# Important safeguards

- Use this appliance only as described in this instruction manual.
   As with any electrical appliance, whilst the instructions aim to cover as many eventualities as possible caution and common sense should be applied when operating and installing this air conditioner.
- This appliance has been manufactured to cool and de-humidify domestic environments and should not be used for other purposes.
- It is dangerous to alter or modify the unit's characteristics in any way.
- The appliance must be installed in line with the relevant national legislation.
- Should repairs be necessary, contact the nearest authorised Repair Service Centre. Unauthorised servicing can be dangerous.
- This appliance is to be used by adults only; keep away from children.
- In the case that the power cable becomes damaged, this must be substituted only by specialised personnel authorised by the manufacturer.
- Always ensure the appliance is earthed. If you have any doubts check with a qualified electrician.
- Avoid using extension leads with the unit.
- Before cleaning or maintenance operations, always unplug the unit from the socket.
- Do not pull on or place strain on the power cable when moving the appliance.
- The appliance should not be installed where the atmosphere may contain combustible gases, oil or sulphur, or near heat sources.
- If the appliance is utilised in areas where there is no ventilation of air, it is necessary to take precautions to avoid that the refrigerant gases that may leak from the appliance do not remain in the room, thereby causing a fire hazard.
- This appliance must be utilised and installed only in rooms with a total volume of 15 cubic metres or greater.
- The refrigerant gases R290 conform to EC regulations on the environment. Avoid perforating the refrigerant circuit of the appliance.
- Keep the unit at least 50 cm away from inflammable substances (alcohol etc) or pressurised containers (eg. aerosol cans).
- Do not rest hot or heavy objects onto the appliance.
- Clean the dust filter at least once a week.
- Remember to perform the descaling procedure at the end of each season (see page 37). In areas where the water is particularly hard (rich in minerals), the use of a commercial anti-lime product added to the water is recommended. This can be requested from De'Longhi LTD.
- Avoid using heaters near the unit.
- · Do not cover this appliance with bags when is not in use
- Unventilated area where the appilance using flammable refrigerants is installed shall be so constructed that any leaked refrigerants will not stagnate so as to cause a fire or an explosion hazard caussed by igniting stagnant refrigerants from other source such as electric heater, stove and similar home applications.
- The unit should be transported in a vertical position. If this is not possible secure the unit at an angle, do not lie horizontally.
  - Before transporting the unit drain the condensation collecting-tray and tank. After transportation, wait at least 1 hour before switching on the unit.
- The packaging materials can be recycled. You are therefore recommended to place them in the special containers for differentiated waste collection.

# How does your Pinguino work

Uuring the summer, optimum comfort is achieved with a temperature of between 24 and 27°C and about 50% relative humidity.

An air conditioner removes moisture and heat from the room where it is located. One advantage of portable air conditioning units over fitted models is that they can be moved from one room to another in the home or even transferred between different buildings.

The hot air in your room is passed through a coil cooled by refrigerant gas, losing excess heat and moisture before being discharged again into the room.

In single unit models (Pinguino), a small part of this air is used to cool the refrigerant gas before, hot and moist air is being discharged outside.

In suitcase models, the circuit is cooled using the air outside.

ECO by Pinguino is the latest generation of ecological air conditioners. Pinguino does not contain gases dangerous to the earth's ozone layer (CFC/HCFC). In addition, thanks to the extreme efficiency of the appliance, not only does it save you money on your electric bills, but it saves the environment by not negatively contributing to the greenhouse effect."

