

USER MANUAL

1. General

Model DDM100S single phase din rail kwh meter adopt micro-electronic technique and imported special large scale integrate circuit,use advanced technique of digital sampling technique and SMT technical ect.The meter are completely conformed to international standard IEC62053-21 on the meter(class 1.0).

The meter is used for measuring active energy power consumption in a rated frequency of 50HZ or 60 HZ single phase alternating current circuit ,which Suitable for rated voltage 220V 230V 240V.The meter adopt (5+1) or (6+1) register display.

It has following features: good reliability,small volume ,light weight,specious nice appearance,Convenient installation ect.It can choose many kinds of installation ways such as 35mm DIN Standard which conformed with DIN EN50022 standards. Or Board before installation (mounting hole is 63mm).



Manufacturing company HUABANG

DDM100S

**SINGLE PHASE DIN-RAIL KWH
METER**

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TG ELECTRONICS
OEM:101473

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2. Function and characteristics:

- 2.1 35mm standard DIN rail installation,complying with standard DIN EN50022.Or front board installed (mounting holes center distance 63 mm), users can choose any one by themselves
- 2.2 four poles width
- 2.3 5+1 digital cyclometer display (99999.9 kWh)
- 2.4 Standard configuration one port of pulse output passive (polarity),may select increase a distant port of pulse output passive (nonpolarity),complying with standard IEC62053-31 and DIN 43864.
- 2.5 LED indicates respectively power supply,impulse ect.
- 2.6 standard configuration S connection (bottom input, top output), Directly input connection
- 2.8 Direct connect operation
- 2.9 Standard configuration short terminal cover, which is helpful to reduce installation space and make it convenient to install

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3. Parameters and specification:

- Accuracy:** class 1.0
- Rated voltage:** 220V 230V 240V ±20%
- Operation voltage range:** 0.7Un~1.3Un
- Insulation capabilities :** AC voltage withstand: 2kV for 1 minute;Impulse voltage withstand: 6kV-1.2/50 μs waveform
- Frequency:** 50HZ or 60HZ
- Rated current:** 5(30)A 10(40)A 10(60)A 15(60)A 20(80)A 30(100)A
- Operation current range:** 0.05Ib~I max (direct),0.02Ib~I Max (with CT)
- Starting current range :** 0.004Ib(Direct);0.002Ib(with CT)
- Power consumption:** voltage circuit ≤ 1.0 W 5VA Current circuit ≤ 1VA (Ib)
- Temperature range :** Max. operation temperature:-40°C ~ +80°C
Max. storage temperature: -45°C ~ +85°C
- Relative humidity:** ≤ 85%

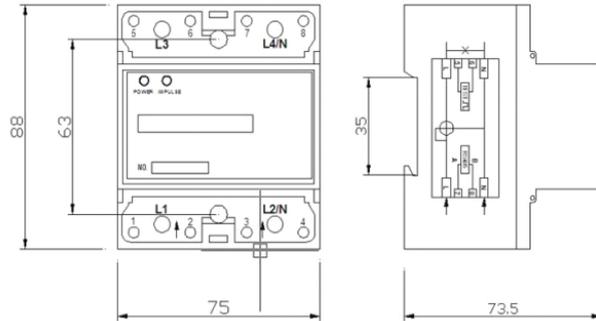
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Service life : more than 10 years

Shape dimension: 75mmx 88mm x 73.5mm

4. Installation dimensions and outside dimension:

35mm standard din installation

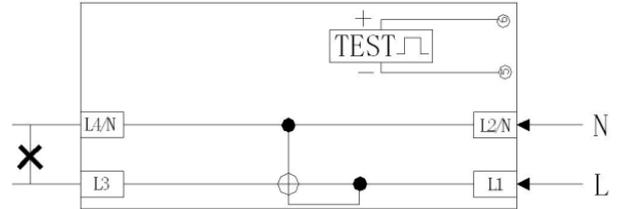


5. Pulse output connection diagram

Power pulse testing output is no power photoelectric isolated mode

Two lines were connected into signal terminals 6(-).7(+)

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6. Installation and using

6.1 The meter is tested as qualified for delivery with the lead sealing marked on it before the installation, but if meter without lead sealing and long time storage, the meter should be checked once again by power department to ensure the measure precision before installation.

6.2 The meter should be installed indoor, in dry and ventilated place where the wall is firm, about 1.8m high and without stake or installed in special meter box. Using temperature: $-45^{\circ}\text{C} \sim +85^{\circ}\text{C}$, relative humidity not more than 85%, without erode gas in the air.

6.3 Connection must be made in accordance with the drawing in this manual or the Drawing on the meter.

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6.4 Using voltage must be meet reference value,using current cann't exceed the maximum current. Otherwise it will cause Measuring inaccurate or damaged.

7.Transportation storage:

7.1 The meter shouldn't be struck violently when it is being transport, opening packing.

7.2 The meter should storage in original packaging,Storage areas shall be clean,storage Temperature should be $-45^{\circ}\text{C}\sim+85^{\circ}\text{C}$.

Relative humidity should be less than 85% and without corrosive Gas.

8. Guarantee Limit

Within 12 months since the delivery date, if t is found that the product doesn't conform to the standards,it will be repaired or replaced free on the condition that the customers operate it according to the instruction manual and the seal is intact.