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Whilst the information given on this data sheet is fan specific, it is in summary and reference to the product selection catalogue and installation & maintenance documents is recommended.
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Technical Data

MRXBOXAB-ECO2 - Wall Mounted MVHR unit with Summer Bypass and integral humidistat

Wall Mounted MVHR unit

Fan Code: **MRXBOXAB-ECO2**

Installation Manual Links: 671795

Nominal Fan Speed: 3,750 RPM
 Electrical Supply: 1 Phase 50 Hz
 Motor Current: flc: 1.2 A
 Max. Operating Temp.: 40°C
 Weight: 20 kg

Sound Data

Acoustic performance to ISO 13347 and AMCA 300.

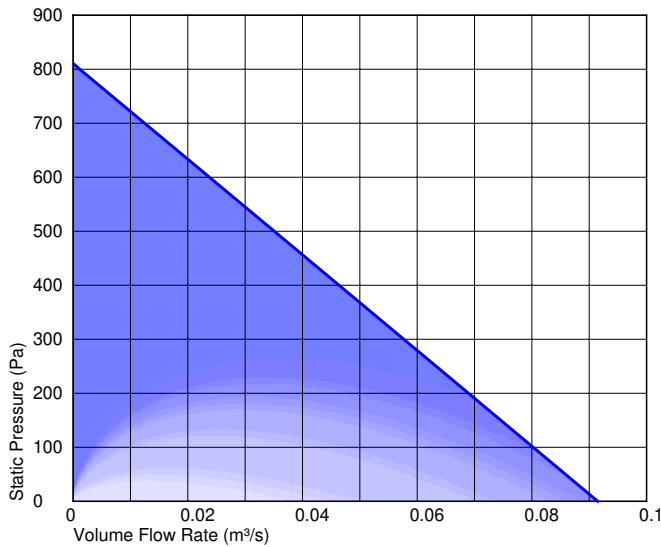
Sound Power Levels re 1 pWatts (Hz):

	63	125	250	500	1k	2k	4k	8k	dB(A)
Breakout	61	60	58	59	50	47	36	26	40
Open Inlet (Intake & Extract)	48	52	59	56	50	46	35	28	
Open Outlet (Supply & Exhaust)	60	67	69	69	65	65	55	47	

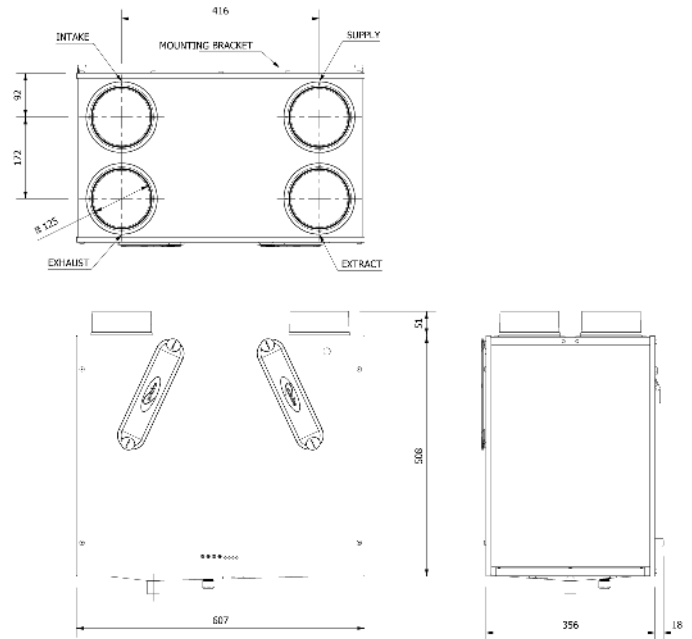
dB(A) is hemi-spherical at 3 metres. For spherical deduct 3 dB(A).

Please note that the noise data stated on this data sheet for the unit and/or silencer is tested in accordance with UK, European and International industry laboratory standards. However onsite conditions may vary and we would recommend that this information is verified by an acoustic specialist in order to ensure its suitability for the intended application.

Performance Curve



Fan Dimensions



The drawing is for dimensional purposes only. Dimensions in mm.

