

## POOLEX PC-MAG050FI

# POOLEX Mag Full Inverter 5 KW Pool Heat Pump User Manual

Model: PC-MAG050FI

## 1. INTRODUCTION

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This manual provides essential information for the safe and efficient installation, operation, and maintenance of your POOLEX Mag Full Inverter 5 KW Pool Heat Pump. Please read this manual thoroughly before installation and use, and keep it for future reference. This heat pump is designed to heat swimming pools up to 35 m<sup>3</sup>.

## 2. SAFETY INSTRUCTIONS

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Always observe the following safety precautions to reduce the risk of injury, electric shock, fire, or damage to the product.

- Ensure the heat pump is installed by a qualified professional in accordance with local electrical and plumbing codes.
- Do not operate the unit if the power cord or plug is damaged.
- Keep children and pets away from the unit during operation.
- Do not insert objects into the fan grille.
- Ensure proper ventilation around the unit. Do not block air inlets or outlets.
- Disconnect power before performing any maintenance or repairs.
- This appliance is not intended for use by persons (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.

## 3. PACKAGE CONTENTS

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Verify that all components are present in the package:

- POOLEX Mag Full Inverter 5 KW Pool Heat Pump unit
- User Manual (this document)
- Connection fittings (quantity may vary)
- Anti-vibration pads

## 4. INSTALLATION AND SETUP

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### 4.1. Placement Considerations

Proper placement is crucial for the heat pump's efficiency and longevity.

- **Location:** Install the heat pump outdoors, in a well-ventilated area, away from direct sunlight and corrosive environments.
- **Clearance:** Ensure adequate clearance around the unit for proper airflow. Maintain at least 50 cm (20 inches) from walls or other obstructions on the air intake side and 100 cm (40 inches) on the air discharge side.
- **Drainage:** Position the unit on a stable, level surface that allows for proper condensation drainage.



Figure 1: Front-side view of the POOLEX Mag Full Inverter 5 KW Pool Heat Pump. This image shows the main body, the circular fan grille on the front, and the side panel with water connections.

## 4.2. Water Connection

Connect the heat pump to your pool's filtration system. The heat pump should be installed after the filter and before any chemical injection points.

1. Turn off the pool pump and close all necessary valves.
2. Connect the pool water outlet to the heat pump's "IN" port.
3. Connect the heat pump's "OUT" port to the pool water return line.
4. Ensure all connections are tight and leak-free.



*Figure 2: Front view of the POOLEX Mag Full Inverter 5 KW Pool Heat Pump, highlighting the fan grille and the overall compact design.*

## 4.3. Electrical Connection

Electrical installation must be performed by a qualified electrician.

- Ensure the power supply matches the specifications of the heat pump (refer to Section 7: Specifications).
- Install a dedicated circuit breaker and residual current device (RCD) for the heat pump.
- Connect the power cable to the designated terminal block inside the unit, ensuring proper grounding.

## 4.4. Initial Startup

After completing all connections:

1. Open all pool valves to allow water to flow through the heat pump.
2. Turn on the pool pump to ensure water circulation. Check for leaks.
3. Turn on the dedicated circuit breaker for the heat pump.
4. The unit will perform a self-check. Follow the instructions on the control panel to set your desired pool temperature.

## 5. OPERATING INSTRUCTIONS

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### 5.1. Control Panel Overview

The heat pump features an intuitive digital control panel. Refer to the specific diagrams in your physical manual for exact button layouts.

- **Power Button:** Turns the unit ON/OFF.
- **Mode Button:** Cycles through operating modes (e.g., Heating, Cooling, Auto).
- **Up/Down Arrows:** Adjust desired temperature settings.
- **Display Screen:** Shows current temperature, set temperature, and operating status.

### 5.2. Setting Desired Temperature

1. Ensure the heat pump is powered on and the pool pump is running.
2. Press the "Mode" button to select the desired operating mode (typically "Heating").
3. Use the "Up" or "Down" arrow buttons to adjust the target water temperature. The display will show the set temperature.
4. The heat pump will automatically start heating the water until the set temperature is reached.

## 6. MAINTENANCE

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Regular maintenance ensures optimal performance and extends the lifespan of your heat pump.

### 6.1. Regular Cleaning

- **Exterior:** Clean the exterior casing with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners.
- **Air Inlet/Outlet:** Periodically check and clear any debris (leaves, dirt, etc.) from the air inlet and outlet grilles to ensure unrestricted airflow.
- **Evaporator Coils:** Gently clean the evaporator coils (located at the back/sides) with a soft brush or low-pressure water spray if they become dirty. Avoid bending the fins.



Figure 3: Rear view of the POOLEX Mag Full Inverter 5 KW Pool Heat Pump, showing the evaporator coils which require periodic cleaning for optimal performance.

## 6.2. Winterization

If you live in an area where temperatures drop below freezing, proper winterization is essential to prevent damage.

1. Turn off the heat pump and disconnect its power supply.
2. Drain all water from the heat pump's plumbing by disconnecting the water lines and allowing gravity to empty the unit.
3. Store the unit under a protective cover in a dry, sheltered location if possible, or use a dedicated winter cover if it remains outdoors.

## 7. TROUBLESHOOTING

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This section addresses common issues you might encounter. For more complex problems, contact qualified service personnel.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Heat pump does not start.	No power; circuit breaker tripped; low water flow.	Check power supply and circuit breaker. Ensure pool pump is running and water valves are open.
Unit runs but no heat.	Incorrect mode selected; ambient temperature too low; refrigerant issue.	Verify operating mode is "Heating". Check ambient temperature against operating limits. If problem persists, contact service.
Low heating capacity.	Dirty evaporator coils; insufficient airflow; pool size exceeds capacity.	Clean evaporator coils and ensure proper clearance around the unit. Verify pool volume is within specified limits.
Error code displayed.	Specific system fault.	Refer to the detailed error code list in your physical manual or contact technical support with the specific code.

## 8. SPECIFICATIONS

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Technical specifications for the POOLEX Mag Full Inverter 5 KW Pool Heat Pump (Model PC-MAG050FI).

Feature	Detail
Brand	POOLEX
Model Number	PC-MAG050FI
Type	Full Inverter Pool Heat Pump
Heating Capacity	5 KW
Recommended Pool Volume	Up to 35 m <sup>3</sup>
ASIN	B0DHHLMH2V
Manufacturer	Poolex

## 9. WARRANTY AND SUPPORT

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POOLEX products are manufactured to high-quality standards and are covered by a manufacturer's warranty. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official POOLEX website.

For technical support, spare parts, or service inquiries, please contact your authorized POOLEX dealer or the POOLEX customer service department. Have your model number (PC-MAG050FI) and purchase date ready when contacting support.