

PABVRPYT KWS-306WF

PABVRPYT KWS-306WF Four-Wire Three-Phase Energy Meter Instruction Manual

Model: KWS-306WF | Brand: PABVRPYT

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of the PABVRPYT KWS-306WF Four-Wire Three-Phase Energy Meter. This device is designed for accurate measurement and monitoring of AC electrical parameters in three-phase systems. Please read this manual thoroughly before installation and use to ensure safe and efficient operation.

2. SAFETY INFORMATION

WARNING: Installation and maintenance should only be performed by qualified electricians. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Ensure power is disconnected before any installation or wiring.
- Verify all connections are secure and correct according to the wiring diagram.
- Do not operate the device in wet or damp conditions.
- Do not exceed the specified voltage and current ratings.
- This device is for indoor use only.

3. PRODUCT OVERVIEW

The KWS-306WF is a smart four-wire three-phase energy meter equipped with a clear LCD display and Wi-Fi connectivity for remote monitoring. It provides real-time data on voltage, current, power, frequency, and power factor, along with various protection features.

3.1 Key Features

- Four-wire three-phase measurement
- AC 85-290V voltage range

- 0-80A current range
- 0-23 kW power range
- Digital display for various electrical parameters
- Wi-Fi connectivity for remote monitoring and control
- Timed off function
- Over Temperature Protection
- Power off memory
- Overvoltage protection
- Undervoltage protection
- Overcurrent protection
- Over power protection
- Voltage imbalance protection
- Current imbalance protection

