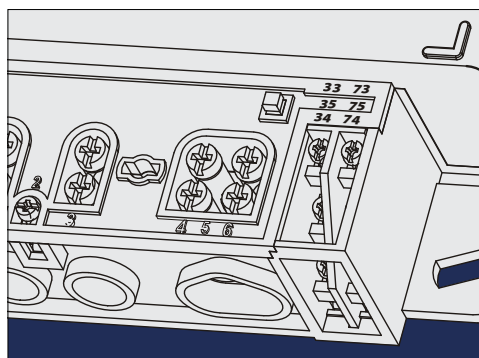
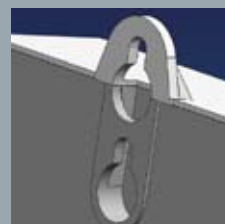


ME172

Single-phase meter

ME172 – single-phase meter is used for measurement and registration of active energy and demand in single-phase two-wire networks for direct connection. The metering and technical properties of the meter comply with the EN 50470-1 and EN 50470-3 European standards, classes A and B, as well as with the IEC 62053-21 and IEC 62052-11 (former IEC 61036) international standards for electronic meters of active energy for classes 2 and 1.

The meter is designed and manufactured in compliance with the ISO 9001 standard.



- Compact meter case with IP53 protection
- Antifraud protection
- Measurement of current, voltage and frequency
- Indications of meter operation status
- Optical port
- Single-wire meter (option)
- Two metering elements (option)

	Active energy
	Maximum demand
	One or two energy flow directions or always positive registration
	Multirate registration
	Internal real-time clock (RTC)
	 Measurement of current, voltage and frequency
	RS485 interface (option)
	LCD with No-power reading option
	Option: Pulse output (kWh) or tariff output

FUNCTIONAL AND TECHNICAL DATA

ME172 single-phase meter is intended for residential and small commercial users. It is used for measurement and registration of active energy and demand in single-phase two-wire networks for direct connection.

Measuring and registration:

- One energy flow direction (import)
- Two energy flow directions
- Always positive (absolute registration)

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

Antifraud protection

- ◆ Absolute energy measurement (option)
- ◆ Metering element in neutral circuit (option)
- ◆ Single-wire measurement (option)
- ◆ Reversed energy flow detector
- ◆ Meter cover opening detector
- ◆ Terminal cover opening detector
- ◆ External magnet field detector
- ◆ Hardware and software protection for programming

Indications:

LED (red): kWh impulses

Blinking: load current is higher than the starting current

Lit: voltage applied to the meter, load current is smaller than the starting current

Turned-off: no voltage applied to the meter

Communication:

Optical port IEC 62056 – 21: for local meter programming and data downloading.

Serial interface RS485 (option)

Multirate registration:

Internal time switch. Programmable number of rates (1 ... 4 rates)

TYPE DESIGNATION FOR ORDERING

ME172-D1A52-G12-M3K03

- M** – Electronic meter
- E** – Single-phase meter
- 172** – Multirate meter with internal time-switch
- D1** – 85 A DIN terminal block
- D3** – 100 A BS terminal block
- D31** – Terminal block for $I_{max} = 100$ A with two metering systems – DIN connection
- D32** – Terminal block for $I_{max} = 100$ A with two metering systems – BS connection
- A** – Active energy measurement
- 5** – Accuracy class A (by EN 50470-3) or 2 (by IEC 62053-21)
- 4** – Accuracy class B (by EN 50470-3) or 1 (by IEC 62053-21)
- 1** – One energy flow direction
- 2** – Two energy flow directions
- 4** – Absolute registration
- G12** – S0 pulse output
- L11** – Pulse output optomos relay with make contact
- M3** – Internal time switch with Li-battery
- K** – Communication port
- 0** – IR optical port
- 3** – RS485 interface (option)

Data display:

- 7-segment LCD
- 7 digits for data + 4 digits for data identification + 8 status flags and energy flow direction indicator
- Automatic scroll mode
- Manual scroll (with a pushbutton). Programmable data set and sequence
- Option: No-power LCD reading

Real-time clock:

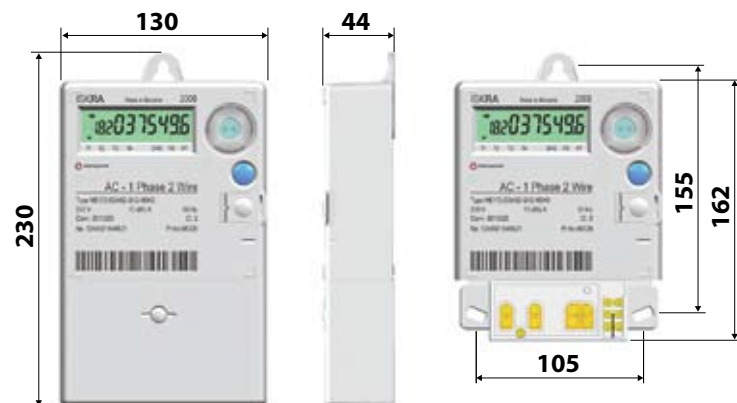
- 32 kHz quartz crystal
- Time keeping accuracy better than defined in the IEC 62054-21 standard
- RTC back-up power supply: Li-battery
- The real-time clock enables: tariff changeover, seasons changeover, transition to daylight saving period and vice-versa, demand periods.

Meter case: high quality self-extinguishing UV stabilized polycarbonate that can be recycled

Protection against water and dust: IP 53

Accuracy class (kWh)	A or B (by EN 50470-3) 2 or 1 (by IEC 62053-21)
Reference / Basic current I_b	5 A, 10 A
Max. current I_{max}	85 A, 100 A
Min. current	0.05 I_b
Starting current	0.004 I_b
Reference voltage U_n	220 V – 240 V
Voltage range	0.8 U_n ... 1.15 U_n
Reference frequency	50 Hz or 60 Hz
Operating temp. range	-40°C ... +70°C (LCD: -25°C ... +70°C)
Storage temperature	-40°C ... +85°C
Dielectric strength	4 kV, 50 Hz, 1 min
Impulse voltage	< 8 kV
Surge	< 6 kV
Short-circuit current	30 I_{max}
EMC	better than requested in IEC 62053-21
Optical port	IEC 62056-21
Dimensions	230 x 130 x 44 mm
Mass	approx. 0,5 kg

OVERALL DIMENSIONS (mm)



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

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