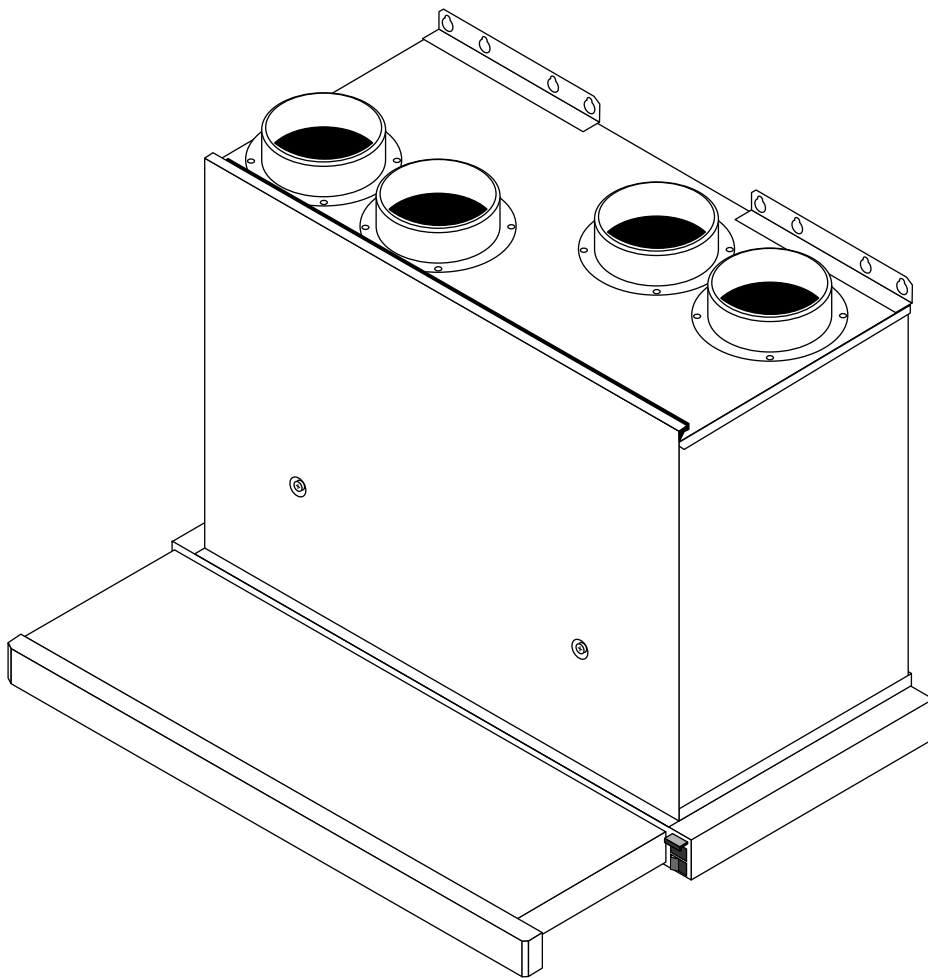


Vent-Axia®

205MEV **Whole House Ventilation System** **with Cooker Hood**

Fitting and Wiring Instructions.



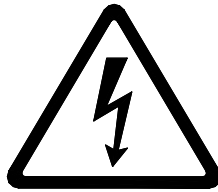
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205MEV (436943) consists of one Fan Unit (436944) and one Cooker Hood (372509)

220-240V 50Hz

PLEASE READ INSTRUCTIONS BEFORE STARTING INSTALLATION.

PLEASE LEAVE THESE INSTRUCTIONS WITH THE USER.



Safety and Guidance Notes

1. DO NOT install this product in areas where the following may be present or occur:
 - Excessive oil or a grease laden atmosphere.
 - Corrosive or flammable gases, liquids or vapours.
 - Ambient temperatures higher than 40°C or less than 5°C.
 - Possible obstructions which would hinder the access or removal of the product.
2. All wiring to be in accordance with the current I.E.E. Regulations, or the appropriate standards of your country and MUST be installed by a suitably qualified person.
3. The 205MEV and accessories should be provided with a fused local isolator switch capable of disconnecting all poles, having a contact separation of at least 3mm.
4. Ensure that the mains supply (voltage, frequency, and phase) complies with the rating label.
5. The 205MEV should only be used in conjunction with the appropriate Vent-Axia accessories.
6. When the 205MEV is used to remove air from a room containing a fuel-burning appliance, ensure that the air replacement is adequate for both the 205MEV and the fuel-burning appliance.
7. The 205MEV should not be fitted where it is liable to be subject to direct water spray.
8. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
9. Children should be supervised to ensure that they do not play with the appliance.
10. The power supply to the unit and its accessories should always be switched off before removing the cover or ducting.
11. If the supply cord is damaged, it must be replaced by Vent-Axia, their service agent or similarly qualified persons in order to avoid a hazard.
12. This product should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority for recycling advice.

