



[Manuals.plus](#) /

› [DQLODCTB](#) /

› DQLODCTB EAPDX-63VAE-RGB 230V 3-in-1 Din Rail Adjustable Overvoltage Current Undervoltage Protection Device User Manual

DQLODCTB EAPDX-63VAE-RGB

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.

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](#)

DQLODCTB EAPDX-63VAE-RGB 230V 3-in-1 Din Rail Adjustable Overvoltage Current Undervoltage Protection Device User Manual

Model: EAPDX-63VAE-RGB

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of the DQLODCTB EAPDX-63VAE-RGB 230V 3-in-1 Din Rail Adjustable Overvoltage Current Undervoltage Protection Device. This device is designed to protect electrical equipment from damage caused by overvoltage, undervoltage, and overcurrent conditions, while also monitoring energy consumption (KWH).

Please read this manual thoroughly before installation and operation to ensure safe and efficient use of the product.

2. SAFETY INFORMATION

- **Electrical Hazard:** Installation and maintenance should only be performed by qualified personnel. Ensure power is disconnected before any wiring or service.
- **Proper Wiring:** Follow all local and national electrical codes. Incorrect wiring can lead to electric shock, fire, or device damage.
- **Operating Environment:** Do not expose the device to moisture, extreme temperatures, or corrosive environments.
- **Intended Use:** Use the device only for its intended purpose as an overvoltage, undervoltage, and overcurrent protection relay.
- **Inspection:** Regularly inspect the device for any signs of damage or wear. Do not operate a damaged device.

3. PRODUCT OVERVIEW

The EAPDX-63VAE-RGB is a compact, DIN rail-mountable protection device featuring a digital display for real-time monitoring of voltage (V), current (A), and accumulated energy consumption (KWH). It provides adjustable protection thresholds for overvoltage, undervoltage, and overcurrent conditions.



Figure 3.1: Device Front Panel

This image displays the front panel of the EAPDX-63VAE-RGB device. It features a multi-color digital display showing Voltage (V), Current (A), and Kilowatt-hours (KWH). Below the display are three control buttons: an 'Up' arrow, a 'Down' arrow, and a 'SET' button, along with a power button. The input terminals (IN) are at the top, and output terminals (OUT) are at the bottom.

are at the bottom, clearly labeled for Neutral (N) and Live (L) connections.

3.1. Key Features

- Real-time display of Voltage, Current, and KWH.
- Adjustable overvoltage protection threshold.
- Adjustable undervoltage protection threshold.
- Adjustable overcurrent protection threshold.
- Automatic reclosing after fault clearance.
- DIN rail mounting for easy installation.

4. SPECIFICATIONS

Refer to the table below for detailed technical specifications of the EAPDX-63VAE-RGB device.



Figure 4.1: Device Dimensions and Key Parameters

This image provides a diagram showing the physical dimensions of the device (81mm height, 36mm width, 60mm depth) and a table of key electrical parameters. The table lists: Rated supply voltage (AC 220V), Operating Voltage Range (AC 80V-400V), Operating frequency (50/60Hz), Overcurrent setting range (1-63A), Overvoltage setting range (230-300V), Undervoltage setting range (80-210V), and Power Display Range (0-999kwh).

Table 4.1: Technical Specifications

Parameter	Value
Brand	DQLODCTB
Model Number	EAPDX-63VAE-RGB
Rated Supply Voltage	AC 220V (Nominal)
Operating Voltage Range	AC 80V - 400V
Operating Frequency	50/60Hz
Overcurrent Setting Range	1 - 63A
Overvoltage Setting Range	230 - 300V
Undervoltage Setting Range	80 - 210V
Power Display Range	0 - 999 KWH
Current Rating (Max)	63A
Mounting Type	DIN Rail Mount
Number of Poles	1
Dimensions (Approx.)	81mm (H) x 36mm (W) x 60mm (D)

5. SETUP AND INSTALLATION

5.1. Pre-installation Checklist

- Ensure the main power supply is OFF before starting installation.
- Verify that the device specifications match your electrical system requirements.
- Have appropriate tools (screwdriver, wire strippers, multimeter) ready.
- Confirm you have a standard 35mm DIN rail for mounting.