SAP PCDB Test Results

Application	Specific Fan Power (W/l/s)	Heat Exchange Efficiency %
Kitchen + 1 wet room	0.52	90
Kitchen + 2 wet rooms	0.59	89
Kitchen + 3 wet rooms	0.77	87
Kitchen + 4 wet rooms	1	86
Kitchen + 5 wet rooms	1.23	86

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Meets Building Regulations

SAP PCDB recognised. Part F & L - England and Wales. Scottish technical handbook (BRE398 referenced), Technical booklet K1998.

Optimum Performance

Low specific Fan power and high efficiency results in SAP PCDB.

Compact

Dedicated design ensured the most compact size for duty on the market.

Improves indoor air quality

High efficiency filters help create a healthy living environment.

Easy maintenance

Accessable filters from the front of the unit. Filter replacement typically every 12-18 months.

Discreet run monitor

Records unit operational time

Integral frost protection

Protects the unit during extreme cold spells

Pre-commissioning filter protection

Filters are covered in a removable protective film to prevent clogged up filters prior to occupant handover.

Simple fan controls

Independent controls for supply & extract for quick and easy commissioning.

Warranty

5 Year parts and 1 year labour warranty guarantee for reduced life costs and peace of mind

Control Options

All versions shall have the following functions integrally mounted within the fan unit on a purpose made PCB, all such components pre-wired and factory fitted by the manufacturer:

- Independent control of background supply and extract flow rates
- Independent control of boost speed supply and extract flow rates
- Integral fan failure indication
- Integral S/L terminals for two independent boost speeds from remote switch e.g. light switch or kitchen boost switch
- Integral heat exchanger frost protection
- Integral Relative Humidity sensor
- Discreet daily run monitor
- LED visual indication for maintenance, servicing and operation modes e.g. Boost, Frost protection

Operation

The supply and extract ventilation unit shall be positioned as indicated on the drawings and shall be in accordance with the particular fan schedule in the specification. The unit is also available in Opposite Hand format.

The combined supply and extract with heat recovery unit, shall supply filtered fresh air to each of the habitable rooms and vitiated air shall be extracted from the wet areas e.g. bathroom, en-suite, w.c, kitchen, utility rooms etc. The supply air shall be pre-heated by the warm extract air via the integrated counter-flow heat exchanger element. The extracted air shall also be filtered before it reaches the heat exchanger block.

The ventilation unit shall vary its speed and therefore the ventilation rate as it receives signals from the switch live signal from light/remote switches or any ancillary sensors. When signals are received the fan shall alter its speed to adjustable, normal and boost rates.

The unit shall have the facility to commission the supply and extract fans independently on minimum (continuous background ventilation), boost and purge speeds via inbuilt minimum and maximum speed adjustment. The fans shall have infinitely variable speed control.

The unit shall monitor intake and extract temperatures and depending on temperature differential shall recover heat or divert all of the fresh air around the heat exchanger to achieve optimum internal temperatures within the dwelling, there shall be no reduction in airflow when in bypass mode. Incoming fresh air and extracted air shall be filtered at all times.

Specification

The unit shall be fully insulated providing excellent thermal and acoustic characteristics and shall be complete with a multi plate counter flow high efficiency heat exchanger block, with a thermal efficiency of up to 95%. The heat exchanger shall be protected by filters on fresh air inlet and system extract. The heat exchanger and filters shall be accessible via the front access panel, enabling quick and easy maintenance.

The unit shall have low energy, high efficiency EC fan/motor assemblies with sealed for life bearings, the impellers shall be backward curved centrifugal type. The motors shall be suitable for an ambient temperature of 40°C.

The unit shall be supplied complete with a condensate drip tray and 21.5mm drain connection.

The unit shall be suitable for 125mm circular ducting.

The breakout noise level and power requirements shall be as detailed by the unit manufacturer and in accordance with the ventilation equipment schedule.

The unit shall be offered with a five year warranty. .

Optional Controls

MRXBOX-RFI (Remote Fail Indicator).

Or Volt Free contacts to allow failure indication to BMS.

MRXBOX95-PIR (Passive Infra Red)

A low voltage sensor which detects movement and activates system, also incorporates overrun timer.

MRXBOX95-HUM

A low voltage sensor which activates the system when the relative humidity is above a set-point level adjustment.

MRXBOX95-VSC

An LCD controller for MVHR system with a 3.2" touch screen display, can be surface or semi-recess mounted.