

MRXBOX95AB-WH2 (with automatic summer bypass)

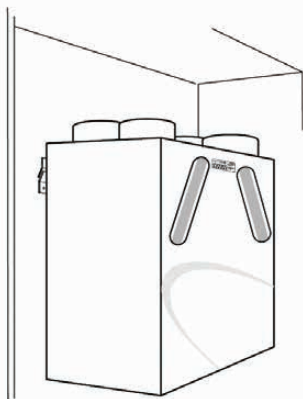
The MRXBOX95AB-WH2 has been designed with automatic summer bypass and the facility to commission the supply and extract fans independently on both minimum and maximum speeds.

This unit is designed to provide optimised balanced (supply and extract) mechanical ventilation with heat recovery, with a heat exchanger block that can recover up to 95% of the normally wasted heat. Tempered air is delivered into living areas whilst extracting moisture laden air from 'wet' areas, creating comfortable well-ventilated homes. The two independent fans have full speed control for background and boost ventilation rates, as well as a run-on timer facility. This unit is listed on the SAP Product Characteristics Database.

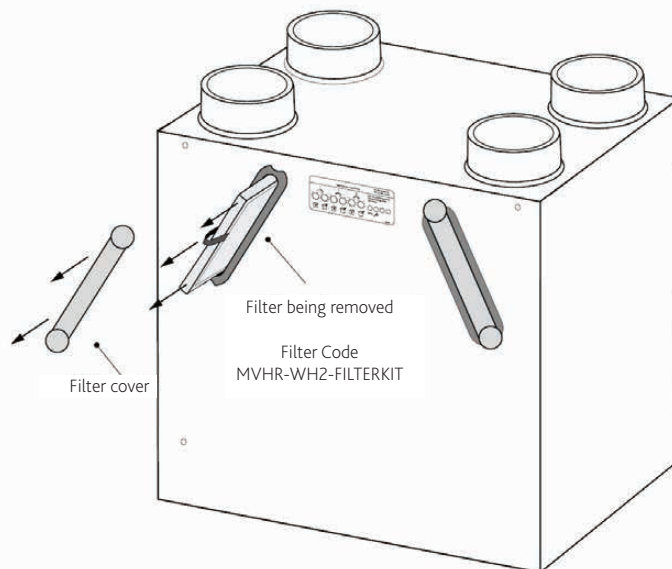


Typical Installation

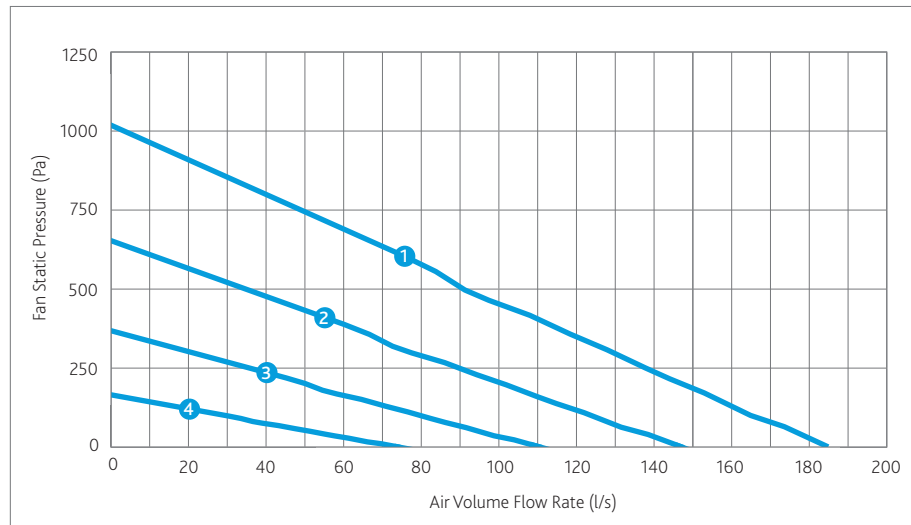
INSTALLATION FEATURES



Typical cupboard installation of MRXBOX95AB-WH2



Performance - MRXBOX95AB-WH2



CODE DESCRIPTION

MRXBOX95AB-WH2



1. Multi-room supply and extract heat recovery
2. Product range
3. Efficiency
4. Automatic Summer Bypass
5. Wall/cupboard application
6. High 2 Model