### Description and setting up

### **DESCRIPTION OF THE APPLIANCE**

- Remote control unit compartment with cover
- 2) Control panel
- 3) Manual function button
- 4) Air outlet grill
- 5) Open-out handle
- 6) Front panel
- 7) Tray
- 8) Tank
- 9) Reset button
- 10) Air intake grill

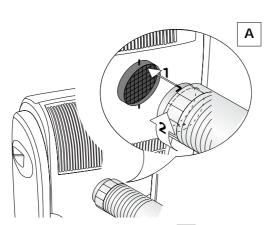
- 11) Handle
- 12) Air exhaust hose fitting
- 13) Drain tube
- 14) Air intake grill
- 15) Flange bung
- 16)Air exhaust hose
- 17) Nozzle for air exhaust hose
- 18) Suction cups
- 19) Wheel locks
- 20) Descaling liquid

The following instructions will help you set up your air conditioning unit as efficiently as possible.

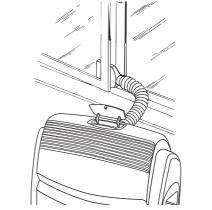
### AIR CONDITIONING WITHOUT INSTALLATION FOR INSTANT TEMPORARY USAGE

With just a few simple operations, Pinguino will restore comfortable conditions in your room:

Fix the exhaust hose 16 to the coupling
 12 on the back of the unit as shown in figure A.

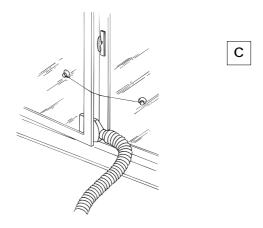


- Fix the window attachment 16 to the end of the hose 17.
- Place the unit near a window French window or door.
- Open the window, French window or door slightly and place the window attachment
   17 as shown in figure B.



With a double casement window, use the suckers 18 provided to hold the two halves of the window together (fig. C).

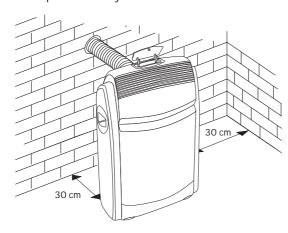
В



# Setting up

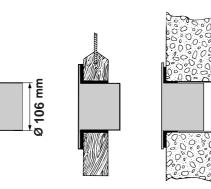
### AIR CONDITIONING WITH INSTALLATION

For more efficient use Pinguino can also be semi-permanently installed



To install, proceed as follows:

Make a hole in a outside wall or through the glass of a window. Check the height and dimensions given in figure D



in a window pane

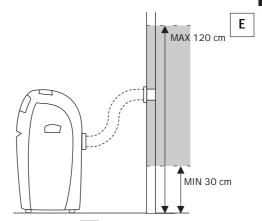
D

wood sill of a window

with



- Fit the flange 15 supplied to the hole.
- Fix the hose 16 to the coupling on the back of the unit (figure A).
- Attach the end of the hose 16 to the flange 15 as shown in the figure E.



When the hose 16 is not attached, close the hole with the bung on the flange 15

### NOTE:

When the unit is installed semi-permanently, we recommend leaving a door slightly open (1 cm is enough) to ensure an adequate exchange of air.

Keep the air hoses as short and free of curves as possible to avoid constrictions.

# Preparation for use

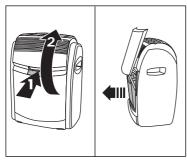
### HOW TO USE THE AIRCONDITIONER WITH WATER

These air conditioners can use both air and water to cool the condenser (the hot part) of the air conditioner.

To utilise the full potential of your air conditioner, the tank **8** needs to be filled with water. The water is used. To increase the cooling power and reduce the noise level and energy consumption of the air conditioner. The water that is used in then expelled from the machine as water vapour through the exhaust hose 16 (it does not go into room).

Always use clean top water (which doesn't contain salts). As a rule the water will usually last about 8 hours however this depends on the conditions within the room, such as temperature, humidity, insulation and aspect and number of people. In turbo mode the water will also be used more quickly.

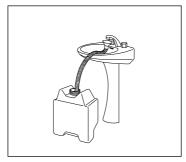
You may also use the airconditioner on air cooling only (without filling the water tank. If you only require the lower cooling power.



