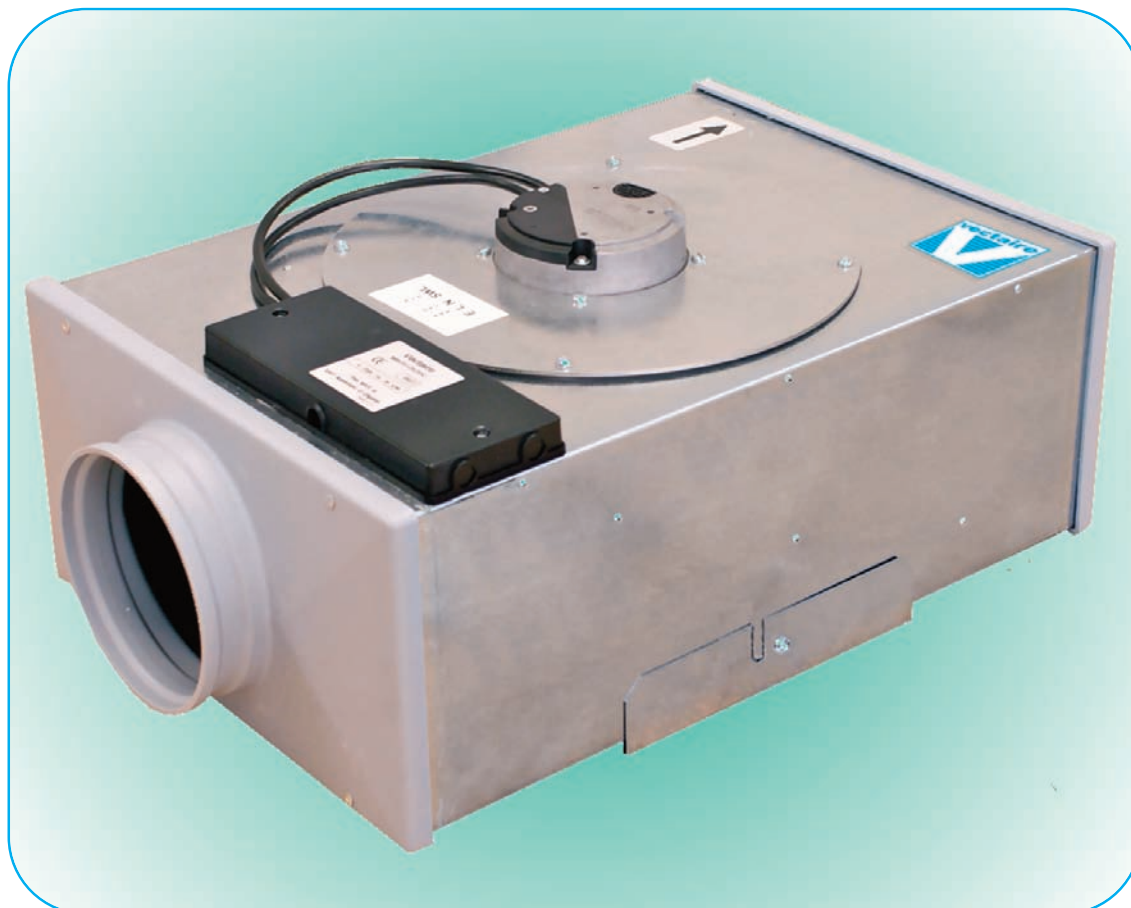


Microbox 125/2DC-B



This MEV - MBOX125/2DC-B - is an efficient, low energy solution to controlling condensation and pollution by providing low level continuous ventilation in a kitchen and up to 4 x 8 wet rooms, whilst allowing the user to boost to maximum performance when required.

The MBOX125/2DC-B is generally installed in the loft or roof void and requires only one discharge grille. The noise level and running costs are extremely low and it is compliant with Parts L and F of the Building Regulations.

