

PORTABLE REFRIGERATED AIR CONDITIONER

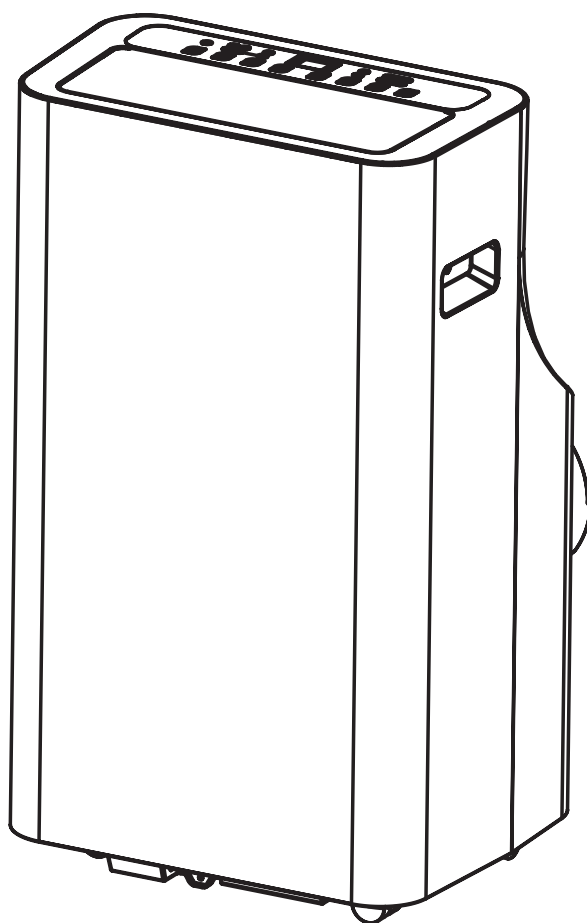
USER MANUAL

For

POLOCOOL

Whisper

PQ10C (2.7kW) R290



Thank you for selecting our quality air conditioner. Please be sure to read this user manual carefully before using. POLOCOOL Portable Refrigerated Air Conditioners are imported and distributed throughout Australasia by Rinnai Australia Pty Ltd.

Rinnai Australia Pty Ltd ABN 74 005 138 769
100 Atlantic Drive, Keysborough, vic 3173
www.mypolo.com.au
National Help Line: 1300 555 545

POLO
by Rinnai

Important Issues Regarding the Proper Use of this Air Conditioner

**Please contact your supplier
for advice before returning unit**

Use this air conditioner only as described in this instruction manual.

- This appliance is fitted with a special safety device. When the compressor switches off or when the appliance is first turned on, this device prevents the compressor from switching on again for at least three minutes.
- This air conditioner has been designed and manufactured to operate in a domestic situation only and should not be used for other purposes.
- The 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. Children should be supervised to ensure they don't play with the appliance.
- Never use the air conditioner in damp rooms (eg bathrooms and laundries).
- If the power cord is damaged, it must be replaced with a new cord installed by a suitably qualified person.
- This air conditioner is designed to be connected to a standard 10 amp power supply outlet.
- Do not pull on or place strain on the power cord when using the appliance.
- Do not operate or stop the appliance by inserting or pulling out the power plug. Use the on/off switch on the air conditioner control panel or the remote control.
- Do not connect to multiple power outlets on extension leads.
- Do not rest hot or heavy objects on the appliance.
- Always unplug the unit from the power outlet before cleaning or maintenance operations, for example filter cleaning.
- Do not place the air conditioner or plastic window slider in direct sunlight.
- For maximum cooling efficiency keep the exhaust hose as short and as free of bends as possible.
- Clean the filters at least once every two weeks.
- Do not splash the unit with water.
- Do not move the unit by pulling the exhaust hose attached to the back of the unit.
- Do not move air conditioner when it is operating.
- Do not use the unit with the air intake and outlet grills closed, covered or obstructed.
- Before transporting drain the water tray in accordance with the instructions on page 15. After transportation, wait at least one hour before switching the unit on.
- The unit should be transported in a vertical position. If this is not possible, secure the unit at an angle, do not lay it horizontally. After transporting, wait at least one hour before switching the unit on.
- Do not operate the air conditioner outdoors or in areas open to the outdoors.
- If the air conditioner is correctly set and runs without cool air coming out of the front air outlet after 10 minutes of correct operation, switch off the unit and contact your supplier immediately.
- When cool air is coming out of the top air outlet, hot air should always be expelled from the bottom rear outlet. If it is not, switch off and contact your supplier immediately.

THIS PRODUCT IS FOR HOUSEHOLD USE ONLY
RETAIN THIS MANUAL FOR FUTURE REFERENCE

CONTENTS

Introduction.....	3
Description of each part and function	4
Installation.....	5
Description of the control panel.....	7
Operating from the control panel	8
Description of the remote control	9
Operating from the remote control	10
Water drainage methods.....	15
Maintenance and service	16
Trouble shooting	17
Warning for Using R32/R290 Rerfigerant.....	19

INTRODUCTION

This portable air conditioner can alter the room temperature and humidity. It has multiple functions of cooling dehumidifying (drying) and fan ventilation, and can be moved from room to room and transported from building to building easily. In addition, the desired humidity level can be set between 35-85%.

The air conditioner can maintain set room indoor air temperatures between 17°C and 30°C. The set room temperature is displayed on the remote control and in the control panel on the unit. This does not mean that the air conditioner will necessarily reduce the actual room temperature to the set room temperature. This appliance operates at half the noise levels of most other portable air conditioners and is ideal for bedrooms.

This POLOCOOL “Whisper” portable refrigerated air conditioner model PQ10C has a maximum cooling capacity of 2.7kW.

This is sufficient to cool rooms with a floor area of between 12 and 18 square metres.

- Do not place the air conditioner or plastic window slider in direct sunlight. Close all curtains in the room being cooled.
- For maximum cooling (COOLING MODE), set the temperature at 18°C and the fan at HIGH. After approximately 3 minutes, the compressor will turn on and cooled air will come out of the front air outlet. Warm air will also come out of the rear outlet and into the exhaust hose.
- In COOLING MODE the air conditioner will not cool unless the set temperature is below the existing room temperature.
- In COOLING MODE once the existing room temperature reaches the set temperature, the fan continues operating and the compressor switches on and off to maintain the set temperature within the room.
- For maximum cooling output keep the exhaust hose as short and as straight as possible. Minimise bends which can reduce the maximum cooling capacity of the air conditioner. Elevate the air conditioner if necessary.
- Make sure the air intake and outlet grills are unobstructed.
- Clean the filters at least once every two weeks.

