# Humidity Automated Continuous Extract Fan dMEV C 125

With External Wind Pressure Detection And Control



Designed for NZ Building Code applications for improved Indoor Air Quality in well-sealed new homes.

The Vent-Axia dMEV C is an energy-efficient Continuous Decentralised Mechanical Extract Ventilation (dMEV) fan with humidity sensing automation. Designed to meet the requirements of the New Zealand Building Code G4/AS1 for Bathrooms.

This 125mm humidity-sensing continuous extract fan operates continuously **24/7** and works alongside trickle vents to maintain a consistently healthy indoor environment.



Continuously running trickle ventilation with humidity sensed boost automation



Near silent 8.5dB(A) operation (independently tested)



**Energy efficient EC motor** 



**External wind pressure compensation** 



IPX5 rating for flexible installations in zones 1, 2 and 3



Fully adjustable variable control platform

Order Code **498098** 



# Designed for Continuous Improved Indoor Air Quality

#### Model Overview - 498098

Maximum Power (W)	6
Maximum Pressure	77 Pa
Free Air Performance	35 l/s
Minimum Specific Fan Power (W/I/s)	0.08 W/I/s
External Wind Pressure Detection and Control	✓
Wall And Ducted Installation Types	✓
Ambient and Rapid-Rise Humidistat	✓
Number of Adjustable Fan Speeds	Infinitely Variable
Accessories - Wall Kit White 125mm (Order Separately)	455226
Warranty	7 years

#### **External Wind Pressure Compensation**

During windy conditions it is possible for external flow rates to be momentarily reduced. The automatic wind pressure system detects the reduced flow rates and increases the fan speed to compensate.

#### **Inbuilt Threshold Humidistat**

dMEV includes a digital humidity sensor with pre-set Threshold and Rapid Rise sensing. The settings are fixed and cannot be adjusted.

#### Threshold:

The fan will increase in speed proportionally between trickle and boost flow rates at 75%RH and 85%RH.

- 0-75%RH = Trickle speed flow rate
- 76-85%RH = Proportional between trickle and boost
- 86-100%RH = Boost speed flow rate

#### **Rapid Rise Detection:**

If the humidity increases by more than 5%RH (RH2) compared to the humidity 5 minutes ago (RH1), the fan enters boost mode. Once the humidity starts to fall, the fan will remain in boost for a further 30 minutes or until the humidity reaches the original (RH1) humidity level, whichever is sooner.

#### **Near Silent Operation**

The fan has been designed to be as discreet as possible for homeowners, with independently tested sound levels as low as 8.5dB(A).



#### **Sound Level**

Model	Speed	dB(A)
dMEV C 125	Min	8.5
	Max	37.9

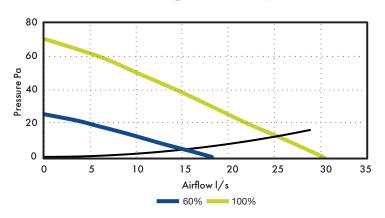
#### **Vent-Axia bought to you by Simx Ltd**

Market leading Vent-Axia and Manrose extraction products are supplied and supported in the New Zealand market by Simx Ltd. Vent-Axia dMEV C systems have been proven and refined over decades in the UK and Europe.

# dMEV C 125

## **Humidity Automated Continuous Extract Fan**

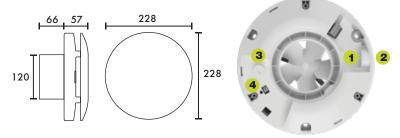




The Vent-Axia 498098 DMEV C 125 HT can be installed as either a through-wall bathroom fan, or a ceiling-mounted bathroom fan.

- 1. Through-wall installations in bathrooms, (when installed with a Manrose weatherproof cowl with NO BACKDRAFT FLAP FITTED and using semi-rigid duct from Simx) are capable over 25l/s on humidity sensed boost automation AND 10l/s continuous extraction rates to meet the G4/AS1 bathroom requirements.
- 2. Ceiling-mounted installations in bathrooms, (when installed with a maximum of  $5m \times 125mm$  Semi-Rigid duct from Simx,  $2 \times 90$ deg bends and  $1 \times 125mm$  Manrose fixed louvre or eggcrate soffit grille) are capable of over 10l/s continuous extraction rates to meet the G4/AS1 bathroom requirements.

### **Dimensions (mm)**



- 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 compensation system (SW2)

# **Consultant's Specification**

The de-centralised mechanical extract ventilation unit shall be the dMEV C as manufactured by Vent-Axia, exact unit sizing and specification shall be in accordance with the particular specification. The exact unit should consist of IPX5 rated 125mm size 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 dMEV C 125 humidity continuous extract fan has 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 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 dMEV C 125 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 66mm.

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.

www.manrose.co.nz