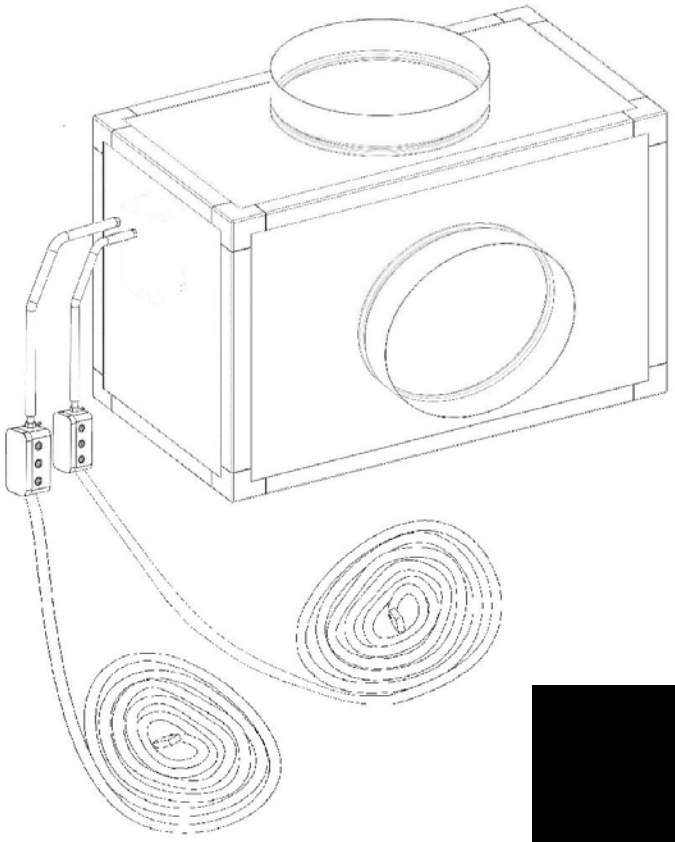
AWARD Appliance Group

# *Installation guide roof motor*

# *V1550 - V2450 ECO*



# EXTERNAL MOTOR V1550 – V2450 eco

**Please read these safety and installation instructions before using the motor.**

## Safety Information

Motors should only be used when connected to the hood. If there is a risk of water reaching the motor through the conduits it will be necessary to provide exterior protection.
External motors are not waterproof; they are not apt for installing exposed to the elements without special protection.

Once installed, make sure that no moving parts are accessible. Roof motors should not be used in dangerous environments and not be directly connected to active chimneys (wood burning, etc.).

WARNING! Before usage or any maintenance operations are carried out, make sure the power is disconnected, (cut-off switch or differential) and make sure the impeller is completely stationary.

WARNING! Motor fans have blades with sharp edges that can cause injury.
WARNING! Take care when opening the access cover for maintenance of the boxes, as fans with the motor installed on the cover are relatively heavy.

## Transport and Storage

All Pando roof motors are packaged for normal handling during transport. When handling, use adequate elevation equipment to avoid damaging the motor and injuring personnel.

WARNING! Do not lift the fans by their cable, the connection box, the impeller or the suction cone.

Avoid impact and shaking of the equipment. Store the motors in a dry place and protected from the elements until final installation.

## Installation

An installation manual with illustrations and explanations is included. The motor must always be connected to an extractor hood, **never directly to the mains.**

Bear in mind the safety information given above. Installation, electrical connection and start-up should only be carried out by authorised/specialised personnel.

## Version V1550e:

- Should be installed with a Ø150mm conduit, a different diameter will affect the performance of the motor, reducing its suction capacity, increasing noise produced as well as causing other problems.
- The recommended length of the conduit between the hood and the motor is 4 m maximum, a greater distance will reduce the motor's suction capacity, while a shorter distance will increase the noise of the hood, if the latter case in inevitable, we recommend the use of soundproofing elements.
- It is recommended that the conduit from the hood to the motor has no sharp angles, as they will reduce the suction capacity of the motor If they are inevitable, try to ensure they are not too close to the inlet or outlet of the motor (at least 0.5m away). Do not use elbow joints with an angle of less than 90º, or place one after another, the minimum recommended distance between them is 1m, and try to make them as open as possible.
- The maximum total length of the conduit from the hood to the exterior should be 10 linear metres, not counting elbow joints (one elbow joint is equivalent to 1 linear metre), any longer and the suction capacity of the motor will be reduced.

