 2	Speed 3	Boost
0.39	0.41	0.44	0.47
Results from our own laboratory - SAP2012 data			

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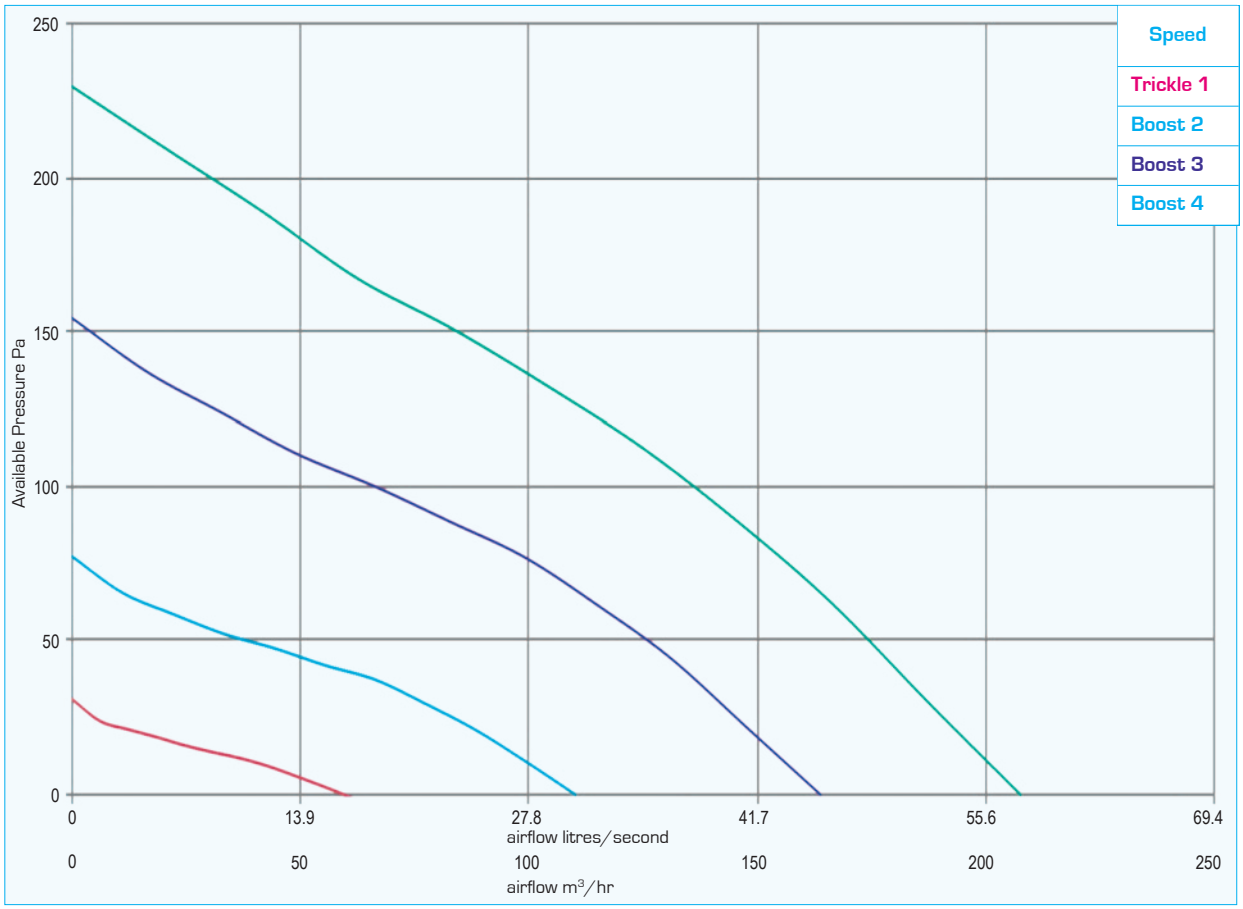
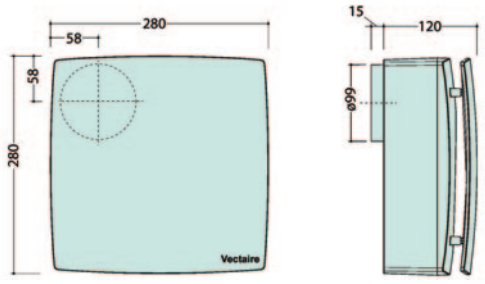
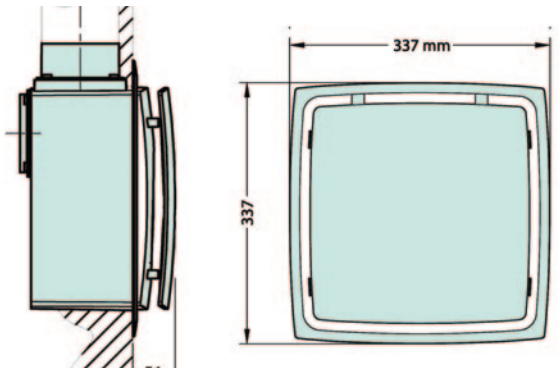
Elprex "16" - ELP2204

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm





Weight - 2.8 kg

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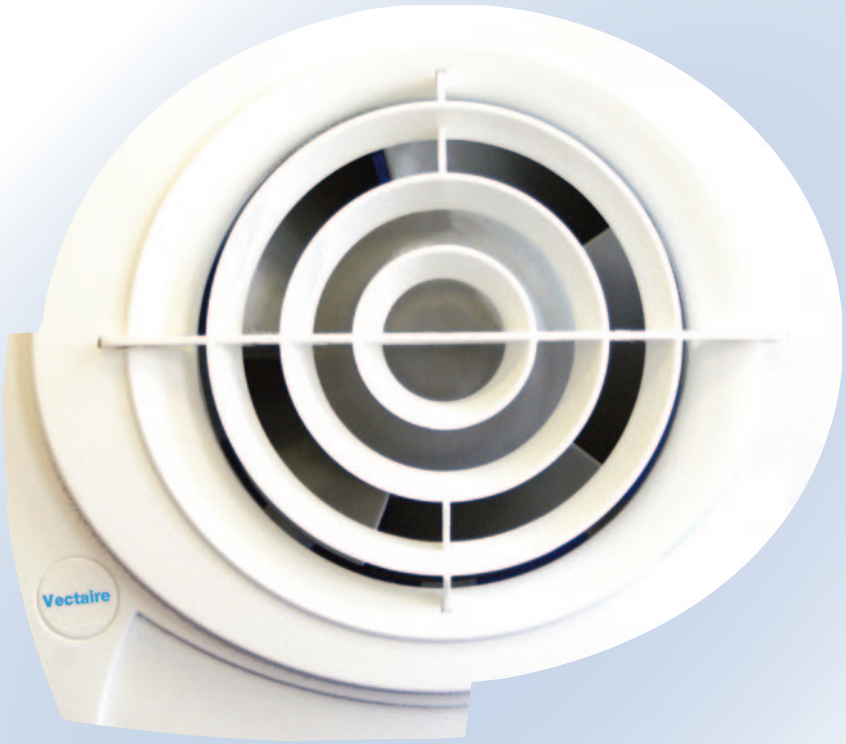
E-Smile - ES1003



E-Smile - ES1003

- provides low level continuous ventilation to control condensation
- 3 speed axial fan
- powerful low profile unit
- choice of two low speeds at installation
- wall or ceiling
- low noise levels
- low running costs
- for any domestic wet room
- complies with Building Regulations

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E-Smile - ES1003

GENERAL FEATURES

- exhausts directly to the outside or through medium length ducting - up to 8m)
- sfp down to 0.37 W/l/s
- runs continuously at pre-selected choice of two speeds (fixed at installation)
- Speed 1 operates at 11 l/s (factory set)
- Speed 2 operates at 14 l/s
- speed boosted to maximum (21 l/s) using integral pull cord or by:
  - remote switch/light switch
  - PIR sensor
  - DRH240 (dynamic remote humidistat)
- easy and economical to install and maintain
- ES1003 design allows installation at any angle with only three fixing points
- energy saving ventilation
- extremely low running costs
- low carbon footprint
- 2 year warranty

TECHNICAL FEATURES

- constructed using recyclable and/or reusable materials and components for minimum ecological impact
- shockproof, high quality technopolymer casing
- designed using latest wind tunnel technology and CFD simulations
- advanced profile to increase aerodynamic efficiency
- induction motor with thermal protection
- 40,000 hour life motors with maintenance free and long life ball bearings
- operates in ambient temperatures up to 40°C
- double insulated - no earth required
- IPX4 Splashproof rated - can safely be installed in Zones I and II, SELV models IPX7 rated

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
- CE marked
- SAP PCDB Listed
- Energy Saving Trust Best Practice Compliant

TYPICAL SPECIFICATION AVAILABLE AT

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

MODELS AVAILABLE:

- ES1003 - 3 speed, continuous running, cord or remote
- ES1003CF - model c/w filter
- ES1003CLV - SELV - 12v model
- ES100H2C - 2 speed, humidity control
- ES100H2CLV - 2 speed, humidity control - SELV - 12v model

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.

N.B These fans are NOT suitable for use with Gravity Grilles. They should be installed using either Cowls or Fixed Grilles. Only approved accessories should be used:

Wall Plates – as required
Window kits – as required
Wall terminations – all wall terminations must use the approved wall cowl or high rise kit

E-Smile - ES1003

TECHNICAL CHARACTERISTICS									
Model	Airflow l/sec			Power - Watts			dBA (@ 3m in free field)		
	Trickle 1	Trickle 2	Boost	Trickle 1	Trickle 2	Boost	Trickle 1	Trickle 2	Boost
ES1003	11	14	21	3.8	5.3	7.5	16	19	29

RESULTS for SAP CALCULATIONS - SAP2012 data ENERGY LEVEL PERFORMANCE - using rigid ducting only			
Unit Configuration	Specific Fan Power (W/l/s)	EST Best Practice Performance Compliant	Flow Rate (l/sec)
In room - kitchen	0.55	Yes	14.2
In room - wetroom	0.61	Yes	11.1
Through wall - kitchen	0.37	Yes	15.5
Through wall - wetroom	0.45	Yes	9.7
Figures from BRE test results at minimum flow rate conditions			

RESULTS for SAP CALCULATIONS - SAP2012 data ENERGY LEVEL PERFORMANCE - using flexible ducting only			
Unit Configuration	Specific Fan Power (W/l/s)	EST Best Practice Performance Compliant	Flow Rate (l/sec)
In room - kitchen	0.57	Yes	13.0
In room - wetroom	0.61	Yes	10.3
Through wall - kitchen	0.37	Yes	15.5
Through wall - wetroom	0.45	Yes	9.7
Figures from BRE test results at minimum flow rate conditions			

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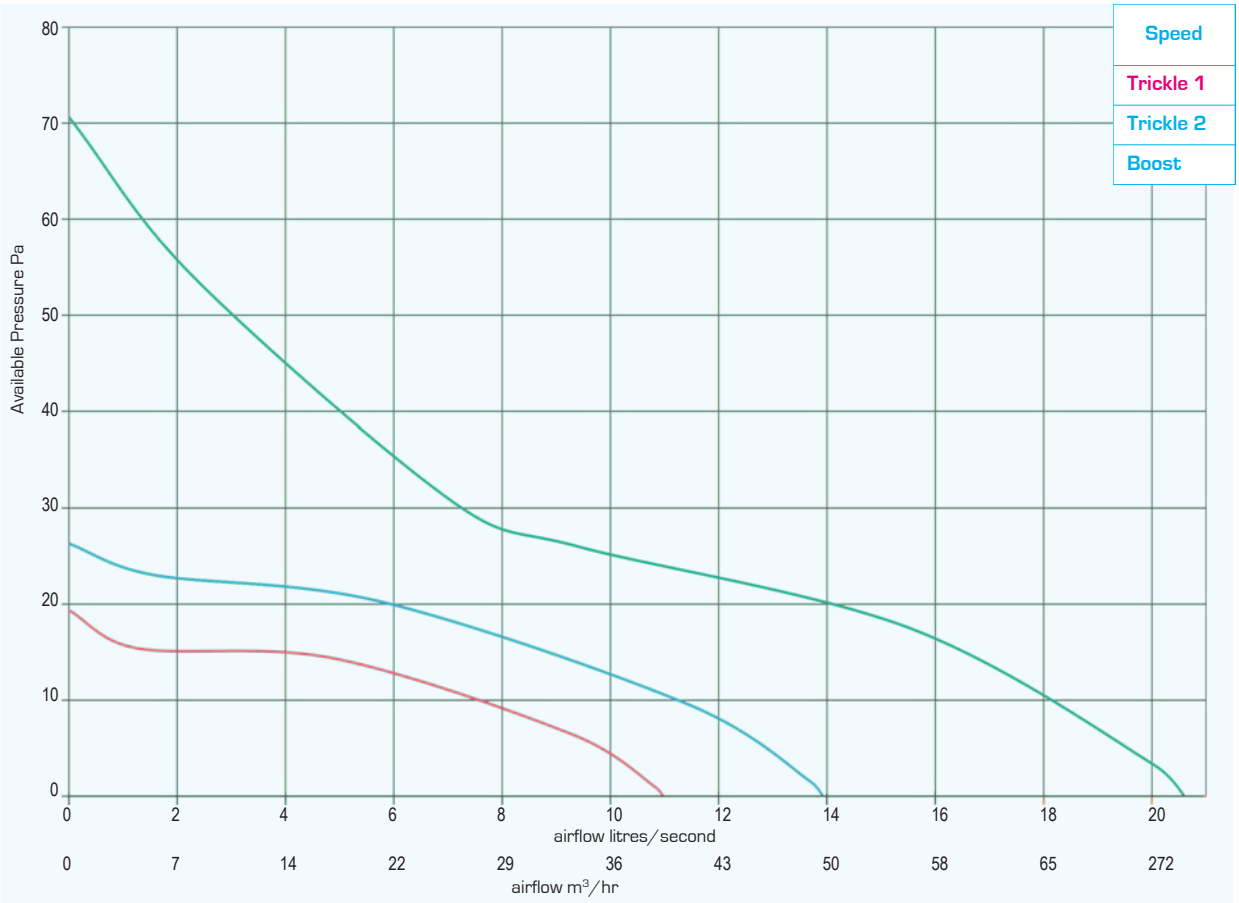
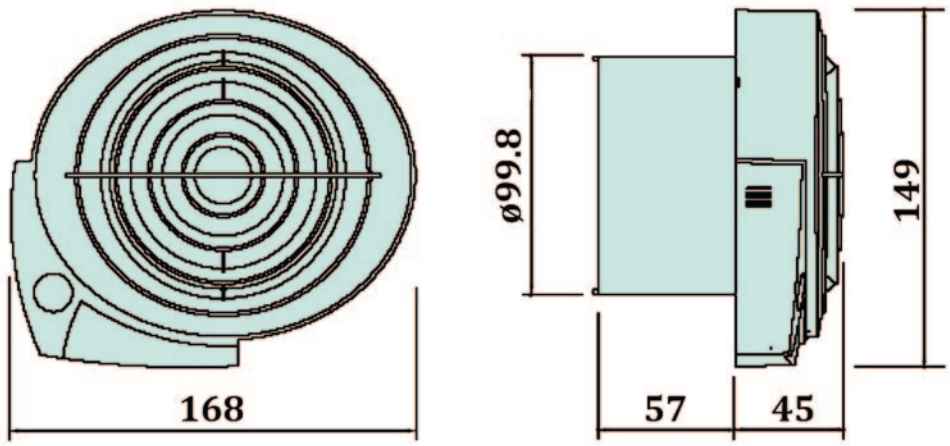
E-Smile - ES1003

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



Elegance - EL100 and EL150

Elegance - EL100 and EL150

- 2 sizes
- high performance, low carbon axial fans
- control condensation
- standard, timer, humidistat and SELV models
- powerful low profile units
- wall, ceiling or window (with additional window kit)
- low noise levels
- low running costs
- for any domestic wet room
- complies with Building Regulations

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Elegance - EL100 and EL150

GENERAL FEATURES

- exhausts directly to the outside (through wall, or window installation with additional window kit, or with medium length ducting)
- easy and economical to install and maintain
- suitable for toilets, shower-rooms, bathrooms, utility rooms and kitchens
- 2 Speed versions - boost speed by means of integral cord, or after removing cord with:
  - remote switch
  - PIR sensor
  - humidistat
- anti-vibration gasket
- patented anti-turbulence deflectors ensure very low noise levels and optimum performances
- energy saving ventilation
- extremely low running costs
- low carbon footprint
- 2 year warranty

TECHNICAL FEATURES

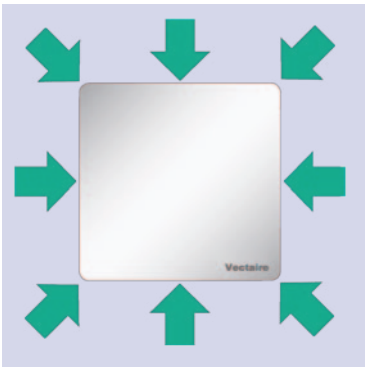
- shockproof, high quality technopolymer casing
- designed using latest wind tunnel technology and CFD simulations
- motor with thermal protection
- 43,000 hour life motors with maintenance free and long life ball bearings
- operates in ambient temperatures up to 40ºC
- double insulated - no earth required
- IPX4 Splashproof rated - can safely be installed in Zones I and II

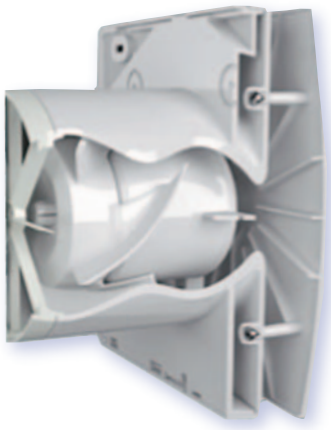
COMPLIES WITH

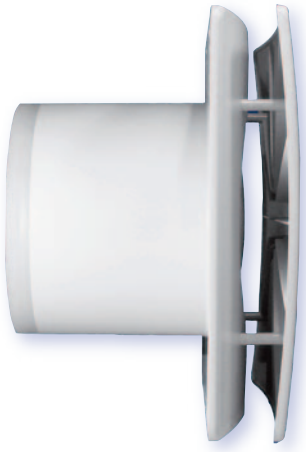
- Building Regulations for enhanced energy saving capability
- Building Regulations for reliable, efficient ventilation
- EU RoHS Directive Compliant.
- Complies with IEC60335-2-80, LVD2006/95/CE and EMC2014/30/UE (European Directive against radio interference and electro-magnetic compatibility
- CE marked

TYPICAL SPECIFICATION AVAILABLE AT

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







MODELS AVAILABLE - 4"/10cm

- EL100 - Standard
- EL100T - with overrun Timer
- EL100HT - with Humidistat and Timer
- EL100LV - SELV low voltage
- EL100TLV - SELV low voltage with Timer
- EL100/2AC - 2 Speed, Cord or Remote

MODELS AVAILABLE - 6"/15cm

- EL150 - Standard
- EL150T - with overrun Timer
- EL150HT - with Humidistat and Timer
- EL150/2AC - 2 Speed, Cord or Remote

N.B timer adjustable from 3-25 minutes

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.

