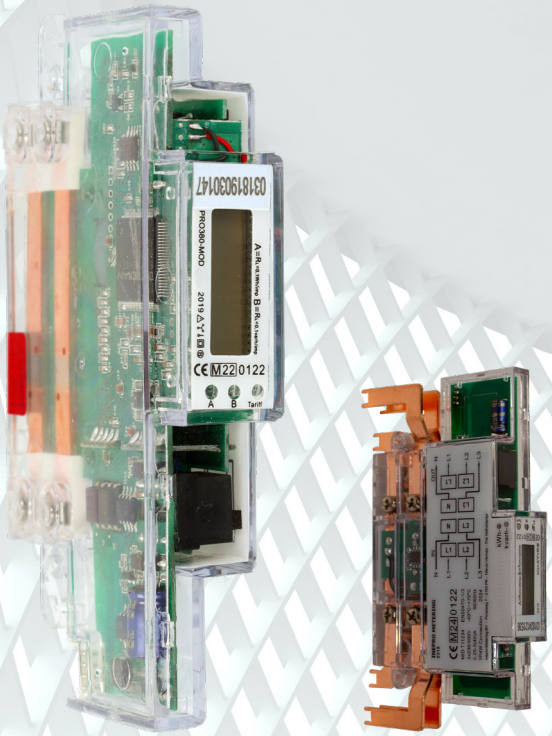
inepro®



# PRO380-Compact/V/DIN

PRO380-Compact/V/DIN

## User manual

Version: 0.06

# 1 Index

**1 Index . . . . . 3**
**2 Safety instructions . . . . . 4**
**3 Foreword . . . . . 6**
**4 Certificates . . . . . 7**
**5 Specifications . . . . . 8**
5.1 Performance criteria . . . . . .8
5.2 Basic errors . . . . . .8
5.3 RS485 communication specifications . . . . . .9
5.4 Dimensions . . . . . .9
5.5 Wire connection . . . . . .9
5.6 Connection diagram . . . . . .9
**6 Installation . . . . . 10**
**7 Operation . . . . . 11**
7.1 Scrolling pages. . . . . .11
7.2 Tariff . . . . . .11
**8 Troubleshooting . . . . . 12**
**Appendix - Modbus . . . . . 13**
A1.1 Communicating via the Modbus output. . . . . .13
A1.2 Modbus register map - Read. . . . . .14
A1.3 Modbus register map - Write . . . . . .16

# 2 Safety instructions

**Information for your own safety**
This manual does not contain all of the safety measures for operation of this meter because special operating conditions, local code requirements or local regulations may necessitate further measures. However, it does contain information which must be adhered to for your own personal safety and to avoid material damage. This information is highlighted by a warning triangle with an exclamation mark or a lightning bolt depending on the degree of actual or potential danger:

**Warning**
This means that failure to observe the instruction can result in death, serious injury or considerable material damage.

**Caution**
This means hazard of electric shock and failure to take the necessary safety precautions will result in death, serious injury or considerable material damage.

**Qualified personnel**
Installation and operation of the device described in this manual may only be performed by qualified personnel. Only people that are authorized to install, connect and use this device, who have the proper knowledge about labeling and grounding electrical equipment and circuits and can do so in accordance with local (safety)regulations, are considered qualified personnel in this manual.

**Use for the intended purpose**
This device may only be used for the application cases specified in the catalog and the user manual and only in connection with devices and components recommended and approved by inepro Metering B.V.

**Proper handling**
The prerequisites for perfect, reliable operation of the product are proper transport, storage, installation and connection, as well as proper operation and maintenance. During its operation certain parts of the meter might carry dangerous voltages.

- Only use insulated tools suitable for the voltages this meter is used for.
- Do not connect while the circuit is connected to a power or current source.
- Only place the meter in a dry environment.
- The meter is intended to be installed in a Mechanical Environment 'M1', with Shock and Vibrations of low significance and Electromagnetic Environment 'E2', as per 2014/32/EC Directive. The meter is intended for indoor use. The meter shall be installed inside a suitable IP rated enclosure, in accordance with local codes and regulations.
- Do not mount the meter in an explosive area or exposed to dust, mildew and/or insects.
- Make sure the used wires are suitable for the maximum current of this meter.
- Make sure the AC wires are connected correctly before activating the current/voltage to the meter.
- Do not touch the meter's connection clamps directly with your bare hands, with metal, blank wire or other conducting material as you will risk an electric shock that could cause possible injury, serious injury or death.
- Make sure the protection cover is placed after installation.
- Maintenance and repair of the meter should only be carried out by qualified personnel.
- Never break any seals (if present on this meter) to open the front cover as this might influence the functionality or accuracy of the meter, and will void all warranty.
- Do not drop, or allow physical impact to the meter as there are high precision components inside that may break and affect the meter measurement negatively.
- All terminals should be properly tightened.
- Make sure the wires fit properly in the connection terminals.
- If the wires are too thin it will cause a bad contact which can spark causing damage to the meter and its surroundings.

