

MeacoDry 25Lm Instruction Manual



MeacoDry 25Lm Dehumidifier

Please read this instruction manual before using the dehumidifier and keep safe for future reference.

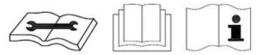
Thank you for choosing Meaco, we really appreciate it.



SAFTEY INFORMATION

This dehumidifier must not be used in rooms under the following conditions:

- Potentially explosive atmosphere
- Aggressive atmospheres
- Featuring a high concentration of solvents
- An extremely high ratio of dust



Keep Children Away: Do not allow children to play with or around this unit, which could result in injury. Be sure the unit is inaccessible to children when not attended. This appliance is not intended for use by person (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 appliances by a person responsible for their safety.

Keep Unit Grounded: Always operate the unit with a grounding plug and a grounded electrical outlet. A grounding plug is an essential safety feature that helps reduce the risk of shock or fire.

Protect Power Cord from Damage: Never operate a unit with a damaged power cord, as this may lead to electrical or fire hazards. If the power supply cord is damaged, it must be replaced by a cord of the same type and amperage rating.

Extension Cords: Extension cords must be grounded and able to deliver the appropriate voltages to the unit.

Handle with Care: Do not drop, throw or crash the dehumidifier. Rough treatment can damage the components or wiring and create a hazardous condition.

Run on Stable Surface: Always operate the unit on a stable, level surface, for example the floor or a strong counter, so that the dehumidifier cannot fall and cause injury.

Keep Out of Water: Never operate the unit in pooled or standing water, as this may create a risk of injury from electrical shock. Do not store or operate outdoors. If electrical wiring or components become wet, thoroughly dry them before using the unit. If in doubt do not use the dehumidifier and consult a qualified electrician or a Meaco approved engineer.

Do Not Let Water Drip onto the Dehumidifier: Dry your bathroom by placing the dehumidifier outside of the room with the bathroom door open. Do not use your dehumidifier inside the bathroom.

Keep Air Intakes Clear: Do not clog or block the air intakes by placing the dehumidifier too close to curtains, walls or anything that will restrict the air inlet. This may cause the unit to overheat and result in a fire or electrical hazard.

Keep the Filter Clean: There is a filter on the air inlet to stop dust from getting inside the dehumidifier. If you allow the dust and dirt to build up on the filter, pressure on the fan motor will be increased and you will reduce the amount of water extracted from the air. Not cleaning the filter reduces the lifespan of the dehumidifier, increases energy consumption and decreases water extraction. Please examine and clean the filter every two weeks minimum.

Keep Electrical Components Dry: Never allow water inside the dehumidifier's electrical components. If these areas become wet for any reason, thoroughly dry them before using the dehumidifier. If in doubt, do not use the dehumidifier and consult a qualified electrician or a Meaco approved engineer.

The operator must make the operating instruction available for the user and make sure that the user does understand the manual.





The Meaco 25Lm Dehumidifier uses the new R290 refrigerant gas to comply with European Environmental Directives. R290 is kinder to the environment and is part of attempts to reduce global warming as it has a low greenhouse effect (GWP).

When using the Meaco 25Lm Dehumidifier you must take into account the following:

- This dehumidifier uses about 150 grams of R290 refrigerant which is flammable, therefore it is part of a sealed system and must only be serviced by a trained Meaco engineer.
- Do not use or store this dehumidifier in a room smaller than 4m² to prevent a fire or explosion hazard if there is a leak of refrigerant and the gas comes into contact with an ignition source.
- Do not use in a room with any continuous sources of ignition, for example open flames, gas fires or hobs, cigarettes or any other sources of ignition.
- Do not sure means to accelerate the defrosting process or to clean, other than those recommended by a trained Meaco engineer.
- If the dehumidifier is installed, operated or stored in a non-ventilated area, then 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 an operating electric heaters, operating gas appliances or other sources of ignition.
- R290 refrigerant gas is odourless.
- Do not puncture or burn either during the units working life or after. At the end of life dispose of following local recycling regulations.
- If there is any damage to the unit then do not use it and contact Meaco or your retailer.
- As with all dehumidifiers, always keep upright and leave the dehumidifier standing upright for 3-4 hours before using it upon receipt.



Failure to comply with these instructions could result in fire, damage to property, serious injury or potentially death.

