



## **Phantom 90 Ceiling Hood**



### **Installation & User Instructions**

**Please read these instructions carefully before installing  
and operating this appliance**

# Contents

<b>1. Introduction</b>	<b>3</b>
<b>2. Health and Safety</b>	<b>3-4</b>
<b>3. Warranty Information</b>	<b>4-5</b>
<b>3.1 After Sales Service Information</b>	<b>4</b>
<b>3.2 How to Report a Fault</b>	<b>5</b>
<b>3.3 Technical Assistance</b>	<b>5</b>
<b>4. Installation</b>	<b>5-</b>
<b>4.1 Assembly Instructions</b>	<b>5-7</b>
<b>4.2 Ducting</b>	<b>7-10</b>
<b>4.2.1 Information on Exhaust Air Ducting</b>	<b>7</b>
<b>4.2.2 Cross Section of the Exhaust Air Ducting</b>	<b>7</b>
<b>4.2.3 Exhaust Material, Ducting &amp; Shape</b>	<b>8</b>
<b>4.2.4 Length of the Exhaust Ducting, Curves &amp; Bends</b>	<b>9-10</b>
<b>4.3 Electrical Wiring</b>	<b>11-12</b>
<b>4.3.1 Electrical Wiring Diagram</b>	<b>11</b>
<b>4.3.2 Controls</b>	<b>12</b>
<b>5. Use &amp; Maintenance</b>	<b>12-13</b>
<b>5.1 Changing the Light Bulbs</b>	<b>12</b>
<b>5.2 Cleaning the Metal Filters</b>	<b>12</b>
<b>5.3 Carbon Filters</b>	<b>12-13</b>
<b>5.3.1 Polyester Carbon Filters</b>	<b>12</b>
<b>5.3.2 Long Life Carbon Filters</b>	<b>12-13</b>
<b>5.4 Cleaning the Hood</b>	<b>13</b>
<b>6. Technical Data</b>	<b>13</b>
<b>7. Troubleshooting</b>	<b>14</b>
<b>8. Energy Labels</b>	<b>15</b>
<b>9. Dimensions</b>	<b>16</b>

# 1. Introduction

Dear Customer,




We wish to thank you for choosing this Air Uno cooker hood. In order to get the best performance from your appliance we recommend that you read this booklet carefully before operating the appliance for the first time.

## Revisions to the publication

In order to improve the product, to keep this publication up to date the manufacturer reserves the right to make modification without any advance notice. Any reproduction, even in part, of this manual without the consent of the manufacturer is prohibited.

## Care of the manual and how to consult it

- Take good care of this manual and keep it in a place which can be easily and quickly reached.
- If this manual should be lost or destroyed, or if it is in poor condition, ask for a copy from your retailer, providing product identification data.
- Information which is essential or that requires special attention is shown in bold text.

	<b>ATTENTION</b> This warning sign indicates that the message to which it refers should be carefully read and understood, because failure to comply with what these notices say can cause serious damage to the extractor and put the user's safety at risk.
	<b>INFORMATION</b> This symbol is used to highlight information which is important for proper extractor operation. Failure to comply with these provisions will compromise use of the boiler and its operation will not be satisfactory.
	<b>MANUAL</b> Indicates that you should carefully read this manual or the related instructions.

## 2. Health and Safety



- **Installation of the cooker hood, making electrical connections, checking its operation and maintenance are all tasks which should be carried out by qualified and authorised personnel.**

- **Install the cooker hood in accordance with the regulations in force in your local area, region and country.**
- For the correct use of the appliance and to prevent accidents, the instructions given in this booklet must always be followed.
- Before beginning any operation, the user, or whoever is preparing to operate on the appliance, must have read and understood the entire contents of this instruction booklet.
- All responsibility for improper use is taken entirely by the user and as such relieves Air Uno of any civil or criminal responsibility.
- In view of the fact that it is an electrical appliance, do not touch the appliance with wet hands.
- Before carrying out any cleaning or maintenance operation, make sure in advance that the appliance is isolated from the mains electricity supply.
- Incorrect installation or faulty maintenance (not conforming to the requirements set out in this booklet) can cause harm to people, animals or property. In such cases Air Uno is absolved from any civil or criminal responsibility.

## This product complies with EU Directive EU2002/96/EC.

The crossed bin symbol on the appliance indicates that the product, at the end of its life, must be disposed of separately from domestic waste, either by taking it to a separate waste disposal site for electric and electronic appliances or by returning it to your dealer when you buy another similar appliance. The user is responsible for taking the appliance to a special waste disposal site at the end of its life. If the disused appliance is collected correctly as separate waste, it can be recycled, treated and disposed of ecologically.