5.2. Mounting

1. Locate a suitable position on your electrical panel's 35mm DIN rail.
2. Align the device with the DIN rail and press firmly until it clicks into place.
3. Ensure the device is securely fastened and does not wobble.

5.3. Wiring Connections

Refer to Figure 3.1 for terminal locations. All wiring must be done with the main power supply disconnected.

1. Input Connections (IN):

- Connect the incoming Neutral (N) wire from your power source to the 'N' terminal on the top (IN) side of the device.
- Connect the incoming Live (L) wire from your power source to the 'L' terminal on the top (IN) side of the device.

2. Output Connections (OUT):

- Connect the outgoing Neutral (N) wire to your load to the 'N' terminal on the bottom (OUT) side of the device.
- Connect the outgoing Live (L) wire to your load to the 'L' terminal on the bottom (OUT) side of the device.

3. Ensure all wire connections are tight and secure to prevent loose contacts and overheating.

Note: The device is designed for single-phase AC 220V systems. Do not connect to three-phase systems or voltages outside the specified operating range.

6. OPERATING INSTRUCTIONS

6.1. Powering On and Display

1. After successful wiring, turn on the main power supply.
2. The device's digital display will illuminate, showing real-time voltage (V), current (A), and accumulated KWH.
3. The power button (usually a circle with a vertical line) can be used to manually turn the output ON/OFF.

6.2. Setting Protection Parameters

The device allows you to set thresholds for overvoltage, undervoltage, and overcurrent protection. Use the 'SET', 'Up' (▲), and 'Down' (▼) buttons.

1. **Enter Setting Mode:** Press and hold the 'SET' button for approximately 3-5 seconds until a parameter starts flashing on the display.
2. **Navigate Parameters:** Briefly press the 'SET' button to cycle through the different adjustable parameters (e.g., Overvoltage, Undervoltage, Overcurrent).
3. **Adjust Value:** When the desired parameter is flashing, use the 'Up' (▲) and 'Down' (▼) buttons to increase or decrease its value.
4. **Confirm and Exit:** After setting all desired parameters, press and hold the 'SET' button again for 3-5 seconds to save the settings and exit the setting mode. If no button is pressed for a certain period, the device may automatically exit setting mode, saving the last adjusted value.

Refer to Figure 4.1 for default/recommended setting ranges.

6.3. KWH Measurement

The device continuously measures and accumulates energy consumption in Kilowatt-hours (KWH). This value is displayed on the screen.

- The KWH reading provides an indication of total energy consumed through the device.
- Consult the device's specific interface for options to reset the KWH counter, if available. This is typically done by holding a specific button combination in setting mode.

7. MAINTENANCE

- **Cleaning:** Periodically clean the device's exterior with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Inspection:** Annually inspect wiring connections for tightness and signs of corrosion or damage.

- **Ventilation:** Ensure adequate ventilation around the device to prevent overheating.
- **Firmware:** This device typically does not require user-updatable firmware.

Always disconnect power before performing any maintenance.

8. TROUBLESHOOTING

Table 8.1: Common Issues and Solutions

Problem	Possible Cause	Solution
Device display is off.	No power supply; incorrect wiring; device fault.	Check main power supply. Verify wiring connections. If problem persists, contact support.
Output is off, but input power is present.	Overvoltage/Undervoltage/Overcurrent protection triggered; manual OFF.	Check display for fault indicators (e.g., high V, low V, high A). Address the fault condition. Press the power button to re-enable output if safe.
Cannot adjust settings.	Not in setting mode; buttons unresponsive.	Press and hold 'SET' button for 3-5 seconds to enter setting mode. If buttons are unresponsive, power cycle the device.
Inaccurate readings (V, A, KWH).	Loose connections; device fault; external interference.	Ensure all wiring is secure. Compare readings with a calibrated multimeter. If significant discrepancy, contact support.

If you encounter issues not listed here or if solutions do not resolve the problem, please contact customer support.

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or contact the manufacturer directly.

Manufacturer: DQLODCTB

Please retain your proof of purchase for warranty claims.