Individuals who operate or work on the refrigerant circuit must have the appropriate certification issued by a national accredited organisation that ensures competence in handling flammable refrigerants according to a specific evaluation recognised by national associations in the industry and compliant with the latest R290 guidance.

Servicing should only be carried out by a Meaco approved engineer using original Meaco parts to prevent damage to the unit and potential injury to the engineer.



WIRING INSTRUCTIONS

Should it be necessary to change the plug, please not the wires in the mains lead are coloured in accordance with the following code:

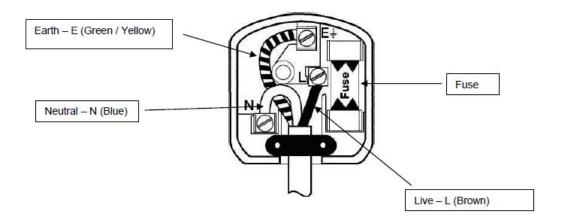
BLUE – NEUTRAL BROWN – LIVE GREEN AND YELLOW – EARTH

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

- 1. The **BLUE** wire is the NEUTRAL and must be connected to the terminal which is marked with the letter N or coloured **BLACK**.
- 2. The BROWN wire is the LIVE and must be connected to the terminal which is marked with the letter L or coloured RED.
- 3. The GREEN/YELLOW is the EARTH and must be connected to the terminal which is marked with the letter E or coloured GREEN or GREEN/YELLOW.
- 4. Always ensure that the cord grip is positioned and fastened correctly.
- 5. Only ever use the same fuse as fitted in the original product, if in doubt please contact Meaco first, or a qualified electrician.

Example wiring for a Standard British Plug:

Please note: The Earth Terminal is marked with the letter E or Earth Symbol 🖃.





GENERAL ADVICE

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- Before putting your dehumidifier into operation for the first time, the instruction manual should be studied carefully.
- After receiving the unit, you should check your dehumidifier for any transport damage. In case of damage, you should inform the sender immediately.
- Store the dehumidifier box and packaging in a safe place this will be required if the dehumidifier requires a service in the future. In order to save space, you can simply cut through the adhesive tape using a knife and fold up the cardboard box.

DEHUMIDIFIER PRINCIPLES

This dehumidifier is designed to reduce humidity from the air in a building or part of a building. The purpose is to prevent humidity damage and to dry out wet materials such as carpet, floors, walls, furniture, contents, timber and structural materials.

This dehumidifier can prevent the formation of condensation, reduce air humidity and keep constant a desired relative humidity level. The time necessary for the dehumidifier to dry a room and reach the desired humidity level depends on the environmental conditions prevailing within the room. For example, the number of air changes with outside air, any sources of moisture and the room temperature can all either speed up or slow down the dehumidification process.

The dehumidifier functions according to the condensation principles with heat recovery. The fan takes the humid air from the room, in and across a filter, and then through an evaporator. Here the air is cooled below dew point, so that the water vapour of the air forms a condensate on the coils, which flows into the internal container ready to be poured away. The cooled and dried air is heated again by a condenser. By recycling the room air through the dehumidifier repeatedly, the moisture content and relative humidity of the air is reduced.

INSTALLATION AND TRANSPORTATION

For installation and transportation, the following instructions must be considered:

- > Before using the dehumidifier, leave it to stand upright for 4 hours.
- Plug the unit directly into a wall socket and it will automatically switch on into Standby Mode.
- Ensure there is at least 30cm of space around the unit to enable adequate air flow. The air inlet and the air outlet must not be covered whilst the dehumidifier is in operation.
- Make sure the water tank is securely in place. The unit will not switch on unless the water tank is secure.
- If you need to move the dehumidifier, it must be switched off by its ON/OFF switch on the unit. The mains plug must be removed from the socket and the water tank should be emptied.
- For transportation, the dehumidifier should be secured on a level base only and must be prevented from rolling around.
- ➤ The dehumidifier must always be transported vertically if the dehumidifier has been in a horizontal position for any time over a few minutes, you must let it stand in the upright position for at least 30 minutes before operating. This allows the oil to drain back into the compressor.



CONTROL PANEL

The unit is equipped with an electronic control board:



POWER

The blue LED indicates when the unit is connected to the mains.

SETPOINT

The green LED indicates when the unit has reached the target humidity level e.g. 60%rh, 50%rh or 40%rh. If the unit is set to run in 'Continuous Mode', this LED will not show as there is no target humidity level.

