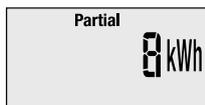


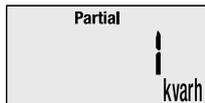
①



②



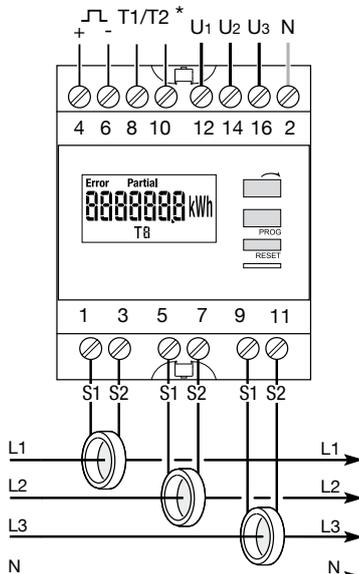
③



④



⑤



\* COUNTIS E41

## Operating principle

This kilowatt hour meter measures the active and reactive electrical energy used in an electrical installation.

This device has a digital LCD to display energy used and power.

This device has a total counter and a partial resettable counter.

In case of two tari levels, the COUNTIS E41 will count separately the energy used in tari 1 and in tari 2.

## Product presentation

- A LCD display.
- B Key to scroll readings.
- C «Prog» key to set up the CT ratio and the type of network.
- D Reset to reset the partial counter.
- E Metrological LED (1 Wh = 10 impulses).

## Meter setup

The following settings have to be made before the meter can be put to use :

- CT ratio.
  - Type of network (single or three-phase).
  - Type of three-phase installation (balanced or unbalanced)
1. Press the Prog key during 3 sec. to enter the setup mode.
  2. The CT ratio setting is displayed (100A). Press the key «Read» repeatedly to scroll the possible CT values (50,60,75,100,125,150,160,200,250,300,400,500,600,700,750,800,1000,1200,1250,1500,1600,2000,2500,3000,4000,5000,6000A).
  3. Press «Prog» to confrm and switch to the next setting.
  4. The type of network (1L+N, 2L, 3L, 3L+N) is displayed. Press the key «Read» repeatedly to scroll the possible values and select the type of network.
  5. Press «Prog» to confrm and switch to the next setting.
  6. On three-phase installations, the type of installation is displayed as «Balanced/Unbalanced» (Bl, Unbl). Press the key «Read» to scroll the values and select the type of installation.
  7. Press «Prog» to confrm.
  8. Press the Prog key during 3 sec. to exit the programming mode.

## Display of readings

The various datas can be scrolled by pressing the Key «Read».

The Default display will indicate power consumption according to the current tari.

### COUNTIS E40:

- 1 1st pressure : backlight switches ON. Total active energy consumption (kWh).
- 2 2nd pressure: partial active energy consumption (kWh).
- 3 3rd pressure: total reactive energy consumption (kVAR).
- 4 4th pressure: partial reactive energy consumption (kVAR).
- 5 5th pressure: instant power consumption (kW).

### COUNTIS E41:

The COUNTIS E41 provides detailed display of the total/partial active energy consumptions according to tari (T1 or T2) and in total (T).

## To reset the partial meter

- Press the scrolling key several times in order to display partial energy.
  - Press the reset button during 3 sec.
- The partial meters (active and reactive energy) will be set to zero.

### ERROR message:

- In case of bad wiring, an «ERROR» message will be displayed.
- Check for each phase that current (I1, I2, I3) and voltage (L1, L2, L3) are measured on the right phase.
  - Check the correct wiring of the product (L/N).

### Note :

The information T1 T2 on the display indicates that the corresponding phase (1, 2,3) is under voltage.

## Technical specifications

### Metrological characteristics

- Accuracy class B (1%) according to EN50470-3
- Metrological LED:
  - 1 pulse = 0.1Wh current transformer ratio e.g. in a installation with a 100/5A C.T., 1 pulse = 0.1Wh /20 pulses = 2Wh
- Starting current: 10 mA
- Basic current: 5 A
- Max current: 6 A

### Technical characteristics

- Consumption: < 0,6 Wt et 2,8 VA max per phase
- Supply: 230/400 VAC +/- 15%
- Frequency: 50/60 Hz +/- 2 Hz
- Savings of measures are made regularly and in case of power failure in EEPROM

- Characteristic of tari input COUNTIS E41: tari 1 = 0 V, tari 2 = 230 VAC +/- 15%
- Impulse output characteristics:
  - 1 pulse: 100 Wh
  - Pulse duration: 100 ms
  - External supply: 20 ... 30 VDC

### Mechanical characteristics

- Modular casing 4 M (72 mm)
- Protection degree (casing) : IP20
- Protection degree noze: IP50/IK03
- Insulation class: II

### Environment

- Storage temperature: -25 °C to +70 °C
- Working temperature: -10 °C to +55 °C
- Connection capacity:
  - exible: 1 à 6 mm<sup>2</sup>
  - rigid: 1,5 à 10 mm<sup>2</sup>

### Note:

in a unbalanced network, please connect 1 C.T. for each phase. If the installation settings is related to a "balanced network", 1 C.T. on the phase 1 has to be connected.