



## DECENTRALISED MECHANICAL EXTRACT VENTILATION CONSTANT FLOW

### APPLICATION

Single flow decentralised mechanical extract ventilation unit, continuous running, Ø100mm and Ø150mm, constant volume and low consumption. Ideal for application in bathroom, toilet and small/medium premises. Suitable to extract stale air directly to the outside or through medium-long length ducting. Units can be wall/panel and ceiling mounted.

### SPECIFICATION

**Casing** made of high quality ABS provides long lasting, shock-proof and robust construction. The unit is finished in white RAL 9010 and is UV resistant.

Unique design **winglet-type impeller**, providing enhanced aerodynamic properties, low noise and increased efficiency.

**EC brushless motor** with integral thermal protection, mounted on sealed-for-life high quality ball bearings to assure a longer fan life and ideal also for cold climates.

**Stator** with aerodynamic deflectors to reduce air turbulences and designed to maximise performance and efficiency.

### FEATURES & BENEFITS

**IPX4** protection degree.

**Aesthetic flat front cover** for modern interior design, easily removed for cleaning without the need of tools.

**Multi-speeds**, with adjustable minimum and intermediate speeds among different settings.

**Low power consumption**: EC motor optimised for continuous running applications (24/24h).

**Constant flow option**, to speed up or slow down the unit depending on the variations of the resistances caused by length of ducting and/or external windy conditions.

**Intelligent humidity control** to increase ventilation only in response to actual variations in humidity, preventing unnecessary heat loss, energy consumption and noisy running.

**Intelligent run-on timer** to adapt the fan operation to the tenant's habits (the run-on period depends on the length of time the switched live connection is activated) and to assure top acoustic comfort especially at night (if switched live connection is activated for less than 3 minutes, speed does not increase).

**Totally recyclable plastic** components, environmentally friendly.

**Double insulated**: no earth connection required.

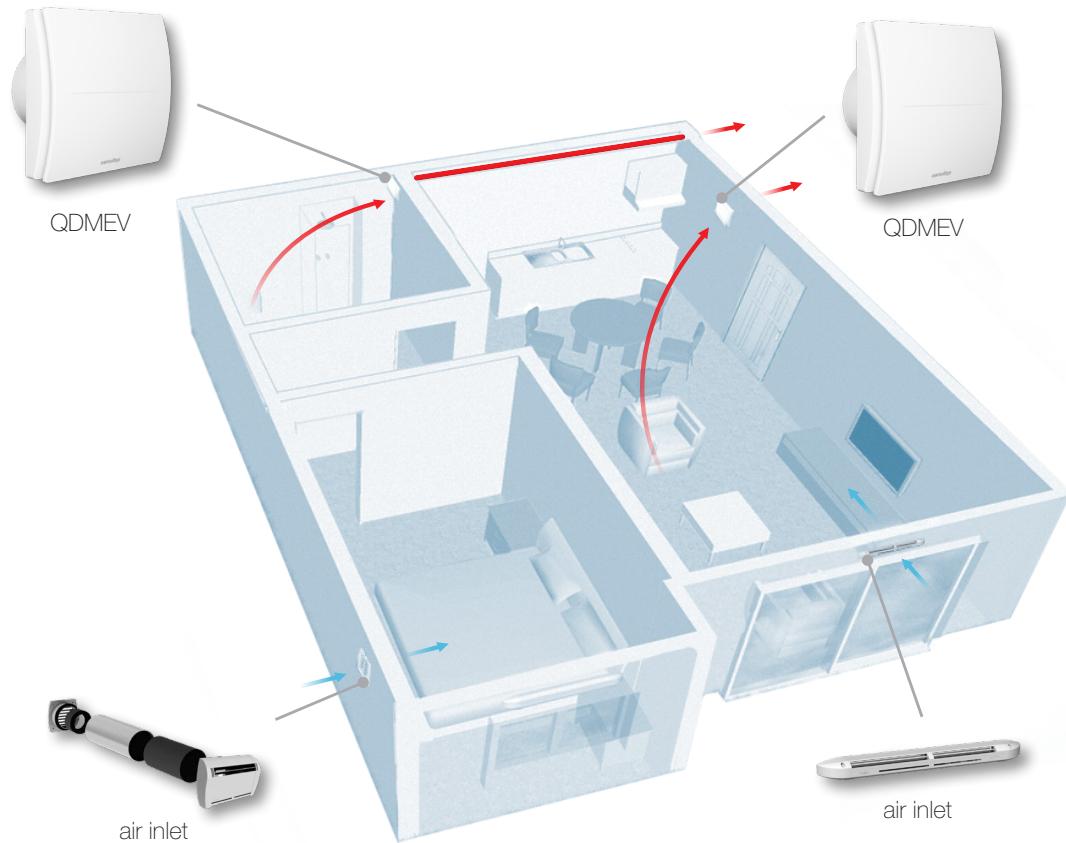
**SAP PCDB listed**: energy efficiency tested at independent laboratory BRE (UK) in accordance to the latest SAP10 dMEV requirements.

