

Meaco 60L Building Dryer



Thank you for choosing Meaco, we really do appreciate it

INSTRUCTION MANUAL [EN] 60L



SAFETY INFORMATION

ATTENTION

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.

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 voltage 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.

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 Filter Clean: Always use a clean air filter. Do not allow any material to clog the filter, as this may cause the dehumidifier to overheat. Never use without a filter. Always check, and if necessary, clean the filter before switching the dehumidifier on. Do not allow oil, grease, or other contaminants to be drawn into the dehumidifier. Do not clean the dehumidifier with organic solvents.

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.



Wiring Instructions: Should it be necessary to change the plug please note 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**.

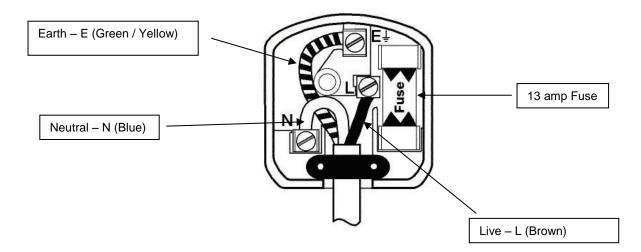
3. The **GREEN/YELLOW** is the **EARTH** and must be connected to the terminal which is marked with the letter **E** or coloured **GREEN** OR **GREEN/YELLOW**.

4. Always ensure that the cord grip is positioned and fastened correctly.

If a 13A (BS1363) fused plug is used it must be fitted with a 13A fuse. If in doubt consult a qualified electrician.

Wiring for a 13Amp Plug (BS1363)

Please note. The Earth Terminal is marked with the letter **E** or Earth Symbol \bigoplus .





1. GENERAL ADVICE

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.

Keep the packaging for the dehumidifier in a safe place in order to be able to despatch the dehumidifier safely if it requires a service. In order to save space, you can simply cut through the adhesive tape using a knife and fold up the cardboard box.

2. 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 value. The time necessary for the dehumidifier to dry a room and reach the desired relative humidity depends on the environmental conditions prevailing within the room. For example the number of air changes with outside, 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 principle 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 pump ready to be automatically drained away. The cooled and dried air is heated again by a condenser. By recycling the room air through the dehumidifier over and over again the moisture content and relative humidity of the air is reduced.

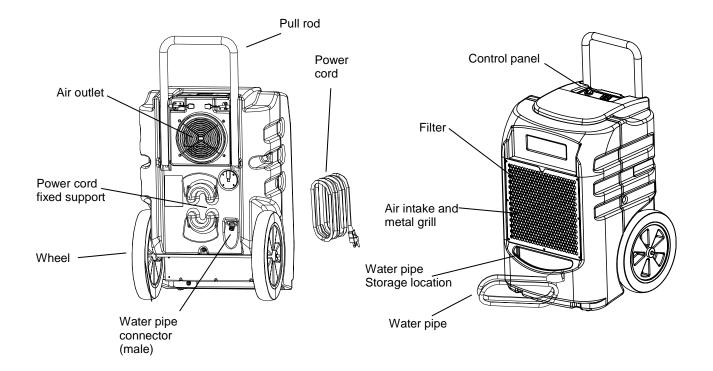
3. INSTALLATION AND TRANSPORTATION

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

- \Rightarrow The air inlet and the air outlet must not be covered whilst the dehumidifier is in operation.
- ⇒ Before any moving the dehumidifier it must be switched off by its ON-OFF switch. The mains plug is to 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.
- ⇒ This dehumidifier must be used exclusively for air dry.
- ⇒ 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.

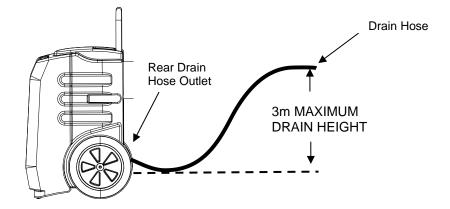


4. PRODUCT INDENTIFICATION



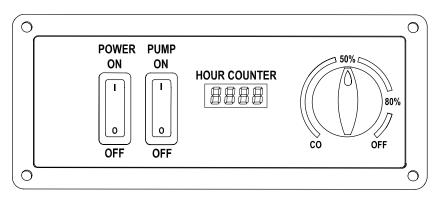
5. CONDENSATE OUTLET

This dehumidifier contains a built-in pump that connects to a drainage hose which is stored in the front of the unit. Uncoil the entire hose to ensure that there are no kinks or restrictions and place the unattached end into a drain or run to the outdoors. Ensure that water piped to the outdoors does not create a slipping hazard. To avoid damaging or overworking the pump, do not exceed a 3m vertical lift height between the pump and drain.





