



amazon basics B07ZHQDF7B Portable Air Conditioner with Dehumidifier User Manual

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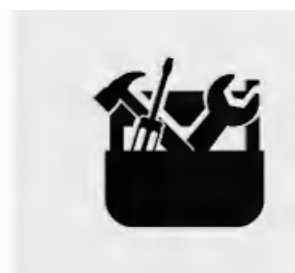
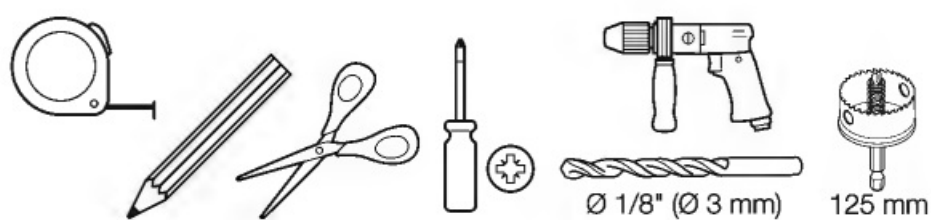
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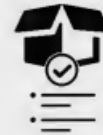
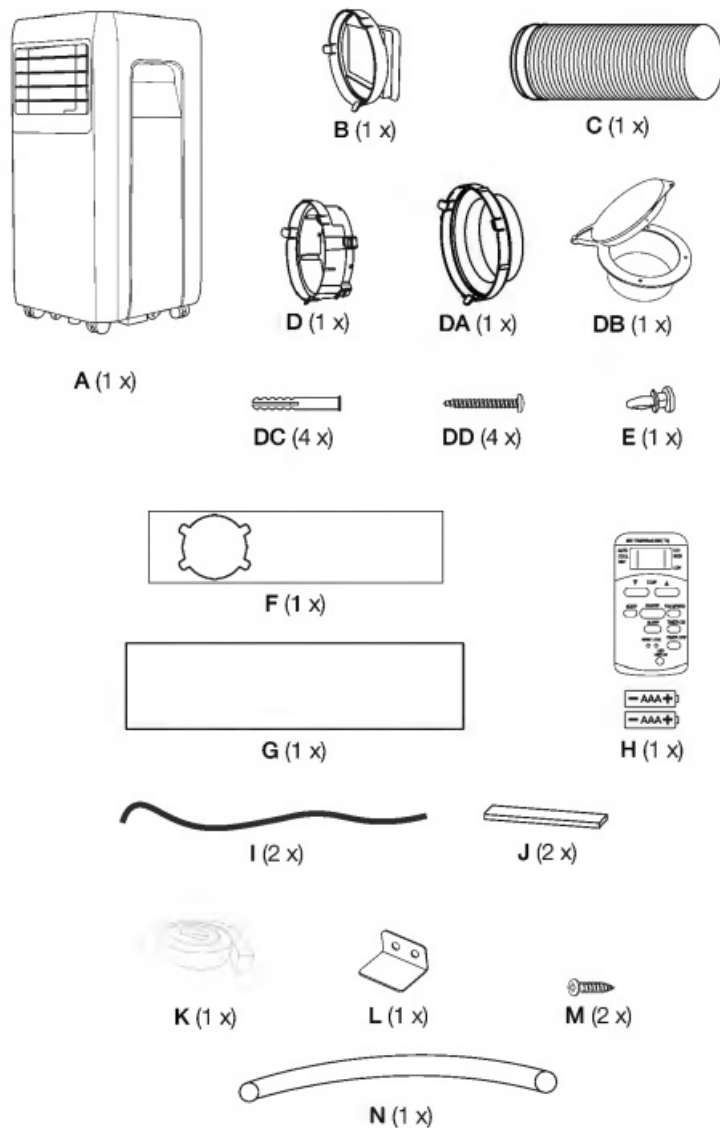
amazon basics B07ZHQDF7B Portable Air Conditioner with Dehumidifier



HARDWARE



PARTS



IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions carefully and retain them for future use. If this product is passed to a third party, then these instructions must be included.
- When using electrical appliances, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and/or injury to persons including the following:

CAUTION

- Risk of fire/Flammable materials.
- This appliance can be used by children aged 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 done by children without supervision.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard.
- The appliance shall be installed per national wiring regulations.

- Place the appliance at least 30 cm from a wall or any obstacles.
- Do not place the appliance in front of curtains or drapes as they might accidentally cover the air intakes. Keep air inlets and air outlets clear of obstructions.
- Clean or replace the filter periodically. Poor airflow might cause overheating, reduces the performance of the appliance and creates more risk. Do not operate the appliance without the filter installed.
- Do not tilt the appliance over a 45-degree angle to prevent damage to the cooling circuit.
- Do not install the appliance in a location with high humidity or where splash water is likely to occur (for example, a laundry room).
- Do not use aerosol products near the appliance.
- Do not disassemble or modify the product. Only use the provided attachments and accessories.
- Do not connect the appliance to extension cords or shared socket outlets.
- Do not run the power cord under carpets or mats where it could be stepped on and damaged.
- This appliance is classified as protection class I and must be connected to a protective ground.
- To avoid damage to the appliance, disconnect it from the socket outlet during thunderstorms.
- The appliance shall be installed, operated and stored in a room with a floor area larger than 7 m.
 - (for B07ZHQDF7B and B07ZHQTBS) and 8 m?
 - (for B07ZHQFNX8 and B07ZHQV1GT).
- Transport the appliance in a vertical position and place it on a stable, level surface during use.
- Contact a professional repair centre for any servicing or maintenance.


NOTICE

- Due to the power input of this appliance on start-up, voltage drops may occur and this can influence other equipment (e.g. dimming lights).
- Therefore, we advise you to make sure that your appliance is only connected to a supply with a maximum permissible system impedance $Z_{max} = 0.451 \text{ D}$ (for B07ZHQFNX8 and B07ZHQV1GT). If you require further clarification, you may contact your local power supply authority.






Battery warnings

- Do not mix old and new batteries or batteries of different types or brands.
- Exhausted batteries should be immediately removed from the product and properly disposed of.
- Keep batteries out of the reach of children.
- Do not dispose of batteries in a fire.
- Remove batteries from the product if it is not to be used for an extended period of time unless it is for emergency purposes.
- If the battery leaks avoid contact with skin and eyes. Rinse affected areas immediately with plenty of clean water, then consult a doctor.
- Keep the button cell batteries away from children. Risk of ingestion and suffocation!

Explanation of Symbols

-  This symbol stands for “Conformité Européenne”, which means “Conformity with EU directives”. With the

CE marking the manufacturer confirms that this product complies with applicable European directives and regulations.