Electrical & Sound

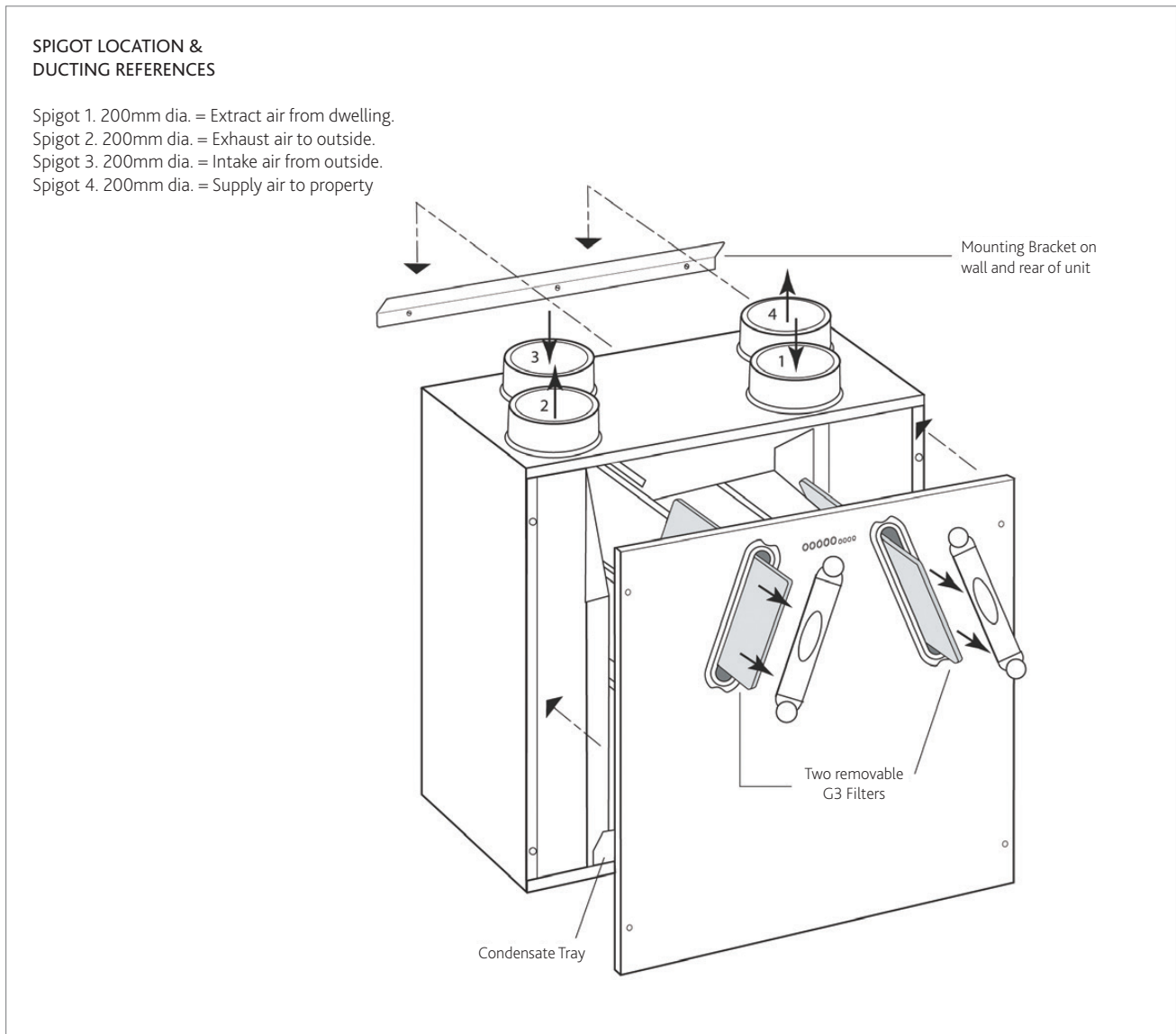
	Maximum power consumption	Frequency/Hz	63	125	250	500	1K	2K	4K	8K	dBA @3m
Curve	(Watts)		Sound Power Levels dB re 1pW								
1	341	Open inlet	58	56	57	63	57	51	46	45	44
		Open Outlet	67	63	65	75	68	63	56	53	
		Breakout	61	61	60	63	53	48	40	35	
2	173	Open inlet	56	54	54	59	52	46	41	40	37
		Open Outlet	65	61	62	71	63	58	51	48	
		Breakout	59	59	57	59	48	43	35	30	
3	73	Open inlet	55	52	51	55	45	39	34	33	32
		Open Outlet	64	59	59	67	56	51	44	41	
		Breakout	58	57	54	55	41	36	28	23	
4	21	Open inlet	53	49	47	49	37	31	26	25	27
		Open Outlet	62	56	55	61	48	48	36	33	
		Breakout	56	54	50	49	33	28	20	<16	

The maximum power consumption shown above (Watts) is consumed on units running continuously, not taking into account any heat recovery saving and based on SAP Appendix Q testing. The breakout case-radiated dBA values are given for Hemispherical free field radiation at 3m - to obtain the Spherical radiated data, subtract 3 dBA.

