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## WZE-1

Electricity consumption  
meter,  
1-phase



51190243116700411

### 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

|                    |              |
|--------------------|--------------|
| Directive MID      | 2014/32/EU   |
| Certificate number | 0120/SGS0570 |

## Purpose

The WZE-1 is a static (electronic) calibrated single-phase AC electricity consumption meter in a direct system.

## Functioning

Under the influence of the flowing current and applied voltage, a special electronic system generates impulses in a quantity proportional to the electricity consumed. Power consumption is indicated by a flashing LED. The number of pulses is converted into energy consumed and its value is indicated on a segmented LCD. Decimal digits indicate the hundredth of kWh (0.01 kWh = 10 Wh).

## Pulse output

The indicator has a SO+ SO- pulse output. This allows you to connect another pulse device (SO) that reads impulses generated by the meter.

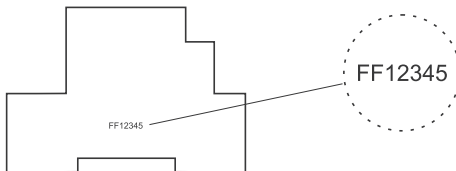
No additional device is required for the correct operation of the meter.

## Sealing

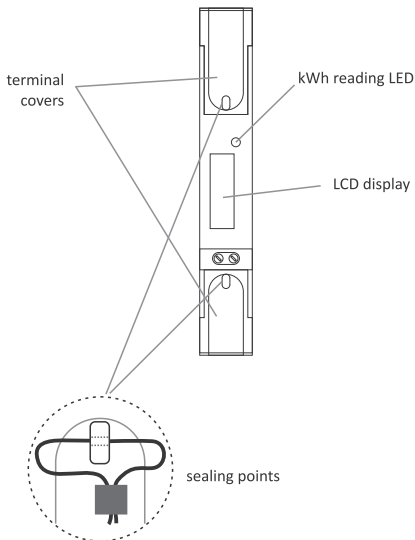
The meter has the option of sealing the input and output terminals, preventing the meter from being bypassed.

## Meter number

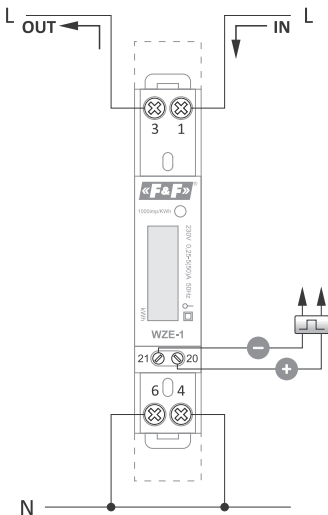
The meter is marked with an individual factory number to enable its unambiguous identification. The marking is indelible (laser engraving).



## Front description



## Wiring diagram



- 1  $L_{IN}$  power input
- 3  $L_{OUT}$  power output
- 4, 6 N-wire neutral
- 20 pulse output (+)
- 21 pulse output (-)

## Mounting

1. Disconnect the power supply..
2. Mount the meter on a rail in the distribution box.
3. Connect the input phase to terminal 1.
4. Connect the N-wire to terminal 4.
5. Connect the measured circuit or a single receiver to terminal 3 (ourpur phase L) and terminal 6 (N).
6. Connect an additional pulse receiver to terminals 20 (+) and 21(-).



An additional pulse receiver is not required.

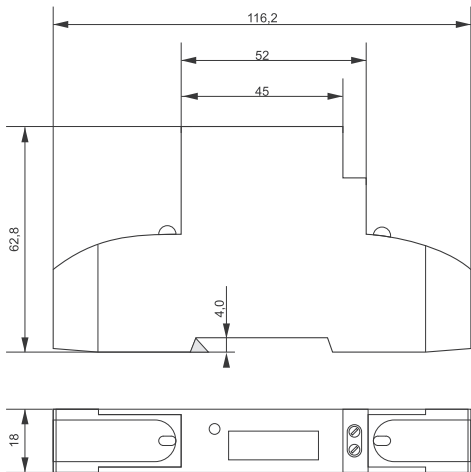
## Technical data

|                                 |                                   |
|---------------------------------|-----------------------------------|
| reference voltage               | 230 V AC, 50 Hz                   |
| base current                    | 0.25÷5 A                          |
| maximum current                 | 50 A                              |
| minimum detection current       | 0.02 A                            |
| accuracy class (EN50470-1/3)    | B                                 |
| energy consumption of the meter | <8 VA; <0.4 W                     |
| range of indications            | 0÷99999.99 kWh                    |
| meter constant                  | (1 Wh/pulse) 1000 pulses/kWh      |
| readout indication              | LED red                           |
| SO+ SO- pulse output            | open collector                    |
| SO+ SO- connection voltage      | <27 V DC                          |
| SO+ SO- connection current      | <27 mA                            |
| SO+ SO- constant                | (1Wh/pulse) 1000 pulses/kWh       |
| SO+ SO- cable lenght            | <20 m                             |
| SO+ SO- pulse time              | 90 ms                             |
| working temperature             | -25÷55°C                          |
| terminal                        | 6 mm <sup>2</sup> screw terminals |

dimensions  
mounting  
ingress protection

1 module (18 mm)  
on TH-35 rail  
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 at [www.fif.com.pl](http://www.fif.com.pl) from 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.
- » Do not tighten the terminals without the wire inserted. This may damage the lift mechanism of the terminal or the plastic cover of this terminal.