

DewinLVD LSXDB03

DewinLVD LSXDB03 3-Phase Tuya WiFi Smart Energy Meter User Manual

Model: LSXDB03 | Brand: DewinLVD

Product Overview	Safety Information	Package Contents	Specifications	Installation	Operation
	Maintenance	Troubleshooting	Support		

1. PRODUCT OVERVIEW

The DewinLVD LSXDB03 is a 3-phase intelligent energy meter designed for accurate bidirectional measurement of electrical energy. It integrates Tuya WiFi connectivity for remote monitoring and control via a smartphone application. This device also features comprehensive protection functions including over-voltage, under-voltage, and over-current protection, enhancing the reliability and stability of your electrical circuit.



Image: Angled view of the DewinLVD LSXDB03 3-Phase Smart Energy Meter, showcasing its compact design and clear display.

2. SAFETY INFORMATION

WARNING: Installation and maintenance of this device should only be performed by qualified electricians to prevent electric shock or damage to the device. Always disconnect power before installation or servicing.

- Ensure the main power supply is disconnected before any wiring.
- Verify all connections are secure and correct according to the wiring diagram.
- Do not operate the device if it appears damaged.
- Keep the device away from water and high humidity environments.
- This device is designed for indoor use only.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x DewinLVD LSXDB03 3-Phase Tuya WiFi Smart Energy Meter
- 1 x User Manual (this document)

4. SPECIFICATIONS

Parameter	Value
Material	Flame-retardant PC material
Maximum Current	100 A
Supply Voltage	380 V AC
Operating Voltage Range	80 V–400 V AC
Rated Frequency	50 Hz
Display	LCD screen
WiFi Control	Smartphone app "Smart Graffiti" (Tuya Smart)
WiFi Frequency	2.4 GHz
Mounting	35 mm DIN rail
Under-voltage Protection	60 V–300 V (adjustable, default: 175 V)
Over-voltage Protection	60 V–300 V (adjustable, default: 275 V)
Over-current Protection	1 A–100 A (adjustable, default: 80 A)
Under-current Protection	1 A–100 A (adjustable, default: off)
Voltage Safety	10–100 % (adjustable, default: off)
Power Outage Protection	10–100 % (adjustable, default: off)
Product Dimensions	7.5 x 7.5 x 9 cm
Product Weight	480 g



Image: Front and side view of the DewinLVD LSXDB03 showing its dimensions (89mm height, 75mm width, 75mm depth, 35mm DIN rail depth).

5. INSTALLATION

5.1 DIN Rail Mounting

The DewinLVD LSXDB03 is designed for easy installation on a standard 35mm DIN rail. Ensure the rail is securely mounted within your electrical distribution box.

Electric meter protector

The universal DIN35mm standard rail is installed, with small size, light weight, simple and convenient installation, high reliability.