**Exclusion of liability**
We have checked the contents of this manual and every effort has been made to ensure that the descriptions are as accurate as possible. However, deviations from the description cannot be completely ruled out, so that no liability can be accepted for any errors or omissions in the information given. The data in this manual are checked regularly and the necessary corrections will be included in subsequent editions. If you have any suggestions, please do not hesitate to contact us.

**Subject to technical modifications without notice.**

**Copyright**

# 3 Foreword

Thank you for purchasing this energy meter. **inepro** offers a wide range of devices. We have introduced numerous energy meters to the market, designed for use with 110V AC to 400V AC (50 or 60Hz) and up to 1000V/1500A DC. For more information on other products, please contact our sales department at sales@inepro metering.com or visit our website at www.inepro metering.com.

While we manufacture this device according to international standards and conduct rigorous quality inspections, it is still possible that a defect or malfunction may occur, for which we apologize. Under normal conditions, your product should provide years of reliable operation. Should you experience an issue with the energy meter, please contact your distributor immediately.

Most of our energy meters are secured with a special seal. Once this seal is broken, warranty claims cannot be honored. Therefore, please NEVER open the energy meter or break the device seal. The limited warranty covers a period of 3 years from the production date, applicable only to production faults.

# 4 Certificates

inepro®

We,
**inepro Metering BV**

Address;
**Pondweg 7**
**2153 PK, Nieuw-Vennep, The Netherlands**

Declare under our sole responsibility that the product;
**0318**

Static Active Electrical Energy Meter, With the measurement range of;
**Three phase Watt Hour meter**

To which this declaration relates, is in conformity with the following European harmonized and published standards at date of this declaration;
**EN 50470-1:2006**
**EN 50470-3:2006**

**CLC/TR 50579**

Following the provisions of the Directives (If applicable);
**2014/32/EU (MID)**

Place and date of issue
**Nieuw-Vennep, 14-08-2023**

Name of responsible for CE-Marking
**D. van der Vaart**

This declaration of Conformity is suitable to the European Standard EN 45014 *General Criteria for Supplier's Declaration of Conformity*. The basis for the criteria has been found in international documentation, particularly in

ISO / IEC, Guide 22, 1982, *Information on manufacturer's Declaration of Conformity with standards or other technical specifications*

NMi

## EU-type examination certificate

Number **T11234** revision 3
Project number 3652538
Page 1 of 1

| | |
|---|---|
| Issued by | NMi Certin B.V., designated and notified by the Netherlands to perform tasks with respect to conformity assessment procedures mentioned in article 17 of Directive 2014/32/EU, after having established that the measuring instrument meets the applicable requirements of Directive 2014/32/EU, to: |
| Manufacturer | Inepro Metering BV<br>Pondweg 7<br>2153 PK Nieuw Vennep<br>The Netherlands |
| Measuring instrument | A static **Active Electrical Energy Meter**<br>Type : 0318<br>Manufacturer's mark or name : Inepro<br>Reference voltage : 3x230/400 V<br>Reference current : 5 A<br>Destined for the measurement of : electrical energy, in a<br>- three-phase four-wire network<br>- single-phase two-wire network<br>Accuracy class : A or B<br>Environment classes : M1 / E2<br>Temperature range : -40 °C / +70 °C<br>Further properties are described in the annexes:<br>– Description T11234 revision 3;<br>– Documentation folder T11234-3. |
| Valid until | 28 May 2028 |
| Remark | This revision replaces the earlier versions, including its documentation folder. |
| Issuing Authority | **NMi Certin B.V., Notified Body number 0122**<br>4 April 2023<br>Certification Board |