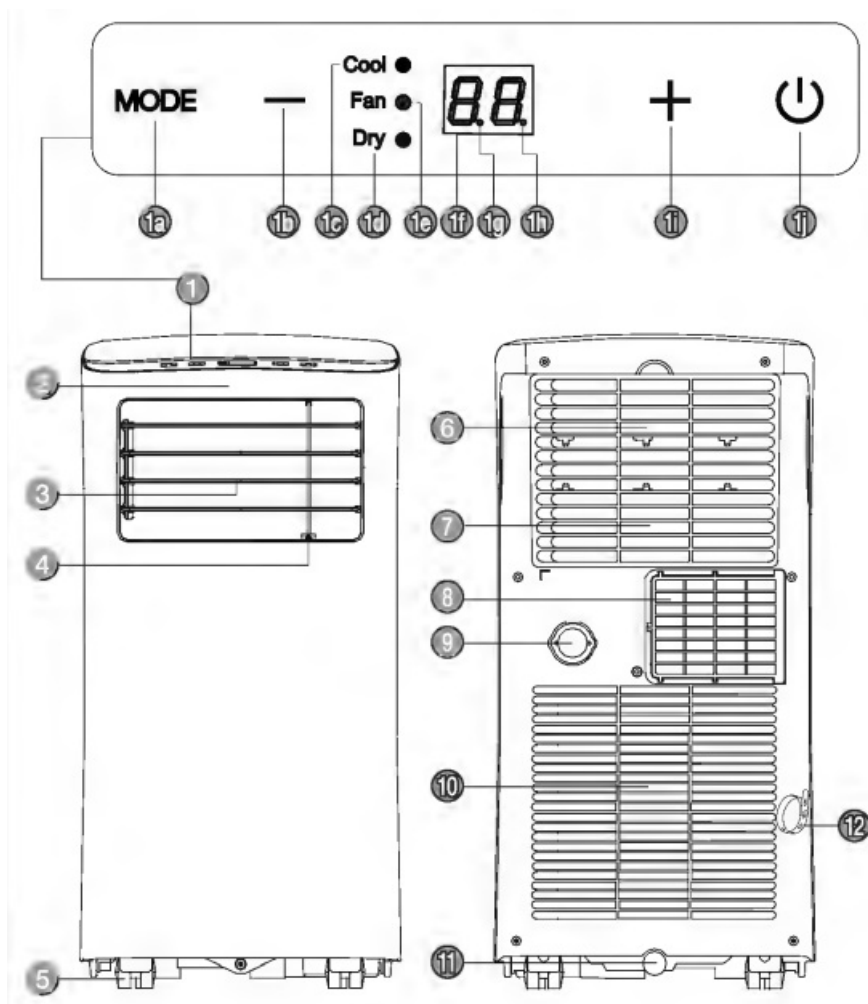
-  Direct current (DC).
-  Alternative current (AC).
-  This symbol indicates that this appliance uses a flammable refrigerant. If the refrigerant is leaking and is exposed to an external ignition source, there is a risk of fire.
-  This symbol indicates that the user should read this manual carefully.
-  This symbol indicates that only professional service personnel should service this appliance. See the “Servicing” chapter.


Intended Use

- This product is intended for regulating temperature and humidity indoors.
- This product is not intended for use as a precision refrigeration system. Do not use it for special purposes such as maintaining food, precision machinery or art objects.
- This product is intended to be used in dry indoor areas only. It is not intended for use in bathrooms, laundry areas and similar indoor locations.
- No liability will be accepted for damages resulting from improper use or non-compliance with these instructions.

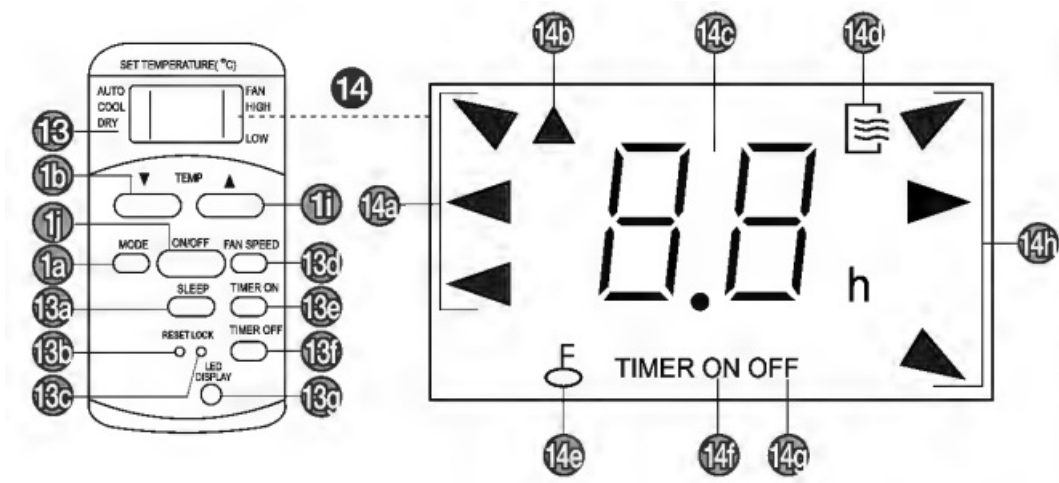


Product Description



- **1** Control panel
 - **1A** MODE button
 - **1B** Decrease temperature button
 - **1C** Cool mode indicator
 - **1D** Dry mode indicator
 - **1E** Fan mode indicator
 - **1F** Main unit display
 - **1G** Standby indicator
 - **1H** Timer indicator
 - **1I** Increase temperature button
 - **1J**  On/off button
- **2** Sensor for remote control
- **3** Horizontal louver
- **4** Vertical louver with lever
- **5** Caster wheels
- **6** Air filter
- **7** Air intake
- **8** Air outlet
- **9** Upper drain outlet
- **10** Lower air intake
- **11** Lower drain outlet

- 12 Cable tie



- 13 Remote control
 - 13a SLEEP button
 - 13b RESET button
 - 13c LOCK button
 - 13d FAN SPEED button
 - 13e TIMER ON button
 - 13f TIMER OFF button
 - 13g LED DISPLAY (screen off) button
- 14 Remote control display
 - 14a Mode indicators
 - 14b Transmission indicator
 - 14c Temperature/timer display
 - 14d Power indicator
 - 14e Lock indicator
 - 14f Timer on indicator
 - 14g Timer off indicator
 - 14h Fan speed indicator

Before First Use

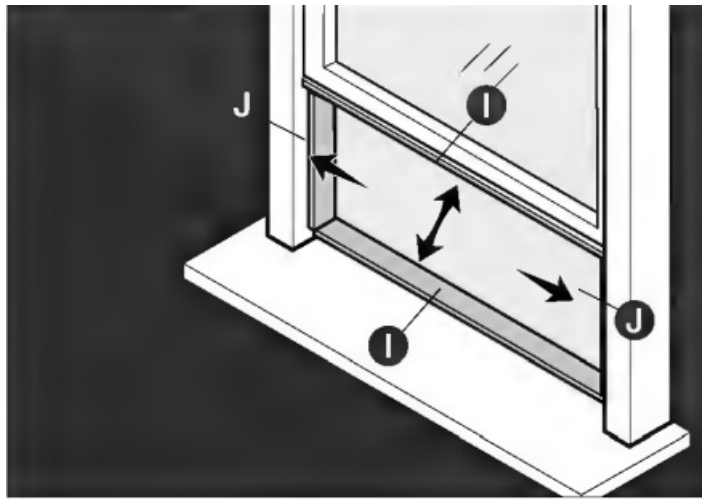
DANGER Risk of suffocation! Keep any packaging materials away from children – these materials are a potential source of danger, e.g. suffocation.

NOTICE This product must only be used in an upright position. If the product has been in any other position, it must be placed in an upright position for at least 6 hours before use. This is to avoid damages on the cooling circuit.