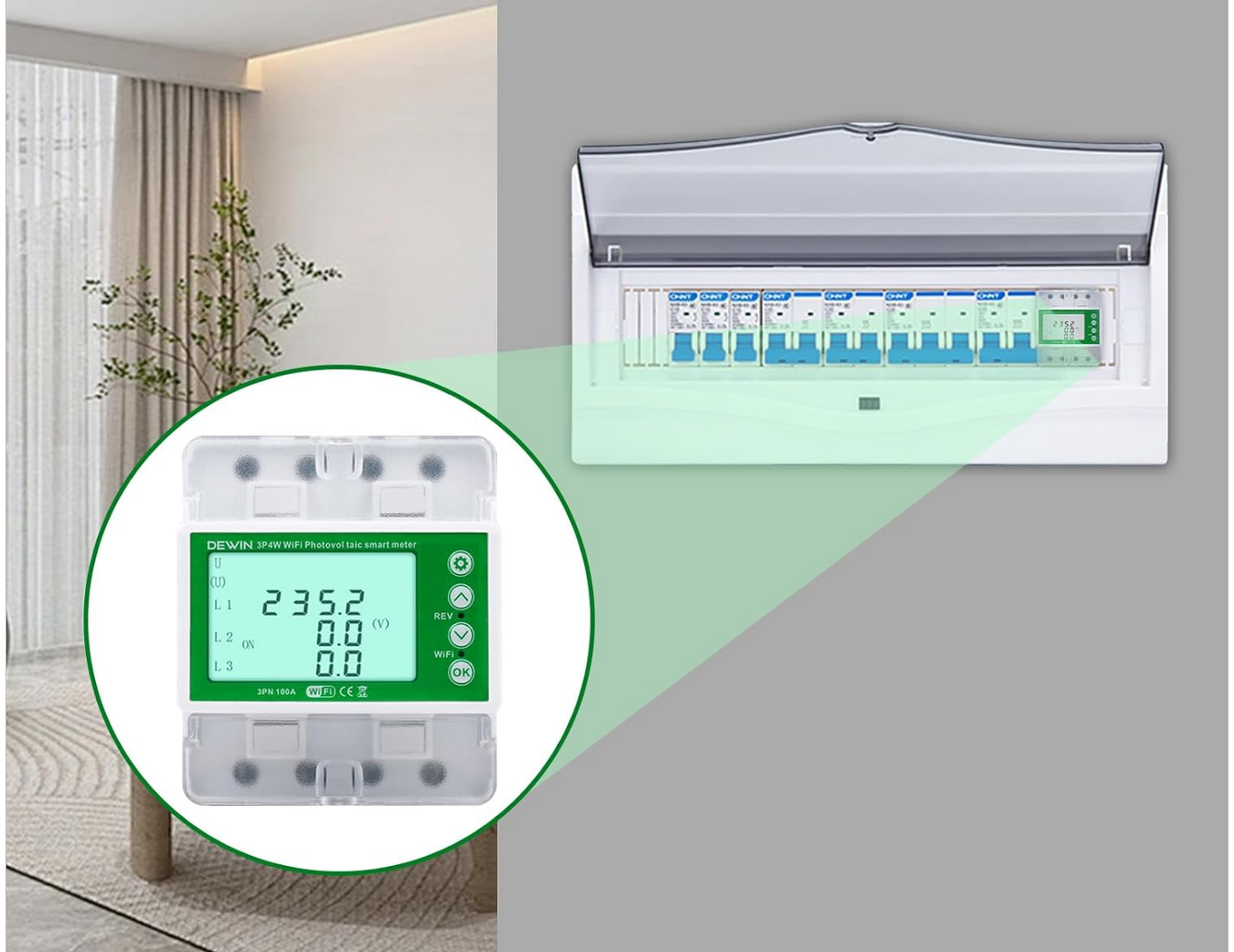


Image: The smart energy meter installed on a DIN rail inside an electrical panel, demonstrating its compact fit.

5.2 Wiring Diagram

Follow the wiring diagram carefully. This device is a 3-phase, 4-wire meter. Connect the input and output lines as indicated.