**Tested to the latest standards**: units are tested in the TÜV Rheinland accredited laboratory at Aeraulika, meaning accurate, up to date information on electrical safety, performance and noise level that can be relied upon. Designed and manufactured in accordance with EN60335-2-80 (Low Voltage Directive) and the EMC Directive (Electromagnetic Compatibility).

### OPERATION

The unit runs continuously at selected minimum speed. Speed automatically increases to intermediate speed if either humidistat or run-on timer is activated. Maximum speed can be activated through dedicated remote on/off switch, ambient sensor (e.g. SEN-HY or SEN-PIR), or through connection to light switch.

## Example of a complete ventilation system



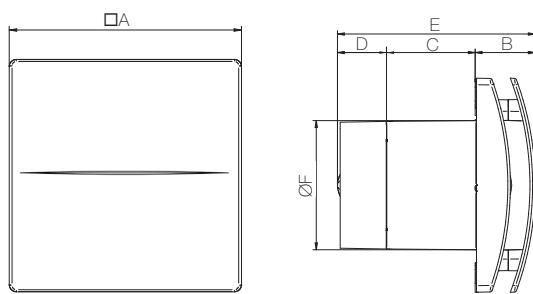
**Application:** ideal solution in case of renovation.

**How it works:** the decentralised mechanical ventilation unit (QDMEV) continuously extracts stale air from wet rooms directly to outdoor with the highest possible acoustic comfort.

**Energy saving:** the EC brushless motor significantly reduces the electricity consumption.

**Indoor Air Quality:** a correctly specified mechanical ventilation system can ensure that indoor air quality is constantly maintained, for the health and well-being of the occupants as well as of the building.

## Dimensions (mm) and Weight (kg)



| Model  | QDMEV 100 | QDMEV 150 |
|--------|-----------|-----------|
| □A     | 164       | 218       |
| B      | 46        | 97        |
| C      | 70        | 52        |
| D      | 36        | -         |
| E      | 152       | 149       |
| ØF     | 99        | 148       |
| Weight | 0,6       | 1,2       |