- Check the product for transport damages.
- Remove all the packing materials.
- Before connecting the product to the power supply, check that the power supply voltage and current rating corresponds with the power supply details shown on the product rating label.

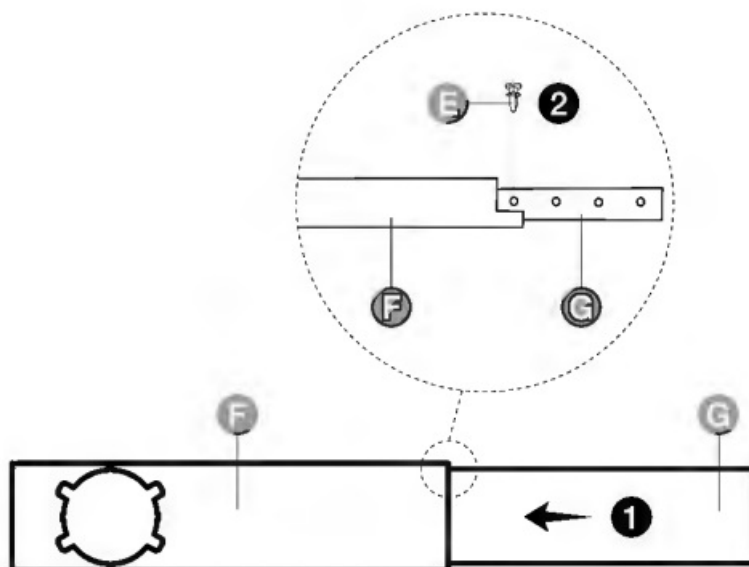
Installation

Sash window – Step 1:



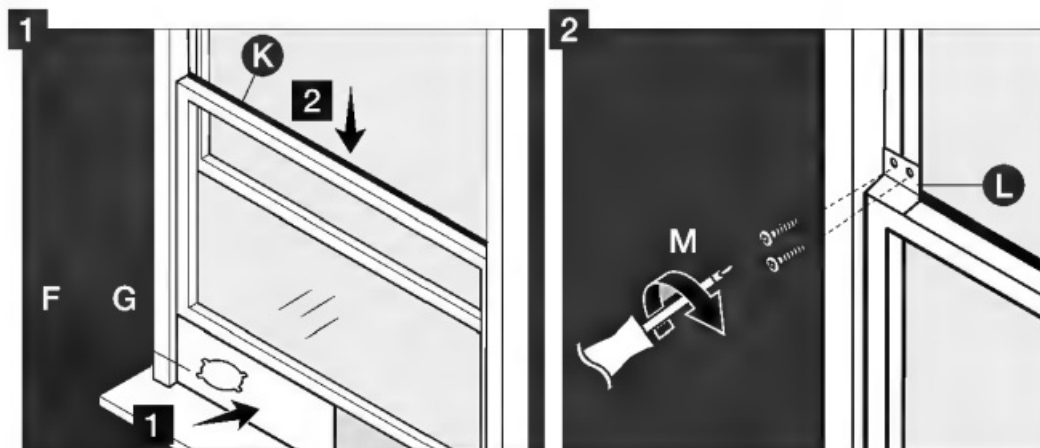
1. Cut the adhesive seal foams (I) and (J) to the required lengths.
2. Remove the strips from adhesive seal foams (I) and (J).
3. Attach the adhesive seal foams (I) and (J) to the window sash and frame.

Step 2:



1. Slide the window slider part (G) into part (F).
2. Adjust the window slider to the width of the window assembly and secure with the plastic bolt (E).

Step 3:

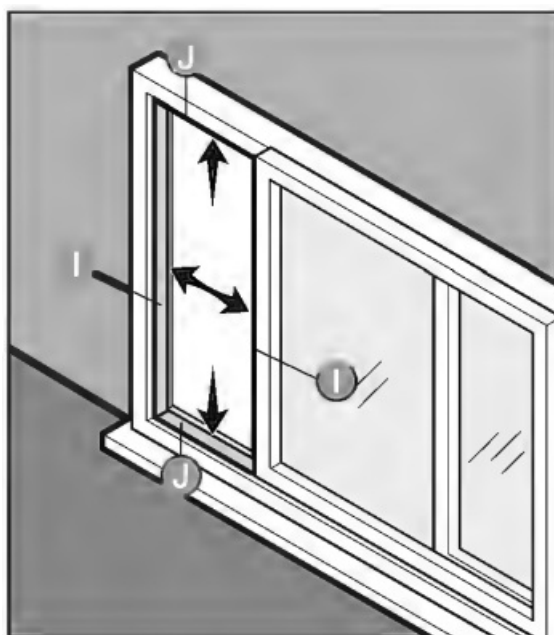


NOTICE

Before securing the window sash, mark and then drill the pilot holes in the window sill to prevent it from splitting.

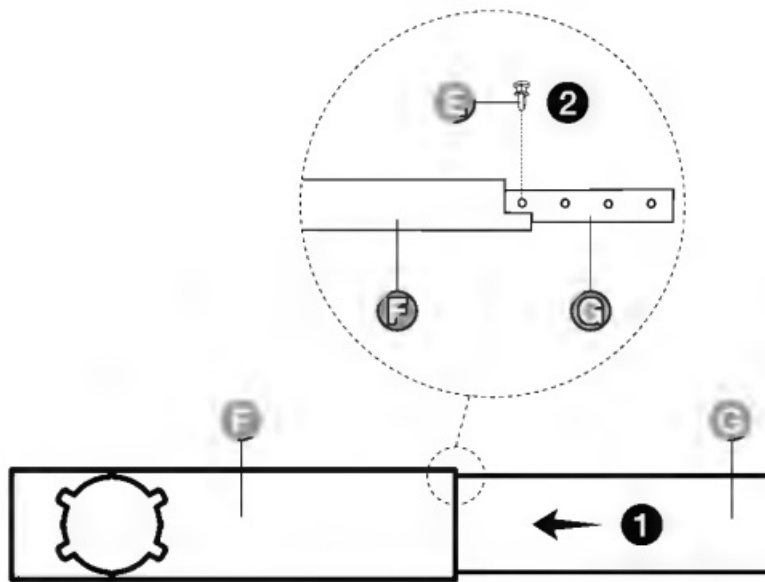
1. Insert the window slider into the window opening. Close the window sash to secure the window slider in place.
2. Measure the width of the window sash.
3. Cut the sash seal (K) so it fits the space between the lower and upper window sash.
4. Place the sash seal (K) between the window sashes.
5. Secure the position of the lower window sash using the bracket (L) and 2 screws (M).

