

JFUDJKLI RMDZW-3PN 100A

JFUDJKLI RMDZW-3PN 100A Three-Phase 4-Wire Smart Circuit Breaker User Manual

Model: RMDZW-3PN 100A

1. INTRODUCTION

The JFUDJKLI RMDZW-3PN 100A is a sophisticated three-phase, four-wire smart circuit breaker designed for advanced electrical system management. This device integrates an LCD display for real-time monitoring and offers comprehensive protection features including overflow, phase loss, overcurrent, and voltage imbalance protection. It is suitable for various applications requiring precise control and monitoring of electrical circuits, including photovoltaic two-way metering.

2. PRODUCT FEATURES

- **Type:** Photovoltaic Smart Meter / Circuit Breaker
- **Rated Voltage:** 220/380V
- **Rated Frequency:** 50/60HZ
- **Screen:** Backlit Digital LCD Display
- **Breaking Capacity:** 6KA
- **Adjustable Current:** 1-100A
- **Protection Functions:**
 - Loss of Current Delay Protection
 - Overcurrent Delay Protection
 - Voltage Imbalance Protection
 - Over and Under Voltage Protection
 - Phase Loss Protection
 - Reclosing Function
- **Additional Functions:** Electricity Measurement, Device Sharing, Voice Control, Remote Control (anytime, anywhere), Thermometer, Photovoltaic Two-Way Metering

- **Mechanical Life:** Over 100,000 times
- **Working Temperature:** -25°C to 70°C

3. SAFETY INFORMATION

WARNING: Electrical shock hazard. Installation and servicing must be performed by qualified personnel only. Failure to follow these instructions can result in serious injury or death.

- Always disconnect power at the main circuit breaker or fuse box before installing or servicing this device.
- Ensure all wiring connections are secure and comply with local and national electrical codes.
- Do not operate the device if it appears damaged.
- This device is designed for indoor use in dry environments unless otherwise specified.
- Verify correct voltage and current ratings before installation.

4. PACKAGE CONTENTS

Please check the package for the following items:

- JFUDJKLI RMDZW-3PN 100A Smart Circuit Breaker (1 unit)
- User Manual (this document)

If any items are missing or damaged, please contact your supplier immediately.

5. INSTALLATION AND SETUP

Installation of the RMDZW-3PN 100A smart circuit breaker requires electrical expertise. It is strongly recommended that installation be performed by a licensed electrician.

5.1 Wiring Diagram (General Guidance)

The device is a three-phase, four-wire system. Ensure correct connection of the three phase lines (L1, L2, L3) and the neutral line (N) to the corresponding terminals. The load should be connected to the output terminals.

Note: A detailed wiring diagram is typically provided with the physical product or by the manufacturer. Always refer to the specific diagram for your model.

5.2 Mounting

Mount the circuit breaker securely within an appropriate electrical enclosure, ensuring adequate ventilation and clearance for wiring and operation. The device is designed for DIN rail mounting.

5.3 Initial Power-Up

After installation, carefully restore power to the circuit. The LCD display should illuminate, indicating the device is operational. Follow the on-screen prompts or refer to the 'Operation' section for initial configuration.

6. OPERATION

The RMDZW-3PN 100A features an intuitive LCD display and control buttons for monitoring and configuration.

6.1 Display Overview



Image 1: Front view of the RMDZW-3PN 100A Smart Circuit Breaker. This image displays the front of the RMDZW-3PN 100A smart circuit breaker. The prominent LCD screen shows real-time voltage readings for three phases (L1, L2, L3), indicating a value of 235.3V for each. To the right of the screen are control buttons for navigation and settings, including 'REV', 'V', and 'OK', along with a gear icon for settings. The model number 'RMDZW-3PN 100A' and 'CE' certification mark are visible below the screen.

The backlit LCD displays various parameters such as voltage (V), current (A), power (W), energy consumption (kWh), and status indicators for protection functions. Use the navigation buttons to cycle through different display modes.