Description

The 205MEV is a whole house ventilation system with cooker hood (including lamps) for small to medium sized dwellings. It is designed to extract air from the dwelling's kitchen and sanitary rooms through ducting in the ceiling as well as the integrated cooker hood in order to meet the ventilation requirements of Building Regulations Document F.

Boost speed can be selected by use of an external boost switch/control. Maximum speed is selected when the cooker hood is pulled out.

Maximum current*: **0.7A**

Maximum power*: **149W**

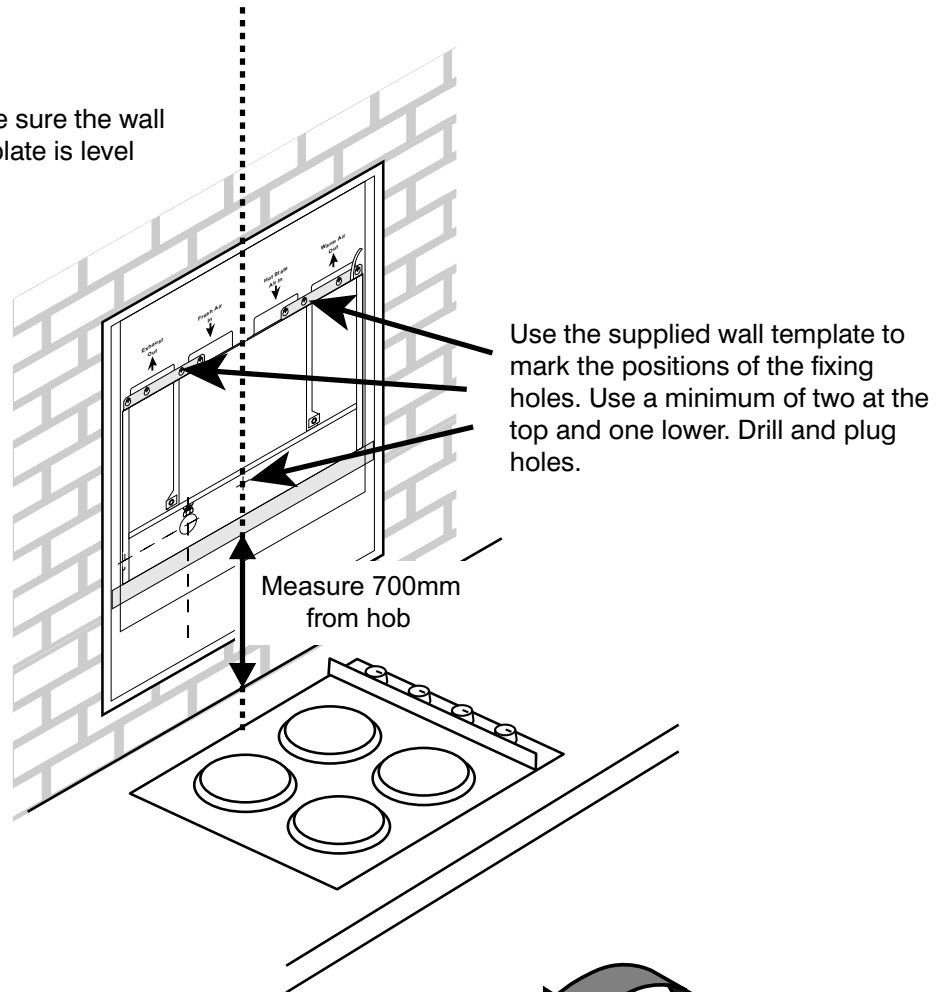
Recommended external fuse rating: **3A**

Lamps in Cooker Hood: Two, 240V, 40W, E14, clear, cylindrical lens, screw thread cap.

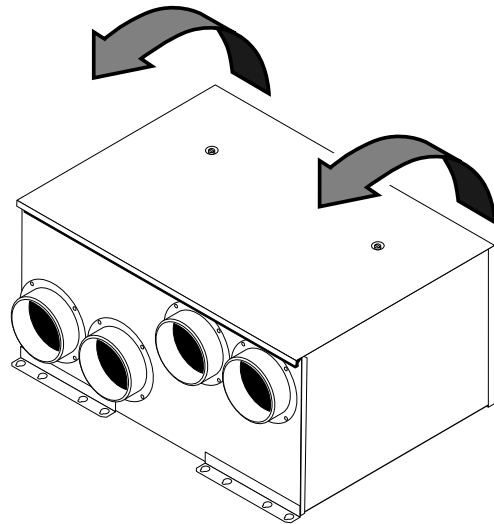
*at maximum speed with lights on.

Preparation for fixing of unit to wall

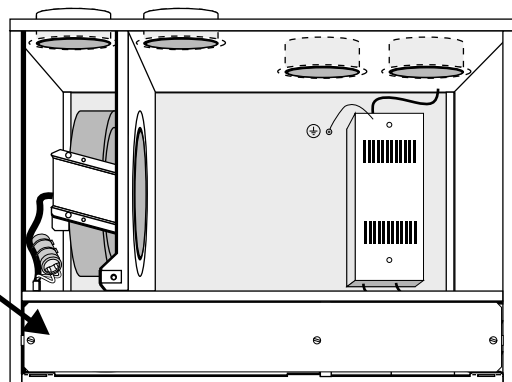
Make sure the wall template is level



Place the fan unit (436944) on its back. Remove the two cover screws. Lift off the cover.