Sliding window – Step 1:



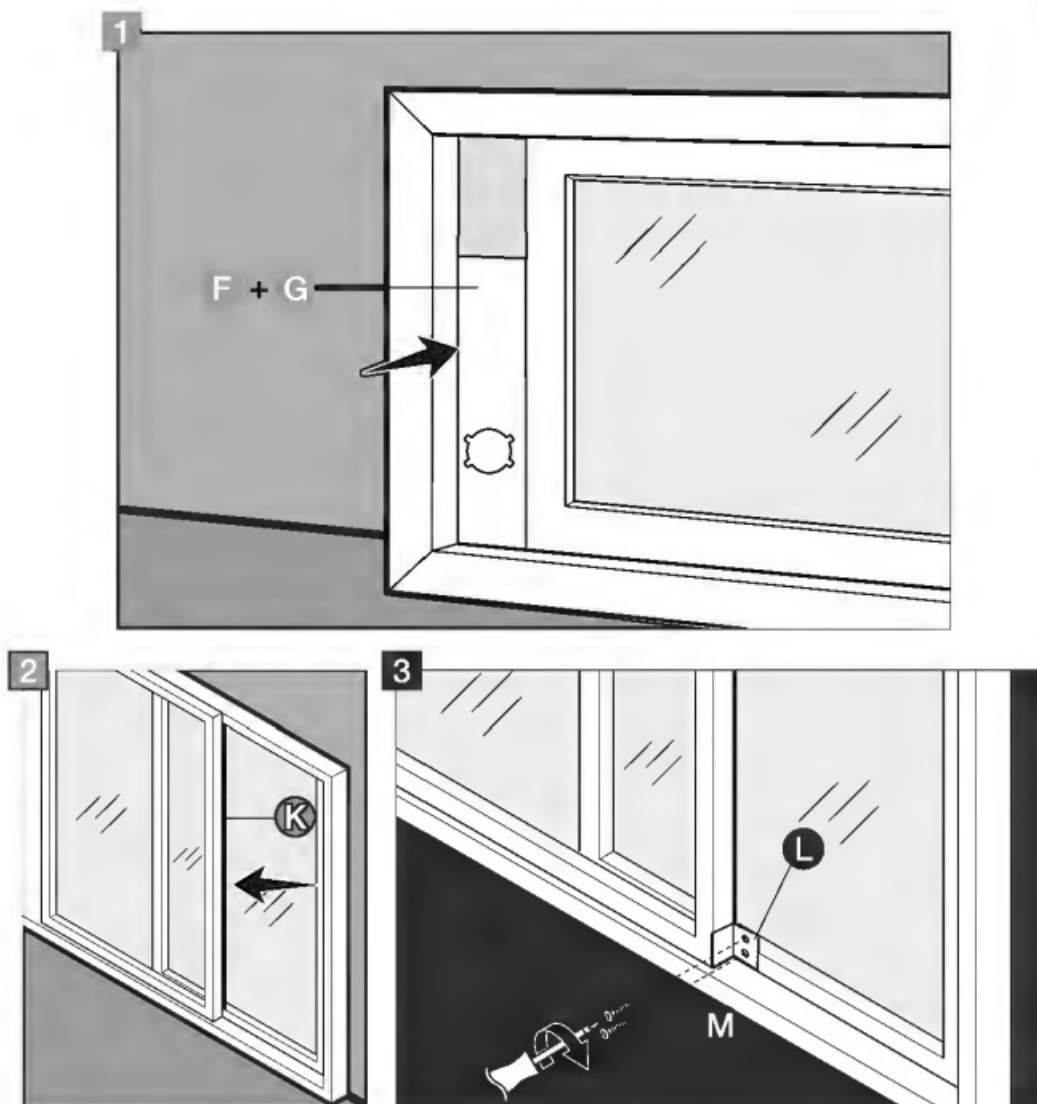
1. Cut the adhesive seal foams (I) and (J) to the required lengths.
2. Remove the strips from adhesive seal foams (I) and (J).
3. Attach the adhesive seal foams (I) and (J) to the window sash and frame.

Step 2:



1. Slide the window slider part (G) into part (F).
2. Adjust the window slider to the height of the window assembly and secure it with the plastic bolt (E).

Step 3:

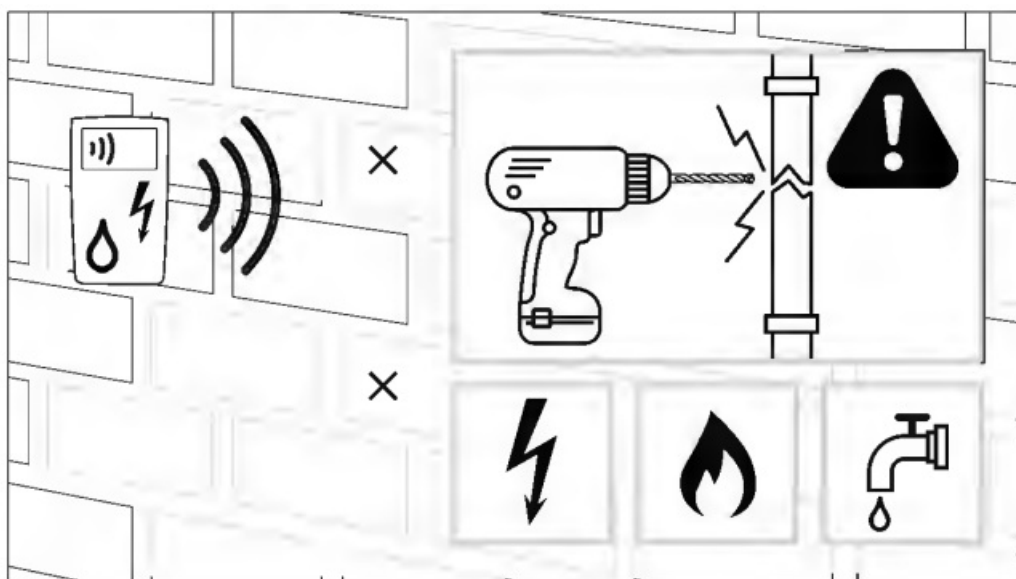


NOTICE Before securing the window sash, mark and then drill the pilot holes in the window sill to prevent it from splitting.

1. Insert the window slider into the window opening. Close the window sash to secure the window slider in place.
2. Measure the height of the window sash.
3. Cut the sash seal (K) so it fits the space between the window sashes.
4. Place the sash seal (K) between the window sashes.
5. Secure the position of the window sash using the bracket (L) and 2 screws (M).

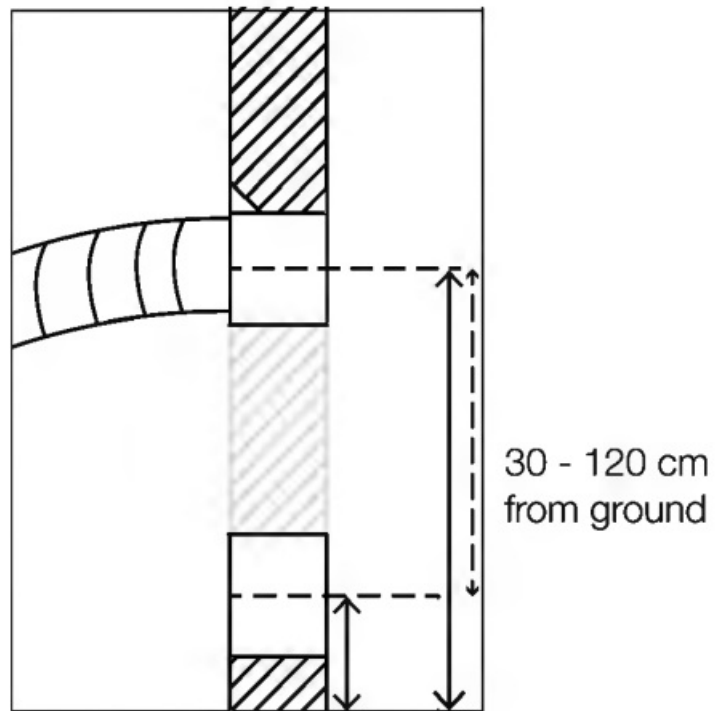
Wall Installation

Wall installation – Step 1:

