

DEWIN IYCQAQCXA-109919-03

DEWIN Tuya WiFi Smart Over/Under Voltage Protector AC 230V 63A Instruction Manual

Model: IYCQAQCXA-109919-03

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your DEWIN Tuya WiFi Smart Over/Under Voltage Protector. This device is designed to safeguard your electrical appliances from damage caused by voltage fluctuations and overcurrent conditions, offering intelligent protection and remote control capabilities.

The protector automatically disconnects power during abnormal voltage or current events and reconnects when conditions return to normal, ensuring continuous protection for your electrical system.

2. SAFETY INFORMATION

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

- Always disconnect power 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 input voltage and current ratings of your electrical system match the device specifications.

3. PRODUCT FEATURES

- **Automatic Protection:** Instantly cuts power during overvoltage, undervoltage, or overcurrent conditions to protect appliances. Automatically restores power when conditions normalize.
- **WiFi Remote Control:** Control the device remotely via a mobile phone application (Tuya platform) from anywhere with a signal.

- **Real-time LED Display:** Vivid LED screen displays real-time voltage (V), current (A), power (kW), and power factor (cosφ) for clear monitoring.
- **Adjustable Protection Parameters:** Manually set overvoltage, undervoltage, overcurrent, and leakage protection values to customize protection levels.
- **Automatic Reset Function:** Configurable recovery delay for automatic power restoration.
- **High Current Impact Resistance:** Built-in 63A magnetic latching relay prevents burnout from large current impacts.
- **Intelligent Anti-Interference:** Smart chips improve anti-interference capabilities.
- **DIN Rail Mountable:** Designed for easy installation on standard DIN rails.

4. PACKAGE CONTENTS

- 1 x DEWIN Tuya WiFi Smart Over/Under Voltage Protector
- 1 x User Manual

5. SPECIFICATIONS

Product Name	WiFi Intelligent Reclosing Protector
Model Number	IYCQAQCXA-109919-03
Material	ABS
Input Voltage	AC 140-300 V
Overvoltage Protection Value	230-300 V (Default: 270 V)
Undervoltage Protection Value	140-210 V (Default: 170 V)
Overcurrent Protection	63 A (Default: 40 A)
Leakage Protection Value	10-99 mA (Default: 30 mA)
Recovery Delay	1-500 seconds (Default: 30 seconds)
Electrical & Mechanical Life	≥ 100,000 times
Self Power Consumption	≤ 2 W
Dimensions (L x W x H)	95 x 45 x 52 mm (approx. 9.5 x 4.5 x 5.2 cm)
Weight	250 g



Product name:	WIFI intelligent reclosing	Overcurrent Protection value:	63A (default 40A)
Material:	ABS	Leakage Protection value:	10-99mA (default 30mA)
Input voltage:	AC 140-300V	Recovery delay:	1-500 seconds (default 30 seconds)
Overvoltage Protection value:	230-300V (default 270V)	Electrical machinery life:	≥ 100,000 times
Undervoltage Protection value:	140-210V (default 170V)	Own Power consumption:	≤ 2W

Image: Product dimensions and a summary of key specifications.

6. SETUP AND INSTALLATION

The DEWIN Smart Over/Under Voltage Protector is designed for DIN rail mounting. Ensure power is disconnected before proceeding with installation.