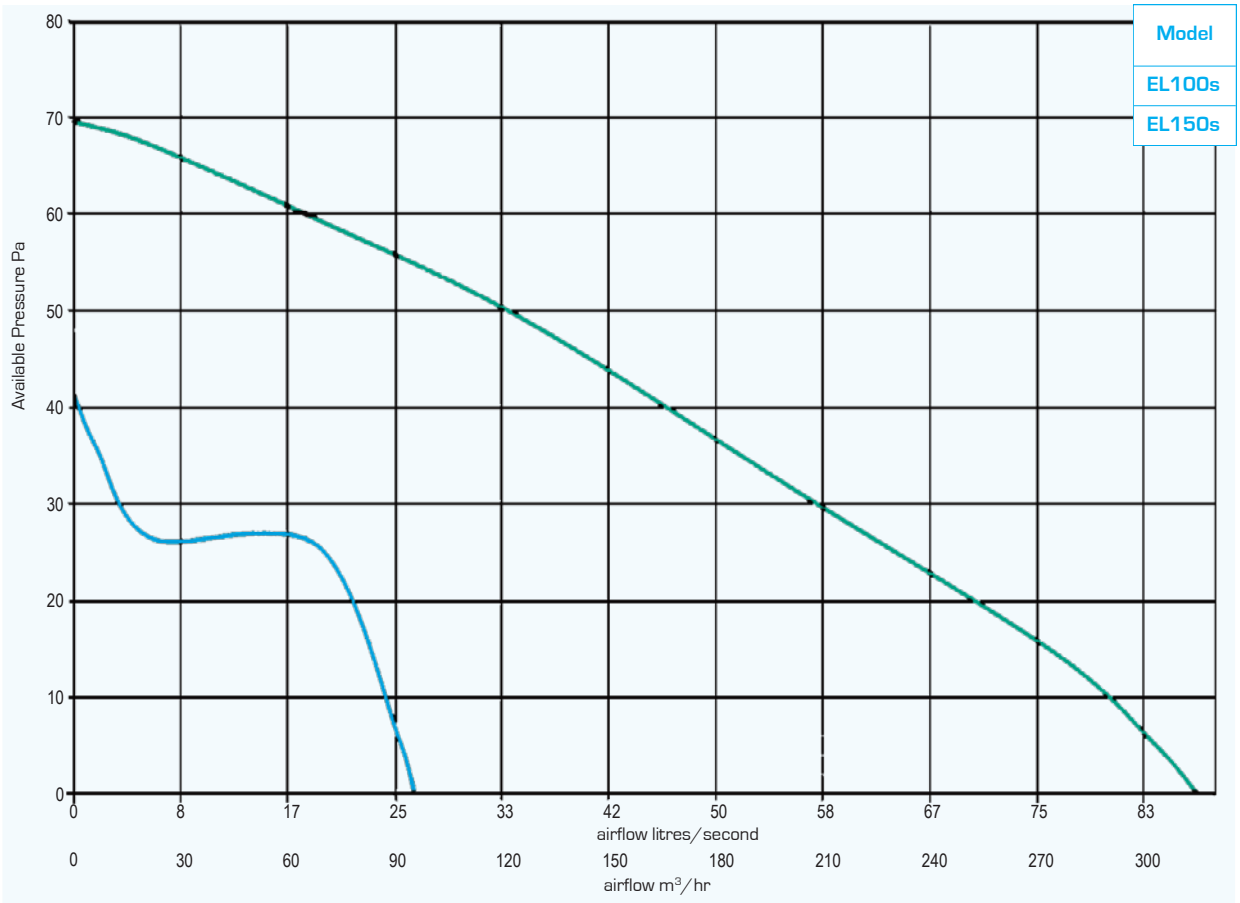
N.B These fans are NOT suitable for use with Gravity Grilles. They should be installed using either Cowls or Fixed Grilles. Only approved accessories should be used:

Wall Plates – as required
Window kits – as required
Wall terminations – all wall terminations must use the approved wall cowl or high rise kit

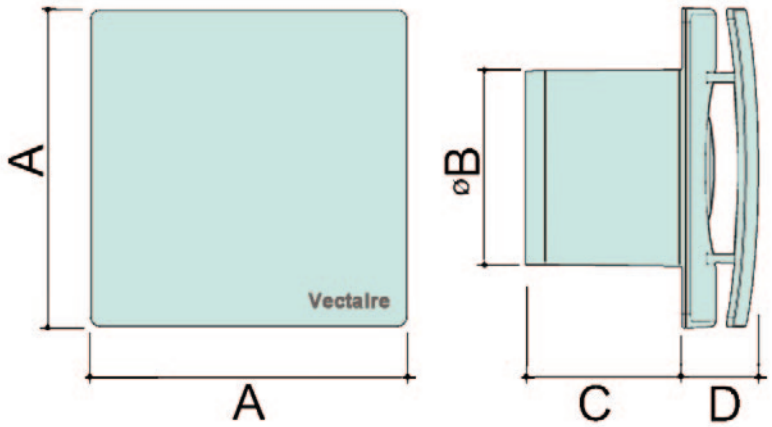
Elegance - EL100 and EL150

TECHNICAL CHARACTERISTICS								
Model	Airflow l/sec		Pressure - Pa		Power - Watts		dBA (@ 3m in free field)	
	maximum	minimum	maximum	minimum	maximum	minimum	maximum	minimum
EL100	25	16	40	20	14	6	31.4	27.4
EL150	87.5	50	71	15	25	13	43.9	29.5

PERFORMANCE (curves are for guidance only)



DIMENSIONS - mm



Model	EL100	EL150
A	160	200
øB	98	149
C	80	105
D	38	56
Kg	0.9	1.3

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Heatrec 1003

Heatrec 1003

- 3 speed centrifugal fan for any domestic wet room
- energy efficient EC motors
- efficient, low energy solution to controlling condensation and pollution
- provides low level continuous ventilation
- with summer bypass and frost-stat
- up to 75% heat exchange efficiency
- choice of two low (trickle) speeds
- speed can be boosted by user
- low noise levels and running costs
- complies with Building Regulations

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Heatrec 1003

GENERAL FEATURES

- single room heat recovery unit for new build or refurbishment
- for areas up to 40m²
- up to 75% of heat recovered
- easy to install and maintain
- for installation into walls - can be rotated to four positions
- two low (trickle) speeds
  - speed 1: 5 litres/sec
  - speed 2: 7.5 litres/sec
- boost speed (15 litres/sec) triggered by user with integral pull-cord or a remote switch
- tube heat recovery cell available in 400mm, 500mm or 600mm lengths
- heat recovery tube incorporates condensate drainage and weather louvre
- termination kit enables complete installation from inside (easy to install in high rise buildings)
- low noise levels
- low running costs
- 5 year warranty - 1 year parts and labour, 4 years parts only

TECHNICAL FEATURES

- efficient and economical
- casing from shockproof, high quality technopolymer
- low energy EC motors
- operates in temperature up to 40ºC
- easy to maintain
- filters and heat exchanger removable and washable
- IPX4 rated (SELV models IPX7)

SUMMER BYPASS

The Heatrec 1003 has sensors which monitor the air intake and extract. When the outside temperature is comfortable and the inside ambient temperature is lower than 18ºC, the air extract motor will be automatically switched off, whilst the air intake motor will continue to operate, ensuring a quick and efficient change of air inside the room. When the outside temperature is higher than 26ºC, the air intake motor will be switched off to ensure ventilation without increasing the temperature.

INTEGRAL FROST-STAT

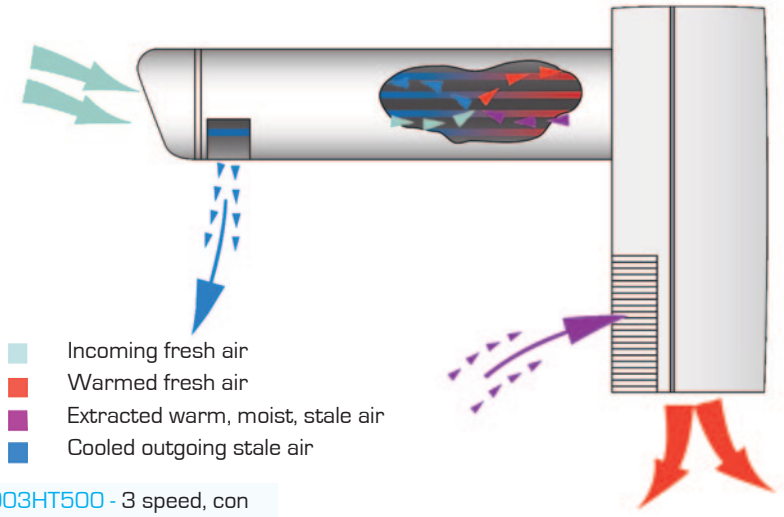
The unit is fitted with an internal thermostat, which automatically stops the air intake if there is a risk of the heat exchanger freezing up (when the outside temperature is too low) and also avoiding the intake of very cold air

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
- CE marked

TYPICAL SPECIFICATION AVAILABLE AT

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



MODELS AVAILABLE:

- HREC1003 - 3 speed, continuous running with pull-cord, 400mm tube
- HREC1003T - 3 speed, continuous running with timer and pull-cord, 400 mm tube
- HREC1003HT - 3 speed, continuous running with timer, humidistat and pull-cord, 400 mm tube
- HREC1003HT500 - 3 speed, continuous running with timer, humidistat and pull-cord, 500 mm tube
- HREC1003HT600 - 3 speed, continuous running with timer, humidistat and pull-cord, 600 mm tube

All above models available in SELV versions.
Timer adjustable from 0-30 minutes
Humidistat relative humidity adjustable between 40-90%.

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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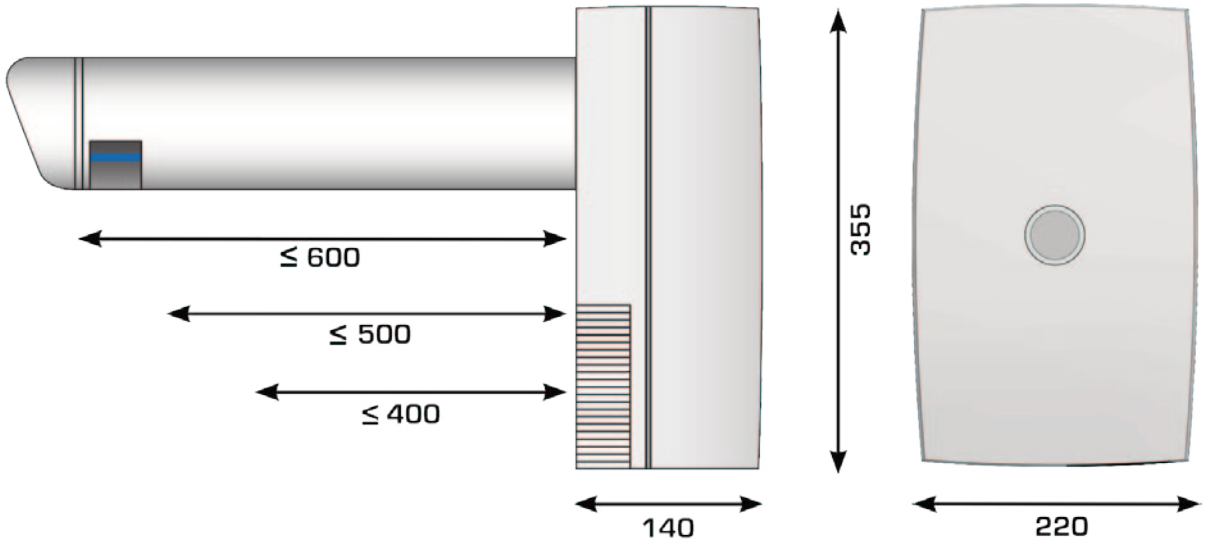
Heatrec 1003

TECHNICAL CHARACTERISTICS									
Model	Airflow l/sec			Power - Watts			dBA (@ 3m in free field)		
	Trickle 1	Trickle 2	Boost	Trickle 1	Trickle 2	Boost	Trickle 1	Trickle 2	Boost
HREC1003	5	7.5	15	3.7	8.3	28.3	18.4	27.7	39.3

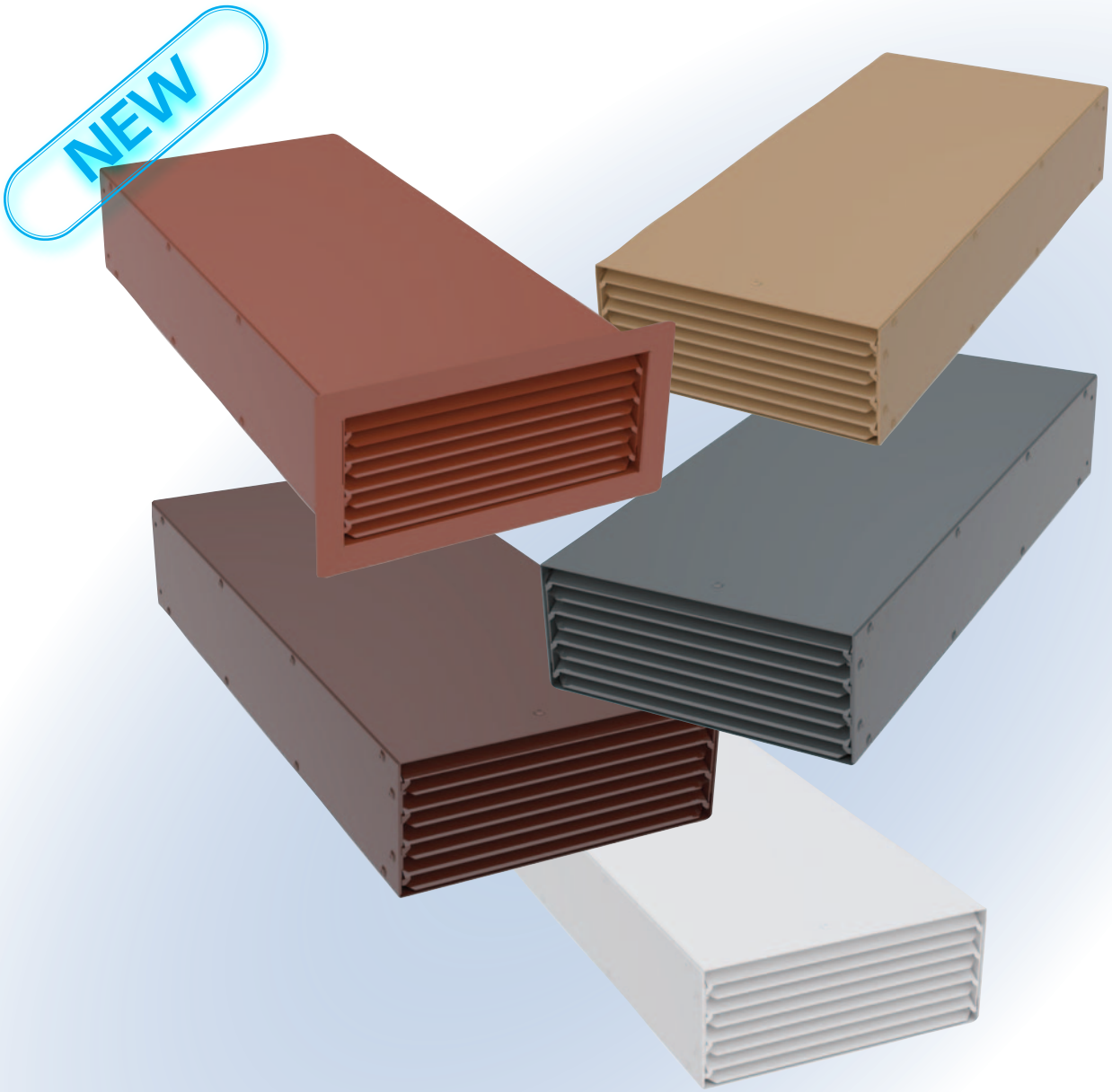
DIMENSIONS - mm

3 models with 100mm dia duct for wall thickness up to:



Weight:
With 400mm tube - 3.8 kg
With 500mm tube - 3.9 kg
With 600mm tube - 4.0 kg

FRAB



Fire Rated Air Bricks - FRAB

- High performance non-combustible terminals designed for low resistance use with powered mechanical ventilation
- Non-combustible as set out in Approved Document B (fire safety) Volume 1: Dwellings, 2019 Edition
- Manufactured from 0.9mm electro-galvanised sheet steel, fire class A1 "no contribution to fire
- Corrosion resistant - salt spray tested to ISO9227:2022, ASTMB117-19
- Polyester powder coating meeting EN13501-1 classification A2-s1,d0
- FREE AREAS:
  204x60 size - 11,007 mm², 90% free area
  220x90 size - 18,222 mm², 92% free area
  208x130 size - 24,660 mm², 91% free area
- Complies with Approved Document F Volume1, 2021 edition

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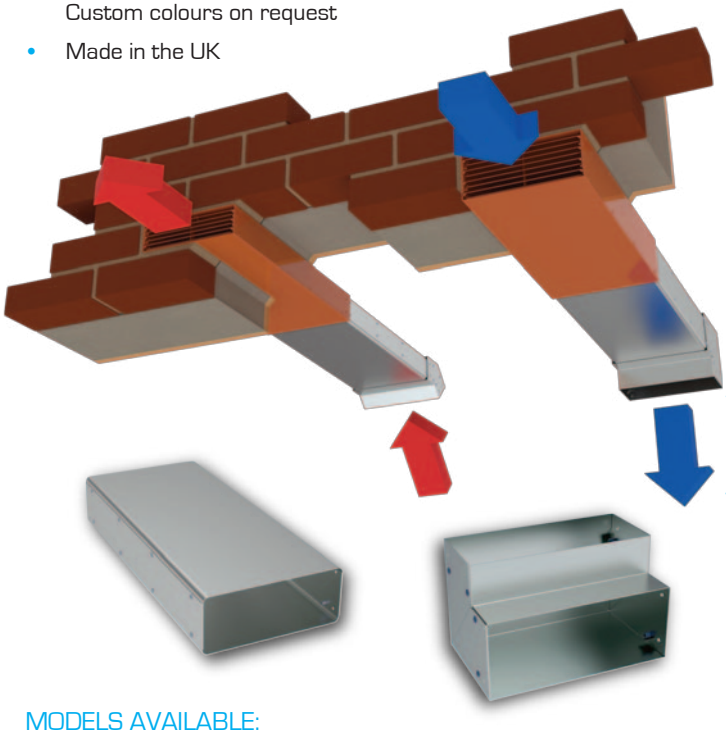
FRAB

GENERAL FEATURES

- High performance non-combustible terminals designed for low resistance use with powered mechanical ventilation
- Very low airflow resistance
- Available in three 3 sizes in 500mm and 100mm lengths
  - 204mm x 60mm
  - 220mm x 90 mm
  - 208mm x 130 mm
- Non-bezelled or bezelled
- Bezelled models suitable for exterior cladding
- Metal ducting available in standard 500mm length. Custom lengths available on request
- Metal straight, 45º and 90º connectors in all three sizes
- Blades integral with firebrick - therefore will not loosen
- Designed to fit into walls during building works
- Available in 5 colours:
  - brown - RAL8016
  - white - RAL9016
  - terracotta - RAL8004
  - grey - RAL7012
  - beige - RAL1001

  Custom colours on request
- Made in the UK



TECHNICAL FEATURES

- Corrosion resistant - salt spray tested to ISO9227:2022, ASTMB117-19
- Polyester powder coating meeting EN13501-1 classification A2-s1,d0
- Non-combustible as set out in Approved Document B (fire safety) Volume 1: Dwellings, 2019 Edition
- Manufactured from 0.9mm electro-galvanised sheet steel, fire class A1 "no contribution to fire"
- **Free Areas:**
  - **204x60 size - 11,007 mm², 90% free area**
  - **220x90 size - 18,222 mm², 92% free area**
  - **208x130 size - 24,660 mm², 91% free area**

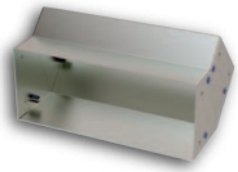
COMPLIES WITH

- Performance tested to BS EN13141-2-2010
- Rated and tested to IPX3 against water ingress
- Corrosion resistant - salt spray tested to BS EN ISO 9227:2012
- Complies with Approved Document F Volume1, 2021 edition

ALL MODELS REGISTERED DESIGNS:

- FRAB204x60 - Registered Design No: 6261188
- FRAB204x60x100 - Registered Design No: 6263780
- FRAB204x60B - Registered Design No: 6261189
- FRAB204x60x100B - Registered Design No: 6263781
- FRAB220x90 - Registered Design No: 6261190
- FRAB220x90x100 - Registered Design No: 6263782
- FRAB220x90B - Registered Design No: 6261191
- FRAB220x90x100B - Registered Design No: 6263783
- FRAB208x130 - Registered Design No: 6261192
- FRAB208x130x100 - Registered Design No: 6263784
- FRAB208x130B - Registered Design No: 6261193
- FRAB208x130x100B - Registered Design No: 6263785

Vectaire Ltd can supply all accessories for use with these units, including air filter cassettes, silencers, fire dampers, air valves and ducting, 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.