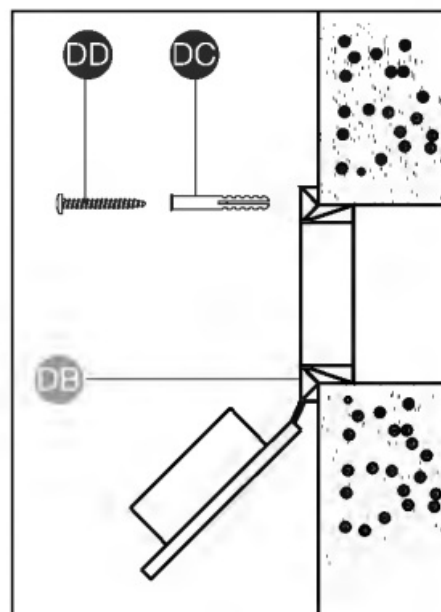


Step 2

1. Drill a 125 mm hole for the wall exhaust adapter (DB) using a circular bit.
 - **NOTICE** The centre of the wall exhaust adapter (DB) should be 30-120 cm from the ground.

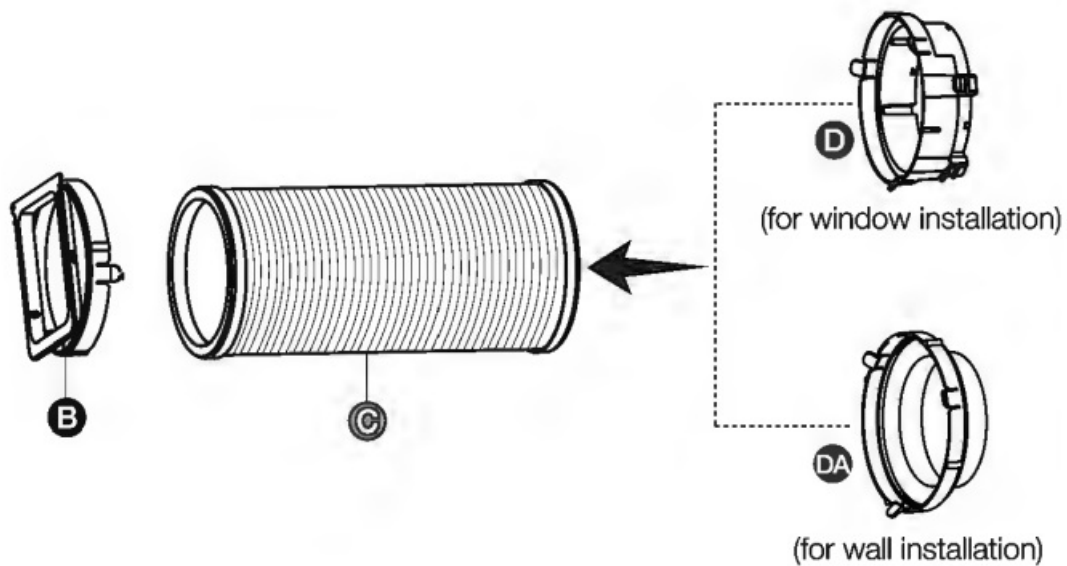


2. Insert the wall exhaust adapter (DB) into the opening and using a pencil mark 4 drilling holes.
3. Remove the adapter and drill 4 holes.
4. Insert wall plugs (DC) if necessary.
5. Reinsert the adapter and secure it to the wall with the screws (DD).

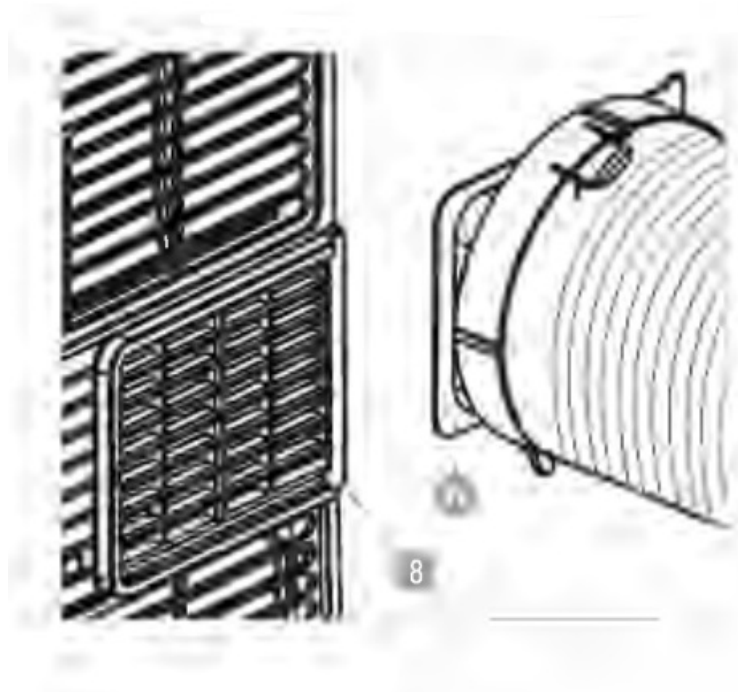


Exhaust hose connection – Step 1:

- Connect the exhaust hose (C) with the hose adapters (B) and (D) (window installation) or (DA) (wall installation).

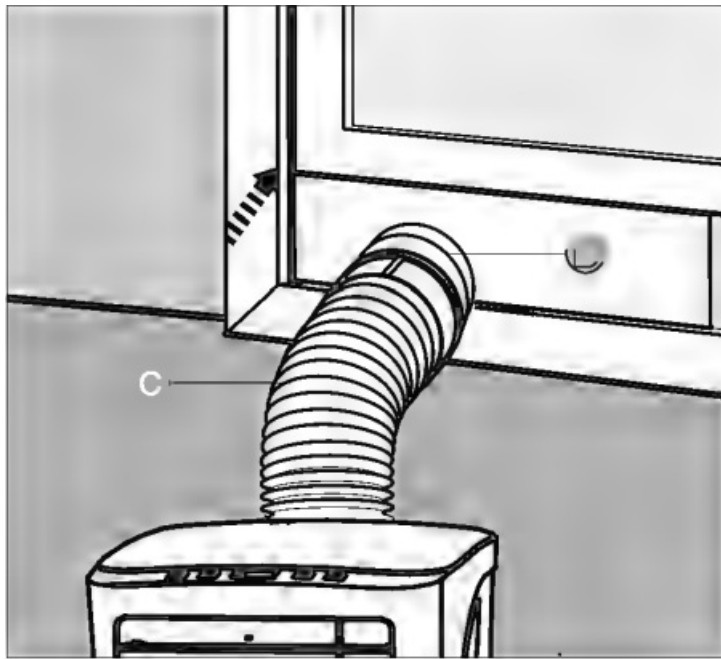


- **Step 2:** Slide the hose adapter (B) onto the air outlet (8).

