

uxcell MR1 5A Thermal Circuit Breaker

uxcell Thermal Circuit Breaker

USER MANUAL

1. Introduction

This manual provides essential information for the safe and effective use of your uxcell Thermal Circuit Breaker. This device is designed to protect electrical circuits from damage caused by overcurrent, which can result from an overload or short circuit. It features a push-button reset mechanism for convenient restoration of power after a trip event. The uxcell Thermal Circuit Breaker is suitable for a wide range of applications, including automotive, industrial, and marine environments, where protection up to 5 amps is required.

2. Safety Information

WARNING: Electrical shock hazard. Always disconnect power before installing, servicing, or removing this device. Installation should be performed by qualified personnel in accordance with all applicable electrical codes and regulations.

- Do not use this circuit breaker in circuits exceeding its specified voltage and current ratings.
- Ensure proper wiring and secure connections to prevent overheating and fire hazards.
- Do not attempt to bypass or tamper with the circuit breaker's protective mechanism.
- If the circuit breaker repeatedly trips, investigate the cause of the overload before resetting.

3. Product Overview and Components

The uxcell Thermal Circuit Breaker is a compact device designed for high-density circuit protection. Below are images illustrating the product and its key components.



Figure 3.1: Two uxcell Thermal Circuit Breakers. Each unit features a black plastic body, a central push-button reset, and two quick-connect terminals labeled "LINE" and "LOAD". Markings on the body indicate "MR1 5A" and "125/250VAC 32VDC".