MODELS AVAILABLE:

204 x 60mm size	220 x 90mm size	208 x 130mm size	DESCRIPTION
FRAB204x60	FRAB220x90	FRAB208x130	Metal Air Brick 500mm
FRAB204x60x100	FRAB220x90x100	FRAB208x130x100	Metal Air Brick 100mm
FRAB204x60B	FRAB220x90B	FRAB208x130B	Metal Air Brick Bezelled 500mm
FRAB204x60x100B	FRAB220x90x100B	FRAB208x130x100B	Metal Air Brick Bezelled 100mm
FR204x60D	FR220x90D	FR208x130D	Duct - 500mm
FR204x60C	FR220x90C	FR208x130C	Connector - straight
FR204x60B45	FR220x90B45	FR208x130B45	Connector - 45º Bend
FR204x60B90	FR220x90B90	FR208x130B90	Connector - 90º Bend

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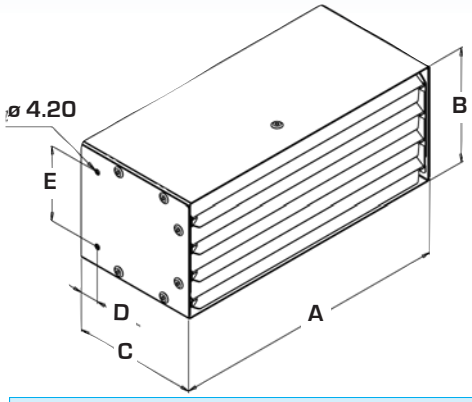
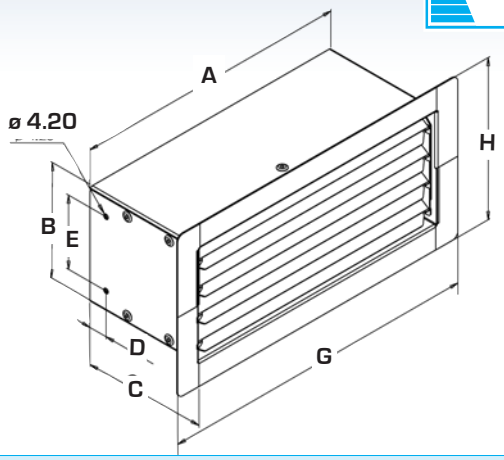
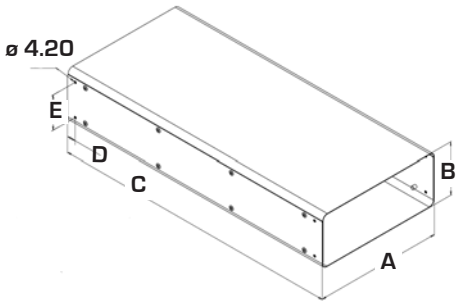
Dimensions



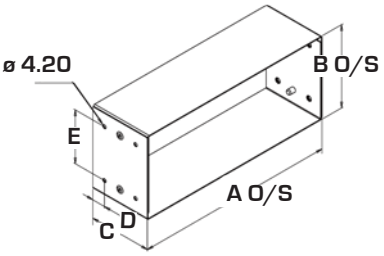


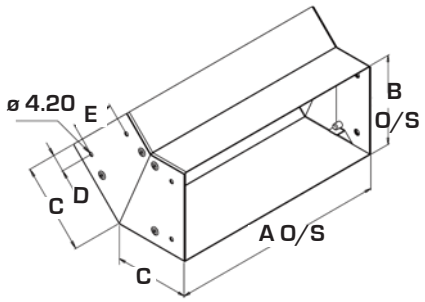
Standard and Bezelled Fire Rated Air Brick						
	FRAB 204x60 &B (100mm)	FRAB 204x60 &B (500mm)	FRAB 220x90 & B (100mm)	FRAB 220x90 &B (500mm)	FRAB 208x130 & B (100mm)	FRAB 208x130& B (500mm)
A	208.6		224.6		212.6	
B	62.8		92.8		132.8	
C	100	500	100	500	100	500
D	15		15		10	
E	30		60		75	
G	245		261		249	
H	101		131		171	



Duct - 500 mm			
	FR204x60D	FR220x90D	FR208x130D
A	204	220	208
B	60	90	130
C	500	500	500
D	15	15	20
E	30	60	75

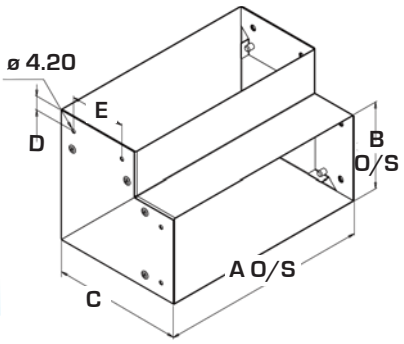
Connector - Straight			
	FR204x60C	FR220x90C	FR208x130C
A	209	225	213
B	63	93	133
C	70	70	70
øD	15	15	10
E	30	60	75





Connector - 45º Bend			
	FR204x60B45	FR220x90B45	FR208x130B4
A	209	225	213
B	63	93	133
C	66	78	95
D	15	15	10
E	30	60	75

Connector - 90º Bend			
	FR204x60B90	FR220x90B90	FR208x130B9
A	209	225	213
B	63	93	133
C	110	140	180
D	15	15	10
E	30	60	75



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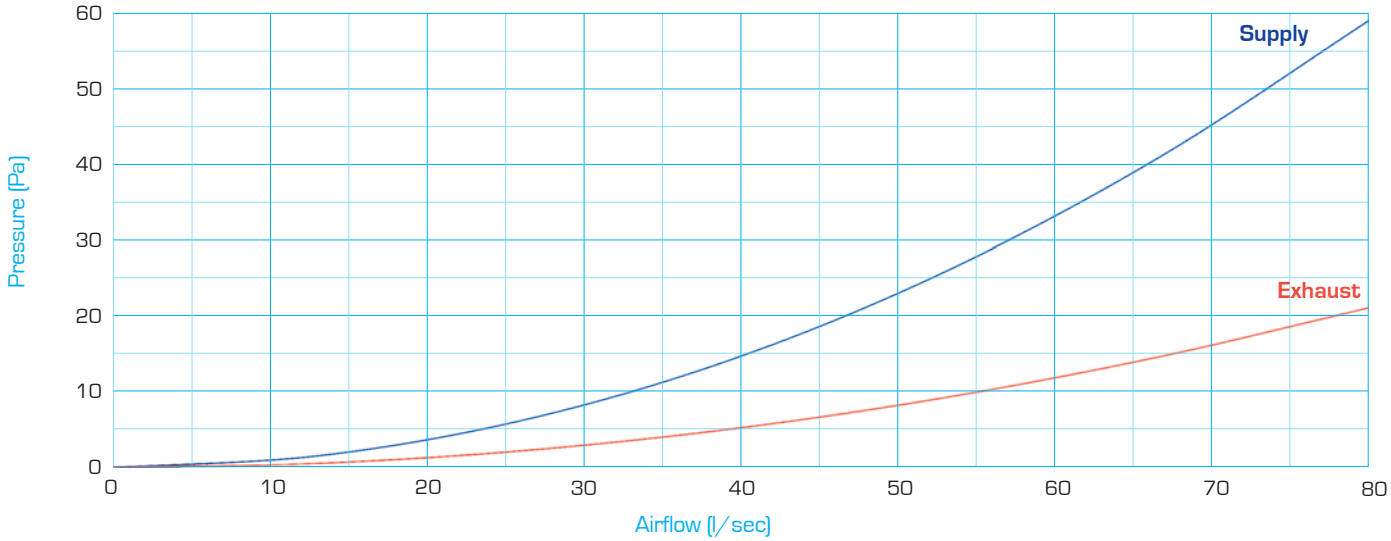
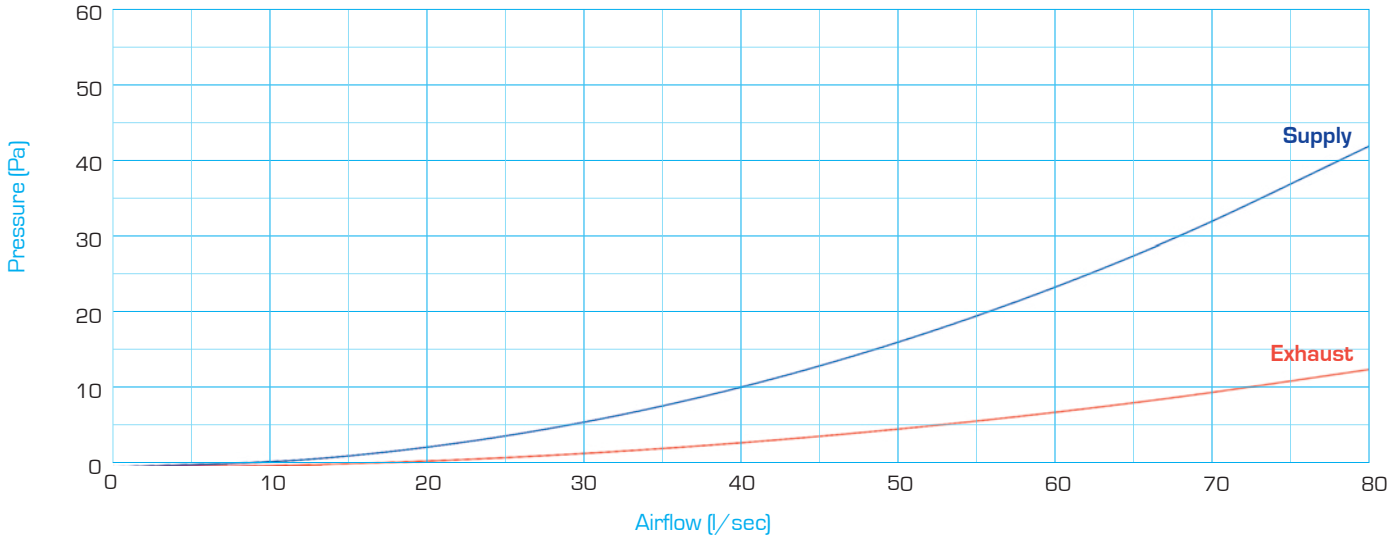
Performance

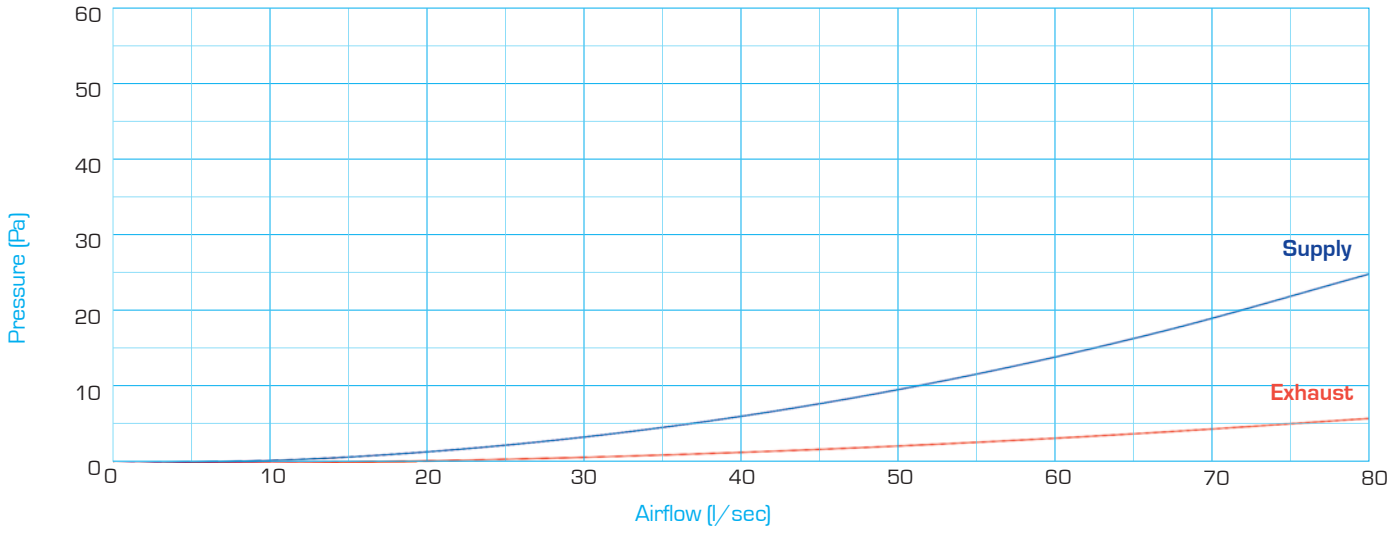
FRAB204x60



FRAB220x90



FRAB208x130



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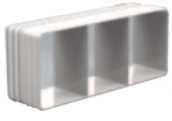
Thermal Self Seal Ducting - Rectangular and Round

2 sizes rectangular, 2 sizes round

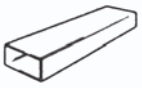
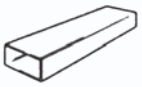
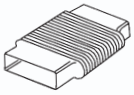
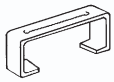
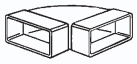
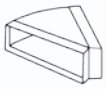
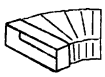
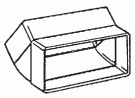
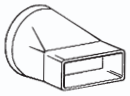
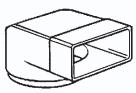
- Push, click and lock system allows fixing position by one person
- Pre-moulded connection system provides added strength and stability
- Air leakage minimised
- 4 sizes, 2 rectangular and 2 round to suit any installation
- Energy saving - reduces heat transfer through ventilation duct work
- High thermal properties to reduce heat loss in ducting
- Especially for installation in unheated areas
- Helps prevent condensation on or in duct
- Larger sizes suitable for purge ventilation
- Low air resistance
- Made from Neopor® graphite impregnated expanded polystyrene - infra red absorbers and reflectors improve thermal resistance.
- Neospor® meets thermal conductivity requirements BASF-EN13163 to help with condensation prevention
- Flame Retardant to DIN 4102 B1
- Ducting has minimum density of 25kg/m^3
- Thermal conductivity of 0.03W/mK, providing minimum ther mal resistance or "R" value of 0.666 m^2K/W @ at 20mm thickness
- Exceeds current UK Domestic Ventilation Regulations - Part F
- Joint integrity exceeds requirements in DW/143 Class A Leakage Test and DW/154 ductwork standards.
- Airflow performance independently tested by BRE

	Model	Size	Box Qty
THERMAL SELF SEAL FLAT DUCTING - 2M LENGTH			
	TSS-204-2M	204 x 60 mm	6
	TSS-220-2M	220 x 90 mm	6
THERMAL SELF SEAL FLAT DUCTING - 90° HORIZONTAL BEND			
	TSS-204-90HB	204 x 60 mm	6
	TSS-220-90HB	220 x 90 mm	6
THERMAL SELF SEAL FLAT DUCTING - 45° HORIZONTAL BEND			
	TSS-204-45HB	204 x 60 mm	6
	TSS-220-45HB	220 x 90 mm	6
THERMAL SELF SEAL FLAT DUCTING - 90° VERTICAL BEND			
	TSS-204-90VB	204 x 60 mm	6
	TSS-220-90VB	220 x 90 mm	6
THERMAL SELF SEAL FLAT DUCTING - 45° VERTICAL BEND			
	TSS-204-45VB	204 x 60 mm	6
	TSS-220-45VB	220 x 90 mm	6
THERMAL SELF SEAL FLAT DUCTING - ADAPTOR ROUND TO FLAT			
	TSS-204-PL	204 x 60 mm	6
	TSS-220-PL	220 x 90 mm	6
THERMAL SELF SEAL FLAT DUCTING -"T" PIECE			
	TSS-204-TP	204 x 60 mm	6
	TSS-220-TP	220 x 90 mm	6
CONNECTOR - DUCT TO FITTING			
	TSS-204-DFCON	204 x 60 mm	6
	TSS-220-DFCON	220 x 90 mm	6
CONNECTOR - DUCT TO DUCT CONNECTOR			
	TSS-204-DDCON	204 x 60 mm	6
	TSS-220-DDCON	220 x 90 mm	6