## Version V2450e:

- Should be installed with a Ø200mm conduit, a different diameter will affect the performance of the motor, reducing its suction capacity, increasing noise produced as well as causing other problems.
- The recommended length of the conduit between the hood and the motor is 4 - 6 m maximum, a greater distance will reduce the motor's suction capacity, while a shorter distance will increase the noise of the hood, if the latter case in inevitable, we recommend the use of soundproofing elements.
- It is recommended that the conduit from the hood to the motor is without sharp angles, as they will reduce the suction capacity of the motor. If they are inevitable, try to ensure they are not too close to the inlet or outlet of the motor (at least 0.5m away). Do not use elbow joints of less than 90º, or place one after another, the minimum recommended distance between them is 1m, and try to make them as open as possible.
- The maximum total length of the conduit from the hood to the exterior should be 14 linear metres, not counting elbow joints (one elbow joint is equivalent to 2.5 linear metres), any longer and the suction capacity of the motor will be reduced.

The motor must be installed in such a manner that its vibrations are not transmitted to the conduits or structures of the building. Make sure the motor is firmly and stably secure and that it is level.

WARNING! This motor must not be installed upside down. The fan should be installed in such a manner that maintenance and repair operations can be carried out simply and safely. Noise disturbance can be avoided by installing a silencer (Not included, but available).

**VERY IMPORTANT!**

**The motor must be totally and easily accessible for maintenance and possible repairs by the technical assistance service (SAT).**

# WARNING!

Please read this user's manual carefully before installing the motor.

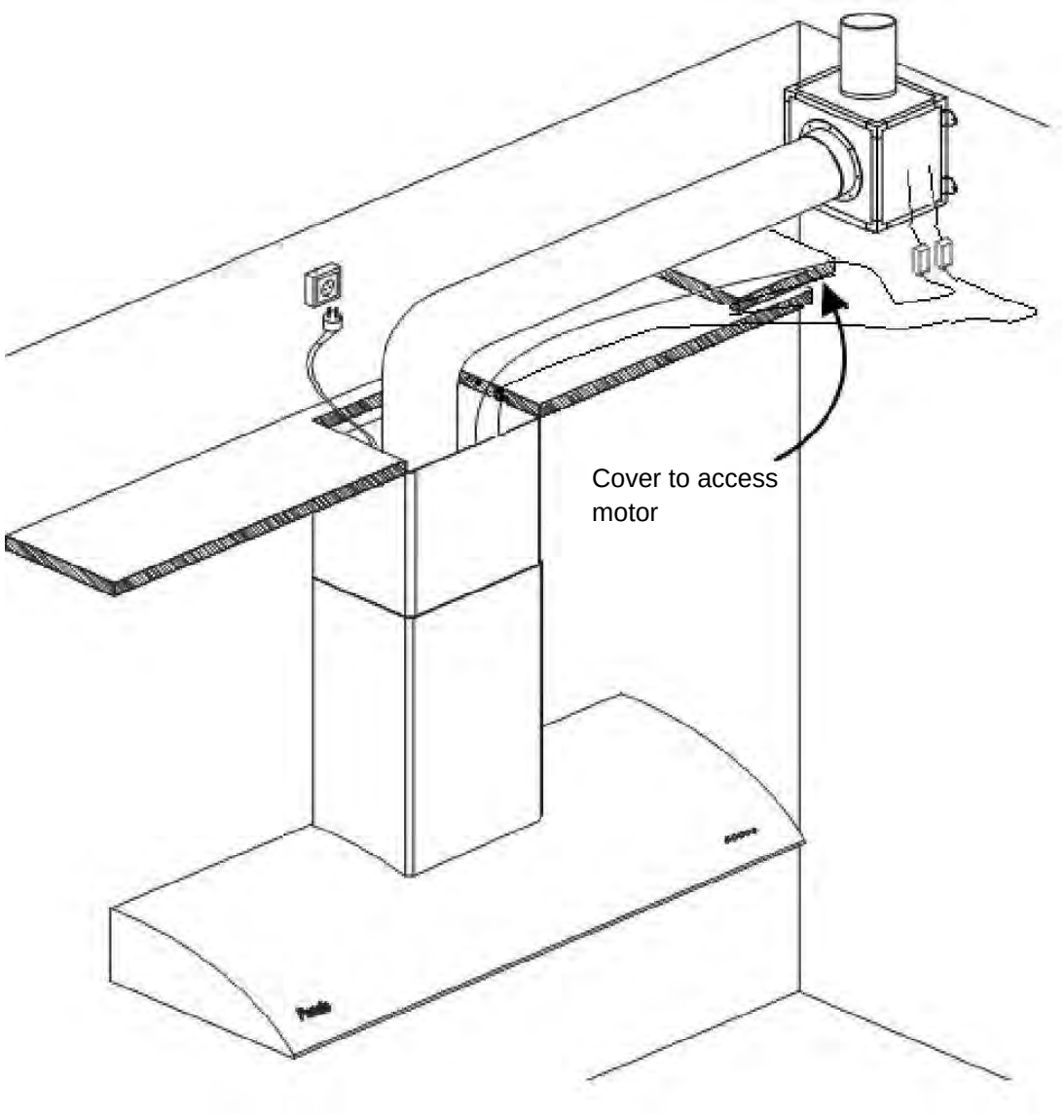
Before installing, check that the diameters of the fume outlet correspond to those indicated in the specifications table.

