

# **Meaco Wall Mounted Dehumidifiers**

MeacoWall 53B/W MeacoWall 72B/W MeacoWall 103B/W

Please read the manual before installation.

INSTRUCTION MANUAL [EN]

MeacoWall Series



#### 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 or chemicals
- · A high ratio of dust
- · Outside of the defined temperature ranges

**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 the Unit Grounded**: The unit must be installed to a grounded supply in **ALL** applications by a qualified electrician.

If the unit is to be installed in to a wet area (i.e. a swimming pool) please ensure that the mains connections meet the criteria set out in section 602 of BS7671 other equivalent local regulation (non-UK)

**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:** This is not a suitable product to use with an extension lead, only use a fused spur.

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

**Mount on Level Surface:** Ensure that the wall for mounting is level and true to avoid leakage and additional vibration from the compressor. **Always secure the dehumidifier to a wall**.

**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 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.



# **Electrical Installation**

	53L	72L	103L
Rated Voltage		220 - 240V / 50Hz	
Power Consumption (kW)	0.93	1.13	1.97
Running current (amps)	4.1	5.0	8.7
Start-up current (amps)	4.3	5.85	10

The unit must be installed to a grounded supply in ALL applications

If the unit is to be installed in to a wet area (i.e. a swimming pool) please ensure that the mains connections meet the criteria set out in section 602 of BS7671 other equivalent local regulation (non-UK)

This unit is supplied without a plug and is expected to be connected to s fused spur by a qualified electrician following local regulations and laws. Please make reference to the unit's start-up voltage before connecting to a power supply.

All units are supplied with a 3 metre 16 amp cable.



#### 1. FIRST THING TO DO

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.

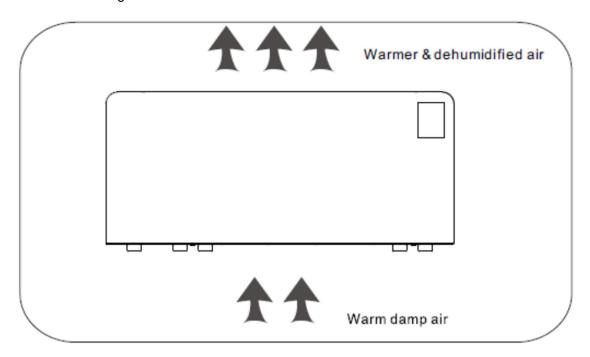
#### 2. DEHUMIDIFIER PRINCIPLES

This dehumidifier is designed to reduce humidity from the air in a building or part of a building. The purpose is to help dry laundry, prevent condensation, mould, musty air and other issues associated with high relative humidity.

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 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 over and over again the moisture content and relative humidity of the air is reduced.

Always try to avoid installation in direct sunlight as this will affect the accuracy of the relative humidity reading that the dehumidifier will be using for control.





#### 3. WHAT IS IN THE BOX

Fig.1

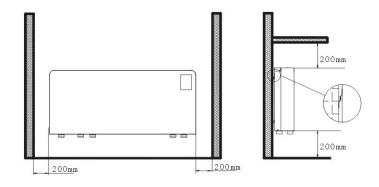
Main unit	Wall suspension bar	Manual	Expansion bolts
		COMMISSION OF THE PARTY OF THE	THE THE

#### 4. INSTALLATION AND TRANSPORTATION

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

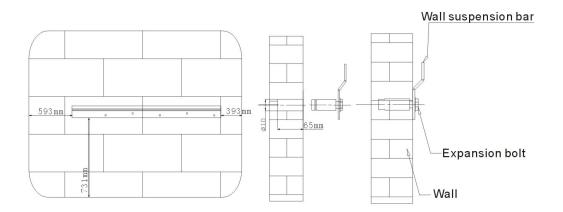
- The air inlet and the air outlet must not be covered whilst the dehumidifier is in operation.
- Before moving the dehumidifier it must be switched off by its ON-OFF switch. The dehumidifier must be disconnected at its fused spur and excess water should be drained.
- For transportation the dehumidifier should be secured on a level base only and must be prevented from rolling around.
- The dehumidifier must always be transported vertically.
- The dehumidifier must always be secured to the wall. Make sure that the wall that it is being fixed to is strong enough to support the weight.
- This dehumidifier must be used exclusively for drying the air.
- \_ 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 24 hours before operating. This allows the oil to drain back into the compressor.
- When installing in a wet area like a swimming pool room always make sure that you are complying with local electrical and safety regulations.