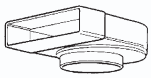
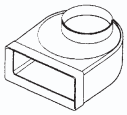
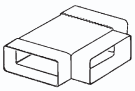
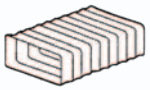
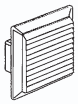
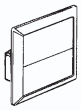
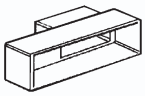
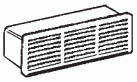
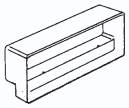
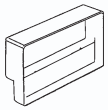
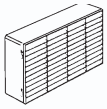
	Model	Size	Box Qty
THERMAL SELF SEAL ROUND DUCTING - 2M LENGTH			
	TSS-125-2M	125 mm	6
	TSS-160-2M	160 mm	6
THERMAL SELF SEAL ROUND DUCTING - 90° BEND			
	TSS-125-90B	125 mm	6
	TSS-160-90B	160 mm	6
THERMAL SELF SEAL ROUND DUCTING - 45° BEND			
	TSS-125-45B	125 mm	6
	TSS-160-45B	160 mm	6
THERMAL SELF SEAL ROUND DUCTING - "T" PIECE			
	TSS-125-TP	125 mm	6
	TSS-160-TP	160 mm	6
160MM TO 150MM ADAPTOR			
	TSS-160-AD	160 mm	6
CONNECTOR - DUCT TO FITTING			
	TSS-125-DFCON	125 mm	6
	TSS-160-DFCON	160 mm	6
CONNECTOR - DUCT TO DUCT			
	TSS-125-DDCON	125 mm	6
	TSS-160-DDCON	160 mm	6

Plastic Flat Ducting - 3 sizes

VFPD - 110x54mm: VPFDS - 204x60mm: VPFDM - 220x90mm

	Model	Size/Description	Box Qty
FLAT DUCTING - 1.5M LENGTH			
	VPFD	1500mm long	20
	VPFDS	1500mm long	5
	VPFDM	1500mm long	3
FLAT DUCTING - 2M LENGTH			
	VPFD-2M	2000mm long	10
	VPFDS-2M	2000mm long	5
	VPFDM-2M	2000mm long	2
UNIVERSAL DUCT			
	VPFDS-UD	204 x 60	10
CONNECTOR			
	VPC	110 x 54	20
	VPCS	204 x 60	10
	VPCM	220 x 90	6
MOUNTING BRACKET			
	VPMB	110 x 54	10
	VPMBS	204 x 60	10
	VPMBM	220 x 90	10
90º HORIZONTAL BEND			
	VPHB	110 x 54	20
	VPHBS	204 x 60	10
	VPHBM	220 x 90	6
45º HORIZONTAL BEND			
	VPHB45	110 x 54	20
	VPHBS45	204 x 60	10
	VPHBM45	220 x 90	6
ADJUSTABLE HORIZONTAL BEND			
	VPAHBS	204 x 60	10
90º VERTICAL BEND			
	VPVB	110 x 54	20
	VPVBS	204 x 60	10
	VPVBM	220 x 90	6
45º VERTICAL BEND			
	VPVB45	110 x 54	20
	VPVBS45	204 x 60	10
	VPVBM45	220 x 90	6
ADAPTOR ROUND TO FLAT			
	VPA	100mm dia spigot	20
	VPAS	125mm dia spigot	10
	VPAM	150mm dia spigot	6
ADAPTOR ROUND TO FLAT - VERTICAL BEND			
	VPAVB	100mm dia spigot	20
	VPAVBS4	100mm dia spigot	10
	VPAVBS5	125mm dia spigot	10
	VPAVBS6	150mm dia spigot	10

White = W: Brown = B: Beige = COT: Terracotta = TC

	Model	Size/Description	Box Qty
ADAPTOR ROUND TO FLAT - VERTICAL BEND - OFFSET SPIGOT			
	VPAVBSA4	100mm spigot	10
	VPAVBSA5	125mm spigot	10
	VPAVBSA6	150mm spigot	10
	VPAVBM4	100mm spigot	6
	VPAVBM5	125mm spigot	6
	VPAVBM6	150mm spigot	6
"T" PIECE			
	VPT	110 x 54	20
	VPTS	204 x 60	10
	VPTM	220 x 90	6
RECTANGULAR FLEXIBLE DUCTING			
	VFD110/.5	110 x 54mm x .5m	1
	VFD110/3	110 x 54mm x 3m	1
	VFD204/.5	204 x 60mm x .5m	1
	VFD204/3M	204 x 60mm x 3m	1
	VFD220/.5	220 x 90mm x .5m	1
	VFD220/3	220 x 90mm x 3m	1
WALL PLATE - FLAT CHANNEL			
	VPAWP		10
	VPAWPS		10
	VPAWPM		6
FIXED GRILLE WITH RECTANGULAR SPIGOT AND FLYSCREEN			
	VPFG	W, B, COT or TC (for 110mm x 54mm duct size only)	20
GRAVITY GRILLE WITH RECTANGULAR SPIGOT			
	VPGG	W, B, COT or TC (for 110mm x 54mm duct size only)	20
AIRBRICK ADAPTOR			
	VPAB/AD	(VFPD only)	20
AIRBRICK			
	VPAB	W, B, COT or TC	20
ADAPTOR - 204MM X 60MM ('S') TO 220MM X 90MM ('M')			
	VPAS-M	W, B, COT or TC	10
DOUBLE AIRBRICK ADAPTOR			
	VPDAB/ADM	Megaduct only	10
DOUBLE AIRBRICK			
	VPDAB	W, B, COT or TC	20
AIRBRICK COWL			
	PLT-DAB-10-VWCB		6

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Fax: +44(0)1494 522337

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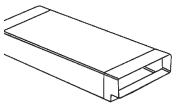
Web: www.vectaire.co.uk

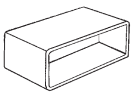
Ducting and Ancillaries

SILENCER



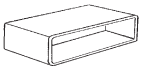
Model	Size/Description	Box Qty
VPFDS-SIL.5	204 x 60mm x .5m	1
VPFDM-SIL.5	220 x 90mm x .5m	1

INTUMESCENT DUCT SLEEVES FOR VFPD



Model	Size/Description	Box Qty
VPFD-DS	110 x 54mm	1
VPFDS-DS	204 x 60mm	1
VPFDM-DS	220 x 90mm	1

INTUMESCENT FIRE SLEEVE



Model	Size/Description	Box Qty
FS204/100	204 x60 x100mm	1

INTUMESCENT FIRE DAMPER

Model	Size/Description	Box Qty
FD4INT	4"/10cm	1
FD5INT	5"/12cm	1
FD6INT	6"/15cm	1

FIRE DAMPER - FUSIBLE LINK

Model	Size/Description	Box Qty
FD4	4"/10cm	1
FD5	5"/12cm	1
FD6	6"/15cm	1

PLASTIC FLEXIBLE DUCTING

VFD4/3	4"/10cm	3m	12
VFD4/6	4"/10cm	6m	6
VFD4/10	4"/10cm	10m	2
VFD5/3	5"/12cm	3m	6
VFD5/6	5"/12cm	6m	1
VFD6/3	6"/15cm	3m	4
VFD6/6	6"/15cm	6m	1
VFD6/10	6"/15cm	10m	1
VFD8/3	8"/20cm	3m	1
VFD8/6	8"/20cm	6m	1
VFD10/3	10"/25cm	3m	1
VFD10/6	10"/25cm	6m	1
VFD315/3	12"/31.5cm	3m	1
VFD315/6	12"/31.5cm	6m	1
VFD315/10	12"/31.5cm	10m	1

INSULATED ALUMINIUM FLEXIBLE DUCTING

VFD4/10INS	4"/10cm	10m	1
VFD5/10INS	5"/12cm	10m	1
VFD6/10INS	6"/15cm	10m	1
VFD8/10INS	8"/15cm	10m	1

ALUMINIUM FLEXIBLE DUCTING

VFD4/10AL	4"/10cm	10m	1
VFD5/10AL	5"/12cm	10m	1
VFD6/10AL	6"/15cm	10m	1

ACOUSTIC ALUMINIUM FLEXIBLE DUCTING

VFD4/10AC	4"/10cm	10m	1
VFD5/10AC	5"/12cm	10m	1
VFD6/10AC	6"/15cm	10m	1
VFD8/10AC	8"/15cm	10m	1

TELESCOPIC DUCT - 8"-14"

Model	Size/Description	Box Qty
VTD10-200	4"/10cm	10
VTD12-200	5"/12cm	10
VTD15-200	6"/15cm	10

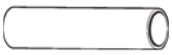
RIGID DUCT - 14'/350MM

Model	Size/Description	Box Qty
VRD4-350	4"/10cm	10
VRD5-350	5"/12cm	10
VRD6-350	6"/15cm	10

RIGID DUCT - 1000MM

Model	Size/Description	Box Qty
VRD4-1M	4"/10cm	3
VRD5-1M	5"/12cm	3
VRD6-1M	6"/15cm	3

RIGID DUCT - 2000MM



Model	Size/Description	Box Qty
VRD4-2M	4"/10cm	3
VRD5-2M	5"/12cm	3
VRD6-2M	6"/15cm	3

RIGID DUCT CONNECTOR

Model	Size/Description	Box Qty
VRD4/C	4"/10cm	10
VRD5/C	5"/12cm	10
VRD6/C	6"/15cm	10

RIGID DUCT FIXING BRACKET

Model	Size/Description	Box Qty
VRD4/FB	4"/10cm	10
VRD5/FB	5"/12cm	10
VRD6/FB	6"/15cm	10

RIGID DUCT T PIECE

Model	Size/Description	Box Qty
VRD4/T	4"/10cm	10
VRD5/T	5"/12cm	10
VRD6/T	6"/15cm	10

RIGID DUCT Y PIECE

Model	Size/Description	Box Qty
VRD4/Y	4"/10cm	10

RIGID DUCT 90° BEND

Model	Size/Description	Box Qty
VRDB90/4	4"/10cm	10
VRDB90/5	5"/12cm	10
VRDB90/6	6"/15cm	10

RIGID DUCT 45° BEND

Model	Size/Description	Box Qty
VRDB45/4	4"/10cm	10
VRDB45/5	5"/12cm	10

ROUND GRILLE WITH FLYSCREEN

Model	Size/Description	Box Qty
T10	4"/10cm	10

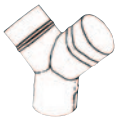
CIRCULAR REDUCER

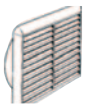
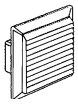
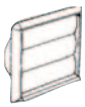
Model	Size/Description	Box Qty
RED4/3P	10cm-7.5cm	10
RED5/4P	12cm-10cm	10
RED6/4P	15cm-10cm	10
RED6/5P	15cm-12cm	10
RED8/6P	20cm-15cm	1

TAPE/ADHESIVES

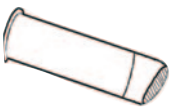
PVCDT	PVC Duct Tape	1
DDSeal	Duct Seal	1
MAS87	Intumescent Mastic	1

Ducting and Ancillaries

	Model	Size/Description	Box Qty
ADAPTOR PLATES			
	PLT/EL	Elegance	1
	PLT/ELX	Elix	1
	PLT/ES1003	E-Smile	1
	PLT/ES1003S12	E-Smile	1
	PLT/ES1003/SIL	E-Smile	1
	PLT/ECO10	ECO	1
	PLT/ECO1030X30	ECO	1
WALL VENT KITS			
	AWVK10/4	4"/10cm	10
	AWVK12/5	5"/12cm	10
	AWVK15/6	6"/15cm	10
METAL DUCT JOINING PIECE			
	DJP4	4"/10cm	1
	DJP5	5"/12cm	1
	DJP6	6"/15cm	1
	DJP8	8"/20cm	1
	DJP10	10"/25cm	1
	DJP12	12"/30cm	1
METAL "Y" SECTION			
	YP4	4"/10cm	1
	YP5	5"/12cm	1
	YP6	6"/15cm	1
	YP8	8"/20cm	1
METAL "T" SECTION			
	TP4	4"/10cm	1
	TP5	5"/12cm	1
	TP6	6"/15cm	1
	TP8	8"/20cm	1
METAL AIR VALVES WITH FIRE DAMPER			
	VAV4+FD	4"/10cm	1
	VAV5+FD	5"/12cm	1
	VAV6+FD	6"/15cm	1
WORM DRIVE CLIPS			
	WDC4	4"/10cm	1
	WDC5	5"/12cm	1
	WDC6	6"/15cm	1
	WDC8	8"/20cm	1
	WDC10	10"/25cm	1
	WDC12/16	12"-16"	1
DUCT SLEEVE			
	VRD4-DS	4"/10cm	1
	VRD5-DS	5"/12cm	1
	VRD6-DS	6"/15cm	1
DUCT JOINING			
	DW25N	Duct Wrap-1.2mx13m	1
	PVCDT	PVC Duct Tape	1
	DT75	Aluminium Foil Duct Tape	1
	DDSeal	Duct Seal	1

	Model	Size/Description	Box Qty
WALL COWLS			
	VWC	4"-6"	1
	VWC4	4"/10cm	1
	VWC5	5"/12cm	1
	VWC6	6"/15cm	1
PLASTIC FIXED GRILLES			
	FG4	4"/10cm	1
	FG5	5"/12cm	1
	FG6	6"/15cm	1
PLASTIC FIXED GRILLES WITH FLYSCREEN			
	FG4F	4"/10cm	1
	FG5F	5"/12cm	1
	FG6F	6"/15cm	1
PLASTIC GRAVITY GRILLES			
	GG4	4"/10cm	1
	GG5	5"/12cm	1
	GG6	6"/15cm	1

N.B plastic grilles available in: White = W: Brown = B: Beige - COT: Terracotta = TC. Grilles will be supplied in white unless requested otherwise at time of ordering

IN WALL ATTENUATORS			
	VIWA4	4"/10cm - with grille	1
	VIWA4C	4"/10cm - with cowl	1
	VIWA4QF	4"/10cm - with quick fit cowl	1
	VIWA5	5"/12cm- with grille	1
	VIWA5C	5"/12cm - with cowl	1
	VIWA5QF	5"/12cm - with quick fit cowl	1
WALL TERMINATION KITS			
	VWTK4	4"/10cm-high rise-wall 350mm duct-internal installation	1
	VWTK-Gas	4"/10cm only for VWTK4	1
	VWTK6	6"/15cm - as VWTK4	1
	VWTC4	4"/10cm-round wall cowl for internal installation	1
	VWTC6	6"/15cm - as VWTC4	1
ROOF TERMINATION KITS			
	RTK4	4"/10cm - Kit	1
	RT4	4"/10cm - Cowl	1
PLASTIC AIR VALVES			
	VAV4	4"/10cm	1
	VAV5	5"/12cm	1
	VAV6	6"/15cm	1
CONDENSATION TRAPS			
	VCT4	4"/10cm	1
	VCT4P	4"/10cm- with overflow	1
	VCT5P	5"/12cm- with overflow	1
	VCT6P	6"/15cm- with overflow	1

VENTILATION

FOR THE

BUILT ENVIRONMENT

low energy
environmentally friendly
economical

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HP12 3RH

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Low Energy 171024 am 241225 © E & O.E

Cool Breeze

vectaire

reducing
the risk of
over-heating
in residential
properties

R290
natural refrigerant

Mitigating over-heating

Cool Breeze

The **Cool Breeze** has been designed to provide an effective solution for mitigating overheating in residential properties, particularly during summer months. It meets the standards used in **CIBSE TM59** assessments and **Approved Document O** of the Building Regulations.

Designed for seamless integration with the **Vectaire Maxi MVHR** range, the **Cool Breeze** offers a compact, energy-efficient, and compliant approach to indoor temperature regulation.

The **self-contained, sealed-for-life system,** delivers up to **4.1 kW of total cooling capacity** without the need for an external condenser.

The **Cool Breeze** automatically senses the room temperature and that of the incoming fresh air to determine when cooling is required.

It removes heat from the supply air allowing the MVHR to distribute the cooled air throughout the property, providing a consistently comfortable indoor environment for residents.

The Vectaire range of MVHRs has been designed to ensure good indoor air quality in every type of domestic environment. They comply with UK Building Regulations for mechanical ventilation with heat recovery.

The system is ideally suited for use in new-build and retrofit applications where regulatory compliance and system efficiency are critical.

HOW THE COOL BREEZE WORKS

Stale air extracted (23°C)

Air supply to room (16°C)

Incoming fresh air (30°C)

Air exhausted to atmosphere

above temperatures for reference only

Mitigating over-heating

Cool Breeze

COOL BREEZE FEATURES

- Up to 4.1 kW of total cooling provided
- Fresh air supply is lowered by up to 20°C
- Uses R290 - eco friendly, natural refrigerant - over 225 times more environmentally friendly than R32
- **COP up to 4.3**
- **GWP Rating 3**
- **EER up to 3.2**
- Automatic control of supply temperature via integral sensor - no false activation from poorly sited external thermostat
- Optional manual override for user preference
- Universal handing via intelligent software
- Very quiet integral condenser
- Front access for servicing
- Wall or floor installation (with appropriate wall bracket or floor stand)

MAXI MVHR FEATURES

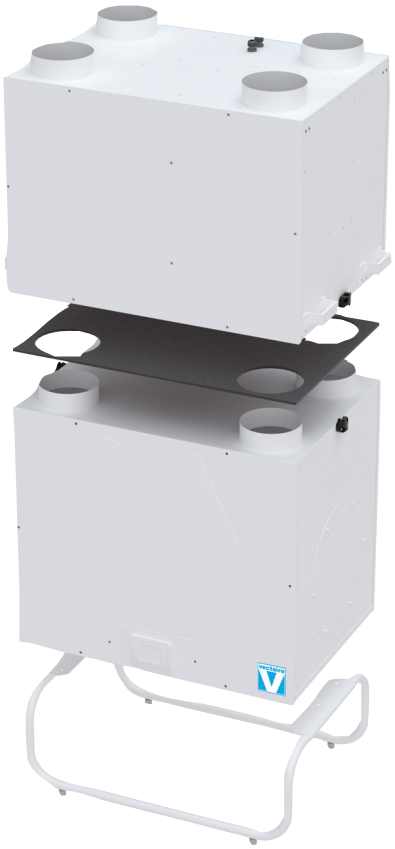
- High quality, energy efficient EC motors with low specific fan power
- 92% efficient counter-flow heat exchanger
- Very low noise levels
- Enhanced acoustic option available
- Fully automatic summer bypass
- Intelligent software for independent motor control
- 0-10V connections can be used for:
  - BMS - for remote motor shut-off
  - CO_2 detector
  - home automation system
- Tool free front filter access
- External pre-heater option
- Passive House Certified option

- Manufactured in the UK
- Cool Breeze Registered Design

INSTALLATION OPTIONS

Wall

Floor



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Cool Breeze

COOLING DATA

External Temperature 28°C		Airflow l/sec					
Internal Temp		60	70	80	90	100	110
23°C	Combined Cooling Power (kW)	1.30	1.48	1.65	1.78	1.90	2.03
	Supply Air °C	10.1	10.6	11.0	11.7	12.3	12.8
	Total Cooling Power @ 50%RH (kW)	1.43	1.62	1.81	1.96	2.09	2.23
24°C	Combined Cooling Power (kW)	1.25	1.43	1.60	1.73	1.85	1.98
	Supply Air °C	10.8	11.2	11.5	12.1	12.7	13.1
	Total Cooling Power @ 50%RH (kW)	1.37	1.57	1.76	1.90	2.03	2.18
25°C	Combined Cooling Power (kW)	1.22	1.40	1.57	1.70	1.82	1.93
	Supply Air °C	11.2	11.5	11.8	12.4	13.0	13.5
	Total Cooling Power @ 50%RH (kW)	1.34	1.54	1.72	1.87	1.99	2.12
26°C	Combined Cooling Power (kW)	1.20	1.37	1.53	1.66	1.78	1.89
	Supply Air °C	11.5	11.9	12.2	12.8	13.3	13.8
	Total Cooling Power @ 50%RH (kW)	1.32	1.50	1.68	1.82	1.95	2.08

