

NGDOLAOV EAWCBT-P

NGDOLAOV EAWCBT-P Intelligent Circuit Breaker User Manual

Model: EAWCBT-P

1. INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of your NGDOLAOV EAWCBT-P Intelligent Circuit Breaker. This device is designed to offer comprehensive protection and energy monitoring for single-phase electrical circuits, integrating features such as current limiting, power limiting, overvoltage/undervoltage protection, temperature protection, and remote control capabilities.

Key features include:

- Adjustable Current Limit (1-63A)
- Adjustable Power Limit (1-26KW)
- Adjustable Overvoltage Protection (220-265V)
- Adjustable Undervoltage Protection (76-240V)
- Adjustable Temperature Protection (40-150°C)
- Energy Monitoring and Data Export
- Timer Switch Functionality
- Remote Control On/Off via APP
- Power-on Response Configuration

2. SAFETY INFORMATION

WARNING: Electrical shock hazard. Installation and servicing should only be performed by qualified personnel.

- Always disconnect power at the main circuit breaker before installing or servicing the device.

- Ensure all wiring connections are secure and comply with local electrical codes.
- Do not operate the device if it appears damaged.
- This device is designed for indoor use in dry environments.
- Verify the voltage and current ratings of your electrical system are compatible with the device specifications.

3. PACKAGE CONTENTS

Upon opening the package, verify that all components are present:

- 1 x NGDOLAOV EAWCBT-P Intelligent Circuit Breaker
- 1 x User Manual (this document)

4. PRODUCT OVERVIEW

The EAWCBT-P Intelligent Circuit Breaker features clear input and output terminals, an integrated power button, and status indicators. The device is designed for DIN rail mounting.



Figure 1: Front view of the EAWCBT-P Intelligent Circuit Breaker. This image displays the top 'N IN L' terminals for neutral and live input, the 'EAWCBT-P' model designation, 'CE' marking, a power indicator, a large circular power button, and the 'AC 80-240V 50/60Hz' rating. The bottom shows 'N OUT L' terminals for neutral and live output.

5. SPECIFICATIONS

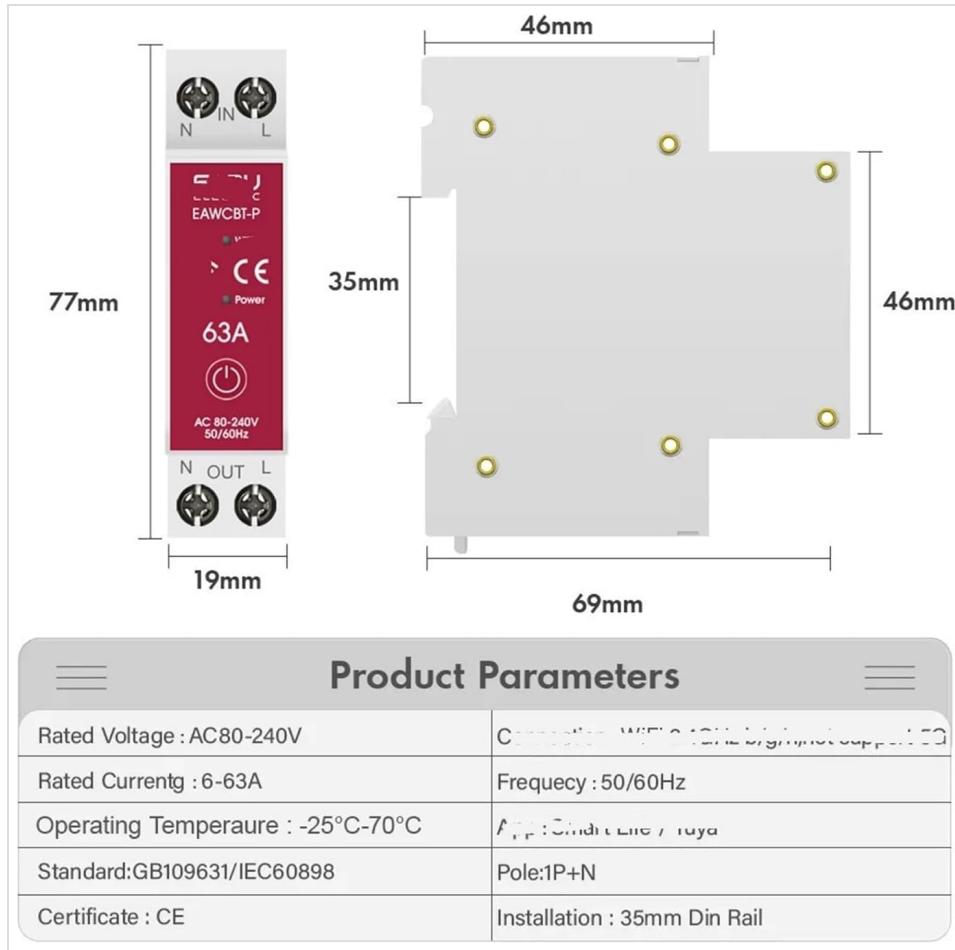


Figure 2: Dimensions and technical parameters of the EAWCBT-P Intelligent Circuit Breaker. The image shows the device's front view with dimensions (77mm height, 19mm width) and a side view with mounting hole positions and overall depth (46mm). A table lists key parameters such as Rated Voltage (AC80-240V), Rated Current (6-63A), Operating Temperature (-25°C-70°C), Frequency (50/60Hz), Standard (GB109631/IEC60898), Pole (1P+N), and Installation (35mm Din Rail).

