Dieffematic ZL56

CAME ZL56 Electronic Control Board User Manual

Model: ZL56 | Brand: Dieffematic

1. Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of the CAME ZL56 electronic control board. This board is designed for the automation of gates, ensuring reliable and efficient control. Please read this manual carefully before proceeding with any installation or operation.

2. Safety Information

Always observe safety precautions when working with electrical components. Disconnect power before any installation, maintenance, or troubleshooting. Installation should only be performed by qualified personnel in accordance with local electrical codes and regulations. Ensure proper grounding.

- Ensure the main power supply is disconnected before any wiring.
- Protect the control board from moisture and extreme temperatures.
- Use appropriate tools for installation.
- Verify all connections are secure before applying power.

3. Setup and Installation

The CAME ZL56 control board is designed for easy integration into gate automation systems. Follow these steps for proper installation.

3.1. Board Overview

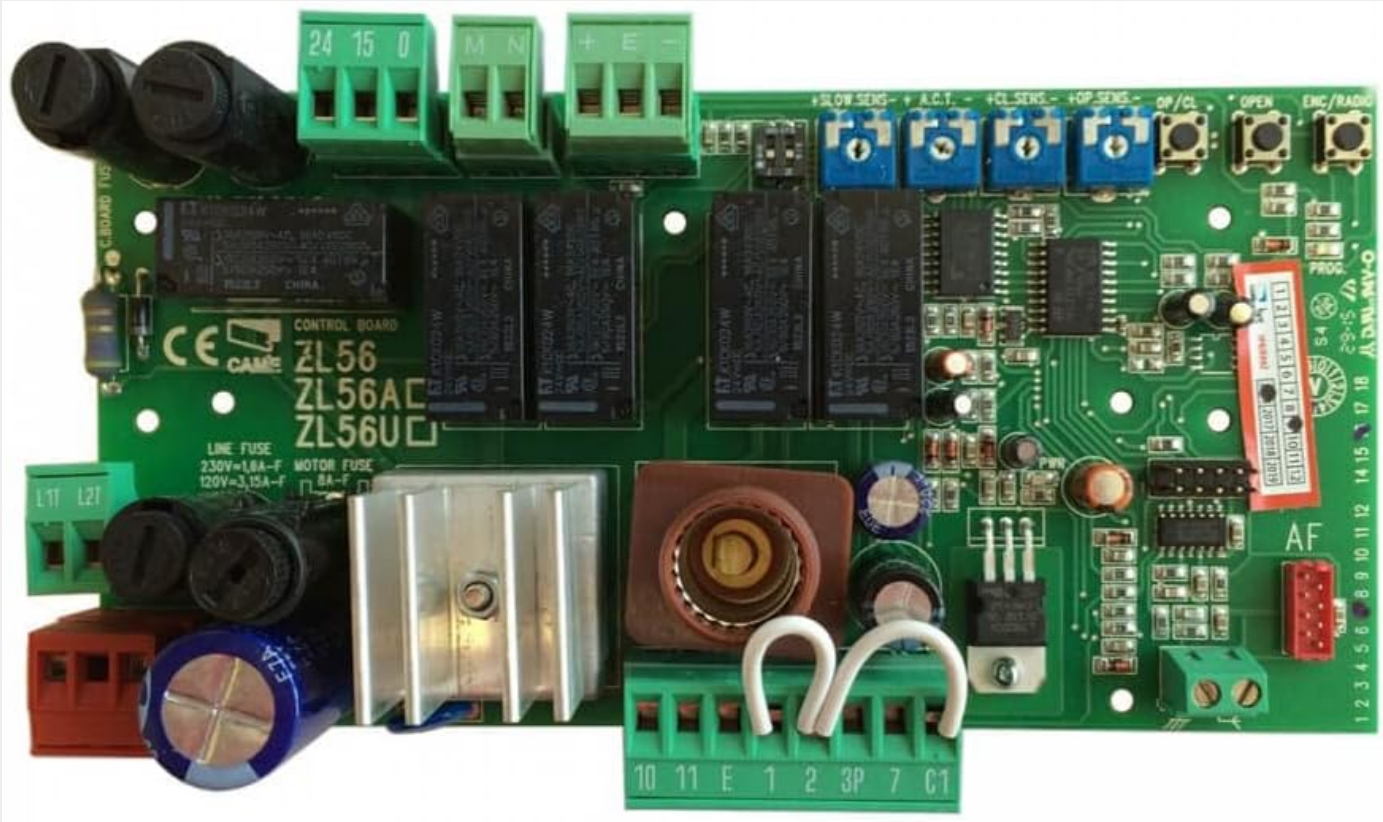

Figure 1: Overview of the CAME ZL56 Electronic Control Board. This image displays the various components including terminal blocks, fuses, relays, potentiometers, and control buttons. Key areas visible are the power input terminals, motor connections, and adjustment controls.