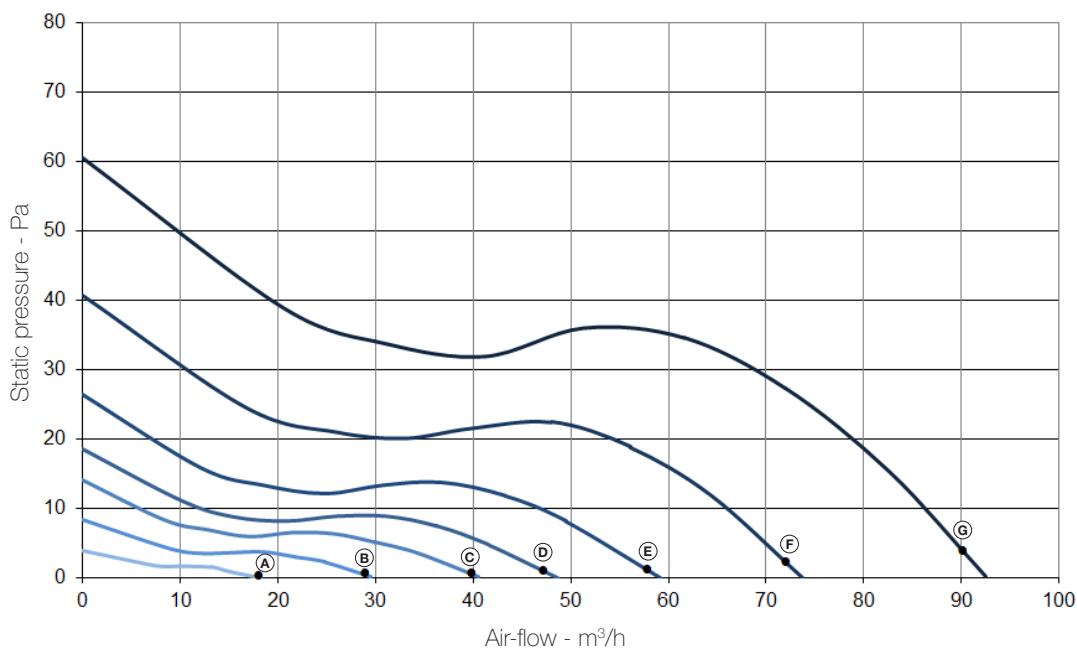
## Performances

| Model                                    | QDMEV 100        | QDMEV 150          |
|--|------------------|--------------------|
| Air-flow m <sup>3</sup> /h               | max 90<br>min 18 | max 180<br>min 18  |
| Power consumption W                      | max 5<br>min 0,9 | max 6,5<br>min 0,7 |
| Sound pressure db(A) @ 3m <sup>(1)</sup> | max 38<br>min <9 | max 36<br>min <9   |
| Ambient temperature °C max               | 40               | 40                 |
| Degree of protection IP <sup>(2)</sup>   | X4               | X4                 |
| Marking                                  | CE UK CA         | CE UK CA           |

- 220-240V ~ 50/60Hz
- air performance measured according to ISO 5801 @ 230V ~ 50Hz, air density 1,2Kg/m<sup>3</sup>.
- data measured in the TÜV Rheinland recognised laboratory in Aeraulica.
- (1) sound pressure level @ 3m in free field, for comparative purposes only.
- (2) IPX4 wall - IPX2 ceiling



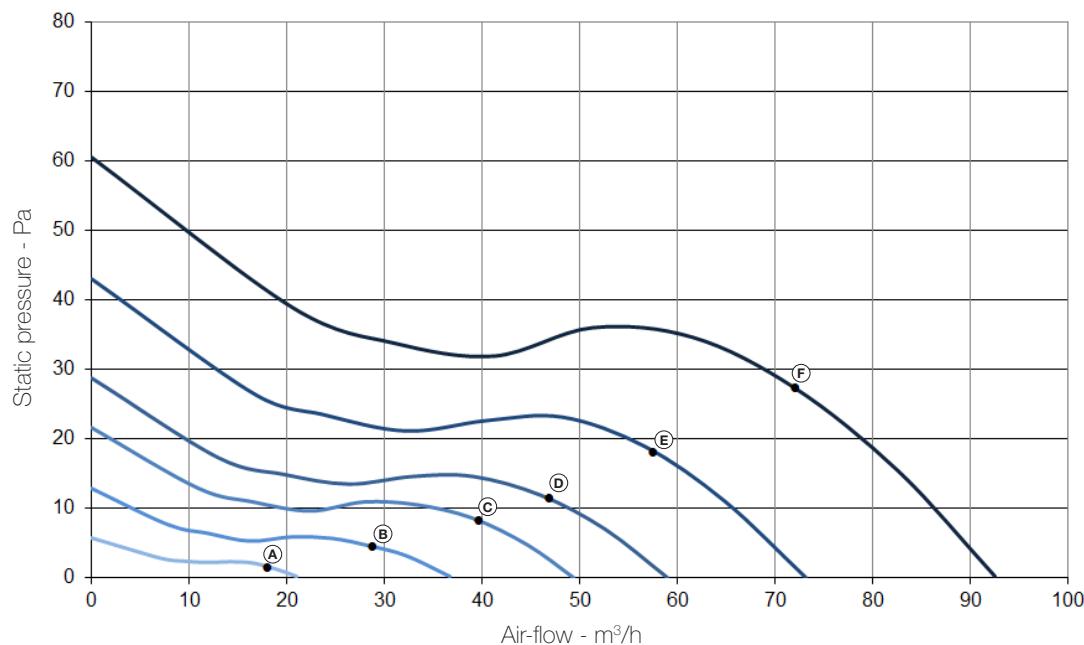
## QDMEV 100 - Performance curve "through the wall"



