PRO-ELEC

LOCAL DEHUMIDIFIER

Model: PELL0307 and PELL0308

Please read these instructions carefully before use and retain for future reference.

IMPORTANT SAFETY INFORMATION

- Do not use any 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 odour.
- The appliance shall be installed, operated and stored in a room with a floor area larger than $4m^2$.
- Keep any required ventilation openings clear of obstruction.
- Servicing shall be performed only as recommended by the manufacturer.
- 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.
- All working procedure that affects safety means shall only be carried by competent persons.
- The appliance is only suitable for indoor use, and is not suitable for other applications.
- Follow local grid interconnection rules while installing the appliance and ensure that it is properly grounded. If you have any question on electrical installation, follow the instructions of the manufacturer, and if necessary, ask a professional electrician to install it.
- Place the appliance in a level and dry place and keep a distance of above 20cm between the machine and the surrounding objects or walls.
- After the appliance is installed, ensure that the mains plug is intact and firmly plugged into the power outlet, and place the power cord to avoid a trip hazard.
- Do not put any object into the air inlet and outlet of the air conditioning. Keep the air inlet and outlet free from obstructions.
- When drainage pipes are installed, ensure that the drainage pipes are properly connected, and are not distorted or bent.
- When moving the appliance, make sure that it is in an upright position.
- The appliance should be kept away from gasoline, flammable gas, stoves and other heat sources.
- Don’t disassemble, overhaul and modify the appliance arbitrarily, otherwise it may cause a malfunction or harm to persons and properties.
- To avoid danger, if a machine failure occurs, refer to a professional for repair.
- Do not install and use the appliance in a bathroom or other humid environments.
- Do not pull out the mains plug to turn off the appliance.

- Do not place cups or other objects on the appliance to prevent water or other liquids from spilling into the air conditioning.
- Do not use insecticide sprays or other flammable substances near the appliance.
- Do not wipe or wash the appliance with chemical solvents such as gasoline and alcohol. When you need to clean the dehumidifier, you must disconnect the power supply, and clean it with a moist soft cloth. If the machine is really dirty, use a mild detergent.
- The appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities 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 maintenance shall not be made by children without supervision.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- The appliance shall be installed in accordance with local wiring regulations.

FOR DOMESTIC USE ONLY.
NOT FOR COMMERCIAL OR INDUSTRIAL USE
as this may invalidate any warranty.

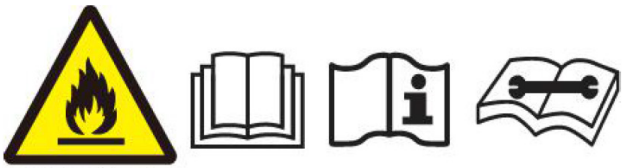
TRANSPORTATION AND STORAGE

Transportation and labelling

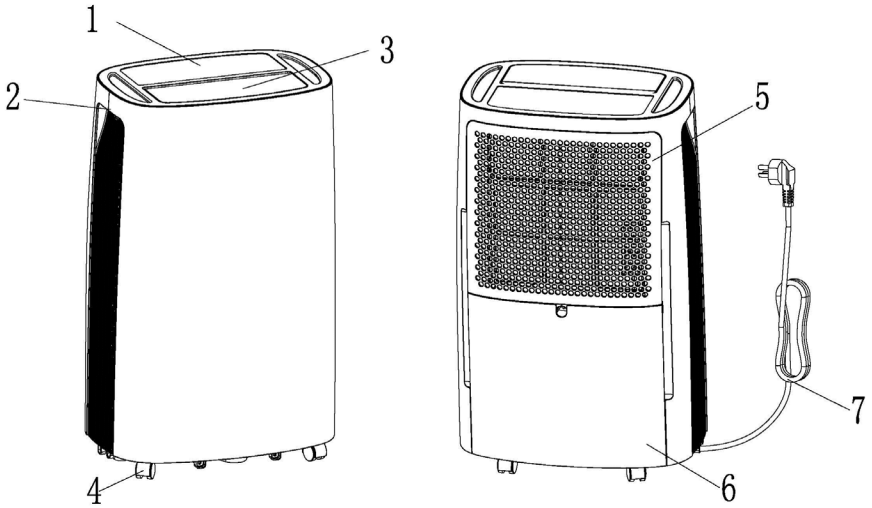
- Transport of equipment containing flammable refrigerants must be in compliance with the transport regulations.
- Marking of equipment using signs in compliance with local regulations
- Disposal of equipment using flammable refrigerants in compliance with national regulations.

