YoungHon 6ED1052-1MD00-0BA6

User Manual: LOGO! 12/24RC Logic Module

Model: 6ED1052-1MD00-0BA6 | Brand: YoungHon

1. Product Overview

The YoungHon LOGO! 12/24RC Logic Module, model 6ED1052-1MD00-0BA6, is a compact and powerful control unit designed for small automation tasks. It integrates a display, keypad, and essential I/O functions, making it suitable for various industrial and commercial applications. This module operates on a DC 12/24V power supply and features 8 digital inputs (with analog capabilities on specific inputs) and 4 relay outputs.

Its robust design and user-friendly interface allow for straightforward programming and monitoring of control sequences without the need for complex programming software in many cases.

Figure 1: Front view of the LOGO! 12/24RC Logic Module, highlighting its display, control buttons, and input/output terminals.

2. Setup and Installation

2.1 Safety Instructions

- Ensure power is disconnected before installation or wiring.
- Installation should be performed by qualified personnel only.
- Adhere to all local and national electrical codes.
- Protect the module from moisture, dust, and extreme temperatures.

2.2 Mounting

The LOGO! module is designed for DIN rail mounting. Snap the module onto a standard 35mm DIN rail in an electrical enclosure. Ensure adequate ventilation around the module to prevent overheating.

2.3 Wiring

Connect the power supply and I/O devices according to the terminal markings on the module. Use appropriate wire gauges for all connections.

- **Power Supply (L+, M):** Connect a stable DC 12V or 24V power source to these terminals. Observe

polarity.

- **Digital Inputs (I1-I8):** Connect switches, sensors, or other digital signals to these terminals. Inputs I1-I8 are DC inputs.
- **Analog Inputs (A I1-A I4):** Inputs I3, I4 can be configured as analog inputs (0-10V) when I1, I2 are used as analog inputs. Similarly, I1, I2 can be configured as analog inputs (0-10V) when I7, I8 are used as analog inputs. Refer to the programming software for detailed configuration.
- **Relay Outputs (Q1-Q4):** These are potential-free relay contacts. Connect your loads (e.g., contactors, lamps) to these terminals. Each output can handle up to 10A.

3. Operating Instructions

3.1 Initial Power-Up

After wiring, apply power to the module. The display will illuminate, and the module will enter its operational state. If no program is loaded, it will typically display a default message or prompt for program transfer.

3.2 Programming

The LOGO! module can be programmed directly via its integrated display and keypad or using the LOGO! Soft Comfort software on a PC. For complex applications, PC-based programming is recommended.

- **On-Device Programming:** Use the navigation buttons (up, down, left, right) to navigate menus, the "OK" button to confirm selections, and the "ESC" button to go back or cancel.
- **PC-based Programming:** Connect the module to a PC using a suitable programming cable (not included). Use LOGO! Soft Comfort software to create, simulate, and transfer programs to the module.

3.3 Monitoring and Diagnostics

The integrated display provides real-time status of inputs, outputs, and internal parameters. Navigate through the display menus to monitor program execution, view error messages, and adjust certain parameters.

4. Maintenance

The LOGO! module is designed for minimal maintenance. However, regular checks can ensure optimal performance and longevity.

- **Cleaning:** Periodically clean the module's exterior with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Environmental Conditions:** Ensure the operating environment remains within specified temperature and humidity ranges. Avoid excessive dust or corrosive atmospheres.
- **Connection Integrity:** Periodically check all wiring connections for tightness and signs of corrosion. Loose connections can lead to intermittent operation or damage.
- **Firmware Updates:** Check the manufacturer's website for any available firmware updates that may improve performance or add features. Follow update instructions carefully.

5. Troubleshooting

This section provides solutions to common issues you might encounter with your LOGO! module.

Problem	Possible Cause	Solution

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Module does not power on.	No power supply; incorrect voltage; reversed polarity; faulty wiring.	Verify power supply connections and voltage (12/24V DC). Check polarity. Ensure power source is active.
Inputs not responding.	Incorrect wiring; faulty sensor/switch; program logic error.	Check input wiring. Test sensor/switch functionality. Review program logic for correct input assignments.
Outputs not activating.	Incorrect wiring; faulty load; program logic error; overloaded output.	Verify output wiring and load functionality. Check program logic. Ensure output current does not exceed 10A per relay.
Display shows error message.	Program error; hardware fault; communication issue.	Note the error code/message and consult the LOGO! Soft Comfort software manual or online resources for specific error definitions.

6. Specifications

Feature	Specification
Model Number	6ED1052-1MD00-0BA6
Power Supply	DC 12/24V
Digital Inputs	8 (DC 12/24V)
Analog Inputs	4 (0-10V, configurable on I1-I4 or I7-I8)
Relay Outputs	4 (10A per output)
Dimensions (W x H)	1"W x 1"H (approximate, based on provided data)
Weight	8.5 ounces (approximate)
Compliance	CE
Manufacturer	yonghong

7. Support and Returns

For any questions regarding the LOGO! 12/24RC Logic Module, technical assistance, or product inquiries, please do not hesitate to contact YoungHon customer service. We aim to provide a 24-hour fast response to assist you.

If you need to return an item, please contact us before initiating the return process. Refunds or exchanges will be processed upon receipt of the returned items. Please refer to your purchase agreement for specific return policy details.

You can typically find contact information on the seller's page or your order details. For general inquiries, you may reach out via the platform where the product was purchased.