Remove the metal cover by removing its three screws, pulling the panel forward and disconnecting the earth lead to the panel. Remember to replace cover later and reconnect the earth lead.



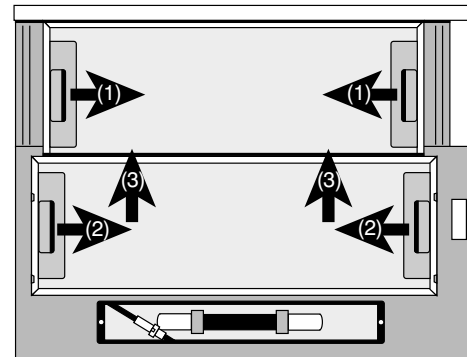
Assembly of the fan unit and the cooker hood

Unpack the cooker hood, locate the screws and two protective box halves.

Open out the telescopic hood and remove the filters before fitting the cooker hood to the fan unit.

Remove the smaller filter first, (at the front of the unit), by moving the catches inwards in the direction shown by the arrows in the diagram (1), and pulling the filter out.

Repeat for the larger filter (2) but slide it forwards (3) before pulling it out



Underside of the cooker hood

Turn the fan unit upside down stand it on a stable surface on its four plastic spigots.

Offer up the hood to the fan unit and carefully feed the cable and four pin socket through the $\varnothing 38\text{mm}$ hole in the rear corner of the fan unit.

Fit the grommet in the hole.

Align the cooker hood and screw it in place using the four screws provided.

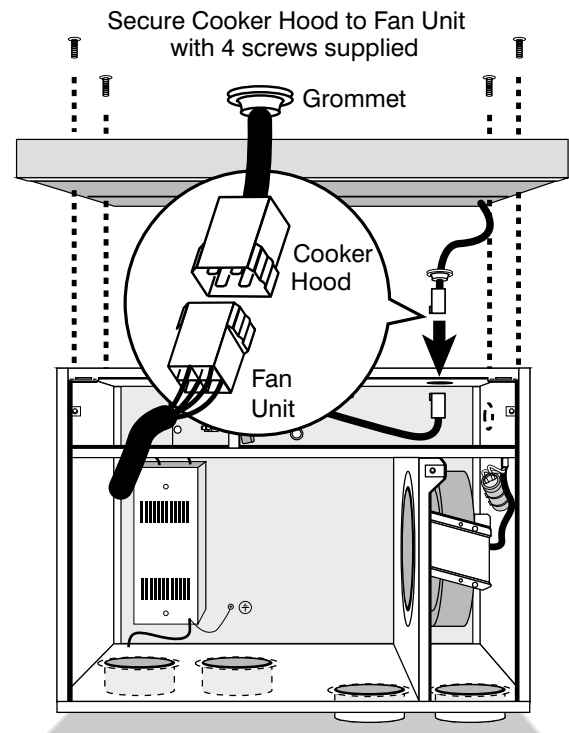
Connect the cooker hood socket to the mating socket in the fan unit.

Secure the two halves of the protective box around the connection with the four small screws provided.

It is important that the cables are routed away from the cooker hood outlet and fire damper.

Check that the cooker hood can slide open and closed unhindered.

Refit the filters.



Fixing the unit to the wall.

Screw the assembled unit to the wall using the prepared fixing points.

Wiring to the power supply.

Check that the mains supply rating matches that of the product's rating label.

Ensure that the mains power supply is off before making any connections.

Connect the 205MEV and any accessories to the mains supply with a switched fused spur capable of disconnecting all poles, having a contact separation of at least 3mm. See wiring diagrams for details.

Wiring of boost switches/controls.

Remove the transformer cover by undoing the two screws.

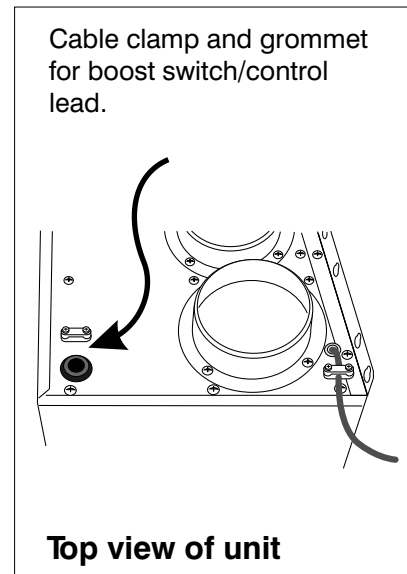
The 205MEV can be used as supplied without a boost switch/control. See wiring diagram 1. In this case, the unit will run continuously at the speed selected by the link wire until the cooker hood is opened, when it will run at the maximum speed. As supplied, the link wire is connected to the terminal L3 (120V transformer tapping). This can be moved to terminals L, L1, L2, L4 or L5 to select a different normal speed, if preferred.