Storage of equipment/appliances

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



PRODUCT OVERVIEW



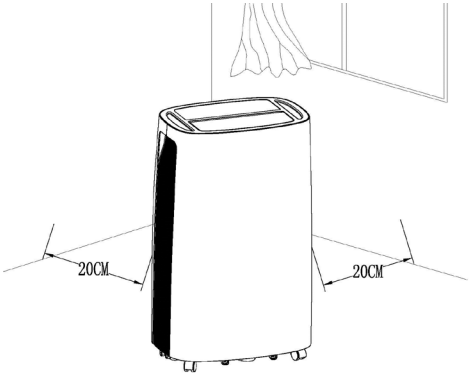
1. Control Panel
2. Handle
3. Air Deflector
4. Caster
5. Filter Box
6. Water Tank
7. Power Cord

POSITIONING & INSTALLATION

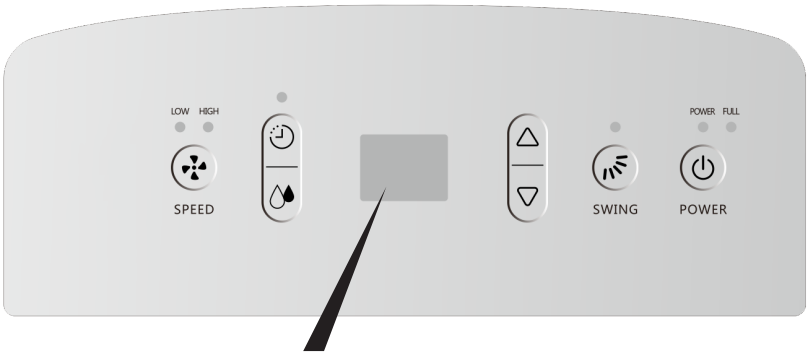
Positioning

Warning: before using the unit, keep it upright for at least two hours.

- The unit must stand upright on an even surface.
- Do not position near a bath, sink or other permanently damp or wet areas.
- Place the unit at least 20cm away from any other wall, curtains or heat sources to ensure adequate air circulation.
- Ensure that the mains socket outlet remains accessible when the unit is in use.
- Ensure that there is free access to the air-inlet and air-outlet vents.



CONTROL PANEL



The LED indicator display features the following functions:
1. When the unit is plugged in, it will indicate the room humidity level.
2. If you set the humidity desired, it will indicate the humidity that you have selected
3. When you program the time for the unit to turn on and off, it will show the hours.
4. When the environment humidity is lower than 35%, it will show “35”
5. When the environment humidity is higher than 95%, it will show “95”

OPERATION

- The buzzer will sound several times when the unit is powered on, and the LED display will show the room humidity for 3 seconds.
- Press the power button to start the unit, and press again to shut down.

Humidity Setting

- Press the key to enter humidity setting mode, then press or to adjust the humidity from 40% to 80%, in 5% increments indicated on the display.
- After 5 seconds, it will return to normal display.
- The default value of humidity is 55%.
- When the unit is running in a room temperature between 5° and 20°, it will stop periodically to defrost.

Fan Speed Setting

- Press the to set the fan speed to high or low, and the corresponding fan speed LED will illuminate.