6. CONTROL PANEL



- ⇒ **POWER ON/OFF**: Press the red switch to turn the unit ON or OFF. The indicator lamp will illuminate when the power is turned on.
- ➡ PUMP ON/OFF: Press the PUMP ON black switch to empty water from the pump reservoir. During normal operation the pump purges automatically when the reservoir is full. Press PUMP ON black switch before moving the machine to avoid water spillage. The pump will close automatically after forty seconds continuous operation.
- ⇒ **HUMIDITY CONTROL**: Adjustable humidity control between OFF-80%-50%-CO.

"OFF" the dehumidifier is turned off.

"CO" the dehumidifier will operate continuously regardless the ambient humidity level.

⇒ BBB Non-resettable hour counter tracking the number of hours that the dehumidifier has been running for in total.

7. OPERATION

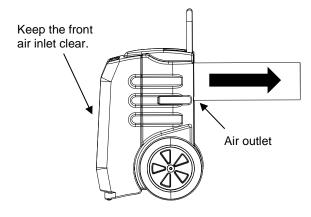
- Plug in electrical cord: This dehumidifier must be plugged into a grounded polarized 220~240 VAC/50Hz outlet rated at least 15 amps. Make sure the drain hose is connected and routed to a safe location.
- ⇒ **Turn the unit on:** Press the "**POWER ON**" switch to turn the unit on. The unit will start to work if the room relative humidity is greater than the level that the rotary dial is set to or if the dial is set to Continuous.
- ⇒ **Turn the unit off:** Press the "**POWER OFF**" switch to turn the dehumidifier off. The water pump will turn on automatically for 40 seconds to drain the residual water in the dehumidifier.
- ⇒ Humidity Setting:
- Turn the humidity control to CO (Continuous), the dehumidifier operates continuously regardless the room humidity level.
- Turn the humidity control to the desired humidity level, the dehumidifier will start operate when the room humidity above the setting level.
- When the target relative humidity has been reached the dehumidifier will stop. It is automatically restart when humidity level above setting.
- If the relative humidity is stable then the dehumidifier goes to sleep for 30 minutes after which it will wake up and sample the air with just the fan running for 1 minute so that the relative humidity sensor can tell the system when to start collecting water again, but if the relative humidity remains below the target then the dehumidifier will go to sleep again.

IMPORTANT:

To avoid water spillage. Do not move the dehumidifier for at least three minutes after turning the power off. Before transporting, be sure to remove the external drain hose, drain it carefully, and return it to the pocket provided on the front of the unit.



8. ATTACHING DUCTING



A maximum of 5m of 170mm ducting can be attached. Run the ducting straight and avoid bends and kinks.

9. AUTOMATIC DEFROSTING SYSTEM

This dehumidifier is equipped with an automatic hot-gas defrosting system. When operating in low temperatures the surface of the evaporator will accumulate frost and this will affect the efficiency of the dehumidifier. When this happens the machine will go into periodic defrosting automatically. Defrost time may vary. It is not recommended to use the dehumidifier in temperatures below $5^{\circ}C$

10. ELECTRICAL CONNECTIONS

This dehumidifier was 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.

11. OPERATING CONDITIONS

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



12. SPECIFICATIONS

| Model | | Meaco 60L |
|------------------------------|----------------|---------------------------|
| Temperature Range | | +5 °C / +35°C |
| Relative Humidity Range | | 35% - 90%rh |
| Defrosting System | | Hot gas |
| Air flow | | 510 cubic metres per hour |
| Rated Voltage | | 220 - 240V / 50Hz |
| Power Consumption | | 780 watts |
| Refrigerant | | R410A / 640g |
| Drying | 26.7ºC – 60%rh | 35 litres |
| Capacity | 30ºC – 80%rh | 60 litres |
| (L/24H) | 32ºC – 90%rh | 65 litres |
| Dehumidifier Dimensions (mm) | | 500 x 455 x 705 |
| Box dimensions (mm) | | 570 x 480 x 720 |
| Nett / Gross Weight (Kgs) | | 38 / 41 |
| Hour Counter | | Yes |



13. TROUBLESHOOTING

| Trouble | Cause | Solution |
|---|--|--|
| Unit does not operate | No power to the unit | Plug in the unit; check power at outlet |
| | Switch not turned ON | Turn ON the switch |
| | Ambient temperature is lower than +5°C | Under this condition the dehumidifier becomes inefficient. It is recommended to switch off the dehumidifier |
| Doesn't dehumidify | Ambient temperature exceeds 35°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 45%rh | Under this condition the dehumidifier becomes inefficient. It is recommended to switch off the dehumidifier |
| | The air filter is dirty and blocked | The air filter must be exchanged |
| | Not enough time to dry | Allow more time to dry |
| Compressor will not start | Overload protector is defective | Contact a Meaco approved workshop. |
| | Running capacitor is defective | Contact a Meaco approved workshop. |
| The fan is out of operation | The dehumidifier is running a defrost cycle | The dehumidifier will switch on the fan automatically after some minutes. If not, the malfunction must be repaired by a Meaco approved workshop. |
| | Fan not running | Contact a Meaco approved workshop. |
| | Defective control assembly | Contact a Meaco approved workshop. |
| Unit continuously in defrost and you can see an ice block on the evaporator | The room temperature is lower than +5°C | Assure that the device is only set up in rooms with temperatures above +5°C. |
| | Defective bypass relay valve | Contact a Meaco approved workshop. |
| | Defective temperature sensor | Contact a Meaco approved workshop. |
| Unit does not defrost | Defective control assembly | Contact a Meaco approved workshop. |
| | Defective bypass relay valve | Contact a Meaco approved workshop. |
| | Switch not turned ON | Turn ON the switch. |
| Time counter does not run | Defective time counter | Contact a Meaco approved workshop. |