**NMi Certin B.V.**
Thijsseweg 11
2629 JA Delft
The Netherlands
T +31 88 636 2332
certin@nmi.nl
www.nmi.nl

# 5 Specifications

| | |
|---|---|
| Casing | PC flame resistant plastic |
| Flammability rate: | UL-94 V0 |
| Voltage: | 230/400V AC |
| Maximum rated current (Imax) | 45A (cable thickness 6mm²)<br>25A (cable thickness 2.5mm²) |
| Operational frequency range | 50 or 60Hz ±2% |
| Test output flash rate (RED LED) | 10,000 imp/kWh |
| LCD scroll time: | 10s |
| Backlight: | ON/OFF |
| Calculation method: | Forward + Reverse |
| Data store | The data can be stored for more than 10 years without power |

The meter shall not be used with 2 phases loaded with import energy while 1 phase is loaded with export energy

## 5.1 Performance criteria

| | |
|---|---|
| Operating humidity: | ≤ 75% |
| Storage humidity: | ≤ 95% |
| International standard: | EN50470-1/3********** |
| Active energy accuracy class: | 1 or B |
| Reactive energy accuracy class: | 2 |
| Protection against penetration: of dust and water: | IP20, IP51 reached by mounting the meter in an IP51 cabinet |
| Insulating encased meter of: protective class: | II |
| Operating temperature range: | -40°C ... +70°C |
| Storage temperature range: | -40°C ... +70°C |

## 5.2 Basic errors

| | | |
|---|---|---|
| 0.05Ib | Cosφ = 1 | ±1.5% |
| 0.1Ib | Cosφ = 0.5L | ±1.5% |
| | Cosφ= 0.8C | ±1.5% |
| 0.1Ib - Imax | Cosφ = 1 | ±1.0% |
| 0.2Ib - Imax | Cosφ = 0.5L | ±1.0% |
| | Cosφ = 0.8C | ±1.0% |

| | |
|---|---|
| ERR 80 | EEPROM cannot initialize |
| ERR 0d | Energy data check error. Difference in value of energy (integer kWh) between LCD (main storage in EEPROM) and backup part of EEPROM<br>Hardware related problem. |
| ERR 1d | Energy data check error. Difference in value of energy (integer and decimal kWh) between LCD (main storage in EEPROM) and backup part of EEPROM<br>Can be hardware or software problem. |
| ERR 0F | Cannot read data from the EEPROM |
| ERR 0C | Energy data check error. Difference in value of energy (integer kWh) between LCD (main storage in EEPROM) and backup part of EEPROM<br>Software related problem. |

## 5.3 RS485 communication specifications

| | |
|---|---|
| Bus type | RS485 |
| Protocol | Modbus RTU with 16 bit CRC |
| Baud rate | 1200, 2400, 4800, 9600 |
| Address range | 1 ... 247 user settable |
| Maximum bus load | 60 meters per bus* |
| Range | 1000m* |

*Please note that the maximum number of meters depends on the converter, baud rate (higher baud rates reduce the maximum number of meters that can be used), and the specific conditions under which the meters are installed.

## 5.4 RS485 communication default settings

| | |
|---|---|
| Modbus ID | 001 |
| Parity | EVEN |
| Baudrate | 9600 |

## 5.5 Dimensions

| | |
|---|---|
| Lenght | 119.95 mm |
| Width | 65 mm |
| Height | 21.50 mm |
| Weight | 0.120 kg (net) |

## 5.6 Wire Connection

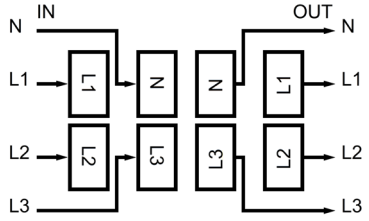
The maximum rated current depends on the thickness of the cable used. Ensure that the correct cable thickness is selected to maintain safety and optimal performance.

Maximum rated current (Imax)

| | | |
|---|---|---|
| -25A | stranded wire with Klauke 6304 insulated solderless terminals | (min. cable thickness 2.5mm²) |
| -45A | stranded wire with Klauke 6504 insulated solderless terminals | (min. cable thickness 6mm²) |

## 5.7 Connection diagram

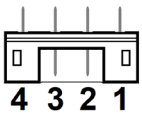
| | | | | |
|---|---|---|---|---|
| L1 (IN) | Phase 1 input | - | L1 (OUT) | Phase 1 output |
| L2 (IN) | Phase 2 input | - | L2 (OUT) | Phase 2 output |
| L3 (IN) | Phase 3 input | - | L3 (OUT) | Phase 3 output |
| N (IN) | Neutral input | - | N (OUT) | Neutral output |




3Phase/4wire

Terminal screw torque(L1/L2/L3/N): 0.3 N.m.