## WARNINGS:

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

- Before cleaning or performing any periodic or urgent maintenance to the hood, isolate the mains supply and turn the main switch off.
- Do not connect the hood to any piping used for combustion appliances, such as burners, boilers or fire places.
- Check that the main power supply corresponds to the voltage required by the hood, which is given on the silver label stuck inside the hood. Ensure that the electric system is correctly earthed and that the earth discharge works correctly.
- When cooking do not use any materials that could form high or unusual flames. Oil that has been used twice and fats are very dangerous and could easily catch fire. Do not prepare flambé dishes under the hood.
- Once the specialised technician has completed the installation of the hood equipped with a remote motor, all the leads, connectors, ground connections and the remote motor must not be accessible to the user. Only the installer is granted access by removing screwed on panel.
- Respect local legislation and regulations issued by the relative authorities regarding the exhaust air when the suction is operating. Failure to respect and perform all maintenance and cleaning operations described in this handbook could cause a fire hazard.



**ATTENTION:** Accessible parts may become hot when the hood is used with cooking appliance.

### 3. Warranty Information

We offer a 4 year warranty on all Airuno cooker hoods, which will start from the date of delivery. The warranty covers parts and labour for the 4 year term based on whether its proved to be either faulty materials or components. We will at our own discretion either repair or replace the goods Free of Charge, including any carriage costs.

This is based on the following conditions:-

1. The product has been fitted/installed as per our instructions.
2. The product has been used for normal domestic purposes only, and in accordance with the

manufacturer's operating and maintenance instructions.

3. The product has been serviced, maintained, repaired, taken apart or tampered with by any person not authorised by us.

### EXCLUSIONS

This guarantee does not cover:

- Damage or calls resulting from incorrect installation, transportation, improper use or neglect, the replacement of any light bulbs or removable parts of glass or plastic.
- Costs incurred for calls to put right appliances improperly installed or calls to appliances outside the United Kingdom.
- Normal wear and tear.
- Products deemed to be in use within a commercial environment.
- Grease filter mesh.
- Bulbs and LEDs.
- Carbon filters.
- Damage caused to the body by usage of detergent spray or other contaminants.
- Damage or corrosion of the LED pars, glass and stainless steel parts.
- Any products taken apart or serviced by unauthorised individuals or service engineers or replaced with other manufacturer's components.
- Product which is not installed with the correct size ducting.

This guarantee is in addition to your statutory and legal rights.

### 3.1 After Sales Service Information

A field service engineer is available to attend a breakdown occurring during the cooker hoods guarantee period.

The cooker hood must be made available for attendance during normal working hours, Monday to Friday.

## 3.2 How to Report a Fault

### Step 1

- Contact your installation or service engineer, who should assess the unit and works carried out on the appliance prior to requesting the attendance of an engineer from Airuno.

### Step 2

Please note that upon attendance by an Airuno engineer, a charge will be made where: - The engineer finds no fault with the cooker hood.

- The cause of the breakdown is due to parts of the system not manufactured or supplied by Airuno.
- The cooker hood has not been installed in accordance with the manufacturer's instructions.
- The cooker hood has not been installed by a qualified fitter.
- The breakdown occurs outside the guarantee period.
- The appliance has not been maintained correctly.
- The breakdown occurs as a result of work on the appliance by an unauthorised third-party.

## 3.3 Technical Assistance

A team of trained technical advisors are available to discuss any problem with the appliance. In many cases, the problem may be solved over the telephone, eliminating the need for an engineer's visit. Before making contact, please have the following information ready:

- The details of the Silver label (located on the inside of the cooker hood behind the grease filters).
- A description of the fault and any unusual behaviour by the cooker hood before the failure occurred.
- The installation date.

### Silver label details

MOD: \_\_\_\_\_

ART: \_\_\_\_\_

DATE \_\_\_\_\_

TYPE: \_\_\_\_\_

Installation Date: \_\_\_\_\_

## 4. Installation

The minimum safety distance between the bottom of the hood and the top of the cooking hob must be 650mm (**Fig 1**), smaller distances must be previously authorised by the manufacturer. The maximum is 1.6m and the optimum height is 1.2m.



**Ø150mm round or 220x90mm rectangular ducting must be used. Ducting with a smaller diameter could cause airflow issues and invalidate the warranty.**

The hood can be used for both filtering and suction. When the filtering function is operating, i.e. with air recycle, carbon filters must be used.

When the suction function is operating i.e. exhausting the filtered air on the outside, a suitable compensation system must be used according to current standards in force. The diameter of the fume exhaust pipe must be the same or greater than the diameter of the hood pipe union.

There must be sufficient ventilation in the room where the hood is installed, to allow simultaneous use of other appliances that use gas or other fuels.