3.2 Device Components

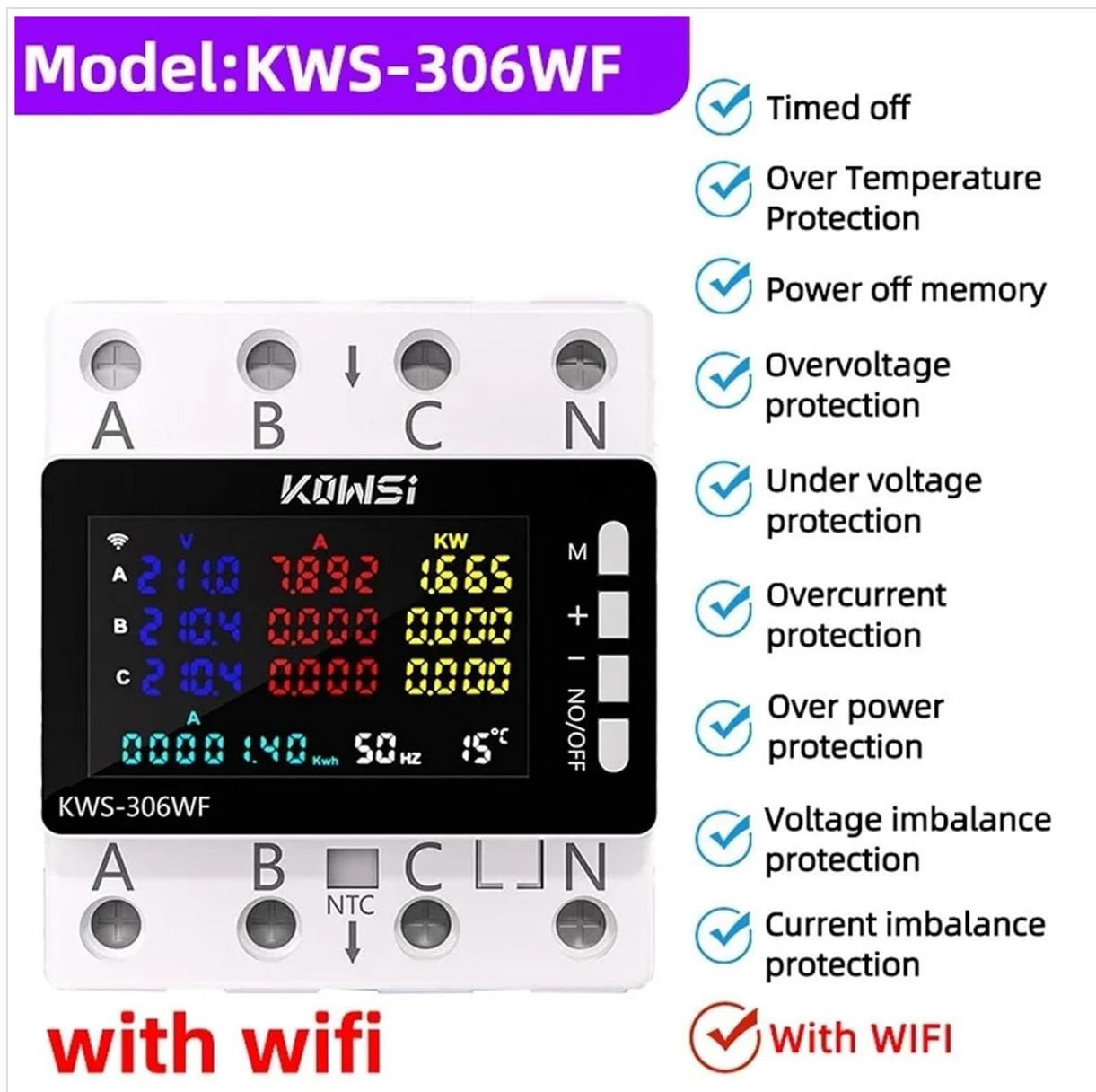


Figure 1: Front view of the KWS-306WF energy meter, highlighting its display, control buttons, and key features such as timed off, over temperature protection, power off memory, over/under voltage protection, overcurrent protection, overpower protection, voltage/current imbalance protection, and Wi-Fi capability.