* Also available with 204mm x 60mm spigot - MBOX125/2DC204-B





Microbox 125/2DC-B

Technical Characteristics

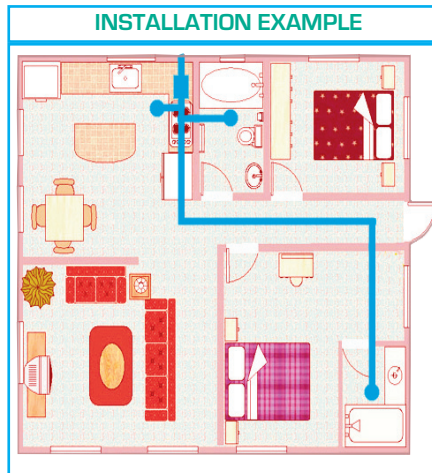


FEATURES

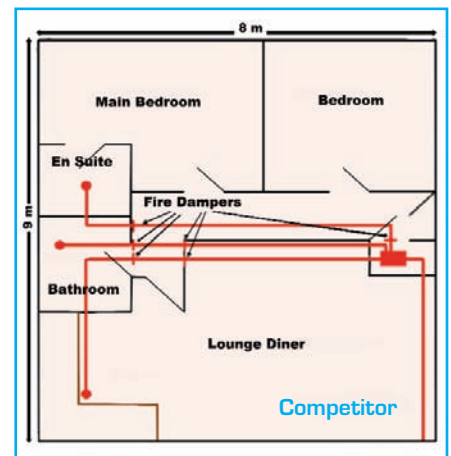
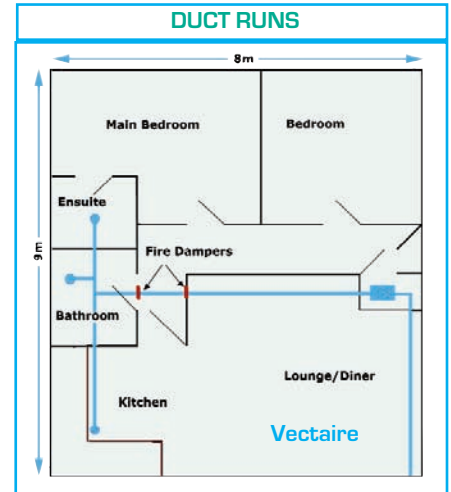
- **SAP Q eligible** (MEV) whole house mechanical extract ventilation for homes or offices
- continuous ventilation in kitchen and up to Z additional wet rooms
- maximum airflow 112 l/sec
- suitable for areas up to 270m²
- easy to install, commission and maintain
- for fitting into lofts, voids, false ceilings or cupboards (can be angled horizontally or vertically)
- a variable choice of both low (trickle) speed and boost options for optimum setting at installation
- the boost speed can be triggered by a switched live connection from a range of devices:
 - PIRFF (passive infra red)*
 - DRH240 (dynamic remote humidistat)*
 - THM (thermostat)*
 - a light switch (if more than one light switch is used, **each one must be a double pole switch**)
 - a remote switch/pull cord (*PIRFF, DRH240 and THM may have integral over-run timer which controls the length of time that the fan will continue to operate at its boost speed after the boost has been switched off.)
- very low noise levels
- low running costs
- gives extra security by removing need to open windows
- 3 year warranty
- Vectaire Ltd can supply all accessories for use with these units, including air filter cassettes, silencers, fire dampers, air valves, ducting, outside grilles and wall cowl

SPECIFICATION

- compact, ultra low profile unit
- casing manufactured from steel lined with acoustic material
- low energy DC external rotor motor has sealed for life bearings
- backward curved blades dynamically balanced
- thermal overload protection
- service and maintenance panel easily accessible
- pre-wired for easy electrical connection
- complete with mounting bracket and anti-vibration plate
- IPX4 rated



Vectaire Ltd offers a design service to ensure that the unit installed is the best possible to provide efficient, effective, low energy and low running cost ventilation. Vectaire can also organise installation and commissioning of these products



COMPLIES WITH

- Part L1A and L1B of Building Regulations for enhanced energy saving capability
- Part F of Building Regulations for reliable, efficient ventilation
- complies with IEC 60335-2-80, LVD2006/95/CE and EMC 2004/108/CE European Directive against radio interference and electro-magnetic compatibility
- CE marked
- **SAP Q eligible**
- **Energy Saving Trust Best Practice Compliant**





Microbox 125/2DC-B

Technical Characteristics - SAP Results



RESULTS for SAP CALCULATIONS			
ENERGY LEVEL PERFORMANCE - using rigid ducting only			
Exhaust Terminal Configuration	Fan Speed Setting	Specific Fan Power (W/l/s)	EST Best Practice Performance Compliant
Kitchen + 1 additional wet room	100% variable	0.20	Yes
Kitchen + 2 additional wet rooms	100% variable	0.26	Yes
Kitchen + 3 additional wet rooms	100% variable	0.34	Yes
Kitchen + 4 additional wet rooms	100% variable	0.44	Yes
Kitchen + 5 additional wet rooms	100% variable	0.55	Yes

Figures from BRE test results at minimum flow rate conditions

RESULTS for Approved Document F				
Exhaust Terminal Configuration	Fan Speed Setting	Total Flow Rate (l/sec)	Total Flow Rate (wind condition) (l/sec)	% reduction of Total Flow Rate
Kitchen + 1 additional wet room	100% variable	21.0	19.3	8
Kitchen + 2 additional wet rooms	100% variable	29.0	27.9	4
Kitchen + 3 additional wet rooms	100% variable	37.0	36.3	2
Kitchen + 4 additional wet rooms	100% variable	45.0	44.2	2
Kitchen + 5 additional wet rooms	100% variable	53.0	52.5	1