WATER TANK FULL

The yellow LED indicates when the water tank is full. When the water tank is full the unit will switch off. Once the water tank has been emptied and placed securely back in the unit, it will start to run again as per its previous settings.

ALARM LIGHT

The red LED indicates when there is a fault with the machine. If this light shows, please contact Meaco.

LED BAR

The LED bar will light up red to indicate which mode the dehumidifier has been set to. For example, if the LED bar is showing one red line the unit is currently in 'Standby Mode', if the LED bar is showing two red lines the unit is currently in 'Continuous Mode', if the LED bar is showing three red lines the unit is set to reach a target humidity level of 40%rh and so on.



HUMIDITY CONTROL

60%rh

Setting the unit to reach a target humidity level of 60% means the unit will run until it reaches 60%rh (plus or minus 3%rh). Once the target humidity has been met, the compressor will turn off but the fan will continue to run. If the humidity level increases above 60%rh, the compressor will then come back on and start to collect water again.

50%rh

Setting the unit to reach a target humidity level of 50% means the unit will run until it reaches 50%rh (plus or minus 3%rh). Once the target humidity has been met, the compressor will turn off but the fan will continue to run. If the humidity level increases above 50%rh, the compressor will then come back on and start to collect water again.

40%rh

Setting the unit to reach a target humidity level of 40% means the unit will run until it reaches 40%rh (plus or minus 3%rh). Once the target humidity has been met, the compressor will turn off but the fan will continue to run. If the humidity level increases above 40%rh, the compressor will then come back on and start to collect water again.

Continuous

Setting the unit to continuous mode means the unit will continue to dehumidify and reduce the humidity level regardless of the humidity level in the environment. The unit will not stop unless it is manually turned off.

Standby

Setting the unit to standby mode means the unit is powered but not running at all. The fan and compressor will not run.



OTHER FUNCTIONS

AUTOMATIC DEFROSTING SYSTEM

During normal dehumidifying operation, ice may form on the evaporator. This dehumidifier is equipped with an automatic hot-gas defrosting system, if ice is detected by the temperature sensor, it will defrost automatically according to the following principle:

- A temperature sensor measures the condition existing in the critical area of the evaporator.
- It transmits an electrical signal to the main electronic board. It has been designed to avoid frequent defrost cycles and consequent loss of efficiency.
- The relay switches off the fan and simultaneously opens the solenoid value.
- Hot gas is guided into the evaporator until the latter is completely free of ice.
- Subsequently, the dehumidifier will operate again in its normal mode when the temperature sensor measures +7 degrees.
- The time between defrost cycles is 20 minutes every time the unit resumes normal operation.

WATER TANK

This dehumidifier is supplied with a water tank. During normal operation the unit will collect water in the tank, ceasing operation when the tank is full. Once the tank is full, the respective yellow LED on the control panel will indicate the tank needs emptying. In order to empty the water tank, remove the tank from the unit and empty the water. The collected water can be used to water non-edible house hold plants, it cannot be consumed. There is a float in the tank which monitors the level of water collected, it is essential the float is always inserted correctly and never removed.

CONTINOUS DRAINGE OPTION 1 (via gravity)

A hose can be fitted to the unit in order to enable continuous drainage via gravity. The hose required needs an internal diameter of 14mm. For continuous drainage via gravity proceed as follows:

- Set the unit to Standby Mode and disconnect the mains plug from the socket.
- Remove the water tank from the unit and remove the bung located at the bottom of the water tank.
- Fasten the continuous drainage hose adaptor (barb fitting) at the bottom of the water tank.
- Attach a 14mm diameter hose to the continuous drainage hose adaptor (barb fitting).
- Insert the water tank back into the unit, plug the unit into the mains and set the desired target humidity level or Continuous Mode.
- The unit must be raised, and the hose must be positioned directly downhill with no kinks, bends or blockages in order to allow water to drain downwards via gravity.