Do not manipulate the internal connections in the motor box. Do not plug the motor directly into the mains socket, it should always be connected through the hood, following the connection instructions.

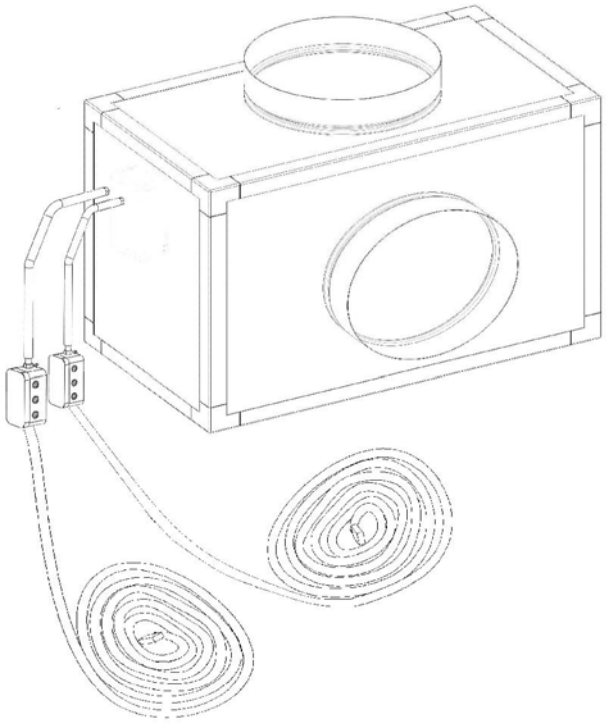
Your model may differ from the models described here, to see the characteristics of your specific model please refer to the exterior motor data sheet.