Figures from BRE test results



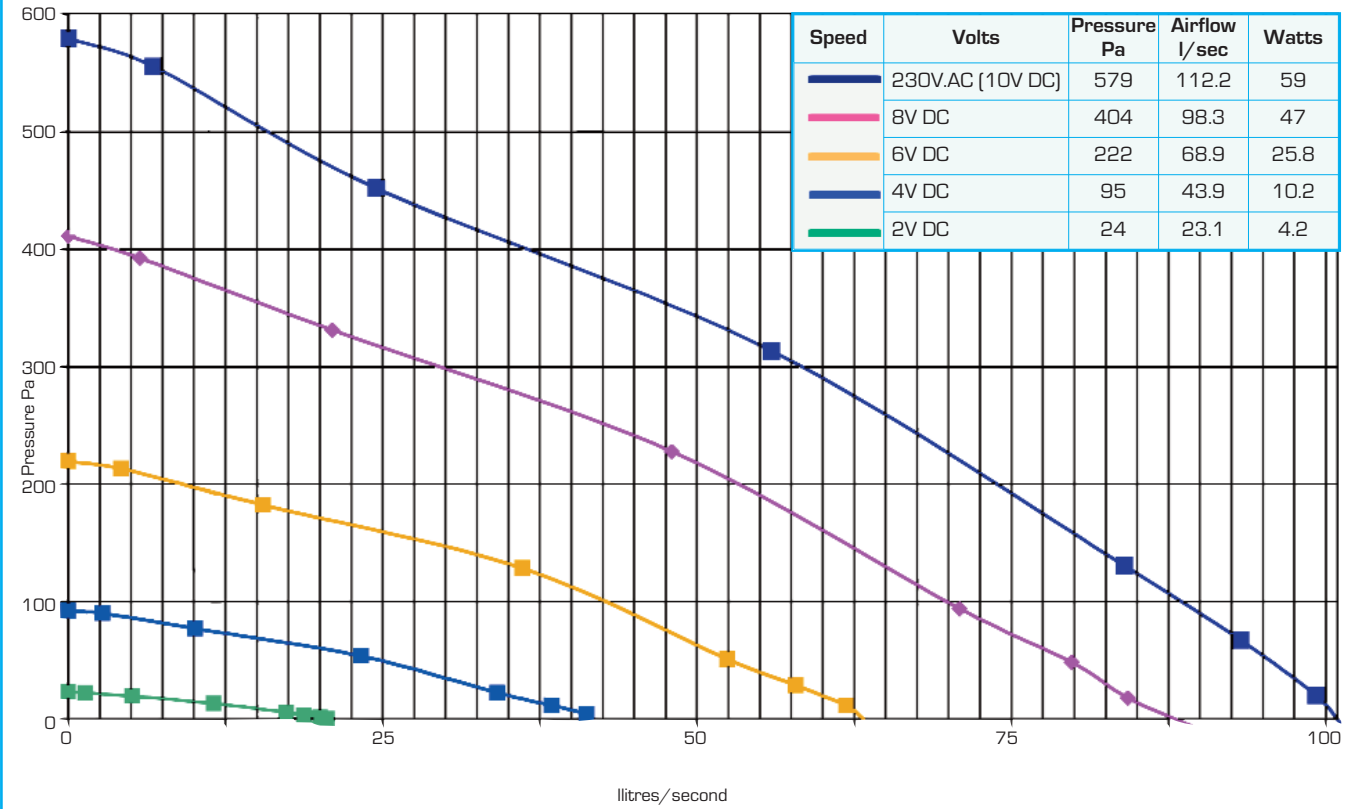


Microbox 125/2DC-B

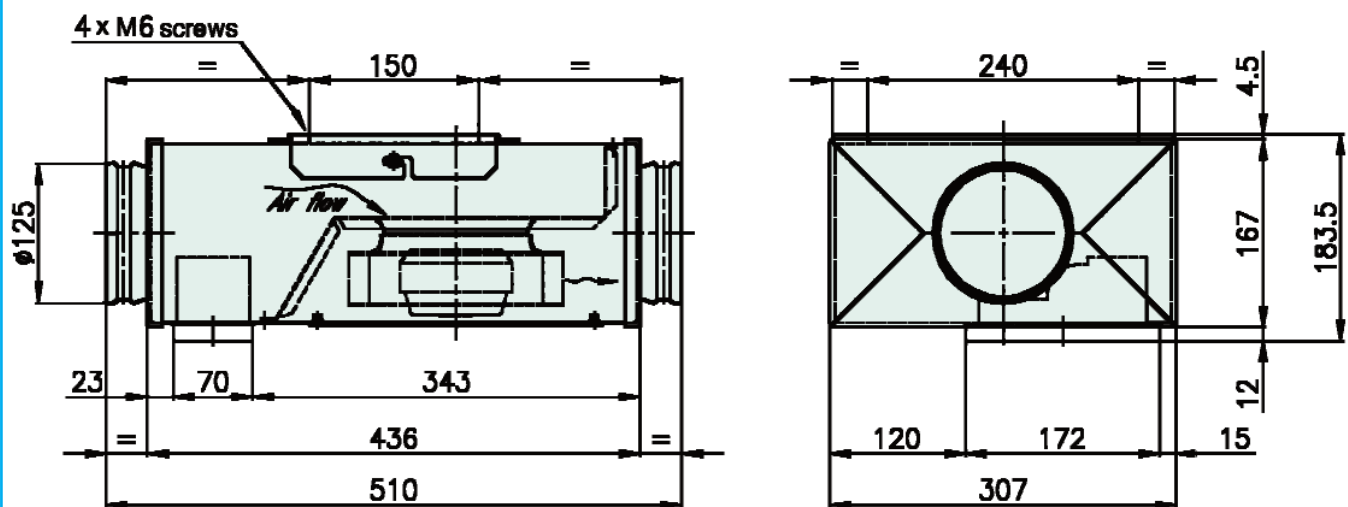
Technical Characteristics - Performance & Dimensions



curves are for guidance only



Dimensions (mm)