3.2. Mounting

Mount the control board securely within a protective enclosure, away from direct sunlight, rain, and excessive dust. Ensure adequate ventilation around the board.

3.3. Wiring Connections

Refer to the terminal markings on the board for correct wiring. Ensure all connections are firm and insulated.

- **Power Input (L1T, L2T):** Connect the main power supply to these terminals. The board supports 230V.
- **Motor Connections (M, N, E):** Connect the gate motor wires to these terminals.
- **Accessory Power (24, 15, 0):** Provides 24V DC power for accessories such as photocells or receivers.
- **Safety Devices (1, 2):** Connect safety devices like photocells or safety edges.
- **Control Inputs (3P, 7, C1):** Connect control devices such as push buttons or key switches for partial open, full open, or close commands.
- **Fuses:**
    - **LINE FUSE:** 230V-1.6A-F (for 230V systems)
    - **MOTOR FUSE:** 120V-3.15A-F (for 120V systems, check specific model variant)

3.4. Initial Power-Up and Adjustments

After all wiring is complete, apply power to the board. Use the potentiometers for fine-tuning the gate's operation.

- **SLOW SENS:** Adjusts the sensitivity for slow-down detection.
- **ACT:** Adjusts the operating time or force.
- **CL SENS:** Adjusts the sensitivity for closing.
- **OP SENS:** Adjusts the sensitivity for opening.

- **OP/CL:** Likely a switch or potentiometer for open/close logic.

The board also features buttons for **OPEN** and **ENC/RADIO** (encoder/radio programming) and a **PROG** (programming) area, which are used for advanced configuration and learning procedures. Refer to the specific programming guide for detailed steps.

4. Operating Instructions

Once installed and configured, the gate system can be operated via connected control devices (e.g., remote controls, push buttons).

- **Normal Operation:** Activate the gate using the designated control input. The board will manage the opening and closing cycles, including slow-down phases.
- **Safety Features:** The board integrates safety inputs. If a safety device (e.g., photocell) detects an obstruction during closing, the gate will stop or reverse.
- **Manual Override:** In case of power failure, refer to your gate motor's manual for instructions on manual release.

5. Maintenance

Regular maintenance ensures the longevity and optimal performance of your control board and gate system.

- **Visual Inspection:** Periodically inspect the board for any signs of damage, loose connections, or corrosion.
- **Cleaning:** Keep the board and its enclosure clean and free of dust, insects, and debris. Use a soft, dry brush or compressed air.
- **Fuse Check:** If the system fails to power on or a specific function stops working, check the LINE FUSE and MOTOR FUSE. Replace blown fuses only with fuses of the same type and rating.
- **Terminal Tightness:** Ensure all terminal screw connections remain tight.

6. Troubleshooting

This section provides solutions to common issues you might encounter.

Problem	Possible Cause	Solution
Gate does not respond to commands.	No power, blown fuse, faulty control device, loose wiring.	Check power supply. Inspect LINE FUSE and MOTOR FUSE. Verify control device functionality. Check all terminal connections.
Gate stops unexpectedly.	Safety device activated (e.g., photocell obstruction), motor overload.	Check for obstructions in the gate path. Inspect safety devices for proper alignment and function. Reduce motor load if possible.
Gate opens/closes partially.	Limit switch issue, incorrect force/time settings.	Check and adjust limit switches. Adjust ACT potentiometer.

If the problem persists after attempting these solutions, contact qualified technical support.

7. Specifications

Key technical specifications for the CAME ZL56 control board:

- **Model:** ZL56 (also known as 3199ZL56)
- **Input Voltage:** Typically 230V AC (check specific model for 120V variants)
- **Line Fuse:** 1.6A (for 230V systems)
- **Motor Fuse:** 3.15A (for 120V systems, check specific model)
- **Accessory Output:** 24V DC
- **Compatibility:** Designed for CAME gate automation systems.
- **ASIN:** B0BHT77WS1
- **Manufacturer Reference:** 3199ZL56
- **First Available Date:** October 10, 2022

8. Warranty and Support

This product is covered by a standard manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation provided with your purchase or contact the seller.
For technical support, troubleshooting assistance beyond this manual, or spare parts, please contact your authorized Dieffematic dealer or the point of purchase. Provide your product model (ZL56) and ASIN (B0BHT77WS1) when seeking support.