TONGOU 1P

TONGOU Mini WiFi Smart Circuit Breaker (1P) User Manual

Model: 1P | Brand: TONGOU

1. INTRODUCTION

The TONGOU Mini WiFi Smart Circuit Breaker (MCB) is designed to provide comprehensive electrical protection and smart control for your home or commercial installations. This device offers protection against short circuits, overcurrents, and overloads, ensuring the safety and reliability of your electrical system. With its integrated WiFi connectivity, you can monitor energy consumption and control the circuit breaker remotely via the Tuya/Smart Life application, or through voice commands with compatible smart assistants.

This manual provides essential information for the safe installation, operation, and maintenance of your TONGOU Mini WiFi Smart Circuit Breaker. Please read it thoroughly before installation and keep it for future reference.

2. SAFETY INFORMATION

WARNING: Electrical installation and maintenance should only be performed by qualified electricians or personnel with appropriate electrical knowledge. Failure to follow these instructions can result in electric shock, fire, or serious injury.

- Always disconnect the main power supply before installing or performing any maintenance on the circuit breaker.

- Ensure that the wiring capacity matches the device specifications (maximum 16 mm²).

- Do not operate the device if it is damaged or shows signs of malfunction.

- Install the circuit breaker in a dry, well-ventilated area, away from direct sunlight and extreme temperatures.

- Ensure all connections are secure and properly insulated to prevent short circuits.

- This device is designed for AC systems (50/60 Hz) with a rated voltage up to 400V AC (for multi-pole versions) and an operating voltage of approximately 230V AC for this 1P model.

3. PRODUCT OVERVIEW

The TONGOU Mini WiFi Smart Circuit Breaker (1P) combines traditional circuit protection with modern smart home capabilities. Its compact design and robust flame-retardant casing ensure durability and reliable performance.

Key Features:

- **Multiple Protection:** Safeguards against short circuits, overcurrents, and overloads.

- **Smart Control:** Remote management via Tuya/Smart Life app (iOS/Android) and voice control with Alexa/Google Assistant.

- **Energy Monitoring:** Real-time display of current, voltage, and power consumption within the app.

- **High Quality:** Constructed with heat-resistant, flame-retardant materials and high-quality copper components for stable, long-term operation.

- **Easy Installation:** Designed for 35mm DIN rail mounting with secure screw terminals.

Component Identification:

Figure 1: Front view of the TONGOU Mini WiFi Smart Circuit Breaker. This image displays the main toggle switch, LED indicators for WiFi and pairing status, and the TONGOU branding with model number TOQCB2-80 C63.

Figure 2: Angled front view of the circuit breaker, showing the input (IN) and output (OUT) terminals, along with a pre-wired neutral connection for the smart module.

4. SETUP AND INSTALLATION

The TONGOU Mini WiFi Smart Circuit Breaker is designed for simple installation on standard 35mm DIN rails. Ensure all safety precautions are followed before proceeding.

4.1 Physical Installation

1. **Power Disconnection:** Turn off the main power supply to the electrical panel where the circuit breaker will be installed. Verify with a voltage tester that no power is present.

2. **Mounting:** Clip the circuit breaker onto a 35mm DIN rail in your electrical distribution box. Ensure it is securely fastened.

3. **Wiring:** Connect the input (IN) and output (OUT) wires to the respective screw terminals. The maximum wiring capacity is 16 mm² for both sides. Ensure the neutral (N) and live (L) connections are correct as indicated on the device. Tighten all screw terminals firmly to prevent loose connections and overheating.

Figure 3: Side view illustrating the screw terminals for wiring connections and the mechanism for DIN rail mounting.

Figure 4: Top view showing the clear labeling for input (IN) and output (OUT) wiring, facilitating correct installation.

4.2 App Pairing (Tuya/Smart Life)

1. **Download App:** Download the Tuya Smart or Smart Life app from the App Store (iOS) or Google Play Store (Android).

2. **Register/Login:** Open the app and register for a new account or log in with an existing one.

3. **Power On:** Restore power to the circuit breaker. The WiFi indicator on the device should start blinking rapidly, indicating it's in pairing mode. If not, press and hold the pairing button (if available, refer to device markings) for 5-10 seconds until it blinks rapidly.

4. **Add Device:** In the app, tap the "+" icon in the top right corner to add a device. Select "Electrical Engineering" > "Circuit Breaker (Wi-Fi)" or allow the app to auto-discover the device.

5. **Connect to WiFi:** Follow the on-screen instructions to connect the device to your 2.4 GHz WiFi network. Enter your WiFi password when prompted.

6. **Completion:** Once connected, the WiFi indicator on the circuit breaker will become solid. You can now rename the device and access its features within the app.

Figure 5: The Tuya/Smart Life app interface demonstrating remote control and monitoring capabilities for the circuit breaker.

5. OPERATING INSTRUCTIONS

Once installed and paired, you can operate your TONGOU Mini WiFi Smart Circuit Breaker both manually and remotely.

5.1 Manual Operation

- **Switch ON/OFF:** Use the physical toggle switch on the front of the circuit breaker to manually turn the connected circuit ON or OFF.

5.2 Remote Control via App

- **ON/OFF Control:** Open the Tuya/Smart Life app, select your circuit breaker, and tap the power icon to remotely switch the circuit ON or OFF.
- **Energy Monitoring:** View real-time current, voltage, and power consumption data for the connected circuit within the app interface. Historical data may also be available.
- **Scheduling:** Set schedules or timers for the circuit breaker to automatically turn ON or OFF at specific times.
- **Automation/Scenes:** Create smart scenes to automate the circuit breaker's operation based on other smart devices, environmental conditions, or custom triggers.