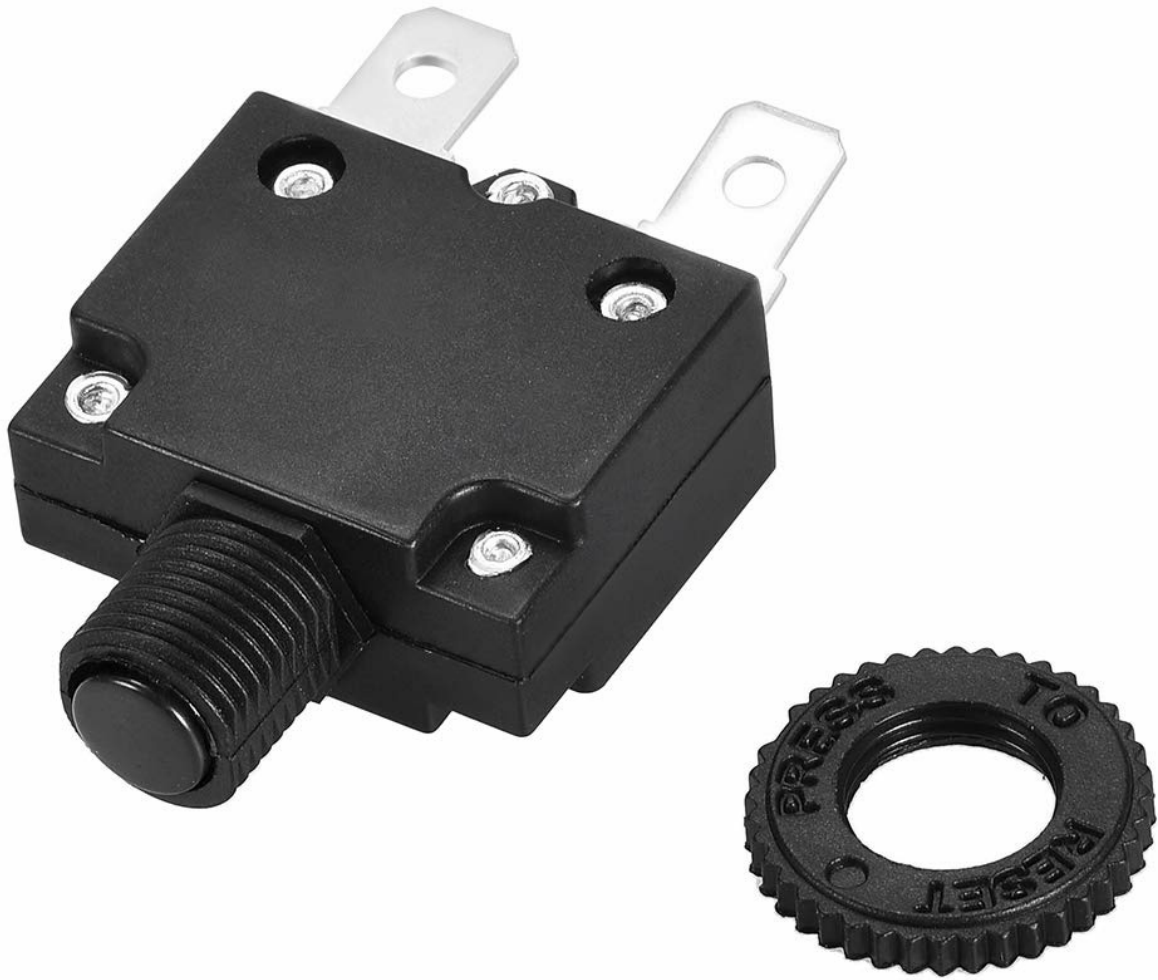


Figure 3.2: A single uxcell Thermal Circuit Breaker shown with its accompanying threaded reset nut. The nut is used to secure the circuit breaker to a panel or enclosure, with the push-button extending through the opening.



Figure 3.3: Detailed view of the push-button reset mechanism and the threaded collar. The collar allows for panel mounting, and the button is clearly marked with "PRESS" and "RESET" indicators around its base.

4. Specifications

Parameter	Value
Current Rating	5 Amps
Voltage Rating	125/250V AC, 32V DC
Type	Push-button Reset Thermal Circuit Breaker
Total Size (L x W x H)	28 x 13 x 46mm (1.1" x 0.51" x 1.81")
Material	Plastic

Parameter	Value
Number of Poles	1

5. Setup and Installation

Before installation, ensure the power supply to the circuit is completely disconnected. This circuit breaker is designed for panel mounting using the threaded collar and nut provided.

- 1. Prepare Mounting Hole:** Drill or cut a suitable mounting hole in your panel or enclosure. The diameter should accommodate the threaded collar of the circuit breaker.
- 2. Insert Breaker:** Insert the circuit breaker through the mounting hole from the front of the panel.
- 3. Secure with Nut:** Thread the provided nut onto the collar from the back of the panel and tighten it securely to hold the circuit breaker in place.
- 4. Wire Connections:** Connect the incoming power line to the terminal marked "LINE" and the outgoing load wire to the terminal marked "LOAD". Ensure all connections are tight and secure to prevent loose contacts and potential overheating.
- 5. Verify Installation:** Double-check all wiring and connections before restoring power.

6. Operating Instructions

The uxcell Thermal Circuit Breaker operates automatically to protect your circuit from overcurrent conditions.

- Normal Operation:** In normal operating conditions, the circuit breaker allows current to flow through the circuit. The push button will be in its "in" or reset position.
- Overload Protection:** If the current flowing through the circuit exceeds the rated 5 Amps, the internal thermal mechanism will heat up and cause the circuit breaker to trip. When tripped, the push button will pop out, indicating that the circuit has been interrupted to prevent damage.
- Resetting the Breaker:** After the circuit breaker has tripped, allow a short period for the internal thermal element to cool down. Once cooled, you can reset the breaker by firmly pressing the push button back into its "in" position. If the overload condition still exists, the breaker will trip again immediately.

Note: This circuit breaker is not designed for manual push-on or push-off switching operations. Its primary function is automatic overload protection and manual reset after a trip.

7. Maintenance

The uxcell Thermal Circuit Breaker requires minimal maintenance. Regular inspection can help ensure its continued reliable operation.

- Visual Inspection:** Periodically inspect the circuit breaker for any signs of physical damage, discoloration, or loose connections.
- Cleaning:** If necessary, gently wipe the exterior of the circuit breaker with a dry, clean cloth. Do not use abrasive cleaners or solvents.
- Connection Check:** Ensure that the quick-connect terminals remain securely attached to their respective wires.

8. Troubleshooting

Problem	Possible Cause	Solution
Circuit breaker trips immediately after reset.	Persistent overload or short circuit in the protected circuit.	Identify and resolve the cause of the overload (e.g., faulty appliance, shorted wiring) before attempting to reset again. Do not repeatedly force reset.
Circuit breaker does not reset (button stays out).	Internal thermal element has not cooled sufficiently, or internal damage to the breaker.	Allow more time for cooling (5-10 minutes). If it still doesn't reset, the breaker may be damaged and needs replacement.
No power to circuit, but breaker is not tripped.	Loose wiring connection, power source issue, or internal failure of the breaker.	Check all wiring connections. Verify power supply to the "LINE" terminal. If connections are secure and power is present, the breaker may be faulty and require replacement.

9. Warranty and Support

Specific warranty information for this uxcell product is not provided within this manual. For details regarding warranty coverage, technical support, or replacement parts, please refer to the official uxcell website or contact their customer service directly.

You can often find support information on the product's purchase page or by visiting the manufacturer's official website: [Visit the uxcell Store on Amazon](#)

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question