SINGLE-PHASE ELECTRONIC ELECTRICITY METER

Electronic meters with LCD display, one tariff, with or without optical port and communication possibilities.

CSM 0202

The CSM 0202 meter belong to the category of measuring and it is intended for the metering of active electrical apparatus energy for residential consumers, and commercial agents which use tariff systems with one tariff for the billing of the electrical energy in single phase low voltage networks.

TECHNICAL CHARACTERISTICS

Rated values

- Rated voltage, Un: 230 V
- Base current, Ib: 5A
- Maximum current, Imax: 80 A
- Minimum current, Imin: 0,25A
- Rated frequency, fn: 50 Hz sau 60 Hz
- Frequency range: 45...65 Hz
- Meter constant (imp/kWh): 1000 imp/kWh

Accuracy characteristics and influences:

- Class A,B for active energy, according to EN 50470-1,3

Climatic characteristics

- Operating temperature range: -25...+55°C
- Temperature limit: -40...+70°C
- Transport and storage temperature:-40...+70°C

Mechanical and constructive characteristics

- Overall dimensions: 100x130(148)x50 mm, according to figure 2
- 3 points mounting dimensions: 85x105(120) mm,
- Display: LCD custom design 60 x 20 mm, acc. to figure 1
- Wiring diagram: LLNN, according to figure 3
- Protection degree: IP 54 (case)
- Testing device: LED 1000 imp/kWh

Operating characteristics

- Clock calendar with leap years recognition and automatic change of the summer/winter hour. A new date and time value can be configured as well as the direction of change (plus/minus one hour)
- Optionally, the meter can be provided with the following:
- Optical port, according to EN 62056-21;
- The meter performs the measurement of the total active energy (unidirectionally) |W+|+|W-|
- Pulse generator (40V, 100mA)
- Current loop for the data transmission, according to EN 62056-21

Other features

- The meter displays and transmits, through its optical port (if it exists), error codes for the measuring circuit errors and reverse energy flow.
- The meter can diagnose the measuring point and can transmit, through its optical port, the following information:
- The number of voltage drops;
- Battery use time counter;
- Number of configuration program changes;
- Time of the last voltage reconnection;
- Time of the last voltage drop;
- Date of maximum demand;
- Time of maximum demand;
- Self-readings;
- List of events;

Quality management system ISO 9001 certified by SRAC
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SYMBOLS

CSM 0202 A(B) W 1 1 x x x x x
1 2 3 4 5 6 7 8 9
1. Accuracy class (A) or (B)
2. Type of energy (W - active energy)
3. (1 = 230V)
4. Maximum current (1 = 80A)
5. Optical port (option) 1/0 = presence yes/no
6. No option = 0
Current loop interface option = 1
Pulse output device cf. EN 62053-31 option = 2
7. Test LED pulse (options) 1/0 = presence yes/no
Note: when option is 0 the test pulses are generated by optical port LED.
8. LED for energy direction flow signaling (options) 1/0 = presence yes/no
9. Sealing cover of the optical port 1/0 = presence yes/no

WIRING DIAGRAM

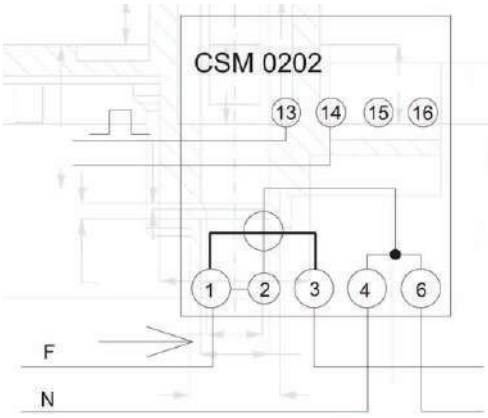
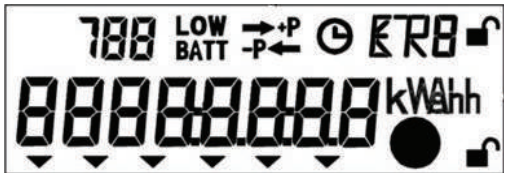


Fig. 3

Meter with pulse generator



Measured energy

Measuring units

T1 T2
active tariff
(for two tariffs)

Fig.1

OVERALL AND MOUNTING DIMENSIONS, SEALS

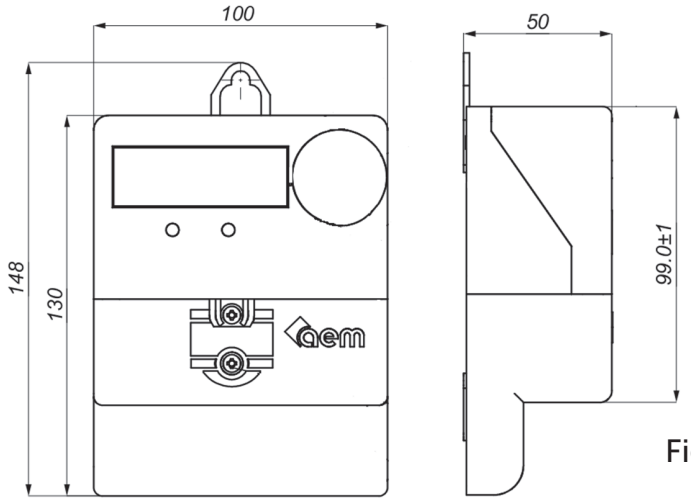


Fig.2

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