Product Ref: **ISK/ME162**

ME162

Single-phase meter

The ME162 single-phase electronic meters are intended for electric energy measurement and registration in single-phase two-wire networks in household. The meter is approved and manufactured in compliance with the IEC 62052-11, IEC 62053-21 (IEC 61036) standards and ISO 9001. They are designed according to even more severe Iskraemeco's standards that are the result of our more than 50-year experiences of meter manufacturing and fifty million meters installed worldwide.

kWh	Active power
	Single or double direction
T(4)	Multi-rate registration
	Internal clock
LCD	Data display
	Impulse output (KWh)

- Internal clock
- Data display on LCD in voltage-free state (option)
- LCD backlight (option)
- Communication optical port for semi-automatic meter reading
- Smaller dimensions
- Energy measurement: one direction, double direction or absolute

FUNCTIONAL AND TECHNICAL DATA

***ME162** is a single-phase meter for residential and small commercial users, for revenue measuring of active power in two wire systems.*

Measuring and registration: Standard (as a mechanical meter).
Other options: – Double direction
– Always positive (absolute)

Accurracy/calibration: Due to the long-term stability there is no need for recalibration in meters life-time.

Indications: **LED 1** (red): kWh impulses (k=1000 imp/kWh)
Illuminated: meter is powered, no load current
Pulsating: load current is higher than starting value
Not illuminated: meter is not powered

Communication: **Opto-port** (IEC 62056 – 21): for local meter reading and programming.

Real time clock:
– 32 kHz quartz oscillator
– The real time clock generates: a tariff program, season changeover, transition to day light saving period and vice-versa.

Inputs – tariff: Two tariff inputs for 2-4 tariff energy registration.

Outputs: S0 (DIN 43864) or opto-MOS-relay.
Option: two separate S0 or optomos outputs for bi-directional energy flow direction (kWh-import, kWh- export).

Local metering data display (LCD):
– Automatic scroll mode
– Manual scroll (by button)Programmable data set and sequence
– LCD back-light (option)
– Data display on LCD in voltage-free state (option).

Scroll key:
– LCD test
– Scrolling data on LCD

Enclosure: Polycarbonate, self-extinguishable.

Protection against water and dust: IP 53.

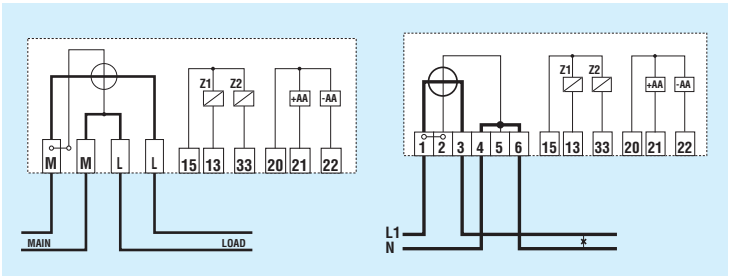
TYPE DESIGNATION FOR OREDERING

ME162–D1A41–V22G22–M3K0

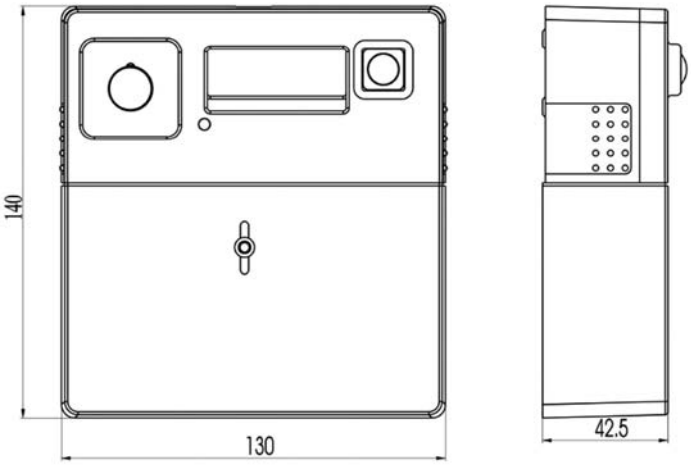
M – Electronic meter
E – Single-phase meter
162 – Meter with LCD and internal clock
D1 – Terminal block for direct connection up to 85 A by DIN 43857
D3 – Terminal block for direct connection up to 100 A by BS 5685
A4 – Active energy measurement, accuracy class 1
A5 – Active energy measurement, accuracy class 2
1 – Energy measurement in one direction
2 – Energy measurement in two directions
4 – Absolute energy measurement
V12 – 1 tariff input
V22 – 2 tariff inputs
G12 – 1 impulse S0 output
G22 – 2 impulse S0 outputs
L11 – 1 OPTOMOS relay, make contact
L21 – 2 OPTOMOS relays, make contact
M – Additional device
3 – Real time clock with Li-battery
K0 – Communication interface. Optical interface IEC 62056-21 (IEC 61107)

Accuracy class	2 or 1
Rated current I_n	5, 10, 20 A
Max. current I_{max}	85, 100 A
Min. current	0,05 I_n
Starting current	0,004 I_b
Reference voltage U_n	120, 220, 230, 240 V
Voltage range	0,8 U_n ... 1,15 U_n
Reference frequency	50, 60 Hz
Meter constant	1000 imp/kWh
Clock accuracy (25°C)	≤ 6 ppm or ≤ ± 3 min/year
RTC control	32 kHz crystal
Temperature range of operation	-25°C ... +60°C
Extended temp. range	-40°C ... +70°C
Storing temperature	-40°C ... +85°C
Current circuit burden	<25 mW / 25 mVA
Voltage circuit burden	<0.8 W / 10 VA
Dielectric strength (burst test)	4 kV, 50 Hz, 1 min
Impulse voltage	6 kV, 1,2/50 µs
Short-circuit current	30 I_{max}
EMC: High frequency disturbances	6 kV (IEC 1000-4-4)
Optical port	IEC62056-21 (IEC 61107)
Impulse outputs:	
S0	ti = 40 ms (10 , 20, 30, ..., 160 ms)
opto-MOS	ti = 80 ms (10 , 20, 30, ..., 160 ms)
Switching power	25 VA (100 mA, 250 V)
Dimensions (h x w x d)	97 x 130 x 43 mm
Mass	Approx. 0.380 kg

CONNECTION DIAGRAMS



DIMENSIONS



Owing to periodical improvements of our products the supplied products can differ in some details from the data stated in the prospectus material.

Data subject to alteration without notice.

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