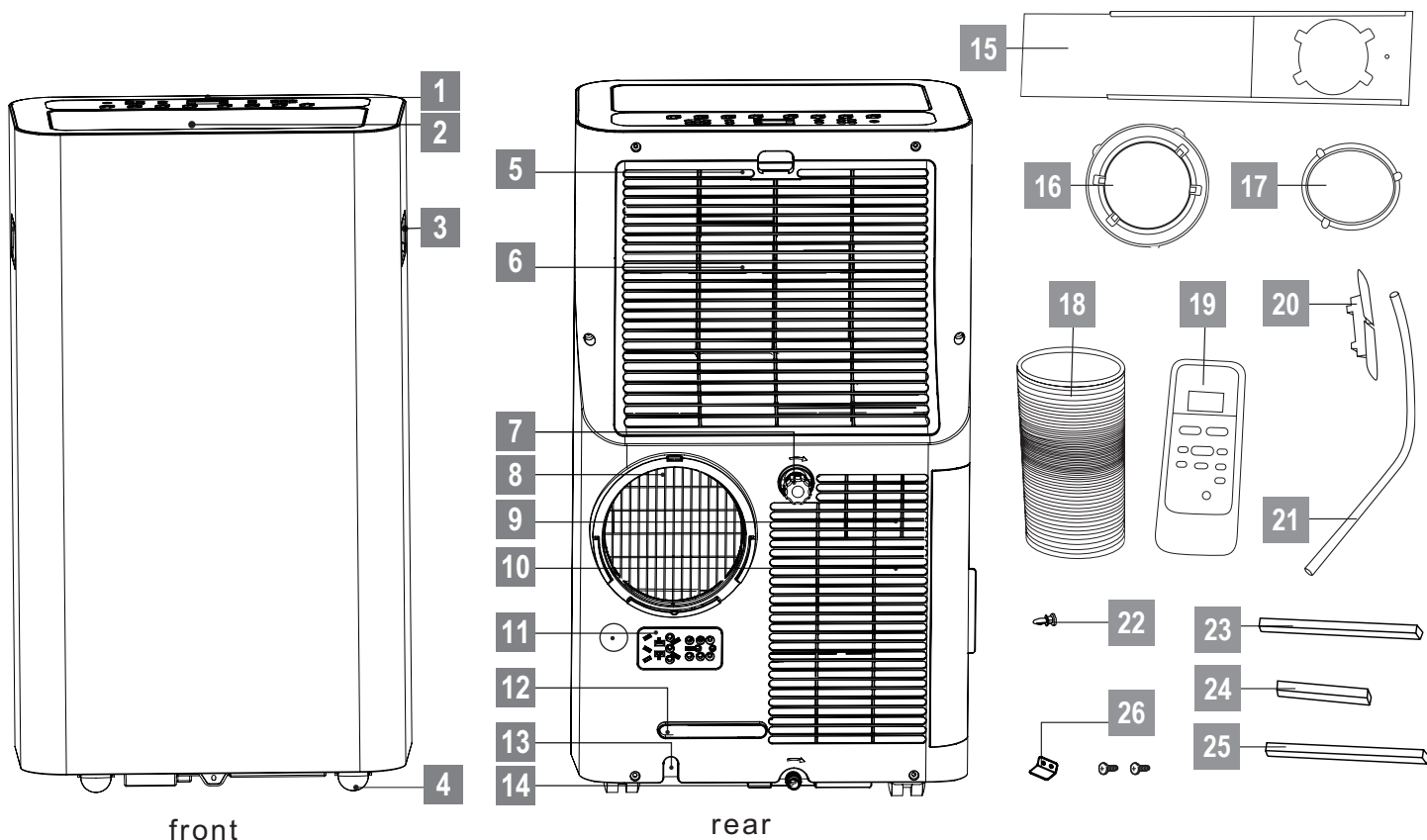
SAFETY PRECAUTIONS

- Warning information regarding appliances with R290 refrigerant gas.
- Thoroughly read all of the warnings.
- This appliance contains 240g of R290 refrigerant gas.
- The appliance must be installed, used and stored in a ventilated area that is greater than 12 m².
- When cleaning the appliance, do not use any tools other than those recommended by the manufacturing company.
- The appliance must be placed in an area without any continuous sources of ignition (for example: open flames, gas or electrical appliances in operation).
- Do not puncture and do not burn.
- Refrigerant gases can be odourless.
- If the appliance is installed, operated or stored in a non-ventilated area, the room must be designed to prevent the accumulation of refrigerant leaks resulting in a risk of fire or explosion due to ignition of the refrigerant caused by electric heaters, stoves, or other sources of ignition.
- The appliance must be stored in such a way as to prevent mechanical failure.
- Repairs must be performed based on the recommendations from the manufacturing company. Maintenance and repairs that require the assistance of other qualified personnel must be performed under the supervision of an individual specified in the use of flammable refrigerants.



DESCRIPTION OF EACH PART AND FUNCTION

1. **Control Panel**
Controls the functions of the air conditioner
2. **Horizontal Louvre Blade**
This lifts up automatically when air conditioner turned on and cooled air comes out of this outlet. It retracts closed when air conditioner is turned off.
3. **Handles**
Used when moving the air conditioner
4. **Castors**
Enables the air conditioner to be easily moved
5. **Upper Air Filter (behind the grille)**
Filters air entering the evaporator
6. **Upper Air Intake**
Enables room air to enter the evaporator
7. **Middle Drain Outlet**
Enables water to be continuously drained using the drain hose. Only used when the unit is in dehumidifying mode.
8. **Air Outlet**
Exhaust hose is connected here to discharge air
9. **Lower Air Filter**
Filters air entering the condenser
10. **Lower Air Intake**
Air intake to condenser
11. **Power Plug Socket**
Used to store power plug after cord wound onto power cord winder bracket
12. **Power Cord Buckle**
Recess for power cord winder bracket
13. **Power Cord Outlet**
Power cord leaving unit
14. **Bottom Water Tank/Tray Drain Outlet**
Remove cap and plug to drain water from water tank/tray drain outlet
15. **Window Slider**
Fits in window and hose outlet is attached
16. **Hose Outlet**
Connects to window slider and is pushed onto the end of the exhaust hose
17. **Hose Inlet**
Connects exhaust hose to rear of unit and is pushed onto the end of the exhaust hose
18. **Exhaust Hose**
Approx 1.45m long fully extended
19. **Remote Control**
20. **Power cord winder bracket**
Pushes into power cord buckle. Store power cord by winding around this bracket
21. **Drain Hose**
Used to drain water from middle/ bottom drain outlets
22. **Bolt**
Installed in hole in window slider to fix adjusted length
23. **Foam Seal A (Adhesive)**
Used to seal around window slider if required
24. **Foam Seal B (Adhesive)**
Used to seal around window slider if required
25. **Foam Seal C (Non Adhesive)**
Used to seal gap in top of open sash windows
26. **Security Bracket & 2 screws**
Used to secure windows/doors & stop them being opened after window slider installed



INSTALLATION

SELECTION OF INSTALLATION LOCATION (Fig.3)

Place the portable air conditioner in a flat location where the air inlets and outlets cannot be covered up. Place the unit no less than 50cm away from a wall or other obstacle. In addition a minimum 50cm clearance is required from all faces of the air conditioner including the rear face.

50cm clearance
required for air inlet.

