Lazmin112 LE1D09M7

Lazmin112 LE1D09M7 Magnetic Electric Motor Starter

User Manual

Brand: Lazmin112 | **Model:** LE1D09M7

1. Introduction and Overview

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Lazmin112 LE1D09M7 Magnetic Electric Motor Starter. Please read this manual thoroughly before using the product and retain it for future reference.

The LE1D09M7 is a versatile magnetic motor starter designed for both single-phase and three-phase motor applications. It features integrated overload and fault protection, ensuring stable and intelligent 24-hour motor protection. Its robust ABS casing provides IP55 waterproof protection, making it suitable for various industrial environments, including air compressors and water applications.

Figure 1.1: Lazmin112 LE1D09M7 Magnetic Electric Motor Starter.

2. Safety Information

WARNING: Electrical shock hazard. Installation and maintenance should only be performed by qualified personnel. Disconnect power before servicing.

- Ensure the power supply matches the starter's voltage requirements (Single-phase 220/230V or Three-phase 380/400V).
- Always disconnect power before making any electrical connections or performing maintenance.
- Verify all wiring connections are secure and correct to prevent damage to the motor or starter.
- Do not operate the starter if the casing is damaged or if water ingress is suspected.
- The starter is rated IP55 for water and dust resistance; however, avoid direct high-pressure water jets.

3. Package Contents

Upon opening the package, please verify that all components are present and undamaged:

- 1 x Lazmin112 LE1D09M7 Magnetic Electric Motor Starter
- 4 x Waterproof Plugs (pre-installed within the product)
- 1 x User Manual (this document)

4. Product Features

Figure 4.1: Key protection features of the motor starter, including overload, leakage, short circuit protection, quick response, and strong applicability.

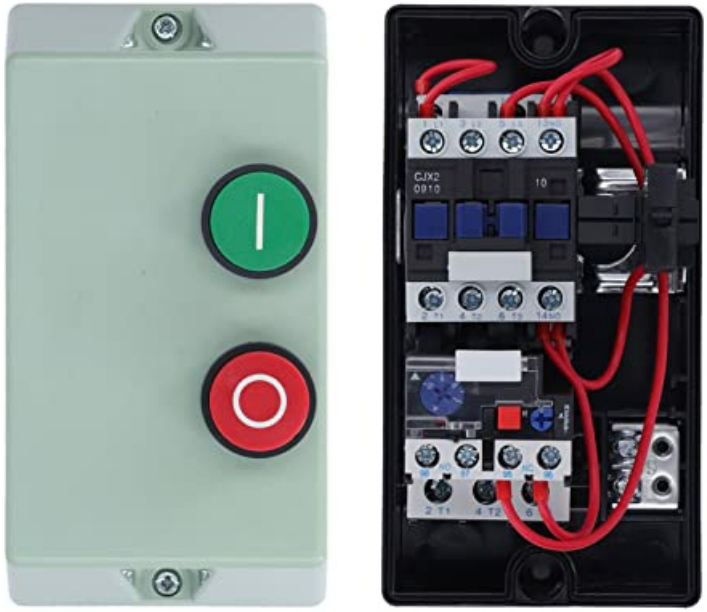

Figure 4.2: Internal components demonstrating smart construction and robust wiring.

Figure 4.3: Detailed view of the wiring ports and the robust ABS casing.

- **Dual Usage:** Compatible with both single-phase (2.2 kW) and three-phase (4 kW) motors.
- **Motor Protection:** Equipped with integrated overload and fault protection for continuous motor safety.
- **Simple Operation:** Features clearly marked start (green) and stop (red) buttons.
- **Easy Wiring:** Designed with convenient perforated holes for straightforward wiring connections.
- **Durable Construction:** Housed in a robust ABS casing, providing IP55 waterproof and dustproof protection.
- **Wide Compatibility:** Suitable for various applications including air compressors, water pumps, and general motor control.

5. Setup and Wiring

Before proceeding with installation, ensure all power is disconnected at the main circuit breaker.