1 & 2 Modbus communication contact
3 & 4 External tariff input




1- Tariff
2- Tariff
3- Modbus B
4- Modbus A

# 6 Installation

## Caution

- Before working on the energy meter and any connected equipment, turn off and, if possible, lock all sources supplying power to them.
- Always use a properly rated voltage sensing device to confirm that power is off.

## Warning

- The installation should be performed by qualified personnel familiar with applicable codes and regulations.
- Use insulated tools to install the device.
- A fuse, thermal cut-off or single-pole circuit breaker should be fitted on the supply line and not on the neutral

## General

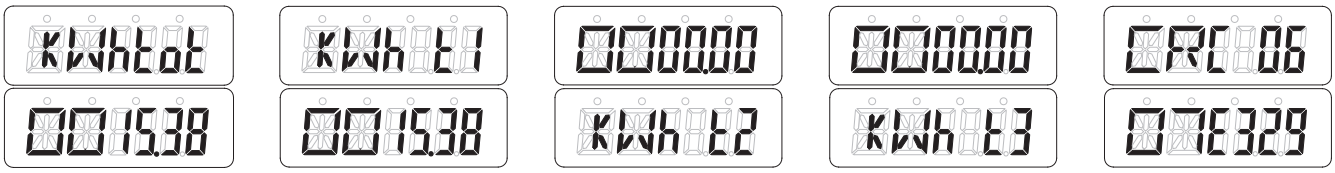
- The connecting wire from the device to the external circuit should be sized according to local regulations, matching the maximum current of the breaker or other overcurrent protection devices in the circuit.
- Install an external switch or circuit breaker on the supply wires to disconnect the meter and the energy-supplying device. It is recommended to place this switch or circuit breaker near the meter for operator convenience. The switch or circuit breaker must comply with the building's electrical specifications and local regulations.
- An external fuse or thermal cut-off used for overcurrent protection must be installed on the supply side wires, ideally near the meter for ease of access. This overcurrent protection device should meet building specifications and local regulations.
- This meter can be installed indoors or outdoors in a properly enclosed and protected meter box, according to local codes and regulations.
- To prevent tampering, use an enclosure with a lock or a similar security feature.
- The meter must be installed against a fire-resistant wall.
- The installation location must be well-ventilated and dry.
- If the meter is exposed to dust or contaminants, it should be installed within a protective box.
- The meter can be installed and used after testing and may be sealed afterward.
- Install the meter in a location where it can be easily read.
- If installed in an area with frequent surges (e.g., from thunderstorms, welding machines, or inverters), the meter should be protected with a Surge Protection Device.
- Seal the device immediately after installation to prevent tampering.

# 7 Operation

## 7.1 Scrolling pages

The PRO380-COMPACT switches LCD pages every 10 seconds. The cycle time can be adjusted with modbus.

1. Total active energy (kWh)
2. T1 active energy (kWh T1)
3. T2 active energy (kWh T2)
4. T3 active energy (kWh T3)
5. CRC (0607E329)




## 7.2 Tariff

The default tariff is 1. The tariff can be set to T1, T2 & T3 by Modbus and 12V signal input.

**Modbus**

When writing the Tariff status via Modbus, an external 12V si is not required.

**12V Supply**

A constant 12V signal is necessary to maintain activation of T2 or T3. The 12V signal overrules the modbus tariff setting.

On the meter there's a LED which indicates with tarrif is active;

T1- LED off
T2- LED on
T3- LED blinking

| Tariff | 1 | 2 |
|---|---|---|
| T1 | - | - |
| T2 | N | 12V |
| T3 | 12V | N |

# 8 Troubleshooting

For questions about one of our products please contact:

- Your local inepro Metering distributor
- Email: support@ineprometering.com
- Website: www.ineprometering.com

## Caution

- During repair and maintenance, do not touch the meter connecting clamps directly with your bare hands, with metal, blank wire or other conducting material as that will cause an electric shock and possibly cause injury, serious injury or even death.
- Turn off and if possible lock all sources supplying the energy meter and the equipment that is connected to it before opening the protection cover and working on it.
- Turn off and lock all power supply to the energy meter and the equipment to which it is installed before opening the protection cover to prevent the hazard of electric shock.