SAP 2012 Test Results

Product Code	MRXBOX95AB-WH2		
Application	Specific Fan Power (W/l/s)	Heat Exchange Efficiency	Energy Saving Trust Best Practice Compliant
Kitchen + 1 Wet Room	0.60	89%	Yes
Kitchen + 2 Wet Room	0.61	88%	Yes
Kitchen + 3 Wet Room	0.68	88%	Yes
Kitchen + 4 Wet Room	0.79	87%	Yes
Kitchen + 5 Wet Room	0.95	86%	Yes
Kitchen + 6 Wet Room	1.15	85%	Yes
Kitchen + 7 Wet Room	1.38	85%	Yes

General Arrangement

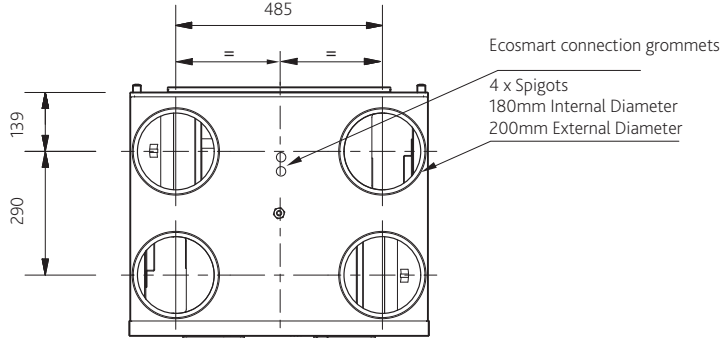


Technical - MRXBOX95AB-WH2

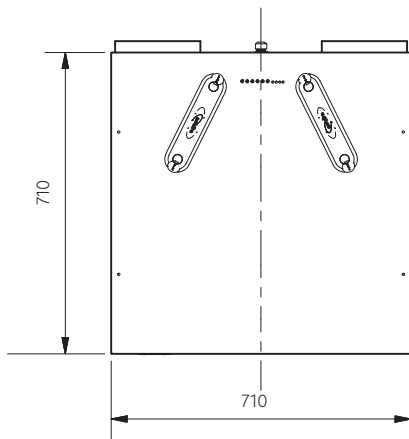
DIMENSIONS (mm)

Weight - 44Kg

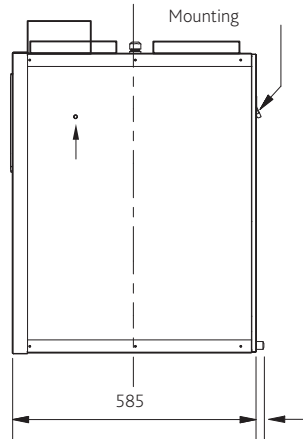
View from top



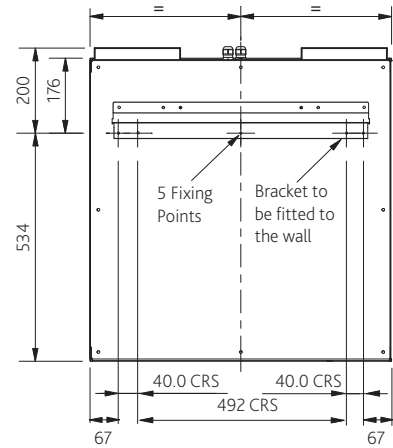
Front view



Side view



Dimensions: Unit wall mounting bracket position
(Viewed from back)



Electrical Details - MRXBOX95AB-WH2

Please note: the electrical connection of the unit must be carried out by a qualified electrician.

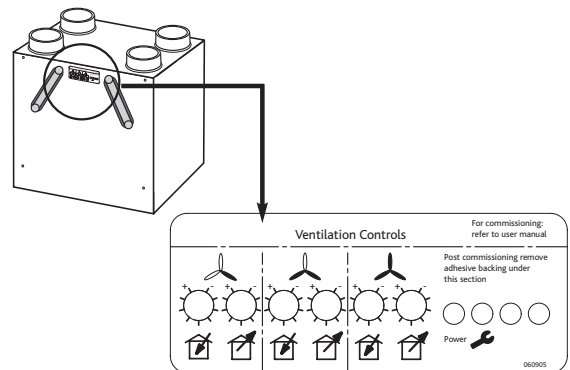
The unit is supplied with a flexible cord for connection to the mains supply.

NOTE: In the event of 1kV transients the fans may stop running, normal operation will be resumed when the interference has ceased.

The mains power supply cable should be connected to a fixed wiring installation, via a fused isolator, in accordance with current IEE wiring regulations.

ELECTRICAL DETAILS: MRXBOX95AB-WH2	
Voltage:	230V 1ph 50Hz
Consumption:	2.5 Amp
Fuse rating:	5 Amp

Detail of unit control on front panel.

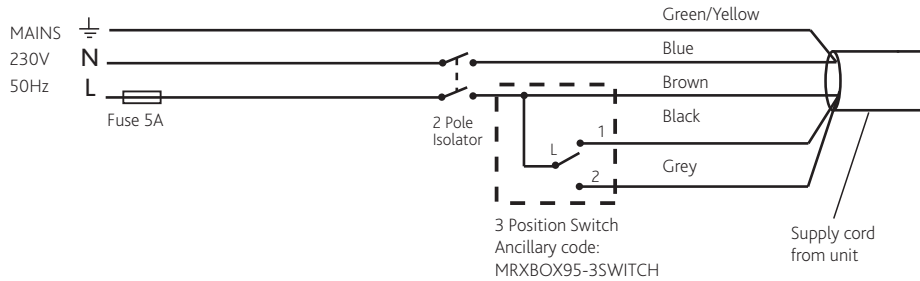


Tamper proof label following commissioning, includes system status indication.