| Working point | m <sup>3</sup> /h | SPI (W/m <sup>3</sup> /h) | I/s | SPI (W/l/s) | W   | dB(A) @3m |
|---------------|-------------------|---------------------------|-----|-------------|-----|-----------|
| A             | 18                | 0,050                     | 5   | 0,18        | 0,9 | <9        |
| B             | 29                | 0,042                     | 8   | 0,15        | 1,2 | 12        |
| C             | 40                | 0,038                     | 11  | 0,14        | 1,5 | 16        |
| D             | 47                | 0,038                     | 13  | 0,14        | 1,8 | 21        |
| E             | 58                | 0,038                     | 16  | 0,14        | 2,2 | 29        |
| F             | 72                | 0,044                     | 20  | 0,16        | 3,2 | 36        |
| G             | 90                | 0,056                     | 25  | 0,20        | 5   | 38        |

Figures from the BRE test results, in "through the wall" installation.

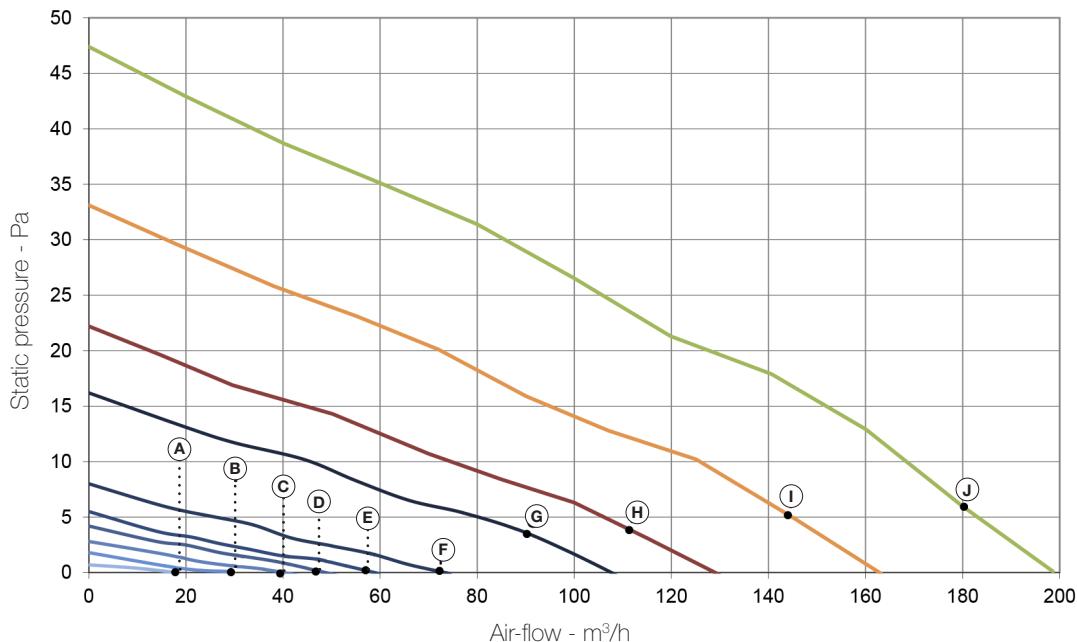
## QDMEV 100 - Performance curve "in room"



| Working point | $m^3/h$ | SPI ( $W/m^3/h$ ) | I/s | SPI ( $W/I/s$ ) | W   | $dB(A)$ @3m |
|---------------|---------|-------------------|-----|-----------------|-----|-------------|
| A             | 18      | 0,056             | 5   | 0,20            | 1   | <9          |
| B             | 29      | 0,049             | 8   | 0,18            | 1,4 | 17          |
| C             | 40      | 0,048             | 11  | 0,17            | 1,9 | 24          |
| D             | 47      | 0,049             | 13  | 0,18            | 2,3 | 29          |
| E             | 58      | 0,057             | 16  | 0,21            | 3,3 | 34          |
| F             | 72      | 0,069             | 20  | 0,25            | 5   | 38          |

Figures from the BRE test results, in "in room" installation.

