McCarthy Hire
PART OF MCCARTHY ENVIRONMENTAL GROUP
ENGINEERING CLEAN AIR

MC 400 AIR COOLER

INSTRUCTION MANUAL

McCarthy Hire, part of McCarthy Environmental Ltd
Unit 9B Cygnet Court, Swan Valley Way,
Northampton NN4 9BS

Phone: 01604 635 333
E-Mail: sales@mccarthyhire.co.uk
www.mccarthy-environmental.co.uk

MC 400 - 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 200-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, OberA will not be responsible for repairs.

MC 400 - USAGES

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

S**ervice 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 400 - PRIMARY FEATURES

- Efficient and economical
- Energy-saving
- Environmentally friendly
- Reliable operation
- Capable of cooling large spaces
- Quiet operation
- Adjustable speed
- Does not require compressed air
- 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
- Possible to connect to a standard garden hose
- Timer function for delayed start or automatic stop

MC 400 - TECHNICAL SPECIFICATIONS

Max. Airflow	m³/h	30 000
Electric Supply	V/Hz	220-240 / 50
Surface Treated	m²	up to 400 m²
Water Capacity	L	200
Water Consumption	L/H	20 - 30
Nominal Current	A	3.7
Water Supply		auto or manual
Measurements (L/W/H)	mm	1565 x 725 x 1760
Weight	kg	110
Power	W	850
Reservoir Level Control		YES
Noise Level	dB	66/68/70
Fan		Axial

MC 250 - TECHNICAL FEATURES

Economical and environmentally friendly evaporative cooling system

High-capacity water tank for long hours of operation

Low noise disturbance

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

Timer function

Program control via electric panel, LCD display

3 speed levels (low, medium, and high)

MC 400 - 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.

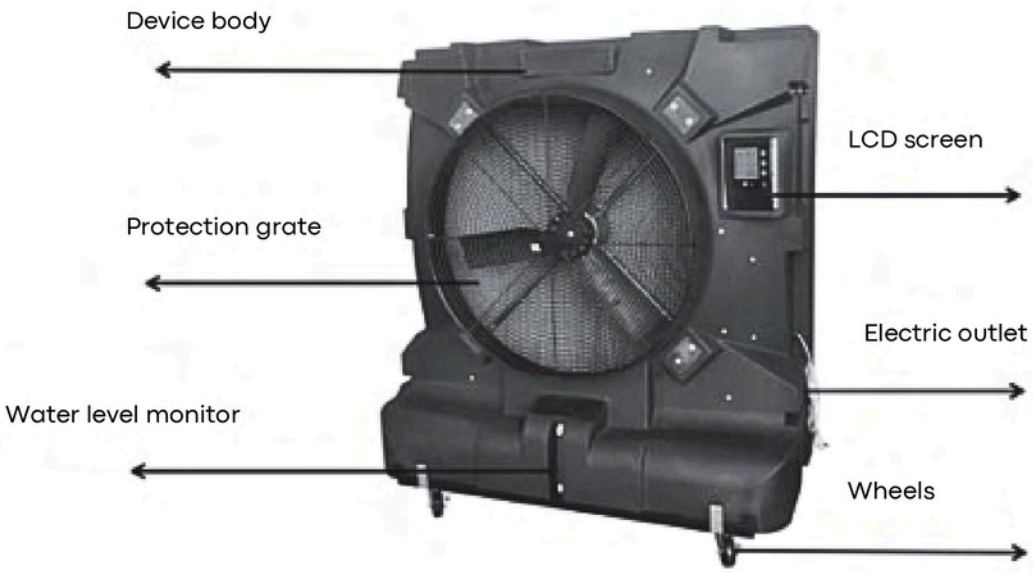
B) Protect the power supply cable from vehicular and pedestrian traffic. Connection to an incorrect voltage or a faulty installation could result in electrocution.