# VERY IMPORTANT!

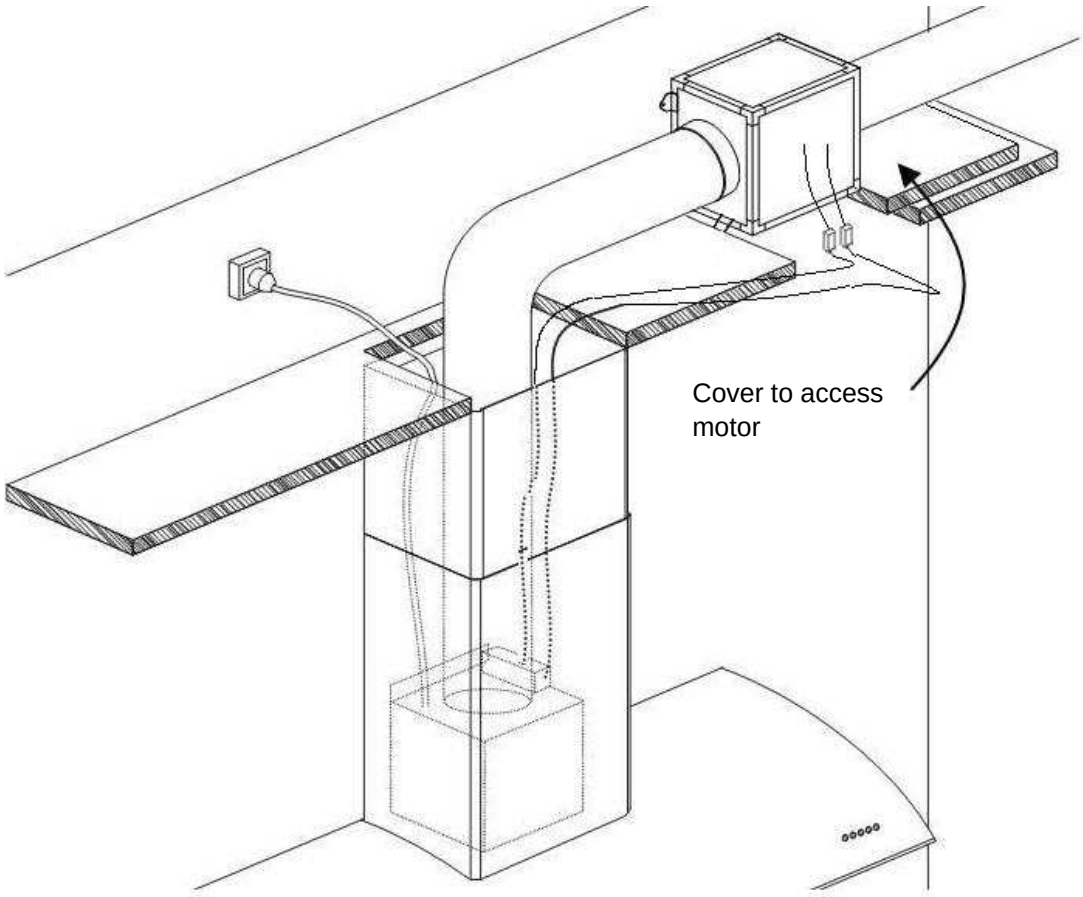
An opening must be provided to access the motor for maintenance and possible repairs by the technical assistance service.



**1–** Unpack the motor. Check that the model corresponds to what you have ordered (See the motor specification sheet) and that it is undamaged.



**2–** Make sure that the dimensions of the box coincide with the dimensions of the false ceiling and existing conduits. Check that the place where it is to be installed is accessible and safe for technical servicing.



**3–** Ensure that you know which of the openings is the inlet and which is the outlet, see the model and type on the table on page 8. You must connect the inlet tube to the hood and the outlet to the conduit that leads outside. This is indicated by labels on the legs: Inlet -IN- connect to the hood and outlet -OUT- connect to the conduit leading outside.