External Temperature 30°C		Airflow l/sec					
Internal Temp		60	70	80	90	100	110
23°C	Combined Cooling Power (kW)	1.43	1.63	1.83	1.99	2.14	2.28
	Supply Air °C	10.3	10.7	11.1	11.7	12.3	12.9
	Total Cooling Power @ 50%RH (kW)	1.57	1.80	2.01	2.19	2.35	2.51
24°C	Combined Cooling Power (kW)	1.39	1.58	1.77	1.93	2.08	2.22
	Supply Air °C	10.9	11.3	11.7	12.3	12.8	13.3
	Total Cooling Power @ 50%RH (kW)	1.52	1.74	1.95	2.12	2.29	2.44
25°C	Combined Cooling Power (kW)	1.36	1.55	1.72	1.88	2.02	2.16
	Supply Air °C	11.2	11.7	12.2	12.8	13.3	13.8
	Total Cooling Power @ 50%RH (kW)	1.50	1.70	1.89	2.06	2.22	2.37
26°C	Combined Cooling Power (kW)	1.34	1.52	1.69	1.83	1.96	2.09
	Supply Air °C	11.5	12.0	12.5	13.2	13.8	14.3
	Total Cooling Power @ 50%RH (kW)	1.48	1.68	1.86	2.02	2.15	2.30

External Temperature 32°C		Airflow l/sec					
Internal Temp		60	70	80	90	100	110
23°C	Combined Cooling Power (kW)	1.50	1.71	1.90	2.06	2.21	2.38
	Supply Air °C	11.3	11.9	12.4	13.1	13.7	14.2
	Total Cooling Power @ 50%RH (kW)	1.65	1.88	2.08	2.27	2.43	2.61
24°C	Combined Cooling Power (kW)	1.46	1.67	1.88	2.04	2.19	2.34
	Supply Air °C	11.9	12.3	12.6	13.3	13.9	14.4
	Total Cooling Power @ 50%RH (kW)	1.60	1.84	2.06	2.24	2.41	2.57
25°C	Combined Cooling Power (kW)	1.44	1.65	1.85	2.01	2.15	2.30
	Supply Air °C	12.1	12.5	12.9	13.6	14.2	14.7
	Total Cooling Power @ 50%RH (kW)	1.59	1.82	2.03	2.21	2.37	2.53
26°C	Combined Cooling Power (kW)	1.42	1.62	1.81	1.97	2.12	2.26
	Supply Air °C	12.4	12.9	13.3	13.9	14.5	15.1
	Total Cooling Power @ 50%RH (kW)	1.56	1.78	1.99	2.17	2.33	2.48

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Cool Breeze

COOLING DATA cont

External Temperature 34°C		Airflow l/sec					
Internal Temp		60	70	80	90	100	110
23°C	Combined Cooling Power (kW)	1.60	1.83	2.04	2.23	2.41	2.59
	Supply Air °C	11.9	12.4	12.9	13.5	14.1	14.6
	Total Cooling Power @ 50%RH (kW)	1.76	2.01	2.24	2.45	2.65	2.84
24°C	Combined Cooling Power (kW)	1.58	1.80	2.00	2.19	2.37	2.56
	Supply Air °C	12.2	12.8	13.3	13.9	14.4	14.8
	Total Cooling Power @ 50%RH (kW)	1.74	1.98	2.20	2.41	2.61	2.81
25°C	Combined Cooling Power (kW)	1.56	1.79	2.01	2.18	2.32	2.51
	Supply Air °C	12.5	12.9	13.2	14.0	14.8	15.2
	Total Cooling Power @ 50%RH (kW)	1.72	1.97	2.21	2.39	2.55	2.76
26°C	Combined Cooling Power (kW)	1.54	1.76	1.97	2.13	2.29	2.46
	Supply Air °C	12.8	13.3	13.7	14.4	15.1	15.5
	Total Cooling Power @ 50%RH (kW)	1.69	1.93	2.16	2.35	2.51	2.71

TECHNICAL DATA		
FLC - Amps	Power - Watts	Max Cooling Capacity - Kilowatts
4.8	700	4.1

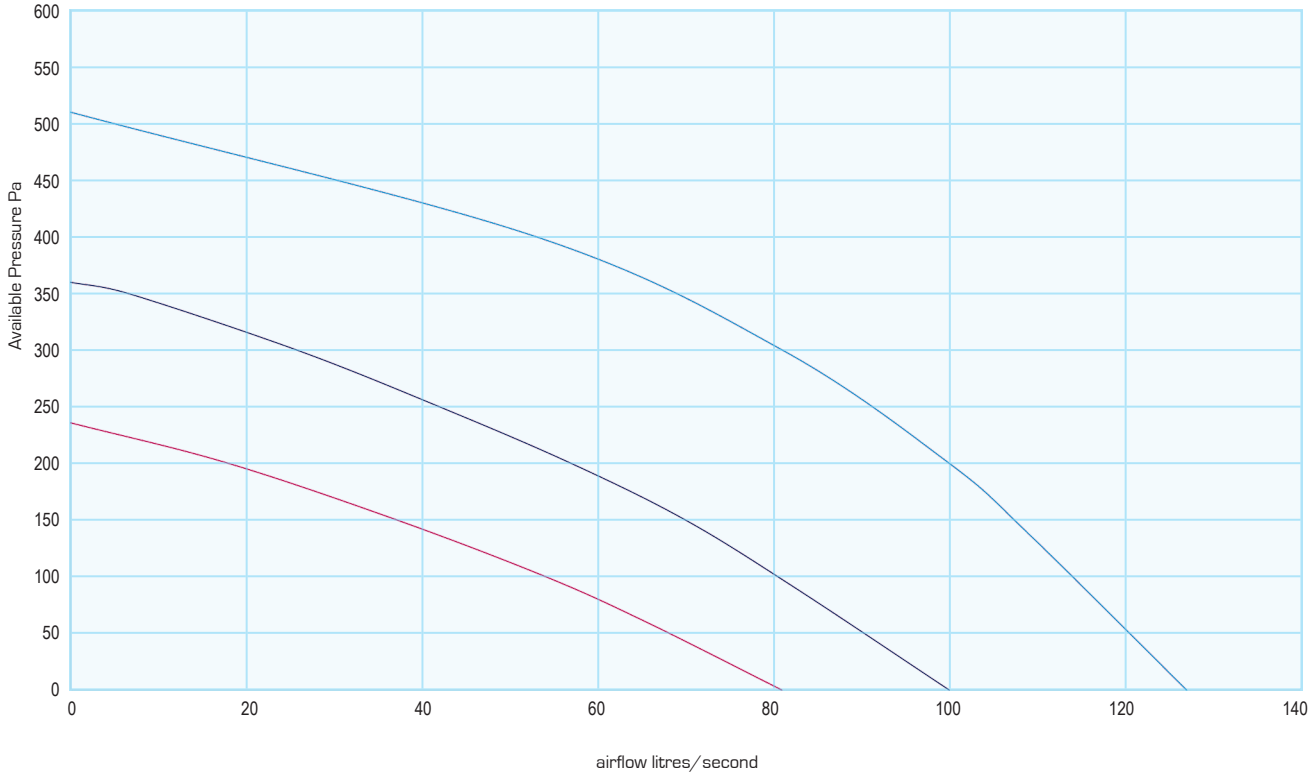
SOUND DATA*		Sound Power Levels, L_W – dB-Octave Bands Frequency Hz								Sound Pressure dBA @ 3m
Curve Ref		63	125	250	500	1k	2k	4k	8k	
100% 140 l/sec	Extract	52	57	61	58	59	58	55	50	
	Supply	57	61	64	60	59	55	50	43	
	Breakout	58	60	61	56	44	39	30	21	38.6
80% 110 l/sec	Extract	48	53	55	53	54	52	49	42	
	Supply	53	57	58	55	54	49	44	35	
	Breakout	57	60	58	54	43	37	28	22	36.7
60% 80 l/sec	Extract	42	47	48	46	47	45	40	32	
	Supply	47	51	51	48	47	42	35	25	
	Breakout	57	60	56	52	42	35	26	22	34.5

* data from our own laboratory

Cool Breeze

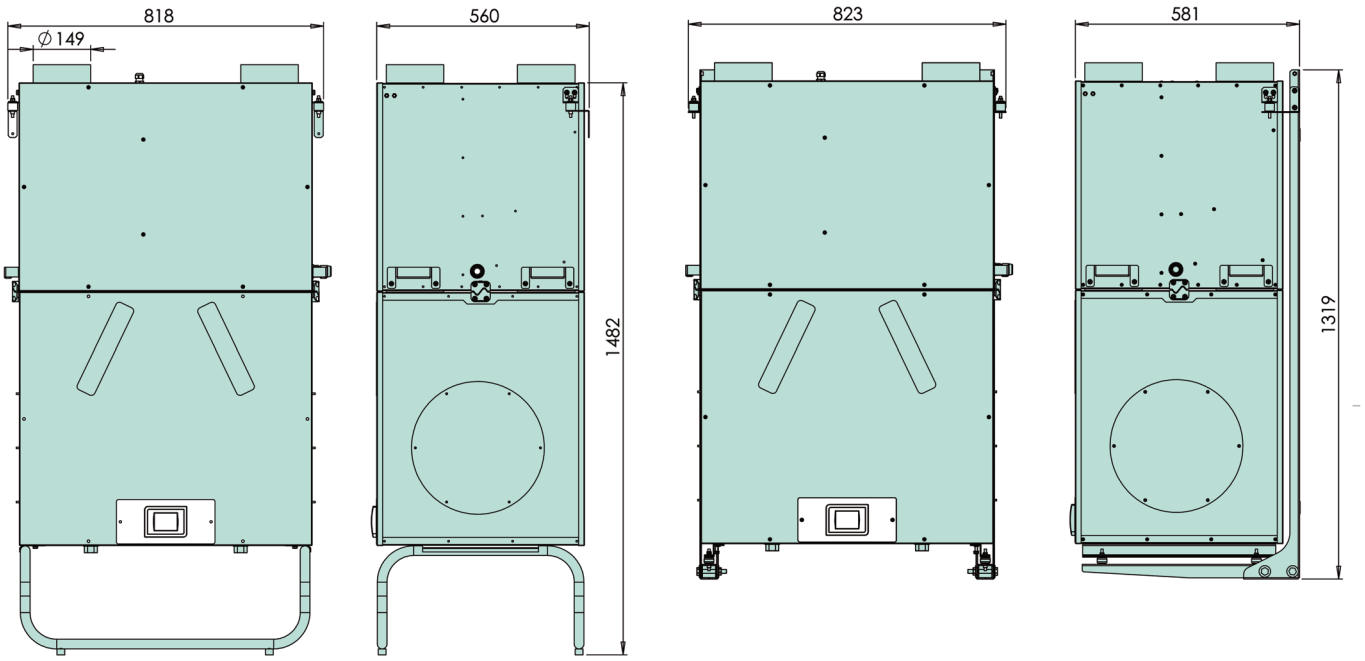
MAXI - RESULTS for SAP CALCULATIONS ENERGY LEVEL PERFORMANCE - using rigid ducting only						
	2009 Data		2012 Data		SAP 10 Data	
Exhaust Terminal Configuration	Specific Fan Power (W/l/sec)	Heat Exchange Efficiency	Specific Fan Power (W/l/sec)	Heat Exchange Efficiency	Specific Fan Power (W/l/sec)	Heat Exchange Efficiency
Kitchen + 1 additional wet room	0.43	92%	0.45	92%	0.45	92%
Kitchen + 2 additional wet rooms	0.40	92.%	0.47	92%	0.47	92%
Kitchen + 3 additional wet rooms	0.42	92%	0.54	91%	0.54	91%
Kitchen + 4 additional wet rooms	0.48	91%	0.66	90%	0.66	90%
Kitchen + 5 additional wet rooms	0.55	91%	0.80	90%	0.80	90%
Kitchen + 6 additional wet rooms	0.63	90%	0.99	89%	0.99	89%
Kitchen + 7 additional wet rooms	0.76	90%	1.21	89%	1.21	89%
Figures at minimum flow rate conditions						

COOL BREEZE PERFORMANCE (curves are for guidance only)



Cool Breeze

COOL BREEZE DIMENSIONS with MAXI - mm



Cooling Unit Weight: 58 kgs
Maxi Weight: 37 kgs
Maxi-AT Weight: 42 kgs

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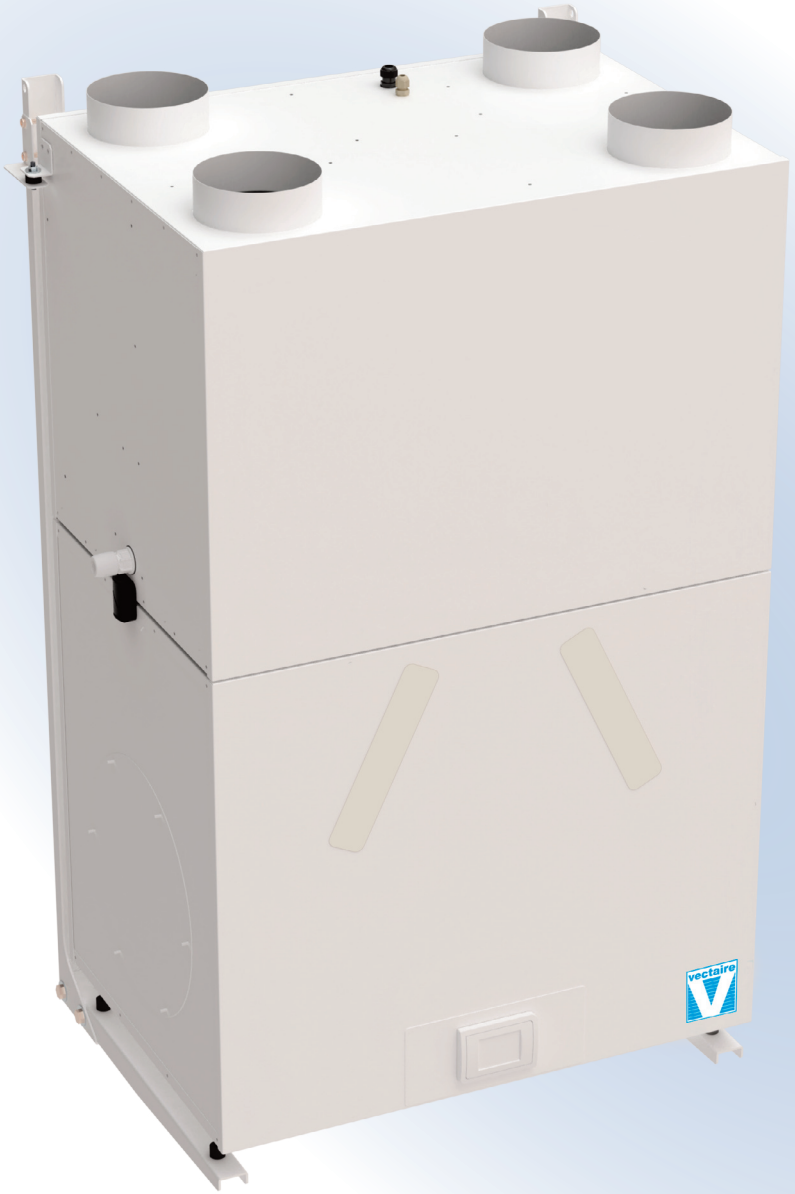
Cool Breeze



reducing
the risk of
over-heating
in residential
properties

R290
natural refrigerant

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vectaire

Cool Breeze Plus

vectaire

reducing the risk of over-heating in residential properties

R290 natural refrigerant

Mitigating over-heating

Cool Breeze Plus

The **Cool Breeze Plus** has been designed to provide an effective solution for mitigating overheating in larger residential properties, particularly during summer months. It meets the standards used in **CIBSE TM59** assessments and **Approved Document O** of the Building Regulations.

Designed for seamless integration with the **Vectaire Maxi Plus MVHR** range, the **Cool Breeze Plus** offers a compact, energy-efficient, and compliant approach to indoor temperature regulation.

The **self-contained, sealed-for-life system,** delivers up to **4.3 kW of total cooling capacity** without the need for an external condenser.

The **Cool Breeze Plus** automatically senses the room temperature and that of the incoming fresh air to determine when cooling is required.

It removes heat from the supply air allowing the MVHR to distribute the cooled air throughout the property, providing a consistently comfortable indoor environment for residents.

The Vectaire range of MVHRs has been designed to ensure good indoor air quality in every type of domestic environment. They comply with UK Building Regulations for mechanical ventilation with heat recovery.

The system is ideally suited for use in new-build and retrofit applications where regulatory compliance and system efficiency are critical.