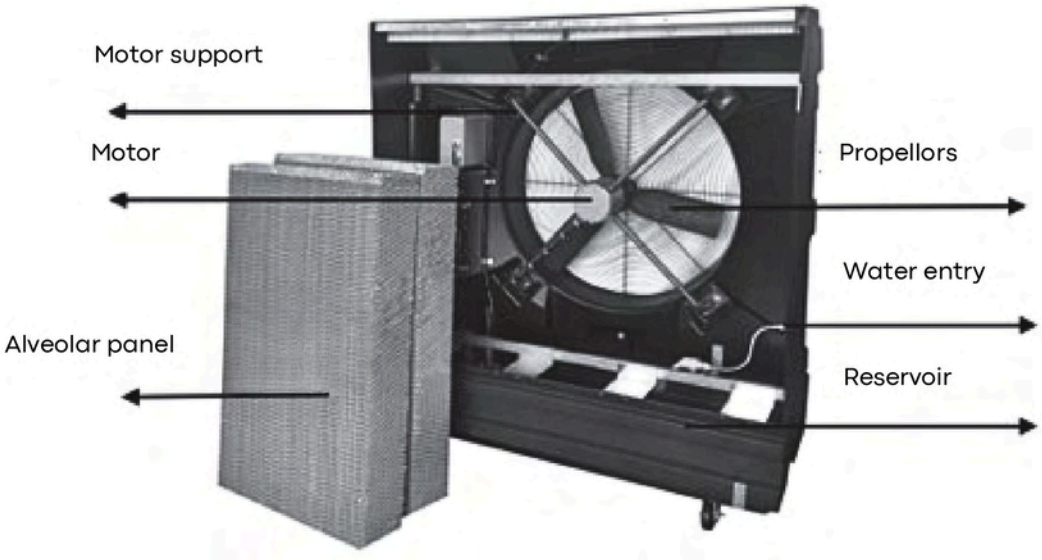
C) If the device does not function properly at startup, unplug it immediately from the power source and contact your distributor for repairs.

D) Other advice for using the air cooler, including fence installation:

1. Leave doors and windows open to allow fresh air in and treated air out when the cooler is running.
2. The blinking red light on the control panel indicates that the water level in the reservoir is low.
3. Rinse the reservoir with fresh water and clean it before using it after a period of inactivity.
4. Be careful when moving the cooler, especially when it is full of water. Pushing too hard can cause the cooler to become unbalanced and tip over, resulting in injury and damage to the cooler.
5. Simplified description of the air cooler installation process and the different connection methods to the water and power networks:
   a. Open the box and ensure that the air cooler is in a correct state, fill the reservoir with water, place the cap on the cover of the reservoir.
      - The power supply is 230 / 50 Hz, including grounding.
      - No lubrification process because there is no belt.
   b. Clean the reservoir and change the water every month.
      - Ensure that the device is powered off, open the cooling panel, wash the panel and the reservoir with fresh water every month