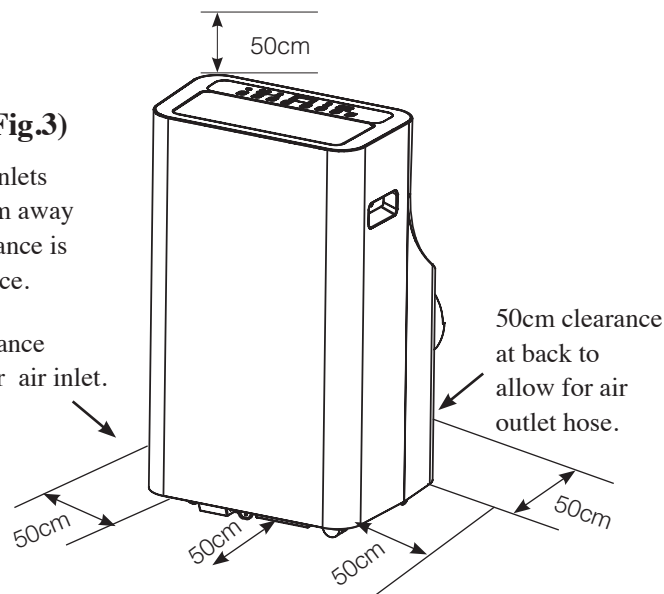
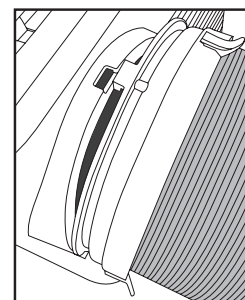
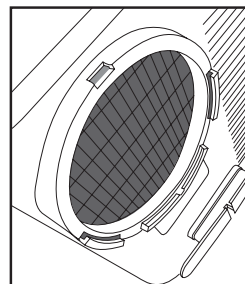


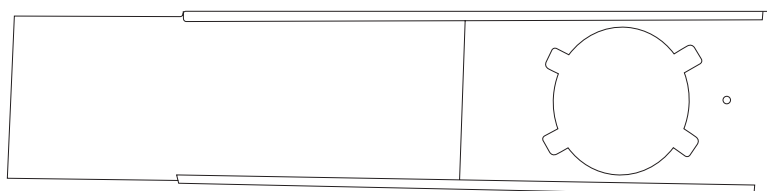
Fig. 3

ASSEMBLY OF EXHAUST HOSE, HOSE INLET, HOSE OUTLET AND WINDOW SLIDER

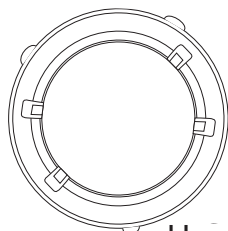
- Press one end of the exhaust hose into the hose outlet which automatically clamps by the three plastic buckles. Lift buckles to remove.
- Press the other end of the exhaust hose into the hose inlet which automatically clamps by the three plastic buckles. Lift buckles to remove.
- Install the hose outlet into the window slider by lining up the 4 plastic buckles with the cutouts in the window slider. Ensure the 4 plastic buckles are pushed all the way into the window slider to ensure a firm fit. Press buckles to remove from window slider.
- Install the hose inlet into the appliance by pushing into the lower groove of the air outlet on the unit while the hook on the hose inlet is aligned with the hole seat of the air outlet. Lift hose inlet upwards to remove. See sketches on right.
- When mounting try and keep the air exhaust hose horizontal and do not extend its length by attaching it to another hose as this reduces the cooling capacity of the appliance.
- Place the hose outlet to the nearest window. The length of the air exhaust hose is between 330mm-1450mm approx. Use the minimum length when working and keep it as straight as possible.



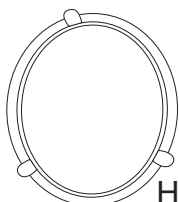
Window
slider



Use bolt to fasten 2 parts of the window slider once they are adjusted to the proper length

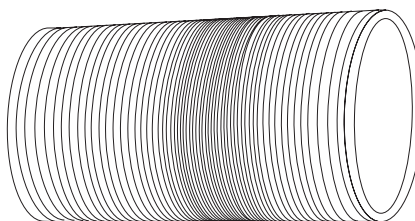


Hose outlet



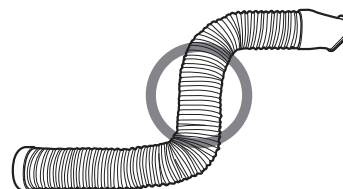
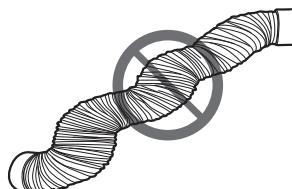
Hose inlet

Hose



Installation of
hose inlet into
appliance

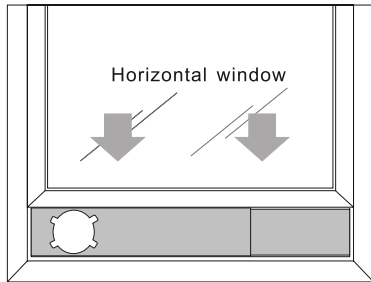
Do not
overextend



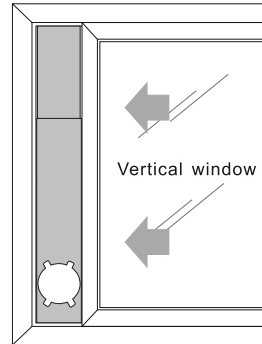
WINDOW SLIDER INSTALLATION

The window slider has been designed to fit most standard “vertical” and “horizontal” window applications. **It may be necessary for you to improvise/modify some aspects of the installation procedures for certain types of windows. Some window types may require the use of cardboard or plastic fillers and/or duct tape to install.** Additional complete window kits may be purchased from POLO to enable pre-installation in windows in other rooms. Window sliders may be cut to length to fit different size windows.

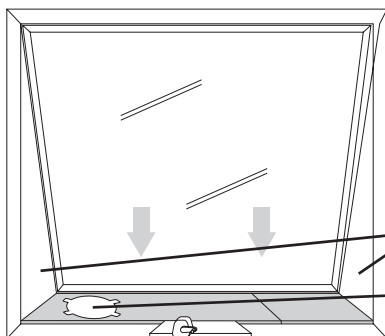
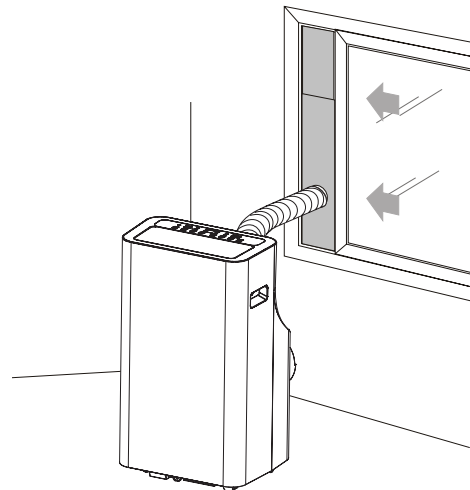
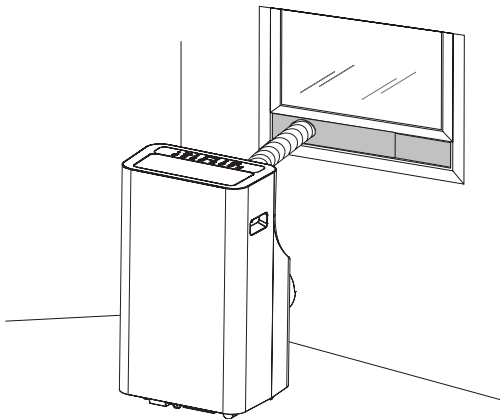
Please refer to illustration for minimum and maximum window openings.



