BAOMAIN SZW26-40/D303.3

Baomain 40A Rotary Changeover Switch (SZW26-40/D303.3) Instruction Manual

Model: SZW26-40/D303.3

1. Product Overview

The Baomain 40A Rotary Changeover Switch, model SZW26-40/D303.3, is designed for electrical wiring applications, particularly in power switches and for controlling squirrel cage type asynchronous motor start-up, reversing, and speed changes. It can also be used for converting control circuits. This switch features a durable plastic external material, 3 positions, and 12 screw terminals.

Key Features:

- **Model:** SZW26-40/D303.3
- **External Material:** Plastic
- **Rated Insulation Voltage (Ui):** 660V
- **Rated Thermal Current (Ith):** 40A
- **Panel Size:** 64 x 64 x 12mm (2.5" x 2.5" x 0.47") (L*W*T)
- **Positions:** 1-0-2 Positions
- **Overall Length:** 105mm (4.1")
- **Mount Hole Center Distance:** 48mm (1.9")
- **Weight:** 280g
- **Terminals:** 12 screw terminals

Figure 1: Front view of the Baomain 40A Rotary Changeover Switch.

Figure 2: Side view showing the 12 screw terminals of the switch.

2. Specifications

Attribute	Value
Manufacturer	Baomain
Part Number	SZW26-40/D303.3
Item Weight	0.28 g
Material	Plastic
Operation Mode	ON-OFF-ON
Current Rating	40 Amps
Operating Voltage	660 Volts (AC)
Contact Type	3NO3NC

Attribute	Value
Connector Type	Screw
Switch Type	Changeover Switch
Mounting Type	Panel Mount

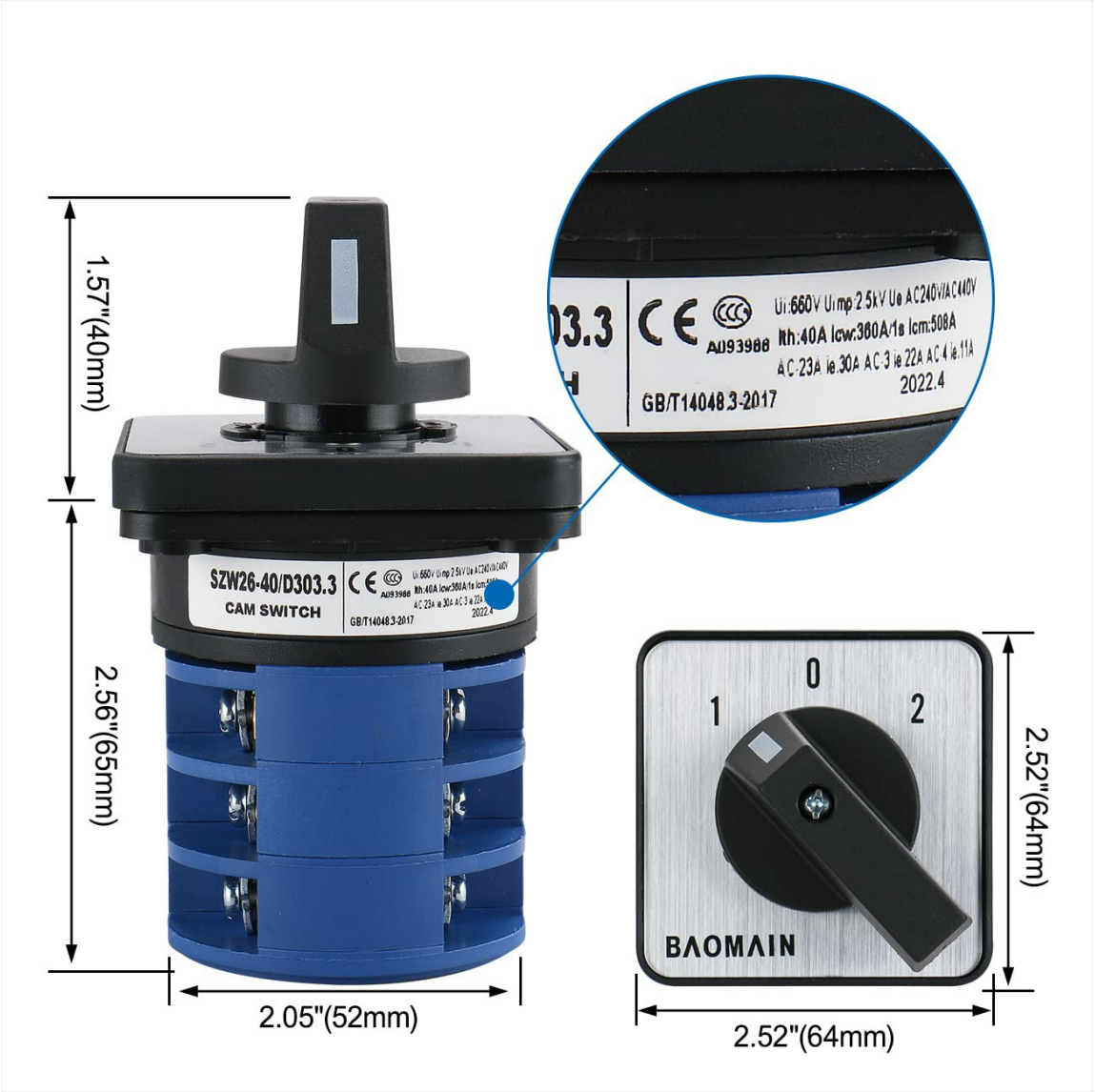

Figure 3: Detailed dimensions of the rotary changeover switch.

