

ELECTRICITY CONSUMPTION METERS

LE-03MW 3-phase, 2-way, tariff

PURPOSE

LE-03MW is an electronic, compliant with the MID Directive, 2-way electricity meter for three-phase electricity, designed for measurement in a direct system. The built-in real time clock allows energy consumption to be measured with different tariff zones. The device is equipped with communication interfaces: RS-485 with Modbus RTU protocol and optical port compliant with EN62056 (IEC1107) standard for remote reading and configuration of the meter.

FUNCTIONS

- * 3-phase, 2-way energy meter;
- * direct measurement up to 80 A;
- * energy measurement in 4 tariff zones;
- * built-in real time clock with battery backup to switch tariff zones;
- * registration of total and divided into consumption tariffs:
 - total active and reactive energy;
 - active and reactive energy divided into individual quadrants;
- * 8 time schedules dividing the day into tariff zones;
- * it can settle energy according to schedules specific for business days and weekends;
- * it can divide year into 8 time intervals; in each interval the energy (for weekdays) can be settled according to a different schedule;
- * indication of network parameters (voltages, currents, active power, reactive power, apparent power, power factor, frequency);
- * calculation of power demand for individual tariffs;
- * an additional, resettable energy consumption meter;
- * compliance with MID;
- * RS-485 port, Modbus RTU protocol;
- * optical communication port compliant with EN62056 (IEC1107) standard;
- * 2 SO pulse outputs with a programmable number of pulses per kWh / kvarh;
- * multifunction LCD display.

reference voltage	3×230/400 V+N
minimum current	0.25 A
base current	5 A
maximum current	80 A
minimum detection current	0.04 A
voltage measuring range	
L-N	100÷289 V AC
L-L	173÷500 V AC
measurement accuracy	B class
rated frequency	50 Hz
installation	3-phase, 4-wire
overloading	30×I _{max} /10 ms
insulation	4 kV/1 min.; 6 kV/1 μs
own meter consumption	<10VA; <2W
indication range of the meter	8 digits
read-out signalling	2×LED
puls outputs	
number of outputs	2
outputs type	OC (open collector)
maximum voltage	30 V DC
maximum current	27 mA
pulse constant OUT 1	1; 10; 100; 1000 pulse/kWh
pulse constant OUT 2	1000 pulse/kvar
communication	
port	RS-485
communication protocol	Modbus RTU
transmission speed	1200, 2400, 4800, 9600 bps
parity	EVEN
parity bits	2
optical port	according with EN62056 (IEC1107)
working temperature	-25÷55°C
terminal	25 mm ² screw terminals
dimensions	4,5 modules (76 mm)
mounting	on TH-35 rail
protection level	IP51