6.1 Wiring Diagram

Easy and simple wiring for top in and bottom out

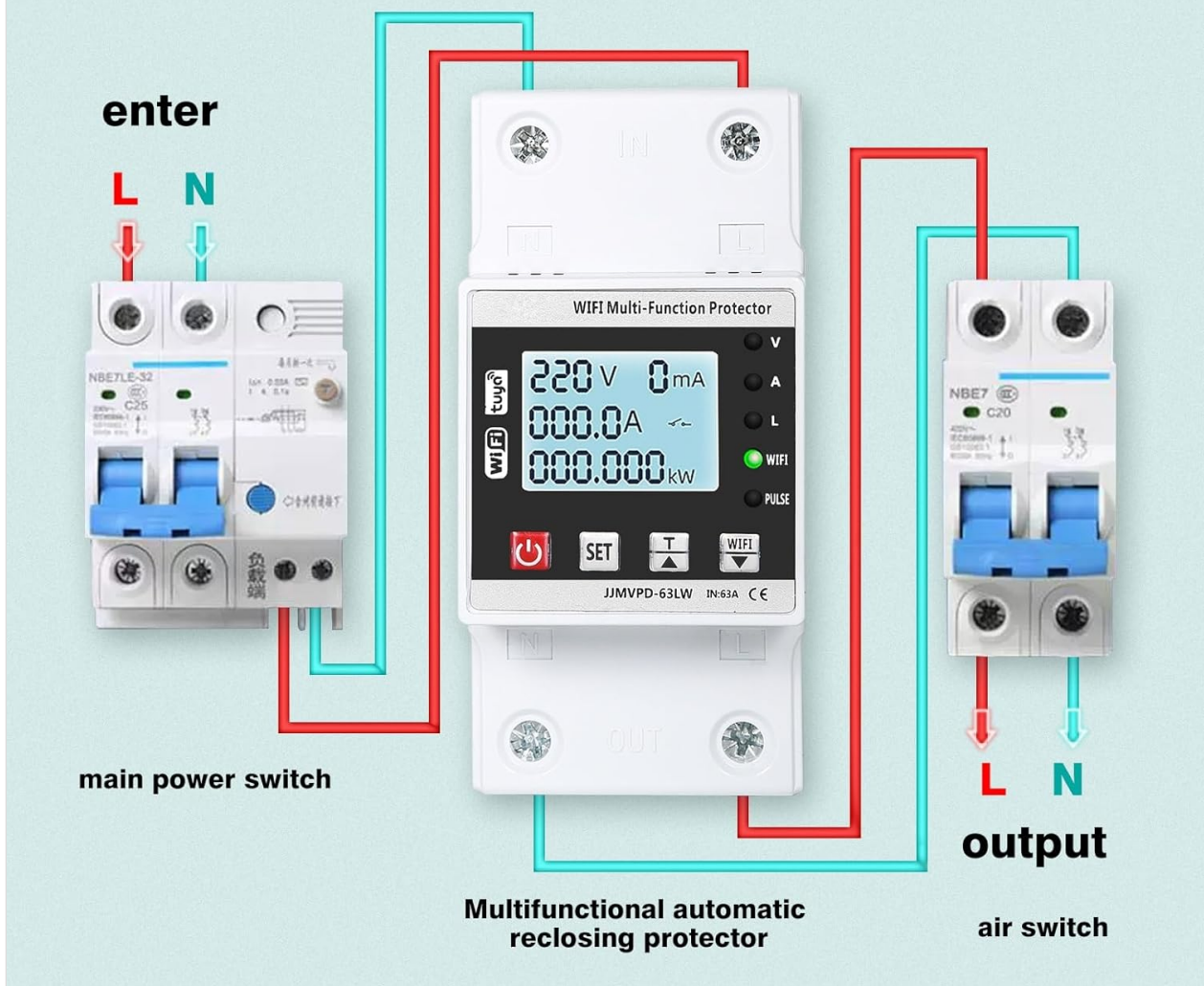


Image: Wiring diagram illustrating the connection of the protector between a main power switch and an air switch, with incoming (IN) and outgoing (OUT) live (L) and neutral (N) lines.

The device supports a 'top-in and bottom-out' wiring configuration. Connect the incoming live (L) and neutral (N) lines to the 'IN' terminals at the top of the device. Connect the outgoing live (L) and neutral (N) lines to the 'OUT' terminals at the bottom of the device, leading to your protected circuit or appliances.

- **Incoming Power:** Connect the main power supply (Live and Neutral) to the 'IN' terminals.
- **Outgoing Power:** Connect the load (Live and Neutral) to the 'OUT' terminals.
- Ensure all connections are tight and secure to prevent loose contacts and overheating.

