

# Electricity consumption meters

## Purpose

Electricity consumption meters are static (electronic), calibrated measuring devices, used as sub-meters to indicate the consumed electric energy of active/reactive one-phase and three-phase alternating current.

## Functioning

A special electronic system, under the influence of the current flowing through it and the applied voltage, generates impulses in the amount proportional to the electric energy consumed. The number of pulses is converted into energy consumed and its value is indicated on the display. The meters are equipped with a pulse output SO+ SO- or communication ports with communication protocols. Input and output terminal covers of the meters can be sealed.

Product	Type	MID	Cooperation with current transformers	Two-way	Measurement of additional parameters										Communication		Page		
					Active imported energy	Active exported energy	Reactive energy	Reactive induction energy	Reactive capacitive energy	Apparent power active, reactive	Power demand	Voltage	Current	Frequency	Power factor	Modbus		M-Bus	
LE-01	meter 1-phase	–	–	–	•	–	–	–	–	–	–	–	–	–	–	–	–	–	235
LE-01d	meter 1-phase	•	–	–	•	–	–	–	–	–	–	–	–	–	–	–	–	–	235
LE-01DC	meter 1-phase	–	shunt	•	•	•	–	–	–	–	–	•	•	–	–	•	–	–	251
LE-01M	meter 1-phase	•	–	–	•	–	–	–	–	–	–	–	–	–	–	•	–	–	240
LE-01MB	meter 1-phase	•	–	•	•	•	–	•	•	•	•	•	•	•	•	–	•	–	248
LE-01MQ	meter 1-phase	•	–	•	•	•	–	•	•	•	•	•	•	•	•	•	–	–	246
LE-01MR	meter 1-phase	•	–	•	•	–	•	–	–	•	–	•	•	•	•	•	•	–	242
LE-01MW	meter 1-phase	•	–	•	•	–	•	–	–	•	–	•	•	•	•	•	•	–	243
LE-02d	meter 3-phase	•	–	–	•	–	–	–	–	–	–	–	–	–	–	–	–	–	236
LE-02d CT	meter 3-phase	–	•	–	•	–	–	–	–	–	–	–	–	–	–	–	–	–	238
LE-03	meter 3-phase	–	–	–	•	–	–	–	–	–	–	–	–	–	–	–	–	–	236
LE-03d	meter 3-phase	•	–	–	•	–	–	–	–	–	–	–	–	–	–	–	–	–	237
LE-03d CT200	meter 3-phase	–	•	–	•	–	–	–	–	–	–	–	–	–	–	–	–	–	238
LE-03d CT400	meter 3-phase	–	•	–	•	–	–	–	–	–	–	–	–	–	–	–	–	–	238
LE-03M	meter 3-phase	•	–	–	•	–	–	–	–	–	–	–	–	–	–	•	–	–	241
LE-03M CT	meter 3-phase	–	•	–	•	–	–	–	–	–	–	–	–	–	–	•	–	–	241
LE-03MB	meter 3-phase	•	–	•	•	•	–	•	•	•	•	•	•	•	•	–	•	–	248
LE-03MB CT	meter 3-phase	–	•	•	•	•	–	•	•	•	•	•	•	•	•	–	•	–	249
LE-03MP	meter 3-phase	–	–	•	•	–	•	–	–	•	–	•	•	•	–	•	–	–	242
LE-03MQ	meter 3-phase	•	–	•	•	•	–	•	•	•	•	•	•	•	•	•	–	–	246
LE-03MQ CT	meter 3-phase	•	•	•	•	•	–	•	•	•	•	•	•	•	•	•	•	–	247
LE-03MW	meter 3-phase	•	–	•	•	•	•	•	•	•	•	•	•	•	•	•	•	–	244
LE-03MW CT	meter 3-phase	–	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	–	245
LE-04d	meter 3-phase	–	–	–	•	–	–	–	–	–	–	–	–	–	–	–	–	–	239
LE-05d	meter 3-phase	–	–	–	•	–	–	–	–	–	–	–	–	–	–	–	–	–	239
WZE-1	meter 1-phase	•	–	–	•	–	–	–	–	–	–	–	–	–	–	–	–	–	237
WZE-3	meter 3-phase	•	–	–	•	–	–	–	–	–	–	–	–	–	–	–	–	–	237

**Base current** – metrological term: the value of the current for which the essential characteristics of the meter are determined, such as accuracy of the measurement.

**Maximum current** – the maximum current which the electricity meter can be constantly loaded with.

**Minimum current** – metrological term: the lowest value of current for which the accuracy class is maintained.

**Minimum detection current** – the lowest value of current whose flow will be recorded by the meter.

**Example of marking on the device:** 0.25÷5(50)A

0.25 A – minimum current; 5 A – base current; 50 A – maximum current