

33.

ELECTRIC ENERGY METERS

PURPOSE

Electricity consumption meters are static (electronic), calibrated electricity consumption indicators used as sub meters for imported active energy of single-phase and three-phase alternating current.

According to directive

MID

FUNCTIONING

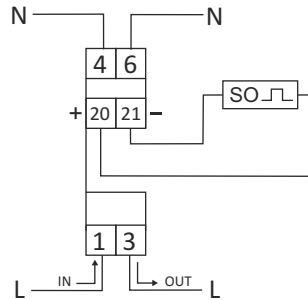
Special electronics system under the influence of current flow and applied voltage generates pulses in proportion to the imported electric energy. The number of pulses is converted to imported energy and its value is shown on the display. Indicators have SO+ - SO- pulse outputs or communication ports with communication protocols. Indicators have the possibility of sealing screens of input terminals to prevent making the indicator bypass.

DIRECT MEASUREMENT TYPE

LE-01



- * single-phase
- * 45A direct measurement
- * according to LVD
- * mechanical drum counter
- * pulse output SO

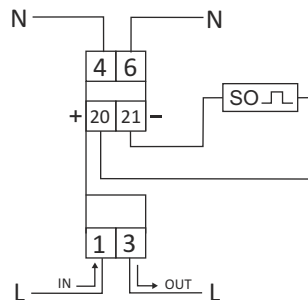


reference voltage	230V AC ±30%
base current	5A
maximum current	45A
minimum current	0.02A
measurement accuracy (according to IEC61036)	1st class
own power consumption	<8VA; <0.4W
indication range	0÷99999.9kWh
meter constant	(1Wh/pulse) 1000pulses/kWh
read-out signalling	red LED
pulse output SO+ SO-	open collector
connection voltage SO+ SO-	<27V DC
connection current SO+ SO-	<27mA
constant SO+ SO-	(1Wh/pulse) 1000pulses/kWh
pulse time SO+ SO-	70msec
working temperature	-20÷65°C
terminal	6mm ² screw terminals
dimensions	1 module (18mm)
mounting	on TH-35 rail
protection level	IP20

LE-01d



- * single-phase
- * 45A direct measurement
- * according to MID
- * display LCD
- * pulse output SO



according to MID	2014/32/EU
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base current	5A
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measurement accuracy (according to IEC61036)	1st class
own power consumption	<8VA; <0.4W
indication range	0÷99999.99kWh
meter constant	(1Wh/pulse) 1000pulses/kWh
read-out signalling	red LED
pulse output SO+ SO-	open collector
connection voltage SO+ SO-	<27V DC
connection current SO+ SO-	<27mA
constant SO+ SO-	(1Wh/pulse) 1000pulses/kWh
pulse time SO+ SO-	70msec
working temperature	-20÷50°C
terminal	6mm ² screw terminals
dimensions	1 module (18mm)
mounting	on TH-35 rail
protection level	IP20

PULSE OUTPUT SUPPLY SYSTEM WITH CONNECTED EXTERNAL COUNTING MACHINE

In order to connect to electricity energy meter counting device has to be connected in parallel to the system power supply 12÷24V DC through resistor 3.6 ÷ 8.2 kΩ/0.5 W current limiting.

Maximum load counting circuit is 27mA .

Changing the polarization of power can damage the meter pulse output.

In the absence of connecting an external counting device is not allowed to be connected to the output pulse power system.