Parameter	Value
Working Voltage	AC90-280V, 50/60Hz (AC90-300V for APP features)
Rated Current	6-63A
Installation	35MM DIN Rail
Mechanical Life	More than 100,000 on/off switches
Operating Temperature	-25°C to 70°C
Overvoltage Protection Range	220-265V (adjustable)
Undervoltage Protection Range	76-240V (adjustable)
Temperature Protection Range	40-150°C (adjustable)
Current Limit Range	1-63A (adjustable)
Power Limit Range	1-26KW (adjustable)
Dimensions	Approximately 77mm (H) x 19mm (W) x 46mm (D)
Item Weight	1.76 ounces (approx. 50g)

6. SETUP

6.1 Installation

1. **Power Disconnection:** Before beginning installation, ensure that the main power supply to the circuit is completely disconnected at the service panel.
2. **Mounting:** The EAWCBT-P is designed for 35MM DIN rail installation. Snap the device onto the DIN rail securely within your electrical panel.
3. **Wiring:**
 - Connect the incoming Neutral (N) and Live (L) wires to the 'N IN' and 'L IN' terminals at the top of the device, respectively.
 - Connect the outgoing Neutral (N) and Live (L) wires to the 'N OUT' and 'L OUT' terminals at the bottom of the device, respectively, leading to the load.
 - Ensure all wire connections are tight and properly insulated.
4. **Verification:** Double-check all connections for correctness and security before restoring power.

6.2 APP Connection (Remote Control)

To utilize the remote control and advanced monitoring features, download the compatible mobile application (refer to product packaging or manufacturer's website for specific APP name). Follow the in-app instructions to pair your device. This typically involves:

1. Ensuring your mobile device is connected to a 2.4GHz Wi-Fi network.
2. Placing the circuit breaker in pairing mode (often indicated by a flashing LED, refer to APP for specific steps).
3. Following the APP's prompts to connect the device to your Wi-Fi network.

7. OPERATING INSTRUCTIONS

7.1 Basic On/Off Operation

- **Manual Control:** Press the large circular power button on the front of the device to manually switch the circuit breaker ON or OFF.
- **Remote Control:** Once connected to the APP, you can remotely switch the device ON or OFF from anywhere.

7.2 Setting Protection Thresholds via APP

The EAWCBT-P allows you to set various protection thresholds to safeguard your electrical appliances. Access these settings through the connected mobile application:

- **Current Limit:** Set the maximum allowable current (1-63A). If the real-time current exceeds this value, the device will trip.
- **Power Limit:** Set the maximum allowable power (1-26KW). If the real-time power consumption exceeds this value, the device will trip.
- **Overvoltage Protection:** Define the upper voltage limit (220-265V). The device will trip if the voltage goes above this setting.
- **Undervoltage Protection:** Define the lower voltage limit (76-240V). The device will trip if the voltage

drops below this setting.

- **Temperature Protection:** Set a temperature threshold (40-150°C). The device will trip if its internal temperature exceeds this value, preventing overheating.

When a threshold is reached, the connected appliance will automatically shut down to prevent damage. You can reset the breaker manually or via the APP after addressing the cause of the trip.

7.3 Energy Monitoring

The APP provides real-time energy consumption data. You can:

- Monitor current, voltage, and power consumption.
- Track kilowatt-hour (kWh) usage over time.
- Set electricity prices within the APP to calculate electricity costs.
- Download historical data to a table for analysis.

7.4 Timer and Schedule Functions

Utilize the APP to set schedules and timers for automated operation:

- **Schedule:** Program the device to turn ON or OFF at specific times on specific days.
- **Timer:** Set a countdown timer for the device to turn ON or OFF after a set duration.
- **Recurring Timer:** Configure repetitive ON/OFF cycles.

7.5 Power-on Response

Configure the device's behavior after a power outage and subsequent restoration:

- **Restore Previous State:** The device will return to its ON or OFF state prior to the power interruption.
- **Always ON:** The device will always turn ON when power is restored.
- **Always OFF:** The device will always remain OFF when power is restored.

8. MAINTENANCE

The NGDOLAOV EAWCBT-P Intelligent Circuit Breaker requires minimal maintenance.

- **Cleaning:** Periodically wipe the exterior of the device with a dry, soft cloth. Do not use abrasive cleaners or solvents. Ensure power is disconnected before cleaning.
- **Inspection:** Regularly inspect the wiring connections for any signs of loosening or damage.
- **Firmware Updates:** Check the mobile application periodically for any available firmware updates for the device to ensure optimal performance and security.

9. TROUBLESHOOTING

If you encounter issues with your EAWCBT-P Intelligent Circuit Breaker, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Device does not power on.	No input power; incorrect wiring.	Check main circuit breaker. Verify input wiring (N IN, L IN).
Device trips frequently.	Overload (current/power); over/undervoltage; high temperature.	Check connected load for excessive consumption. Review and adjust protection thresholds in the APP. Ensure proper ventilation.
Cannot connect to APP.	Incorrect Wi-Fi network (not 2.4GHz); device not in pairing mode; network issues.	Ensure phone is on 2.4GHz Wi-Fi. Follow APP instructions to put device in pairing mode. Restart router.
Remote control not working.	No internet connection; APP not logged in; device offline.	Check internet connectivity. Log into the APP. Verify device status in APP.

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

10. WARRANTY AND SUPPORT

NGDOLAOV products are manufactured to high-quality standards. For warranty information, please refer to the documentation provided at the time of purchase or contact your retailer. For technical support, troubleshooting assistance, or inquiries regarding your EAWCBT-P Intelligent Circuit Breaker, please contact NGDOLAOV customer service through the contact information provided on the product packaging or the official NGDOLAOV website.