6.2 Control Buttons

- **Gear Icon Button:** Accesses the settings menu.
- **REV Button:** Navigates backward or scrolls through options.
- **V Button:** Cycles through voltage display modes or confirms selections.
- **OK Button:** Confirms selections or enters sub-menus.

6.3 Adjusting Settings

To adjust parameters such as current limits (1-100A), delay times for protection, or other smart functions:

1. Press the **Gear Icon Button** to enter the settings menu.
2. Use the **REV** and **V** buttons to navigate through the menu options.
3. Press **OK** to select an option or enter a sub-menu.

4. Adjust values using the **REV** and **V** buttons, then press **OK** to confirm.
5. Exit the settings menu by navigating to the 'Exit' option or holding down a specific button (refer to on-screen prompts).

6.4 Smart Features (Voice Control, Remote Control, Device Sharing)

This device supports smart integration. Refer to the accompanying smart home application guide or manufacturer's website for instructions on connecting the device to your smart home system, enabling voice control, remote monitoring, and device sharing functionalities.

7. TROUBLESHOOTING

If you encounter issues with your RMDZW-3PN 100A, refer to the following common problems and solutions:

- **No Display/Device Not Powering On:**
 - Check the main power supply to the circuit breaker.
 - Ensure all wiring connections are secure.
 - Verify the input voltage is within the rated range (220/380V).
- **Device Trips Frequently:**
 - An overcurrent or fault condition may exist in the circuit. Inspect connected loads.
 - Check the set current limit (1-100A) in the device settings; it might be too low for the connected load.
 - Investigate for voltage imbalances or phase loss conditions.
- **Incorrect Readings on Display:**
 - Ensure the device is correctly calibrated (if applicable, refer to advanced settings).
 - Verify the current transformers (CTs) are correctly installed and oriented (if external CTs are used).
- **Cannot Connect to Smart Home System:**
 - Ensure your Wi-Fi network is active and within range.
 - Check the smart home application for correct device pairing procedures.
 - Verify the device's network status on its display.

If the problem persists, contact customer support or a qualified electrician.

8. SPECIFICATIONS



Image 2: Angled view of the RMDZW-3PN 100A Smart Circuit Breaker with dimensions. This image shows an angled view of the RMDZW-3PN 100A smart circuit breaker, highlighting its physical dimensions. The width is indicated as 75.3mm, the height as 75.3mm, and the depth as 89.5mm. Another dimension of 58.3mm is shown, likely referring to the depth of the main body without the terminal covers. The LCD screen and control buttons are also visible, providing context for the measurements.

Parameter	Value
Model	RMDZW-3PN 100A
Rated Voltage	220/380V
Rated Frequency	50/60HZ
Adjustable Current Range	1-100A
Breaking Capacity	6KA
Screen Type	Backlit Digital LCD
Mechanical Life	≥ 100,000 times
Working Temperature	-25°C to 70°C

Parameter	Value
Package Dimensions	1.18 x 0.79 x 0.39 inches (approximate, likely referring to a component)
Item Weight	1.76 ounces
Manufacturer	JFUDJKLI
Assembly Required	No (for the device itself, installation requires assembly)
Number of Pieces	1
Device Dimensions (approx.)	75.3mm (W) x 75.3mm (H) x 89.5mm (D)

9. MAINTENANCE

The RMDZW-3PN 100A smart circuit breaker is designed for minimal maintenance. However, periodic checks are recommended:

- **Visual Inspection:** Regularly inspect the device for any signs of physical damage, discoloration, or loose connections.
- **Cleaning:** Keep the device clean and free from dust and debris. Use a dry, soft cloth for cleaning. Do not use liquid cleaners.
- **Connection Checks:** Periodically ensure all terminal connections are tight and secure.

Always disconnect power before performing any maintenance.

10. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the documentation provided with your purchase or contact JFUDJKLI customer service through their official channels. Keep your purchase receipt as proof of purchase.