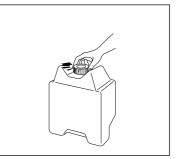
A) To open the front panel

6 grip either side of the panel and gently pull the panel towards you and upwards. Remove the tank

8 Lifting it forward.



B) Turn the tank upside down and remove the plug, remove the extendible tube and fill the tank, leaving it on the ground.

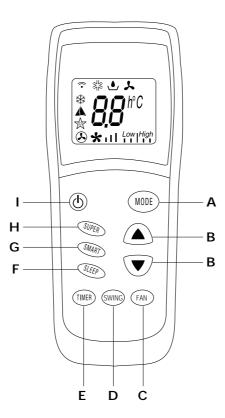


C) After completing the filling procedure, replace the extendible hose, replace the cap and screw it in tightly. Return the tank to its place, with the writing FRONT clearly visible. Carefully hold the panel in the centre and lower to its closed position.

During the "water functioning" operation and in particularly silent locations (eg the bedroom) a slight gurgling sound may be heard. This is completely normal.

IMPORTANT: if the room temperature is 32°C or over the airconditioner must be operated with with water in the tank.

# Description of the remote control



When the remote control is not used, it can be stored in the foreseen compartment  $\boxed{1}$ . To open the compartment press "push".

### Description of the remote control/ Electrical connection

### **DISPLAY**

Signal transmission

\* Air conditioning indicator

Dehumidifying indicator

Fan indicator

SUPER air conditioning indicator

▲ SMART indicator

★ SLEEP indicator

Automatic fan speed

**★**III High fan speed

\*II Medium fan speed

\* Low fan speed

Low High Regulates temperature in SMART or Dehumidifying mode.

### A. MODE button

Selects the operating mode (air conditioning, dehumidifying, fan).

### **B. ROOM TEMPERATURE buttons**

Set room temperature or programme the timer.

### C. FAN button

Sets fan speed to automatic, high, medium or low in sequence.

### D. SWING button (wall mounted models only)

#### E. TIMER button

Sets or cancels the timer.

### F. SLEEP button ( ☆ )

Sets or cancels the automatic SLEEP function.

### G. SMART button ( A )

When this button is pressed, the appliance automatically establishes the most suitable operating mode for maximum comfort.

### H. SUPER button ( \*)

Starts or stops rapid cooling (in the rapid cooling mode, the fan operates at high speed with the temperature automatically set at 18°C).

### I. ON/OFF button

Press this button to turn the appliance on and off. NB: the settings are displayed even when the air conditioner is off.

### **ELECTRICAL CONNECTION**

Before plugging in check that:

- the mains supply corresponds to the value shown in the specifications table;
- the socket and the mains lead correspond to the power requirements of the appliance;
- the socket is suited to the plug otherwise have the socket replaced;
- the socket is properly grounded. The manufactures cannot be held responsible for any damages due to failure in following normal safety procedures.

Replacement of the power cable must be carried out by qualified personnel.

# Warning lights/Forced operations

### THE LEDS

Led displays come on depending on the selected function or as warning of possible anomalies.

FUNZIONE	GREEN LIGHT	YELLOW LIGHT	BLU LIGHT
OFF	-	-	-
AIR-CONDITIONING	on	-	-
FAN	-	on	-
SUPER	-	-	on

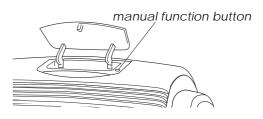
ANOMALY	GREEN LIGHT	YELLOW LIGHT	BLU LIGHT
ALARM*	blinking	blinking	blinking
NO WATER IN TANK	on or off	-	blinking

<sup>\*</sup> Call the Service Centre

### **FORCED OPERATIONS**

This is a way of operating to be selected if there are problems with the remote control (broken or lost, or the batteries run-down).

Press the button 3 until the required mode is selected (air conditioning, fan, smart, off). Refer to the indicator lights and the table below to identify the mode selected. For each mode selected, the appliance will automatically choose the optimum values for maximum comfort.