## Warning

- Maintenance or repair should only be performed by qualified personnel familiar with applicable codes and regulations.
- Use insulated tools to maintain or repair the meter.
- Make sure the protection cover is in place after maintenance or repair.
- The case is sealed, failure to observe this instruction can result in damage to the meter.

# Appendix - Modbus

## A1.1 Communicating via the Modbus output

The PRO380-COMPACT meter is equipped with a Modbus port. In order to read out the meter registers, first install and configure the required PC software.

Connect the PC to the meter using an RS485 level converter, with the cable connected to terminals 3 and 4. The default communication address of the meter is set to 01.

The PRO380-COMPACT model supports Modbus communication with the following default settings:

-Baud rate: 9600
-Data bits: 8
-Parity: Even
-Stop bit: 1

The baud rate can be modified to values of 9600, 4800, 2400, 1200, 600, or 300. Parity can be adjusted to even, odd and none; however, the data bits and stop bit settings cannot be changed.

When testing the meter with a serial converter (RS485), note that, due to such a partial Modbus infrastructure implementation, an additional resistor (120 ohms, 0.25 watts) must be placed across A and B on the meter side.

For details on the registers used in the meter and data interpretation, please refer to the Modbus register map on the pages below

## A1.2 Modbus register map - Read

| Register | Content | Function | R/W | Length | Data Type | Unit |
|---|---|---|---|---|---|---|
| 4000 | Serial number | 03 | Read | 2 | signed | - |
| 4002 | Meter code | 03 | Read | 1 | signed | - |
| 4003 | Meter ID (Modbus) | 03/06 | R/W | 1 | signed | - |
| 4004 | Baud Rate | 03/06 | R/W | 1 | signed | - |
| 4005 | Protocol Version | 03 | Read | 2 | Float - (ABCD) | - |
| 4007 | Software Version | 03 | Read | 2 | Float - (ABCD) | - |
| 4009 | Hardware Version | 03 | Read | 2 | Float - (ABCD) | - |
| 400B | Meter Amps | 03 | Read | 2 | signed | A |
| 4010 | LCD cycle time | 03/06 | R/W | 2 | signed | - |
| 4011 | Parity setting | 03/06 | R/W | 1 | signed | - |
| 4012 | Phase direction | 03 | Read | 3 | signed | - |
| 4016 | Power on off counter | 03/06 | R/W | 1 | HEX | - |
| 4017 | Total Q4 | 03 | Read | 1 | signed | - |
| 4018 | L1 Q4 | 03 | Read | 1 | signed | - |
| 4019 | L2 Q4 | 03 | Read | 1 | signed | - |
| 401A | L3 Q4 | 03 | Read | 1 | signed | - |
| 401B | Checksum | 03 | Read | 2 | HEX | - |
| 401D | Active status word | 03 | Read | 2 | HEX | - |
| 4021 | Backlight | 03/06 | R/W | 1 | signed | - |

| Registe | Content | Function | R/W | Length | Data Type | Unit |
|---|---|---|---|---|---|---|
| 5002 | L1 Voltage | 03 | Read | 2 | Float - (ABCD) | V |
| 5004 | L2 Voltage | 03 | Read | 2 | Float - (ABCD) | V |
| 5006 | L3 Voltage | 03 | Read | 2 | Float - (ABCD) | V |
| 5008 | Grid Frequency | 03 | Read | 2 | Float - (ABCD) | Hz |
| 500C | L1 Current | 03 | Read | 2 | Float - (ABCD) | A |
| 500E | L2 Current | 03 | Read | 2 | Float - (ABCD) | A |
| 5010 | L3 Current | 03 | Read | 2 | Float - (ABCD) | A |

