

# CRN\_ME162




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## Single Phase LCD 2 tariff Credit 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.




-  Active power


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-  Single or double direction


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-  Multi-rate registration


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-  Internal clock

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-  Data display

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-  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)

**Accuracy/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:

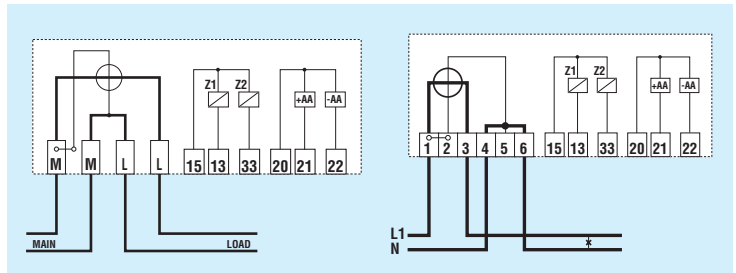
– LCD test  
– Scrolling data on LCD

**Enclosure:** Polycarbonate, self-extinguishable.

**Protection against water and dust:** IP 53.

|                                  |       |                                       |
|----------------------------------|-------|---------------------------------------|
| 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