# Description of the remote control

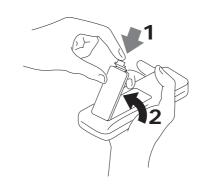
### **REMOTE CONTROL**

### Inserting the batteries

- Slide the cover as shown in figure.
- Insert two new batteries (not rechargeable) making sure the (+) and (-) are in the correct positions.
- Put the cover back on.

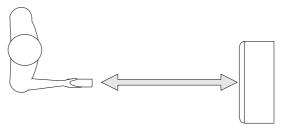
### Note: WE SUGGEST USING ALKALINE BAT-TERIES (LR03).

If the remote control is to be replaced or thrown away, the batteries must be removed and disposed of in accordance with the current laws as it represents an environmental hazard.



### **PROPER USE**

- Point the remote control unit towards the airconditioning unit signal receiver.
- Maximum distance: about seven (7) metres (without any obstacle between remote control and receiver).
- The remote control must be handled with great care: do not drop it, expose it to direct sunlight, or leave it close to heat sources.



# Selecting functions

### **AIR-CONDITIONING MODE**

- Press the (1) button to turn the appliance on.
- A beep indicates that the air-conditioning unit is on and the symbol flashes on the display
- Press the MODE button a number of times until the air-conditioning symbol \*\* appears on the display.
- Now set the temperature using the ▲ ▼ buttons.
- To select fan speed, press the FAN button repeatedly until the required fan speed is selected (automatic, high, medium, low).

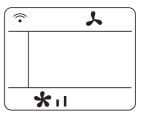
NB: in air-conditioning mode, the appliance automatically removes excess moisture from the atmosphere.



### **FAN MODE**

On humid but not particularly hot days, the fan function alone may be adequate.

- Press the  $\bigcirc$  button. A beep indicates that the air-conditioning unit is on and the  $\bigcirc$  symbol flashes on the display.
- Press the MODE button a number of times until the fan symbol appears on the display.
- Once fan mode has been selected, press the FAN button until the required speed is reached (low, medium, high).



# Selecting functions

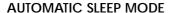
### **SMART MODE**

In SMART mode, the air-conditioning unit decides the best way to operate to guarantee maximum comfort.

- Press the (1) button to turn the appliance on. A beep indicates that the air-conditioning unit is on and the \$\infty\$ symbol flashes on the display.
- Press the SMART button. The appliance functions automatically and the symbol appears on the display.

**NB:** in SMART mode, temperature is controlled automatically. However, if the required temperature has not yet been reached, it can be reduced or increased by a maximum of  $2^{\circ}$  C by pressing the  $\blacktriangle$   $\blacktriangledown$  buttons.

It should be pointed out that when the automatic ventilation functions are activated, the appliance itself will choose the proper speed.

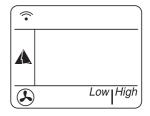


The automatic SLEEP mode is ideal for the night-time as it enables operation of the air-conditioning unit in any of the modes (air-conditioning, SMART) to be gradually reduced until it shuts down completely (after eight hours). To select SLEEP mode, proceed as follows:

- Press the button to turn the appliance on.
- A beep indicates that the air-conditioning unit is on and the symbol flashes on the display.
- Press the MODE button a number of times until the symbol of the air conditioning function appears on the display.
- Then select the required temperature by pressing the ▲ ▼ buttons.
- Now press the SLEEP button to set the night function. The 

   symbol is displayed.
- Press the SLEEP button again to go back to the previous mode. In this mode, the fan operates at low speed.

N.B: The night-time function makes it possible to keep a room at a perfect temperature, thus preventing an excessive rise or a drop in temperature while the silent operation is in effect. The air-flow will decrease, while the room temperature will vary gradually to provide the ideal condition: the temperature will increase by 1° C. after 60 minutes and by 2° C. after two hour (it goes off altogether after 8 hours).