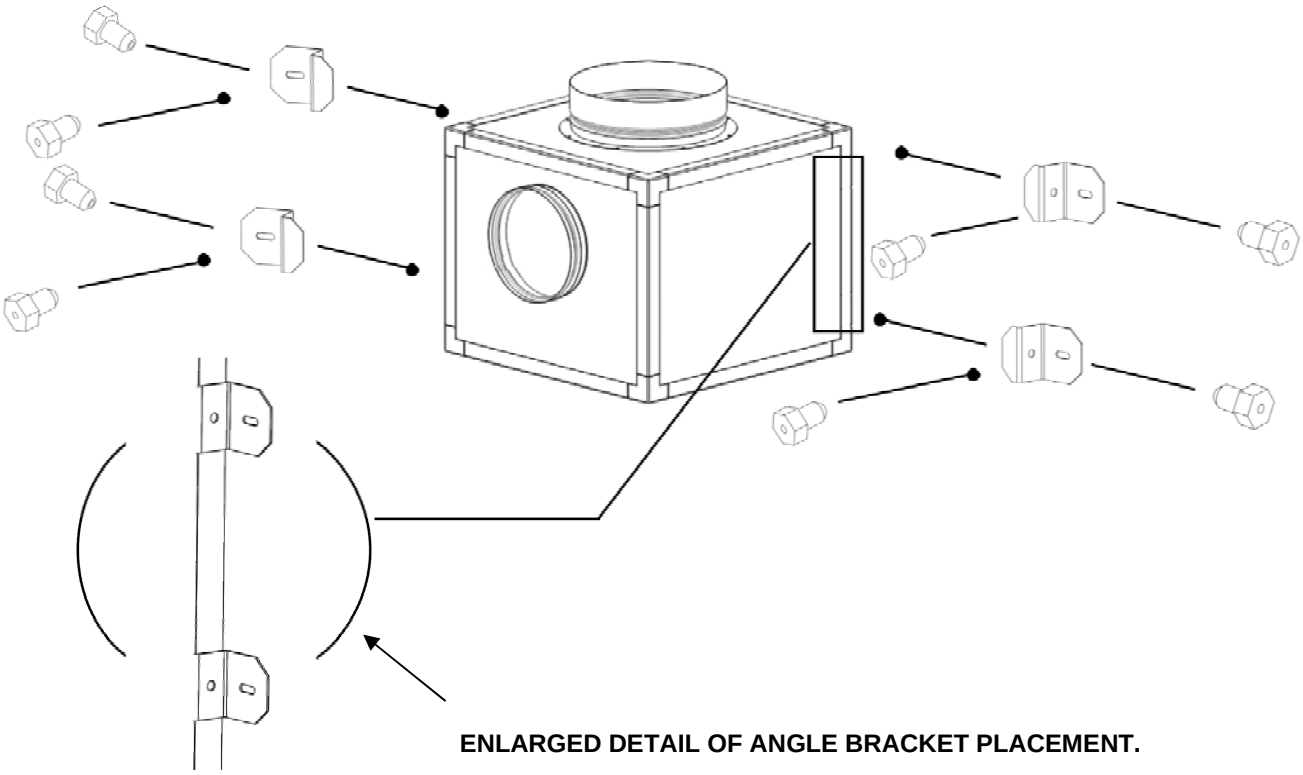
**4–** The following elements are supplied for installing the box:

- 4 Angle brackets.
- 4 Self-tapping screws DIN7504N 4.8x16.
- 4 Wall plugs and 4 screws for securing to the wall or ceiling DIN7981 M4.8x50.

Chose the face of the box on which you wish to attach the motor. Fit the 4 angle brackets onto the box, inserting them into the 2 mm gap around the perimeter between the black cover and the aluminium frame, as can be seen in the illustration.

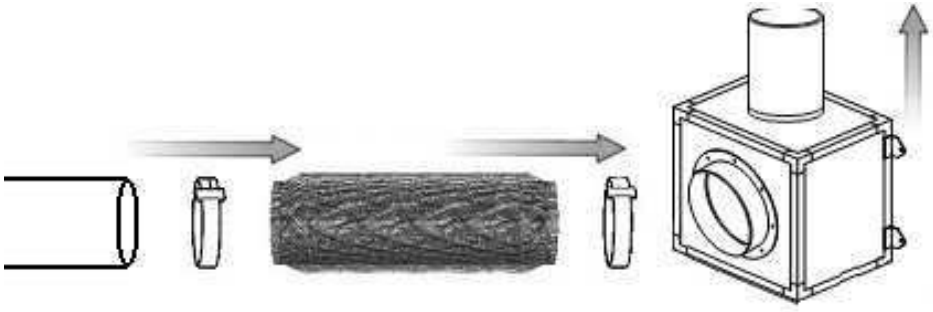
Fit the 4 self-tapping screws that will secure the angles to the aluminium frame of the box.