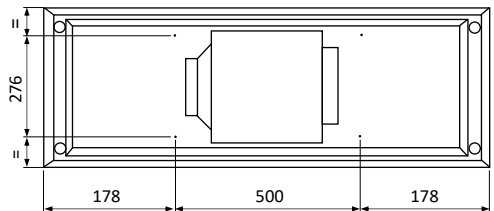
## 4.1 Assembly Instructions

Attention: Before proceeding with the installation, make sure that the screws and the anchors already supplied, are suitable for the type of ceiling the hood must be fixed to.

To assemble the hood use the accessories that are supplied and follow the instructions given in the enclosed hand book.

### Screw hole dimensions and cable entries

#### Phantom 90



**Fig 1**

## Phantom Classic 90 Cut-out Dimensions

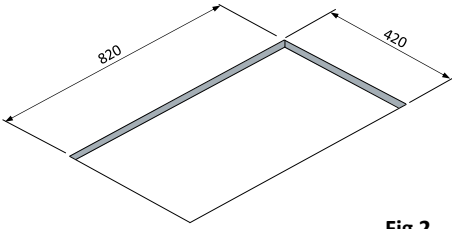


Fig 2

1. Pull down at each side of the glass cover to open (Fig 3).

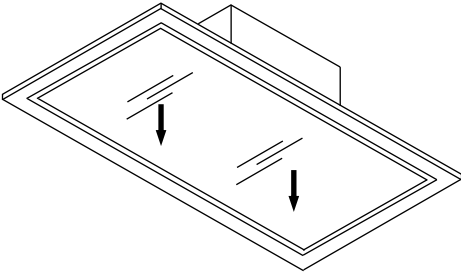


Fig 3

2. Remove the grease filters from inside the hood (Fig 4).

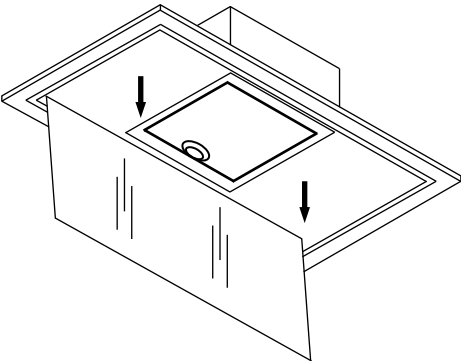


Fig 4

3. Fix the hood into the ceiling (Fig 5).

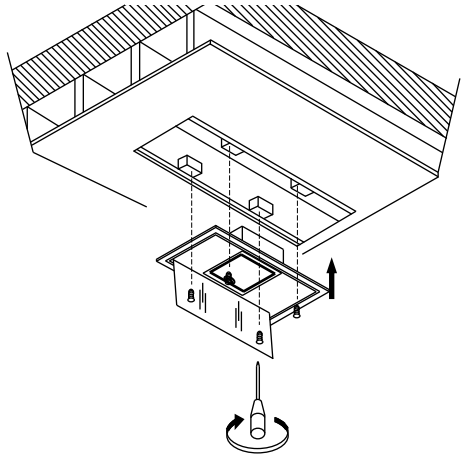


Fig 5

4. Re-insert the grease filters into the hood (Fig 6).

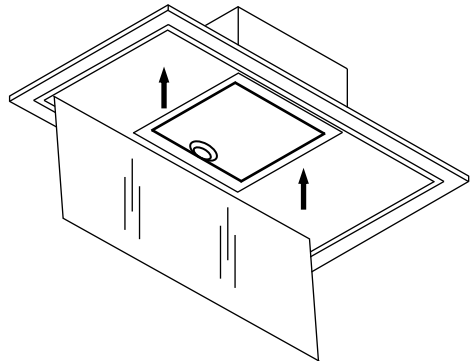


Fig 6

5. Push up at each side of the glass to shut (Fig 7).

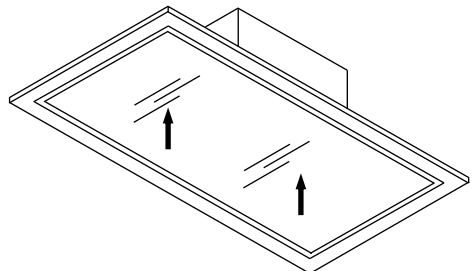
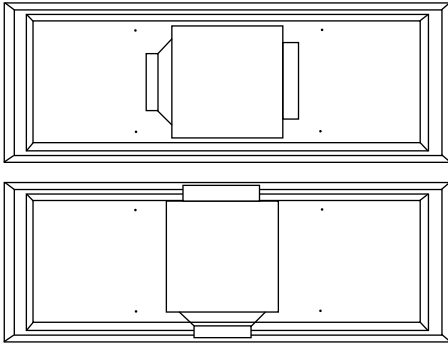


Fig 7

5

The Phantom can be ducted from any side of the extractor to suit the installation by unscrewing the 4 screws and turning the motor 90 degrees (**Fig 8**).



