

TYPE DT862

THREE-PHASE FOUR-WIRE WATT-HOUR METER

1.Usage and scope of application:

The meter is used for measuring power consumption in a rated frequency of 50Hz three-phase four-wire alternating current circuit.

The meter is installed indoors. The site conditions shall be assumed as follows: The ambient temperature is in $0 \text{ C} \sim +50 \text{ C}$. The relative humidity shall not exceed 85%. There isn't any corrosive gas or any influence of dust, mold, insects etc.

2. Main specification and technical data:

The meter conforms to all technical requirments in Class 2 Group p. IEC 521-88.

2.1 Specification:

Туре	Accuracy	Rated Voltage	Rated Current
DT862-4	Class 2	3 ×380/220	1.5(6),5(20,)10(40),15(60). 20(80),30(100)
DT862-3	Class 2	3 ×380/220	3 ×20(60)

(Note:In Rated Current the digits before brackets are Ib and in brackets are Imax)

2.2 Technical data:

2.2.1 Error limits:

Error limits under balanced load

Current	Power Factor	Percentage Error Linits
0.05Ib	1	± 2.5
0.1Ib	0.5L	± 2.5
0.11b~Imax	1	± 2.0
0.21b~Imax	0.5L	± 2.0

Error limits under unbalanced load

Current	Power Factor	Percentage Error Limits
0.21b ~ 1b	I	±3.0
Ib	0.5L	±3.0
>Ib ~ Imax	0.5L	±4.0

2.2.2 Starting current:

Under the conditions of rated voltage and rated power and $\cos \phi = 1$, when load current of the meter is 0.5% Ib, the rotor will constantly move in positive.

2.2.3 Creeping:

When the meter has no current in current circuit but the voltage is 80~110% of the rated in the voltage cuiruit, the rotor of the meter shall not make one complete revolution.

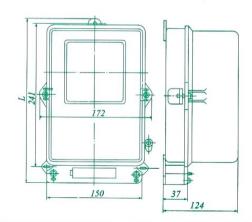
2.2.4 Insulation:

All the circuits to the meter case can endure the impulse voltage of 1.2/50 µs wave and 6Kv peak value. In the same electrode to be test 10 times the meter shall not discharge are or breakdown.

All the circuits to the insulation to the earth can endure alternating voltage 2Kv of 50Hz factal sine wave in a minute.

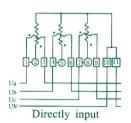
3. The drawing of external surface and connection drawing:

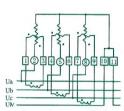
3.1 The drawing of external surface:



15(60), 20(80), 30(100)	279
1.5(6), 3(6), 5(20), 10(40)	273
Specification (A)	L

3.2 Connection drawing:





Input through mutual inductor

4. Installation and use:

- 4.1 The meter can be installed and used after being test and sealed with letterpress printing. Without letterpress printing or storage time is too long, the meter must be retested.
- 4.2 The meter must be installed in a ventilate and arid place. The meter base board must be on the wall of fire resistance and uneasily shaken. The meter must be installen vertically and the gradient shall not exceed 1 °. The installation height is about 1.8m.
- 4.3 The meter must be installed in the protective box in dusty place or against possible mechnical injury.
- 4.4 Connecting must accord with above drawings or the drawing in the extended cover. To use brass conductor to input to avoid that the meter shall be burnt due to loose contact.
- 4.5 In the more thunderstorms place to adopt measures to avoid lightning injury.
- 4.6 The load capacity of the meter is between 0.05Ib~Imax. If the capacity exceeds above the register shall not beaccurate or the current coil shall be heated and burnt.
- 4.7 The meter register adds up all the numbers mechanically. Theag has decimal digist in the ted window and integers in the black one. Without red window they're all integers. When the meter is connected with mutural inductor the total shall be that the numbers read in the windows multiply the times of mutual inductor.

5. Transportation and storage:

- 5.1 Transport and storage of the meter mustn't be shaken and must accord with ZBY002-81.
- 5.3 The meters should be in the original packing box and the boxes should be piled up no more than fives on the rack. The seperate meters should be piled up no more than fives. The unpacked meter isn't suitable for storage.