CONTINOUS DRAINAGE OPTION 2 (via a pump)

A pump can also be used to enable continuous drainage. Please note the pump is not included and can be purchased separately via www.meaco.com. The hose required needs an internal diameter of 8mm. For continuous drainage via a pump proceed as follows:

- Set the unit to Standby Mode and disconnect the mains plug from the socket.
- Remove the water tank from the dehumidifier and empty any water which may have been collected.
- Fit an 8mm diameter hose, with the desired length, onto the water outlet of the submersible pump and make it pass through the panel cut-out hole of the housing, placing the pump in side the tank afterwards.
- Plug in the pump to the pump socket located beneath the water pan in the centre and insert the water tank back into the unit.
- Extend the hose to the desired drainage point. NOTE: The maximum water column height our pump kit handles is 4 metres (elevation always depends on the pump used).
- Plug the unit into the mains and set the desired target humidity level or Continuous Mode.
- Test the pump is working correctly by adding water to the water tank until you are able to see water is being pumped out of the water tank and draining through the attached hose.

MEMORY FUNCTION / AUTO RE-START

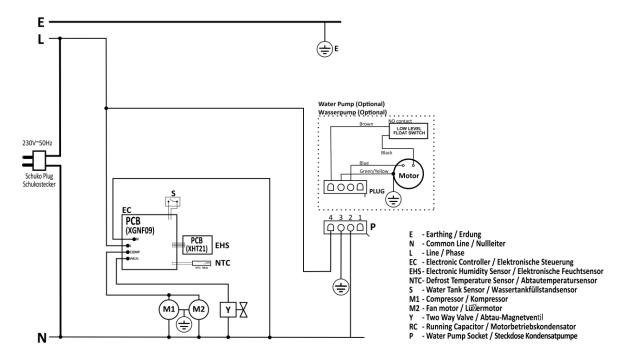
When the dehumidifier is switched off, either by the mains or via a power cut, when turned back on the dehumidifier will continue to run in the same settings it was previously running on.

If you wish to reset the dehumidifier to its factory default settings switch the dehumidifier off using the mains button, unplug it from the mains, wait a few minutes, plug it back into the mains and then switch the unit back on using the mains.

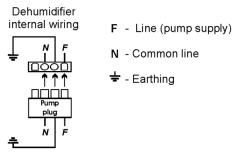


ELECTRIC DIAGRAMS

DEHUMIDIFIER ELECTRIC WIRING



PUMP CONNECTION WIRING



In case of using a water condensates pump it must be connected to the socket located underneath the water pan of the dehumidifier, and only then it is possible to switch it on again.

The water pump is supplied by the ${\it F}$ and ${\it N}$ wirings.

As the condensates start to flow into the bucket and the pumps first float is activated, the pump starts to pump out the water. If somehow the hose gets clogged the water level will start to rise until the bucket float with the magnetic moves away from the level sensor, due to the rising of the water level, making the dehumidifier to stop by full bucket detection and consequently lighting up the full bucket led, which will force the user to check the bucket.

OBS.: PUMP WIRING MUST BE CONNECTED ACCORDING TO THIS ELECTRIC WIRING DIAGRAM!



MAINTENANCE

Always turn off the power and disconnect the main cable before performing maintenance procedures.

INSPECT ELECTRICAL SYSTEM

• Inspect the electrical cord for damage at regular intervals.

CLEANING THE EXTERIOR

• Clean the exterior with a soft, dry cloth. If the device is extremely dirty, use a mild cleaning agent or wipe the dehumidifier with a slightly damp cloth. Never spray the device with water.

CLEANING THE FILTER

When used regularly, the filter may become clogged with dust and dirt particles. The filter must be cleaned a minimum of every two weeks (not doing so could invalidate the units' warranty). Please use the following steps:

- Remove the filter.
- Clean both sides of the filter with the end of a hoover or soapy water no hotter than 40°C. Rinse and dry completely before inserting back into the dehumidifier.

STORAGE

If the machine will not be used for a long period of time, take the following steps:

- 1. Remove the plug from the socket and empty the water tank. Allow the water tank and the dehumidifier to dry completely, this can take a couple of days.
- 2. Clean the filter and store the device in a dust-free location away from direct sunlight, preferably covered with a sheet of plastic.



SPECIFICATIONS

ELECTRICAL CONNECTIONS

This dehumidifier is designed to operate in a 230V~50Hz electrical installation. Make sure that the electric sockets are connected to earth and that all safety precautions are taken.

OPERATING CONDITIONS

This dehumidifier can be operated within an ambient temperature range from +5°C to +32°C, and with a relative humidity from 35%rh to 90%rh. It is suitable for applications residential buildings, offices, museums, archives, garages and storage rooms.