#### **Minimum Installation Distances**





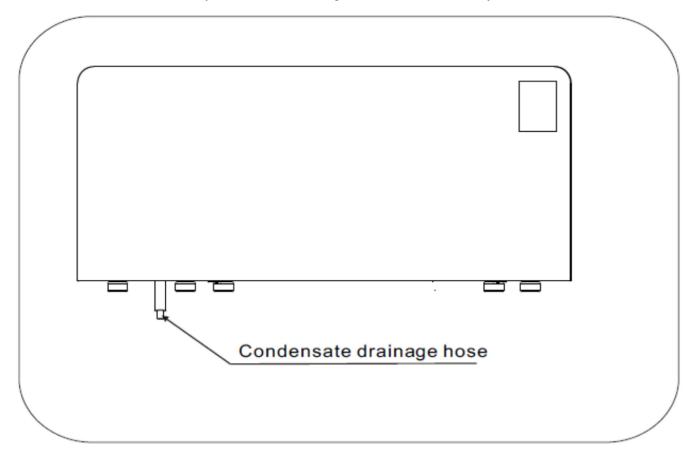
Using the enclosed drills five holes for the wall mounting bracket and secure using the expansion bolts. The wall must be true and the bracket level or water will leak from the dehumidifier.



#### 5. CONTINUOUS DRAINAGE

This dehumidifier is designed to be connected to a permanent drain via a 16mm hose. Make sure that the drain connection is running downhill and does not have any kinks or blockages.

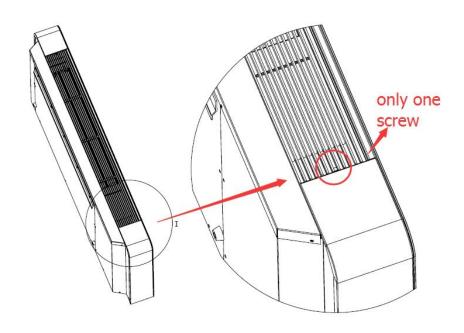
As standard the hose is fitted ready to come out of the right of the dehumidifier as you look at it from behind.





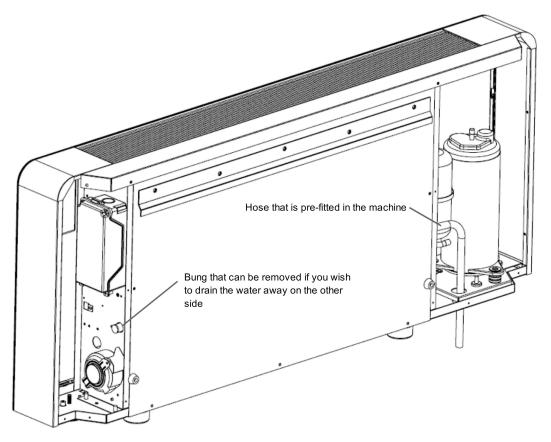
If you wish to move the drain to the other side then you can do so by removing the side covers.

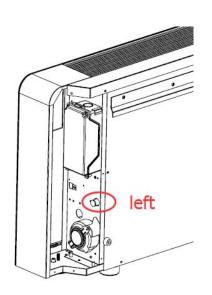
# This should only be done by a qualified electrician and only when the unit's power supply has been turned off and isolated.

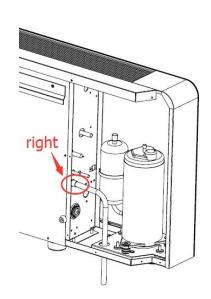


Remove the one screw as per above to access the side panels.





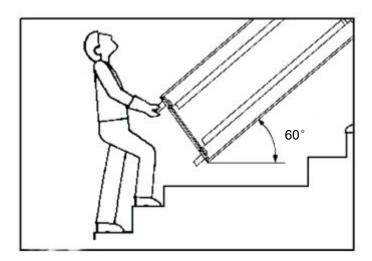




Connect the condensate hose (16mm diameter) and ensure that the water is flowing downhill with no kinks or blockages. You have the choice of fitting the drain on the right or left side. The hose on the right is pre-fitted, if you wish to change to left then remove the bung from the left and swap it with the hose on the right.

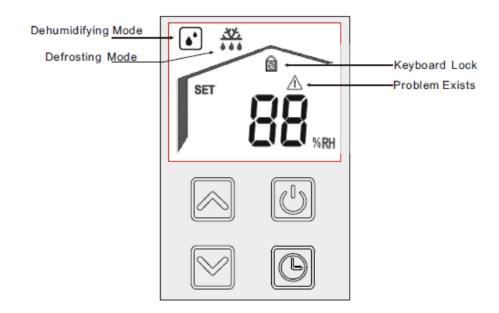


Please keep the dehumidifier upright at all times prior to installation. If the dehumidifier is inclined greater than 60 degrees then the dehumidifier should only be turned on 24 hours after it has been installed.





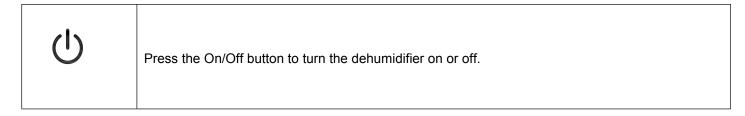
# 6. CONTROL PANEL AND USING THE DEHUMIDIFIER

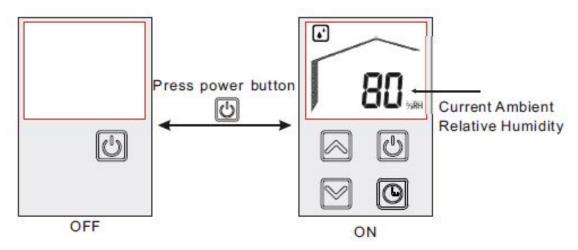


When you turn the dehumidifier on the display will show 88 and then the program version number for ten seconds. This is to allow the relative humidity sensor to sample the air and to take a reading.

The display will dim after 90 seconds of no keys being pressed.

#### Turning the dehumidifier On or Off







#### **Child Lock**



Press the On/Off button for 5 seconds to lock the control panel. Repeat to deactivate.

#### Checking the relative humidity set point

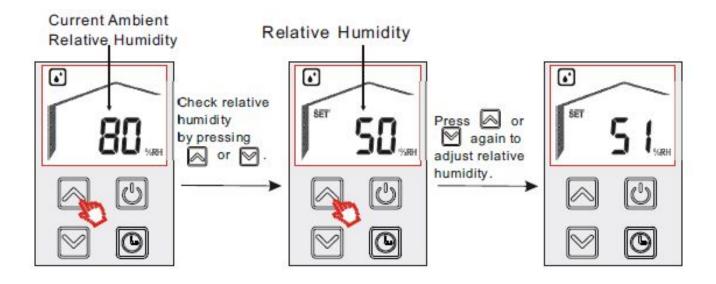


Press either the up or down arrow once to check what target relative humidity has been set to.

#### Setting the relative humidity set point



Use the up or down to set your preferred target relative humidity.







When the unit is turned on use this button to determine when the dehumidifier will turn off.

#### On Timer



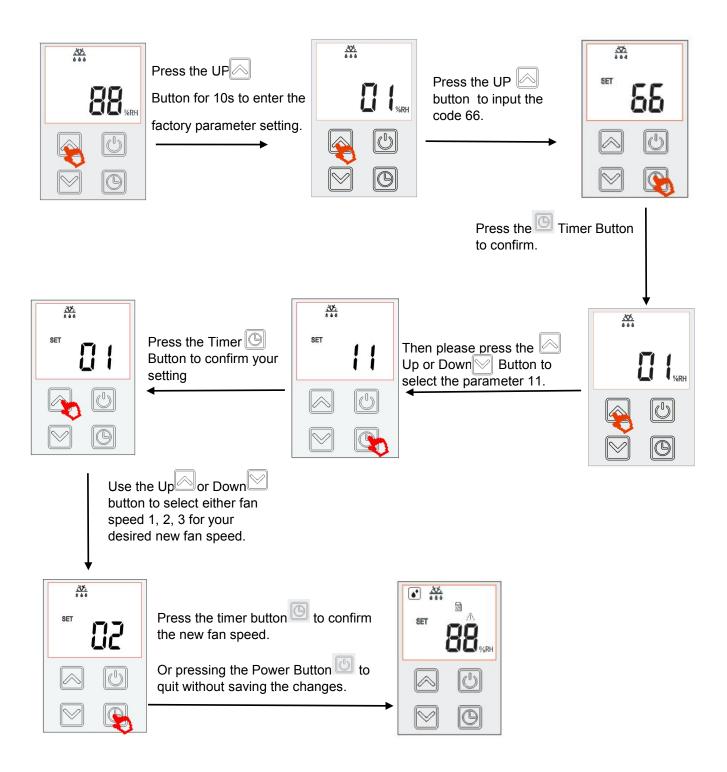
When the unit is turned off use this button to determine when the dehumidifier will turn on.



#### How to change the fan speed.

The internal setup parameter 11 is designed to control the fan speed. The default value is 2.

Within parameter 11 are the following options: 1 - low speed, 2 - middle speed, 3 - high speed.

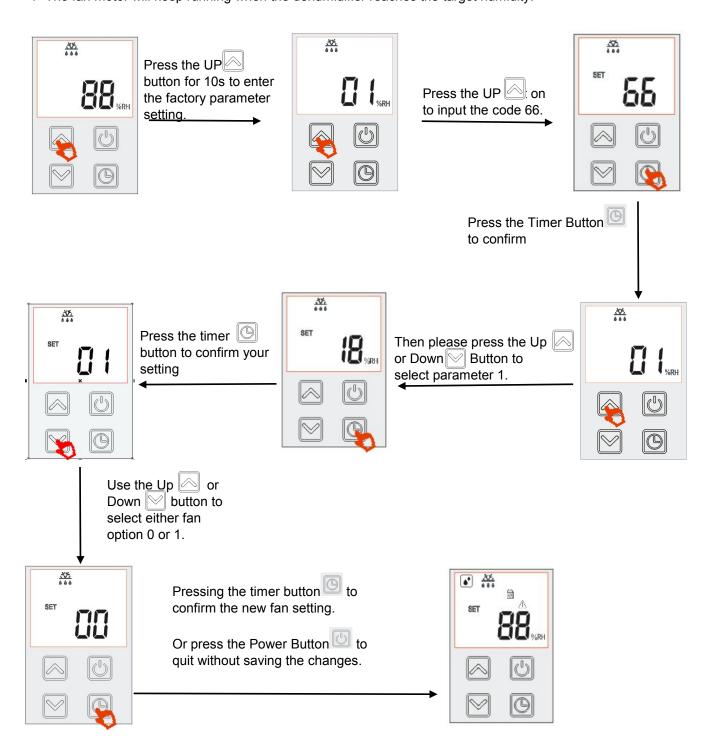




Set the fan to run continuously or set the fan to run only when the compressor is on.

The parameter 18 is used to control when the fan runs. The default value is 1.

- 0 -The fan motor will stop running when the dehumidifier reaches the target humidity.
- 1 -The fan motor will keep running when the dehumidifier reaches the target humidity.





### What happens when the machine is running?

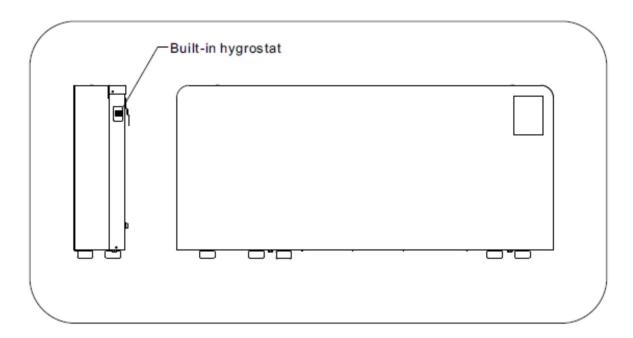
#### When it is dehumidifying and when it is not

If the dehumidifier is dehumidifying you will see this symbol on the control panel 💰.

.

The dehumidifier will continue to dehumidify until the relative humidity is 5%rh below the target and stays there for at least 3 minutes.

When the relative humidity increases 5%rh above the target and stays there for 30 seconds then the unit will start to dehumidify again.



The hygrostat on the side of the dehumidifier is where the relative humidity measurements are made. Keep this clear and clean at all times.

#### Defrosting

In order to remove water from the air the temperature of the coils inside the dehumidifier must be lower than the room temperature, the actual temperature is determined by a combination of ambient room temperature, relative humidity and air pressure. If there is a chance of ice forming on the coils then the machine will defrost itself internally and this symbol will appear on the display . This is a normal part of the dehumidifier's operation and is not a fault.

#### **Error codes**

If P1 through to P7 or E0 appears on the display then please contact your supplier for a service.

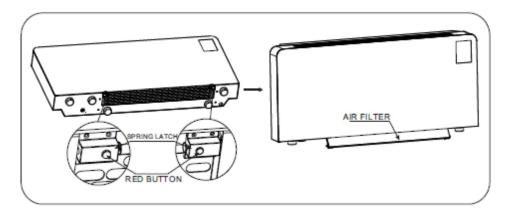


# \*\*Disconnect the power supply before carrying out these tasks\*\*

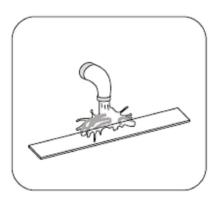
# Cleaning the filter

To ensure that your dehumidifier has a long operational life please clean the filter at least once every two weeks as a blocked filter will put pressure on the fan and cause damage to the fan motor.

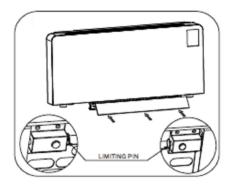
The filter can be removed without the need to remove the dehumidifier from the wall and without having to tilt the dehumidifier, the image below only shows the dehumidifier on its side for clarity.



To remove the filter press the red button to the left and right of the filter guard. This will allow the filter to drop down.

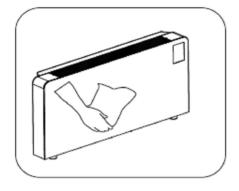


Wash the filter in water and allow to dry fully before refitting.



Once the filter is dry reinsert and allow the safety springs to clip back into place on the right and left.





Clean the outside with a soft, damp cloth. Do not use anything that will scratch the surface or any detergents.

#### 8. 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 and the defrost symbol will appear on the display. Defrost time may vary. It is not recommended to use the dehumidifier in temperatures below 10°C

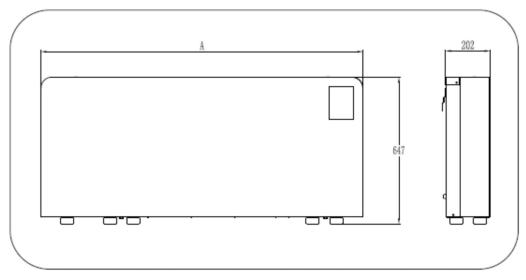
#### 9. ELECTRICAL CONNECTIONS

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. Installations in a wet area must comply with local laws. **We recommend electrical installation and servicing by a qualified electrician only.** 

#### 10. OPERATING CONDITIONS

This dehumidifier can be operated within an ambient temperature range from +10°C to +36°C and with a relative humidity from 30% to 99%rh. It is suitable for applications in domestic situations, swimming pool halls, clean storage applications and in museums and archives.



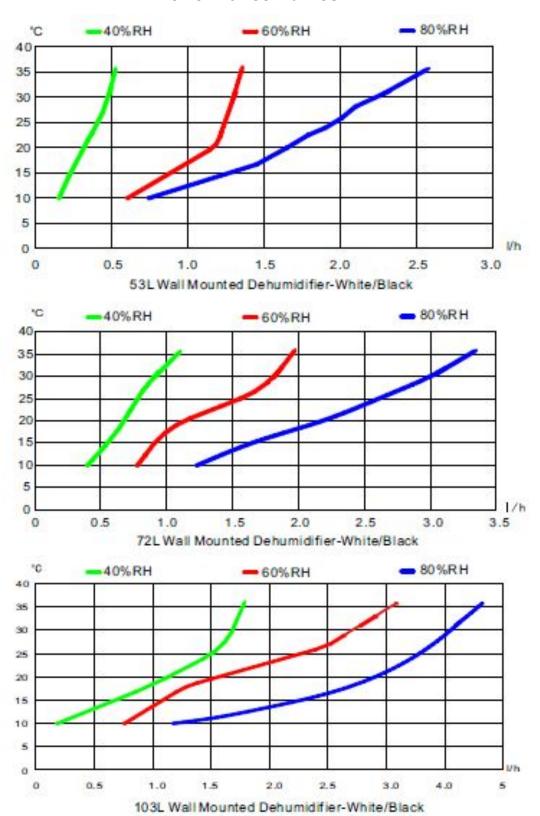


Model	53L Wall Mounted	72L Wall Mounted	103L Wall Mounted
	Dehumidifier-White/Black	Dehumidifier-White/Black	Dehumidifier-White/Black
Length: A	1295	1495	1495

		53L	72L	103L
Temperature Range		+10°C to +36°C		
Relative Humidity Range		30% - 99%rh		
Rated Voltage		220 - 240V / 50Hz		
Air flow (m³/h)		450m³/h	600m³/h	750m³/h
Noise level at 1 metre dB(A)		44	46	48
Power Consumption (kW)		0.93	1.13	1.97
Running current (amps)		4.1	5.0	8.7
Start-up current (amps)		4.3	5.85	10
Refrigerant		R410a		
Drying Capacity in litres (at 30°C &80%rh)	Per hour	2.2	3.0	4.3
	Per day	53	72	103
Drain diameter		16mm		
Dehumidifier Dimensions (mm)		See image above		
Nett / Gross Weight (Kgs)		See nameplate on the side of the dehumidifier		



# **Performance Curves**





Trouble	Cause	Solution	
	No power to the unit	Plug in the unit; check power at outlet	
Unit does not operate	On/Off button not turned ON	Turn the unit on	
	Humidity below the set point	Adjust the target if necessary	
Doesn't dehumidify or collects little water	Ambient temperature is low	As temperatures drops then dehumidification will drop as well. This is unavoidable.	
	Ambient temperature exceeds +36°C	This is above the working range of the dehumidifier.	
	The ambient air humidity is lower than 40%rh	Under this condition the dehumidifier becomes inefficient and little water will be collected. This is normal for a compressor dehumidifier.	
	The air filter is dirty and blocked	The air filter must be exchanged	
	The ambient is below the relative humidity set point	This is normal and is not a fault.	
O	The dehumidifier has just turned on	Wait 3 minutes for the compressor to start up.	
Compressor is not on	Unit is in defrost mode, defrost symbol appears on the display,	This is normal and is not a fault.	
The fan is not running	Relative humidity is below the set point	This is normal and is not a fault. This can be changed, see the control panel section of the manual.	
	The room temperature is lower than +10°C	Assure that the device is only set up in rooms with temperatures above +10°C.	
	If not the above.	Contact a Meaco approved workshop.	
Unit does not defrost	Conditions are below +10°C	Move the dehumidifier to a warmer space.	
	Defective bypass relay valve	Contact a Meaco approved workshop.	
Codes P1 to P8 &/or E0 appear (excluding P3)	Turn off for one hour & then restart	If the unit still does not work then contact Meaco.	
P3 only	Condenser coil temperature too high	Run the fan for 30 minutes, if it continues then disconnect power for one hour and try again.	
Buttons do not work	Child lock is activated	Hold the On/Off button for 5 seconds.	



# 13. CHEMICALS

- 1. This dehumidifier is designed to be used in clean air atmosphere free from corrosive chemicals. The use of chlorine is common in swimming pools and at safe levels will not harm the dehumidifier but excess levels will damage the dehumidifier and invalidate the warranty.
- 2. Abnormal levels of chlorine would be anything above 2ppm and/or a Superchlorination above a maximum of 30ppm over a 24 hour period.

# 14. STORAGE

Follow the guidelines below when storing the unit:

- 3. Unplug the dehumidifier.
- 4. Prior to storing the unit, clean the filter and drain the water from the unit.
- 5. Protect from dust and strong sunlight during storage.



#### 15. WARRANTY AND CUSTOMER SERVICE

There is a two year warranty on your dehumidifier from the date of purchase.

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, chemicals or 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.

This dehumidifier has been imported into the U.K. by;

Meaco (U.K.) Limited Meaco House

Parklands Railton Road

Guildford GU2 9JX

Telephone: 01483 234900

Email: <u>sales@meaco.com</u>

Website: <u>www.meaco.com</u>

Fax: 01483 232700

Please record, for future reference, your date of purchase and where you bought the dehumidifier from here.

Date of purchase.....

Purchased from <a href="www.meaco.com">www.meaco.com</a> (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 08/16 - version 1.0