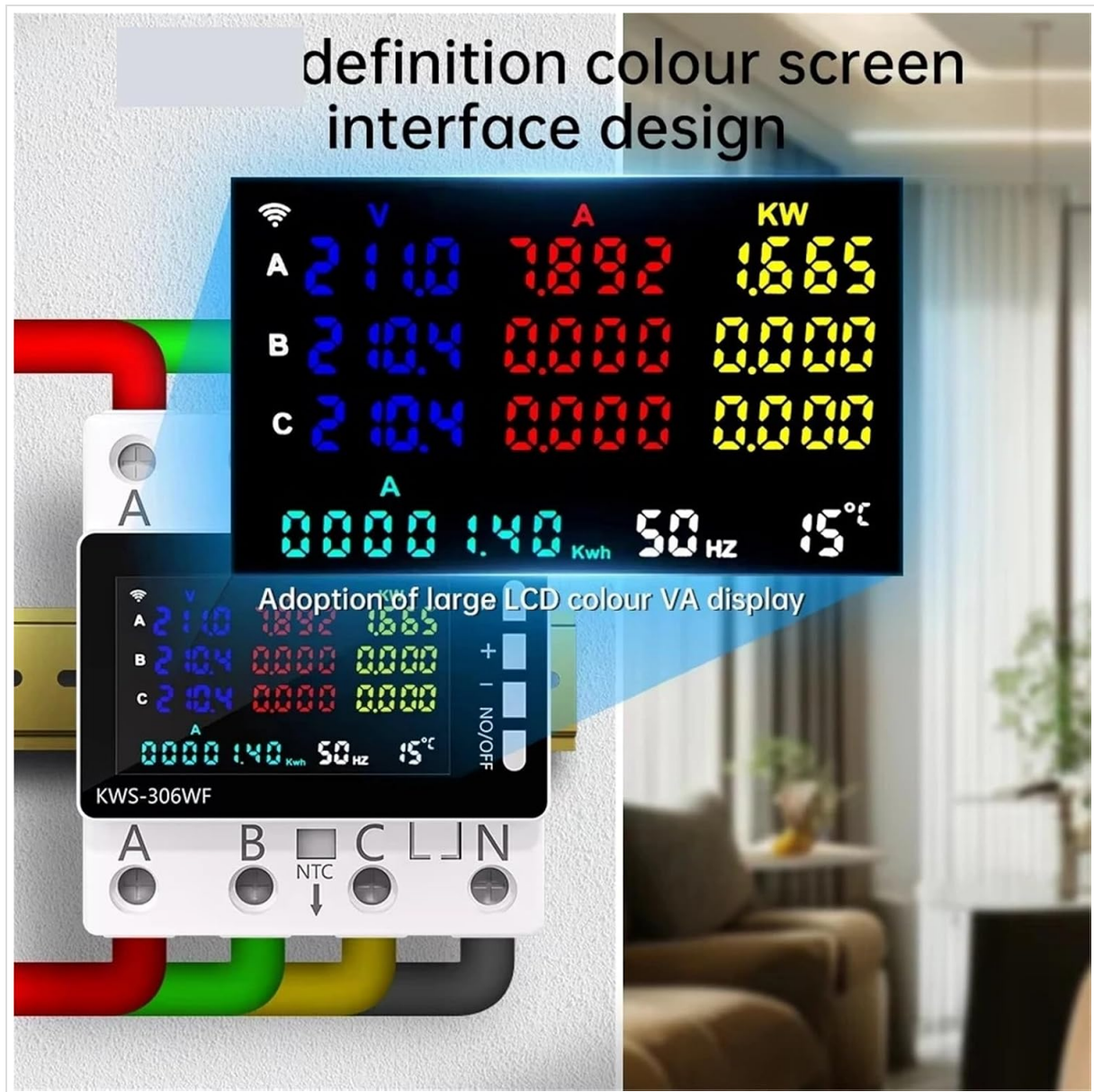


Figure 2: Close-up view of the KWS-306WF energy meter display showing real-time voltage (V), current (A), and power (KW) readings for phases A, B, and C. The image also illustrates the wiring terminals (A, B, C, N) and the NTC temperature sensor connection point.

4. INSTALLATION

The KWS-306WF energy meter is designed for DIN rail mounting. Follow these steps for proper installation:

1. **Power Disconnection:** Before beginning installation, ensure that the main power supply to the circuit is completely disconnected at the breaker. Use a voltage tester to confirm no power is present.
2. **Mounting:** Snap the meter onto a standard 35mm DIN rail in a dry, well-ventilated enclosure.
3. **Wiring:** Connect the four-wire three-phase system to the meter's terminals as shown in the wiring diagram (refer to Figure 2 for terminal labels).
 - Connect Phase A to terminal 'A'.
 - Connect Phase B to terminal 'B'.
 - Connect Phase C to terminal 'C'.
 - Connect Neutral to terminal 'N'.
 - Ensure all connections are tight and secure to prevent loose contacts and overheating.

4. **NTC Sensor (Optional):** If temperature monitoring is desired, connect the NTC temperature sensor to the designated NTC terminals.
5. **Power Restoration:** Once all connections are verified, restore power to the circuit. The meter display should illuminate.

5. OPERATING INSTRUCTIONS

5.1 Initial Power-Up

Upon initial power-up, the meter will display real-time voltage, current, and power readings for each phase. The display cycles through various parameters automatically.

5.2 Button Functions

The meter features two control buttons, typically labeled '+' and 'NO/OFF' or similar, for navigation and control.

- **'+' Button:** Used to cycle through different display parameters (e.g., total energy, frequency, power factor, temperature) or to increase values during setting.
- **'NO/OFF' Button:** Used to turn the output ON/OFF (if applicable), enter settings mode, or confirm selections. A long press may activate specific functions.

5.3 Wi-Fi Connectivity and App Integration

The KWS-306WF supports Wi-Fi connectivity for remote monitoring and control via a smartphone application (e.g., Smart Life app). Refer to the app's instructions for pairing the device.

1. Download the compatible smart home application from your device's app store.
2. Register or log in to your account.
3. Ensure your smartphone is connected to a 2.4GHz Wi-Fi network.
4. Follow the in-app instructions to add a new device. This typically involves putting the meter into pairing mode (often by holding a button until an indicator light flashes rapidly).
5. Once paired, you can monitor real-time data, set protection thresholds, schedule timed operations, and view historical data remotely.

| Problem | Possible Cause | Solution |
|--|--|---|
| Meter display is off. | No power supply; incorrect wiring. | Check main power supply. Verify wiring connections (A, B, C, N) are correct and secure. |
| Incorrect readings. | Improper wiring; faulty sensor. | Recheck all wiring connections. Ensure the NTC sensor (if used) is correctly connected. |
| Wi-Fi connection fails. | Incorrect Wi-Fi password; 5GHz network; meter too far from router. | Ensure correct 2.4GHz Wi-Fi network and password. Move meter closer to router or use a Wi-Fi extender. Reset meter and try pairing again. |
| Protection features activate frequently. | Actual electrical fault; protection thresholds set too low. | Investigate the electrical system for faults (e.g., overcurrent, overvoltage). Adjust protection thresholds via the app if appropriate for your system. |

8. SPECIFICATIONS

| Parameter | Value |
|-------------------------|----------------|
| Model | KWS-306WF |
| Brand | PABVRPYT |
| Rated Voltage Range | AC 85-290 V |
| Rated Current Range | 0-80 A |
| Power Measurement Range | 0-23 kW |
| Frequency Range | 50-60 Hz |
| Power Factor Range | 0.00-1.00 PF |
| Time Range (on panel) | 999 hours |
| Temperature Range | -20 ~ 150 °C |
| Connectivity | Wi-Fi (2.4GHz) |
| Mounting | 35mm DIN Rail |
| Item Weight | 50 Grams |

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or contact PABVRPYT customer service through their official website or authorized distributors. Keep your purchase receipt as proof of purchase.