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LE-02d

Electric energy meter,
3-phase



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
Certificate

2014/32/EU
0120/SGS0169

Purpose

The LE-02d is a static (electronic) indicator calibrated electricity three-phase alternating current in the system directly.

Functioning

A special electronic system under the influence of current flow and applied voltage in each phase, generates pulses in proportion to the electricity consumed in this phase. Phase energy consumption is indicated by flashing the corresponding LED (L1, L2, L3). The sum of the pulses of the three phases is indicated by a flashing LED shall be converted to energy, taken throughout the three-phase system, and its value is determined by the segment LCD display.

Decimal represent the hundredths (.01 kWh = 10Wh).

Measured value

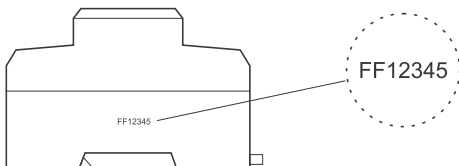
Active energy consumed AE+ [kWh]

Pulse output

The indicator has a pulse output. This allows you to connect a pulse meter-reading pulses generated by the counter. For proper operation of the indicator is not required to connect additional devices.

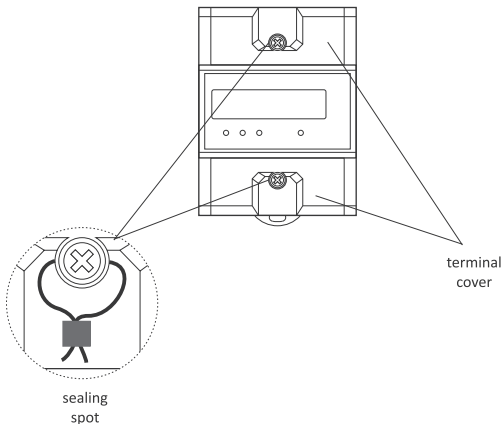
Meter number

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

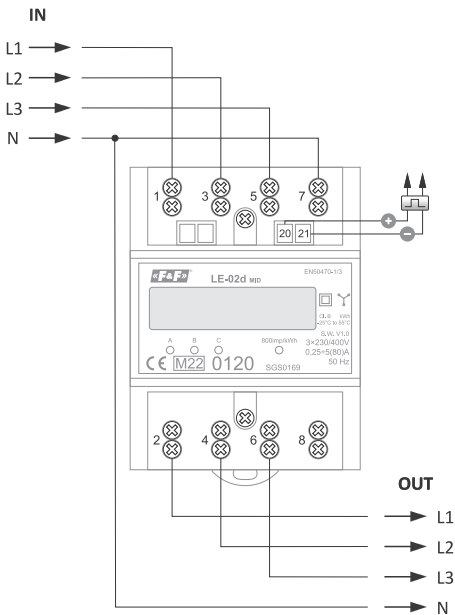


Sealing

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



Wiring diagram



- | | | | |
|---|------------------------------|----|------------------|
| 1 | L1 _{IN} phase wire | 7 | N-wire neutral |
| 2 | L1 _{OUT} phase wire | 20 | pulse output (+) |
| 3 | L2 _{IN} phase wire | 21 | pulse output (-) |
| 4 | L2 _{OUT} phase wire | | |
| 5 | L3 _{IN} phase wire | | |
| 6 | L3 _{OUT} phase wire | | |

Mounting

1. Disconnect the power supply.
2. The indicator mounted on a rail in the distribution box.
3. Using a screwdriver, remove the screws and remove the front shield meter terminals.
4. Connect the voltage-controlled phase, following the indications to terminals 1 (L1), 3 (L2), 5 (L3).
5. N-wire connect to terminal 7.



Do not tighten the terminals without an inserted wire. This may damage the clamping mechanism or the plastic cover of the terminal.

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6. Additional pulse receiver connected to terminals 20(+) – 21(-). The terminals are located under the top shell meter terminals.



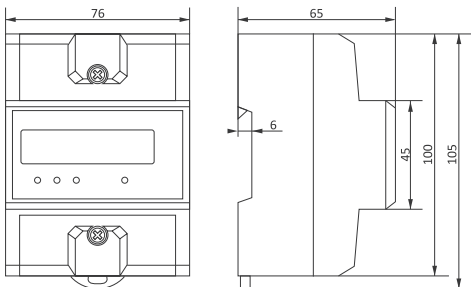
Additional pulse receiver is not required.

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7. Put the meter terminals covers.

Technical data

installation	4-wire
rated voltage	3×230/400 V
minimum current measured	0.04 A
base current	3×5 A
maximum current	3×80 A
voltage measuring range	160÷265 V AC
measurement accuracy (EN50470-1/3)	B class
rated frequency	50 Hz
insulation protection class	II
housing	PC material
own power consumption	10 VA; 2 W
indication range	0÷999999.99 kWh
constant	800 pulses/kWh
current consumption signalling	3× red LED
read-out signalling	red LED
pulse output	
type	open collector
maximum voltage	27 V DC
maximum current	27 mA
pulse time	35 ms
working temperature	-25÷55°C
terminal	16 mm ² screw terminals
dimensions	4,5 module (75 mm)
mounting	on TH-35 rail
ingress protection	IP20

Dimensions



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 L.P. 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.

General work safety conditions

- » Please read the instructions carefully before installation.
- » The device should be installed and operated by qualified personnel who are familiar with its design, operation, and associated risks.
- » Do not install a meter that is damaged or incomplete.
- » The user is responsible for proper grounding of the system, proper selection, installation, and efficiency of other devices connected to the meter, including safety devices such as over-current, residual current and overvoltage circuit breakers.
- » Before connecting the power supply, make sure that all cables are connected correctly.
- » It is essential to observe the operating conditions of the meter (supply voltage, humidity, temperature).
- » To avoid electric shock or damage to the meter, turn off the power supply whenever the connection is changed.
- » Do not make any changes to the unit yourself. Doing so can result in damage to or improper operation of the device, which in turn can pose a threat to people operating it. In such cases, the manufacturer is not responsible for the resulting events and may refuse the provided warranty in the event of a complaint.