Qoltec®

Model: 50882

Operating Instructions

Single-phase Smart Energy Meter with Wi-Fi on DIN rail with two modules

INTRODUCTION

Thank you for purchasing the Single-phase energy meter with 2 modules with WI-FI. The meter is designed for DIN rail mounting and offers a wide range of functions for integration into electrical installations, providing significant benefits for the user. The device provides high efficiency, safety and installation convenience. It is part of a comprehensive range of DIN rail-mounted energy meters with various communication options.

ABOUT THE PRODUCT

The electronic energy consumption meter for DIN rail mounting 35 is used for the ongoing monitoring of the level of electricity consumption of single-phase consumers. It allows the level of energy consumption to be monitored in real time. The device has an LED indicator which signals energy consumption, the diode flashes at a frequency which depends on the energy consumed with a pulse constant of 1600imp/kWh.

FEATURES

- Single-phase, two-wire, 2 modules,

- Unidirectional, it counts energy regardless of the direction of flow,

- Standard installation of the device in a switchboard on a 35mm DIN rail,

- Measurement of energy consumption displayed in kWh,

- Direct measurement is 5(60)A,

- Complies with IEC 62053-21 and DIN EN50022,

- Accuracy class 1.0,

- The base current is 5A, the maximum current is 60A,

- Possibility of remote monitoring thanks to the Wi-Fi module and the Tuya app.

SAFETY INSTRUCTIONS

1. The installation and removal of the meter should only be carried out by a qualified electrician.

2. Always disconnect the power supply before starting any installation, maintenance or repair work.
3. Ensure that the meter is connected to a properly protected electrical circuit, in accordance with local electrical regulations and standards.
4. The unit should be installed in a dry location, protected from moisture and direct contact with water.
5. Ensure that the meter is installed in a location that allows adequate ventilation to prevent overheating.
6. Periodically check the condition of the meter, including the electrical connections, to ensure they are working properly and there is no visible damage.
7. The appliance should be installed out of the reach of children and unauthorised persons.
8. Do not exceed the maximum current and voltage rating specified in the device specifications.
9. It is recommended that surge protectors are installed in the electrical circuits to protect the meter from sudden voltage spikes.

TECHNICAL SPECIFICATIONS

Rated voltage:	230V
Rated current:	5(60)A
Accuracy:	Class 1
Inrush current:	0.004Ib
Pulse constant:	1600 imp/kWh
Frequency:	50Hz-60Hz
Communication:	TUYA

The dimensions of the device are shown *in Figure 1 in the appendix*

TUYA WI-FI CONNECTION

1. Download and register the "Tuya Smart" app from the App Store
2. The next step is to pair the device. Make sure your device is switched on.
3. Hold down the button on the device until the LED starts flashing. Turn on Bluetooth and Wi-Fi on your smartphone to start pairing. The app will

automatically add the device to the list. This process may take approximately 1 minute.

Functionality of the Application

- The app can remotely switch the device on and off
- The meter measures and displays voltage, current, power and kWh
- Additional functions are available in the application
- Check the availability of device software updates and apply them in accordance with the manufacturer's instructions to ensure optimum performance and safety.

INSTALLATION INSTRUCTIONS

1. Install the unit on a 35 mm wide DIN rail, choose a location that allows the meter to be easily read.
2. Make sure the meter is installed in a well-ventilated and dry place.
3. If the meter is exposed to dust or other debris, it should be installed in a protective housing.
4. In areas exposed to frequent surges (e.g. due to storms), we recommend protecting the meter with a surge protection device (SPD).

CONNECTION DIAGRAM

Illustration 2 in the appendix

Terminal 1 (L): Connect the phase wire (L) on the supply side.

Terminal 2 (N): Connect the neutral (N) wire on the power supply side.

Terminal 3 (N): Connect the neutral (N) wire on the load side.

Terminal 4 (L): Connect the phase wire (L) on the load side.

Terminals 9 (+) and 10 (-): Terminals for an additional module, e.g. for connecting an antenna or communication module.

CONSERVATION

1. Disconnect the meter from the power supply before cleaning.

2. Use a dry, soft cloth to remove dust and dirt from the surface of the unit.
3. Do not use water, detergents or other chemicals to avoid damaging the electronics.
4. Periodically check the physical condition of the meter, noting any damage to the housing, terminals or wires. Ensure that all electrical connections are well tightened and there are no loose wires.
5. In case of abnormal readings or lack of communication with the Wi-Fi network, contact the technical service.
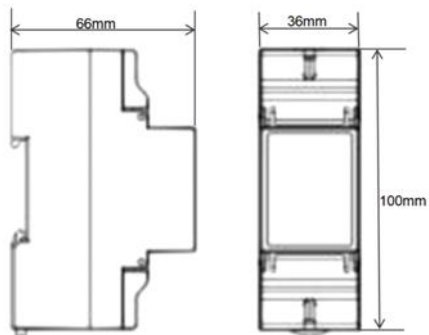
UTILISATION

This product is subject to the regulations for the disposal of electrical and electronic equipment (WEEE). It must not be disposed of with municipal waste. Contact the manufacturer or an authorised service centre if you have any questions about disposal.

INFORMATION ON WARRANTY AND SERVICING

The product is covered by a 24-month manufacturer's warranty from the date of purchase. The warranty covers any defects in materials and workmanship. Please contact our service department if you have any problems with your device to ensure prompt and professional service. The warranty does not cover damage resulting from misuse, falls, mechanical damage, unauthorised repairs or disassembly attempts.

1

66mm   36mm

100mm

2

+   -
⑨ ⑩

4   1   3   2

L   L   N   N