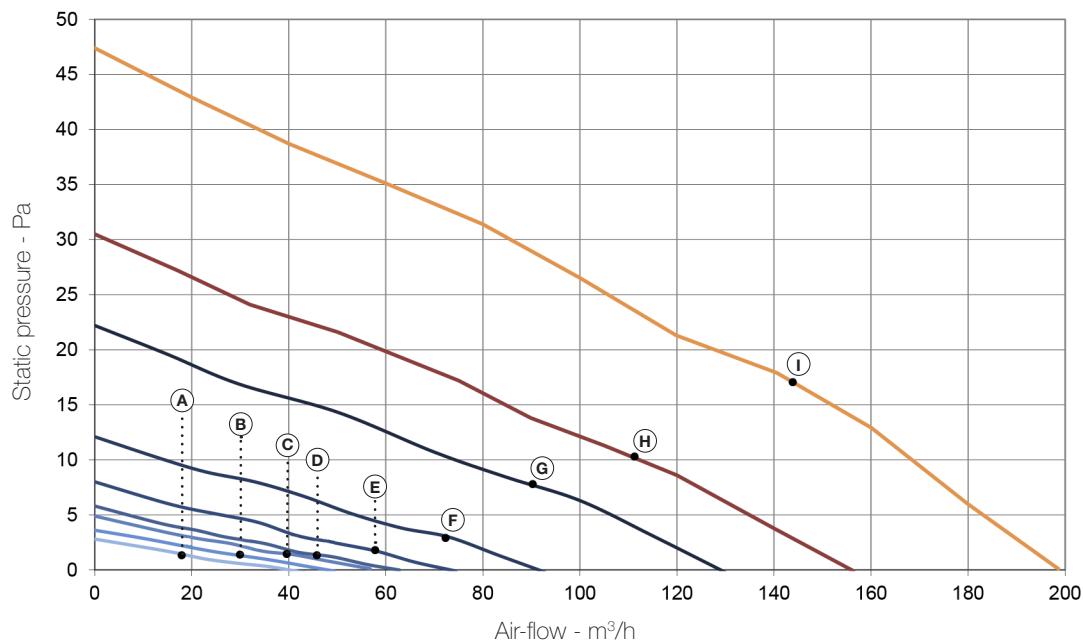
## QDMEV 150 - Performance curve “through the wall”



| Working point | m³/h | SPI (W/m³/h) | l/s | SPI (W/l/s) | W   | dB(A) @3m |
|---------------|------|--------------|-----|-------------|-----|-----------|
| A             | 18   | 0,039        | 5   | 0,14        | 0,7 | <9        |
| B             | 29   | 0,028        | 8   | 0,10        | 0,8 | <9        |
| C             | 40   | 0,023        | 11  | 0,08        | 0,9 | <9        |
| D             | 47   | 0,019        | 13  | 0,07        | 0,9 | <9        |
| E             | 58   | 0,017        | 16  | 0,06        | 1   | <9        |
| F             | 72   | 0,017        | 20  | 0,06        | 1,2 | 10        |
| G             | 90   | 0,022        | 25  | 0,08        | 2   | 20        |
| H             | 112  | 0,022        | 31  | 0,08        | 2,5 | 23        |
| I             | 144  | 0,028        | 40  | 0,10        | 4   | 30        |
| J             | 180  | 0,036        | 50  | 0,13        | 6,5 | 36        |

Figures from the BRE test results, in “through the wall” installation.

## QDMEV 150 - Performance curve "in room"



| Working point | $m^3/h$ | SPI<br>(W/m³/h) | l/s | SPI<br>(W/l/s) | W   | dB(A)<br>@3m |
|---------------|---------|-----------------|-----|----------------|-----|--------------|
| A             | 18      | 0,050           | 5   | 0,18           | 0,9 | <9           |
| B             | 29      | 0,031           | 8   | 0,11           | 0,9 | <9           |
| C             | 40      | 0,025           | 11  | 0,09           | 1   | <9           |
| D             | 47      | 0,024           | 13  | 0,08           | 1,1 | <9           |
| E             | 58      | 0,021           | 16  | 0,08           | 1,2 | 10           |
| F             | 72      | 0,021           | 20  | 0,08           | 1,5 | 15           |
| G             | 90      | 0,028           | 25  | 0,10           | 2,5 | 23           |
| H             | 112     | 0,032           | 31  | 0,12           | 3,6 | 29           |
| I             | 144     | 0,045           | 40  | 0,16           | 6,5 | 36           |

Figures from the BRE test results, in "in room" installation.