

## DDS3366D-C-W1 Type

### Specification for single-phase electronic energy meter

#### 1. Purpose and Scope of Application

DDS3366D-C-W1 type electronic guide rail single-phase energy meter is a new multi-function energy meter designed by our company with advanced technology. It has the characteristics of high precision, good stability, strong practicability and convenient operation, and can measure current, voltage, power, electric energy, frequency, power factor and so on. Each parameter index conforms to GB/T 17215.321-2008, DL/T 614-2007, and other national standards as well as industry standards; using liquid crystal display with RS485 communication function and active pulse output.

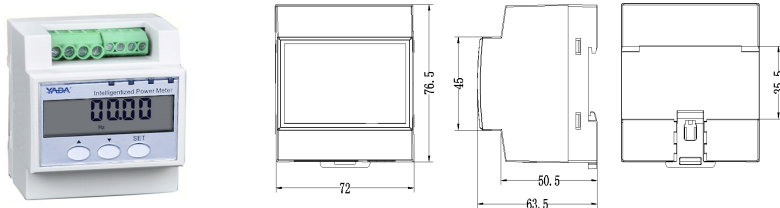
The main functions are as follows:

- ◇ Forward active energy, reverse active energy measurement;
- ◇ The combined active energy measurement, active energy is equal to the forward active energy plus the reverse active energy.
- ◇ Measurement of instantaneous quantities of various electrical parameters (including: voltage, current, active power, power factor, frequency),
- ◇ Multiple backups with CRC check for electricity,
- ◇ With RS485 communication interface,
- ◇ The meter has the function of over-limiting indication.
- ◇ Save ratio can be set, communication can be read,
- ◇ External Ma output power transformer, direct measurement of primary side current;
- ◇ Using liquid crystal display, the electric energy is shown as combined active power.
- ◇ Compatible with Modbus and DL/T645-2007 communication protocol;

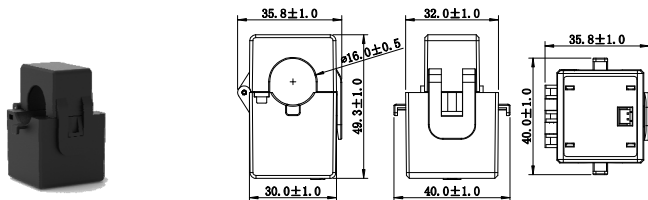
#### 2. Shape and wiring diagram

##### 2.1 Installation dimensions (Units: mm, Tolerance: ±0.5)

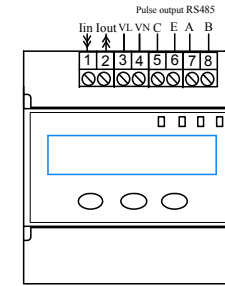
###### 2.1.1 Host Profile



###### 2.1.2 External Ma Output Transformer CTF16T-2k5-50/100 External Diagram



#### 2.2 Wiring diagram



Transformer wiring diagram

#### 3. Specifications and main technical parameters

##### 3.1 Specifications (the following parameters are subject to panel marking)

- Rated voltage: 220V (Un)
- Calibration Current: 1.5(6) A ,20(50) A ,20(100) A
- Reference frequency: 50Hz
- Pulse constant: specific reference panel
- Accuracy level: 1
- Optional Transformer Specifications: CTF16T-2k5-50/100

##### 3.2 Main technical data

- Starting current: 0.004 Ib
- Insulation strength: input to output: 2.0kV/min ·1mA;
- Power consumption: <2W ,10VA
- Submersible: 115% rated voltage applied at the end of the voltage, no current at the end of the current, no more than 1 pulse output by the energy meter within the specified time
- Normal operating voltage: 0.9~1.1 Un; Extreme operating voltage: 0.8~1.2 Un
- Communication mode: RS485
- Reference temperature: 23°C ±2°C; reference humidity: 40%~60% RH
- Working temperature: -20°C~50°C; Storage temperature: -40°C~70°C, relative humidity not exceeding 85% and no corrosive substances in the air
- Shape Size: 76.5±0.5mm×72±0.5mm×63.5±0.5mm

#### 4. Communication interface

The meter is equipped with an RS485 communication interface. RS485 communication baud rate of 1200bps, 2400bps, 4800bps, 9600bps can be set, factory default 2400bps. Through the RS485 interface, we can complete the programming parameter setting and reading data with the PC.

#### 5. Display operation

Using liquid crystal display, the items are electric energy, power, voltage, current, power factor, frequency.