HOW THE COOL BREEZE PLUS WORKS

Stale air extracted (23°C)

Air supply to room (16°C)

Incoming fresh air (30°C)

Air exhausted to atmosphere

above temperatures for reference only

Mitigating over-heating

Cool Breeze Plus

COOL BREEZE PLUS FEATURES

- Up to 4.3 kW of total cooling provided
- Fresh air supply is lowered by up to 20°C
- Uses R290 - eco friendly, natural refrigerant - over 225 times more environmentally friendly than R32
- **COP up to 6.5**
- **GWP Rating 3**
- **EER up to 4.6**
- Automatic control of supply temperature via integral sensor - no false activation from poorly sited external thermostat
- Optional manual override for user preference
- Universal handing via intelligent software
- Very quiet integral condenser
- Front access for servicing
- Wall or floor installation (with appropriate wall bracket or floor stand)

MAXI PLUS MVHR FEATURES

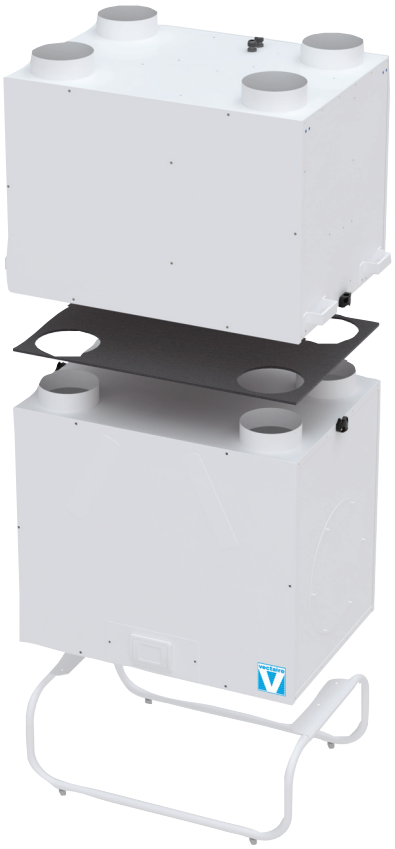
- High quality, energy efficient EC motors with low specific fan power
- 89% efficient counter-flow heat exchanger
- Very low noise levels
- Enhanced acoustic option available
- Fully automatic summer bypass
- Intelligent software for independent motor control
- 0-10V connections can be used for:
  - BMS - for remote motor shut-off
  - CO_2 detector
  - home automation system
- Tool free front filter access
- External pre-heater option
- Passive House Certified option

- Manufactured in the UK
- Cool Breeze Registered Design

INSTALLATION OPTIONS

Wall

Floor



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Cool Breeze Plus

COOLING DATA

External Temperature 27°C		Airflow l/sec								
Internal Temp		80	90	100	110	120	130	140	150	160
23°C	Combined Cooling Power (kW)	1.39	1.52	1.65	1.78	1.92	2.04	2.15	2.23	2.30
	Supply Air °C	12.6	13.0	13.4	13.6	13.8	14.1	14.3	14.7	15.1
	Total Cooling Power @ 50%RH (kW)	1.76	1.93	2.08	2.26	2.43	2.58	2.72	2.83	2.92
24°C	Combined Cooling Power (kW)	1.36	1.48	1.60	1.74	1.89	1.99	2.08	2.16	2.23
	Supply Air °C	13.0	13.4	13.8	13.9	14.0	14.4	14.7	15.1	15.5
	Total Cooling Power @ 50%RH (kW)	1.72	1.87	2.02	2.21	2.39	2.52	2.64	2.73	2.82
25°C	Combined Cooling Power (kW)	1.32	1.45	1.57	1.69	1.80	1.90	2.00	2.07	2.13
	Supply Air °C	13.4	13.7	14.0	14.3	14.6	14.9	15.2	15.6	16.0
	Total Cooling Power @ 50%RH (kW)	1.67	1.83	1.99	2.14	2.28	2.41	2.53	2.62	2.70
26°C	Combined Cooling Power (kW)	1.31	1.43	1.54	1.63	1.71	1.84	1.97	2.01	2.03
	Supply Air °C	13.5	13.9	14.3	14.8	15.2	15.3	15.4	16.0	16.5
	Total Cooling Power @ 50%RH (kW)	1.65	1.81	1.95	2.06	2.17	2.33	2.49	2.54	2.57
27°C	Combined Cooling Power (kW)	1.28	1.40	1.51	1.60	1.67	1.75	1.83	1.88	1.92
	Supply Air °C	13.8	14.2	14.5	15.0	15.5	15.9	16.2	16.7	17.1
	Total Cooling Power @ 50%RH (kW)	1.62	1.77	1.91	2.02	2.11	2.22	2.32	2.38	2.43

External Temperature 28°C		Airflow l/sec								
Internal Temp		80	90	100	110	120	130	140	150	160
23°C	Combined Cooling Power (kW)	1.44	1.61	1.78	1.90	2.02	2.14	2.25	2.35	2.44
	Supply Air °C	13.1	13.2	13.3	13.7	14.1	14.4	14.7	15.1	15.4
	Total Cooling Power @ 50%RH (kW)	1.83	2.04	2.25	2.41	2.55	2.71	2.85	2.98	3.09
24°C	Combined Cooling Power (kW)	1.43	1.60	1.75	1.87	1.97	2.08	2.17	2.28	2.38
	Supply Air °C	13.2	13.4	13.5	14.0	14.4	14.8	15.2	15.5	15.7
	Total Cooling Power @ 50%RH (kW)	1.81	2.02	2.22	2.37	2.50	2.63	2.74	2.88	3.01
25°C	Combined Cooling Power (kW)	1.39	1.55	1.69	1.81	1.92	2.01	2.10	2.20	2.28
	Supply Air °C	13.6	13.8	14.0	14.4	14.8	15.2	15.6	15.9	16.2
	Total Cooling Power @ 50%RH (kW)	1.76	1.96	2.14	2.29	2.43	2.55	2.66	2.78	2.89
26°C	Combined Cooling Power (kW)	1.36	1.51	1.65	1.75	1.84	1.93	2.02	2.11	2.19
	Supply Air °C	13.9	14.2	14.4	14.9	15.3	15.7	16.1	16.4	16.7
	Total Cooling Power @ 50%RH (kW)	1.73	1.91	2.08	2.22	2.33	2.45	2.55	2.67	2.77
27°C	Combined Cooling Power (kW)	1.31	1.45	1.59	1.68	1.77	1.86	1.95	2.04	2.13
	Supply Air °C	14.5	14.7	14.9	15.4	15.8	16.2	16.5	16.8	17.0
	Total Cooling Power @ 50%RH (kW)	1.65	1.83	2.01	2.13	2.24	2.36	2.47	2.58	2.70

External Temperature 30°C		Airflow l/sec								
Internal Temp		80	90	100	110	120	130	140	150	160
23°C	Combined Cooling Power (kW)	1.62	1.76	1.90	2.02	2.13	2.26	2.37	2.49	2.59
	Supply Air °C	13.3	13.8	14.3	14.8	15.3	15.7	16.0	16.3	16.6
	Total Cooling Power @ 50%RH (kW)	2.05	2.23	2.40	2.56	2.70	2.86	3.00	3.15	3.28
24°C	Combined Cooling Power (kW)	1.57	1.73	1.88	1.98	2.08	2.20	2.32	2.41	2.50
	Supply Air °C	13.8	14.2	14.5	15.1	15.7	16.0	16.3	16.7	17.1
	Total Cooling Power @ 50%RH (kW)	1.99	2.18	2.37	2.51	2.63	2.79	2.94	3.06	3.16
25°C	Combined Cooling Power (kW)	1.50	1.65	1.79	1.91	2.02	2.13	2.24	2.33	2.42
	Supply Air °C	14.5	14.9	15.2	15.7	16.1	16.5	16.8	17.2	17.5
	Total Cooling Power @ 50%RH (kW)	1.90	2.09	2.27	2.42	2.55	2.70	2.83	2.95	3.06
26°C	Combined Cooling Power (kW)	1.44	1.60	1.74	1.86	1.97	2.07	2.15	2.24	2.32
	Supply Air °C	15.1	15.4	15.6	16.0	16.4	16.9	17.3	17.7	18.0
	Total Cooling Power @ 50%RH (kW)	1.83	2.02	2.21	2.36	2.50	2.62	2.72	2.84	2.94
27°C	Combined Cooling Power (kW)	1.38	1.54	1.69	1.79	1.87	1.97	2.07	2.16	2.25
	Supply Air °C	15.7	15.9	16.0	16.6	17.1	17.5	17.8	18.1	18.4
	Total Cooling Power @ 50%RH (kW)	1.75	1.95	2.14	2.27	2.37	2.50	2.62	2.73	2.84

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Cool Breeze Plus

COOLING DATA

External Temperature 32°C		Airflow l/sec								
Internal Temp		80	90	100	110	120	130	140	150	160
23°C	Combined Cooling Power (kW)	1.68	1.86	2.02	2.16	2.29	2.42	2.54	2.68	2.81
	Supply Air °C	14.6	15.0	15.3	15.8	16.2	16.6	17.0	17.3	17.5
	Total Cooling Power @ 50%RH (kW)	2.13	2.35	2.56	2.74	2.90	3.07	3.22	3.39	3.55
24°C	Combined Cooling Power (kW)	1.66	1.83	2.00	2.14	2.27	2.38	2.49	2.63	2.77
	Supply Air °C	14.8	15.2	15.5	16.0	16.4	16.9	17.3	17.5	17.7
	Total Cooling Power @ 50%RH (kW)	2.11	2.32	2.53	2.70	2.87	3.02	3.15	3.33	3.50
25°C	Combined Cooling Power (kW)	1.60	1.78	1.96	2.10	2.22	2.34	2.46	2.57	2.67
	Supply Air °C	15.5	15.7	15.8	16.3	16.7	17.1	17.5	17.9	18.2
	Total Cooling Power @ 50%RH (kW)	2.02	2.25	2.48	2.65	2.81	2.97	3.11	3.25	3.38
26°C	Combined Cooling Power (kW)	1.58	1.75	1.92	2.04	2.15	2.28	2.41	2.51	2.61
	Supply Air °C	15.7	15.9	16.1	16.7	17.2	17.5	17.8	18.2	18.5
	Total Cooling Power @ 50%RH (kW)	2.00	2.22	2.44	2.59	2.72	2.89	3.04	3.18	3.31
27°C	Combined Cooling Power (kW)	1.54	1.69	1.83	1.94	2.05	2.18	2.30	2.40	2.50
	Supply Air °C	16.1	16.5	16.9	17.4	17.9	18.2	18.4	18.8	19.1
	Total Cooling Power @ 50%RH (kW)	1.95	2.14	2.31	2.46	2.59	2.76	2.92	3.04	3.16

External Temperature 34°C		Airflow l/sec								
Internal Temp		80	90	100	110	120	130	140	150	160
23°C	Combined Cooling Power (kW)	1.84	2.05	2.25	2.42	2.58	2.76	2.93	3.09	3.25
	Supply Air °C	15.0	15.2	15.4	15.8	16.2	16.5	16.7	17.0	17.2
	Total Cooling Power @ 50%RH (kW)	2.33	2.59	2.85	3.07	3.27	3.49	3.71	3.92	4.12
24°C	Combined Cooling Power (kW)	1.82	2.03	2.23	2.40	2.56	2.72	2.88	3.03	3.18
	Supply Air °C	15.2	15.4	15.6	16.0	16.4	16.7	17.0	17.3	17.6
	Total Cooling Power @ 50%RH (kW)	2.30	2.56	2.82	3.03	3.23	3.44	3.65	3.84	4.02
25°C	Combined Cooling Power (kW)	1.81	2.00	2.19	2.35	2.50	2.64	2.78	2.92	3.06
	Supply Air °C	15.3	15.6	15.9	16.4	16.8	17.2	17.6	17.9	18.2
	Total Cooling Power @ 50%RH (kW)	2.29	2.54	2.77	2.97	3.16	3.35	3.52	3.70	3.87
26°C	Combined Cooling Power (kW)	1.77	1.95	2.12	2.29	2.45	2.58	2.69	2.84	2.98
	Supply Air °C	15.7	16.1	16.5	16.8	17.1	17.6	18.1	18.4	18.6
	Total Cooling Power @ 50%RH (kW)	2.24	2.47	2.68	2.90	3.11	3.27	3.41	3.60	3.77
27°C	Combined Cooling Power (kW)	1.71	1.89	2.07	2.23	2.38	2.50	2.61	2.73	2.85
	Supply Air °C	16.3	16.6	16.9	17.3	17.6	18.1	18.6	19.0	19.3
	Total Cooling Power @ 50%RH (kW)	2.17	2.40	2.62	2.82	3.01	3.17	3.30	3.46	3.60

External Temperature 35°C		Airflow l/sec								
Internal Temp		80	90	100	110	120	130	140	150	160
23°C	Combined Cooling Power (kW)	1.91	2.12	2.32	2.52	2.72	2.90	3.08	3.26	3.43
	Supply Air °C	15.3	15.6	15.8	16.1	16.3	16.6	16.8	17.1	17.3
	Total Cooling Power @ 50%RH (kW)	2.41	2.68	2.94	3.19	3.44	3.67	3.90	4.12	4.34
24°C	Combined Cooling Power (kW)	1.88	2.09	2.30	2.50	2.69	2.84	2.98	3.16	3.33
	Supply Air °C	15.6	15.8	16.0	16.3	16.5	17.0	17.4	17.6	17.8
	Total Cooling Power @ 50%RH (kW)	2.38	2.65	2.91	3.16	3.40	3.59	3.77	4.00	4.22
25°C	Combined Cooling Power (kW)	1.84	2.04	2.24	2.42	2.60	2.75	2.90	3.05	3.19
	Supply Air °C	16.0	16.3	16.5	16.8	17.1	17.5	17.9	18.2	18.5
	Total Cooling Power @ 50%RH (kW)	2.33	2.58	2.83	3.07	3.29	3.48	3.67	3.86	4.04
26°C	Combined Cooling Power (kW)	1.80	2.00	2.19	2.36	2.53	2.68	2.83	2.96	3.08
	Supply Air °C	16.4	16.7	16.9	17.3	17.6	18.0	18.3	18.7	19.1
	Total Cooling Power @ 50%RH (kW)	2.28	2.53	2.77	2.99	3.20	3.39	3.58	3.74	3.90
27°C	Combined Cooling Power (kW)	1.76	1.94	2.12	2.28	2.44	2.60	2.74	2.87	2.98
	Supply Air °C	16.8	17.2	17.5	17.9	18.2	18.5	18.8	19.2	19.6
	Total Cooling Power @ 50%RH (kW)	2.23	2.46	2.68	2.89	3.09	3.29	3.47	3.63	3.77

Cool Breeze Plus

TECHNICAL DATA		
FLC - Amps	Power - Watts	Max Cooling Capacity - Kilowatts
5.5	815	4.3

SOUND DATA *		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% 180 l/s	Extract	67	63	66	64	64	61	58	54	
	Supply	72	67	69	66	64	58	53	47	
	Breakout	68	66	64	57	51	53	49	32	43.3
80% 140 l/s	Extract	63	58	61	59	58	55	51	46	
	Supply	68	62	64	61	58	52	46	39	
	Breakout	63	62	61	53	46	44	39	28	38.0
60% 100 l/s	Extract	58	52	53	51	51	48	43	35	
	Supply	63	56	56	53	51	45	38	28	
	Breakout	60	60	58	47	40	37	31	25	34.2

* data from our own laboratory

MAXI PLUS - 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	0.75	89%	0.56	89%	0.56	89%
Kitchen + 2 additional wet rooms	0.56	89%	0.47	89%	0.47	89%
Kitchen + 3 additional wet rooms	0.46	89%	0.50	88%	0.50	88%
Kitchen + 4 additional wet rooms	0.46	88%	0.56	87%	0.56	87%
Kitchen + 5 additional wet rooms	0.49	88%	0.66	86%	0.66	86%
Kitchen + 6 additional wet rooms	0.55	87%	0.78	85%	0.78	85%
Kitchen + 7 additional wet rooms	0.63	86%	0.94	84%	0.94	84%

Figures at minimum flow rate conditions

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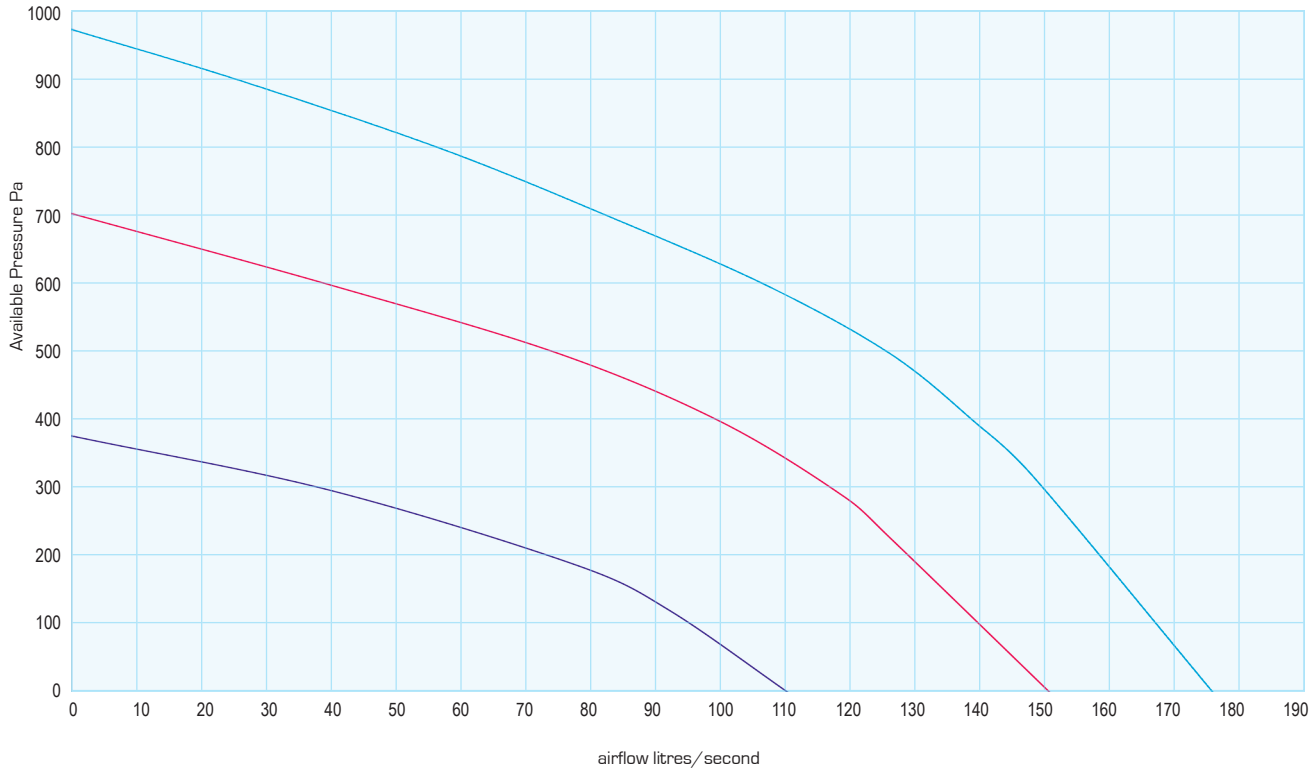
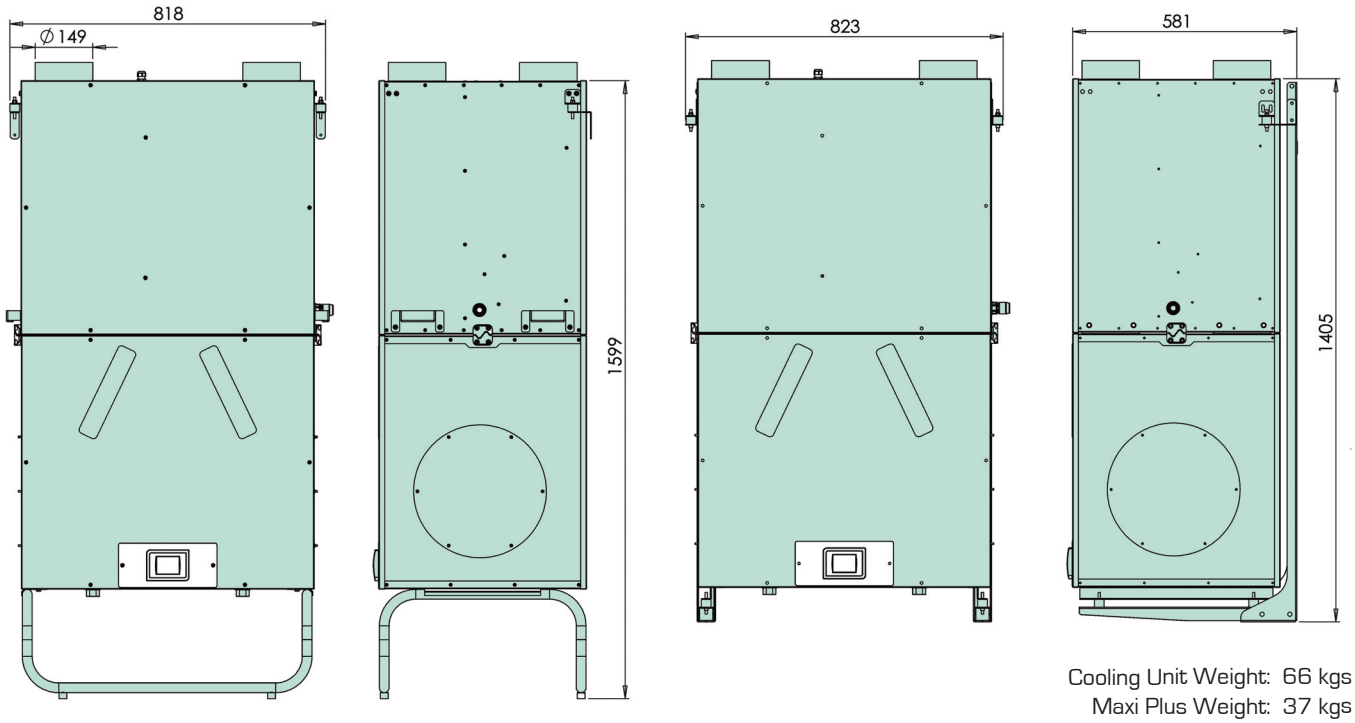
Cool Breeze Plus