Window slider length
Min. 67.5 cm
Max. 123 cm (to last securing hole)



Window slider length
Min. 67.5 cm
Max. 123 cm (to last securing hole)

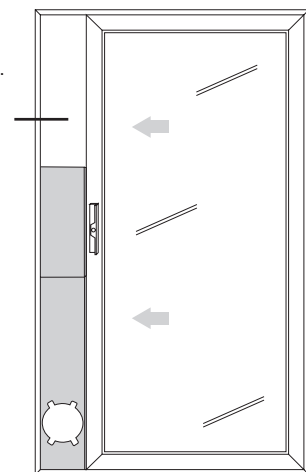


Window slider length
Min. 67.5cm
Max. 123cm

Gaps can be sealed using cardboard or plastic and duct tape or foam seals.

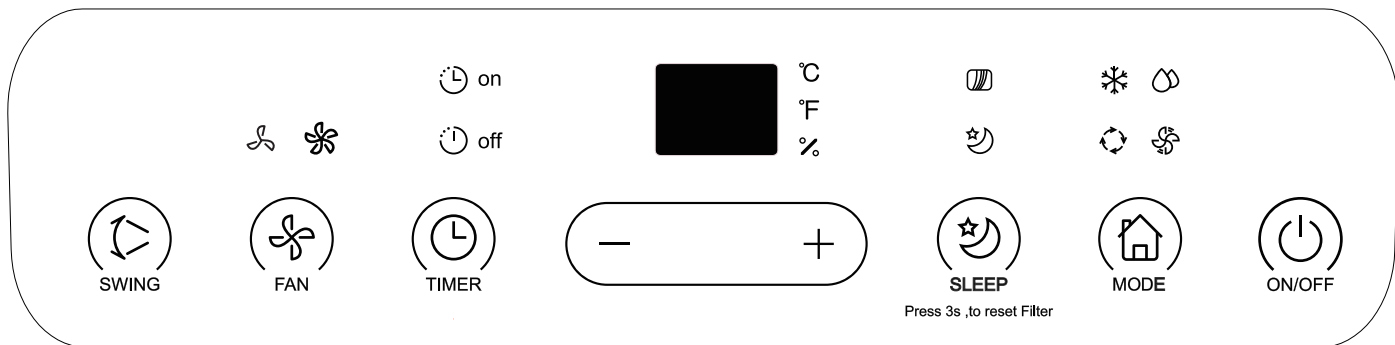
Hose inlet must be right way around to ensure window is hard up against slider

Standard door height 210cm.
Gap can be sealed using cardboard and duct tape.
Additional window sliders can also be purchased to fill this gap.



Window (Door) slider height
Max. 123cm

DESCRIPTION OF THE CONTROL PANEL



SWING button

Used to initiate the Auto swing feature. When the operation is ON, press the SWING button can stop the louver at the desired angle.



FAN BUTTON

Control the fan speed. Press to select the fan speed in three steps - LOW, HIGH and AUTO. The fan speed indicator light illuminates under different fan settings except AUTO speed. When select AUTO fan speed, all the fan indicator lights turn dark.



TIMER button

Used to initiate the AUTO ON start time and AUTO OFF stop time program, in conjunction with the + & - buttons. The timer on/off indicator light illuminates under the timer on/off settings.



SLEEP(ECO)/FILTER button

Used to initiate the SLEEP/ECO operation. NOTE: After 250 hours of operation, the filter indicator light illuminates . This feature is a reminder to clean the Air Filter for more efficient operation. Press this button for 3 seconds to cancel the reminder.

Press 3s to reset Filter



MODE button

Selects the appropriate operating mode. Each time you press the button, a mode is selected in a sequence that goes from COOL, DRY, FAN & AUTO. The mode indicator light illuminates under the different mode settings.

NOTE: When setting AUTO, it may be AUTO fan or AUTO cooling. This depends on the room temperature and humidity.

If you decrease the setting temp by DOWN (-) button the AUTO fan may jump into AUTO cooling.

On dry mode, you can adjust the humidity between 35-85%.

In Auto Mode, fan speed is automatically adjusted according to the set temperature.



UP (+) and DOWN (-) buttons

Used to adjust (increasing/decreasing) temperature settings in 1°C/1°F(or 2°F) increments in a range of 17°C/62°F to 30°C/86°F(or 88°F) or the TIMER setting in a range of 0~24hrs or The humidity settings in a range of 35%RH(Relative Humidity) to 85%RH

(Relative Humidity) in 5% increments.

NOTE: The control is capable of displaying temperature in degrees Fahrenheit or degrees Celsius. To convert from one to the other, press and hold the Up and Down buttons at the same time for 3 seconds.



POWER button

Power switch on/off.

OPERATING FROM THE CONTROL PANEL

Press ON/OFF button to turn appliance on

COOL Operation

- Press the "MODE" button until the "COOL" indicator light comes on.
- Press the ADJUST buttons "+" or "-" to select your desired room temperature. The temperature can be set within a range of 17°C~30°C/62°F~88°F(or 86°F).
- Press the "FAN SPEED" button to choose the fan speed.

DRY operation

- Press the "MODE" button until the "DRY" indicator light comes on.
- Under this mode, you cannot select a fan speed or adjust the temperature. The fan motor operates at LOW speed. --Keep windows and doors closed for the best dehumidifying effect.
- Set the humidity level between 35-85% RH. Please install the rear exhaust hose for best dehumidification effect and connect to the window slider. However the unit can still be used without the rear exhaust hose if required.
- When you set the air conditioner in AUTO mode, it will automatically select cooling, or fan only operation depending on what temperature you have selected and the room temperature.
- The air conditioner will control room temperature automatically round the temperature point set by you.
- Under AUTO mode, you can not select the fan speed.

FAN operation

- Press the "MODE" button until the "FAN " indicator light comes on.
- Press the "FAN SPEED" button to choose the fan speed. The temperature can not be adjusted and room temperature is shown in the display.
- Do not install the exhaust hose.

TIMER operation

- When the unit is on, press the Timer button will initiate the Auto-off stop program, the TIMER OFF indicator light illuminates. Press the UP or down button to select the desired time. Press the TIMER button again within 5 seconds, the Auto-on start program is initiated. And the TIMER ON indicator light illuminates. Press the up or down button to select the desired Auto-on start time.
- When the unit is off, press the Timer button to initiate the Auto-on start program, press it again within five seconds will initiate the Auto-off stop program.
- Press or hold the UP or DOWN button to change the Auto time by 0.5 hour increments, up to 10 hours, then at 1 hour increments up to 24 hours. The control will count down the time remaining until start.
- The system will automatically revert back to display the previous temperature setting if there is no operation in a 5 seconds period.
- Turning the unit ON or OFF at any time or adjusting the timer setting to 0.0 will cancel the Auto Start/Stop timer program.
- When the malfunction occurs, the Auto Start/Stop timed program will also be cancelled.

