



## TYPE DD862

### SINGLE-PHASE WATT-HOUR METER

#### 1. Usage and scope of application:

The meter is designed throughout the country. It is high overload and low power loss and economical induction meter. It is used for measuring power consumption in a rated frequency of 50Hz single phase alternating current circuit.

The meter is installed indoors. The site conditions shall be assumed as follows: The environmental temperature is in  $-20^{\circ}\text{C} \sim +50^{\circ}\text{C}$ . The relative humidity shall not exceed 95%. 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 requirements in Class 2 Group P. IEC 521-88.

##### 2.1 Specification:

Type	Accuracy	Rated Voltage (V)	Rated Current (A)
DD862-4	Class2	220~240	1.5(6), 2.5(10), 5(20), 3(12), 10(40), 15(60), 20(80), 30(100)
DD862	Class2	220~240	3(9), 5(15), 10(30), 15(45), 20(60), 30(90)

(Note: In rated Current the digits before brackets are  $I_b$  and in brackets are  $I_{max}$ )

#### 2.2 Technical data:

##### 2.2.1 Error limits:

Current	Power Factor	Percentage Error Limits
$0.05I_b$	1	$\pm 2.5$
$0.1I_b$	0.5L	$\pm 2.5$
$0.1I_b \sim I_{max}$	1	$\pm 2.0$
$0.2I_b \sim I_{max}$	0.5L	$\pm 2.0$

##### 2.2.2. Starting:

Under the conditions of rated voltage and rated power and  $\cos \phi = 1$ , when the load current of the meter is  $0.5\% I_b$ , 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 circuit, the rotor of the meter shall not make one complete revolution.

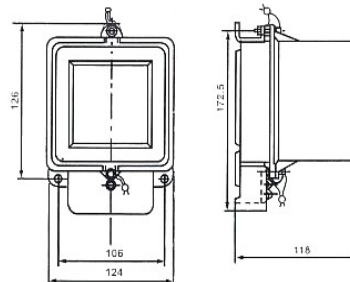
##### 2.2.4 Insulation:

All the circuit to the meter case can endure the impulse voltage of 1.2/50  $\mu\text{s}$  wave and 6kV peak value. In the same electrode to be test 10 times the meter shall not discharge arc or breakdown.

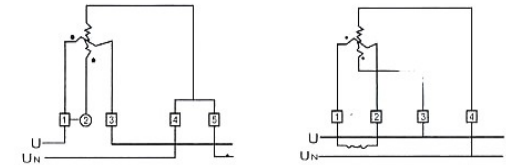
All the circuit to the insulation to the earth can endure alternating voltage 3kV of 50Hz factual sine wave in a minute.

#### 3. The drawing of external surface and connection drawing:

##### 3.1 The drawing of external surface



##### 3.2 Connection drawing:



Directly input

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 shaking, The meter must installed vertically and the gradient shall not exceed  $1^{\circ}$ . The installation height is about 1.8m.

4.3 The meter must be installed in the protective box in the dusty place or against possible mechanical 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  $0.05I_b \sim I_{max}$ . If the capacity exceeds above the register shall not be accurate or the current coil shall be heated and burnt.

4.7 The meter register adds up all the numbers mechanically. The nameplare has decimal digits in the red window and integers in the black one. Without red window they're all integers. When the meter is connected with mutual inductor the total shall be that the numbers read