Place the box in the chosen location and secure it to the wall or ceiling with the screws. To avoid vibration you can fit rubber bushing washers between the wall and the box (not included).



**ENLARGED DETAIL OF ANGLE BRACKET PLACEMENT.**

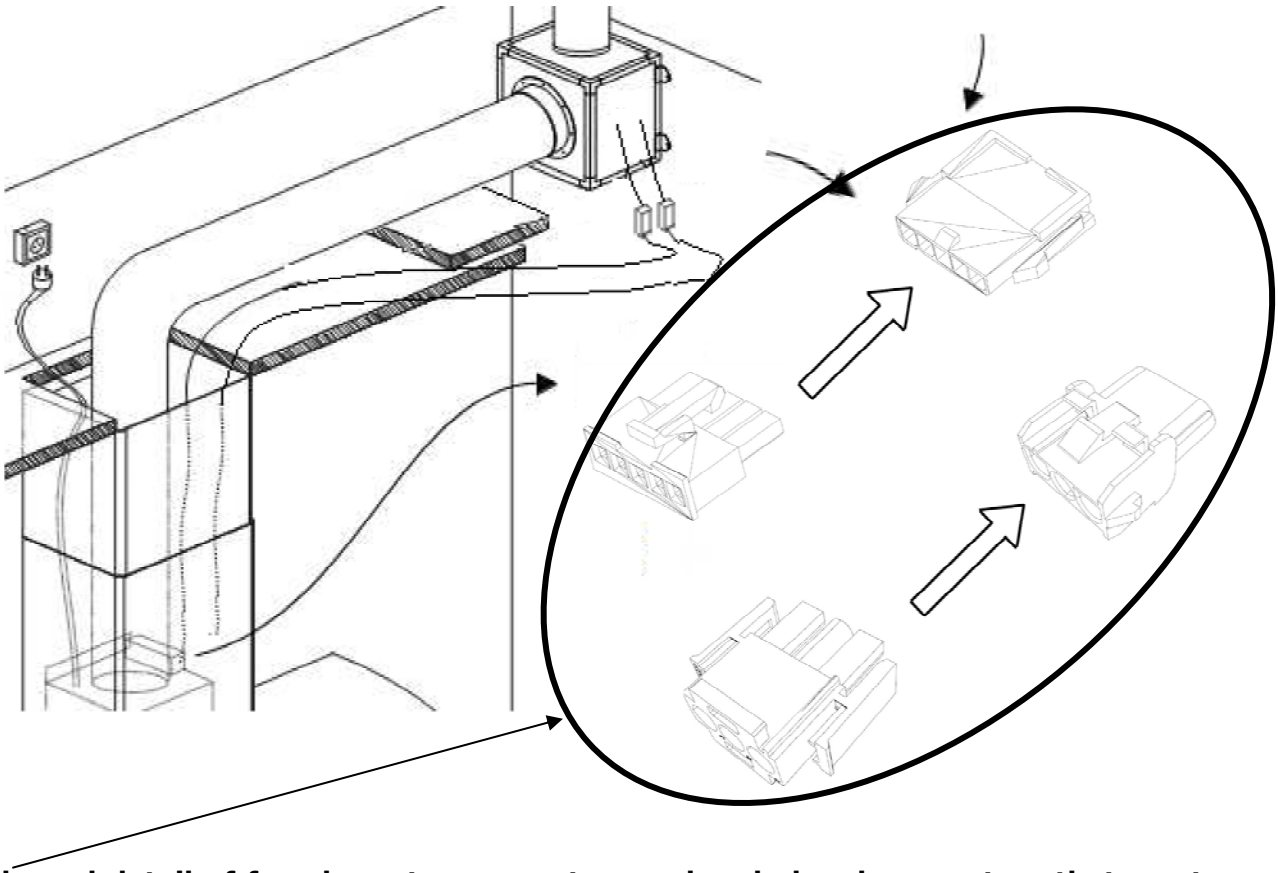
**5–** Connect the motor to the outlet and the hood following the advice given in the user manual. Secure the connections with ties or aluminium tape (Not included), so as to ensure the seal is hermetic**.**



