

# Lo-Carbon NBR dMEV/dMEVe

- Market leading efficiency
- Digital controls with display
- Fully adjustable trickle & boost airflow settings
- 100mm & 125mm model
- Recognised in SAP PCDB
- Constant volume
- Display showing airflow and system pressure
- Switched live connection for external switches/sensors
- IPX5 rated
- Multi-orientation grille
- NHBC Approved
- STAS Approved (Scotland)
- Airflow sensor models UKAS calibrated



## Lo-Carbon NBR dMEV

Continuous running, constant volume dMEV range with switched live (LS) and innovative digital display and harmonised control platform. Quiet running and with high pressure development, the dMEV is best in class.

The unique patented display provides the calibrated installed airflow and pressure meaning that there is no need to test the installation with an airflow measuring device.

The constant volume technology automatically adjusts the speed of the fan to ensure the desired airflow is delivered. A silent high pressure axial impeller means Lo-Carbon dMEV can meet the requirements of many domestic installations without the need to use a traditional centrifugal fan.

A brand new control platform also provides fully adjustable airflow in 1l/s increments, meaning wholehouse rates can be achieved easily using fewer fans than is currently possible with any other dMEV product on the market.

## Longer Duct Runs

A new 125mm dMEV fan is also available to further improve Dwelling Emission Rates (DER) by improving efficiency and lowering noise. The larger 125mm spigot also means there are almost no restrictions in terms of duct lengths and bends used in the system, when compared to a traditional 100mm axial fan. This means fewer fans are required to achieve wholehouse ventilation rates.

As can be seen below, an axial dMEV fan consumes a fraction of the energy of the equivalent centrifugal fan - drastically reducing DER.

Configuration	Location	Alternative Centrifugal Fan SFP	Vent-Axia dMEV 125mm SFP
In room	Kitchen	0.38	0.16
	Wet Room	0.29	0.20
Through Wall	Kitchen	0.36	0.12
	Wet Room	0.28	0.16

## Side View of Airflow Display

Be confident that the dMEV is delivering the right performance with our innovative digital display showing the airflow and system pressure of the installed product.



## Comfort Control Option

Designed to offer a more relaxing environment to the homeowner, the Lo-Carbon dMEV features a delayed start option. This patented comfort control option is selectable at installation and allows the homeowner to enjoy a quiet, peaceful bathroom for up to 20 minutes before the Boost activates. Furthermore, if the light switch turns On and Off within 3 minutes, the Boost will not activate. No more disturbing the family if the bathroom light is turned on during the night.

## Model

### Lo-Carbon NBR dMEVe & dMEVe HT

For kitchen, utility and bathroom/toilet applications, the continuous running H model incorporates an adjustable (40% - 90%) ambient response humidistat. The fan will increase the extract rate if the humidity rises above the point set at installation.

Fixed Speed Settings (3 boost speeds, 2 trickle speeds)

Model	Stock Ref
100e (Switch Live)	474496
100e HT (Humidity Control)	474497

Fixed Speed Settings (2 boost speeds, 3 trickle speeds)

Model	Stock Ref
125e (Switch Live)	495364
125e HT (Humidity Control)	495365

### Lo-Carbon NBR dMEV & dMEV HT

Continuous running dMEV available in two sizes. Humidity control models incorporate an adjustable (40% - 90%) ambient response humidistat. The fan will increase the extract rate if the humidity rises above the point set at installation. Variable speed options for trickle and boost, dependant on size for maximum control. Features a display prism, to allow users to see airflow being achieved without having to remove a grille.

Variable Speed Settings (5-30 l/s trickle, 6-35 l/s boost)

Model	Stock Ref
100 (Switch Live)	475142
100 HT (Humidity Control)	473809

Variable Speed Settings (9-30 l/s trickle, 10-35 l/s boost)

Model	Stock Ref
125 (Switch Live)	494147
125 HT (Humidity Control)	494148

### Accessories

Model	Stock Ref
Wall Kit White 100mm	254102
Wall Kit Brown 100mm	254100
Ceiling Kit 100mm	407928
Window Kit 100mm	407927
Decoration Frame 100mm	474041
Wall Kit White 125mm	455226
Conversion Kit 150mm	408680

### Consultant Specification

The de-centralised mechanical extract ventilation unit shall be the NBR DMEV as manufactured by Vent-Axia, exact unit sizing and specification shall be in accordance with the particular specification.