**Fig 8**

## 4.2 Ducting

### 4.2.1 Information on Exhaust Air Ducting

The planning and design of extractor ducting has a significant influence on the airflow rate and the noise level of the cooker hood. This is because each component in the ducting introduces counter pressure (frictional resistance), which leads to a reduction in the airflow rate in the cooker hood and increases the level of noise.

The frictional resistance within the ducting is dependent on a number of factors:

- Cross section of the exhaust air ducting.
- Length of the exhaust air ducting.
- Bends/curves in the exhaust air ducting.
- Material and type of ducting (the material must also be approved for use with a cooker hood in accordance with fire prevention regulations).

### 4.2.2 Cross Section of the Exhaust Air Ducting

The cross section of the ducting must be adapted to match the airflow rate of the cooker hood and the ducting routing (length and design). A cross section that is too narrow will result in significant losses in

the airflow rate and increase noise level. The ventilation performance of the cooker hood is the key factor for determining the ducting cross section. The more powerful the ventilation performance, the greater the ducting cross section must be.

As a rule, the larger the cross section, the less counter pressure is created in the ducting.

The following exhaust air ducting specifications serve as a guide:

Ø125mm for a ventilation performance of >400m<sup>3</sup>/h  
Ø150mm for a ventilation performance of <400m<sup>3</sup>/h

Any reduction in the cross section of the ducting must be avoided.

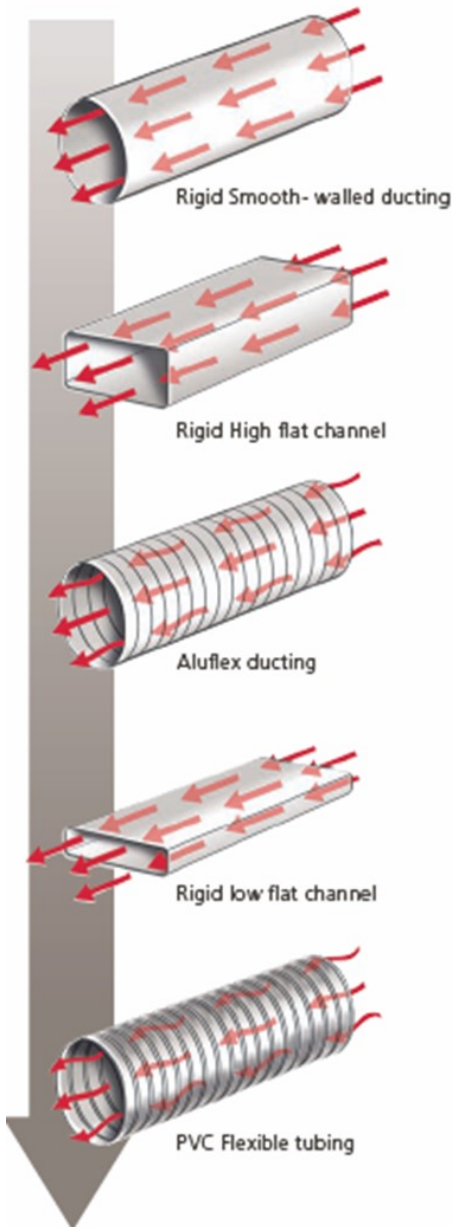
This would give rise to turbulence, which would generate a high amount of counter pressure. The more rapid airflow speed associated with a narrowing in the cross section will also cause the noise level to increase.

#### TIP

It is only possible to achieve a high airflow volume and low noise level by using extractor ducting that provides low resistance. Always use where possible rigid ducting equivalent to 150mm.

## 4.2.3 Exhaust Material, Ducting & Shape

FLOW RESISTANCE: LOW



FLOW RESISTANCE: HIGH

Smooth-walled plastic rigid ducts are the most favourable form of ducting from a technical airflow perspective and are particularly suitable for straight duct routes/runs. These should be used if the structural requirements are met.

Flexible aluminium ducting (alu-flux) also achieves reasonably good flow values when elongated. It is more flexible than rigid plastic ducting and adapts well to differing structural conditions.

Unnecessary bends should, however, be avoided.

Corrugated and spiral ducts are the least favourable from a technical airflow perspective. The wave-like surface results in a large amount of turbulence, even if the ducting is pulled taut. When the film is heated by the extracted air, it stretches. This leads to even greater turbulence and the flapping film generates noise. This type of ducting is prone to crushing which will create a poor air flow.

A distinction is made between round and flat channels. Flat channels are often used in practice for both visual and technical reasons. It used to be believed that the flow conditions in flat channels were less favourable. However, this no longer applies as a general rule. Recent developments in flat channels can provide similar or better airflow results than a round channel.