## 6–ELECTRICAL CONNECTION OF MOTOR TO HOOD:

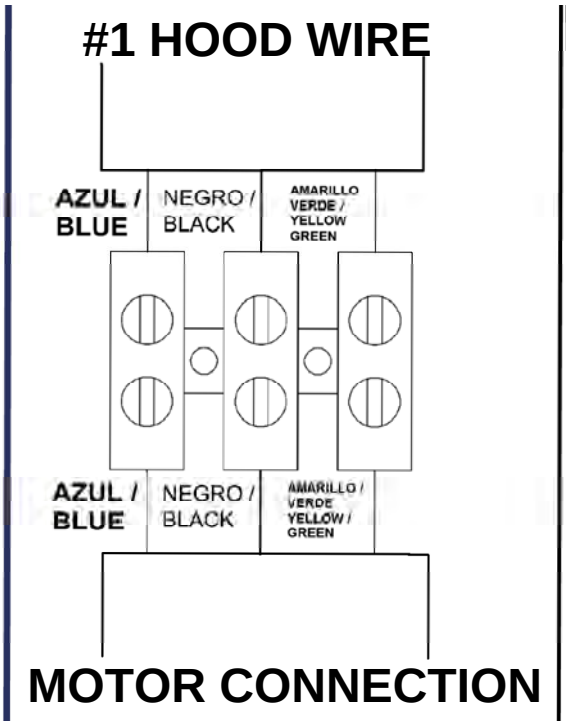
The motor has 2 connection boxes with 2 cables that are 6 m long, "Cable 1" 3-core and "Cable 2", which is 2-core, ended in female connectors. The electrical connections of the hood are at the upper part, with 2 cables with male connectors on their ends. You will have to **route the motor cables to the hood and connect to the hood cables. The cables are labelled for correct connection.**

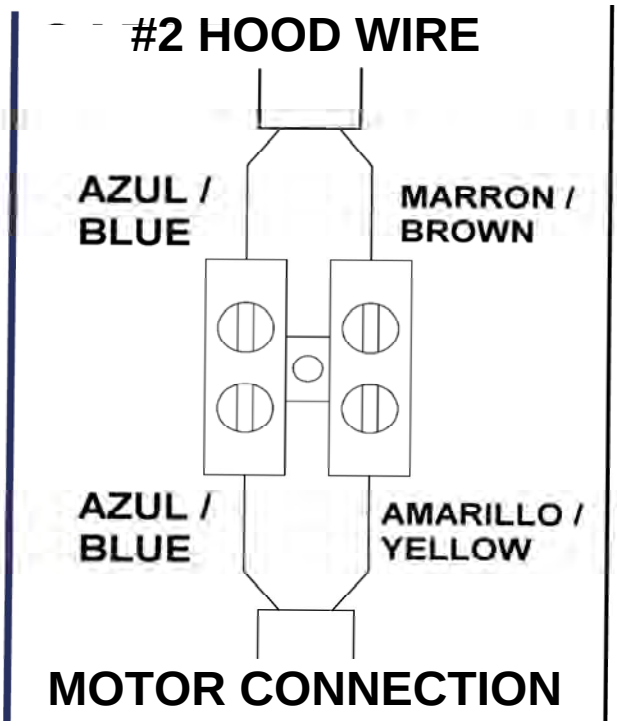
**NEVER ROUTE THE CABLES INSIDE THE CONDUIT.**
**DO NOT MANIPULATE THE INSIDE OF THE CONNECTION BOXES OR CUT ANY CABLES AND THEN SPLICE THEM, ACTIONS SUCH AS THESE WILL RENDER THE GUARANTEE VOID.**