SLEEP/ECO operation

- Press this button, the selected temperature will increase (cooling) by 1°C/2°F(or 1°F) 30 minutes. The temperature will then increase (cooling) by another 1°C/2°F(or 1°F) after an additional 30 minutes. This new temperature will be maintained for 7 hours before it returns to the originally selected temperature. This ends the Sleep/Eco mode and the unit will continue to operate as originally programmed. NOTE: This feature is unavailable under FAN or DRY mode.

OTHER FEATURES

WAIT 3 MINUTES BEFORE RESUMING OPERATION After the unit has stopped, it can not be restarted operation in the first 3 minutes. This is to protect the unit. Operation will automatically start after 3 minutes.

AIR FLOW DIRECTION ADJUSTMENT

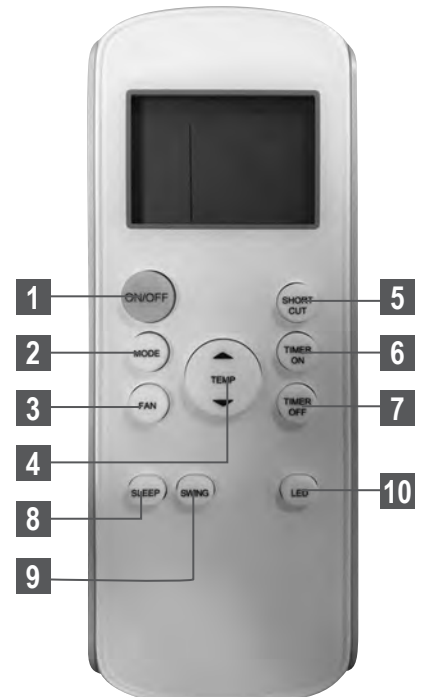
The louver can be adjusted automatically. Adjust the air flow direction automatically :

- When the Power is ON, the louver opens fully.
- Press the SWING button on the panel or remote controller to initiate the Auto swing feature. The louver will swing up and down automatically.
- Please do not adjust the louver manually.

NOTE: Only one mode of operation is available at any time.

DESCRIPTION OF THE REMOTE CONTROL

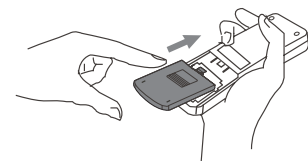
1. ON/OFF button – press this button to switch the appliance ON/OFF
2. Mode indicator – Press this button to select modes of Auto/Cool/Dry (dehumidify)/ Fan
3. Fan button – Press mode button to select FAN mode. As button is pressed LOW/ HIGH/AUTO fan speeds are selected
4. Temperature button – Press symbol ▲ Increase by 1°C
Press symbol ▼ decrease by 1°C
5. Short Cut – sets and activates your favourite pre-settings
6. Timer ON – Sets timer to turn unit on
7. Timer OFF – Sets timer to turn unit off
8. Sleep – saves energy during sleeping hours
9. Swing – starts and stops top horizontal louvre movement up and down automatically
10. LED – Turns units LED light display on the control panel on and off. Useful to help sleeping if you are sensitive to light.



INSERTING OR REPLACING THE BATTERIES

- Slide and remove the cover on the rear of the remote control;
- Insert two “AAA” 1.5V batteries in the correct position (see instructions inside the battery compartment);
- Replace the cover

If the remote control is not used for long periods, remove the batteries.



CORRECT USE

- The remote control must be used within 8 metres of the unit
- The unit will beep when remote signal is received
- Curtains, other materials and direct sunlight can interfere with the infrared signal receiver

OPERATING FROM THE REMOTE CONTROL

ON / OFF Button

Press the ON/OFF orange button to turn the unit ON or OFF. The unit will beep when the remote signal is received. ① will appear in remote display when the unit is ON.



SETTING TEMPERATURE

The operating temperature range for the unit is 17-30°C

You can increase or decrease the set temperature in 1°C increments

MODE

Displays the current Mode (Auto / Cool / Dry / Fan)

AUTO OPERATION

In **AUTO** mode, the unit will automatically select the COOL, FAN or DRY mode based on the set temperature.

1. Press the **MODE** button to select Auto mode.
2. Set your desired temperature using the Temp ▲ or Temp ▼ button.
3. Press the **ON/OFF** button to start the unit.

NOTE: *FAN SPEED can't be set in Auto mode.*

COOL OPERATION

1. Press the **MODE** button to select **COOL** mode.
2. Set your desired temperature using the Temp ▲ or Temp ▼ button.
3. Press the **FAN** button to select the fan speed: LOW, HIGH, or AUTO.

The first two fan speeds are indicated by increasing number of arrows in the display eg low >>> high >>>>>> The third setting >>>>>>>> does not change the fan speed

AUTO is marked after the third setting – the unit automatically selects the fan speed based on the set temperature

4. Press the **ON/OFF** button to start the unit.

DRY (Dehumidifying) OPERATION

1. Press the **MODE** button to select **DRY** mode.
2. Set your desired temperature using the Temp ▲ or Temp ▼ button.
3. Press the **ON/OFF** button to start the unit.

NOTE: *FAN SPEED can't be changed in Dry mode.*

FAN OPERATION

1. Press the **MODE** button to select **FAN** mode.
2. Press **FAN** button to select the fan speed: LOW, HIGH, or AUTO.

The first two fan speeds are indicated by increasing number of arrows in the display eg low >>> high >>>>>> The third setting >>>>>>>> does not change the fan speed

AUTO is marked after the third setting – the unit automatically selects the fan speed

3. Press the **ON/OFF** button to start the unit.

NOTE: *You can't set temperature in FAN mode. As a result, your remote control's LCD screen will not display temperature.*

OPERATING FROM THE REMOTE CONTROL

SETTING THE TIMER FUNCTION

Your air conditioning unit has two timer-related functions:

- **TIMER ON** - sets the amount of timer after which the unit will automatically turn on.
- **TIMER OFF** - sets the amount of time after which the unit will automatically turn off.

TIMER ON function

The **TIMER ON** function allows you to set a period of time after which the unit will automatically turn on, such as when you come home from work.

1. Press the **TIMER ON** button. By default, the last time period that you set and an "h" (indicating hours) will appear on the display.
Note: This number indicates the amount of time after the current time that you want the unit to turn on. For example, if you set **TIMER ON** for 2 hours, "2.0h" will appear on the screen, and the unit will turn on after 2 hours.
2. Press the **TIMER ON** button repeatedly to set the time when you want the unit to turn on.
3. Wait 2 seconds, then the **TIMER ON** function will be activated. The digital display on your remote control will then return to the temperature display.