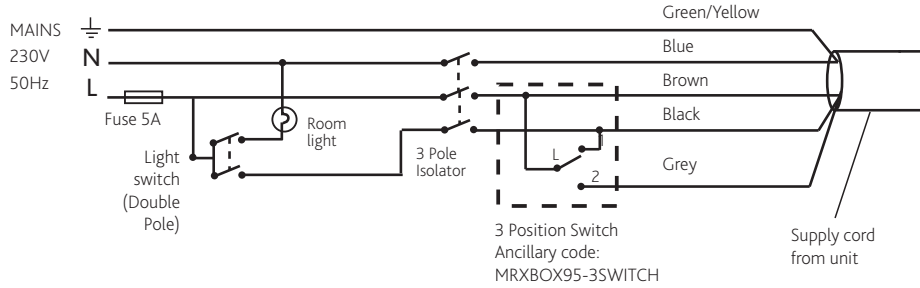
Wiring

Note: Wiring is for reference purposes only as the connections are factory fitted. The unit is pre-wired with a 2 metre fly lead.

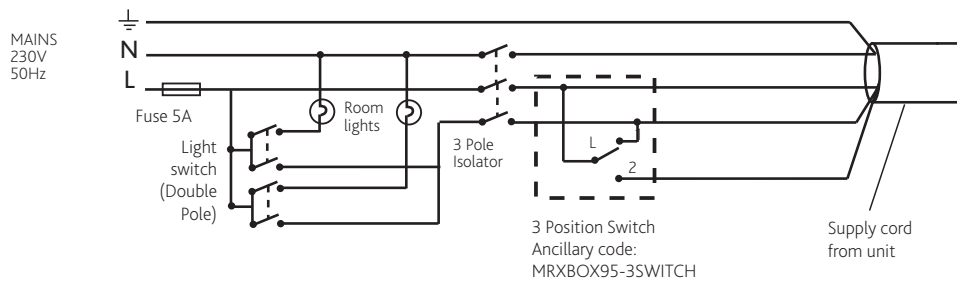
UNIT SERVING KITCHEN & BATHROOM



UNIT SERVING ONE BATHROOM



UNIT SERVING TWO BATHROOMS



OPTIONAL SENSORS AND DETECTORS

Customise MRBOX95AB-WH2 for enhanced performance. All supplied with pre-plugged 10m data cable and incorporates status LED.

MRXBOX95-PIR (Passive Infrared)

A low voltage sensor, detects movement and activates system. Incorporates overrun timer and timer adjustments.



MRXBOX95-HUM (Relative Humidity)

A low voltage sensor, activates the system when the RH level is above set point. Incorporates overrun timer and RH setpoint level adjustment.



MRXBOX95-RFI (Remote Fail Indicator)

If fan failure occurs the audio visual indicator will flash a warning.



MRXBOX-VSC
Coming soon
with this unit!

Consultants Specification

MRXBOX95AB-WH2 – 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 G3 grade 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 of an ambient temperature of 40°C.

The unit shall be supplied complete with a condensate drip tray and 32mm drain connection.

The unit shall be suitable for 200mm diameter circular ducting.

Note: The unit is also available in opposite handed format, refer to spigot configuration for set up.

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 MRXBOX95AB-WH2 as manufactured by Nuaire and shall be listed on the SAP Appendix Q database.

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 combined supply and extract with heat recovery unit shall supply filtered fresh air to each of the habitable rooms and moisture-laden 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 one of the following:

- Switched live signal from light/remote switches.

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 speed (continuous background ventilation), boost speed, via inbuilt minimum and maximum speed adjustment. The fans shall have infinitely variable speed control.

INTEGRAL AUTOMATIC SUMMER BYPASS

The bypass damper shall open automatically via a wax actuator allowing the air to bypass the heat exchanger to deliver fresh filtered air during the warmer months.

INTEGRAL HUMIDITY SENSOR

The integral humidity sensor incorporated within the extract fan chamber will automatically boost both the extract and supply fan, to the commissioned boost speed, when the humidity level exceeds that set by the side panel mounted adjustment potentiometer.

OPTIONAL REMOTE SWITCH (MRXBOX95-3 SWITCH)

The unit shall have the facility to wire a three position remote switch to a suitable location within the property. The switch shall have 3 settings, trickle, boost and summertime boost facility. The remote switch will act as the master switch and will override all other switches.

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 terminal for boost to commissioned level, from remote switch, e.g. light switch.
- Integral S/L terminal for summertime boost speed, from remote switch e.g. plate switch.
- Integral heat exchanger frost protection.
- Discreet daily run monitor.
- Remote fail indicator (Part number-MRXBOX95-RFI).
- Indication and controls - The unit shall have clear LED visual indication for maintenance, servicing and operation mode i.e. summer bypass, frost protection.

The unit shall be offered with a 5 year warranty.

The manufacturer's recommendations should be observed at all times. The unit shall be the MRXBOX95AB-WH2 and shall be manufactured by Nuaire.