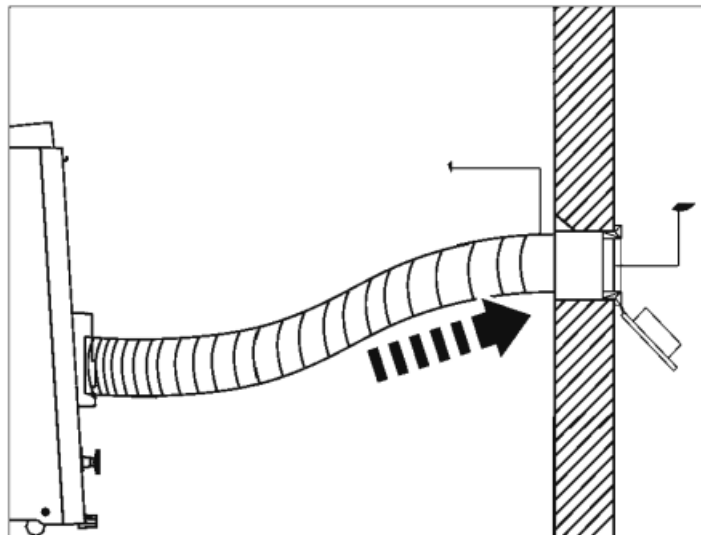


- **Step 3:** Connect the other end (D) (window installation) or (DA) (wall installation) to the window slider or the wall exhaust adapter (DB).

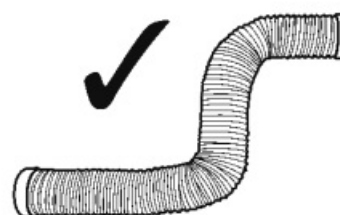
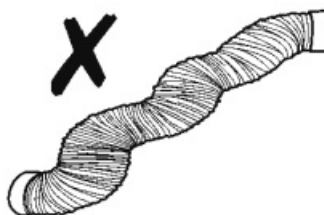
Window Installation



Wall installation



- **NOTICE** Open the cap of the adapter (DB) when using the product to prevent overheating. Cover the hole of the adapter (DB) with the cap when the product is not in use.
- **NOTICE** To ensure proper operation, do not overextend or abnormally bend the hose (C). Place the product at a suitable distance from walls, furniture and curtains to prevent it from overheating due to poor ventilation.



Location

- Place the product at a distance of 30 cm from walls, furniture and curtains on all sides to prevent it from overheating due to poor ventilation. The horizontal louvre blade should be at least 50 cm away from obstacles.
- The product additionally requires at least 50 cm of clearance on the back.
- Place the product on a firm and level floor.
- Place the product near an easily accessible grounded socket outlet.

Water Drainage

- **WARNING** Risk of electric shock! Unplug the product before draining the water.

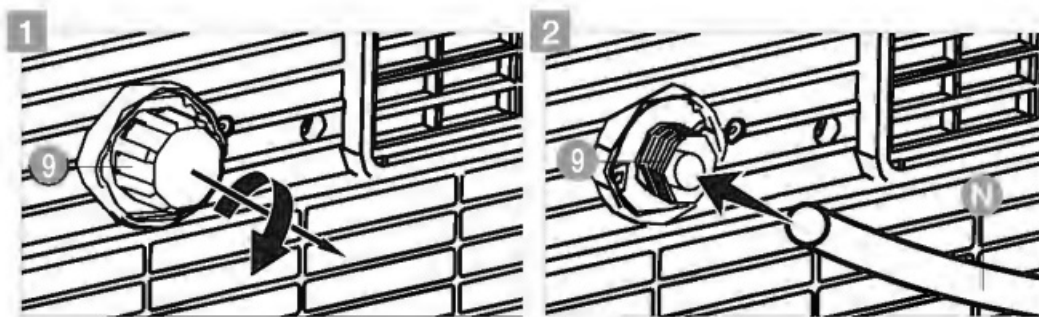
NOTICE This product features a bottom tray which collects excess water when in the DRY (dehumidifying) mode. When the bottom tray is full, the product beeps 8 times and the main unit display (1f) shows P1.

To drain the excess water:

1. Switch off and unplug the product from the socket-outlet.
2. Carefully move the product to a location where the water can be drained. Use the side handles.
3. Unscrew the lower drain outlet's cap (11) and remove the drain plug.
4. Drain the water.
5. Reinstall the drain plug and the cap.

Continuous water drainage

- **CAUTION** Danger of flooding! Do not leave the product unattended when draining to an external container! Empty the container frequently to avoid spilling over and water damage.



1. Remove the exhaust hose (C).
2. Unscrew the upper drain outlet's (9) cap and remove the drain plug.
3. Attach the hose (N) to the upper drain outlet (9).
4. Place the other end of the hose over the drain receptacle, for example, a basement floor drain, a sink or similar.
 - **NOTICE** Ensure that there are no kinks or bends on the drain hose (N) as this can stop water from draining.

Operation

Switching on/off

- To switch on the product, press the power button (1)). The main unit display (1f) lights up.
- To switch off the product, press the power button (1j) again. The main unit display (1f) goes off.
 - **NOTICE** To switch the display (1) and all indicators off, press the LED DISPLAY button (13g). Press it again to switch them back on. If the product switches off due to the power cut, it restarts automatically with the previous setting after 2 seconds. Mode selection
 - **NOTICE** For FAN and DRY operation modes, the exhaust hose (C) can be disconnected from the main unit.

Press the MODE button (1a) to toggle between:

Mode	Function
Auto	The product automatically chooses the COOL or FAN mode depending on the set temperature and the ambient temperature.
Cool	The product produces airflow with cooling.
Dry	The product enters the dehumidifier mode and removes excess moisture from the air.
Fan	The product enters the fan mode without engaging the cooling function.

Temperature selection

NOTICE The temperature can be set only in COOL mode.

- To set the temperature, press the increase temperature button (1i) or the decrease temperature button (1b). The temperature can be set between 17 – 30 °C.
- To change from °F to °C and vice versa, press and hold the increase (1i) and decrease temperature button (1b) simultaneously for 3 seconds.

Airflow direction

- Adjust the horizontal louvres (3) by carefully pushing them up or down.
- Adjust the vertical louvre (4) by carefully moving its lever to the left or right.

Remote control auxiliary functions

Fan speed selection

NOTICE The fan speed can be set only in COOL and FAN modes.

- To set the fan speed, press the fan button (13d) repeatedly to switch between low, high or automatic.

Timer function.

- The product can be switched on/off automatically using the timer

Timer on (automatic switch on setting)

NOTICE The timer on setting can be selected only when the product is off.

- Press the TIMER ON button (13e) repeatedly to set the desired time. The range is 0.5 to 24 hours.
- After 2 seconds the product beeps and the timer indicator (1h) lights up.
- To deactivate the setting, press the on/off button (1)) or set the time to 0.

Timer off (automatic switch-off setting)

NOTICE The timer off setting can be selected only when the product is on.

- Press the TIMER OFF button (13f) repeatedly to set the desired time. The range is 0.5 to 24 hours.
- After 2 seconds the product beeps and the timer indicator (1h) lights up.
- To deactivate the setting, press the on/off button (1) or set the time to 0.