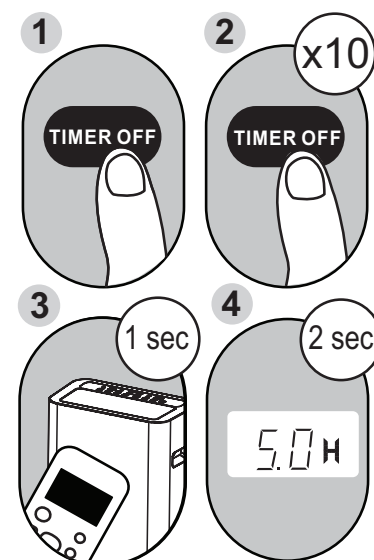
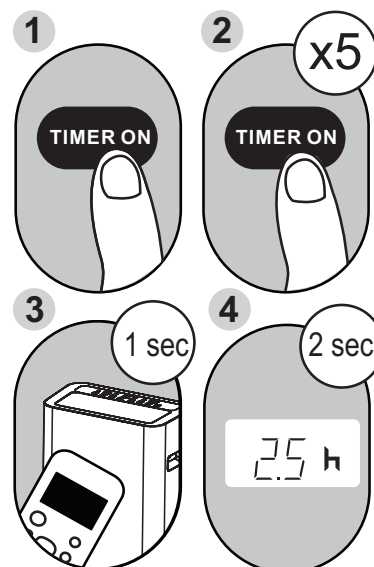
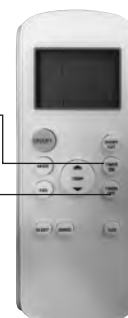
TIMER OFF function

The **TIMER OFF** function allows you to set a period of time after which the unit will automatically turn off, such as when you wake up.

1. Press the **TIMER OFF** button. By default, the last time period that you set and an "h" (indicating hours) will appear on the display.
Note: This number indicates the amount of time after the current time that you want the unit to turn off. For example, if you set **TIMER OFF** for 2 hours, "2.0h" will appear on the screen, and the unit will turn off after 2 hours.
2. Press the **TIMER OFF** button repeatedly to set the time when you want the unit to turn off.
3. Wait 2 seconds, then the **TIMER OFF** function will be activated. The digital display on your remote control will then return to the temperature display.

NOTE: When setting the **TIMER ON** or **TIMER OFF** functions, up to 10 hours, the time will increase in 30 minute increments with each press. After 10 hours and up to 24, it will increase in 1 hour increments. The timer will revert to zero after 24 hours. You can turn off either function by setting its timer to "0.0h".

Continue to press **TIMER ON** or **TIMER OFF** until desired time is reached.

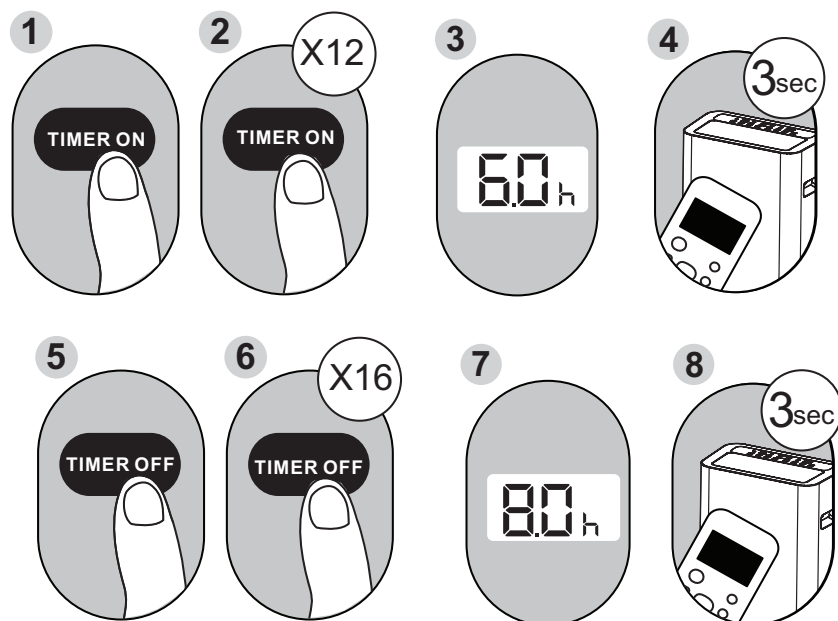


OPERATING FROM THE REMOTE CONTROL

SETTING BOTH TIMER ON AND TIMER OFF AT THE SAME TIME

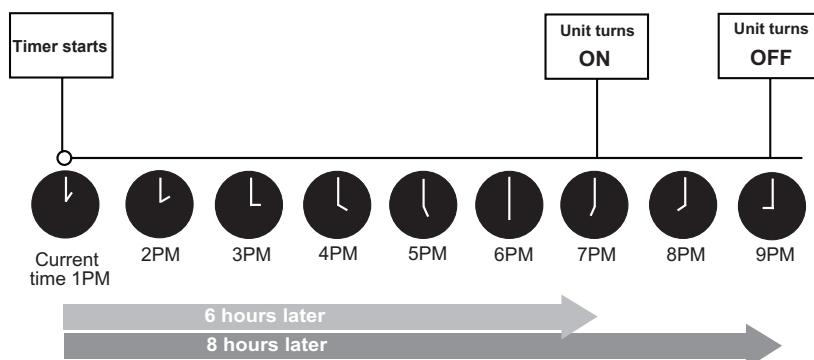
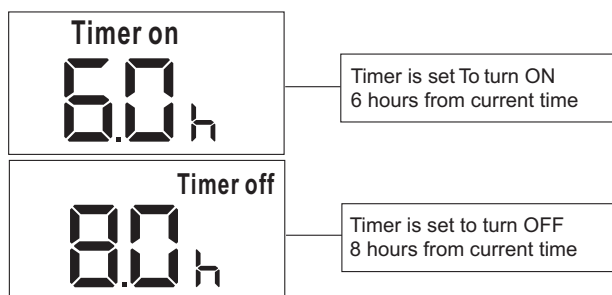
Keep in mind that the time periods you set for both functions refer to hours after the current time. For example, say that the current time is 1:00 PM, and you want the unit to turn on automatically at 7:00 PM. You want it to operate for 2 hours, then automatically turn off at 9:00 PM.

Do the following:



Example: Setting the unit to turn on after 6 hours, operate for 2 hours, then turn off (see the figure below)

Your remote display



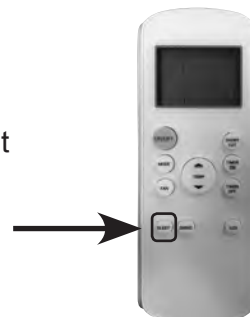
OPERATING FROM THE REMOTE CONTROL

HOW TO USE THE ADVANCED FUNCTIONS

SLEEP Function

The **SLEEP** function is used to decrease energy use while you sleep (and don't need the same temperature settings to stay comfortable). This function can only be activated via remote control.

Note: The SLEEP function is not available in FAN or DRY mode.



SWING Function

Used to stop or start louvre movement and set the desired up/down air flow direction. The louvre changes 6 degrees in angle for each press (some models without). If you continue pushing more than 2 seconds, the louvre auto swing feature is activated.



SHORTCUT Function

Used to restore the current settings or resume previous settings.

Push this button when remote controller is on, the system will automatically revert back to the previous settings including operating mode, setting temperature, fan speed level and sleep feature (if activated).

If pushing more than 2 seconds, the system will automatically restore the current operation settings including operating mode, setting temperature, fan speed level and sleep feature (if activated).



SELF-DIAGNOSIS

LED display

Shows the set temperature in °C or °F and the Auto-timer settings and the humidity settings(only for modes with humidity sensor). While on DRY and FAN modes, it shows the room temperature. Shows Error codes and protection code:

E1 - Room temperature sensor error.

E2 - Evaporator temperature sensor error.

E3 - Condenser temperature sensor error (on some models).

