

INSTRUCTIONS

SINGLE-PHASE FOUR MODULAR DIN-RAIL ELECTRONIC METER

I. Standard

The functions of the product meet all the technical requirements of single phase electronic meter in IEC 61036 standard (static AC active power meter).

II. Function and characteristic

1. Active electricity measuring, without adjust under long-time work.
2. Prevent reverse tamper and indication.
3. Wide work temperature range: -30—55°C

III. Technical specification

1. Rated voltage: 220V/230V
2. Rated current: 5(20)A, 5(30)A, 10(40)A, 15(60) A, 20(80)A, 10(100)A.
3. Rated frequency: 50-60Hz
4. Display mode: Counter 5+1 = 99999.9kWh
5. Impulse constant: 1600imp/kWh
6. Class of Accuracy: 1.0
7. Start current: 0.4%I_b (class 1.0)
8. Creep: logical design of Anti-creep
9. Power consumption: ≤1W (when 220V 20A)

Accuracy (see the form bellow)

Load current	Power factor COSΦ	Basic error%		
		Class 0.5	Class 1	Class 2
0.05I _b	1.0	±1.0	±1.5	±2.5
0.1I _b ~I _{max}	1.0	±0.5	±1.0	±2.0
0.1I _b	0.5(L)	±1.0	±1.5	±2.5
	0.8(C)	±1.0	±1.5	—
0.2I _b ~I _{max}	0.5(L)	±0.5	±1.0	±2.0
	0.8(C)	±0.5	±1.0	—

10. Invironment condition: standard work temperature -20—45°C
limit work temperature -30—55°C
relative humidity ≤85%

11. Outside dimensions: 100×76×65mm

IV. Working principle

See Fig.1. send simulate signal of sampling current and sampling voltage separately to special integrated circuit, after inner amortize and magnify to multiplicative part. And voltage signal multiply with current signal, through A/D transition to transfer simulate value to figure signal. Then, through frequency divide circuit and drive circuit to use the impulse output of electricity signal in drive impulse circuit and electricity indication.

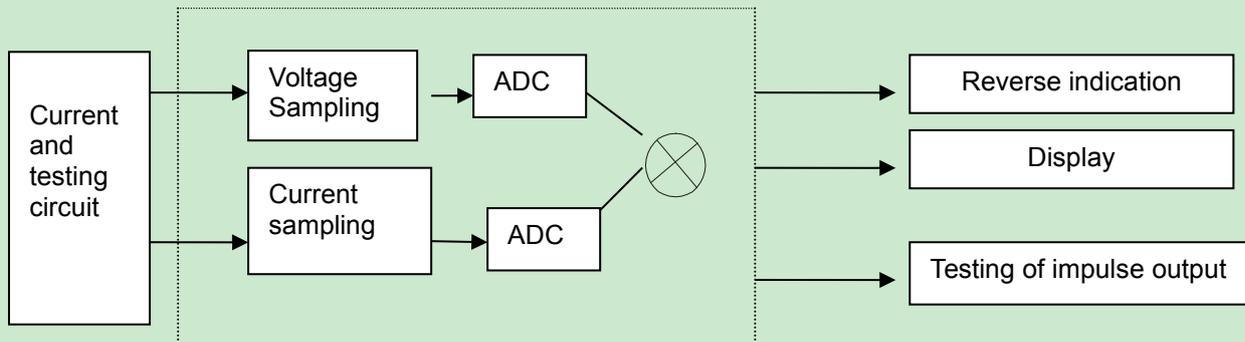


Fig.1

V. Installation

1. The meter is checked out and sealed before leave the factory, then installing and using.
2. The meter should be installed in the meter box no matter indoor or outdoor. The meter should be installed on the firm and against-fire wall. There should no any corrupt gas in the air.
3. The meter should be connected in according to the wiring diagram on the terminal block crust. It's better to meet with copper line or copper connection head.
4. The energy counter display meter show the electricity quantity with the unit of kWh.
5. Installation picture 2 (meter installation chart).
6. Wiring diagram—Picture3 (energy meter wiring diagram)

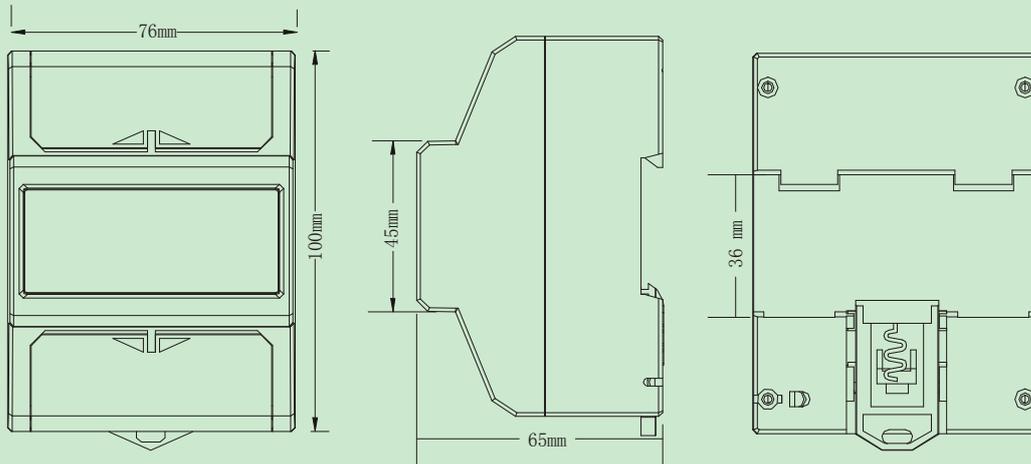


Fig. 2

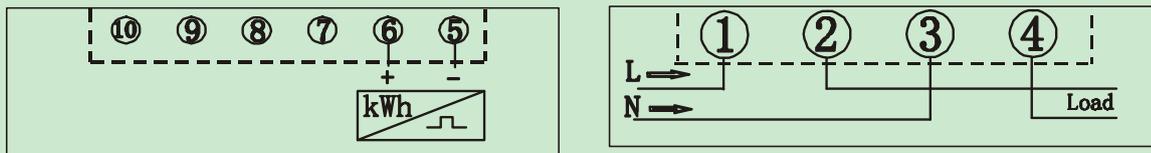


Fig. 3

VI. Transportation and handling

1. The meter shall not be subjected to throwing, dropping, kicking or other physical abuse, as there are high precision components inside that will break or make the meter measure in accurately. The process of transportation, handling and installation should be according to transportation and storage rule of GB/T15464-1995.
2. Keep the meter in the original package when stored. The storage temperature range should be 0—40°C. relative humidity $\leq 85\%$. There should be no toxic or corrosive substance or gases in the air.
3. The meters shall be stacked on the platform in storage. Don't stack more than 10 units high.
4. Time limit of guarantee.
Within 18 months from the day of sale, and on the condition that the users abide by the specifications and installation procedures, and the sealing is kept completely intact. If the meter does not correspond with the rule of the enterprise standard, the meter shall be repaired free or replaced.