NOTICE The timer on and timer off functions can be used at the same time by setting first one and then the other. Wait 3 seconds between programming the on and off functions. The on-and-off cycle works only once and needs to be set again afterwards.

Sleep setting

NOTICE The sleep setting can be activated only in COOL mode and is used to conserve energy during sleeping hours.

- Press the SLEEP button (13a). The product raises the temperature by 2 °C over 1 hour.
- The product maintains the temperature for the next 7 hours. After that, the product returns to the originally selected temperature.

Resetting remote control

- To cancel all current settings and reset the remote control to the factory settings, press the RESET button (13b) with a toothpick or the tip of a pen.

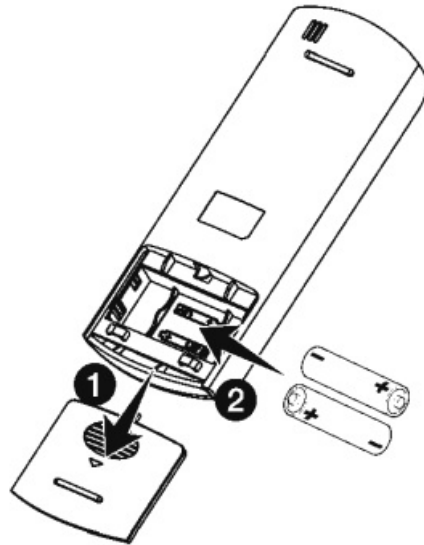
Locking remote control

- To lock all current settings and disable the buttons of the remote control, press the LOCK button (13c) with a toothpick or the tip of a pen.
- The remote control will display the & indicator (14e).

Installing/replacing the batteries

NOTICE Use 2 x 1.5 V type AAA (LR03) batteries.

- Remove the battery compartment cover.
- Insert 2 x AAA (LR03) batteries (1A) with the correct polarities (+) and (-) as marked on the battery and inside the battery compartment.
- Slide the battery compartment cover back into place.



NOTICE Use 2 x 1.5 V type AAA (LR03) batteries.

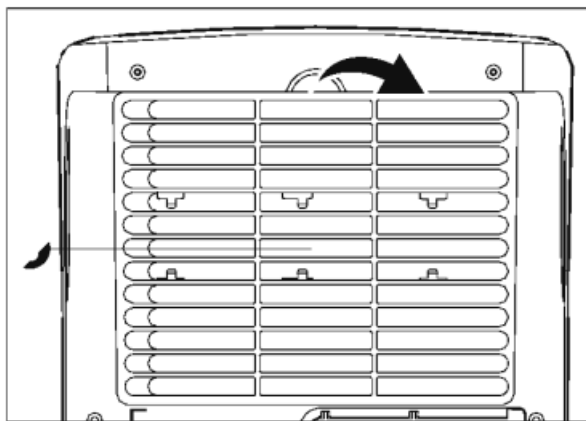
- Remove the battery compartment cover.
- Insert 2 x AAA (LR03) batteries with the correct polarities (+) and (-) as marked on the battery and inside the battery compartment.
- Slide the battery compartment cover back into place.

Cleaning and Maintenance

- **WARNING** Risk of electric shock! To prevent electric shock, unplug before cleaning.
- **WARNING** Risk of electric shock! Never clean the product under running water.



Cleaning the removable air filter (6)



NOTICE Clean the removable air filter (6) at least every 2 weeks.

- Pull the filter out.
- Rinse the filter thoroughly in warm water with mild detergent.
- Gently shake off the excess water from the filter and air-dry it.
- Put the filter back in the main unit.

Cleaning the main unit

- To clean, wipe with a soft, slightly moist cloth.
- Never use corrosive detergents, wire brushes, abrasive scourers, or metal or sharp utensils to clean the product.

Storage

CAUTION Risk of fire! The product shall be stored in places without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).

NOTICE Drain water before storage.

NOTICE Place the product in a warm and dry room and activate the fan mode for 12 hours to avoid mold formation.

- Secure the power cord using the cable tie (12).
- Store in a cool and dry place away from children and pets, ideally in original packaging.
- Avoid any vibrations and shocks.

Transportation

- The product is heavy. Move the product by pushing or pulling it, rolling on the caster wheels. When lifting is unavoidable, use the handles and lift with two people.
- Transport the products in a vertical position and secure them well.
- After transportation, place the product in an upright position for at least 6 hours before use to avoid damage to the cooling circuit.

Plug fuse replacement (for UK only)

- Use a flat screwdriver to open the fuse compartment cover.
- Remove the fuse and replace it with the same type (13 A, BS1362). Refit the cover.

Maintenance

Any other servicing than mentioned in this manual should be performed by a professional repair center.

Simplified EU Declaration of Conformity

- Hereby, Amazon EU Sarl declares that the radio equipment type B07ZHQDF7B_B07ZHQFNX8_B07ZHQTBGGS_B07ZHQV1GT complies with Directive 2014/53/EU.
- The full text of the EU Declaration of Conformity is available at the following internet address:
https://www.amazon.co.uk/amazon_private_brand_EU_compliance.

Troubleshooting

Problem	Solution
The product does not switch on.	<ul style="list-style-type: none"> – Check if the product is properly connected to the socket-outlet. – Check if the socket-outlet is powered. – The circuit breaker of the electrical installation tripped. Flip the suspect breaker to the “on” position. – Clean the removable air filter (6). – Check the air vents for obstructions.
The product does not cool efficiently.	<ul style="list-style-type: none"> – Ensure the doors and windows are closed. – Compressor has shut off due to changed operating mode. After switching off the product, wait at least 3 minutes before switching it on again. – Incorrect installation. Refer to installation instructions.
The product is noisy and vibrates abnormally.	<ul style="list-style-type: none"> – The product is not levelled. Place the product on a levelled surface. – Clean the removable air filter (6). <div style="border: 1px solid black; padding: 2px; margin-top: 5px;"> NOTICE Murmur of water is heard when the product is operating. It is a normal sound of the cooling circuit operating. </div>
The product switches on and off rapidly.	<ul style="list-style-type: none"> – Outside temperature is extremely hot. Set fan speed to a higher setting. – Clean the removable air filter (6).
Water drips when the product is cooling.	<ul style="list-style-type: none"> – This is normal during excessively humid days. The product is removing large quantity of moisture from the humid room.

P1 error code	– The water tank is full. Drain water through lower outlet.
E0	– EEPROM
E1 error code	– Room temperature sensor error.
E2 error code	– Evaporator temperature sensor error.
E3 error code	– Condenser temperature sensor error
E4 error code	– Display panel communication error
EC error code	– Refrigerant leakage detection malfunction
Solution to all error codes:	
	– Stop using the product and contact a professional repair centre.

Disposal

- The Waste Electrical and Electronic Equipment (WEEE) Directive aims to minimise the impact of electrical and electronic goods on the environment, by increasing reuse and recycling and by reducing the amount of WEEE going to landfill.
- The symbol on this product or its packaging signifies that this product must be disposed of separately from ordinary household wastes at its end of life.
- Be aware that this is your responsibility to dispose of electronic equipment at recycling centers to conserve natural resources.
- Each country should have its own collection centres for electrical and electronic equipment recycling.
- For information about your recycling drop-off area, please contact your related electrical and electronic equipment waste management authority, your local city office, or your household waste disposal service.