E4 - Display panel communication error.

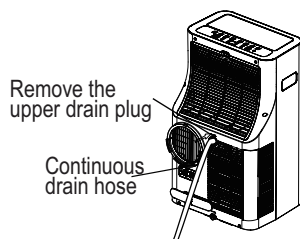
P1 - Bottom tray is full--Connect the drain hose and drain the collected water away. If protection repeats, call for service.

Note: When one of the above malfunctions occurs, turn off the unit, and check for any obstructions. Restart the unit, if the malfunction is still present, turn off the unit and unplug the power cord. Contact POLO on 1300 555 545.

WATER DRAINAGE METHOD

Water Drainage - continuous

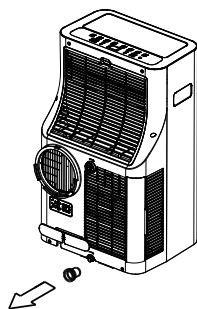
- During dehumidifying modes, remove the upper drain plug from the back of the unit and securely attached the drain hose to the hole so there are no leaks.



Water Drainage when bottom tray / tank full

- When the water level of the bottom tray reaches a predetermined level, the unit beeps 8 times, the digital display area shows "P1". At this time the air conditioning/dehumidification process will immediately stop. However, the fan motor will continue to operate (this is normal). Carefully move the unit to a drain location, remove the bottom drain plug and let the water drain away. Reinstall the bottom drain plug and restart the machine until the "P1" symbol disappears. If the error repeats, call for service.

NOTE: Be sure to reinstall the bottom drain plug firmly to prevent leakage before using the unit.

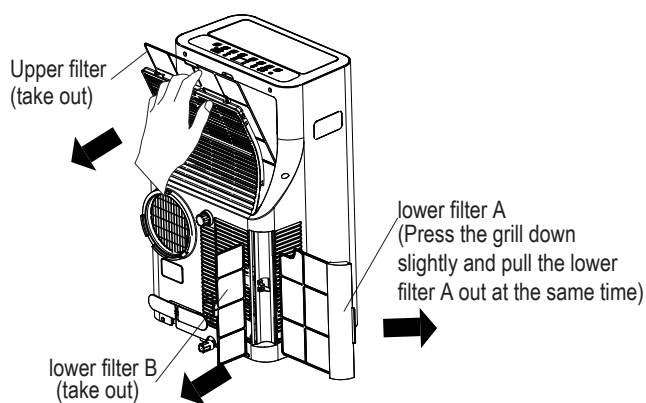


MAINTENANCE AND SERVICE

Maintenance - Safety Precautions

- Always unplug the unit before cleaning or servicing.
- **DO NOT** use flammable liquids or chemicals to clean the unit.
- **DO NOT** wash the unit under running water. Doing so causes electrical danger.
- **DO NOT** operate the machine if the power supply was damaged during cleaning. A damaged power cord must be replaced with a new cord from the manufacturer.

Clean the Air Filter



Remove the air filter

Clean the filters using a vacuum cleaner to remove dust or if very dirty immerse in warm water and rinse a number of times. Leave the filters to dry before reinstalling in the appliance.

Maintenance Tips

- Be sure to clean the air filter every 2 weeks for optimal performance.
- The water collection tray should be drained immediately after P1 error occurs, and before storage to prevent mold.
- In households with animals, you will have to periodically wipe down the grill to prevent blocked airflow due to animal hair.

Clean the Unit

Clean the unit using a damp, lint-free cloth and mild detergent. Dry the unit with a dry lint-free cloth.

Store the unit when not in use

- Drain the unit's water collection tray according to the instructions on page 15.
- Run the appliance on FAN mode for 12 hours in a warm room to dry it and prevent mold.
- Turn off the appliance and unplug it.
- Clean the air filter according to the instructions in the previous section. Reinstall the clean, dry filter before storing.
- Remove the batteries from the remote control.



Be sure to store the unit in a cool, dark place. Exposure to direct sunshine or extreme heat can shorten the lifespan of the unit.

TROUBLESHOOTING

Please check the machine according to the following form before asking for maintenance:

PROBLEM	POSSIBLE CAUSE	TROUBLESHOOTING
Unit does not turn on when pressing ON/OFF button	P1 Error Code	The Water Collection Tray is full. Turn off the unit, drain the water from the Water Collection Tray and restart the unit.
	In COOL mode: room temperature is lower than the set temperature	Reduce the temperature set point to lower value.
Unit does not cool well	The air filter is blocked with dust or animal hair	Turn off the unit and clean the filter according to instructions
	Exhaust hose is not connected or is blocked	Turn off the unit, disconnect the hose, check for blockage and reconnect the hose
	The unit is low on refrigerant	Call a service technician to inspect the unit and top off refrigerant
	Temperature setting is too high	Reduce the temperature set point to lower value
	The windows and doors in the room are open	Make sure all windows and doors are closed to reduce ventilation
	The room area is too large	Double-check the cooling area
	There are heat sources inside the room	Remove the heat sources if possible
The unit is noisy and vibrates too much	The ground is not level	Place the unit on a flat, level surface
	The air filter is blocked with dust or animal hair	Turn off the unit and clean the filter according to instructions
The unit makes a gargling sound	This sound is caused by the flow of refrigerant inside the unit	This is normal
E1-E4 or P1 appears on the LED display	See self-diagnosis section on page 14	

TECHNICAL SPECIFICATIONS

Polocool PQ10C

Rated Voltage	220 - 240 Volts
Rated Power Input	1160 watts
Refrigerant/Charge	R290/240g (0.24kg)
Cooling Capacity	2.7KW

LIMIT CONDITIONS

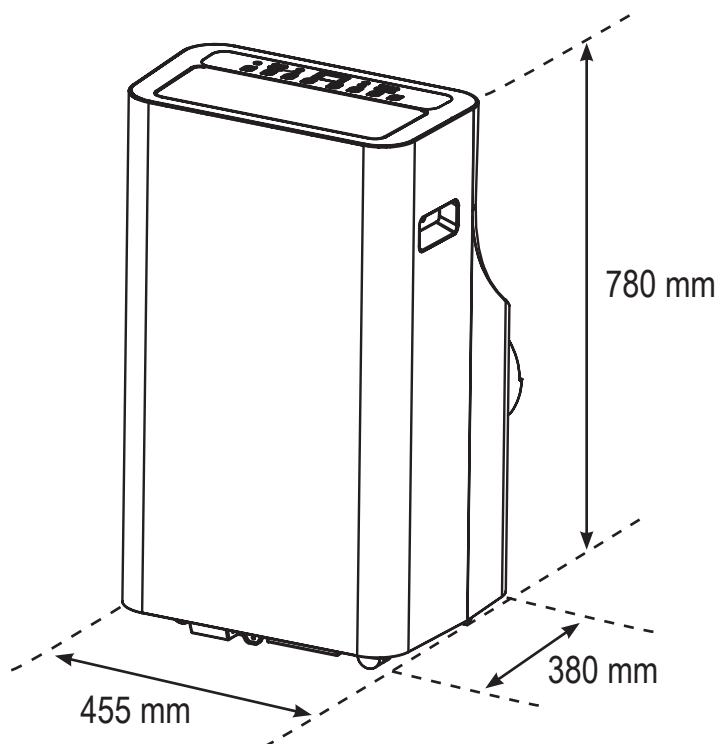
Temperature of room in air conditioning 17°C-35°C (Cooling)

SIZE OF APPLIANCE

Width 455 mm

Height 780 mm

Depth 380 mm





WARNING for Using R32/R290 Refrigerant

- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that the refrigerants may not contain an odour.
- Appliance should be installed, operated and stored in a room with a floor area according to the amount of refrigerant to be charged. For specific information on the type of gas and the amount, please refer to the relevant label on the unit itself. When there are differences between the label and the manual on the Min. room area description, the description on label shall prevail.