"▲" key: Display data turn up page or value add 1; "▼" key: Display data turn down page or cursor left; "SET" key: Enter the programming page, password 3366.



Figure 1 LCD Display Interface Reference Chart



Figure 2 Current



Figure 3. Active power

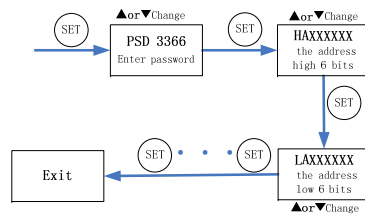
5.1 LCD character meaning in system parameter settings

No.	LCD figure	Note
1	PSd 3366	Password 3366
2	HA 146034	Equipment address high 6 bits
3	LA 30005 1	Equipment address low 6 bits
4	Pf 00000 1	Voltage to change ratio
5	Cf 00000 1	Current to change ratio
6	02400 E	Baud rate and check bit

5.2 Parameter setting

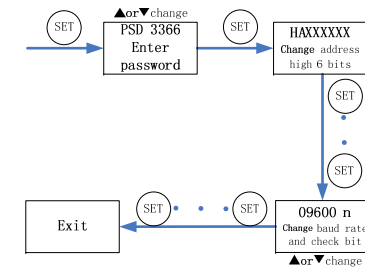
Change of equipment address

- ✦ Press **SET** key into the programming state, password input status character flashing;
- ✦ Press **▲** the key to select the number, press **▼** the key to the left shift, the password is **3366**;
- ✦ After the **SET** key confirms the password, enters the device address high 6 bits **HA XXXXXX**;
- ✦ Press **▲** or **▼** the key to set the corresponding number, after the completion of the **SET** key to determine the save and enter the device address low 6 bits set **LA XXXXXX**;
- ✦ Press **▲** the key to select the number, press **▼** the key to the left shift to set the corresponding number, complete the **SET** key to determine the save and enter the next item;
- ✦ Other parameters are not modified just continue to press the **SET** key to determine, and finally go into the display interface and save the changes;



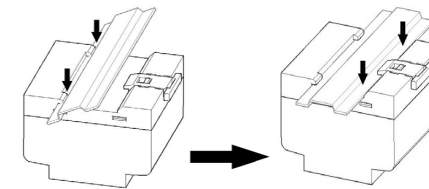
Baud rate or check bit modification

- ✦ Press **SET** key into the programming state, password input status character flashing;
- ✦ Press **▲** the key to select the number, press **▼** the key to the left shift, the password is **3366**;
- ✦ After the **SET** key confirms the password, enters the device address high 6 bits **HA XXXXXX**;
- ✦ Continue to press **SET** key to determine entry baud rate and check bit setting interface **02400 E**;
- ✦ Press **▲** the key to select the number, press **▼** the key to the left shift to set the corresponding baud rate or check bit, complete the **SET** key to determine the save and enter the next item;
- ✦ Other parameters are not modified just continue to press the **SET** key to determine, and finally go into the display interface and save the changes;



6. Installation and Use

6.1 Installation mode: use standard DIN 35mm guide rail installation;



6.2 Notes:

should be installed in a firm, fire resistant, not easy to vibrate, the installed meter should be vertical not tilt. Follow the housing identification wiring diagram correctly, otherwise it may burn out because the voltage is too high. When wiring should pay attention to poor contact and incoming and outgoing line too fine and cause fire and burn. Pay attention to the meter range, do not exceed its range, otherwise it may burn out the meter because the load current is too large.

7. Attention to Storage and Transportation

- 7.1 The products shall not be severely impacted in transport and unsealing and shall be transported and stored in accordance with the provisions of the National Standard GB/T13384-2008 General Technical Conditions for Packaging of Mechanical and Electrical Products.
- 7.2 This product is an electronic device, so we should avoid the impact and bumps of heavy objects when handling and releasing.
- 7.3 The ambient temperature at the place of storage shall be -40°C~70°C, relative humidity not exceeding 85% and free of corrosive substances in the air.
- 7.4 The watt-hour meter shall be stored in the warehouse under the condition of the original packing, and the stacking height shall not exceed 5. The meter after unpacking, if found appearance damage, please do not install the meter, add electricity; single meter stacked height is not more than 5, unpacked meter should not be stored.

8. Duration of guarantee

The meter shall be repaired free of charge within 18 months from the date of its departure, if the user finds that it does not meet the above characteristics and technical requirements, or if it is certified by the relevant power metering department and operated in full compliance with the requirements specified in this specification.

**Note: The above pictures are for reference only, the products are subject to the actual product,**

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