MRXBOX95AB-WH2-OH (with automatic summer bypass)

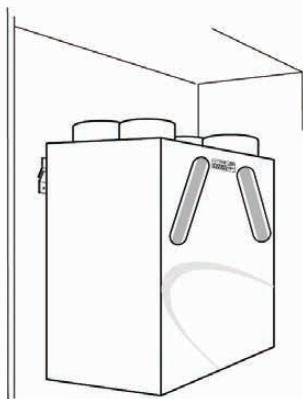
The MRXBOX95AB-WH2-OH has been designed with automatic summer bypass and the facility to commission the supply and extract fans independently on both minimum and maximum speeds.

This unit is designed to provide optimised balanced (supply and extract) mechanical ventilation with heat recovery, with a heat exchanger block that can recover up to 95% of the normally wasted heat. Tempered air is delivered into living areas whilst extracting moisture-laden air from 'wet' areas, creating comfortable well-ventilated homes. The two independent fans have full speed control for background and boost ventilation rates, as well as a run-on timer facility. This unit is listed on the SAP Product Characteristics Database.

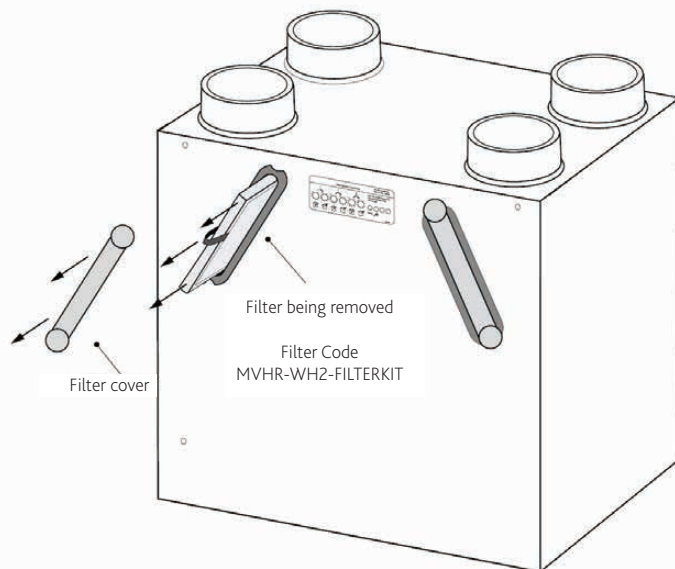


Typical Installation

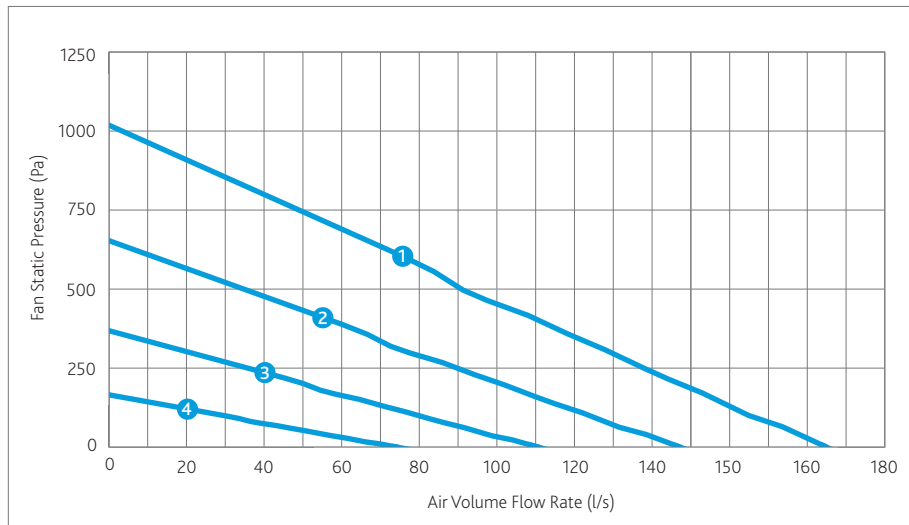
INSTALLATION FEATURES



Typical cupboard installation of MRXBOX95AB-WH2



Performance - MRXBOX95AB-WH2-OH



CODE DESCRIPTION

MRXBOX95AB-WH2-OH

1 2 3 4 5 6 7

1. Multi-room supply and extract heat recovery
2. Product range
3. Efficiency
4. Automatic Summer Bypass
5. Wall/cupboard application
6. High 2 Model
7. Opposite hand