5.3 Voice Control

Integrate your TONGOU Smart Circuit Breaker with Amazon Alexa or Google Assistant for convenient voice control.

1. **Link Accounts:** In the Alexa or Google Home app, link your Tuya Smart or Smart Life account.
2. **Discover Devices:** Ask Alexa or Google Assistant to discover new devices.
3. **Voice Commands:** Use commands such as "Alexa, turn on [Device Name]" or "Hey Google, turn off [Device Name]".
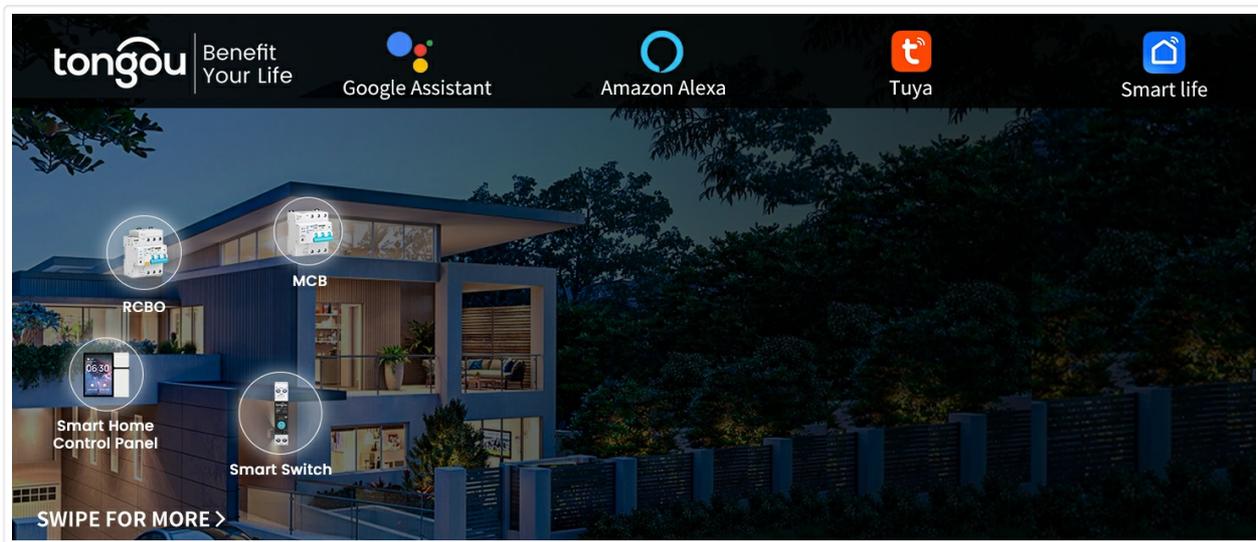
Figure 6: Illustration of the TONGOU smart ecosystem, highlighting the integration of the smart circuit breaker with other devices for a comprehensive smart home experience.

6. MAINTENANCE

The TONGOU Mini WiFi Smart Circuit Breaker requires minimal maintenance. Regular checks can help ensure its longevity and safe operation.

- **Visual Inspection:** Periodically inspect the device for any signs of physical damage, discoloration, or loose connections.
- **Cleaning:** If necessary, gently clean the exterior of the device with a dry, soft cloth. Do not use liquid cleaners or solvents.
- **Connection Check:** Ensure that all wiring connections remain tight and secure.
- **Firmware Updates:** Check the Tuya/Smart Life app for any available firmware updates for the device to ensure optimal performance and security.

CAUTION: Do not attempt to open or repair the circuit breaker yourself. Refer all servicing to qualified personnel.

7. TROUBLESHOOTING

If you encounter issues with your TONGOU Mini WiFi Smart Circuit Breaker, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Device not powering on	No main power; Incorrect wiring; Device fault	Check main power supply; Verify wiring connections; Contact support if device is faulty.
WiFi indicator not blinking (pairing mode)	Not in pairing mode	Press and hold the pairing button for 5-10 seconds until the indicator blinks rapidly.

Problem	Possible Cause	Solution
Unable to connect to app	Incorrect WiFi password; 5GHz WiFi network; Weak WiFi signal	Ensure correct 2.4 GHz WiFi password; Connect to a 2.4 GHz network; Move router closer or use a WiFi extender.
Circuit breaker trips frequently	Overload; Short circuit; Device fault	Reduce load on the circuit; Check for short circuits in wiring/appliances; Contact support.
Remote control not responding	No internet connection; App issue; Device offline	Check internet connection; Restart app; Verify device WiFi connection.

8. SPECIFICATIONS

Parameter	Value
Brand	TONGOU
Model Number	1P
Product Type	Miniature Circuit Breaker (MCB)
Material	Plastic
Rated Current	63 A (Adjustable 1-63 A)
Operating Voltage	Approx. 230 V AC
Rated Voltage (Product Line)	Up to 400 V AC (for multi-pole versions)
Frequency	50/60 Hz
Operating Mode	ON-OFF
Terminal Type	Screw Terminals
Max. Wiring Capacity	16 mm² (IN/OUT)
Dimensions (L x W x H)	47 x 35 x 104 mm
Weight	250 grams
WiFi Standard	2.4 GHz
Included Parts	Instruction Manual

9. WARRANTY AND SUPPORT

TONGOU is committed to providing high-quality products and excellent customer service.

- **Warranty:** This product comes with a 2-year warranty, ensuring compliance with EU standards.

- **Customer Support:** For any questions, technical assistance, or issues, please contact TONGOU customer support. We aim to provide a solution within 24 hours.

- **Contact Information:** For further assistance, please visit support@tongou.

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