They are characterised by the following features: The inner cross section of the flat channel must correspond at least to the cross section of the exhaust air socket in the cooker hood. The surface area should therefore equate to the cross section of 150mm pipe if the exhaust air outlet has a diameter of 150mm.

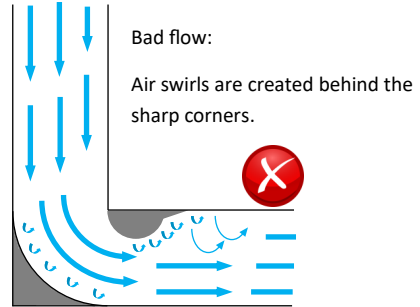
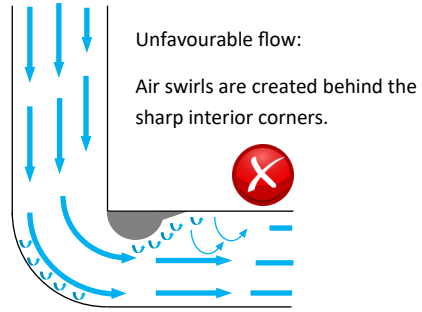
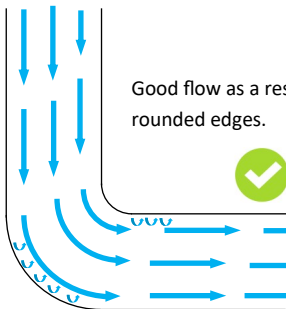
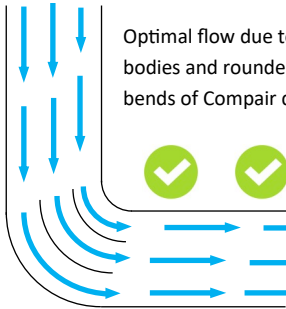
The width-to-height ratio must be optimised. The higher the flat channel, the more favourable its airflow qualities (e.g. 90 x 220mm).



## 4.2.4 Length of the Exhaust Ducting, Curves & Bends

As the length of the exhaust ducting increases, the counter pressure (duct resistance) increases and the airflow rate decreases.

Bends and curves are problematic as they present deflection surfaces that dam the air steam and generate turbulence. This causes an increase in counter pressure. Bends and curves in the ducting should therefore be kept to a minimum. If bends and curves are required for structural reasons, bends with largest possible radius are advisable. The smaller the bend radius, the greater the counter pressure. Corners at right angles should also be avoided if possible because these lead to even greater pressure losses and therefore a loss of performance.



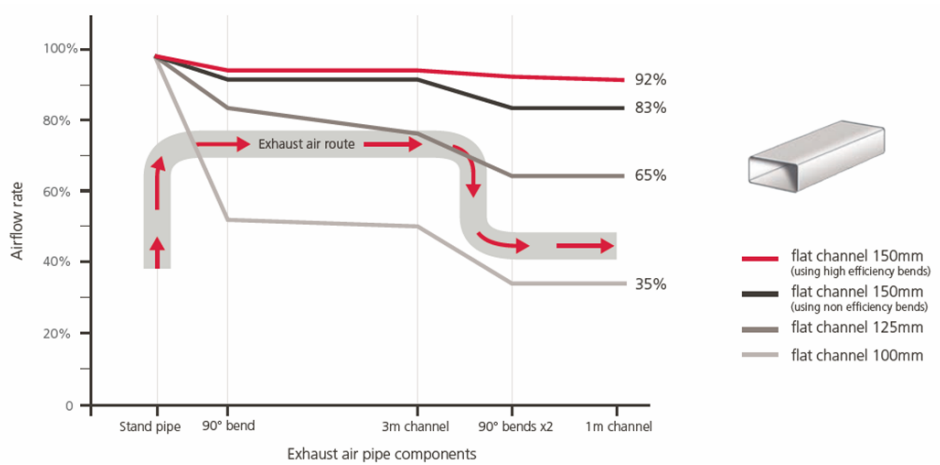
### TIP

The following rule of thumb applies for good duct routing:

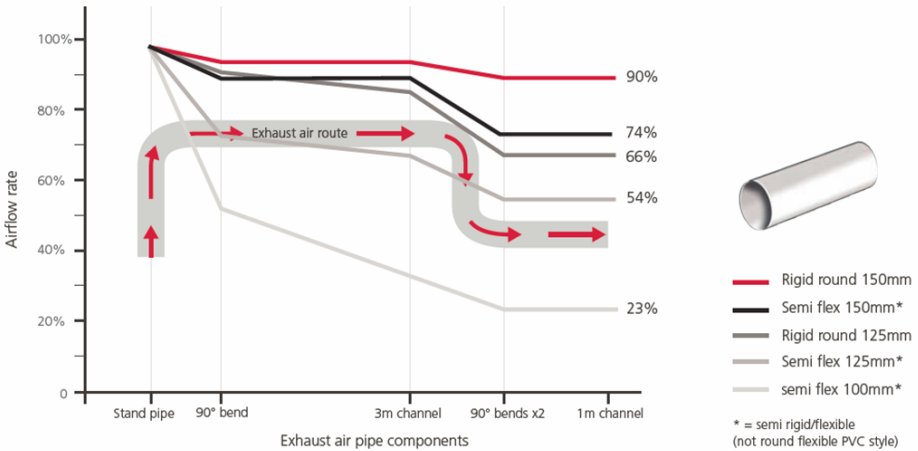
The distance between two bends should be at least 1m, although 1.5m is better.