Electrical & Sound

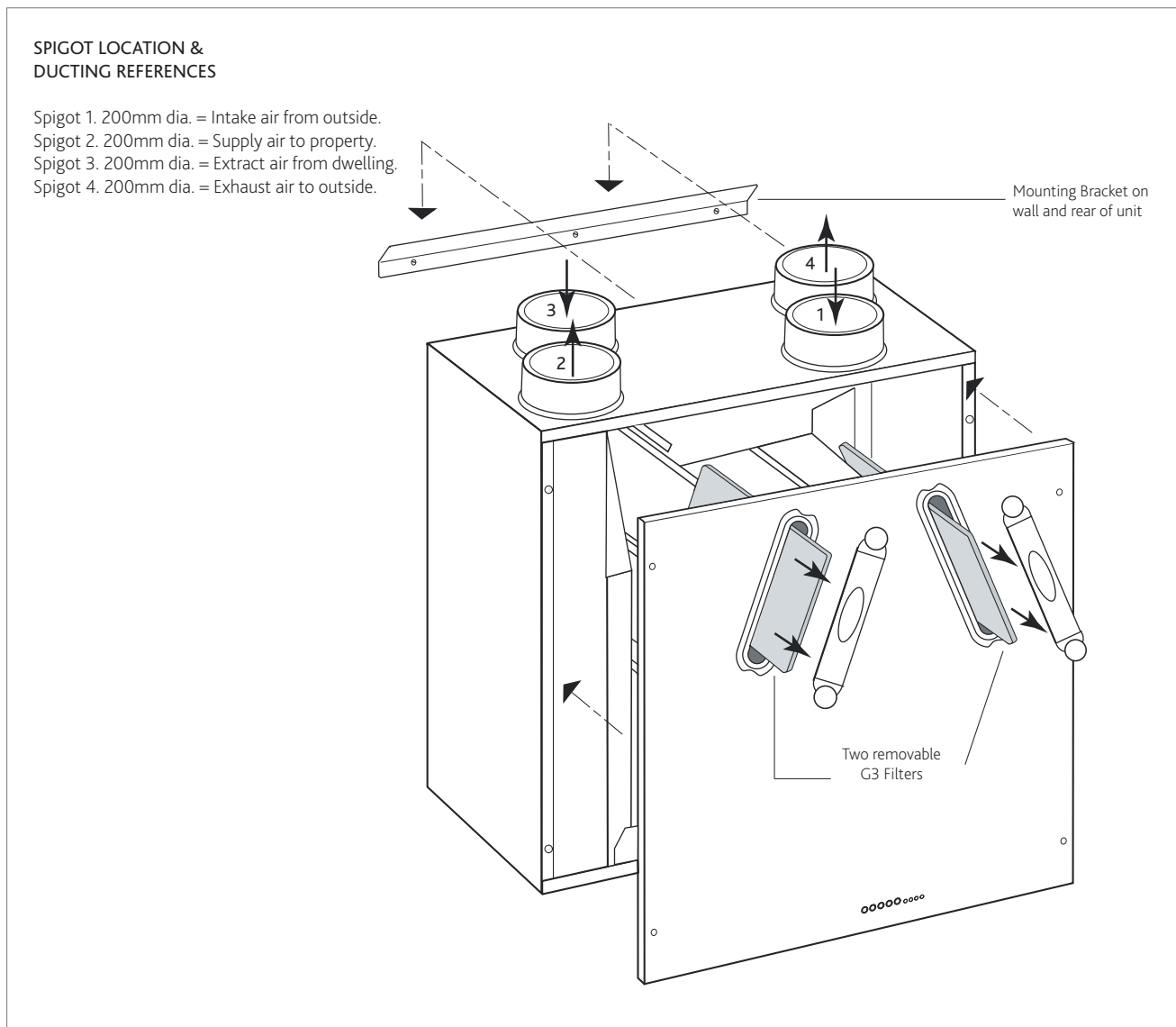
Curve	Maximum power consumption (Watts)	Frequency/Hz	Sound Power Levels dB re 1pW								dBA @3m
			63	125	250	500	1K	2K	4K	8K	
1	341	Open inlet	58	56	57	63	57	51	46	45	44
		Open Outlet	67	63	65	75	68	63	56	53	
		Breakout	61	61	60	63	53	48	40	35	
2	173	Open inlet	56	54	54	59	52	46	41	40	37
		Open Outlet	65	61	62	71	63	58	51	48	
		Breakout	59	59	57	59	48	43	35	30	
3	73	Open inlet	55	52	51	55	45	39	34	33	32
		Open Outlet	64	59	59	67	56	51	44	41	
		Breakout	58	57	54	55	41	36	28	23	
4	21	Open inlet	53	49	47	49	37	31	26	25	27
		Open Outlet	62	56	55	61	48	48	36	33	
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The maximum power consumption shown above (Watts) is consumed on units running continuously, not taking into account any heat recovery saving and based on SAP Appendix Q testing. The breakout case-radiated dBA values are given for Hemispherical free field radiation at 3m - to obtain the Spherical radiated data, subtract 3 dBA.