L1 = 80V = Slowest speed
L2 = 100V
L3 = 120V
L4 = 140V
L5 = 160V
L = 220-240V = Maximum speed

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↓

Alternatively, the 205MEV can be connected to a switch or control capable of switching the motor speed from normal speed to boost speed. This could be, for example, a normal/boost rocker switch, normal/boost pullcord switch, humidistat or CMSM controller. If you wish to connect a boost switch/control, follow the instructions below.

Use the supplied cable clamp and grommets to route cabling into the 205MEV and in to the transformer assembly ensuring that cables are not passing any unprotected edges of metalwork. Drill, don't slice, a hole in the grommet on top of the unit equal to half the diameter of the boost switch/control cable.



Remove the link wire between terminals "C" and "L3".

Connect the common terminal of the boost switch, (sometimes labelled "COM" or "C") to the terminal labelled "C" in the transformer assembly, as shown in the wiring diagrams 2 and 3.

Connect the normal speed terminal of the boost switch, (sometimes labelled "O", "Ordinary", "NC" or "L2"), to the desired transformer terminal for normal (low) speed. This determines the speed that the fan will run at when the cooker hood is closed and the boost switch/control is not calling for boost speed.

Connect the boost speed terminal of the boost switch, (sometimes labelled "B", "NO" or "L1"), to the desired transformer terminal for boost speed. This should be a faster speed than the normal speed tapping. This determines the speed that the fan will run at when the boost switch/control calls for boost speed.

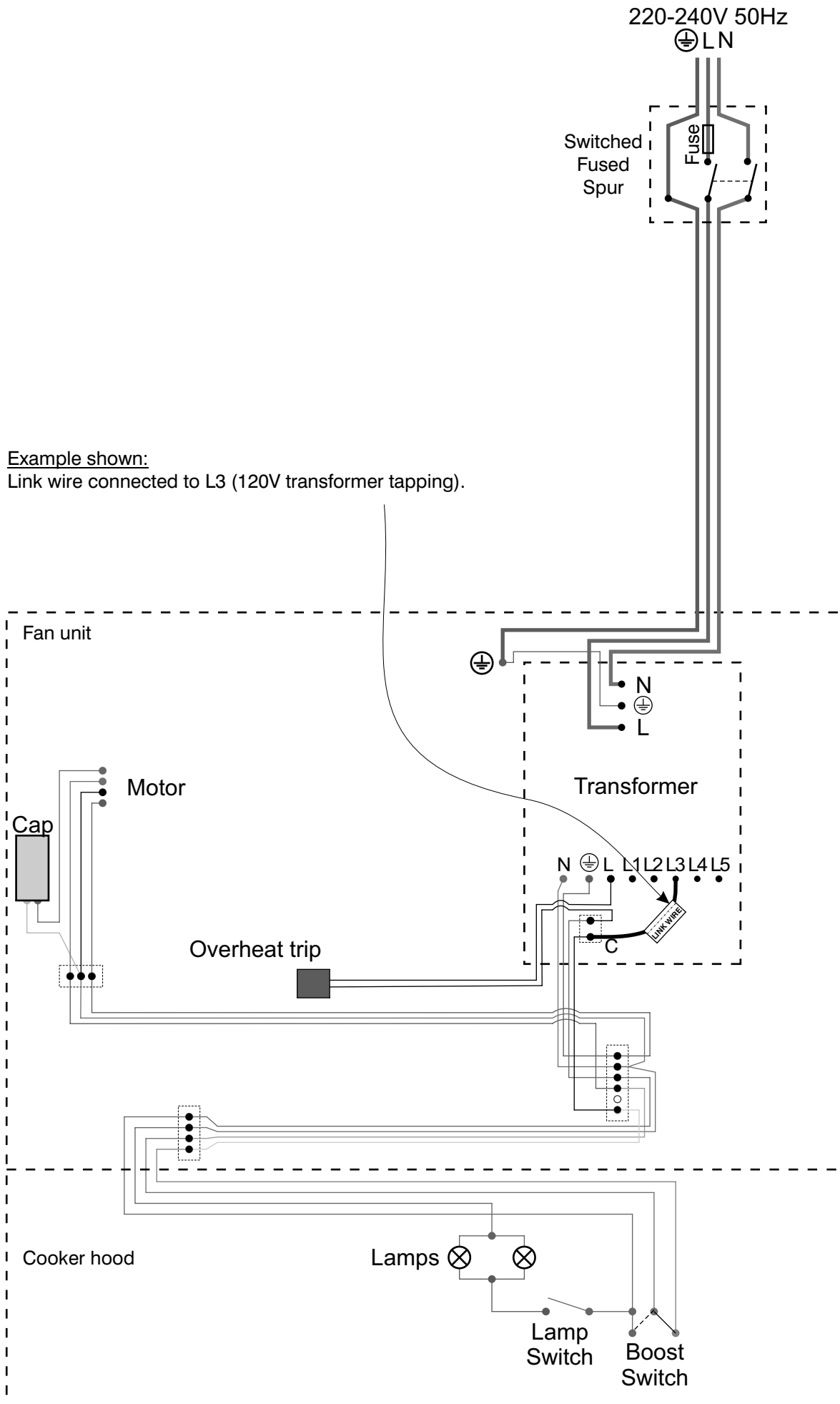
Replace the transformer cover and tighten the two screws.