DIN35MM standard guide rail installation

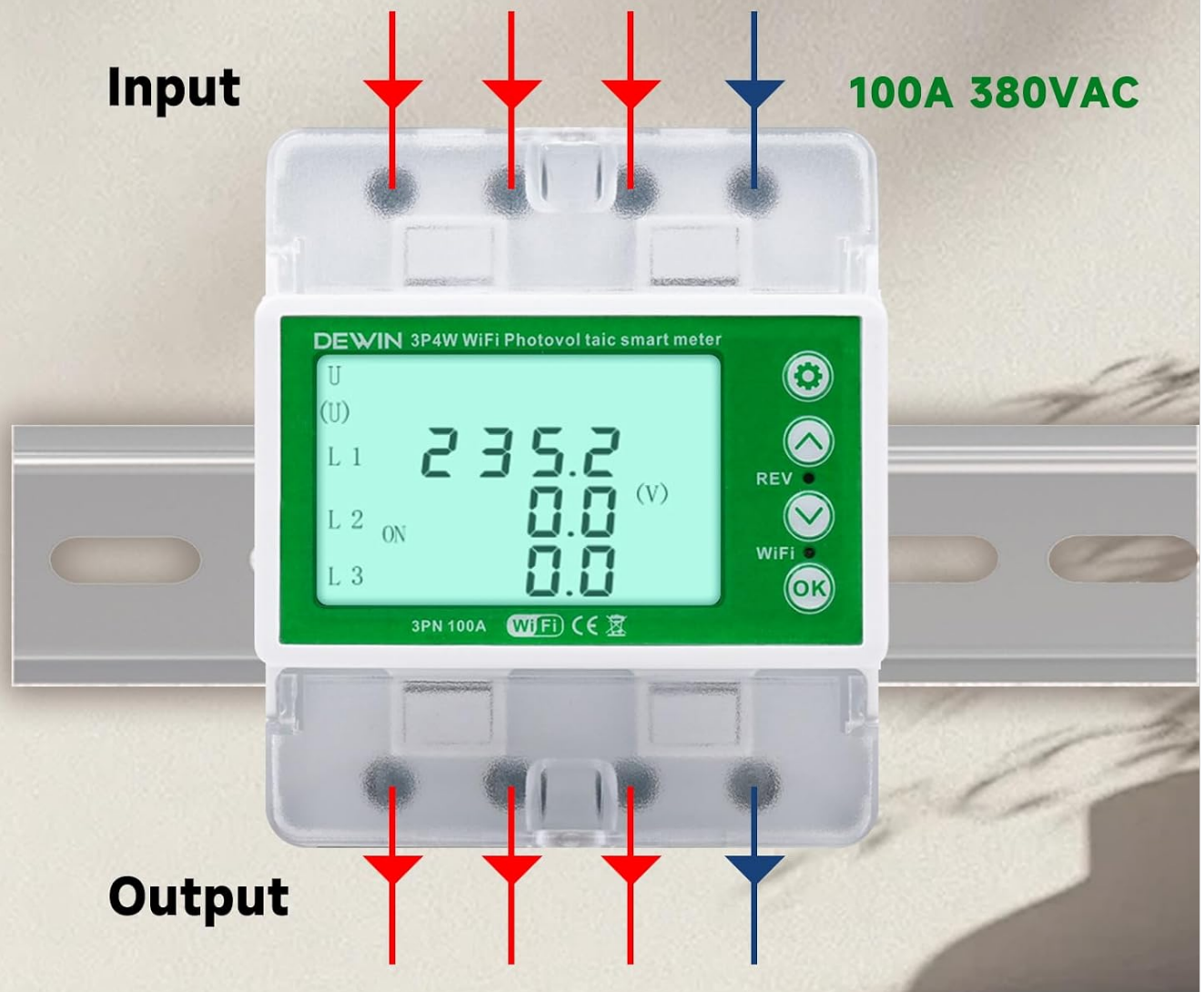


Image: Wiring diagram for the DewinLVD LSXDB03, showing input and output connections for a 3-phase, 4-wire system (100A 380VAC).

1. Connect the 3-phase input lines (L1, L2, L3) and Neutral (N) to the designated input terminals.
2. Connect the corresponding output lines (L1, L2, L3) and Neutral (N) to the output terminals.
3. Ensure all connections are tight and secure.

5.3 Tuya WiFi App Connection

To enable remote control and monitoring, connect the device to the "Smart Graffiti" (Tuya Smart) app.

Remote control Wifi circuit breaker



Smart Life



Google Assistant



Wi-Fi



Amazon Alexa



Tuya Smart



Image: The smart energy meter alongside a smartphone displaying the Tuya Smart app interface, indicating remote control capabilities.

