The following values are displayed successively in the automatically rotating display:

| lr- | 2F | 3F |
|--------------|----------|------|
| 888 | 388 | 8.88 |
| 888 REV 2 | 388 3 | 8.88 |
| 888 | 88. | 388 |

Energy flow direction display per phase 1 2 3 R = Reverse. F = Forward

Active energy (forward) in kWh (OBIS: 1.8.0) Accumulating

Active energy (reverse) in kWh (OBIS: 2.8.0) Accumulating

Active power (total)

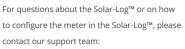
For a complete overview of all of the display values available in the manual mode, please refer to the technical descriptions in the download section at www.kdk-dornscheidt.de. (German).

Changing the Modbus address with the sensor buttons on the meter

The Modbus address can be changed from the Program Menu (see supplementary sheet) under "PRO -2." Additional changes are possible. A password is required to access the sub-menu "PRO -3." The default password is "0000" - it can be changed via the programming.

Example of the MID label

The declaration of conformity and certification (EN 50470) you will find current on: www.kdk-dornscheidt.de

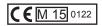


support@solar-log.com

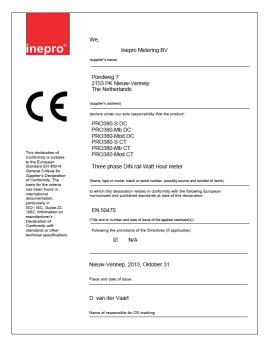
or: +49 7428 94 18 660

For questions about the meter, please contact the manufacturer: info@kdk-dornscheidt.com

or: +49 2244 919940









Quick Start Guide

Electronic A.C. current meter for DIN rail mounting with MID declaration of conformity and ModBus interface (converter connection meter)



Warning



The meter's case is sealed and may not be opened. Opening the meter and/or breaking the seal invalidates the warranty. Please make sure that all of the cables are mounted free from mechanical stress.

Only meters with the MID declaration of conformity can be used for tariff applications.

Important note on adjusting the converter ratio.

The converter ratio can only be set once with this meter.

When the meter is connected to power, the display alternates between "Set CT" and "CT5 0005." If one of the arrow keys is pressed, the first number from the left blinks. Define the secondary power between /1A and /5A and confirm the selection by pressing both of the arrow keys at the same time for 3 seconds. After that, define the primary current by selecting the 4 numbers from left to right with the keys as described above. Confirm every number by pressing both arrow keys for 3 seconds.

The primary power can be freely defined in steps of 5A from 0005 to 9995. Once the last digit has been confirmed, the converter ratio is saved and cannot be changed again.

Please note

This document is only a quick start guide and does not cover all of the device's functions. Detailed specifications and descriptions are available at www.kdk-dornscheidt.de.

Information for your safety

This quick start guide does not contain all of the safety instructions for operating the meter. Due to special operating conditions and/or local laws and regulations, additional measures may be required.

Trained Personnel

The meter may only be installed and connected by a trained, qualified specialist. Trained, qualified specialists are those who are certified to put devices, systems and circuits into operation, to switch them on, to ground them and to mark them according to safety standards and regulations.

Meter type: PRO380-Mod-CT

Technical Data

| Nominal voltage | 230 / 400 V AC | | |
|-----------------------------|--------------------------------------------------------------|--|--|
| Current | 0.015 - 1.5 (6) A | | |
| Frequency | 50 Hz | | |
| Measured value | Active- and Reactive energy in forward and reverse direction | | |
| Accuracy class | В | | |
| Self-consumption | < 10 VA - < 2 W | | |
| Start-up current | 3 mA | | |
| Width | 4 TE (70 mm) | | |
| Pulse output LED | 10,000 lmp/kWh, 2.5 ms | | |
| S _o Pulse output | 10,000 lmp/kWh, 30 ms | | |
| Operating temperature | -25°C to +70°C | | |
| Max. relative humidity: | 75 % on average, temporary 95 % | | |
| Registered harmonic | 0.05 – 0.25 kHz | | |
| LED | blinking red: Supply > 4 W, pulse rate = consumption | | |
| Display | 5 + 3 Digits (99999,111 kWh) | | |
| aximum cable cross-section | Main terminal blocks: max. 10 mm² | | |
| | Additional terminals: max. 2.5 mm² | | |
| Baud rate ModBus | 9,600 baud | | |

Connection diagram

CT1 (in) Transformer 1 Terminal k (s1)

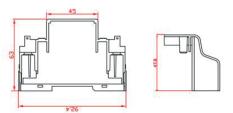
| err (iii) transformer i reminarik (31) | err (out) transformer reminar (32) |
|----------------------------------------|----------------------------------------------|
| CT2 (in) Transformer 2 Terminal k (s1) | CT2 (out) Transformer 2 Terminal I (s2) |
| CT3 (in) Transformer 3 Terminal k (s1) | CT3 (out) Transformer 3 Terminal I (s2) |
| N (in) Neutral Terminal Connection | N (out) Neutral Terminal Connection |
| Out []Z]E]N | 10 Volts Phase 1 (10/11 internally bridged) |
| | 12 Volts Phase 2 (12/13 internally bridged) |
| | 14 Volts Phase 3 (14/15 internally bridged) |
| 00000000000000000000000000000000000000 | 16/17 not used |
| CTI CT2/CTS N | 18/19 S _o Pulse output A+ forward |
| | 20/21 S _o Pulse output A-reverse |
| | L1 L2 22/23 ModBus connection |
| | 24/25 Connection for external tariff (230V) |

CT1 (out) Transformer 1 Terminal I (s2)

Dimensions (mm)

Width: 70.0 mm
Height with cover: 140.0 mm
Height without cover: 92.4 mm
Depth: 63.0 mm

Pulse outputs (S_o)



The pulse output from the Solar-Log™ PRO380-Mod-CT delivers a pulse that corresponds to the secondary measured kWh (kvar) values. The pulse length of the pulse output is permanently set to 30 ms.

Connection diagram for different operating modes

Solar-Log[™] PRO380-Mod-CT (RS485 or S_o) connection assignments

The meter connections are labeled IN (bottom) and OUT (top).

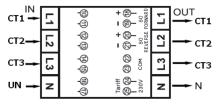
As consumption or sub-consumption meter: Connection to the grid (IN) – connection for appliances (OUT) As inverter /production meter: Connection for the production (IN) – connection to the grid (OUT)

Solar-Log™ PRO380 connection assignments (only RS485)

As consumption meter (bi-directional): OUT = connection to the grid – IN = connection to the house/plant As battery meter (bi-directional): IN = connection to the grid – OUT = connection to the battery

Please note that only Solar-Log[™] PRO380 meters can operate on the RS485 interface (one or several). It is not possible to combine the operation with other components.

| Terminal block connector Solar-Log (RS485) | Solar-Log Base | PRO380-Mod-CT (COM) |
|--------------------------------------------|-------------------------|---------------------|
| Terminal | Terminal | Terminal |
| 1-> | (A) 6 or (B) 10 (Data+) | 22 (A) |
| 4-> | (A) 9 or (B) 13 (Data-) | 23 (B) |
| | | |



If the meter is the last device on the bus, it has to be terminated at connection block 22 and 23 with a resistor (120 ohm / 0.25W).

All display values of the meter

Change the meter from the automatically rotating display to the manual display by pressing the keys. Pressing on the keys here allows all of the available display values to be accessed in sequence. Please refer to the attached table for the menu navigation. If no keys are pressed after a short time, the meter reverts back to the automatic display mode.