Eltako DSZ15DE-3x80A

Eltako DSZ15DE-3x80A Digital Current Meter Instruction Manual

1. INTRODUCTION

This instruction manual provides essential information for the safe and efficient operation of your Eltako DSZ15DE-3x80A Digital Current Meter. Please read this manual thoroughly before installation and use, and keep it for future reference.

2. SAFETY WARNINGS

WARNING: Electrotechnical work must only be performed by qualified electricians or under their direct supervision and guidance. Failure to comply may result in serious injury or damage to equipment.

3. PRODUCT OVERVIEW

The Eltako DSZ15DE-3x80A is a modular digital current meter designed for direct measurement of active energy. It is suitable for mounting on a DIN-EN 60715 TH35 rail.

- **Maximum Current:** 3 x 80 A
- **Standby Loss:** Only 0.5 W per path
- **Mounting:** DIN-EN 60715 TH35 rail
- **Dimensions:** 4 division units (70 mm wide, 58 mm deep)
- **Accuracy Class:** B (1%)
- **Interface:** S0 interface for pulse output
- **Measurement:** Measures active energy based on current flow. The meter's own consumption of 0.5 W active power per path is not measured or displayed.
- **Conductor Connection:** Supports 1, 2, or 3 external conductors with currents up to 80 A.
- **Starting Current:** 4 mA
- **Display:** 7-segment LCD, readable for up to two weeks without power supply.
- **Power Indication:** A flashing bar on the display indicates power consumption (100 flashes per kWh).
- **Tariff Functionality:** Can be used as a 2-tariff meter by connecting 230 V to terminals E1/E2.

Figure 1: Front view of the Eltako DSZ15DE-3x80A digital current meter, showing the LCD display, 'MODE' and 'SELECT' buttons, and connection labels L1, L2, L3. The display shows '00006.13 kWh'.

4. SETUP AND INSTALLATION

The Eltako DSZ15DE-3x80A is designed for easy installation on a standard DIN rail.

1. **Mounting:** Securely mount the meter onto a DIN-EN 60715 TH35 rail. The device occupies 4 division units, measuring 70 mm wide and 58 mm deep.
2. **Wiring:** Connect the external conductors (L1, L2, L3) to the appropriate terminals. The meter supports 1, 2, or 3 external conductors with currents up to 80 A.
3. **Neutral Connection:** An N connector must be available and properly connected for correct operation.
4. **Tariff Control (Optional):** For 2-tariff operation, connect a 230 V supply to the E1/E2 terminals.

Ensure all connections are secure and comply with local electrical codes and safety regulations.

5. OPERATING INSTRUCTIONS

The meter features a 7-segment LCD display and two control buttons: MODE and SELECT.

5.1. Display and Menu Navigation

- **Button Activation:** Pressing either the MODE or SELECT button will first activate the display backlight.
- **Menu Navigation:** Use the MODE and SELECT buttons, located next to the display, to scroll through the various menu options and display values.
- **Available Displays:** The meter can display the following information:

    - Total active energy per tariff (T1, T2)
    - Resettable active energy (RS1 or RS2)
    - Instantaneous values for power (P), voltage (U), and current (I) per external conductor (L1, L2, L3)

5.2. Tariff Switching

If configured for 2-tariff operation, the meter will switch between tariffs when 230 V is applied to the E1/E2 terminals.

6. ERROR MESSAGES

The meter provides error indications to assist with troubleshooting:

- **"false" Error:** If an external conductor is missing or the current direction is incorrect, the display will show "false" along with the corresponding external conductor (e.g., "false L1").

7. SPECIFICATIONS

Manufacturer	Eltako
Model Number	DSZ15DE-3x80A
Dimensions (L x W x H)	6.3 x 7 x 8.2 cm
Weight	250 Grams
Voltage	400 Volts
Quantity	1 piece
Measurement System	Metric
Electrical Connection Type	DIN Rail
Usage	Professional and personal use
Batteries Required	No

8. MAINTENANCE

The Eltako DSZ15DE-3x80A digital current meter requires minimal maintenance.

9. TROUBLESHOOTING

If you encounter issues with your meter, refer to the following common problems and solutions:
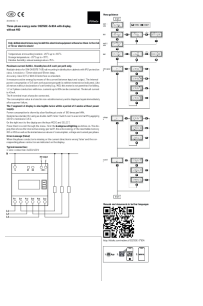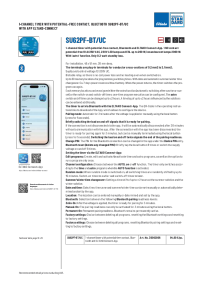
- **Display shows "false" with a conductor label (e.g., "false L1"):** This indicates a missing external conductor or incorrect current direction for the specified phase. Check the wiring for the indicated conductor and ensure it is connected correctly and the current flows in the intended direction.
- **Display is blank:** Check the main power supply to the circuit being measured. While the display can retain readability for up to two weeks without power, prolonged absence of power will cause it to go blank.
- **Incorrect readings:** Verify that the meter is correctly wired for the number of phases in use (1, 2, or 3 external conductors). Ensure the N connector is properly connected.

If problems persist after attempting these solutions, consult a qualified electrician.

10. WARRANTY AND SUPPORT

Specific warranty information and direct support contact details are not provided in the product description. Please refer to the manufacturer's official website or your point of purchase for warranty terms and customer support options.

Related Documents - DSZ15DE-3x80A

	[Eltako DSZ15DE-3x80A Three-Phase Energy Meter User Manual](#) User manual for the Eltako DSZ15DE-3x80A three-phase energy meter. This document provides installation instructions, technical specifications, and operational guidance for the device.
	[Eltako DSZ14DRS-3x80A RS485 Three-Phase Energy Meter with MID Approval - Technical Specifications](#) Detailed technical specifications, installation guide, and operating instructions for the Eltako DSZ14DRS-3x80A RS485 three-phase energy meter, featuring MID approval, RS485 interface, and LC display.
	[Eltako SU62PF-BT/UC 1-Channel Bluetooth Timer with ELTAKO Connect-App](#) Discover the Eltako SU62PF-BT/UC, a versatile 1-channel timer with potential-free contact and Bluetooth. Control it easily via the ELTAKO Connect-App for advanced scheduling, astro functions, and more. Ideal for lighting and general switching applications.

[Eltako SU12DBT/1+1-UC: 2-Channel Bluetooth Timer with Display & App Control](#)

Explore the Eltako SU12DBT/1+1-UC, a versatile 2-channel timer with display, Bluetooth, and ELTAKO Connect-App integration. Features 16A/250V AC contact, astro function, and DIN rail mounting for efficient electrical control.

[Eltako FAC65D/12-24V UC Wireless Alarm Controller User Manual](#)

Comprehensive guide to installing, configuring, and operating the Eltako FAC65D/12-24V UC wireless alarm controller, covering sensor integration, alarm functions, and system management.

[Eltako EUD12DK/800W-UC Universal Dimmer Switch with Rotary Knob - Technical Specification](#)

Detailed technical specifications and operating guide for the Eltako EUD12DK/800W-UC universal dimmer switch with rotary knob. This device features Power MOSFET technology, automatic lamp detection, adjustable minimum and maximum brightness, and multiple operating modes for various lamp types, including dimmable LEDs and energy-saving lamps. It offers universal control voltage input and PWM control options.