The range should consist of IPX5 rated 100mm and 125mm sizes to meet the Building Regulations compliant design, extracting air from wet rooms (including kitchen and utility) via rigid, flexible ducting or through-wall applications with the fewest fans possible, supplied with a 7 year warranty.

The 100mm DMEV should have variable speed settings of 5-30 l/s on trickle and 6-35 l/s on boost, achieving a minimum noise level of 13 dB(A) at 3 metres. The 125mm DMEV should have variable speed settings of 9-30 l/s on trickle and 10-35 l/s on boost, achieving a minimum noise level of 12.9 dB(A) at 3 metres. All units shall be and independently 3rd party tested at the Sound Research Laboratory (SRL), tested to BS EN 13141-6.

The unit shall comprise a single high efficiency EC/DC motor to deliver specific fan powers as low as 0.12 w/l/s, as measured in accordance with the SAP PCDB test method and listed on the PCDB database.

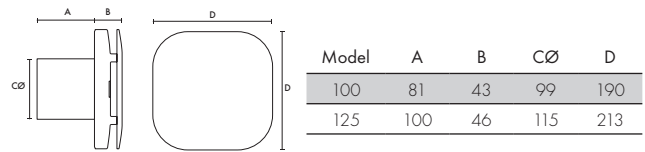
The controls for the DMEV unit shall provide fully adjustable, continuous trickle and boost speeds, with the airflow being controlled in 1 l/s increments. The boost speed shall be activated via a switch live input or integral humidistat.

The unit shall include an integral humidity sensor with ambient and rapid response capability, which increases fan speed in proportion to the level of humidity detected. The unit shall also automatically raise the humidity threshold set point as temperature decreases in order to prevent unnecessary boosting due to background humidity levels.

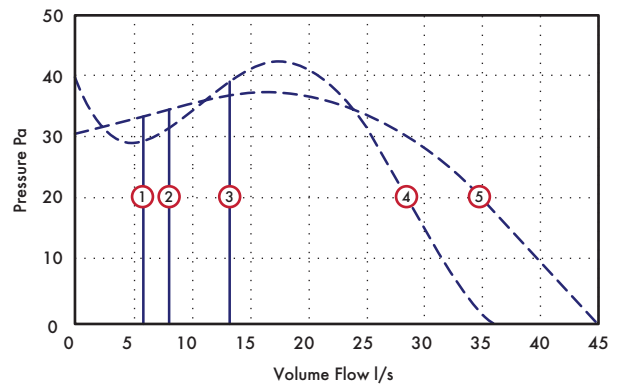
The unit shall be able to be commissioned as a continuous running or intermittent fan according to the Building Regulations compliant design. The fan will have an in-built spirit level for ease of installation.

Commissioning of the fan in accordance with the Building regulations shall be achieved without the use of an airflow measuring device. The fan shall be provided with a UKAS calibrated, constant volume function with the flow rates displayed on the unit without having to remove the cover via the display prism.

### Dimensions (mm)



### Performance Guide



- ① 6l/s Constant Volume
- ② 8l/s Constant Volume
- ③ 13l/s Constant Volume
- ④ Maximum pressure available to deliver airflow - 100mm model
- ⑤ Maximum pressure available to deliver airflow - 125mm model

### Sound

100mm					125mm						
Flow l/s	Min	6	8	13	Max	Flow l/s	Min	9	13	15	Max
Pa	-	5	7	17	-	Pa	-	4	7	9	-
dB(A)	13	14	17	24	41	dB(A)	12	14	17	19	36

### SAP PCDB Performance

Unit Configuration	Location	100 Model	125 Model
In room (rigid duct)	Kitchen	0.17	0.16
	Wet room	0.17	0.20
In room (flex-duct)	Kitchen	0.16	0.15
	Wet room	0.16	0.20
Through wall	Kitchen	0.12	0.12
	Wet room	0.14	0.16