6.2 DIN Rail Mounting





Image: Rear view of the protector, highlighting the guide rail buckle for DIN rail installation.

The device features a guide rail buckle for easy and secure attachment to a standard DIN rail. Simply align the device with the DIN rail and press firmly until it clicks into place.

7. OPERATING INSTRUCTIONS

7.1 Product Interface Overview



Image: Detailed diagram of the protector's front panel, showing the LED display, indicator lights (V, A, L, WiFi, Pulse), and control buttons (Manual Switch, SET, T, WiFi).

The front panel includes an LED display, indicator lights, and control buttons:

- **LED Display:** Shows real-time electrical parameters.
- **Indicator Lights:**
 - **V:** Over/under voltage protection indicator light.
 - **A:** Overcurrent protection indicator light.
 - **L:** Leakage protection indicator light.
 - **WiFi:** WiFi indicator light.
 - **Pulse:** Electricity meter pulse indicator light.
- **Manual Switch (Power Button):** Turns the device on/off manually.
- **SET Key:** Used to enter the setting interface (press and hold for 3 seconds).

- **T Key:** Test button (press and hold for 3 seconds to test leakage).
- **WiFi Key:** Used in conjunction with the T key to configure the wireless network (press T + WiFi for 3 seconds).

7.2 Display Modes



Image: The protector's display cycling through electricity consumption (kWh), instantaneous power (kW), and power factor ($\cos\phi$) readings.

The LED display cycles through various parameters:

- **Electricity Display (kWh):** Shows total electricity consumption.
- **Power Display (kW):** Shows instantaneous power usage.
- **Power Factor Display ($\cos\phi$):** Shows the power factor.
- **Voltage (V) and Current (A):** Also displayed in real-time.

7.3 Manual Operation

- Press the **Manual Switch** (power button) briefly to manually turn the power on or off.

8. CONFIGURATION AND SETTINGS

The device allows for manual adjustment of protection parameters and WiFi network configuration.

8.1 Adjusting Protection Values

- Press and hold the **SET** button for 3 seconds to enter the setting interface.
- Use the **SET** and **T** buttons to navigate through the parameters (overvoltage, undervoltage, overcurrent, leakage protection, recovery delay).
- Adjust the values as needed. Refer to the specifications section for default and adjustable ranges.
- Confirm your settings to save them.

8.2 WiFi Network Configuration

- Ensure your mobile device has the Tuya Smart app installed and you have an active 2.4GHz WiFi network.
- Press and hold the **T** button and the **WiFi** button simultaneously for 3 seconds to initiate WiFi pairing mode. The WiFi indicator light will flash.
- Follow the instructions in the Tuya Smart app to add the device to your network.
- Once connected, you can remotely monitor and control the protector via the app.

9. MAINTENANCE

- Regularly inspect the device for any visible damage or loose connections.
- Keep the device clean and free from dust. Use a dry, soft cloth for cleaning.
- Do not use abrasive cleaners or solvents.
- Ensure proper ventilation around the device to prevent overheating.

10. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	No incoming power; loose wiring; device fault.	Check main power supply. Verify all wiring connections. If problem persists, contact support.
Device trips frequently.	Overvoltage, undervoltage, or overcurrent condition; sensitive protection settings.	Check electrical parameters on the display. Adjust protection values if necessary (refer to Section 8.1). Investigate the cause of voltage/current fluctuations.
WiFi indicator not flashing/connecting.	Incorrect WiFi password; 5GHz network; device too far from router; incorrect pairing mode.	Ensure you are using a 2.4GHz WiFi network. Re-enter pairing mode (Section 8.2). Check WiFi signal strength. Verify WiFi password.
Remote control not working.	No internet connection on phone or device; app issue.	Check internet connectivity for both your phone and the device. Restart the Tuya Smart app.

11. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the purchase documentation or contact your

retailer. Keep your proof of purchase for any warranty claims.