# ENGLISH

# Selecting functions

### **SUPER MODE**

SUPER mode is used to turn rapid cooling on or off. The fan is set to high speed and the temperature is automatically set to 18° C. To select SUPER mode, proceed as follows:

- · Make sure there is water in the tank
- Press the  $\bigcirc$  button to turn the appliance on. A beep indicates that the air-conditioning unit is on and the  $\bigcirc$  symbol flashes on the display.
- Press the SUPER button to set the mode. The symbol is displayed.
- The blue indicator light comes on. If this flashes, the tank needs filling
- To go back to the previous mode, press the SUPER button again.
- The SUPER function will be deactivated automatically after 15 minutes



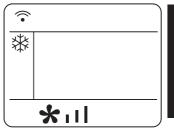
The timer can be used to delay appliance start up or shut down. This avoids wasting electricity by optimising operating periods.

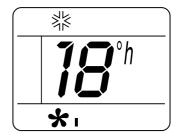
#### Programming the turn-off function

- With the air-conditioning unit on, press the TIMER button. The time is displayed and the "h" symbol flashes. Set the time when you want the appliance to go off using the ▼ buttons (from 30 minutes to 24 hours).
- Press the TIMER button again to confirm the selection. A count-down of the time left is displayed.
- At the end of the set time the appliance goes off automatically.
   During the first ten hours, you can select half hour intervals. For times greater than ten hours, one hour intervals can be selected.
- To cancel the set time, press the TIMER button again. You will hear a beep.

### Programming the ON function

- With the air-conditioning unit off, press the TIMER button. The time
  is displayed and the "h" symbol flashes. Set the time when you
  want the appliance to come on using the ▲ ▼ buttons (from 30
  minutes to 24 hours).
- Press the TIMER button again to confirm the selection.
- At the end of the set time the appliance comes on automatically.
  - During the first ten hours, you can select half hour intervals. For times greater than ten hours, one hour intervals can be selected.
- To cancel the set time, press the TIMER button again. You will hear a beep and the three indicator lights on the air-conditioning unit will go off.





### Purification filter

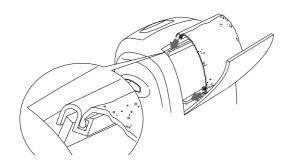
### **PURIFICATION FILTER**

The appliance is provided with a 3M purification filter. This filter is able to capture even the smallest sized particles and impurities (up to 0.003 millimetres), such as cigarette smoke. The purification filter should never be used with the dust filter, which is also included with the appliance. Therefore:

A. If you wish to use the purification filter:

Remove the purification filter from the filter housing; Remove the aspiration grill 10 (fig. F on page 36) and the dust filter which is attached to this. Remove the purification filter from its packaging. Anchor the filter to the appliance by attaching the two plastic pieces on the filter to the special supports on the air conditioner (see the illustration below). Set the dust filter aside.

**B.** If the dust filter is sufficient: Remove the purification filter from the filter housing and set it aside.

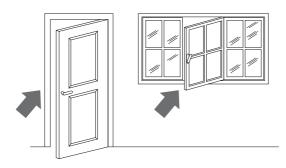


# Recommendations

### **RECOMMENDATIONS**

Follow these recommendations to achieve maximum efficiency from your air conditioning unit:

· Close the doors and windows in the room



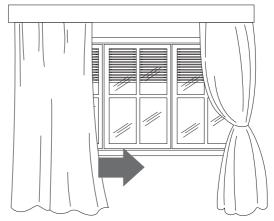
close doors and windows

where the unit is functioning. The only exception is in the case of installation through a hole in the wall or window. In this case, you are recommended to allow a small amount of air to enter through a door or window to guarantee an adequate exchange of air.

- Protect the room from direct exposure to the sun's rays by drawing the curtains and/or partially lowering the blinds so as to maximise energy savings.
- Do not rest objects on the air conditioning unit
- Do not obstruct the air intake 10 or outlet
   4 .