1. **Mounting:** Securely mount the motor starter in a suitable location, ensuring it is protected from excessive vibration and direct impact. The IP55 rating provides protection against dust and low-pressure water jets, but proper placement is still crucial.
2. **Accessing Wiring Terminals:** Carefully open the starter's casing to expose the internal wiring terminals. The casing is typically secured with screws.
3. **Wiring Connections:**
    - Identify the input power terminals and connect the main power supply wires (L1, L2, L3 for three-phase; L1, N for single-phase).
    - Identify the motor output terminals and connect the motor wires (U, V, W for three-phase; U, N for single-phase).
    - Ensure proper grounding connections are made according to local electrical codes.
    - The starter includes perforated holes for convenient cable entry. Use appropriate cable glands to

maintain the IP55 rating.

4. **Wiring Diagram Reference:** Refer to the provided wiring diagram for specific connection details. A general diagram is shown below.

Figure 5.1: Motor starter with a typical wiring diagram. Always consult the specific diagram included with your product for precise connections.

5. **Secure Casing:** Once all connections are verified and secure, close the starter's casing, ensuring all screws are tightened to maintain the IP55 seal.
6. **Final Check:** Double-check all connections and ensure no loose wires are present before restoring power.

6. Operating Instructions

The LE1D09M7 motor starter features simple push-button operation:

- **Starting the Motor:** Press the **GREEN** button labeled "I" to initiate motor operation. The starter will engage, and the motor should begin running.
- **Stopping the Motor:** Press the **RED** button labeled "O" to stop the motor. The starter will disengage, and the motor will cease operation.

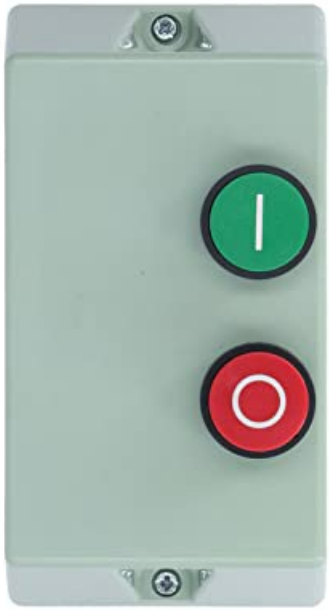

Figure 6.1: Top view of the motor starter, highlighting the green start button and red stop button.

7. Maintenance

Regular maintenance ensures the longevity and reliable operation of your motor starter. Always disconnect power before performing any maintenance.

- **Periodic Inspection:** Annually inspect the starter for any signs of physical damage, corrosion, or loose connections.
- **Cleaning:** Keep the exterior of the starter clean and free from dust and debris. Use a dry, soft cloth. Do not use abrasive cleaners or solvents.
- **Terminal Check:** Periodically check all wiring terminals to ensure they are tight and free from oxidation.
- **Overload Protection:** The integrated overload protection is designed to trip if the motor draws excessive current. If a trip occurs, investigate the cause (e.g., motor fault, mechanical binding) before resetting the starter.

8. Troubleshooting

If you encounter issues with your motor starter, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Motor does not start when green button is pressed.	No power supply; Loose wiring; Overload tripped; Motor fault.	Check main power supply; Verify all wiring connections; Reset overload if tripped (after identifying cause); Inspect motor for faults.
Motor stops unexpectedly.	Overload tripped; Power interruption; Motor fault.	Check for overload trip and reset; Verify stable power supply; Inspect motor.

Problem	Possible Cause	Solution
Starter trips frequently.	Motor drawing excessive current (overload); Incorrect motor size for starter; Faulty motor.	Check motor load; Ensure motor current is within starter's adapter current range (7-10A); Consult a qualified electrician to inspect the motor.
Buttons are unresponsive.	Internal mechanical issue; Severe power issue.	Disconnect power and inspect internal mechanism (if qualified); Consult a professional.

If the problem persists after attempting these solutions, contact a qualified electrician or the manufacturer's support.

9. Specifications

Feature	Detail
Product Type	Magnetic Electric Motor Starter
Model	LE1D09M7
Material	ABS Casing
Applicable Voltage (Single-phase)	220/230 V
Applicable Voltage (Three-phase)	380/400 V
Power (Single-phase)	2.2 kW (3 HP)
Power (Three-phase)	4 kW (5.5 HP)
Adapter Current Range	7-10 A
Waterproof Rating	IP55

10. Warranty and Support

For warranty information and technical support, please refer to the documentation provided at the point of purchase or contact Lazmin112 customer service. Keep your purchase receipt as proof of purchase.