"Microbox"

DC Models

MBOX 125/2DC-B

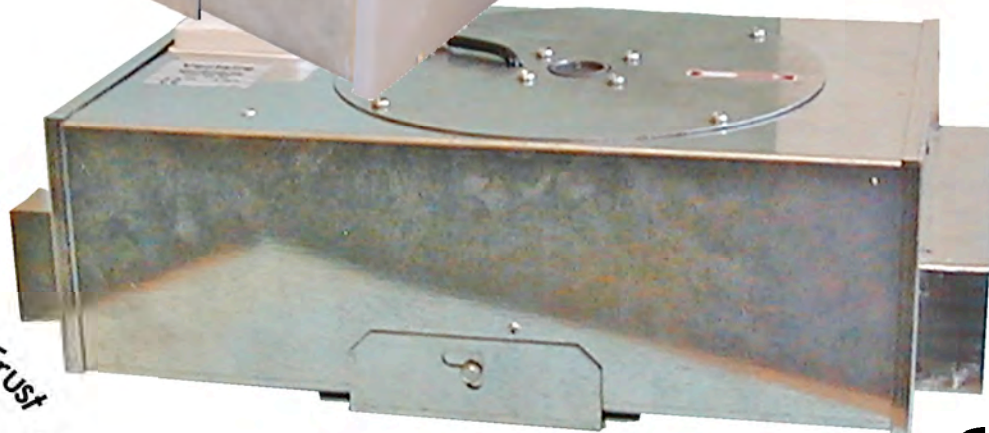
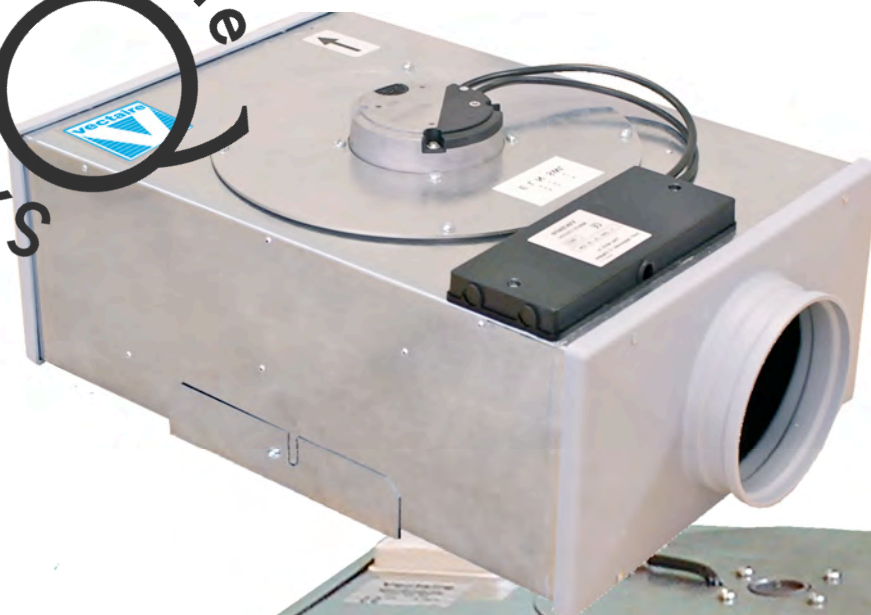
MBOX 125/2DC204-B



**Continuous Mechanical Extract Ventilation
Unit with Low Energy DC Motor - for
domestic and commercial use**

**Installation, Operating and Maintenance
Instructions**

Q
P
A
S
Eligible





"MICROBOX" - CONTINUOUS MECHANICAL EXTRACT UNIT INSTALLATION AND OPERATING INSTRUCTIONS

PLEASE READ THE FOLLOWING INSTRUCTIONS VERY CAREFULLY BEFORE USING THE PRODUCT. THE MANUFACTURER WILL NOT BE HELD RESPONSIBLE AND DECLINES ANY AND ALL LIABILITY FOR DAMAGE CAUSED TO PERSONS OR PROPERTY DUE TO IMPROPER USE WITH REFERENCE TO THE PRECAUTIONS OUTLINED IN THIS MANUAL.

THIS MANUAL MUST ALWAYS BE READILY AVAILABLE.

