

Operating instructions Plug housing SG-EH100MID



Safety instructions and warnings:

Only use this meter: - as intended - in perfect technical condition - in compliance with the operating instructions and safety regulations

- Do not connect plug housings in series!
- Do not operate the plug housing covered!
- Do not dispose of the old appliance with household waste, but take it to the local recycling centers!



Intended use:

The customary local standards, guidelines, provisions and regulations must be complied with. The meter may only be installed by qualified and appropriately trained personnel. The meter must be protected from moisture during storage and transportation and must not be operated outside the specified technical data ($I_{max}=15A!$). If the housing is damaged, the device may no longer be used!



Maintenance and cleaning:

The SG-EH100MID is maintenance-free. Repairs may only be carried out by the manufacturer. To clean the meter, wipe it with a dry, soft cloth when it is disconnected from the power supply. Never use corrosive substances or substances containing solvents for cleaning.

Attention: Opening the appliance invalidates the calibration and any warranty.

Description:

The SG-EH100MID energy and hour meter was developed for portable devices that are primarily used in the rental sector. A mandatory MID-compliant version (EN50470-1 and EN50470-3) is required for billing the customer.

The calibrated version is identified on the type plate of the meter by the year it was placed on the market (e.g. M19) and the name of the notified body that performed the calibration (e.g. 2083). This version may be used for billing customers. The calibration is valid for 8 years. The SG-EH100MID complies with protection class IP54, dust and splash water protected, and is therefore suitable for outdoor use.

After switching on the meter, the installed hardware (e.g. HW2) and the software version (e.g. V3.8) are displayed for approx. 1 second, after which it is immediately ready for use.

Energy meter: (approved for kWh billing)

The energy consumed is counted and displayed in 0.01 kWh increments. The meter reading is saved permanently in a non-volatile memory after each change (data retention > 10 years). The display range is 5 digits before the decimal point and 2 digits after the decimal point: xxxxx.xx kWh. The LED on the front panel flashes according to the currently consumed energy: slow flashing = low energy consumption, fast flashing = high energy consumption. The counter constant of the LED is 6400 Imp/kWh.

Hour meter: (do not use for billing purposes)

A flashing star at the last digit indicates that the counter is working properly. The display range is 5 digits before the decimal point and 2 digits after the decimal point: xxxxx.xx h. The digits after the decimal point are displayed in "decimal" hours 0 to 0.99. The smallest unit 0.01h corresponds to 1/100 of an hour or 0.99 seconds. The smallest unit 0.01h corresponds to 1/100 hour or 36 seconds. The counter reading is saved permanently in a non-volatile memory after each change (data retention > 10 years).

General technical data:

Model name:	Electronic single-phase active consumption and hour meter
Type:	SG-EH100MID
Nominal voltage:	230V - 20% + 15% 50Hz
Max. Current/power:	15A3500W (due to plug)
Temperature range:	- 10°C to + 55°C
Storage temperature:	- 20°C to + 70°C
Altitude:	up to 2000m
Protection class:	I
Protection class:	IP54
Display:	LCD 2x8 digits, digit height 5mm
Housing:	approx. 56mm x 86mm x 63mm
Weight:	approx. 200g
Active power self-consumption:	<0.5Q

Energy meter:

Meter constant LED:	6400Imp/kWh
Current definitions:	Actual=20mA, Imin=0.25A, Itr=0.5A, Iref=5A, Imax=25A
Accuracy class:	B (1%)

Operating counter:

Accuracy: 2%

EU Declaration of Conformity:

The designated product to which the declaration refers complies with the following standards or normative documents:

- Directive 2014/32/EU of the European Parliament and of the Council of February 26, 2014 on measuring instruments,
- and is verified by compliance with the EN 50470-1:2007-05 and EN 50470-3:2020-05 standards

This declaration certifies compliance with the aforementioned directives, but does not constitute a guarantee of properties. Safety instructions in the supplied product documentation must be observed.

Securing the mains cable on the SG-EH100MID energy meter

Securing the plugged-in mains cable prevents the customer from removing the connected mains cable of the plugged-in appliance.

A simple way to secure the cable is to use a cable tie. This makes the customer very reluctant to unplug the cable, as the cable tie has to be pinched through first.

Attention:

The maximum total current of 15A (3500W) for all devices together must not be exceeded. Extreme caution is advised with cheap "DIY store socket strips". These often overheat even at currents far below the printed current rating of e.g. 16A!

If a cable reel is used, it must be completely unwound to prevent overheating in the cable reel.

Suggested attachment of the cable tie (or sealing wire):

cable tie



cable tie



Important information on the calibration period for measuring devices in accordance with the Measurement and Verification Ordinance

The calibration period for electronic electricity meters is 8 years.

The calibration period begins on the day the meter manufacturer places the meter on the market. It ends at the end of the year in which the period ends arithmetically.

Example 1:

Marking of the meter CE M18 for calibration in 2018.

The meter was purchased from the meter manufacturer in the course of 2019. The purchase from the manufacturer (not from an intermediary!) is the placing on the market, the calibration period is the current year 2019 plus 8 years. The meter may be used until 31.12.2027.

Example 2:

Marking of the meter CE M19 for calibration in 2019.

The meter was purchased from the meter manufacturer in the course of 2019. The purchase from the manufacturer (not from an intermediary!) is the placing on the market, the calibration period is the current year 2019 plus 8 years. The meter may be used until 31.12.2027.

If the meter is marked differently, e.g. CE M18 and placed on the market, e.g. 2019, the meter invoice with serial number must be kept in order to be able to prove the year of placing on the market in the event of an inspection by the market surveillance authority.