Swing setting

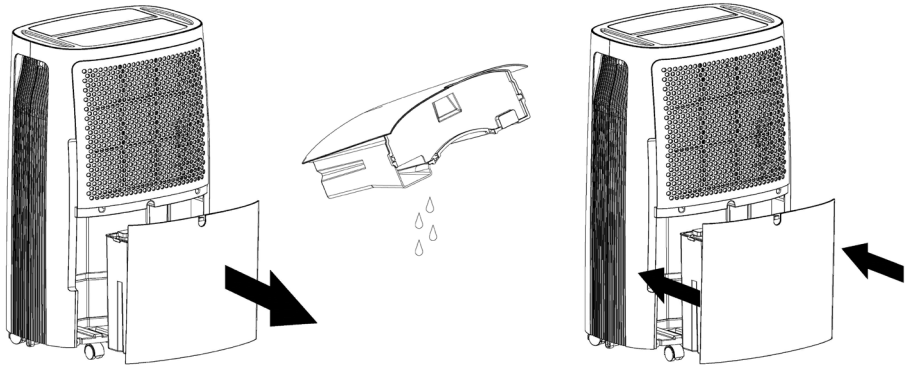
- After the machine is started, press to start or stop the air-outlet deflector swing movement.

Time-setting

- Press to enter startup-time setting mode when the unit is powered off, then the LED will display the time, pressing or to adjust the automatic start time from 1 to 24 hours.
- Press to enter shut down time setting mode when the unit is operating, then the LED will display the time, pressing or to adjust the automatic stop time from 1 to 24 hours .
- If the unit is turned on or off manually, or the water tank full condition occurs during use, the timer function will be over-ridden.

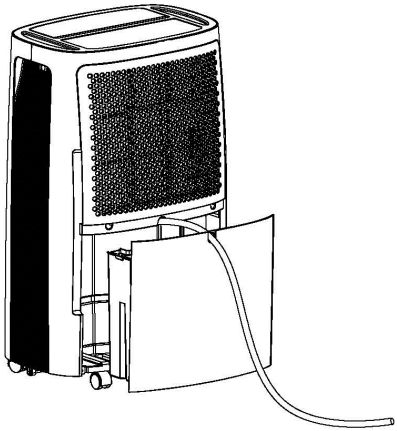
WATER DRAINAGE

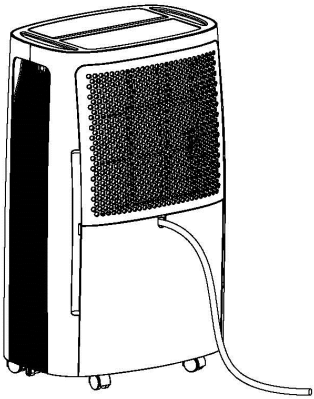
- The dehumidifier has an internal water tank to collect water that accumulates during the cooling process. This tank will need to be emptied periodically.
- When the internal water tank is full the unit will go into standby mode and the buzzer will sound 15 times.
- The water tank will need to be emptied before normal operation can be resumed.
- Lightly press on the sides of the tank with both hands and pull the tank out gently.
- Discard the collected water.
- Replace the drainage tank by pressing it into place firmly on both sides, and when correctly positioned, normal operation can resume.



CONTINUOUS WATER DRAINAGE

- The dehumidifier features a continuous drainage port. Using a plastic pipe (with an inner diameter of 10mm) inserted into the drain hole (on intermediate plate), and arrange the drain pipe through the cut out in the water tank front panel.
- The water in the drainage tank can be continuously drained from the continuous port on the unit into a suitable drain.





MAINTENANCE

Important: In order to avoid an electric shock, power-off the dehumidifier and disconnect the mains plug before performing any maintenance or repair activities.

Cleaning

- Unplug from the mains supply before cleaning.
- Do not splash water into the dehumidifier.
- Clean the outside of the dehumidifier with a damp, not wet, cloth and dry thoroughly before using.
- Do not use any chemicals, abrasives or solvents, which may damage the surface of the dehumidifier.

Filters

Clean the filters every two weeks. If the filters become blocked by dust, the efficiency of the dehumidifier will be reduced.

- Remove the air filters on the front of the unit.
- Run a vacuum cleaner lightly over the surface of the filters to remove dust.
- If the filters are exceptionally dirty wash them in warm water and a mild detergent and allow to dry thoroughly before refitting.