MBOX125/2DC-B: 5"/125mm spigot, for dwellings up to 270m², max capacity 404m³/hr

MBOX125/2DC204-B: 204 x 60mm spigot, for dwellings up to 270m², max capacity 404m³/hr



ATTENTION : This symbol indicates that care must be taken in installing this product in order to avoid (potentially lethal) injury both to installer and user. This instruction **MUST** be followed for installation.

1. Do not use this product for any purpose other than that for which it was designed and as shown in this leaflet.
2. Remove all packaging and check that your fan has not been damaged in transit. If in doubt, contact your supplier.
3. Do not leave packaging within the reach of children or unskilled people. Dispose of hazardous waste (poly styrene, plastic, polypropylene, etc.) responsibly.
4. If the product is dropped or badly knocked, contact your supplier, dealer or manufacturer to ensure that it is operating properly.
5. Using any electrical equipment requires compliance with basic safety rules:
 - the product must not come into contact with liquid of any sort and should not be touched with wet or damp parts of the body (eg hands, feet)
 - the product must not be operated by children or other unskilled people.
6. The product should only be connected to the mains electricity supply or electrical outlet if:
 - your electrical voltage and frequency correspond to those shown on the rating label.
 - the capacity of your electricity supply is sufficiently powerful to operate the product at its maximum power
 If this is not the case, contact professionally qualified personnel.
7. Before carrying out any maintenance or cleaning operation, the product must be switched off and disconnected from the main power supply.
8. If a fault, malfunction or anomaly of any type occurs, the product should be made inoperative (by turning off the switch and by disconnecting it from the mains electricity supply) and qualified personnel contacted immediately. Always request original spare parts to carry out any repairs.
9. If the product needs to be removed, turn off the main network circuit-breaker and then disconnect the appliance from that network.
10. The unit should be installed in a safe location as far away as possible from children and/or unskilled people.
11. The electricity system to which the product is connected must comply with the current standards.
12. **In order to comply with Construction (Design & Management) Regulations, sufficient access for safe maintenance or removal following installation, MUST be provided for this product.**



WARNING : This symbol indicates that care must be taken to avoid damaging your product when following these instructions

1. This product is professionally manufactured and complies with the current standards regarding electrical equipment
2. This product conforms with the EEC directive EMC 89/336 concerning the suppression of radio interference and electromagnetic compatibility.
3. This product must not be used in an ambient temperature greater than 40 °C (104 °F).
4. Do not leave the product exposed to the weather (rain, sun, snow, etc.).
5. Do not place the unit or any part of it in water or liquids.
6. When cleaning or performing routine maintenance, check the condition of the appliance.
7. To avoid the risk of fire, do not use the product in the presence of inflammable substances or vapours such as alcohol, insecticides, gasoline, etc.
8. The air or fumes being extracted must be clean and free from greasy particles, soot, chemicals and corrosive agents, inflammable or explosive mixes (if these substances are present, contact Vectaire for information on more suitable products).
9. The unit must be installed by professionally qualified personnel.



10. The product must be connected to the electricity supply by means of a triple-pole isolating switch with a minimum contact opening distance greater than 3 mm.
11. To ensure optimum operation, do not block the air intake and exit vents.
12. The area where the device is located must be adequately ventilated to ensure correct operation (UNI CIG 7129).
13. If the fan is extracting from a room containing a fuel burning appliance, the installer must ensure that air replacement is adequate both for the fan and the fuel burning appliance.
14. Any ducting used must be free from blockages
15. Your fan must not be exhausted into a duct which is already used for any other purpose (see Approved Document F1 2006 for guidance)

OPERATION

1. The **Microbox** is suitable for ceiling or wall installation.
2. If one of the spigots is not connected to ducting a safety grille **MUST** be fitted to that spigot, so that it is impossible for any moving part to be touched.
3. This fan runs continuously at a preset trickle speed and has an independently switched boost speed. The trickle & boost speeds are selectable during the installation by adjusting the trimmers in the controller (see wiring diagrams).

Electrical Connection

WARNING: these appliances must be earthed and all wiring must conform to current IEE Regulations and all applicable standards and Building Regulations.

