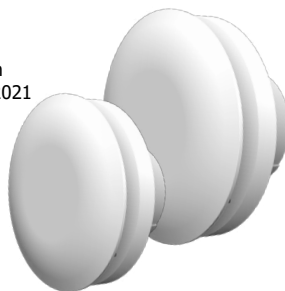


Lo-Carbon dMEV RNB

- Continuously running 100mm and 125mm dMEV with sleek circular design
- Designed to comply with the latest Building Regulations Parts L1A and F 2021
- SAP PCDB listed with SFP's down to 0.08 W/l/s
- Near silent operation independently tested
- IPX5 rated, wall and ceiling mounted Zones 1, 2 and 3
- Low ceiling void - 56mm (100mm spigot) and 66mm (125mm spigot)
- Easy to commission, fully adjustable variable control platform
- Intelligent humidistat model option with proportional increase and timer
- Comfort control option
- 7-year warranty



CODE	DESCRIPTION
418086	Lo-Carbon dMEV RNB 100 – Continuous running fan 100mm
418087	Lo-Carbon dMEV RNB 100 HT – Continuous running fan 125mm
418088	Lo-Carbon dMEV RNB 125 – Continuous running fan 100mm with humidistat
418089	Lo-Carbon dMEV RNB 125 HT – Continuous running fan 125mm with humidistat

Lo-Carbon dMEV RNB

Increased whole ventilation rates, should not mean increased noise levels. The Lo-Carbon dMEV RNB fan, available in 100mm and 125mm, provides adequate ventilation whilst minimising noise. The fan is designed in line with the Approved Document F 2021 Building Regulations, meeting the increased whole house ventilation rates.

For kitchen, utility and bathroom/toilet applications, the continuous running Lo-Carbon dMEV RNB fan is available as standard or as a humidistat model which incorporates an ambient response humidistat. The fan will increase the extract rate if the humidity rises above the point set at installation. Both fans will have optional Comfort Control, which includes a timer function.

humidity (RH) before enabling Boost.

The Lo-Carbon dMEV RNB is complete with IPX5 rating, allowing flexible installation within Zone 1, 2 and 3.

A back pressure detection system option is available, to Boost if the system pressure increase momentarily due to external wind conditions. A silent mixed flow impeller means the Lo-Carbon dMEV RNB 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, meaning wholehouse rates can be achieved easily using fewer fans.

Table 1.3 – Minimum whole dwelling ventilation rates determined by the numbers of bedrooms.

No. of bedrooms	2013 Edition	2021 Edition	Thermal Efficiency %
1	13 l/s	19 l/s	46%
2	17 l/s	25 l/s	47%
3	21 l/s	31 l/s	47%
4	25 l/s	37 l/s	48%
5	29 l/s	43 l/s	48%

The minimum whole dwelling ventilation rate for the supply air should meet the higher of the two following result:

- A minimum rate of 0.3l/s per m2 of internal floors area
- A minimum rate determined by the number of bedroom, as per Table 1.3

Nuisance tripping has also been minimised within the fan logic. The integral humidity sensor versions have functionality that allows for proportional speed increase up to 85% relative

Comfort Control Option

Designed to offer a more relaxing environment to the homeowner, the Lo-Carbon dMEV RNB features a delayed start. This patented comfort control option 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 three minutes, the Boost will not activate. No more disturbing the family if the bathroom light is turned on during the night.

Near Silent Operation

The fan has been designed to be as discreet as possible for homeowners, with independently tested sound levels as low as 7.4dB(A).

Consultant Specification

The de-centralised mechanical extract ventilation unit shall be the Lo-Carbon dMEV RNB as manufactured by National Ventilation, 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 Lo-Carbon dMEV RNB should have variable speed settings of 5-26 l/s achieving a minimum noise level of 7.4dB(A) at 3 metres. The 125mm Lo-Carbon dMEV RNB should have variable speed settings of 5-35 l/s achieving a minimum noise level of 8.5dB(A) at 3 metres.

All sound pressure levels are quoted at hemispherical measurements.

All units shall be and independently third-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 0.08 W/l/s, as measured in accordance with the SAP PCDB test method and listed on the PCDB database.

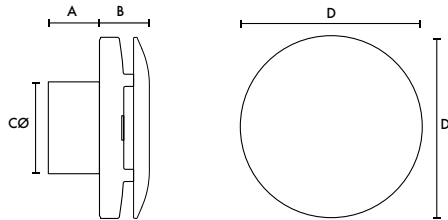
The controls for the Lo-Carbon dMEV RNB unit shall provide fully adjustable, continuous whole house ventilation rates. The Boost speed shall be activated via an integral humidistat or via LS Input.

The fan shall be compatible with low ceiling voids and have a spigot length of 56mm (100mm) and 66mm (125mm).

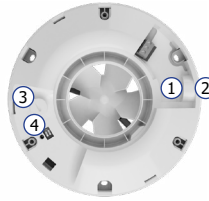
The fan shall have the nuisance tripping prevention option called Comfort Control, which stops the fan from engaging Boost when the LS input is engaged for less than three minutes.

The unit shall be able to be commissioned as a continuous running fan according to the Building Regulations compliant design.

Dimensions (mm)

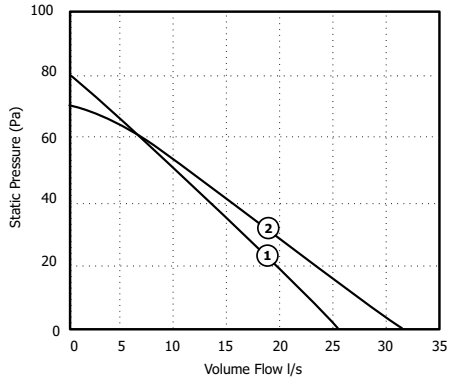


Model	A	B	CØ	D
100	56	54	99	195
125	66	57	120	228



- 1 Rear cable entry
- 2 Side cable entry (cut plastic side wall to access)
- 3 100% variable speed adjustment
- 4 Installation mode (SW1) Back pressure detection system (SW2)

Performance Guide



- 1 100mm dMEV RNB Max Speed 2 125mm dMEV RNB Max Speed

Sound

The fan has been designed to be as discreet as possible for homeowners, with independently tested sound levels as low as 7.4dB(A).

Model	Speed	dB(A)
100	Min	7.4
	Max	34.3
125	Min	8.5
	Max	37.9

SAP PCDB Performance 2021

The fan has been designed to be as discreet as possible for homeowners, with independently tested sound levels as low as 7.4dB(A).

Model	Speed	100 Model	125 Model
In room (Rigid Duct)	Kitchen (13l/s)	0.14	0.14
	Kitchen/wet room (8l/s)	0.11	0.12
Through wall	Kitchen (13l/s)	0.08	0.09
	Kitchen/wet room (8l/s)	0.08	0.10