

SINGLE - PHASE ELECTRONIC ELECTRICITY METER

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



CSM 0201

The CSM 0201 meter belongs to the category of measuring apparatus and it is intended for the metering of active electrical energy for residential consumers, and commercial agents which use tariff systems with one tariff for the electrical energy billing in single-phase low voltage networks.

TECHNICAL CHARACTERISTICS

Rated values

- Rated voltage, U_n : 230 V
- Base current, I_b : 5 A
- Maximum current, I_{max} : 80 A
- Minimum current, I_{min} : 0.25 A
- Rated frequency, f_n : 50 Hz or 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: -40...+70°C
- Transport and storage temperature: -40...+70°C

Mechanical and constructive characteristics

- Overall dimensions: 127x95(155)x54 mm, according to figure 2 3 points mounting dimensions: 105x75(95) mm, according to 2
- Display: LCD custom design 60 x 20 mm, acc. to figure 1
- Wiring diagram: LLNN, according to figure 3
- Protection degree IP 51
- Testing device: LED 1000 imp/kWh

Operating characteristics

- The meter performs the measurement of the total active energy (unidirectionally) $|W+|+|W-|$.
- Optionally, the meter can be provided with the following:
 - Optical port, according to EN 62056-21;
 - Pulse generator. (40V, 100mA);
 - Current loop for the data transmission, according to EN 62056-21.

Other facilities

The meter displays and transmits, through its optical port(if it exists), error codes for the measuring circuit errors and internal memory.

The meter can diagnose the measuring point and can transmit, through its optical port, the following information:

- the number of voltage drops
- the number of the reverse connections (energy reverse direction circulation);
- the meter operating period;
- the number of since the last voltage connection;
- the number of seconds of operation without load.

The display is made on a custom design display, according to figure 1.



SYMBOLS

CSM 0201 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. Rated voltage (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

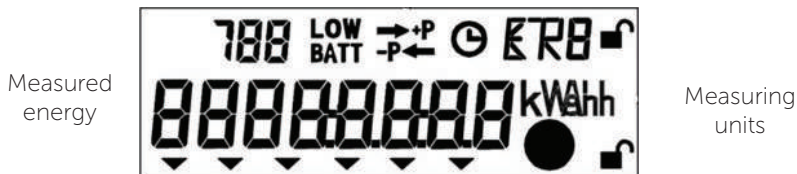


Fig.1

OVERALL AND MOUNTING DIMENSIONS, SEALS

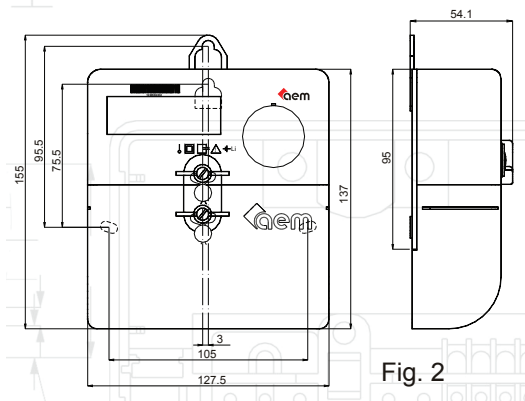


Fig. 2

WIRING DIAGRAM