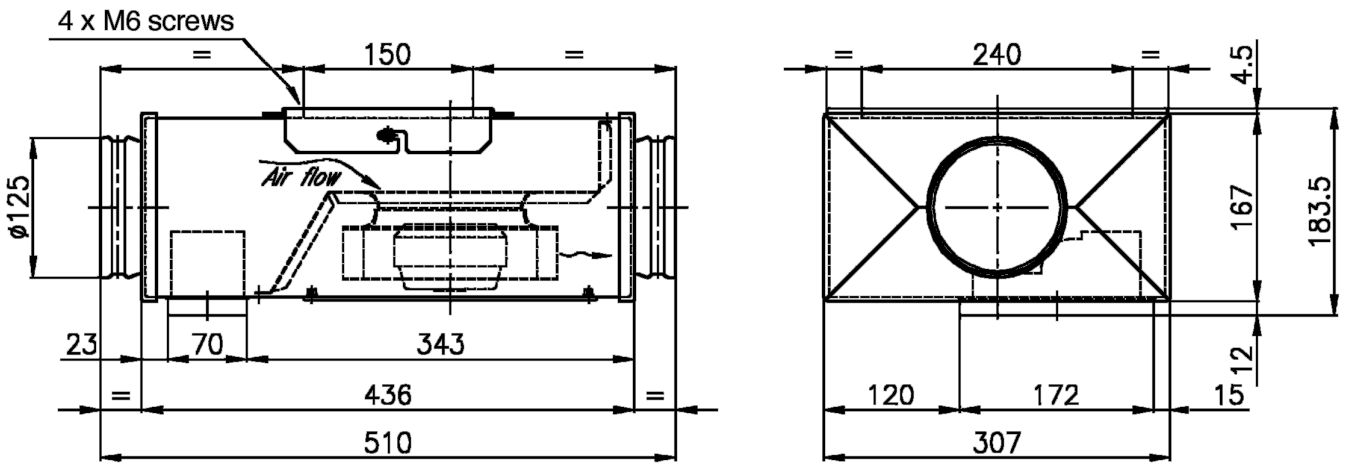
- The unit is suitable for 230V, 50Hz Single phase supply fused at 3A.
- The unit is supplied with a mains rated 4 core flexible cord (black, brown, grey and green/yellow)
- A fused spur box, or triple pole switch having a minimum contact separation of 3mm must be used for isolation.
- Boost controls must not be located within 1 metre of a cooker or where they may be affected by excessive heat or moisture
- Boost controls should be clearly identified and conveniently located.
- The boost speed can be triggered by a switched live connection from a variety of external devices including:
 - PIRFF (passive infra red)*
 - DRH240 (dynamic remote humidistat)*
 - THM (thermostat)*
 - a light switch (if more than one light switch is used, **each one must be a double pole switch**)
 - a remote switch/pull cord
 (*PIRFF, DRH240 and THM may have an integral over-run timer which controls the length of time that the fan will continue to operate at its boost speed after the boost has been switched off)
- The boost speed can also be triggered by a remote, volt-free switch (see wiring diagram for connections).



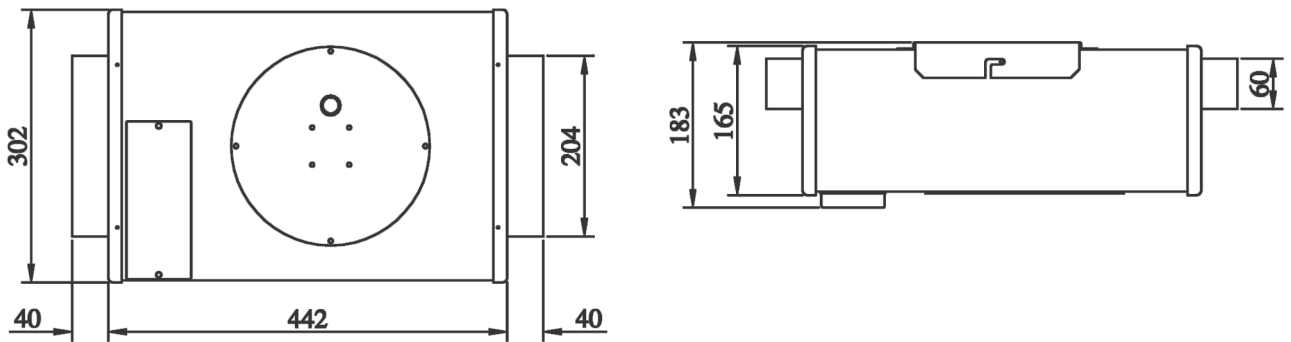
CLEANING AND MAINTENANCE

1. **Before carrying out any maintenance or cleaning operations the mains electrical supply MUST be disconnected.**
2. CLEANING AND MAINTENANCE SHOULD BE CARRIED OUT BY A QUALIFIED PERSON.
3. Before attempting to remove the motor impeller assembly disconnect the cable inside the control box.
4. Remove the screws (Fig.8) and lift out the motor/fan assembly.
5. Clean the motor/fan assembly either with a dry brush or a dry cloth.
6. Electrical parts **cannot** be cleaned.
7. Reassemble in the reverse order to above.

