



F&F Filipowski sp. j.  
Konstantynowska 79/81 95-200 Pabianice  
phone/fax: (+48 42) 215 23 83 / 227 09 71 POLAND  
http://www.fif.com.pl e-mail: fif@fif.com.pl

ELECTRICITY CONSUMPTION INDICATOR  
three-phase, two-tariff

LE-04d

**WARRANTY.** The F&F products are covered by a warranty of the 24 months from the date of purchase. Effective only with proof of purchase. Contact your dealer or directly with us. More information how to make a complaint can be found on the website:  
[www.fif.com.pl/reklamacja](http://www.fif.com.pl/reklamacja)



Do not dispose of this device to a garbage bin with other unsorted waste! In accordance with the Waste Electrical and Electronic Equipment Act any household electro-waste can be turned in free of charge and in any quantity to a collection point established for this purpose, as well as to the store in the event of purchasing new equipment (as per the old for new rule, regardless of brand). Electro-waste thrown in the garbage bin or abandoned in the bosom of nature pose a threat to the environment and human health.

**Purpose**

LE-04d is a static (electronic), calibrated indicator of electric power of three-phase alternating current in direct system. The indicator is suitable for use with an external control timer and is designed for measuring and billing in two-tariff system.

**Functioning**

Special electronic system, under the influence of current flow and applied voltage, generates pulses in each phase in proportion to the electricity consumed in this phase. Energy consumption in phases is indicated by flashing LED A and C. The sum of the pulses of the three phases is indicated by flashing LED (800 pulses/kWh) and is converted to energy consumed in the entire three-phase system, and its value is displayed by segment LCD display. The number after the decimal is tenths (0.11 kWh = 110 Wh). Indicator is suitable for registering the value of electricity in two-tariff system. Two separate displays T0 and T1 indicate the value of electricity consumption in a given tariff. Switching between the tariffs takes place when the control voltage is applied on the D input of the meter (terminals 10-11). This can done

**Technical data**

reference voltage	3x 230/400V+N
basic current	10A
maximum current	100A
minimum current	0,04A
measure precision (with IEC61036)	1 <sup>st</sup> class
own power consumption	<10VA; <2W
T0 and T1 display indication range	0-99999,99kWh
meter constant	(1,25Wh/pulse) 800pulses/kWh
current consumption indication	3x red LED
T0 and T1 meter indication	2x red LED
pulse output VO	open collector
connection voltage VO	<24V DC
connection current VO	<30mA
constant VO	(1,25Wh/pulse) 800pulses/kWh
pulse time VO	30ms
working temperature	-20÷55°C
terminal	25mm <sup>2</sup> screw terminals
dimensions	7 modules (122mm)
mounting	on TH-35 rail
ingress protection	IP20

**Assembly**

1. Disconnect the power supply.
2. Mount the meter on the rail in the distribution box.
3. Connect power supply to terminals 1 (L1), 3 (L2), 5 (L3).
4. Connect measuring circuit or a single receiver to terminals 2 (L1), 4 (L2), 6 (L3).
5. Connect wire N to terminal 7.
6. Connect the contact of switching timer to terminal 10. Connect terminal 11 to N.
7. Connect additional pulse receiver (not required) to terminals 9 (+)/8 (-).

with external control clock. The T0 meter reads the value of energy consumption in the absence of control voltage at the input D. The T1 meter reads the value of energy from the appearance of the control voltage at the input D, until its disappearance. Operation of the given meter is indicated by appropriate LED.

**Pulse output**

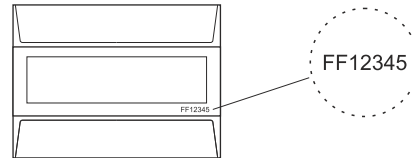
Indicator has a pulse output VO. This allows you to connect another pulse device that reads pulses generated by the meter. Connection of an additional device is not required for proper operation of the meter

**Sealing**

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

**Meter number**

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



**Wiring diagram**