14. MAINTENANCE

Always turn off the power and disconnect the main cable before performing maintenance procedures. All service procedures below are to **be executed with the unit unplugged**. Perform before each use or as needed.

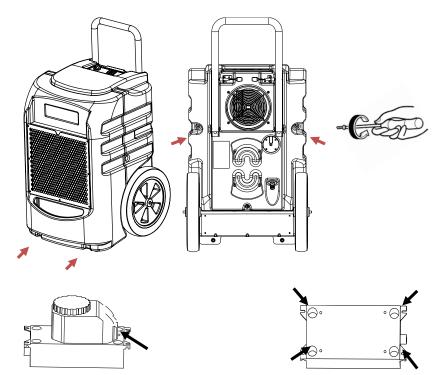
INSPECT ELECTRICAL SYSTEM: Inspect the electrical cord for damage at regular intervals.

The working performance of the dehumidifier will be greatly reduced if the filters are blocked with dust. Check the filter at least weekly. Cleaning or replace the filter if it gets clogged.

- 1. Remove the filter as shown.
- 2. Vacuum any debris from the filter.
- 3. Using lukewarm water and a mild detergent wash the filter and allow to dry.
- 4. Once dry, re-install the filter into the dehumidifier.

The item 2, 3 refer only to washable filters.

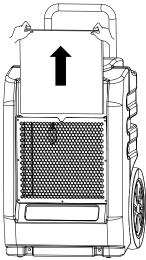
15. CLEANING THE WATER PUMP



NOTE: Clean the water pump every 1000 hours running time.

Ensure the dehumidifier is turned OFF and the plug is removed from the power outlet before performing maintenance.

- 1. Remove four screws to remove the front housing of the dehumidifier.
- 2. Pull the water pipe to access the water pump.
- 3. As per the above diagram on the left remove the one screw to remove the top cover.
- 4. As per the above diagram on the right remove the four screws to remove the bottom cover.
- 5. Clean the water pump.
- 6. Re-install by reversing the above instructions.



16. STORAGE

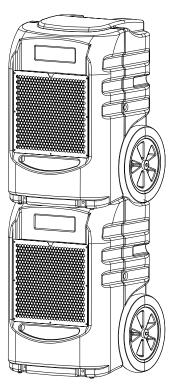


Follow the guidelines below when storing the unit:

- 1. Prior to storing the unit, clean the filter and drain the water from the unit.
- 2. Wind the power cord to the back of the unit.
- 3. Put the water pipe to the water pipe storage location in the front of the unit.
- 4. If necessary, stack machines as shown.

NOTE:

Do not stack more than 2 machines high. Be sure to secure the machines to ensure they do not fall or move.





17. WARRANTY AND CUSTOMER SERVICE

There is a two year warranty on your dehumidifier from the date of purchase. Please register your warranty at <u>www.meaco.com</u>, as a thank you we will enter you into our monthly free prize draw.

All material or manufacturing defects will be repaired free of charge.

The following applies:

- Any repairs or replacement of components during the warranty period will not result in an extension of the warranty period.
- 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.
- Components subject to normal wear and tear, such as the air filter, are not covered by the warranty.
- The warranty is only valid on presentation of the original, unaltered, and date-stamped purchase receipt.
- The warranty does not cover damage caused by actions that deviate from those as described in the user's manual or by neglect.
- The warranty does not covered faults caused by dirt of third party products.
- The warranty does not cover accidental damage.
- All claims for compensation, including consequential damage, will not be entertained.

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

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 appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

| Meaco (U.K.) Limited Meaco House | | Please record, for future reference, your date of purchase and where you bought the dehumidifier from here. |
|--|--|---|
| Parklands | | |
| Railton Road Guildford GU2 9JX | | Date of purchase |
| Telephone: Email: Website: Fax: | 01483 234900 <u>sales@meaco.com</u> <u>www.meaco.com</u> 01483 232700 | Purchased from <u>www.meaco.com</u> (if not then please record the supplier's name below). |
| | | |

Meaco are specialists in dehumidifiers and would welcome your comments and questions on this dehumidifier. If you do develop a fault within the first year then please do call us and if we cannot fix the problem over the phone we will be happy to collect the dehumidifier from you at our expense and repair or replace as appropriate.

Please save the box just in case this happens.

Meaco 11/17 - version 1.1