



# INSTRUCTIONS

## THREE-PHASE ELECTRONIC ACTIVE ENERGY METER

### I . Standard

The functions of the meter meet all the technical requirements of three phase active electronic meter in IEC62052-11 and IEC62053-21 standard.

### II . Functions and characteristics

- 1、 With simple structure and high reliability, the meter adopts three-chip synthetic technology and some certain constants can be decided by users.
- 2、 Measure and calculate the accumulative active power with power indicator and energy indicator.
- 3、 With wide measuring range without hooks, shunt sampling is adopted to avoid tampering by pulling off the hooks or shunting direct current.
- 4、 Power failure in one phase (3P3W) will not affect normal energy measuring.
- 5、 The meter is electromagnetically compatible, anti-jamming and lightning-strike-proof.

### III. Technical specifications

1. Rated Voltage: 3\*230/400V
2. Rated Current: 5(100)A
3. Frequency: 50/60Hz
4. Connection Mode: Direct Type
5. Display: Counter/LCD
6. Accuracy Class: 1.0
7. Power Consumption:  $\leq 1.0W$ ;  $\leq 0.3VA$
8. Start Current: 0.004Ib
9. Constant: 800imp/kWh
10. Temperature
  - Normal temperature:  $-15\sim 70^{\circ}C$
  - Ultra temperature:  $-20\sim 75^{\circ}C$
  - Temperature for storage and transportation:  $-25\sim 80^{\circ}C$
  - relative humidity:  $\leq 85\%$
11. Weight: 1.2KG-2KG
12. Outside dimensions: 220mm x 138mm x 63mm

### IV. Working principle

Showing as figure 1, sending the sampling current and sampling voltage into the special integrated circuit, through the inner cushion amplifier, next to multiplying unit, multiply the voltage and current signals. Then through A/D conversion, convert the logic signal to the digital signal, next to frequency

circuit and drive circuit, then put out the drive impulse and show the watt-hour indication.

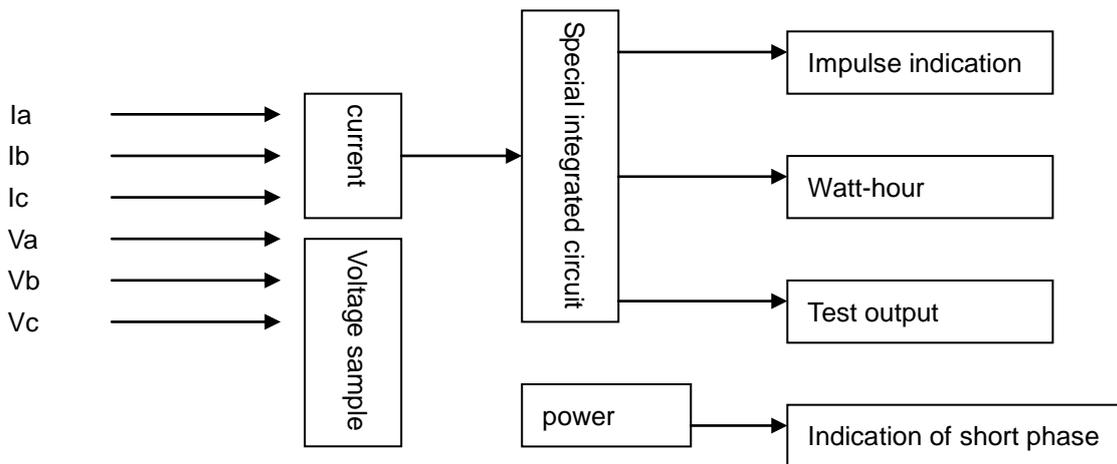


Fig.1

## V. Installation

1. The meter is tested and sealed before leaving the factory.
2. The meter should be installed in a meter enclosure whether indoors or outdoors. The meter should be installed on a solid and fire-resistant backing, and not near any combustible, corrosive or noxious substances or gases.
3. The meter should be connected in according to the wiring diagram on meter case. Copper wiring is preferred.
4. The LCD/Counter displays shows the electricity consumption with units of kWh (kilowatt hours).
5. Meter case dimension

