

Bidirectional electricity meter SIMLIC LS-3FB



- ✓ 3-phase
- ✓ digital
- ✓ 4-module
- ✓ backlit LCD
- ✓ reset function
- ✓ MID
- ✓ 100 A

SIMLIC

INTENDED USE OF THE LS-3FB METER

This bidirectional, single-zone electricity meter SIMLIC LS-3FB is designed for direct measurement of active electricity, which is collected and produced in the 3-phase installations.

Furthermore, it can be used to carry out measurements in industrial and non-commercial applications. Also, it's perfectly suitable for photovoltaic installations – metering of the generated renewable energy.

The LS-3FB meter indicates active power in [W] and active electricity in [kWh] – both consumed and produced (import / export).

INSTALLATION

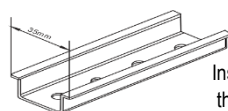
Prior to the installation, it is necessary to read the manual. This meter should be installed by a qualified person.

Prior to commencement of the installation, it is necessary to:

- make sure that the connected wires are voltage-free;
- make sure that the meter is not damaged, deformed and that no components are missing.



Recommended
installation by
qualified staff



Installation on
the TS 35 rail

INSTRUCTIONS REGARDING INSTALLATION AND SAFE USE

- this device must be operated only with the use of insulated tools;
- it is prohibited to install this product in potentially explosive atmospheres or in the areas in which it will be exposed to dusts, oil mist, mould or insects;
- it is necessary to make sure that the connection wires are characterised by the appropriate cross-section and that they are properly insulated;
- prior to first start-up of the meter, it is necessary to make sure that the power cables are connected to the appropriate mounting terminals of the meter;
- touching of the meter's mounting terminals or non-insulated wires with bare hands, metal items or other conductive items creates a risk of electric shock;
- after completion of the installation, it is absolutely necessary to put on the covers of mounting terminals;
- only the qualified persons should carry out the installation, inspections and any possible repairs;
- it is prohibited for unauthorised persons without appropriate qualifications to remove the mounting covers or to interfere with the meter;
- it is necessary to protect the meter against falling and mechanical shocks.

TECHNICAL DATA

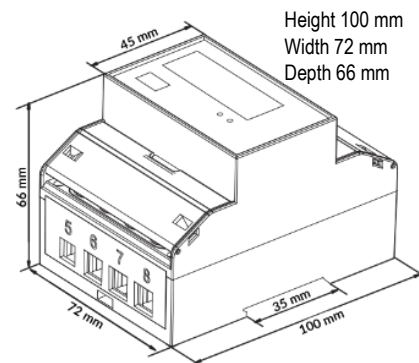
Specification	
Rated voltage AC U_n	3 x 230 V / 400 V
Rated impulse voltage U_{imp}	6 kV
Minimum current I_{min}	0.5 A
Reference current I_{ref}	10 A
Maximum current I_{max}	100 A
Starting current of the meter I_{st}	0.04 A
Rated frequency	50 Hz
Own consumption	≤ 2 W / 10 VA
Pulse output	1000 p. / kWh
Maximum indication	999999.9 kWh

Performance criteria

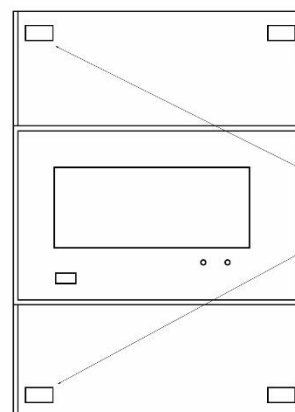
Acceptable humidity	≤ 95 %
Operating temperature	-25°C ... +55°C
Measurement accuracy class	Class B
Protection rating of the housing	IP51
Insulation protection class	II
Start-up time	5 seconds

It is necessary to store and transport this meter under the conditions compliant with the performance criteria.