**Enlarged detail of female motor connectors and male hood connectors that must be connected together.**

## 7– WIRING DIAGRAM AND BOX DIMENSIONS:

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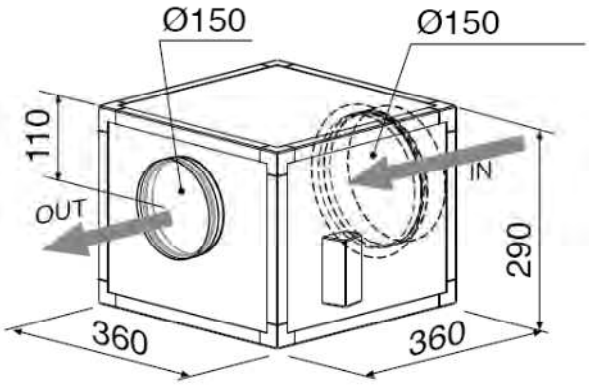
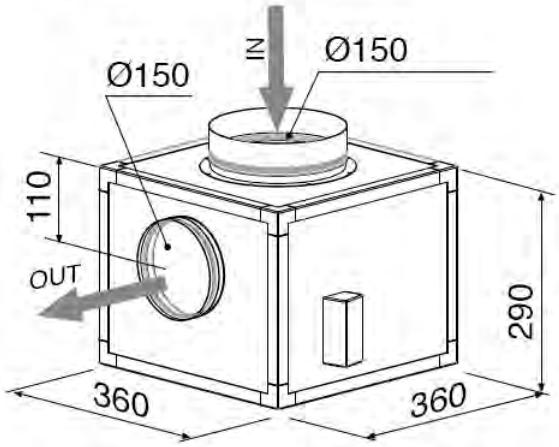
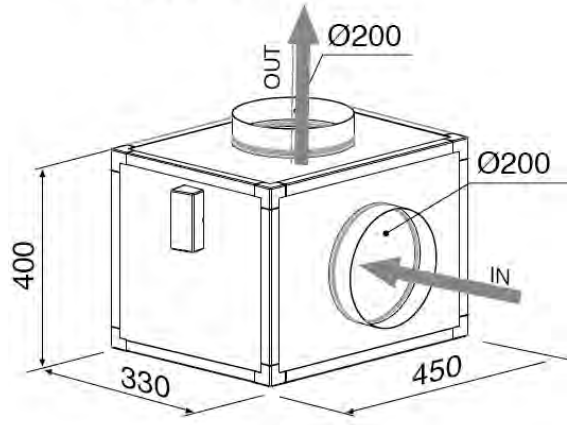
### V.1550 ECO-Type 1



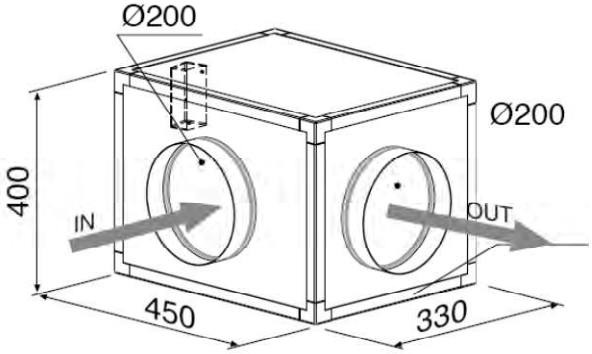

### V.1550 ECO - Type 2




### V.2450 ECO - Type 2




### V.2450 ECO - Type 3



## Operation

See the user manual for the hood.

## Maintenance and Repairs

Before carrying out any maintenance, servicing or repairs, make sure of the following:

-Electrical power is disconnected (Circuit breaker or differential).
-Fan blades are completely stationary.
-Follow personal safety regulations!

Inadequate maintenance of the hood filter systems (See hood user manual) can result in an excessive accumulation of grease on the motor blades, putting them out of balance and causing malfunction or abnormal noises.

The motor blades are maintenance-free and, if necessary, should only be repaired by specialised and authorised personnel. Do not clean with a pressure jet cleaning system.

Make sure that any balance weights are not displaced and that the blades are not deformed.

**VERY IMPORTANT:** The motor must remain accessible for maintenance or possible repairs to be carried out by the Technical Assistance Service. Access to the motor for maintenance or repair must be safe and non-hazardous for the Technicians. If access and disassembly