- Make sure there are no heat sources in the room.
- Do not use outdoors.



lower the blinds or draw the curtains

 Make sure the unit is located on a level floor. If necessary, place the two blocking devices 19 under the front wheels.

### Maintenance

Before cleaning or maintenance, always turn the unit off and unplug from the mains.

### **CLEANING THE APPLIANCE**

We recommend cleaning the appliance with a slightly damp cloth then drying with a dry cloth. For safety reasons, do not wash the air conditioner with water.

#### **Precautions**

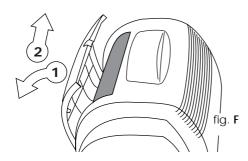
Never clean with benzene, alcohol or solvents. Never spray liquid insecticide or similar.

#### CLEANING THE FILTERS

All of the models are equipped with a dust filter able to capture the dust particles suspended in the air.

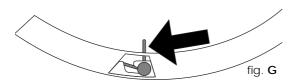
In order to maintain the effectiveness of your air conditioner unaltered over time, remember to clean the dust filter every two weeks.

1. Remove the aspiration grill 10, (see fig. F);



2. Remove the filter holder housing by detaching it from the external grill. To detach it, press on the two wings found on the side of the filter holder (see fig. **G**)

Use a vacuum cleaner to remove the dust deposits on the filter. If the filter is very dirty,



immerse it in warm water, rinsing it thoroughly. The temperature of the water should be kept under 40°C.

After washing it, let the filter dry before reinserting it into the holder.

### CLEANING THE RESORVOIR 7

It is recommended that you clean this at least once a month using the following method:

- turn off the appliance and remove the plug from the electrical outlet.
- open the front panel 6 and remove the tank 8.
- remove the bung from the drainage hose
   13 which can be found at the back the air conditioner and empty out the water to a container.
- after draining off the water, replace the drainage hose plug.
- remove the dirt by scrubbing gently with a cloth where the tank is positioned.

#### START OF SEASON CHECKS

Check that the power cable and socket are undamaged and that the earth installation is efficient. Carefully observe the installation instructions.

### RECOMMENDED OPERATIONS TO PERFORM AT THE END OF THE SEASON

- 1) Proceed with scaling procedures (see page 37).
- 2) Remove the water from the collection reservoir.
- Operate the appliance in the ventilation only mode for about half an hour in order to thoroughly dry the inside of the air conditioner.
- 4) Turn off the appliance and remove the plug from the outlet.
- 5) Remove the exhaust hose 16.
- 6) Clean the filter and dry it thoroughly before replacing it in the appliance.

# Descaling

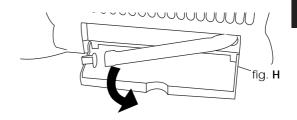
When the scale deposits become excessive (on average, after about 400 hours of operation) or in any case, at least once each season, it is very important to proceed with the decalcification of the appliance as described below.

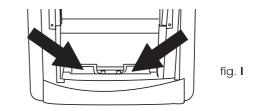
To remove the scale from the appliance, you need:

- 250 ml of descaling liquid 20
- 750 ml of clean water

#### Proceed as follows:

- 1) Remove the tank 8 from the appliance and drain the water remaining in the collection reservoir 7 by using the drainage hose 13 (fig. H).
- 2) Close the drainage hose 13. Pour 250 ml of decalcifying liquid and 750 ml of clean water into the collection reservoir 7 which is found under the tank (fig. I), on the bottom of the appliance.
- 3) Operate the air conditioner for about half an hour (air-conditioning function).
- 4) After this, drain out all of the liquid remaining in the collection reservoir and rinse thoroughly. During the rinsing process, the drainage hose must be open and the appliance functioning.
- Unplug the appliance from the mains and clean the collection reservoir thoroughly with a clean cloth.
- 6) After cleaning the collection reservoir, the air conditioner can be used normally.