COOL BREEZE PLUS PERFORMANCE (curves are for guidance only)



COOL BREEZE PLUS DIMENSIONS with MAXI PLUS - mm



Cooling Unit Weight: 66 kgs
Maxi Plus Weight: 37 kgs
Maxi Plus-AT Weight: 42 kgs

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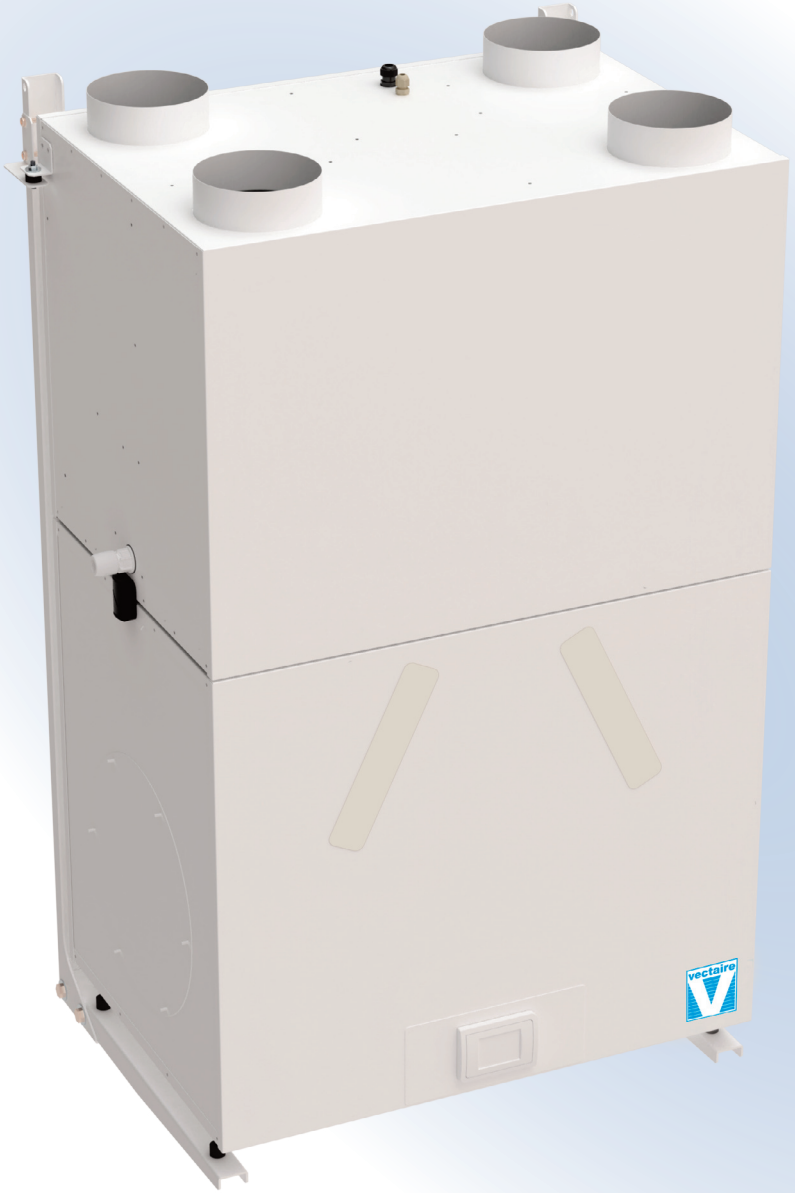
Cool Breeze Plus



reducing the risk of over-heating in residential properties

R290 natural refrigerant

Vectaire Ltd
Lincoln Road
Cressex Business Park
High Wycombe
Buckinghamshire
HP12 3RH

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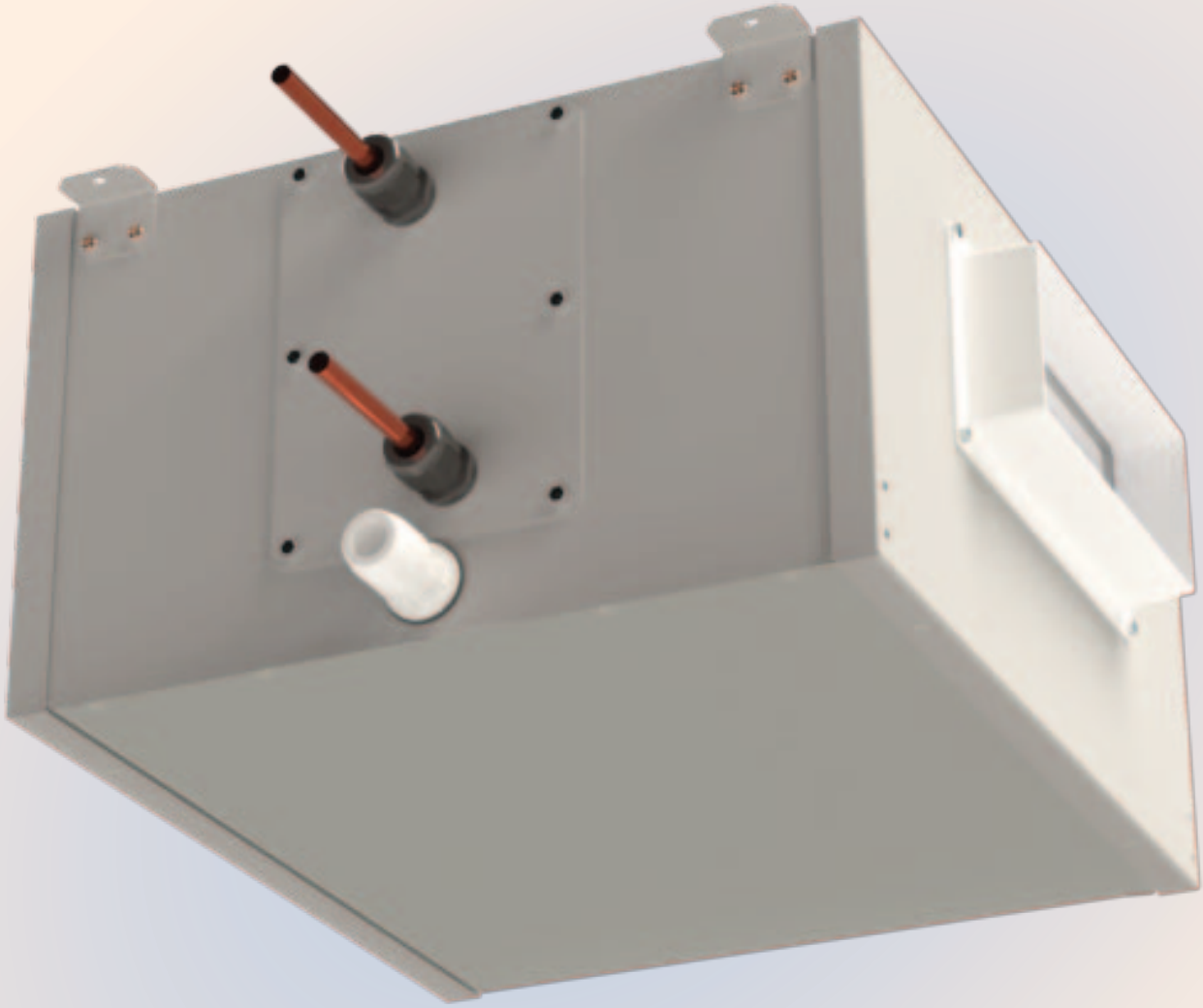
vectaire

Cool-Aire



in-line cooling/heating unit

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Cool-Aire

The Vectaire **Cool-Aire** is an in-line cooling/heating module that utilises an existing water circuit within the property to cool the air flow by up to **17°C** or heat it by up to **29°C**

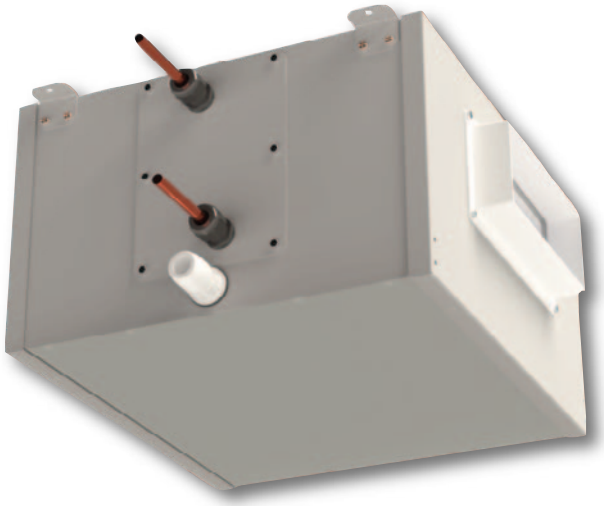
Its slimline design allows it to fit into any ceiling void of minimum 250mm height.

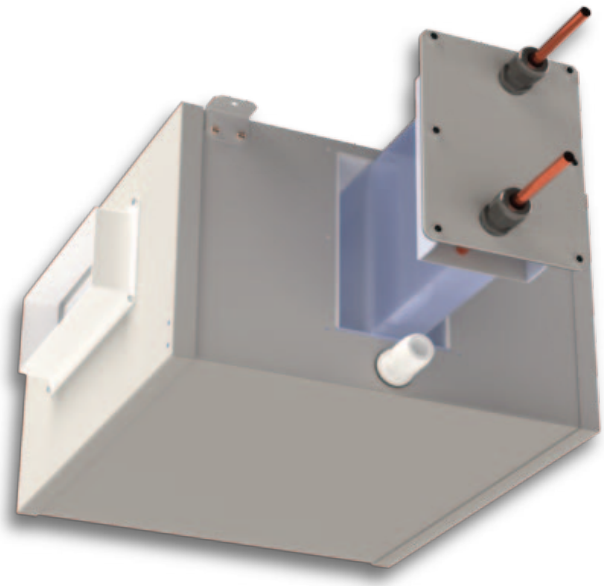
Universal handing allows the air to be passed in either direction over the coil through the 220mm x 90mm spigots at either end.

Internal, integral thermal lining - no exterior lagging required - no additional space taken up in ceiling void.

Designed to achieve compliance with **CIBSE TM59** assessments and **Approved Document O** of the Building Regulations.

Models are available with 2 or 3 port valves and actuators which can integrate seamlessly with any Vectaire MVHR for autonomous cooling.





GENERAL FEATURES

- ✓ Cooling/heating module
- ✓ In-line airflow installation
- ✓ Water loop required
- ✓ Integration with Vectaire MVHRs
- ✓ Slimline design to fit into shallow ceiling void
- ✓ Universal handing - bidirectional flow
- ✓ Alternative control models available
- ✓ Constructed from galvanised steel
- ✓ Ceiling, loft or void installation
- ✓ Easy to install and maintain
- ✓ Designed to achieve compliance with **CIBSE TM59** assessments and **Approved Document O** of the Building Regulations

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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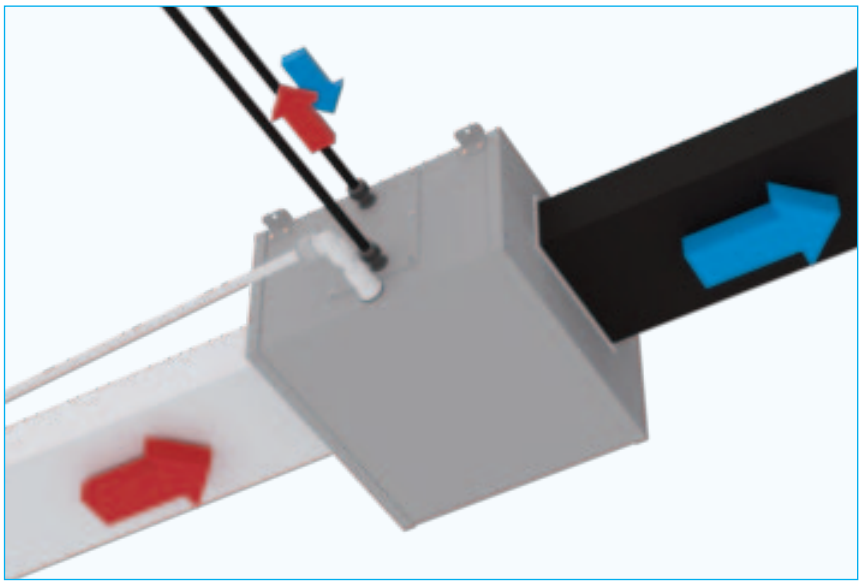
Cool-Aire

INSTALLATION



The **Cool-Aire** should be placed in the room supply ducting of a Vectaire MVHR allowing for up to 93% heat recovery together with total automation of the coil.

The **Cool-Aire** is complete with hanging brackets for ceiling mounting. It can also be supported from the base by drop rods or a plinth.

The **Cool-Aire** is internally angled to encourage condensate flow out of the 15mm push fit connector.

Once the fresh air from the outside has passed through the MVHR it is pushed through the **Cool-Aire** which uses its 1.5kW capacity to cool the air by up to 17°C or heat it by up to 29°C when used with a hot water circuit.

MODELS AVAILABLE

- **Cool-Aire 1** - Base unit only
- **Cool-Aire 2** - Base unit with ½" female thread 2-port valve and 230v actuator
- **Cool-Aire 3** - Base unit with ½" female thread 3-port valve and 230v actuator

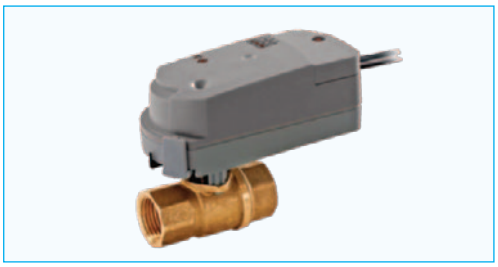
N.B Valves and actuators on models **Cool-Aire 2** and **3** work through direct integration to a Vectaire MVHR.

The unit is controlled by monitoring the temperature of the fresh air coming into the property as well as the temperature of the extracted air from the dwelling.

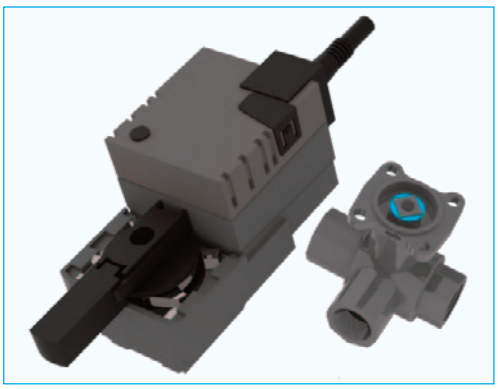
If cooling (or heating if used with a hot water circuit) is required the MVHR automatically opens the valve to begin cooling or heating the supply air.

Alternatively, a room mounted thermostat can be installed to control the coil directly.