Temperature Range		+5 °C / +32°C
Relative Humidity Range		35% - 90%rh
Rated Voltage		230V / 50Hz
Defrosting System		Hot gas
Tank Size		5 litres
Power Consumption at 32°C and 80%rh		570W
Refrigerant		R290 / 150g
Drying Capacity (L/24H)	32°C and 80%rh	25 litres per day in Continuous Mode
	20°C and 60%rh	12 litres per day in Continuous Mode
	10°C and 60%rh	5 litres per day in Continuous Mode
Dehumidifier Dimensions (mm)		660 x 405 x 425
Nett / Gross Weight (kgs)		25Kgs



TROUBLESHOOTING

SYMPTON	CAUSE	SOLUTION
Unit does not operate	There is no power to the unit.	Plug in the unit and check the power outlet.
	The ON/OFF button has not been pressed.	Press the ON/OFF button.
	Ambient temperature is lower than +5°C.	Under this condition the dehumidifier becomes inefficient. It is recommended to switch off the dehumidifier.
Unit does not dehumidify or collects little water	Ambient temperature exceeds 32°C.	Under this condition the compressor is overloaded and switches off automatically. It is recommended to switch off the dehumidifier.
	The ambient air humidity is lower than 35%rh.	Under this condition the dehumidifier becomes inefficient and little water will be collected.
	The air filter is dirty and blocked.	The air filter must be cleaned. If the air filter is beyond cleaning, it must be replaced.
	Below the relative humidity set point.	This is normal and is not a fault.
	The dehumidifier has just turned on.	Wait three minutes for the compressor to start up.
The compressor is not on	The overload protector is defective.	Please contact Meaco.
The fan will not turn on	The machine is in Standby Mode.	Turn the machine on by using the UP and DOWN arrows.
	The fan is not running.	Please contact Meaco.



The unit is continuously in defrost and you can see an	The room temperature is lower than +5°C.	Make sure that the device is being used in an environment of 5°C and above.
ice block on the evaporator	Defective control assembly.	Please contact Meaco.
The unit does not defrost	Defective bypass relay valve.	Please contact Meaco.
	Defective control assembly.	Please contact Meaco.
	Defective bypass relay valve.	Please contact Meaco.

If you need to contact Meaco, please use the contact details below.

Contact Number: 01483 234900

Contact Email: customerservice@meaco.com / service@meaco.com

Live Chat: www.meaco.com



WARRANTY AND CUSTOMER SERVICE

There is a two-year manufacturer's warranty on your dehumidifier from the date of purchase. Please register your purchase at https://meaco.com/warranty-register - as a thank you, you will be entered into our monthly free prize draw to help support the David Shepard Wildlife Foundation. Registering also allows us to keep you update with any important developments concerning your product.

Within the two-year manufacturer's warranty, all manufacturing defects will be repaired free of charge (excluding damage to the units' filter and water tank which can be subject to wear and tear).

The following applies:

- 1. Any repairs or replacement of components during the warranty period will not result in an extension of the warranty period.
- 2. The warranty will expire if any alterations have been made, not genuine components have been fitted or if the dehumidifier has been repaired by a third party.
- 3. Components subject to normal wear and tear are not covered by the warranty.
- 4. The warranty is only valid on presentation of the original, unaltered, and date-stamped purchased receipt.
- 5. The warranty does not cover damage caused by actions that deviate from those as described in the user's manual or by neglect.
- 6. The warranty does not cover faults caused by dirt or by third-party products.
- 7. The warranty does not cover accidental damage.
- 8. All claims for compensation, including consequential damage, will not be entertained.
- 9. Using a third-party switching device that turns the dehumidifier on or off via the mains will invalidate the warranty.

To prevent unnecessary expenses, we recommend that you always carefully read the user's manual first. If this does not provide a solution, please call Meaco and we will be happy to help.

This dehumidifier has been imported into the UK by:

Meaco (UK) Limited Meaco House Parklands Railton Road Guildford GU2 9JX

Telephone: 01483 234900 Fax: 01483 232700

Email: service@meaco.com Website: www.meaco.com Please record, for future reference, your date of purchase and where you bought the dehumidifier from here.

Date of purchase:

Purchased from www.meaco.com (if not, then please record the supplier's name below).

Suppliers name:

If your dehumidifier develops a fault at any time, please contact us and we will always try and help you as best we can.

Please keep hold of the original box and packaging your unit arrived in just in case we need to collect the dehumidifier from you for a repair/service in the future.





This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.