Note: Do not operate the air dehumidifier without the filters.

Long term storage
If the dehumidifier is not going to be used for a long time, please follow the steps below:

- Unplug the unit from the mains.
- Remove the internal water tank and empty it and replace it.
- Clean and dry the filters and then reinstall them.
- Put the dehumidifier back in its original carton and store in a cool, dry place.

FURTHER SAFETY INFORMATION

Information on servicing
- Checks to the work 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.

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.

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.

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.

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.

No ignition sources
- Any 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.

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:

1. The charge size is in accordance with the room size within which the refrigerant containing parts are installed.
2. The ventilation machinery and outlets are operating adequately and are not obstructed.
3. If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant.
4. Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be replaced.
5. 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 corrosion or are suitably protected against corrosion.

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:
  1. That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking.
  2. That there no live electrical components and wiring are exposed while charging, recovering or purging the system.
  3. That there is continuity of earth bonding.

Repairs to sealed components

- 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.
- 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.

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 searching for or detection of refrigerant leaks. A halide torch (or 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 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.

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:
    1. Remove refrigerant.
    2. Purge the circuit with inert gas.
    3. Evacuate.
    4. Purge again with inert gas.
    5. 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.

Charging procedures

- In addition to conventional charging procedures, the following requirements shall be followed.
    1. 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.
    2. Cylinders shall be kept upright.
    3. Ensure that the refrigeration system is earthed prior to charging the system with refrigerant.
    4. Label the system when charging is complete (if not already).
    5. Extreme care shall be taken not to overfill the refrigeration system.
    6. Prior to recharging the system it shall be pressure tested with OFN.
    7. 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.

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.
- Become familiar with the equipment and its operation.

- Isolate system electrically.
- Before attempting the procedure ensure that:
    1. Mechanical handling equipment is available, if required, for handling refrigerant cylinders.
    2. All personal protective equipment is available and being used correctly.
    3. Pump down refrigerant system, if possible.
    4. If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
    5. Make sure that cylinder is situated on the scales before recovery takes place.
    6. Start the recovery machine and operate in accordance with manufacturer's instructions.
    7. Do not overfill cylinders. (No more than 80 % volume liquid charge).
    8. Do not exceed the maximum working pressure of the cylinder, even temporarily.
    9. 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.
    10. Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

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.

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.

TROUBLESHOOTING

Trouble	Cause	Solution
Appliance does not work	• Power is off • Water tank is full • The ambient temperature is too low or too high	• Switch the power on • Drain internal water tank • Recommend to use the machine in at the temperature range of 7-35°C (44-95°F)
The dehumidifying function doesn't work	• Filters are too dirty • Is the intake duct or discharge duct obstructed?	• Clean the air filter. • Remove the obstruction from the discharge duct or intake duct.
Poor air discharge	• Air filter is dirty • Air intake is obstructed.	• Clean the air filter. • Check for obstructions.
Noisy operation	• Unit is not level	• Check the unit is stood level on a flat even surface.

TECHNICAL SPECIFICATION

	PELL0307	PELL0308
Main voltage	220-240V ~ 50Hz	
Rated input power	260W	325W
Power standby mode	0W	
Dehumidifying capacity	16L/24hr	20L/24hr
Air flow	120m³/h	
Sound power level	≤47dB(A)	
Refrigerant/charge	R290/75g	R290/80g
Fan speeds	2	
Recommended room floor area	16m²	20m²
Dimensions	342x251x561mm	
Weight	13kg Net / 16kg Gross	15kg Net / 17kg Gross

INFORMATION ON WASTE DISPOSAL FOR CONSUMERS OF ELECTRICAL & ELECTRONIC EQUIPMENT.

When this product has reached the end of its life it must be treated as Waste Electrical & Electronic Equipment (WEEE). Any WEEE marked products must not be mixed with general household waste, but kept separate for the treatment, recovery and recycling of the materials used. Contact your local authority for details of recycling schemes in your area.

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