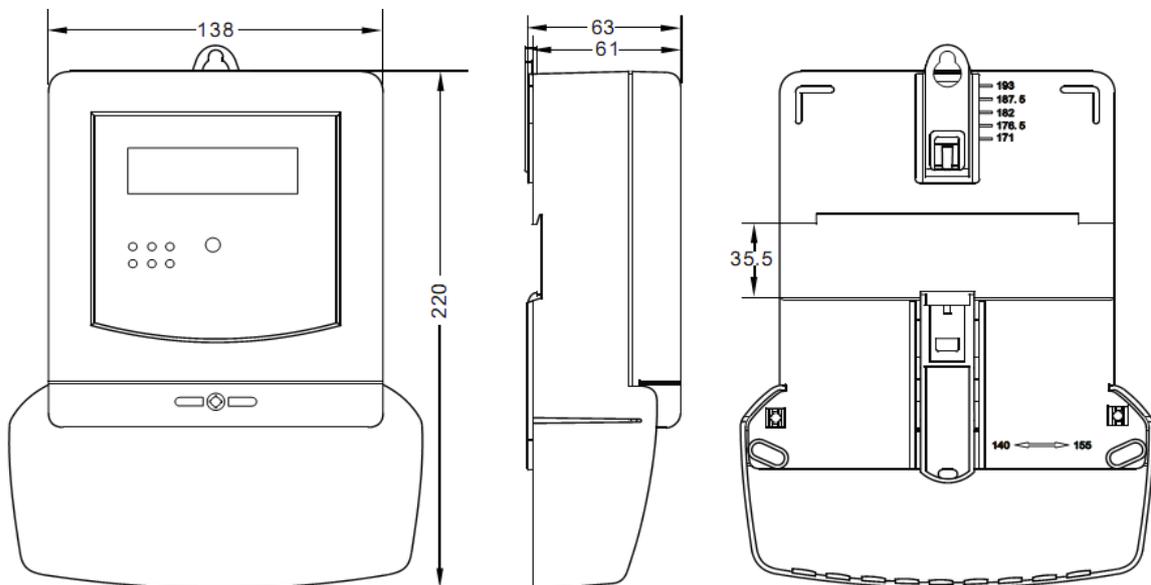


Fig .2

## 6. Meter wiring diagram

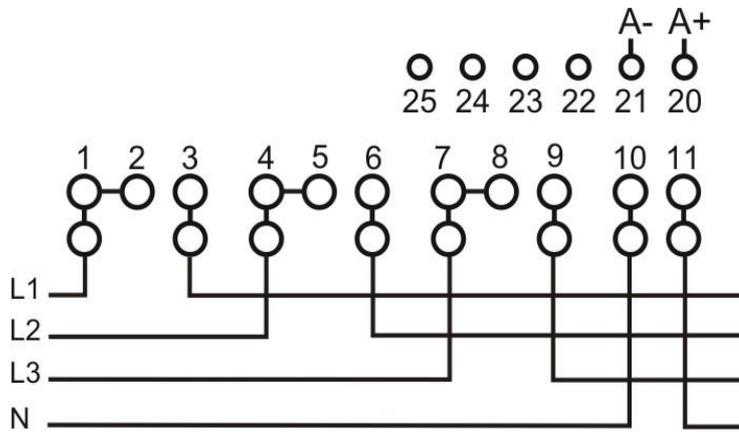


Fig.3

## VI. Transportation and handling

1. It must be packed when transporting, it cannot be vibrated and struck tempestuously. Its pack should be accordance with IEC1036<The universal technical condition for instruments and meters pack>.
2. When storage it should not pile up more than 5 layers, and the storehouse must be clean ,the temperature should be between  $-25^{\circ}\text{C}$ -- $+80^{\circ}\text{C}$ , the humidity is not over 85%, any cautory gas and mildew cannot be in the air.
3. Time limit of guarantee  
The manufactory will repair or exchange the products while the lead seal is still exited, within 18 months, when discovering the products not accordance with the technical specification.