Reconnect the earth lead to the tag on the internal metal cover and screw the cover back in place using the three screws provided.

Refit the front cover by hooking it over the top lip of the appliance and swinging it down. Fit and tighten the two cover screws.

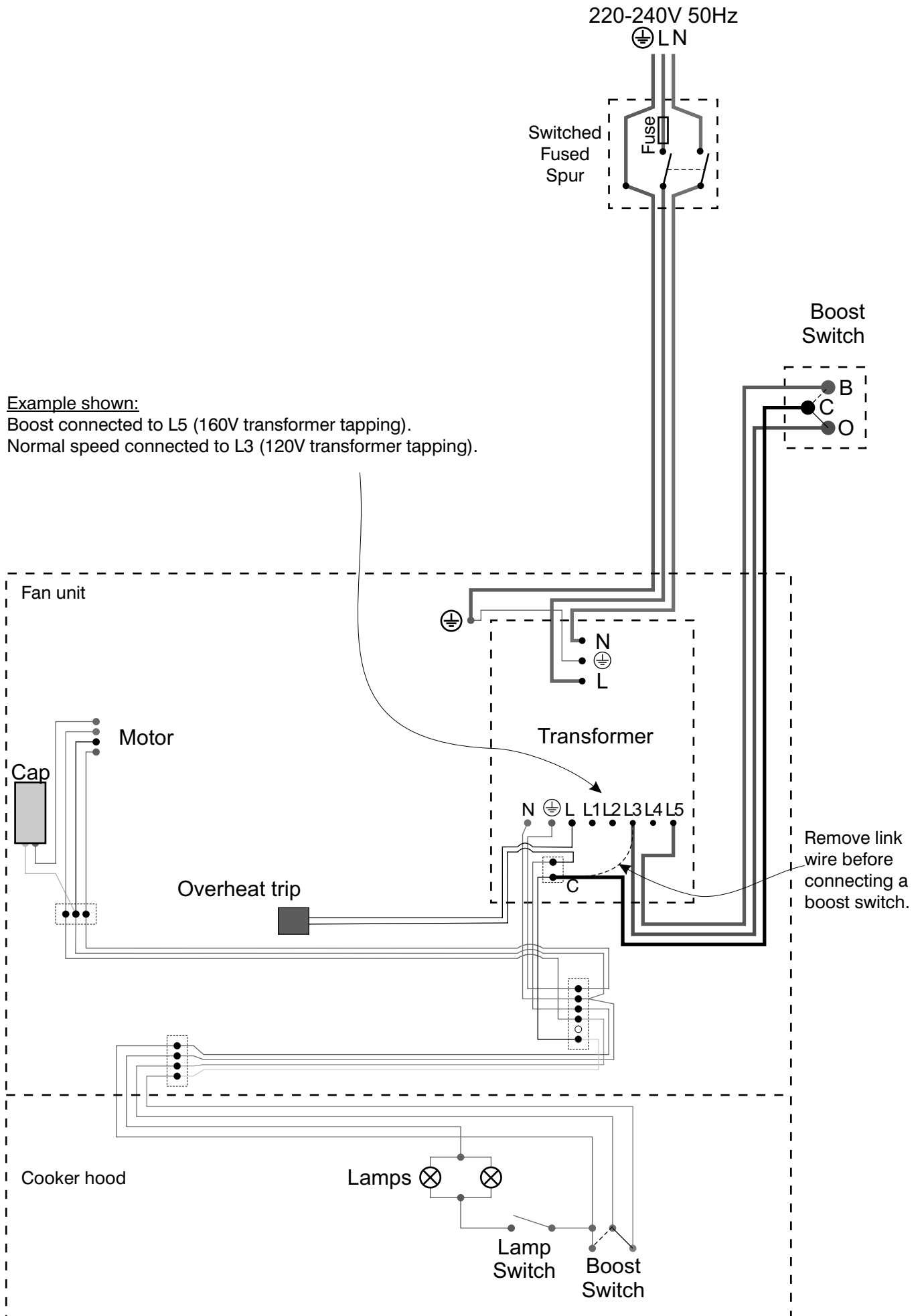
When the cooker hood is opened, the fan will run at maximum speed, (220-240V), regardless of the boost switch/control setting.

