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LE-01MB

Electric energy meter,
1-phase



5190831215997911

Do not dispose of this device in the trash along with other waste!

According to the Law on Waste, electro coming from households free of charge and can give any amount to up to that end point of collection, as well as to store the occasion of the purchase of new equipment (in accordance with the principle of old-for-new, regardless of brand). Electro thrown in the trash or abandoned in nature, pose a threat to the environment and human health.



Compliance

| | |
|--------------------|--------------|
| MID Directive | 2014/32/EU |
| Certificate number | 0120/SGS0214 |

Purpose

The LE-01MB is a static (electronic) calibrated electricity meter of single-phase alternating current in a direct system.

Functioning

It is used for reading and recording of imported electricity and parameters of the power supply with the ability of remote reading through a wired M-Bus network.

Configuration of the meter is done through the configuration menu accessible from the front panel and through the communication port according to the software features of the M-Bus.

Measured values

| | | |
|----------------------------|---------------|---------|
| Active energy consumed | AE+ | [kWh] |
| Active energy released | AE- | [kWh] |
| Inductive reactive energy | | [kvarh] |
| Capacitive reactive energy | | [kvarh] |
| Active power | P | [W] |
| Reactive power | Q | [var] |
| Apparent power | S | [VA] |
| Power demand | kW | |
| Voltage | U | [V] |
| Current | I | [A] |
| Rated frequency | f | [Hz] |
| Power factor | cos φ | |

Pulse output

The meter is equipped with 2 pulse output open collectors (OC type). This allows you to connect another pulse device (SO) that reads pulses generated by the meter.

No additional connected equipment is required for proper operation of the meter.

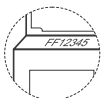
Meter number

The meter is marked with individual serial number allowing its unambiguous identification. The marking is laser engraved and cannot be removed).

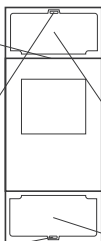
Sealing

The meter has sealable input and output terminal covers to prevent any attempts to bypass the meter.

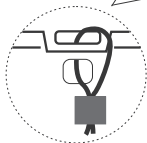
Front description



meter
number



terminal
cover



sealing spot

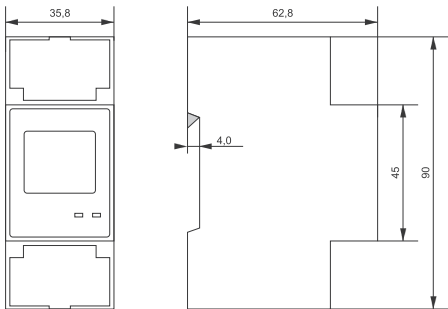
Display description



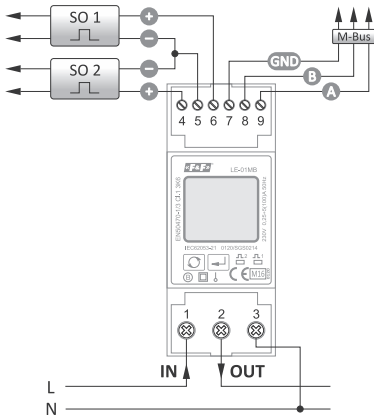
| No. | Description |
|-----|---|
| 1 | 7 digits for displaying measured values |
| 2 | Active energy – total value) |
| 3 | Tariff (inactive) |
| 4 | Energy: imported/exported |
| 5 | Maximum power or current demand |
| 6 | Pulse output 1 and 2 |
| 7 | Parameter units |
| 8 | PF – power factor |

| No. | Description |
|-----|--|
| 9 | Power indicator |
| 10 | Communication indicator |
| 11 | Battery status |
| 12 | M-Bus communication lock symbol for configuration parameters |

Dimensions



Wiring diagram



- | | |
|--------------------------|------------------------|
| 1 – LIN power input | 6 – pulse output 1 (+) |
| 2 – LOUT power output | 7 – M-Bus output (GND) |
| 3 – N-wire neutral | 8 – M-Bus output (B) |
| 4 – pulse output 2 (+) | 9 – M-Bus output (A) |
| 5 – pulse output 1+2 (-) | |

Technical data

| | |
|------------------------------------|---|
| installation | 2-wire |
| rated voltage | 230 V AC |
| minimum measured current | 0.02 A |
| base current | 5 A |
| maximum current | 100 A |
| voltage measuring range | 176÷276 V |
| measurement accuracy (EN50470-1/3) | class B |
| rated frequency | 50 Hz |
| insulation protection class | II |
| housing | PC+ABS material |
| own power consumption | 10 VA; 2 W |
| indication range | 0÷99999.99 kWh |
| read-out signalling | 2× red LED |
| communication | |
| communication protocol | M-Bus |
| baud rate | 300, 600, 1200, 2400*, 4800, 9600 bps |
| parity | NONE, ODD, EVEN* |
| stop bits | 1*, 2 |
| pulse outputs | |
| type | 2× open collector |
| maximum voltage | 27 V DC |
| maximum current | 27 mA |
| output 1 | |
| constant | 1, 10, 100, 1000 pulses/kWh or 1, 10, 100, 1000 pulses/kvarh |
| pulse time | 60, 100, 200 ms |
| output 2 | |
| constant | 3200 pulses/kWh |
| pulse time | 200 ms |

| | |
|-------------------------|-------------------------------------|
| working temperature | -25÷55°C |
| terminals | |
| pulse and communication | 1.5 mm ² screw terminals |
| voltage and current | 16 mm ² screw terminals |
| dimensions | 2 modules (35 mm) |
| mounting | on TH-35 rail |
| ingress protection | IP51 |

** factory settings*

Warranty

F&F products are covered by a 24-month warranty from the date of purchase. The warranty is only valid with proof of purchase. Contact your dealer or contact us directly.

CE declaration

F&F Filipowski sp. j. declares that the device is in conformity with the essential requirements of The Low Voltage Directive (LVD) 2014/35/EU and the Electromagnetic Compatibility (EMC) Directive 2014/30/UE.

The CE and MID Declaration of Conformity, along with the references to the standards in relation to which conformity is declared, can be found www.fif.com.pl on the product subpage.