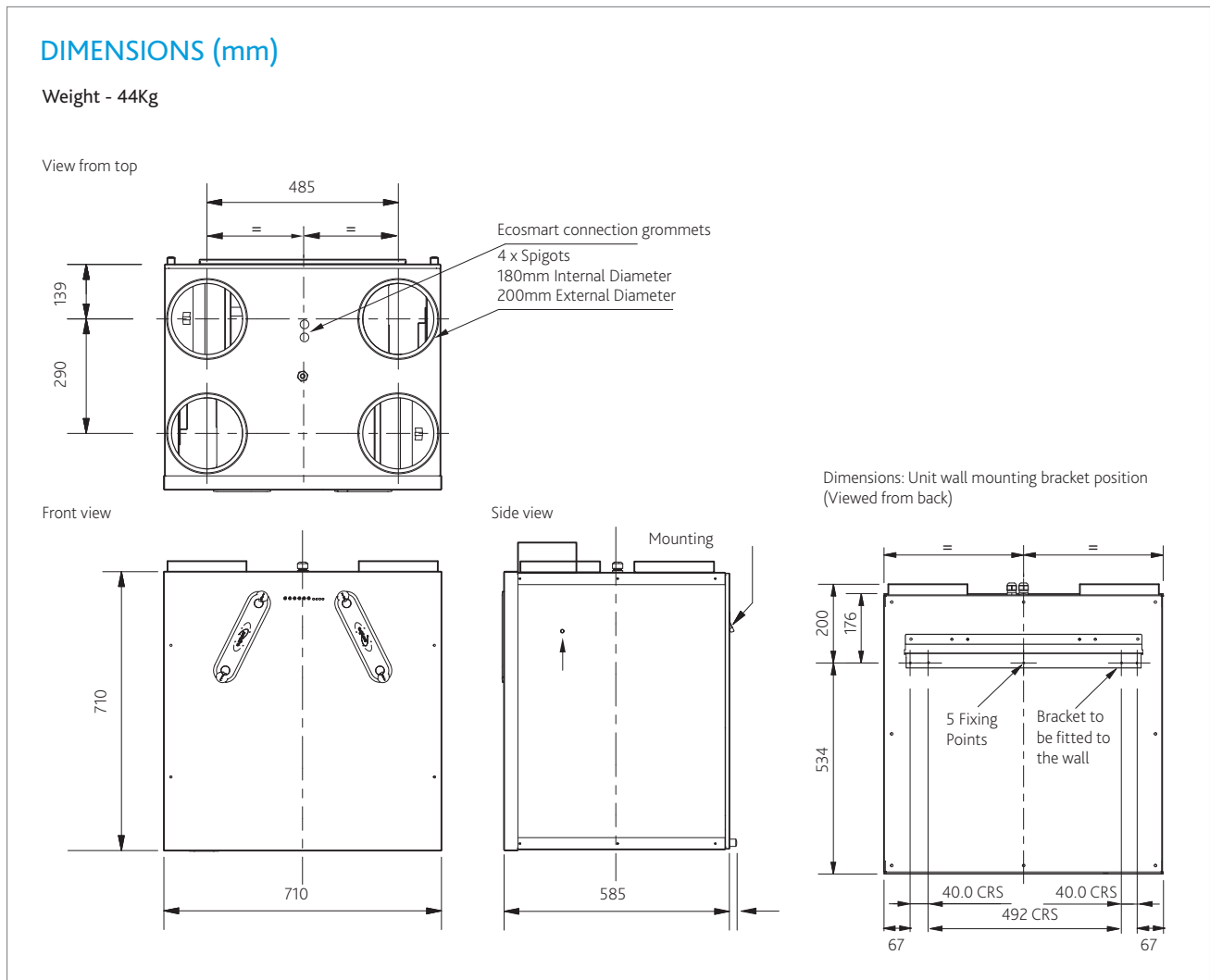
SAP 2012 Test Results

Product Code	MRXBOX95AB-WH2-OH		
SAP Identifier	MRXBOX95AB-WH2		
Application	Specific Fan Power (W/l/s)	Heat Exchange Efficiency	Energy Saving Trust Best Practice Compliant
Kitchen + 1 Wet Room	0.60	89%	Yes
Kitchen + 2 Wet Room	0.61	88%	Yes
Kitchen + 3 Wet Room	0.68	88%	Yes
Kitchen + 4 Wet Room	0.79	87%	Yes
Kitchen + 5 Wet Room	0.95	86%	Yes
Kitchen + 6 Wet Room	1.15	85%	Yes
Kitchen + 7 Wet Room	1.38	85%	Yes

General Arrangement



Technical - MRXBOX95AB-WH2-OH



Electrical Details - MRXBOX95AB-WH2-OH

Please note: the electrical connection of the unit must be carried out by a qualified electrician.

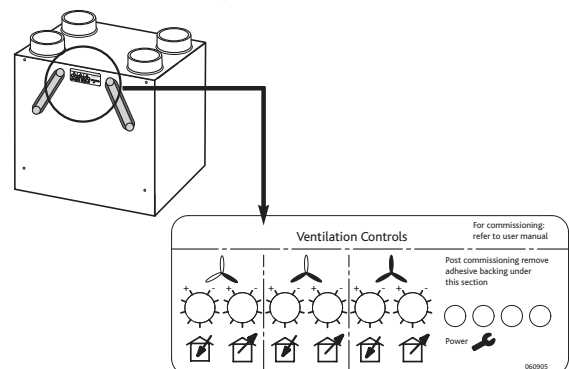
The unit is supplied with a flexible cord for connection to the mains supply.