Wiring diagram 1 - without boost switch/control

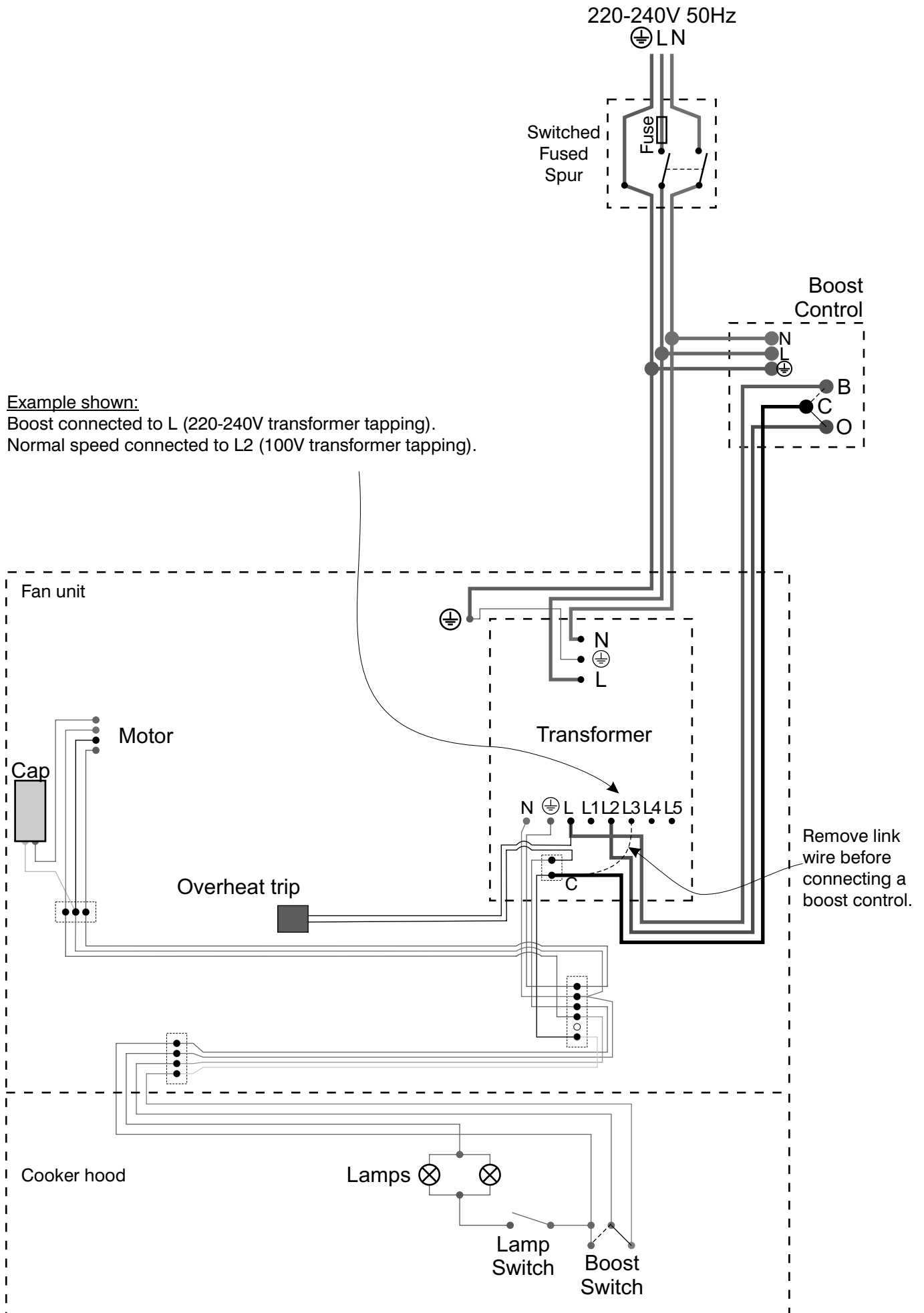


Example shown:
Link wire connected to L3 (120V transformer tapping).

Wiring diagram 2 - with boost switch



Wiring diagram 3 - with boost control



Ducting installation

Duct systems should be installed in accordance with BRE Digest 398 and CIBSE guides.

The duct work system should be sized and installed to minimise the pressure loss along it. Using larger diameter ducts and keeping the number of bends and fittings to a minimum will reduce the pressure drop and allow the unit to be set at a lower fan speed. Bend radii for flexible ducting, measured to the inside of bends, should be kept to at least 1x the duct diameter.

The transmission of noise along ducts can be reduced by fitting noise attenuation ducts, (part numbers FS100 or 370426).

Ducting should be insulated in cold areas to prevent condensation forming.

The exhaust duct must pass through an outside wall or roof and discharge to atmosphere in a suitable position, at least 0.6m from a flue outlet and not above.

There must be adequate ventilation of the room when the cooker hood is used at the same time as appliances burning gas or other fuel. The exhaust air duct must not be discharged into a flue which is used for exhausting fumes from appliances burning gas or other fuels. Refer to the relevant current British Standard Codes of Practice, Part J of the Building Regulations (England and Wales) and, in Scotland, OFTEC Technical Information Sheet TI/112.