MC 400 - KEY ELEMENTS





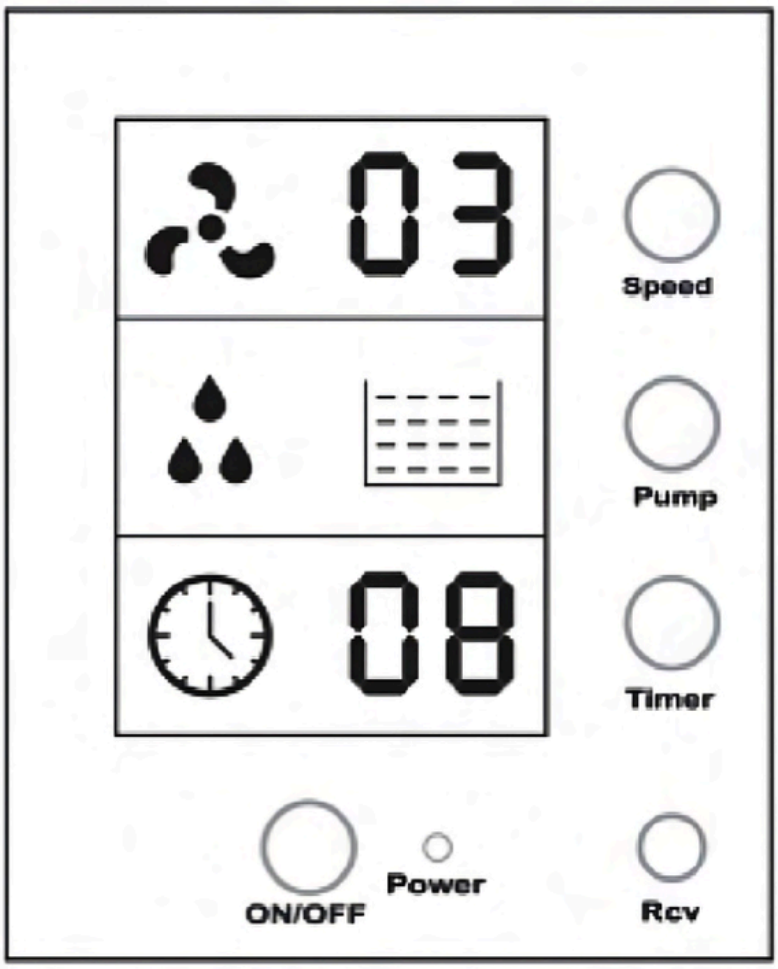
MC 400 - OPERATING INSTRUCTIONS

WARNING

1. Warning that the 3 wire power supply cable (live, neutral, and ground) and the switch must be found near the air cooler.
2. All electric repairs should be carried out by a qualified electrician, after having cut the power supply.
3. 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. Children must be supervised to ensure that they do not play with the device.
4. The grounding and power supply must be disconnected before opening the window.

Instruction Key	Comments
ON / OFF	This function allows to activate or deactivate the reservoir.
COOL/FAN	This activates the cooling function. Note that there is a one-minute delay before the fan starts, the time it takes for the cooling panels to dampen.
BLAST	When the COOL function is pressed again, the water evaporation function is deactivated and only the fan functions.
SPEED	SPEED allows for a the user to select low, medium, or high fan speed.
TIMER Delayed start	The timer function can be used to start the air cooler after a certain number of hours of delay. When the green POWER light is on, press the TIMER button until the number of hours of delay (1-24) appears.
TIMER Automatic stop	When the air cooler is already operating, press the TIMER button to set the number of hours (1-24) until the device turns off automatically.
WATER SUPPLY	Use only clean water. Pour the water into the water input valve situated on the right side of the device. If needed, a hose can be attached to the input valve on the left side of the device to allow for automatic filling. Note: it is recommended to use a pressure reducer for high pressure water supplies.

MC 400 - CONTROL PANEL



MC 400 - 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.

Disconnect the machine from the mains and switch it off before carrying out any maintenance on the appliance.

1. Remember to lock the brakes to prevent the machine from drifting.
2. Remove the filter by unscrewing the 4 screws located on the back of the air cooler.
3. Next, lift up the filter and pull on the lower part to release it. To replace the filter, slide it upwards to the slot underneath the upper portion of the cooler, push it downwards and let it fall into the lower slot.
4. Clean the panel from the inside out (the inside is facing the motor). Never use any liquid detergent. Never use pressurised water, as this could cause damage to the pad.
5. Unscrew the drain cover to allow the dirty water to drain away, then clean the water tank thoroughly with a soft cloth. Remove the dirt from the water sensor, water pump, and float valve. Rinse thoroughly.
6. Clean the cooler housing with a soft cloth. Do not use caustic chemical detergents which could damage the cooler surface.

