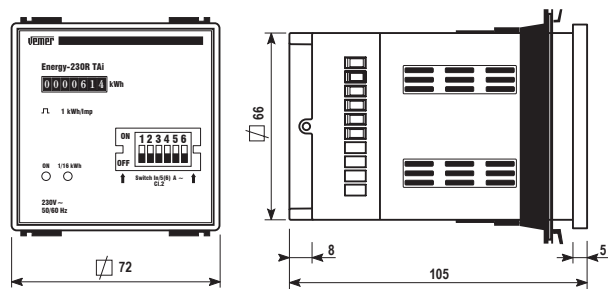
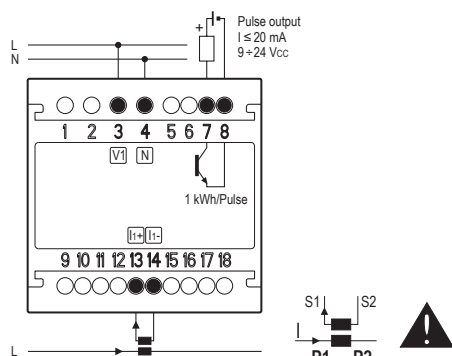
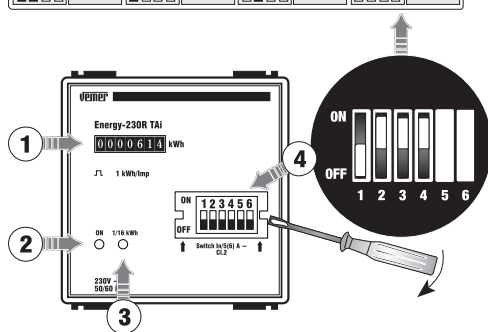
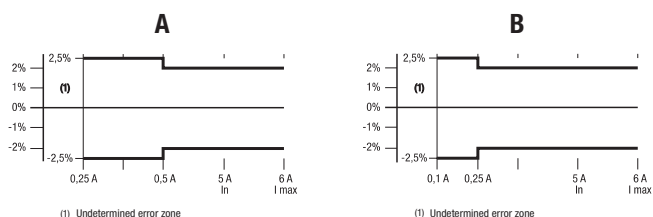


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Dimensions**Connection diagrams****Description**

OFF	1 2 3 4	TA	1 2 3 4	TA	1 2 3 4	TA	1 2 3 4	TA	ON
	5/5A		75/5A		200/5A		500/5A		
	10/5A		100/5A		250/5A		600/5A		
	25/5A		125/5A		300/5A		800/5A		
	50/5A		150/5A		400/5A		1000/5A		

**Accuracy****User Manual****ACTIVE ENERGY METER****Read all the instructions carefully**

- Static meter in standard dimensions 72x72 mm to read active energy consumption in single-phase 230V systems.

SAFETY WARNINGS

To guarantee correct installation, proceed as follows:

- 1) The appliance should be installed by a competent operator**
- 2) The appliance should be installed in a panel in such a way as to guarantee that the terminals are inaccessible after fitting**
- 3) A protection device against over-currents should be installed in the electrical system, upstream of the energy meter**
- 4) Connect the instrument as shown in the alongside diagrams**
- 5) Before touching the connector terminals make sure that the wires to be connected or already connected to the instrument are not live**
- 6) Touch the dip-switches only when the instrument is not powered**
- 7) Do not power or connect the instrument if any part of it is damaged**

Code	Model	Description
VE012100	ENERGY-230R TAI	Single-phase energy meter

TECHNICAL SPECIFICATIONS

- Power supply voltage: 230V CA (-15%/+10%) 50/60Hz
- Input current: $I_n = 5A$; $I_{MAX} = 6A$
- Minimum start-up current: 15mA
- Accuracy: class 2 to standards EN 62053-21
- Maximum power consumption: voltage circuits < 2,5VA
current circuits < 2,5VA
- Galvanically isolated amperometric input
- Amperometric connection by AT x/5A
- Selectable transformation ratios (for AT x/5 A): 5-10-25-50-75-100-125-150-200-250-300-400-500-600-800-1000/5
- Operating temperature: $-10 \div +45^\circ C$
- Relative humidity: 10% ÷ 90% non condensing
- Storage temperature: $-20 \div +60^\circ C$
- Signaling leds: green = power on
red = flashing at 1/16kWh
- Optoinsulated pulse output for energy consumption remote-monitoring (1 kWh/pulse)
- Pulse specifications: duration = 100 ms ± 15%
voltage = 9 ÷ 24V CC (± 10%)
switchable output current 20mA max
- Protection degree: IP20
- Enclosure: standard dimensions 72x72mm

INSTRUMENT DESCRIPTION

- 7-digit mechanical counter: resolution 1 kWh
- Green warning light: lights up to indicate power on
- Red warning light: every flash corresponds to an energy count of 1/16 kWh
- Dip-switch 1-2-3-4 for AT setting. Dip-switch 5-6 not used

GUIDE TO INSTALLATION

- Before installing the instrument, select the transformation ratio required. Use an x/5A outer AT with a transformation ratio from among those set out in the description box. The AT secondaries may be connected to earth.
- The instrument should be connected as shown in the connection diagrams, in accordance with the AT energy directions.
- If the error is to fall within the class limits of the instrument, it is necessary to use the current transformer in its linear operating field. See the precision box:
 - Maximum measurement error in accordance with EN 62053-21 for class 2 meters with $\cos \phi = 0,5$ inductive **(A)**;
 - Maximum measurement error in accordance with EN 62053-21 for class 2 meters with $\cos \phi = 1$ and voltage and frequency reference conditions **(B)**.
- If the instrument is active, the power should be switched off to change the AT ratio.

REFERENCE STANDARDS

Conformity to the EU directives:

73/23/CEE modified by **93/68/CEE** (Low Voltage)

89/336/CEE modified by **92/31/CEE** and **93/68/CEE** (E.M.C.)

is declared with reference to the following harmonised standard:

EN 61010-1, EN 61000-6-2, EN 61000-6-3, EN 62053-21 and EN 62052-11