| Register | Content | Function | R/W | Length | Data Type | Unit |
|---|---|---|---|---|---|---|
| 5012 | Total Active Power | 03 | Read | 2 | Float - (ABCD) | kW |
| 5014 | L1 Active Power | 03 | Read | 2 | Float - (ABCD) | kW |
| 5016 | L2 Active Power | 03 | Read | 2 | Float - (ABCD) | kW |
| 5018 | L3 Active Power | 03 | Read | 2 | Float - (ABCD) | kW |
| 501A | Total reactive power | 03 | Read | 2 | Float - (ABCD) | kVA |
| 501C | L1 reactive power | 03 | Read | 2 | Float - (ABCD) | kVA |
| 501E | L2 reactive power | 03 | Read | 2 | Float - (ABCD) | kVA |
| 5020 | L3 reactive power | 03 | Read | 2 | Float - (ABCD) | kVA |
| 5022 | Total Apparent Power | 03 | Read | 2 | Float - (ABCD) | KVA |
| 5024 | L1 Apparent Power | 03 | Read | 2 | Float - (ABCD) | KVA |
| 5026 | L2 Apparent Power | 03 | Read | 2 | Float - (ABCD) | KVA |
| 5028 | L3 Apparent Power | 03 | Read | 2 | Float - (ABCD) | KVA |
| 502A | Power Factor | 03 | Read | 2 | Float - (ABCD) | - |
| 502C | L1 Power Factor | 03 | Read | 2 | Float - (ABCD) | - |
| 502E | L2 Power Factor | 03 | Read | 2 | Float - (ABCD) | - |
| 5030 | L3 Power Factor | 03 | Read | 2 | Float - (ABCD) | - |

| Register | Content | Function | R/W | Length | Data Type | Unit |
|---|---|---|---|---|---|---|
| 6000 | Total Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6002 | T1 Total Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6004 | T2 Total Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6006 | L1 Total Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6008 | L2 Total Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 600A | L3 Total Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 600C | Forward Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 600E | T1 Forward Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6010 | T2 Forward Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6012 | L1 Forward Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6014 | L2 Forward Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6016 | L3 Forward Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6018 | Reverse Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 601A | T1 Reverse Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 601C | T2 Reverse Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 601E | L1 Reverse Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6020 | L2 Reverse Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6022 | L3 Reverse Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6024 | Total Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6026 | T1 Total Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6028 | T2 Total Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 602A | L1 Total Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 602C | L2 Total Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |

| Register | Content | Function | R/W | Length | Data Type | Unit |
|---|---|---|---|---|---|---|
| 602E | L3 Total Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6030 | Forward Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6032 | T1 Forward Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6034 | T2 Forward Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6036 | L1 Forward Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6038 | L2 Forward Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 603A | L3 Forward Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 603C | Reverse Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 603E | T1 Reverse Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6040 | T2 Reverse Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6042 | L1 Reverse Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6044 | L2 Reverse Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6046 | L3 Reverse Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6048 | Tariff | 03/06 | R/W | 1 | Float - (ABCD) | kWh |
| 604C | T3 Total Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 604E | T3 Forward Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6050 | T3 Reverse Active Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6052 | T3 Total Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6054 | T3 Forward Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |
| 6056 | T3 Reverse Reactive Energy | 03 | Read | 2 | Float - (ABCD) | kWh |

Write

| Register | Content | Function | Length | Unit | | |
|---|---|---|---|---|---|---|
| 4003 | Modbus ID | 06 | 0001 | (01-147) 01= Default - 00=Broadcast | | |
| Command: | 01 06 4003 **000A** (new ID: 10) | | | | | |
| 4004 | Baudrate | 06 | 0001 | 300 (012C) - 600 (0258) - 1200 (04B0)- 2400 (0960)- 9600 (2580) | | |
| Command: | 01 06 4004 **2580** (new Baudrate: 9600) | | | | | |
| 4010 | LCD cycle time | 06 | 0001 | 1 | Sec | HEX |
| Command: | 01 06 4010 **0025** (new cylce time = 25sec) | | | 01-30 | | |
| 4011 | Parity setting | 06 | 0001 | 1 | - | signed |
| Command: | 01 06 4011 **0002** (new parity: none) | | | 01: even / 02: none / 03: odd | | |
| 4016 | Power down counter | 06 | 0001 | 1 | - | signed |
| Command: | 01 06 4016 0000 | | | Reset to 0 | | |
| 4021 | Backlight | 06 | 0001 | 1 | - | HEX |
| Command: | 01 06 4021 **0002** | | | Set backlight off 01 = ON – 02 = OFF | | |
| 6048 | Tarrif | 06 | 0001 | 1 | - | signed |
| Command: | 01 06 6048 **0002** (new tariff = 02) | | | 01: T1 / 02: T2 / 03: T3 | | |