The following comparison between different duct types and flat channels indicates the extent to which the material used can influence airflow loss.

## COMPARISON BETWEEN CHANNEL SYSTEMS WITH A SQUARE CROSS SECTION



## COMPARISON BETWEEN CHANNEL SYSTEMS WITH A ROUND CROSS SECTION



\* = semi rigid/flexible (not round flexible PVC style)

## 4.3 Electrical Wiring

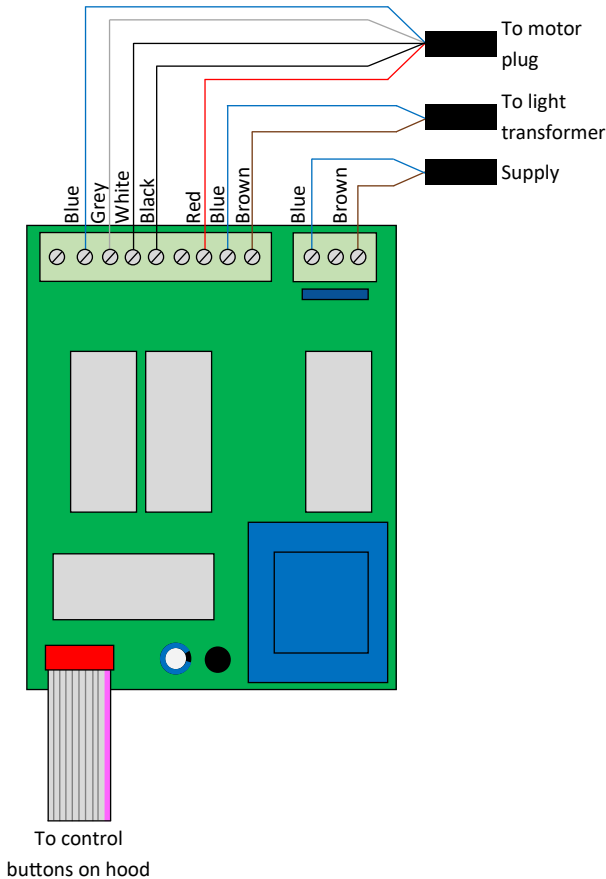
The electrical wiring must be performed by a specialised electrician fully respecting current standards and legislation in force. **Check that the power supply corresponds to the voltage requested by the hood, which is given on the silver label stuck inside the hood.** Ensure that the wiring system conforms to current standards and the earth discharge works efficiently. Pay special attention to the hood power cable, ensure that it does not pass through any holes without a cable clamp. For direct connection to the electrical mains it is necessary to provide a device that ensures disconnection from the electrical mains, with an opening distance of the contacts that allows the complete disconnection

under the conditions of overvoltage category III, in accordance with the rules of installation. The plug or Omni polar switch must be accessible when the unit is installed.

If the power cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent. The cable must be of type H05VV-F 3 x 0.75mm<sup>2</sup> minimum cross-section.

**The manufacturer declines all responsibility if the current accident prevention standards in force are not respected, which are needed for the wiring system to operate correctly.**

### 4.3.1 Electrical Wiring Diagram



### 4.3.2 Controls

The Phantom is controlled by remote control. This allows the user to control the hoods on/off functions and motor speeds.

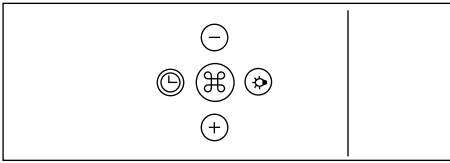


Fig 9

- ⏻ Turns motor on at speed 2 and for turning the motor off.
- ⊕ Increases motor speed.
- ⊖ Decreases motor speed.
- ⚙ Turns lights on.
- 🕒 Timer button for turning the motor off after 10 minutes.

The extractor has a timer incorporated to remind the user to clean the grease filters. A red light indicates the filters need cleaning. To reset this press and hold the power button on the extractor until the red light goes off.

## 5. Use & Maintenance

Before beginning any sort of cleaning or maintenance work, turn the power off to the hood by turning the main switch to 0 (OFF).