1. Download the "Smart Graffiti" or "Tuya Smart" app from your smartphone's app store.
2. Register or log in to your account.
3. Ensure your smartphone is connected to a 2.4 GHz WiFi network.
4. Power on the energy meter.
5. Follow the in-app instructions to add a new device. The meter should enter pairing mode (often indicated by a blinking WiFi LED).
6. Once connected, you can monitor and control the meter remotely.

6. OPERATING INSTRUCTIONS

6.1 LCD Display and Buttons

The device features an LCD screen for real-time data display and physical buttons for local control and settings adjustment.

LCD display Adjustable physical buttons



Image: Close-up of the DewinLVD LSXDB03's LCD display showing voltage readings and the physical control buttons (up, down, REV, WiFi, OK).

- **LCD Screen:** Displays real-time voltage (V), current (A), power (W), energy consumption (kWh), and other parameters for each phase.
- **Buttons:** Use the navigation buttons (Up/Down arrows) to scroll through different display parameters or adjust settings. The "OK" button confirms selections, and "REV" might indicate reverse direction or reset. The "WiFi" button is typically used for pairing mode.

6.2 Bidirectional Measurement

This meter supports bidirectional energy measurement, which is crucial for systems like solar power installations. It accurately measures both energy consumed from the grid and energy fed back into the grid.

6.3 Protection Functions

The device offers multiple adjustable protection settings:

3 PHASE 4 LINE

wifi intelligent rewiring gate

Arrears protection

Lack of protection

Overcurrent protection

Lost delayed protection

Over -pressure protection

Overcurrent delay protection

Voltage three -phase imbalance

Three -phase imbalance of current



Image: The smart energy meter with a list of its protection features, including overcurrent, over-pressure (overvoltage), and three-phase imbalance protection.

- **Over-voltage Protection:** Adjustable range 60 V–300 V AC (default: 275 V).
- **Under-voltage Protection:** Adjustable range 60 V–300 V AC (default: 175 V).
- **Over-current Protection:** Adjustable range 1 A–100 A (default: 80 A).
- **Under-current Protection:** Adjustable range 1 A–100 A (default: off).
- **Voltage Safety:** Adjustable range 10–100 % (default: off).
- **Power Outage Protection:** Adjustable range 10–100 % (default: off).
- **Three-phase Current Imbalance Protection:** Automatically detects and protects against imbalances.
- **Phase Failure Protection:** Protects against loss of a phase.

These settings can typically be adjusted via the Tuya Smart app or directly on the device using the physical buttons. Refer to the app's interface for detailed instructions on setting protection thresholds.

7. MAINTENANCE

- Keep the device clean and free from dust. Use a dry, soft cloth for cleaning.
- Do not use abrasive cleaners or solvents.
- Periodically check wiring connections for tightness and signs of wear.
- Ensure the operating environment remains within specified temperature and humidity ranges.
- Firmware updates for the device may be available through the Tuya Smart app. Follow app instructions for updates.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device not powering on.	No power supply; incorrect wiring.	Check main power supply. Verify wiring connections according to the diagram.
WiFi connection fails.	Incorrect WiFi password; 5GHz network; device too far from router.	Ensure correct 2.4 GHz WiFi network and password. Move device closer to router. Re-enter pairing mode.
Inaccurate readings.	Incorrect wiring; faulty sensor.	Double-check wiring. If problem persists, contact support.
Protection trips frequently.	Protection thresholds set too low; actual electrical issue.	Review and adjust protection settings in the app. Consult an electrician to check for underlying electrical problems.

9. SUPPORT INFORMATION

For technical assistance, warranty claims, or any questions regarding your DewinLVD LSXDB03 Smart Energy Meter, please contact our customer support team.

We aim to respond to all inquiries within 24 hours.

Contact Information: Please refer to your purchase documentation or the seller's contact details on the platform where you purchased the product.

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.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for

conversion attribution. [Privacy details](#).

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