The 205MEV is supplied with one of the three *Extract from rooms* spigots on the top of the unit blanked off. If the use of that spigot is required, remove the blank.

All duct joints should be taped with duct tape to ensure a secure, air tight seal.

It is important that any door or cupboard front covering the 205MEV is easily removable as access for servicing may be required.

Commissioning

Check that the external controls are set to normal speed.

Turn on the electrical supply. The unit will now start running at the normal ventilation speed.

Check the boost operation by setting the boost switch/control to boost. The unit should now speed up to boost speed.

It is important that a suitable anemometer is used to balance the system to give the required extract rates from each room.

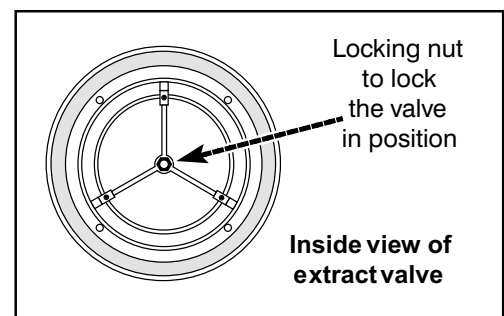
Set the unit to normal speed.

Check the flow rate and adjust if necessary the extract grille furthest from the appliance.

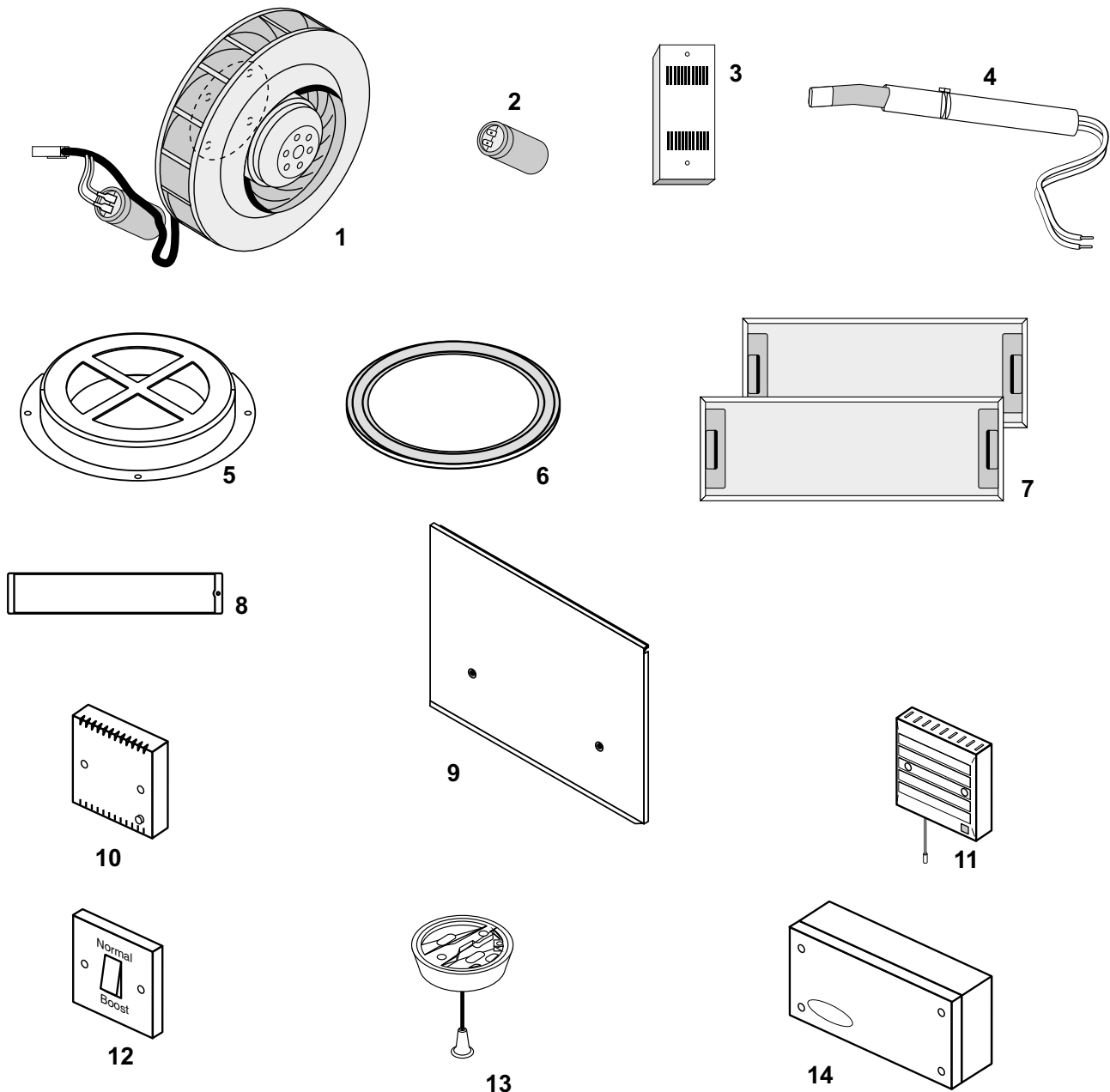
Check the flow rates and adjust if necessary the remaining extract grilles.