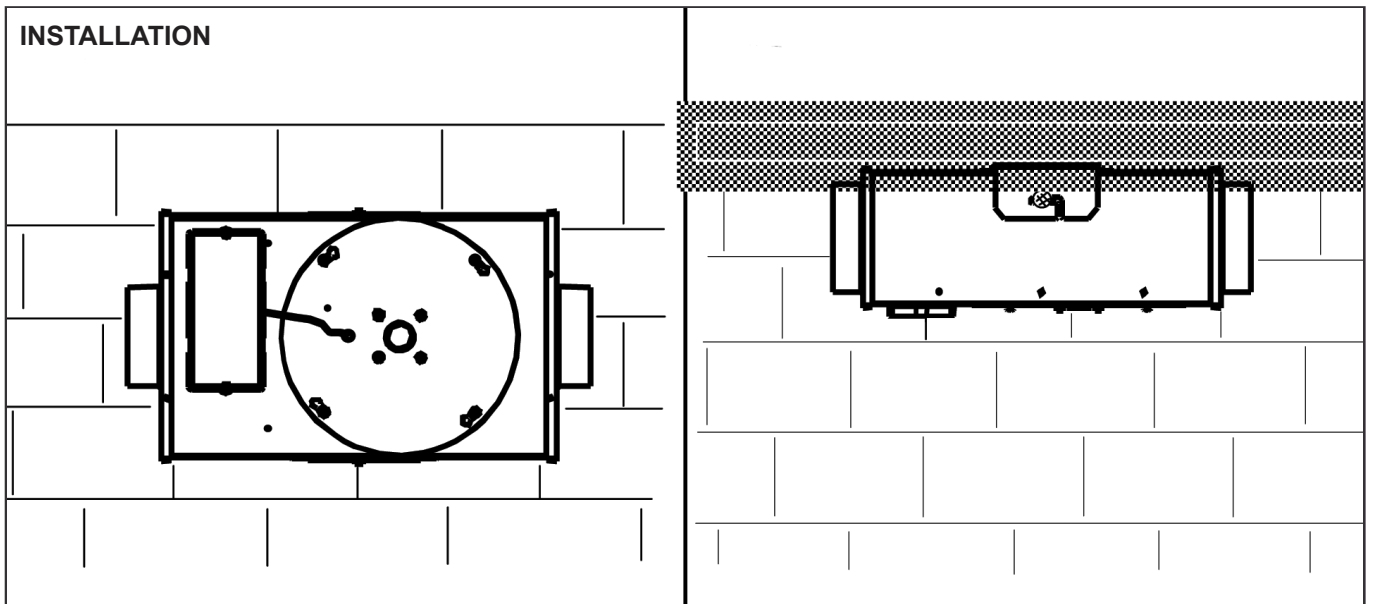
DIMENSIONS - MBOX125/2DC-B

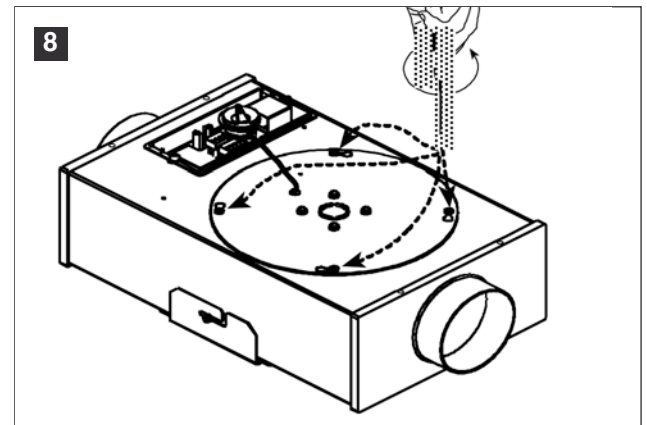
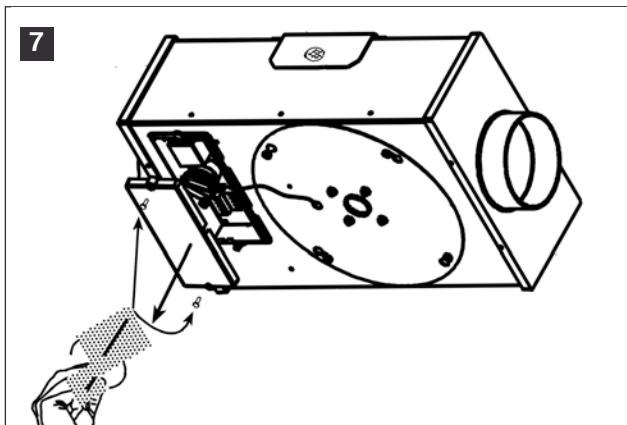
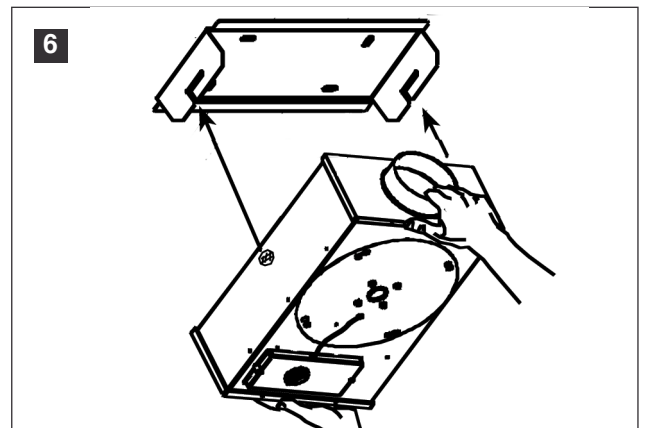
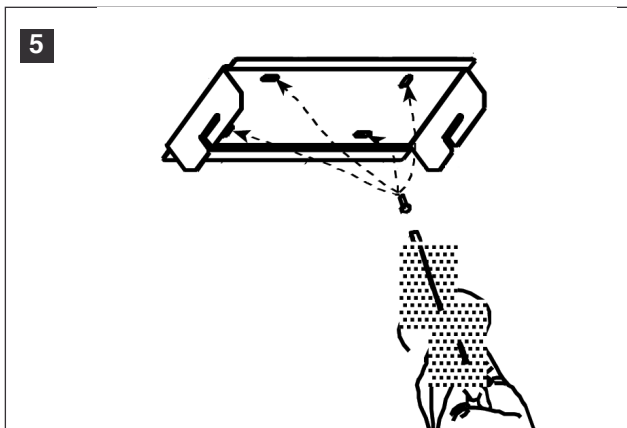