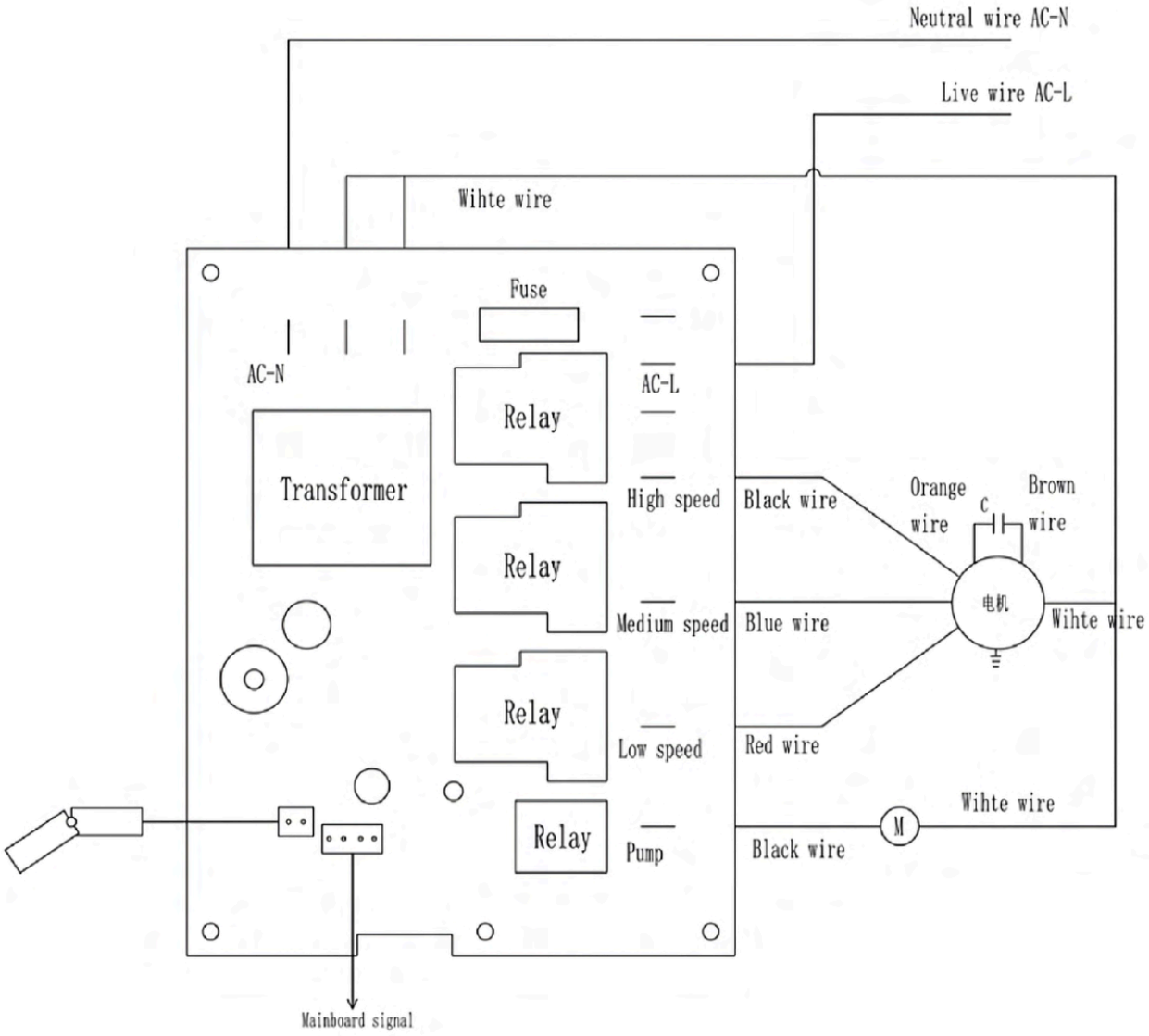
MC 400 - TROUBLESHOOTING

Malfunction	Reason	Solution
The display screen remains dark	• No electricity • Main control board failure • The fuse has blown • Faulty panel	• Ensure that the device is plugged in • Change the control board • Change the fuse • Change the panel
The display is normal but the airflow is insufficient or the air speed is too low	• The fan is blocked • The cooling pad or the dust filter is clogged • The fan is defective • Main control board failure	• Ensure that there is nothing blocking the free rotation of the fan • Clean cooling panel and dust filter • Change the fan • Replace the control board
The motor does not respond to the control panel	• Main control board failure • Panel malfunction	• Change the control board • Change the panel
Water leak from the drain valve	• The drain valve is loose • Dirt in the valve	• Tighten the drain valve nut • Clean the drain valve
Water droplets are projected from the air diffuser	• The water pipe has detached	• Check the water pipe to the top of the filter and re-attach or re-tighten

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

Warning: The reservoir contains a UV lamp to disinfect the water. This lamp is on when the cooling function is active. The UV light emitted by this lamp may cause burns to the eyes. Never look directly into a UV lamp in operation. Always unplug from the power source before maintenance.

MC 400 - WIRING DIAGRAM



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