### 5.1 Changing the LED Strip

LED spotlight replacement should only be carried out by qualified technicians using only original spare parts.

### 5.2 Cleaning the Metal Filters

The metal filters fitted in the hood should be washed every 2-3 months, depending on how much the hood is used, using hot water and a liquid detergent that is not too aggressive.

The metal filters can be removed by the special handle, unhooking the front part of the filter and pulling it downwards (Fig 10).

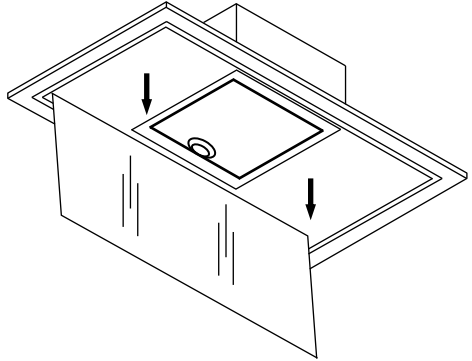


Fig 10

## 5.3 Carbon Filters

The hood can be used with carbon filters which traps the cooking smells. These are either polyester or long life carbon filters and these are situated behind the grease filters.

### 5.3.1 Polyester Carbon Filters

These cannot be reused or washed and must be periodically changed (every 4 months if the hood is used for 2 hours every day). Saturated filters could be a fire hazard. The filters in the Phantom are round.

### 5.3.2 Long Life Carbon Filters

These can be cleaned and reactivated. The filter should be cleaned every other month if used normally. The filter is best cleaned in a dishwasher at the highest temperature using normal washing detergent. The filter should be washed on its own to prevent particles of food fastening in it and then causing an unpleasant smell later on (Fig 11).



Fig 11

To reactivate, the carbon filter should be dried in the oven. Choose upper/lower heat and maximum 100°C and dry the filter for 10 minutes (Fig 12). The filter must be changed when it no longer absorbs the cooking smells sufficiently.

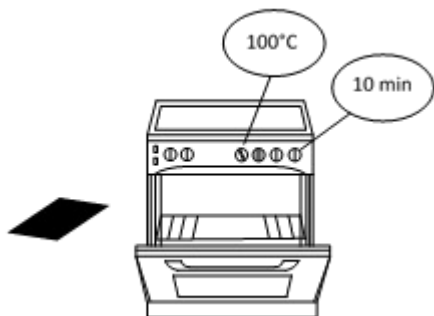


Fig 12

## 5.4 Cleaning the Hood

The surfaces of the hood should be cleaned frequently, to avoid the risk of having to remove built up and encrusted deposits and stains.

For the painted or copper plated hoods just a soft cloth with warm water and a neutral detergent, Do not pour the detergent directly onto the hood or use powdery or abrasive products. For the stainless steel hood, use special products and cloths for satin finish stainless steel (not abrasive, corrosive detergents or detergents containing chloride), ensuring to clean in the same direction as the satin finish.

Do not use aggressive products, chemical solvents or derivatives of oil distillates that could leave oily traces which could cause oxidation and polymerisation.

**The manufacturer accepts no responsibility for damage to the surface of the hood due to failure to respect these instructions.**

## 6. Technical Data

Phantom 90 with E800 Motor	
Control	Remote control
Colour/finish	Stainless Steel/White
Lighting	LED Strip 4W (3000K)
Airflow (m <sup>3</sup> /h)	226-412
Pressure (Pa)	332
Noise (db)	51-65
Power (W)	90
Voltage (V)	220-240
Outlet Width (mm)	150
Energy Class	D

## 7. Troubleshooting

Please make sure the below has been checked before logging a service call.

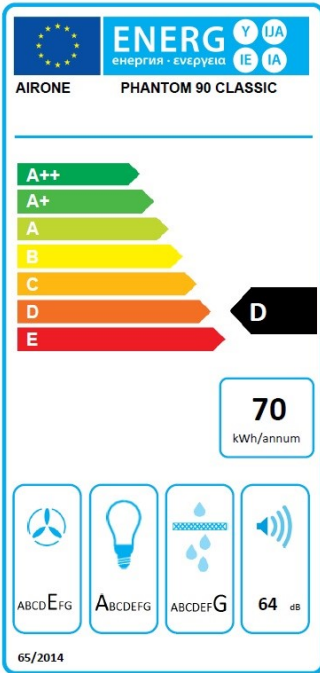
### NOISY

- Check that the hood has correct size ducting (semi or rigid ideally).
- Make sure there are no restrictions within the ducting outlet.
- Make sure the minimum amount of 90 degree bends have been used.
- Make sure the hood has been secured correctly as per instructions (fixing screws used to secure).
- Make sure cable hasn't been dropped into fan area.
- Make sure back draught flaps have not been jammed semi closed against ducting.
- In re-circulation mode make sure the flue vents/grilles are not covered.