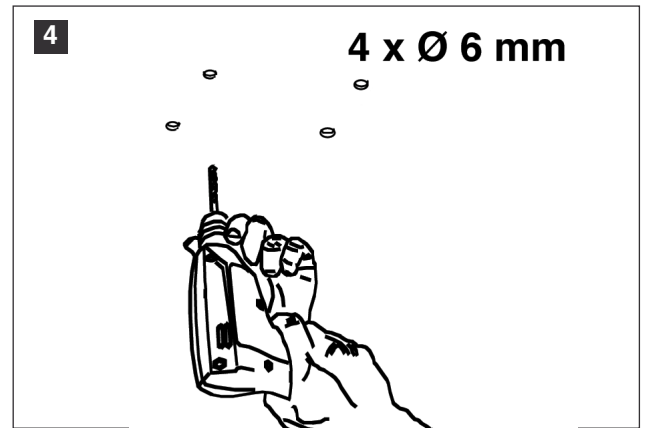
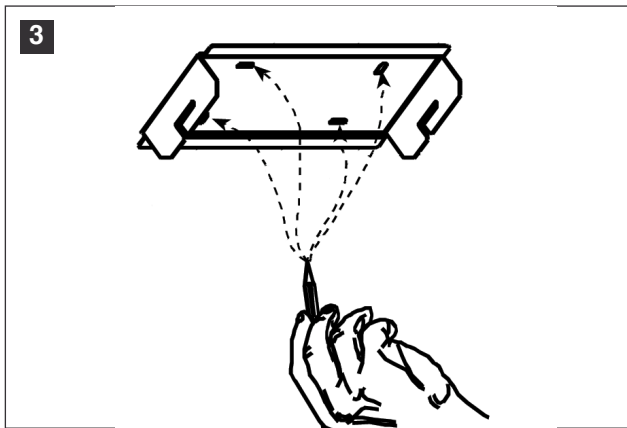
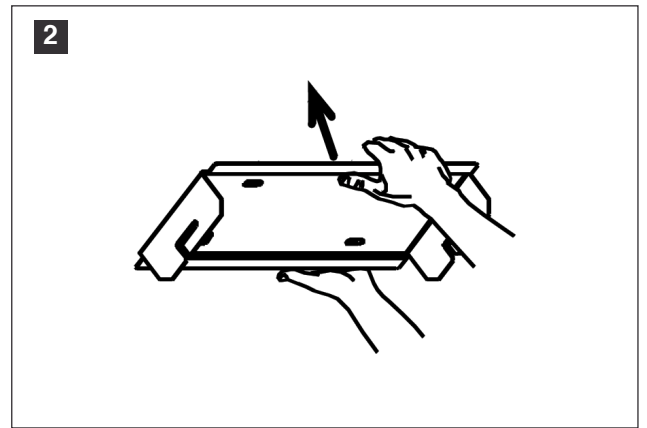
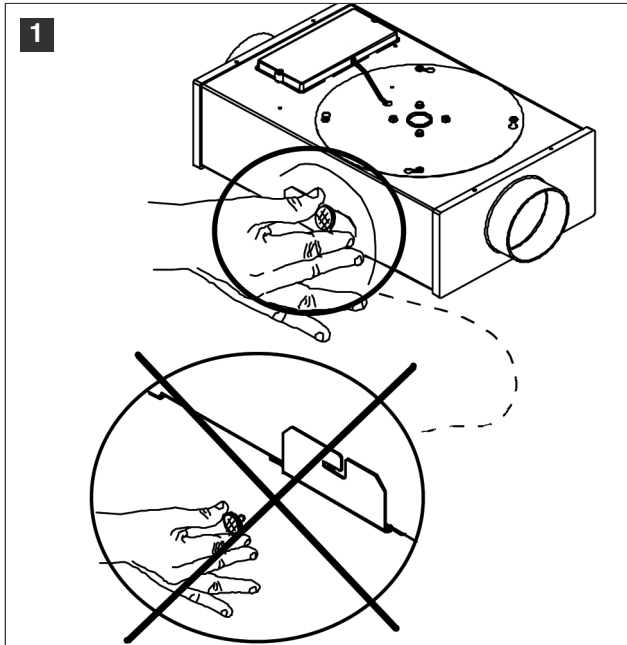


DIMENSIONS - MBOX125/2DC204-B



INSTALLATION





WIRING and COMMISSIONING DIAGRAMS