For R290

amount of refrigerant (kg)	Min. room area(m ²)	amount of refrigerant (kg)	Min. room area(m ²)
>0.0836 and ≤0.1045	5	>0.2090 and ≤0.2299	11
>0.1045 and ≤0.1254	6	>0.2299 and ≤0.2508	12
>0.1254 and ≤0.1463	7	>0.2508 and ≤0.2717	13
>0.1463 and ≤0.1672	8	>0.2717 and ≤0.2926	14
>0.1672 and ≤0.1881	9	>0.2926 and ≤0.3135	15
>0.1881 and ≤0.2090	10		

- Compliance with national gas regulations shall be observed.
Keep ventilation openings clear of obstruction.
- The appliance shall be stored so as to prevent mechanical damage from occurring.
- A warning that the appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.
- Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorises their competence to handle refrigerants safely in accordance with an industry recognised assessment specification.
- Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.
- The appliance shall be stored in a room without continuously operating open flames (for example an operating gas appliance) and ignition sources (for example an operating electric heater).

Explanation of symbols displayed on the unit(For the unit adopts R32/R290 Refrigerant only):



Caution: Risk of fire/
flammable materials

	WARNING	This symbol shows that this appliance used a flammable refrigerant. If the refrigerant is leaked and exposed to an external ignition source, there is a risk of fire.
	CAUTION	This symbol shows that the operation manual should be read carefully.
	CAUTION	This symbol shows that a service personnel should be handling this equipment with reference to the installation manual.
	CAUTION	This symbol shows that information is available such as the operating manual or installation manual.

1.Transport of equipment containing flammable refrigerants

See transport regulations

2.Marking of equipment using signs

See local regulations

3.Disposal of equipment using flammable refrigerants

See national regulations.

4.Storage of equipment/appliances

The storage of equipment should be in accordance with the manufacturer's instructions.

5.Storage of packed (unsold) equipment

Storage package protection should be constructed such that mechanical damage to the equipment inside the package will not cause a leak of the refrigerant charge. The maximum number of pieces of equipment permitted to be stored together will be determined by local regulations.

6.Information on servicing

1)Checks to the area

Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimised. For repair to the refrigerating system, the following precautions shall be complied with prior to conducting work on the system.

2)Work procedure

Work shall be undertaken under a controlled procedure so as to minimise the risk of a flammable gas or vapour being present while the work is being performed.

3)General work area

All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

4)Checking for presence of refrigerant

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.

5)Presence of fire extinguisher

If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO2 fire extinguisher adjacent to the charging area.

6)No ignition sources

No person carrying out work in relation to a refrigeration system which involves exposing any pipe work that contains or has contained flammable refrigerant shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which flammable refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. No Smoking signs shall be displayed.

7)Ventilated area

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

8)Checks to the refrigeration equipment

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt consult the manufacturer's technical department for assistance. The following checks shall be applied to installations using flammable refrigerants:

The charge size is in accordance with the room size within which the refrigerant containing parts are installed;

The ventilation machinery and outlets are operating adequately and are not obstructed;

If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant; Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;

Refrigeration pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

9)Checks to electrical devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

Initial safety checks shall include:

That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;

That there no live electrical components and wiring are exposed while charging, recovering or purging the system; That there is continuity of earth bonding.

7.Repairs to sealed components

1)During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.

2)Particular attention shall be paid to the following to ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected. This shall include damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc. Ensure that apparatus is mounted securely. Ensure that seals or sealing materials have not degraded such that they no longer serve the purpose of preventing the ingress of flammable atmospheres. Replacement parts shall be in accordance with the manufacturer's specifications.

NOTE: The use of silicon sealant may inhibit the effectiveness of some types of leak detection equipment. Intrinsically safe components do not have to be isolated prior to working on them.

8.Repair to intrinsically safe components

Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use. Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere. The test apparatus shall be at the correct rating. Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

9.Cabling

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

10.Detection of flammable refrigerants

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

11.Leak detection methods

The following leak detection methods are deemed acceptable for systems containing flammable refrigerants. Electronic leak detectors shall be used to detect flammable refrigerants, but the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed and the appropriate percentage of gas (25 % maximum) is confirmed. Leak detection fluids are suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work. If a leak is suspected, all naked flames shall be removed/ extinguished. If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Oxygen free nitrogen (OFN) shall then be purged through the system both before and during the brazing process.

12.Removal and evacuation

When breaking into the refrigerant circuit to make repairs or for any other purpose conventional procedures shall be used. However, it is important that best practice is followed since flammability is a consideration. The following procedure shall be adhered to:

Remove refrigerant; Purge the circuit with inert gas; Evacuate; Purge again with inert gas; Open the circuit by cutting or brazing.

The refrigerant charge shall be recovered into the correct recovery cylinders. The system shall be flushed with OFN to render the unit safe. This process may need to be repeated several times. Compressed air or oxygen shall not be used for this task. Flushing shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system. When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place. This operation is absolutely vital if brazing operations on the pipe-work are to take place. Ensure that the outlet for the vacuum pump is not close to any ignition sources and there is ventilation available.

13.Charging procedures

In addition to conventional charging procedures, the following requirements shall be followed. Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimise the amount of refrigerant contained in them.

Cylinders shall be kept upright.

Ensure that the refrigeration system is earthed prior to charging the system with refrigerant.

Label the system when charging is complete (if not already).

Extreme care shall be taken not to overfill the refrigeration system. Prior to recharging the system it shall be pressure tested with OFN. The system shall be leak tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

14.Decommissioning

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of reclaimed refrigerant. It is essential that electrical power is available before the task is commenced.

a) Become familiar with the equipment and its operation. b) Isolate system electrically. c) Before attempting the procedure ensure that: Mechanical handling equipment is available, if required, for handling refrigerant cylinders; All personal protective equipment is available and being used correctly; The recovery process is supervised at all times by a competent person; Recovery equipment and cylinders conform to the appropriate standards. d) Pump down refrigerant system, if possible. e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system. f) Make sure that cylinder is situated on the scales before recovery takes place. g) Start the recovery machine and operate in accordance with manufacturer's instructions. h) Do not overfill cylinders. (No more than 80 % volume liquid charge). i) Do not exceed the maximum working pressure of the cylinder, even temporarily. j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off. k) Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

15.Labelling

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. Ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

16.Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely. When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs. The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of flammable refrigerants. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt. The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant Waste Transfer Note arranged. Do not mix refrigerants in recovery units and especially not in cylinders. If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The evacuation process shall be carried out prior to returning the compressor to the suppliers. Only electric heating to the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely.