



McCarthy Hire

PART OF MCCARTHY ENVIRONMENTAL GROUP
ENGINEERING CLEAN AIR

MC 180 AIR COOLER

INSTRUCTION MANUAL





MC 180 - INTRODUCTION

Thank you for choosing a McCarthy Hire air cooler. We hope it will give you lasting satisfaction. The cooler is a high-tech product that is extremely simple to use and exceptionally reliable, thanks to its European design.

It works on the following principle: the evaporation of water uses the surrounding heat to cool the room. When water is continuously distributed over the surface of the cooling panel, the air drawn through the cushion causes the water to evaporate, making the air cooler. The circulating water flows back to the reservoir, where it is pumped back through the cooling panels.

If the automatic refill option is used (supplied as standard), a float valve keeps the tank full at all times. If filled manually, the large 80-litre tank guarantees hours of uninterrupted operation. A level indicator lets you quickly check how much water is left.

This appliance is designed exclusively for room air cooling and must not be used for any other purpose. It only works with water and must not be combined with any other substances. In the event of inappropriate use, we will not be responsible for repairs.

MC 180 - USAGES

This air cooler is currently used in several different industries for many different purposes in numerous countries. The examples are the following:

Service sector:

Office buildings, stores, hospitals, schools, workshops, break rooms, outdoor tea/coffee shops, restaurants, recreational facilities.

Production and manufacturing:

Textiles, machinery, ceramics, refined chemicals, metalworking, hardware, leather, electronics, footwear and apparel production, plastics, food processing, and packaging.

Others:

Covered sports playing fields, playgrounds, industrial laundry cleaning, farmer's markets, gymnasiums, underground parking structures, greenhouses, chicken and cow farming, gardens, etc.



MC 180 - PRIMARY FEATURES

- Efficient and economical
- Energy-saving
- Environmentally friendly
- Reliable operation
- Capable of cooling large spaces
- Quiet operation
- Adjustable speed
- Multidirectional airflow
- Large water reservoir for prolonged use
- No installation or ductwork required
- Easy to use and easy to clean
- Casing made from anticorrosive plastic
- Easy to maintain
- Completely portable
- Manual or electric shutters



MC 180 - TECHNICAL SPECIFICATIONS

Max. Airflow	m ³ /h	14 000
Electric Supply	V/Hz	220-240 / 50
Surface Treated	m ²	up to 180 m ²
Water Capacity	L	80
Water Consumption	L/H	20 - 30
Nominal Current	A	3.7
Water Supply		auto or manual
Measurements (L/W/H)	mm	1300 x 740 x 500
Weight	kg	45
Power	W	510
Reservoir Level Control		YES
Noise Level	dB	48 - 70
Fan		Axial

MC 180 - TECHNICAL FEATURES



Economical and environmentally friendly evaporative cooling system



Adjustable speeds



Low noise disturbance



High-capacity water tank for long hours of operation



Oscillation function



Large wheels and brake make it easy to move and immobilise the machine



MC 150 - IMPORTANT REMINDERS

Please carefully read the manual before operating the air cooler.

A) Operating conditions:

1. Temperature 18°C to 45°C ; Water temperature: < 45°C
2. The power supply must not exceed the required voltage (+ / -) 5%
3. The air supply must be largely free of dust, if used without a filter, or additional cleaning is required.

B) Protect the power supply cable from vehicular and pedestrian traffic. Connection to an incorrect voltage or a faulty installation could result in electrocution.

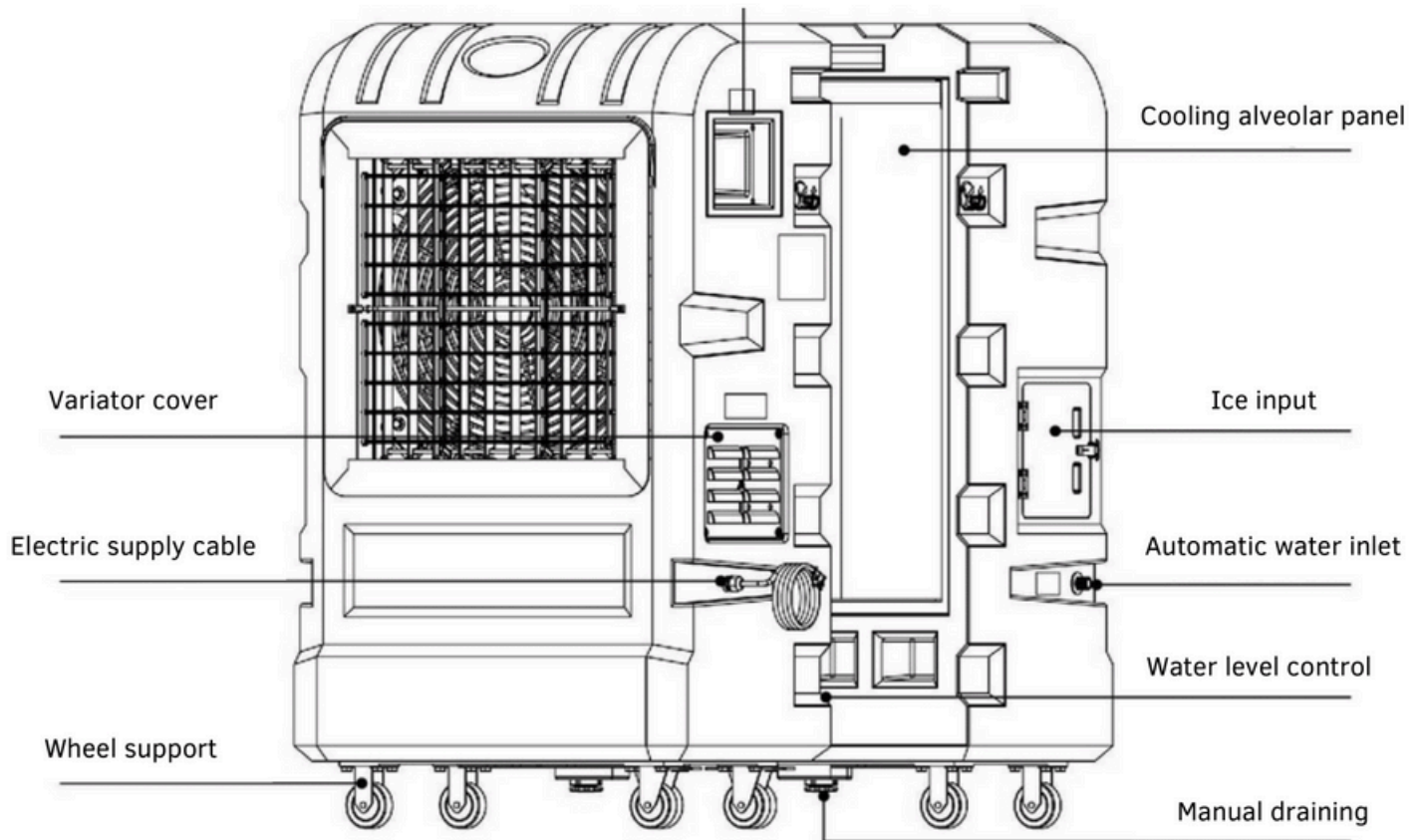
C) If the device does not function properly at startup, unplug it immediately from the power source and contact your distributor for repairs.

D) Other advice for using the air cooler:

1. When the water storage level is low, the pump will stop automatically. Fill the reservoir again to the maximum level and do not overfill.
2. Do not stand on, sit on, or place any items on the air cooler. This could cause damage, cause the water to spill, or cause injuries.
3. Do not remove the lid protection or other parts of the air cooler, failure to do so could result in damage to the air cooler or cause an accident.
4. Make sure to have an insulated plug or cable for the air cooler. Do not share the power supply with other high energy consuming equipment in order to guarantee safety.
5. By deactivating the pump switch, the device can be used in fan only mode.



MC 180 - KEY ELEMENTS





MC 180 - OPERATING INSTRUCTIONS



WARNING

1. All electric repairs should be carried out by a qualified electrician, after having cut the power supply.
2. The air cooler is not designed to be used by children or by those whose physical, sensorial, or mental capacities are reduced or those who lack experience and knowledge.
3. Children must be supervised to ensure that they do not play with the device.

Fasten the water inlet connection tube to the faucet and tighten it. Verify that the other extremity of the connection is fastened to the air cooler. Turn on the faucet and fill the reservoir up to the highest level of the water level control. Turn on the pump and let it dampen the cooling alveolar panel for one to two minutes, then turn on the fan and adjust its speed. By following this procedure, the best cooling effect from the fan will be achieved.

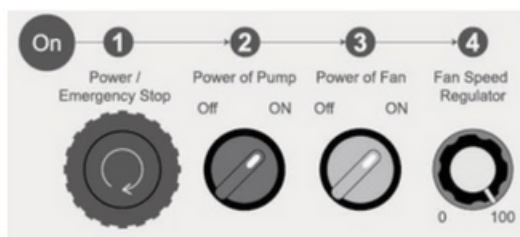
Instruction Key	Comments
Emergency Stop Button	<ul style="list-style-type: none">• Turn the knob and switch on the power inductor.• Push the button to turn off the device in case of emergency.• Follow the start-up and shut-down procedures for normal usage.• Warning: when you push the button, the fan will restart after 20 seconds.
Water Pump Power Supply	Engage the button, the pump will turn on once there is enough water in the reservoir. The pump will not start when the water level is low.
Propellor Power Supply	Switch the fan on and turn the speed regulator knob to control the speed.
Speed Regulator	Control the fan speed when the device is in use. From 0 to 100; the higher the number is, the faster the fan speed.
Wind Sweep Power Supply (Swing)	Controls the electric shutters



WARNING

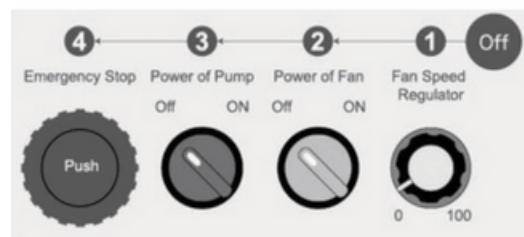
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ON :

- Plug in the power supply cable
- Switch the device on by turning the ON knob
- LED power supply switched on
- Turn on the pump for 1 to 2 minutes to properly dampen the panel
- Activate the propellers
- Regulate the speed according to needs

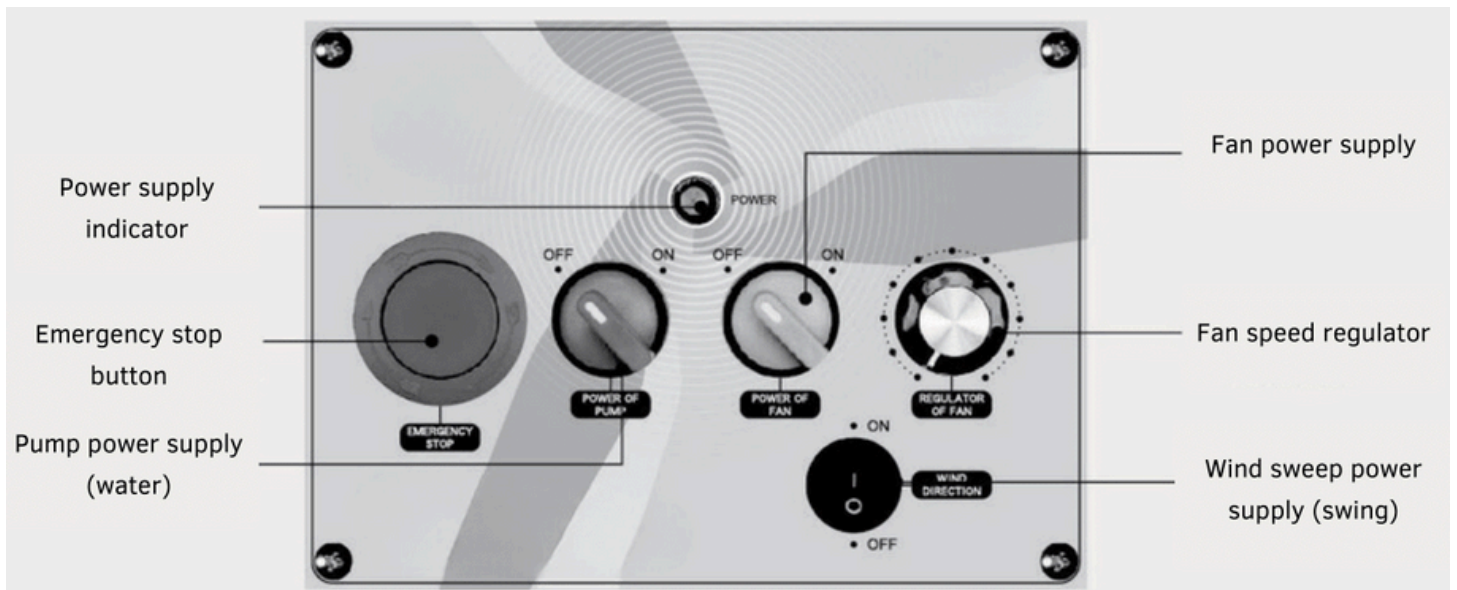


OFF :

- Turn the regulator to 0
- Turn off the propellers
- Turn off the pump
- Push the emergency stop button
- Unplug the device



MC 180 - CONTROL PANEL





MC 180 - MAINTENANCE

For optimal results and long-lasting operation, routine maintenance is essential.

In order to ensure the cooler supplies fresh and clean air, it is necessary to change the water regularly when it is dirty, clean the dust filter, and the cooling panels.

1. During use, both dust and particles are deposited and build up inside. This can reduce the cooling capabilities of the fan and create unpleasant odours. It is recommended to change the water in the reservoir at least once a week, even more if necessary. Do not spray water directly onto the inverter or the control panel.
2. The air cooler can filter dust and particles. When the cooler is used in an area where the air quality is degraded, it is recommended to open the manual drain valve to evacuate the water after use. Refill the reservoir the next time it will be in use. Then, turn it back the other direction to put it back into place.

Cleaning recommendations:

1. Before proceeding with cleaning, turn off the fan, unplug the device and move it away from all energy sources or other equipment.
2. Open the manual drain valve opening, situated beneath the device and clean the refrigerating pad from the top with a soft brush. After cleaning, wait until the old, used water has flowed out. Then, close the drain valve.
3. When washing the panel, do not spray water directly onto the control panel or onto the inverter. This could cause damage to the motor.
4. Clean the fan's casing with a damp cloth. Do not spray water and do not wipe it with a volatile liquid.

Warning: before proceeding with the cleaning of the UV lamp, push the emergency stop button and unplug the power cable to avoid any short-circuiting.



MC 150 - TROUBLESHOOTING

Malfunction	Reason	Solution
The cooler makes strange noises	<ul style="list-style-type: none">• Turbine not correctly positioned• Loose or damaged drive belts• Bearings in poor condition	<ul style="list-style-type: none">• Center the turbine and tighten the screw• Balance or replace the drive belts• Replace the bearings
Loss of airflow	<ul style="list-style-type: none">• Clogged cellulosic panels• Aeration grates incorrectly placed• Lack of air output to the outside of the building	<ul style="list-style-type: none">• Clean or replace the panels• Direct them to the correct position• Increase the exit openings (each m² opening allows 10,000 m³/h)
Does not cool the air	<ul style="list-style-type: none">• Incorrect water pump rotation direction• Burned or blocked water pump	<ul style="list-style-type: none">• Reverse the rotation direction of the water pump• Replace the water pump• Check the water inlet and the level
Unpleasant air odour	<ul style="list-style-type: none">• Dirty water in the deposit	<ul style="list-style-type: none">• Empty and clean the reservoir then fill it again• Increase the drainage frequency
Bothersome drafts	<ul style="list-style-type: none">• Poorly regulated networks	<ul style="list-style-type: none">• Adjust the grate orientation
The pump does not work	<ul style="list-style-type: none">• Damaged motor	<ul style="list-style-type: none">• Replace the motor
Water pump leak	<ul style="list-style-type: none">• Damaged radial sealing joint	<ul style="list-style-type: none">• Replace the joint

Note: This troubleshooting is provided for reference only. If you require technical assistance, please contact us for service/repair.



First Name:	Contact:
Last Name	Address:
Maintenance Records:	