### POOR EXTRACTION

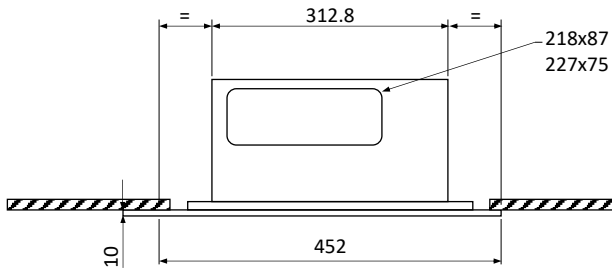
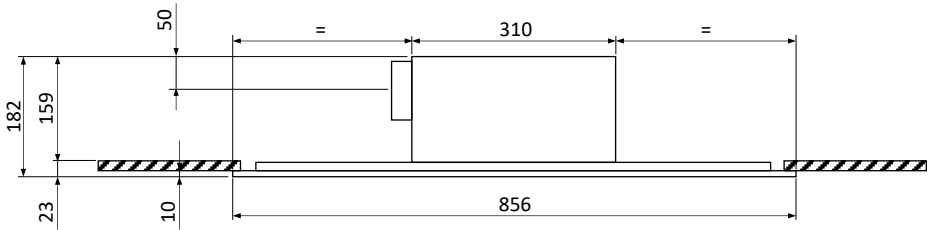
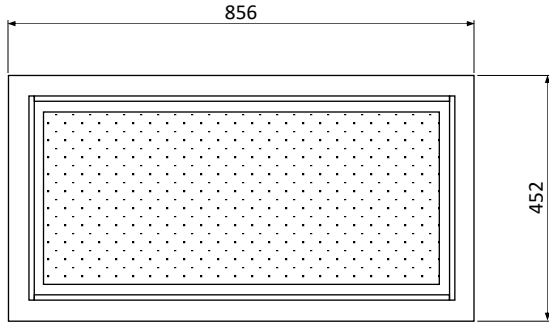
- Check that the hood has correct size ducting (semi or rigid ideally).
- Make sure there are no restrictions within the ducting outlet.
- Make sure the minimum amount of 90 degree bends have been used.
- Make sure back draught flaps have not been jammed semi closed against ducting.
- Make sure ducting doesn't exceed recommended length run for the model installed.
- Make sure customer is switching hood on 10 minutes before cooking and leaving on 10-15 minutes after.
- Advise customer to always reduce boiling water to simmer and use lids.
- On recirculation mode it is more important to use lids on pots and pans to reduce steam/humidity in room.

## 8. Energy Labels



Suppliers Name	AIRONE
Model identifier	PHANTOM 90
Annual Energy Consumption AEC (kWh/a)	70.3
Energy Efficiency Class	D
Fluid Dynamic Efficiency FDE (%)	12.2
Fluid Dynamic Efficiency class	E
Light Efficiency LE (lux/W)	29.0
Lighting Efficiency Class	A
Grease Filter Efficiency GFE (%)	40.0
Grease Filter Efficiency Class	G
Minimum Air Flow in normal use (m <sup>3</sup> /h)	226
Maximum Air Flow in normal use (m <sup>3</sup> /h)	383
Air Flow at intensive/boost setting (m <sup>3</sup> /h)	412
A-weighted Sound Power Emission at minimum speed (dB(A))	51
A-weighted Sound Power Emission at maximum speed (dB(A))	64
A-weighted Sound Power Emission at intensive or boost speed (dB(A))	65
Power consumption off mode PO (W)	0.00
Power consumption in standby mode PS (W)	0.49
Time increase factor	1.6
Energy Efficiency Index EEI	89.6
Measured air flow rate at best efficiency point QBEP (m <sup>3</sup> /h)	236.3
Measured air pressure rate at best efficiency point PBEP (Pa)	173
Maximum air flow QMAX (m <sup>3</sup> /h)	412.0
Measured electric power input at best efficiency point WBEP (W)	92.9
Nominal power of the lighting system WL (W)	22.0
Average illumination of the lighting system on the cooking surface EMIDDLE (lux)	638

## 9. Dimensions













CD (UK) Ltd T/A Air Uno  
Unit L, Wakefield House  
Thistle Way  
Gildersome Spur  
Morley  
West Yorkshire  
LS27 7JZ

CD (UK) Ltd T/A Air Uno is a company registered in England and Wales Registration No. 2905619



Copyright of all contents of this leaflet is vested in CD (UK) Ltd t/a Air Uno. Any part may not be reproduced without permission. The contents of this leaflet are accurate at the date of printing but, because CD (UK) Ltd t/a Air Uno has a policy of continual development, it may be superseded and should be disregarded if specifications or appearances are changed. The statutory rights of the customer are not affected. E&OE's.