ACTUATOR AND 2 PORT VALVE



ACTUATOR AND 3 PORT VALVE



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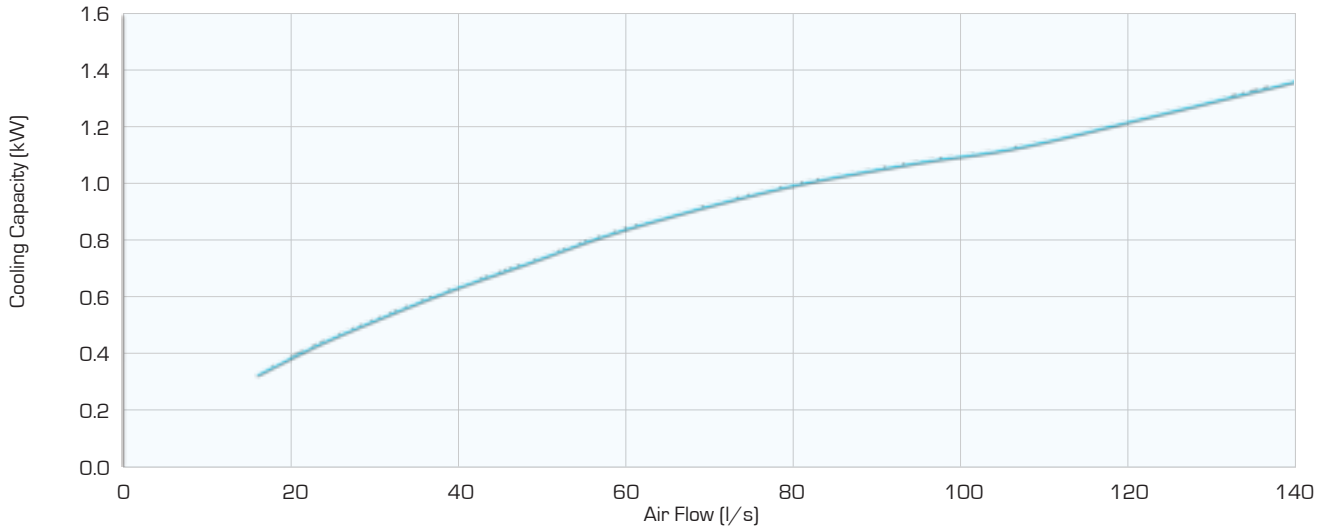
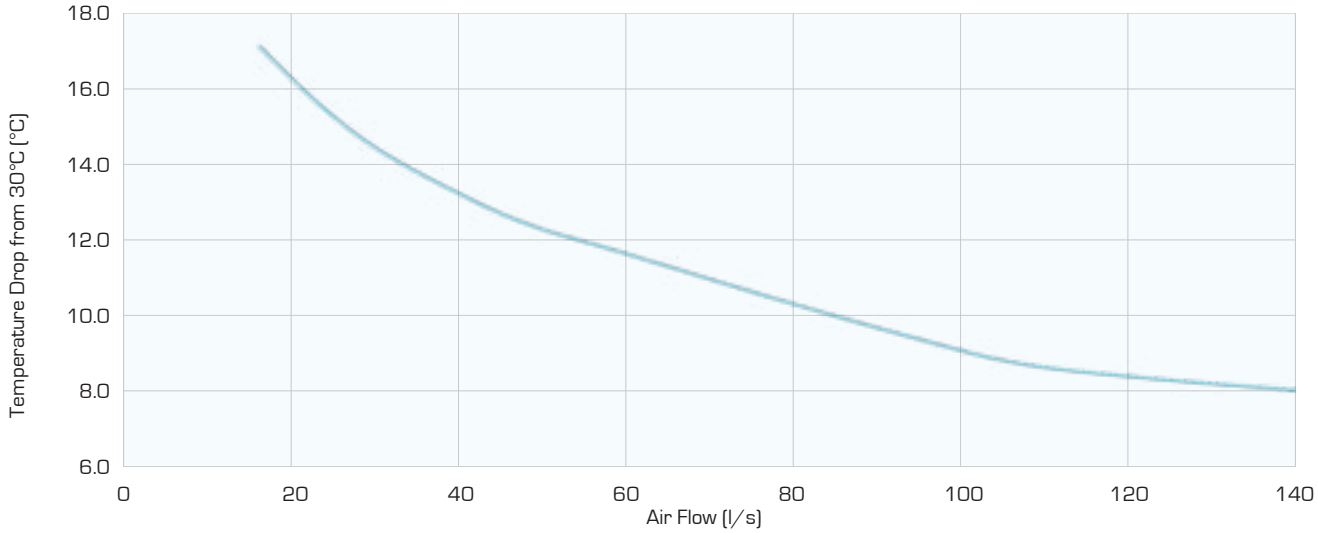
Cool-Aire

PERFORMANCE - COOLING POWER (curves are for guidance only)

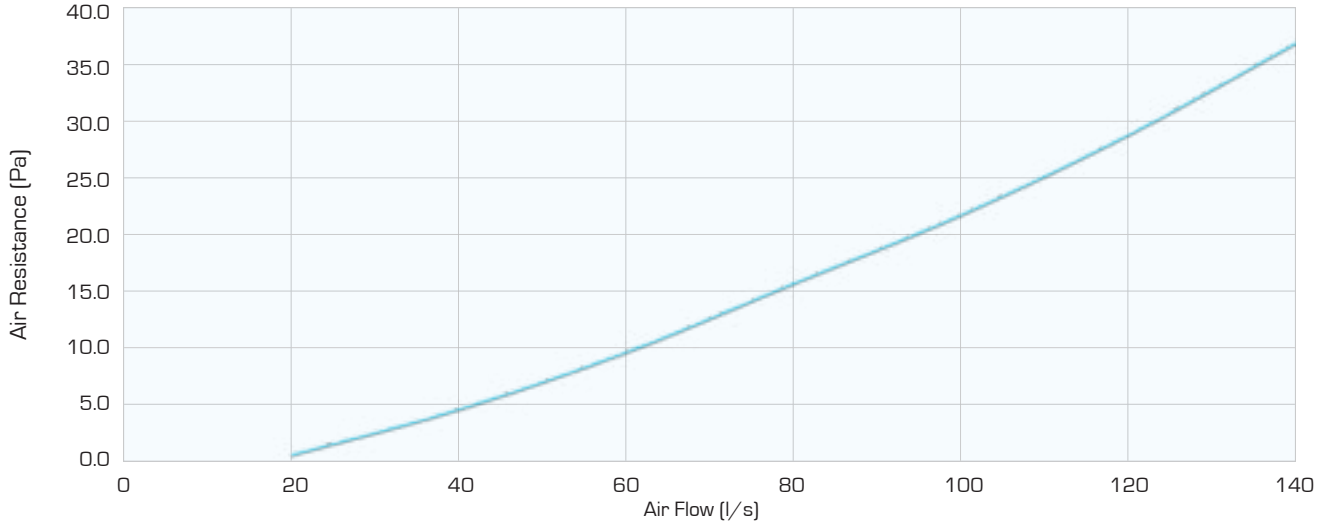
In-Line "Sensible" Cooling Coil Capacity (kW)



In-Line Cooling Coil Capacity (°C)



In-Line Cooling and Heating Pressure Drop (Pa)



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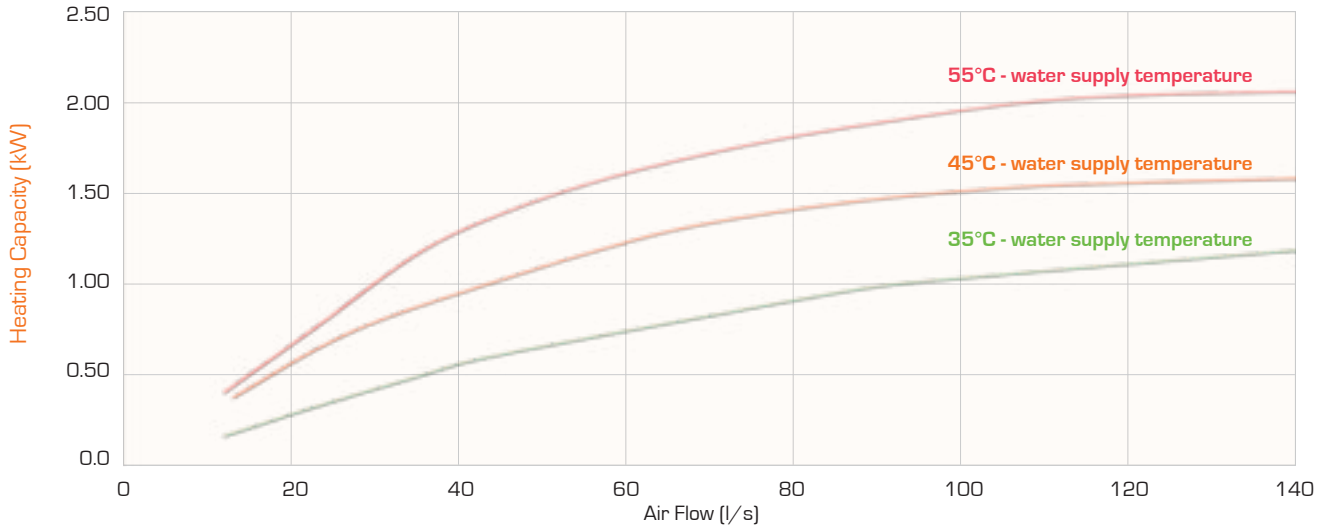
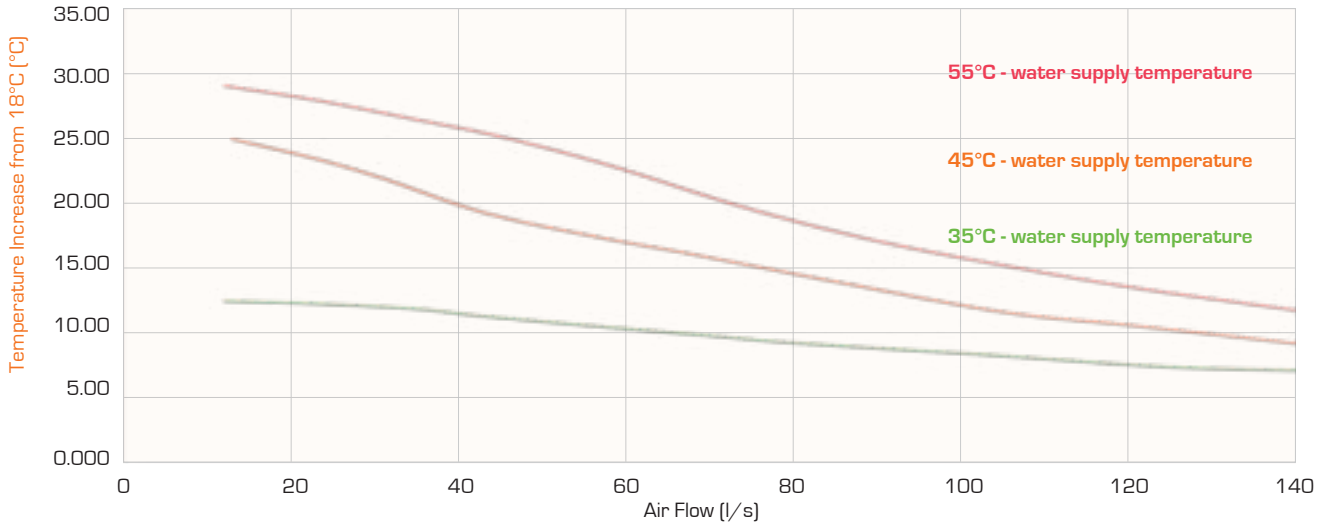
Cool-Aire

PERFORMANCE - HEATING POWER (curves are for guidance only)

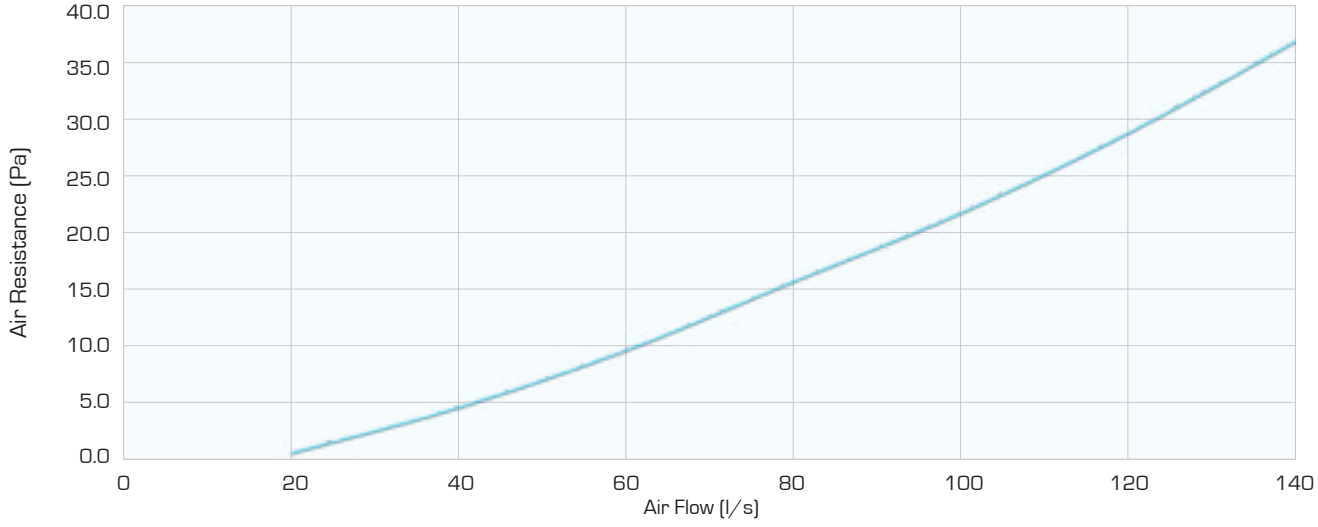
In-Line Cool-Aire Heating (kW)



In-Line Cool-Aire Temperature Increase (°C)



In-Line Cooling and Heating Pressure Drop (Pa)



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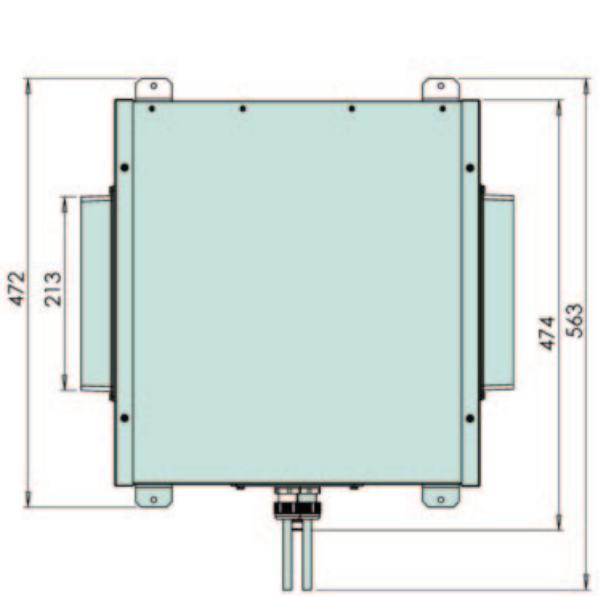
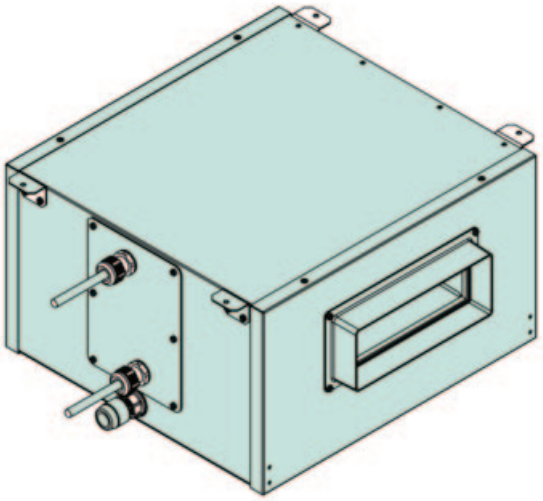
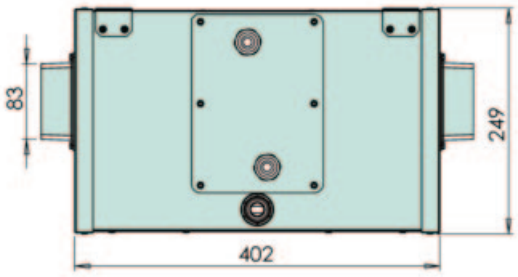
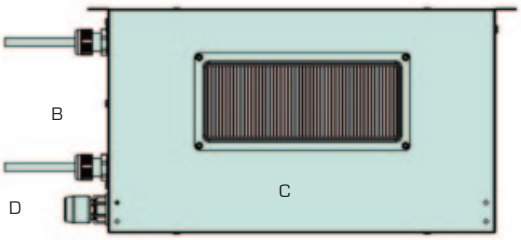
Cool-Aire

DIMENSIONS - mm





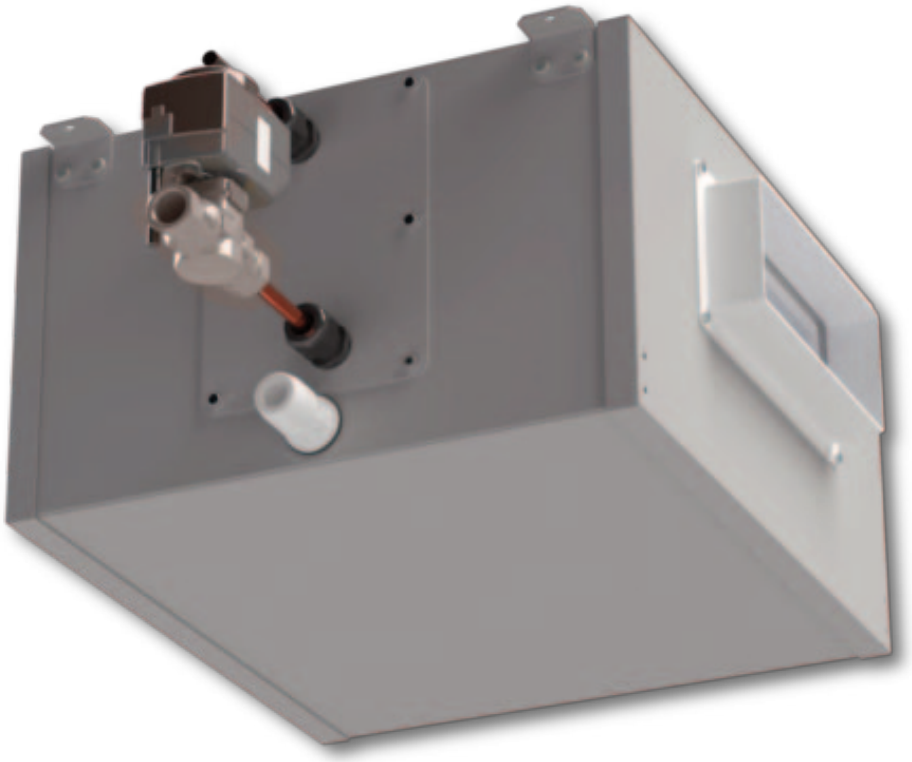




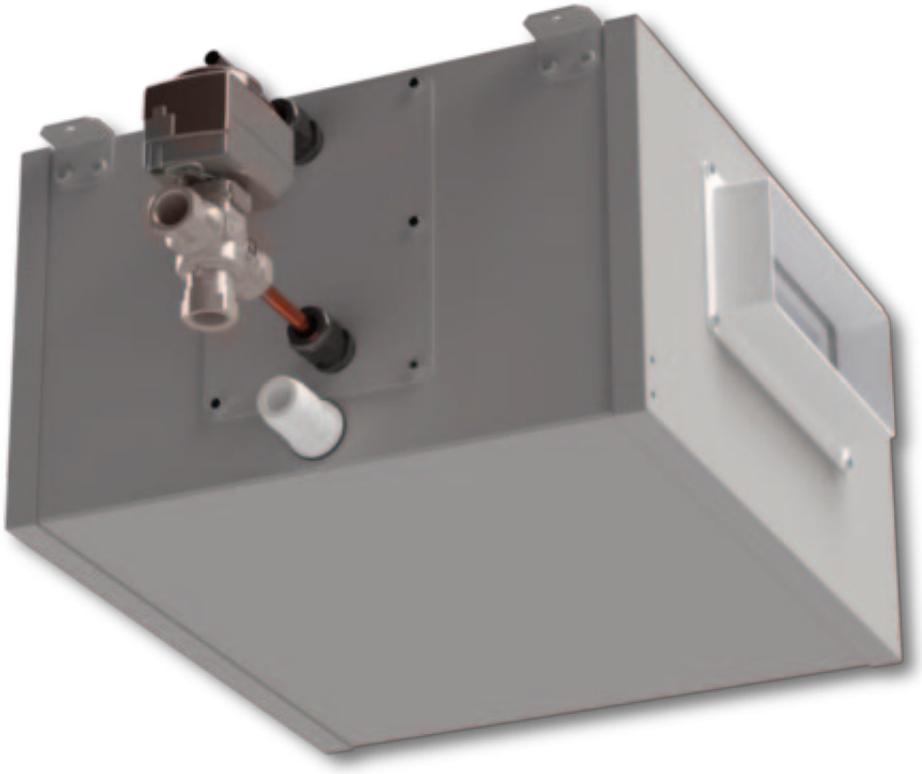
A. Mass - 8 kgs (dry)
B. Coil connections - 9.6mm
C. Spigot - to fit 90mm x 220mm
D. Drain - 15mm push fit adaptor

Cool-Aire

Cool-Aire 2



Cool-Aire 3



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