EXTERNAL DIMENSIONS



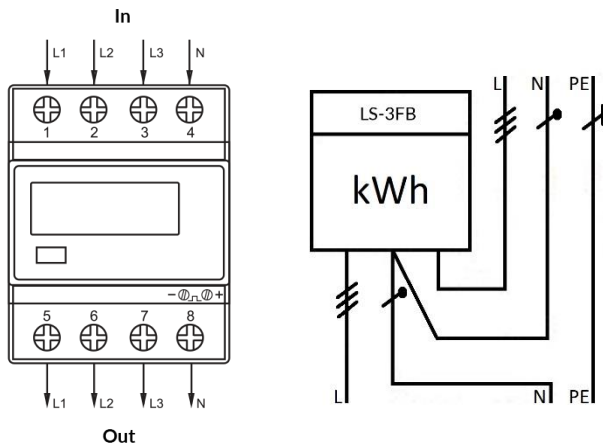
SEALING



This meter has the option of sealing the covers of input and output terminals.

the points of sealing the covers of mounting terminals

CONNECTION DIAGRAM



Transmission of pulses

This meter is equipped with an additional pulse output, which allows to connect an external counting device.

Note: the pulse output should be connected in compliance with the marking. It is necessary to pay particular attention to the voltage polarity (+/-).

Pulse output		Nominal cross-section of connected wires	
Voltage DC U_i	5 ... 27 V	rigid	4 ... 25 mm ²
Current I_{max}	27 mA	flexible	2.5 ... 16 mm ²
Pulse duration	30 ms		

BIDIRECTIONAL MEASUREMENT OF ELECTRICITY AT A GIVEN PERIOD

The LS-3FB meter allows to carry out the measurements of electricity consumption and production in a given period.

RESET button enables the activation of 2 functions:

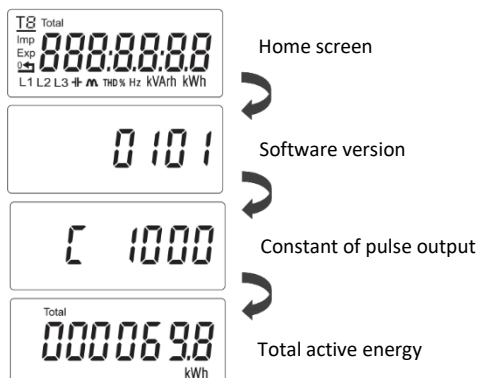
- short pressing (up to < 1 second) results in switching of the individual indications on the display;
- pressing and holding it for approx. 3 seconds resets the partial measurement of electricity and initiates the next periodic measurement.



FUNCTIONS OF THE DISPLAY

Start screen

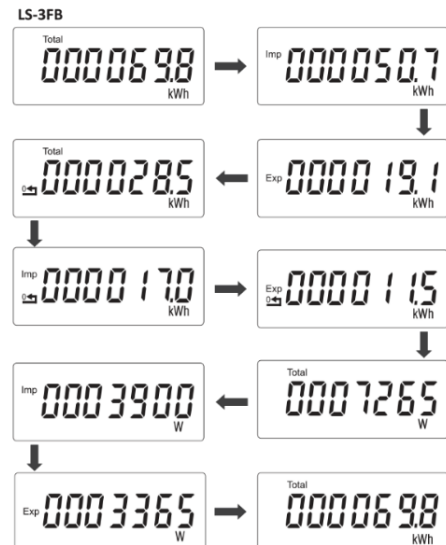
After start-up, the meter will carry out a self-check procedure.



FUNCTIONS OF THE DISPLAY cont.

Switching of the display views

Display menu of the LS-3FB meter can be scrolled with the use of reset button, which is located on the meter's front panel.



ENVIRONMENTAL PROTECTION



After the end of their use, it is prohibited to dispose of the electrical products (marked with a crossed-out bin symbol and an underscore) together with other household waste. The user is obliged to deliver such product to an entity collecting used electrical and electronic equipment, which created a system for collection of such waste - including an appropriate store, local collection point or municipal unit. Waste equipment may have a negative impact on the environment and human health, because it potentially may contain hazardous substances, mixtures and components. The households have a significant role in contributing to the reuse and recovery of recycling materials, including the recycling of waste equipment. The attitudes that are shaped at this stage affect the preservation of our common good - clean natural environment.

WARRANTY

The warranty period of the LS-3FB meter is 2 years from the date of sale, with the reservation that the rules of use, transport and storage are observed. Please contact the seller in the case of incorrect operation of the meter.

STANDARDS

- MID 2014/32/EU
- LVD 2014/35/EU
- EMC 2014/30/EU
- EN 50470 - 1
- EN 50470 - 3

Certification body no. 0598.
Certificate no. 0120/SGS/0335.

**USER'S MANUAL
(ENGLISH VERSION)**