NOTE: In the event of 1kV transients the fans may stop running, normal operation will be resumed when the interference has ceased.

The mains power supply cable should be connected to a fixed wiring installation, via a fused isolator, in accordance with current IEE wiring regulations.

ELECTRICAL DETAILS: MRXBOX95AB-WH2-OH	
Voltage:	230V 1ph 50Hz
Consumption:	2.5 Amp
Fuse rating:	5 Amp

Detail of unit control on front panel.

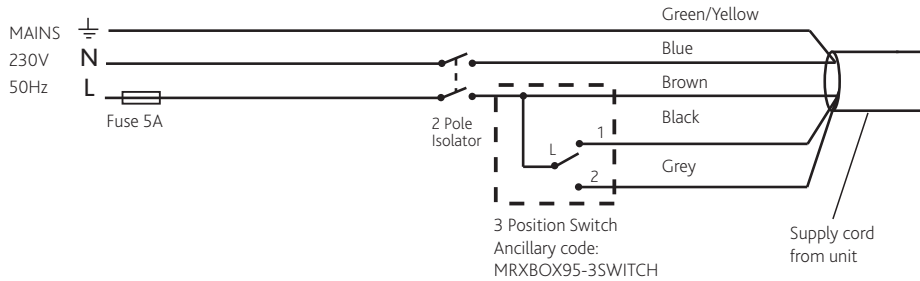


Tamper proof label following commissioning, includes system status indication.

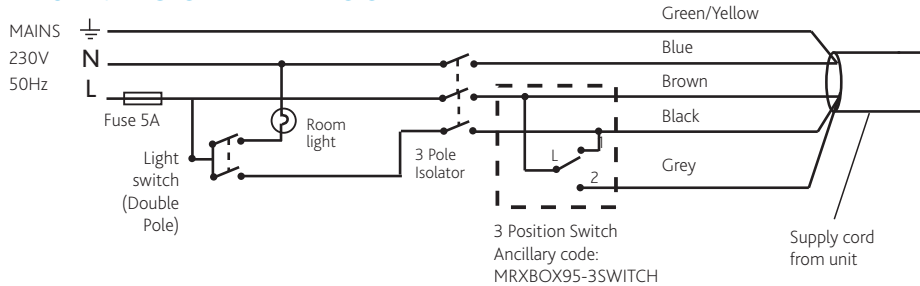
Wiring

Note: Wiring is for reference purposes only as the connections are factory fitted. The unit is pre-wired with a 2 metre fly lead.

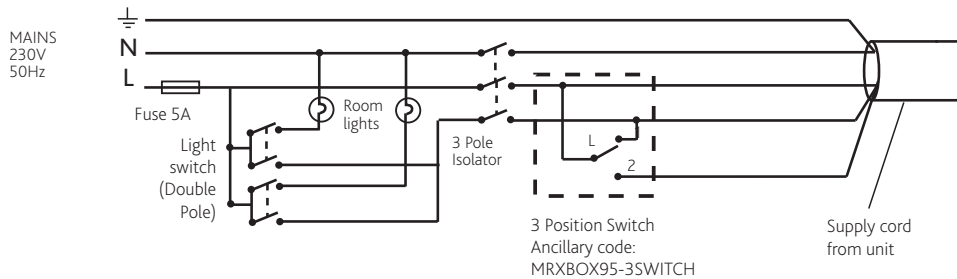
UNIT SERVING KITCHEN & BATHROOM



UNIT SERVING ONE BATHROOM



UNIT SERVING TWO BATHROOMS



OPTIONAL SENSORS AND DETECTORS

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MRXBOX95-PIR (Passive Infrared)

A low voltage sensor, detects movement and activates system. Incorporates overrun timer and timer adjustments.



MRXBOX95-HUM (Relative Humidity)

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MRXBOX95-RFI (Remote Fail Indicator)

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MRXBOX-VSC
Coming soon
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Consultants Specification

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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 of an ambient temperature of 40°C.

The unit shall be supplied complete with a condensate drip tray and 32mm drain connection.

The unit shall be suitable for 200mm diameter circular ducting.

Note: The unit is also available in standard format, refer to spigot configuration for set up.

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 MRXBOX95AB-WH2-OH as manufactured by Nuaire and shall be listed on the SAP Product Characteristics Database as MRXBOX95AB-WH2.

OPERATION

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The combined supply and extract with heat recovery unit shall supply filtered fresh air to each of the habitable rooms and moisture-laden 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.

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- Integral heat exchanger frost protection.
- Discreet daily run monitor.
- Remote fail indicator (Part number-MRXBOX95-RFI).
- Indication and controls - The unit shall have clear LED visual indication for maintenance, servicing and operation mode i.e. summer bypass, frost protection.

The unit shall be offered with a 5 year warranty.

The manufacturer's recommendations should be observed at all times. The unit shall be the MRXBOX95AB-WH2-OH and shall be manufactured by Nuaire.