Battery Disposal

- Do not dispose of used batteries with your household waste. Take them to an appropriate disposal/collection site.

Specifications

Model number:	MPPH4-07CRN7, MPPH-07CRN7-QB6G1	MPPH4-08CRN7, MPPH-08CRN7-QB6
Voltage/frequency:	220-240 V~, 50 Hz	
Power consumption:	960 W	1100 W
Rated current:	5 A	5.8 A
Protection class:	I	
Cooling capacity:	269.1 ft ² (25 m ²), 7000 BTU	290.6 ft ² (27 m ²), 8000 BTU
Design pressure:	2.6/1.0 Bar	
Indoor side air flow:	319/213 m ³ /h	286/194 m ³ /h
Indoor side noise level (Hi/Lo):	52.5/47 dB(A)	52.3/47.2 dB(A)
Cooling operation:	Indoor only, up to 35 °C	
Temperature range:		
- Cool mode	17 °C - 35 °C	
- Dry mode	13 °C - 35 °C	
Dimensions (W x H x D):	approx. 35.5 x 70.3 x 34.5 cm	
Net weight:	approx. 22.5 kg	approx. 25.5 kg
Refrigerant type + quantity:	R290, 0.13 kg	R290, 0.15 kg

Remote control

- **Range:** 8 meters (in an unobstructed area)
- **Rated voltage:** 3 V, 2x 1.5 V, type AAA (LR03)

Description	Symbol	B07ZHQDF7B, B07ZHQTBS	Unit
Rated capacity for cooling	P_{rated} for cooling	2,0	kW
Rated capacity for heating	P_{rated} for heating	x,x	kW
Rated power input for cooling	P_{EER}	0,8	kW
Rated power input for heating	P_{COP}	x,x	kW
Rated energy efficiency ratio	EERd	2,7	-
Rated Coefficient of performance	COPd	x,x	-
Power consumption in thermostat-off mode with display	P_{TO}	N.A.	W
Power consumption in standby mode without display	P_{SB}	0,5	W
Electricity consumption of single/double duct appliances (indicate for cooling and heating separately)	DD: Q_{DD}	DD: x,x	DD: kWh/a
	SD: Q_{SD}	SD: 0,8 x,x	SD: kWh/h
Sound power level	L_{WA}	63	db(A)
Global warming potential	GWP	3	kgCO ₂ eq
Contact details for obtaining more information	Amazon EU S.à r.l., 38 avenue John F. Kennedy L-1855 Luxembourg.		

Description	Symbol	B07ZHQFNX8, B07ZHQV1GT	Unit
Rated capacity for cooling	P_{rated} for cooling	2,3	kW
Rated capacity for heating	P_{rated} for heating	x,x	kW
Rated power input for cooling	P_{EER}	0,9	kW
Rated power input for heating	P_{COP}	x,x	kW
Rated energy efficiency ratio	EERd	2,6	-
Rated Coefficient of performance	COPd	x,x	-
Power consumption in thermostat-off mode with display	P_{TO}	N.A.	W
Power consumption in standby mode without display	P_{SB}	0,5	W
Electricity consumption of single/double duct appliances (indicate for cooling and heating separately)	DD: Q_{DD}	DD: x,x	DD: kWh/a
	SD: Q_{SD}	SD: 0,9 x,x	SD: kWh/h
Sound power level	L_{WA}	62	db(A)
Global warming potential	GWP	3	kgCO ₂ eq
Contact details for obtaining more information	Amazon EU S.à r.l., 38 avenue John F. Kennedy L-1855 Luxembourg.		

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END OF USER MANUAL Servicina Manual

WARNING

- Any person who is involved with working on or breaking into a refrigerant circuit should hold a currently valid certificate from an industry-accredited assessment authority, which authorizes their competence to handle refrigerants safely following an industry-recognized 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.
- 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 refrigerants may not contain an odor.

Checks to the area

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

Work procedure

- Work shall be undertaken under a controlled procedure to minimize the risk of flammable gas or vapor being present while the work is being performed.

General work area

- All maintenance staff and others working in the local area shall be instructed on the nature of the 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.

Checking for the presence of refrigerant

- The area shall be checked with an appropriate refrigerant detector before 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.

Presence of a 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 CO^{*} fire extinguisher adjacent to the charging area.

No ignition sources

- No person carrying out work to a refrigeration system that 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, repair, removal, and disposal, during which flammable refrigerant can be released to the surrounding space.
- Before 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.

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.

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 per 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 the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;
- Refrigeration pipes or components are installed in a position where they are unlikely to be exposed to any substance that may corrode refrigerant-containing components unless the components are constructed of materials that are inherently resistant to being corroded or are suitably protected against being so corroded.

Checks to electrical devices

- Repair and maintenance of 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 safely to avoid the possibility of sparking;
- That no live electrical components and wiring are exposed while charging, recovering, or purging the system;
- That there is continuity of earth bonding.

Repairs to sealed components

1. During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon before any removal of sealed covers, etc. If it is 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 the 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 following the manufacturer's specifications.

NOTICE 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 before working on them.

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.

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.

Detection of flammable refrigerants

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

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 that requires brazing, all of the refrigerant shall be recovered from the system, or isolated (employing shut-off valves) in a part of the system remote from the leak.
- Oxygen-free nitrogen (OF) shall then be purged through the system both before and during the brazing process.

Removal and evacuation

- When breaking into the refrigerant circuit to make repairs or for any other purpose conventional procedures shall be used.
- However, best practice must be followed since flammability is a consideration.
- Opening of the refrigeration systems shall not be done by brazing. 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 OF 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 the 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 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.

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 minimize the amount of refrigerant contained in them;

Cylinders shall be kept upright;

- Ensure that the refrigeration system is earthed before 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.
- Before recharging the system, it shall be pressure tested with OFN.
- The system shall be leak tested on completion of charging but before commissioning. A follow-up leak test shall be carried out before leaving the site.

Decommissioning

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

1. Become familiar with the equipment and its operation.
2. Isolate system electrically.
3. 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.
4. Pump down the refrigerant system, if possible.
5. If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
6. Make sure that the cylinder is situated on the scales before recovery takes place.
7. Start the recovery machine and operate it according to the manufacturer's instructions.

8. Do not overfill cylinders. (No more than 80% volume liquid charge).
9. Do not exceed the maximum working pressure of the cylinder, even temporarily.
10. When the cylinders have been filled correctly and the process comes to tomas Roma a loan ars on the outment. are closed off.
11. Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.


Labeling

- Equipment shall be labeled 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.

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 labeled for that refrigerant (i.e. special cylinders for the recovery of refrigerant).
- Cylinders shall be complete with pressure relief valves 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 the 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 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 before returning the compressor to the suppliers.
- Only electric heating of the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely.
- [amazon.com/AmazonBasics](https://www.amazon.com/AmazonBasics).
- V01-07/22

Documents / Resources

	<p>amazon basics B07ZHQDF7B Portable Air Conditioner with Dehumidifier [pdf] User Manual</p> <p>B07ZHQDF7B Portable Air Conditioner with Dehumidifier, B07ZHQDF7B, Portable Air Conditioner with Dehumidifier, Air Conditioner with Dehumidifier, Conditioner with Dehumidifier, Dehumidifier</p>
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References

- [User Manual](#)