Repeat the checks and adjust until the system is extracting the desired amount of air from each room.

If the flow rates have been achieved with all of the extract grilles almost closed it may be possible to reduce the fan speed and re-adjust the valve settings. This would lower power consumption and noise levels.

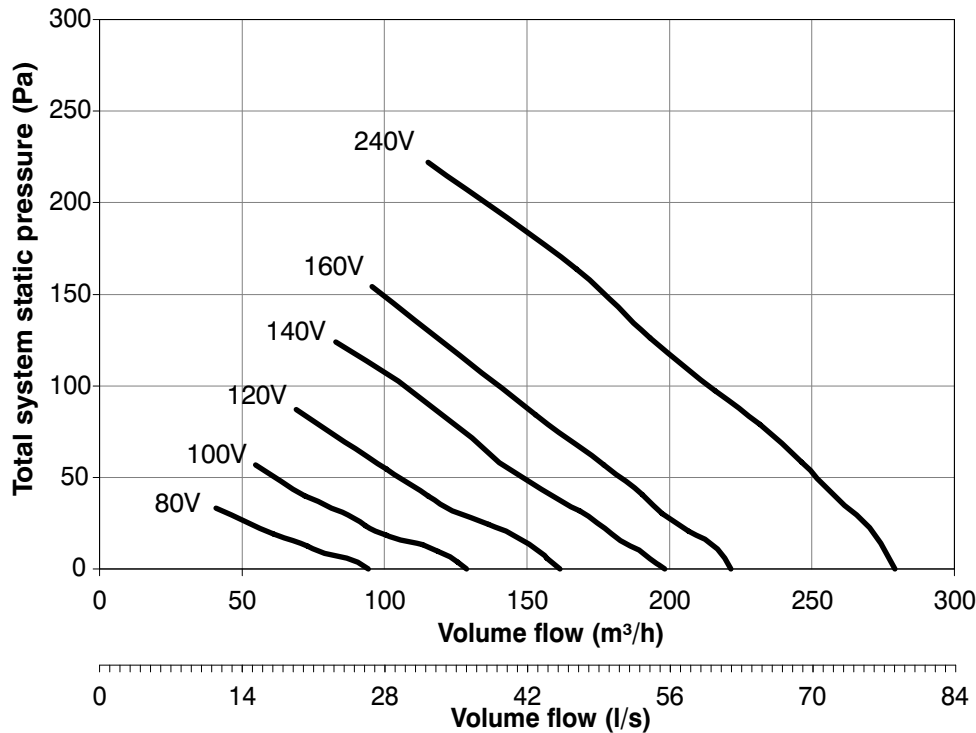


Short Parts List



| Key No. | Spares Part No. | Description |
|----------------------------------|-----------------|------------------------------------|
| 1 | 372730 | Fan assembly (including capacitor) |
| 2 | 372731 | Capacitor |
| 3 | 563538 | Transformer/Controller |
| 4 | 372733 | Overheat thermostat |
| 5 | 372734 | Fire damper |
| 6 | 372741 | Cooker hood seal |
| 7 | 372774 | Cooker hood filters (set of two) |
| 8 | 372778 | Light Cover |
| 9 | 372739 | Outer door assembly |
| Optional boost switches/controls | | |
| 10 | 370254 | Humidity sensor HS6 |
| 11 | 563532 | Ecotronic humidity sensor |
| 12 | 370495 | Normal/boost switch NBSW |
| 13 | 370278 | Normal/boost pull cord switch PCSW |
| 14 | 435960 | CMSM controller |

Total extract air performance



The 205MEV will extract the total volume of air from the building shown on the graph depending on the total system static pressure.

The hood will extract a little air through it when closed.

The proportion of air pulled through the hood whether open or closed is dependent on the static pressure of the duct system on the inlet side. The more resistance there is on the inlet side of the system, the less air will be pulled through the ducts and more through the hood.

The Vent-Axia Guarantee

Applicable only to products installed and used in the United Kingdom. For details of the Guarantee outside of the United Kingdom contact your local supplier.

Vent-Axia guarantees this product for two years from the date of purchase against faulty material or workmanship. In the event of any part being found to be defective, the product will be repaired, or at the Company's discretion the product will be replaced without charge, provided that the product:

- 1). Has been installed and used in accordance with the instruction given with each unit.
- 2). The electricity supply complies with the rating label.
- 3). Has not been misused, neglected or damaged.
- 4). Has not been modified or repaired by any person not authorised to do so by Vent-Axia.

IF CLAIMING UNDER THE TERMS OF THE GUARANTEE

Please return the complete product, carriage paid to your original supplier by post or in person. Please ensure that it is adequately packed and accompanied by a letter clearly marked 'Guarantee Claim' stating the nature of the fault and providing proof of the date and source of purchase.

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