3. Setup and Installation

Installation of the Baomain 40A Rotary Changeover Switch requires careful attention to wiring and mounting. Ensure all power sources are disconnected before beginning installation.

3.1. Component Identification

Figure 4: Exploded view showing the main components of the switch, including the switch body, rod, install panel, marking plate, and twist grip (knob).

3.2. Mounting the Switch

1. **Disassembly:** Use a screwdriver to remove the screw securing the twist grip (knob). Carefully detach the knob and the marking plate from the switch body.
2. **Panel Preparation:** Prepare a panel with an appropriate cutout for the switch body and mounting holes matching the switch's dimensions (refer to Figure 3 for details). The panel thickness should be approximately 1.2cm.
3. **Mounting:** Insert the switch body through the panel cutout. Secure the switch body to the panel using appropriate screws through the mounting holes.
4. **Reassembly:** Place the marking plate onto the switch body, ensuring correct orientation (positions 1, 0, 2 are aligned). Reattach the twist grip (knob) and secure it with the screw.

Figure 5: Close-up of the switch handle and faceplate, showing positions 1, 0, and 2.

3.3. Wiring Instructions

The switch features 12 screw terminals for connecting electrical circuits. Refer to the wiring diagram provided with the product for specific connection details. Ensure all connections are secure and properly insulated.

Figure 6: Wiring diagram illustrating terminal connections for positions 1, 0, and 2. 'X' indicates a connected terminal.

Important: Only use two wires when connecting or working with each phase, as indicated in the wiring diagram.

3.4. Installation Video (with Enclosure)

The following video demonstrates the installation process of a similar Baomain rotary changeover switch, including its integration into an exterior box. While your product may not include the box, the switch installation principles remain relevant.

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Video 1: Installation of a Baomain Rotary Changeover Switch with an exterior box. This video provides a visual guide to handling and connecting the switch, even if your specific model does not include the box.

4. Operating Instructions

The Baomain 40A Rotary Changeover Switch operates with three distinct positions: 1, 0, and 2. These positions control the connection status of the 12 terminals, allowing for different circuit configurations.

4.1. Switch Positions

- **Position 0 (OFF):** All terminals are disconnected. This is the neutral or off position.
- **Position 1 (ON - Configuration 1):** Terminals 1-2, 5-6, 9-10 are connected and active.
- **Position 2 (ON - Configuration 2):** Terminals 3-4, 7-8, 11-12 are connected and active.

To change positions, rotate the twist grip (knob) to the desired setting. The switch has a latching action, meaning it will stay in the selected position until manually changed.

4.2. Application Examples

The following videos demonstrate typical applications of a 3-position changeover switch, illustrating how it can be used to switch between different power sources or loads.

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Video 2: Demonstration of a rotary changeover switch in an application, showing switching between two power sources to a single load.

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Video 3: Another application example demonstrating the switch's functionality, potentially showing switching a single power source between two different loads.

5. Maintenance

Regular maintenance helps ensure the longevity and reliable operation of your Baomain Rotary Changeover Switch.

- **Cleaning:** Periodically clean the external plastic housing with a dry, soft cloth. Avoid using abrasive cleaners or solvents that could damage the material.
- **Terminal Inspection:** Annually inspect all terminal connections for tightness. Loose connections can lead to overheating and potential hazards. Ensure power is disconnected before inspecting terminals.
- **Operational Check:** Occasionally operate the switch through all positions (1-0-2) to ensure smooth mechanical action and proper latching.
- **Environmental Conditions:** Ensure the switch is operating within its specified environmental conditions (temperature, humidity) to prevent premature wear or failure.

6. Troubleshooting

If you encounter issues with your Baomain Rotary Changeover Switch, consider the following common troubleshooting steps. Always disconnect power before performing any inspection or repair.

- **No Power to Load:**
  - Check if the switch is in position '0' (OFF). Rotate to position '1' or '2'.
  - Verify that the main power source is active.
  - Inspect all wiring connections for looseness or damage.

- Check for tripped circuit breakers or blown fuses in the circuit.

- **Switch Feels Stiff or Does Not Latch:**
  - Ensure no foreign objects are obstructing the switch mechanism.
  - If recently installed, re-check the mounting to ensure it's not overtightened or misaligned.
  - If the issue persists, the internal mechanism may be worn or damaged, requiring replacement.

- **Overheating:**
  - Ensure the switch is not exceeding its rated current (40A).
  - Check for loose or corroded terminal connections, which can cause resistance and heat buildup.
  - Verify that the wire gauge used is appropriate for the current load.

For persistent issues or complex electrical problems, consult a qualified electrician.

7. Warranty and Support

For information regarding the product warranty, returns, or technical support, please refer to the documentation provided at the time of purchase or contact Baomain customer service directly. Details may also be available on the official Baomain website or through your retailer.