IF TRACES OF SUDS CAN BE SEEN IN THE WATER WHEN THE MACHINE IS USED AGAIN AFTER IT HAS BEEN CLEANED AS DESCRIBED ABOVE, THIS IS NORMAL HOWEVER, IF THERE ARE A LOT OF SUDS RINSE THE APPLIANCE AGAIN THOROUGHLY TO REMOVE ALL TRACES OF CLEANING PRODUCT.

IF NECESSARY, REQUEST ADDITIONAL QUANTITIES OF DECALCIFYING LIQUID FROM DE' LONGHI LTD.

#### ATTENTION:

The use of products other than De' Longhi could cause damage to the internal components of the appliance and invalidate the terms of the warranty.

# Troubleshooting

PROBLEM	CAUSES	REMEDY
The unit does not work	<ul> <li>the power is off</li> <li>the plug is not inserted into the electrical outlet</li> <li>the fan is blocked</li> <li>the appliance's security device has intervened</li> </ul>	<ul> <li>restore the power</li> <li>plug in the appliance</li> <li>call the Service Centre</li> <li>restore the appliance by pushing the button 9. If the problem persists, call the Service Centre.</li> </ul>
The unit works for only a short time	<ul><li>the exhaust tube is twisted</li><li>the exhaust tube is blocked</li><li>the drain tube is bent</li></ul>	<ul> <li>position exhaust tube correctly</li> <li>check if there are obstacles blocking the exhaust of air out of the appliance</li> <li>unbend the tube</li> </ul>
The unit works but does not cool the room	<ul> <li>a window is open</li> <li>in the room there is some source of heat (lamp, burner, etc.) or there are many people in the room</li> <li>the thermostat is set too high</li> <li>the air filter is dirty</li> <li>the air conditioner has a capacity not adequate for the conditions or the Idimensions of the room</li> </ul>	<ul> <li>close the open window</li> <li>remove the heat source</li> <li>set the thermostat to a lower (remote control)</li> <li>clean the filter or replace</li> </ul>
Remote control signals are weak or inexistent	Batteries run down	Change the batteries
Strange odour in the room	air filters dirty	clean the filter or replace it
The air conditioner doesn't work for about 3 min from turning on the appliance	the appliance's security system has intervened	wait for 3 minutes

370 m<sup>3</sup>/h

# Technical specification

### **TECHNICAL SPECIFICATION**

Power supply see rating plate

Max. absorbed power
in air conditioning "

Refrigerating capacity "

Refrigerant "

Number of fan speeds 3

### RECOMMENDED OPERATING CONDITIONS

Room temperature 21 ÷ 35°C

#### Dimensions:

Max. air flow.

width 580 mm
 height 785 mm
 depth 435 mm

### **ELECTRICAL CONNECTION (U.K. ONLY)**

- A) If your appliance comes fitted with a plug, it will incorporate a 13 Amp fuse. If it does not fit your socket, the plug should be cut off from the mains lead, and on appropriate plug fitted, as below. warning: Very carefully dispose of the cut off plug after removing the fuse: do not insert in a 13 Amp socket elsewhere in the house as this could cause a shock hazard. With alternative plugs not incorporating a fuse, the circuit must be protected by a 15 Amp fuse. If the plug is a moulded-on type, the fuse cover must be re-fitted when changing the fuse using a 13 Amp Asta approved fuse to BS 1362. In the event of losing the fuse cover, the plug must NOT be used until a replacement fuse cover can be obtained from your nearest electrical dealer. The colour of the correct replacement fuse cover is that as marked on the base of the plug.
- B) If your appliance is not fitted with a plug, please follow the instructins provided below:

### WARNING - THIS APPLIANCE MUST BE EARTHED IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

Green and yellow Earth
Blue Neutral
Brown Live



As the colours of the wires in the mains lead may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The green and yellow wire must be connected to the terminal in the plug marked with the letter E or the earth symbol

**≟** or coloured green or green and yellow.

The blue wire must be connected to the terminal marked with the letter N or coloured black.

The brown wire must be connected to the terminal marked with the letter L or coloured red.