DDSD285 Single Phase Multi-function Watt-Hour Meter

General:

DDSD285 (T), a type of fully electronic active energy electricity meter, conforms to IEC 61036 and IEC 61038. The meter features its innovative structure design and reliable electric capabilities, so it is an ideal option for measuring household electric energy with time-of-use (TOU) as well as balancing electricity load better.

Specifications:

<table>
<thead>
<tr>
<th>Type</th>
<th>Specification</th>
<th>Accuracy Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDSD285</td>
<td>220V 2.5(15)A</td>
<td>Class 1 or class 2</td>
</tr>
<tr>
<td></td>
<td>220V 5 (30) A</td>
<td>Class 1 or class 2</td>
</tr>
<tr>
<td></td>
<td>220V 10(60) A</td>
<td>Class 1 or class 2</td>
</tr>
<tr>
<td></td>
<td>220V 20(100) A</td>
<td>Class 1 or class 2</td>
</tr>
</tbody>
</table>

Note: Customer specified requirement can be fulfilled.

Technical Data:

(1) Voltage range
   - Specified operating range: 0.85Un~1.1Un
   - Limit range of operation: 0.75Un~1.15Un
(2) Rated frequency: 50Hz
(3) Starting current: 0.004Ib
(4) Power consumption in voltage circuit: =2W or 2.5VA
   Power consumption in current circuit: =2.5VA
(5) Dimension(mm): 164.5×112×71 L×W×H
(6) Net Weight: 0.7kg
(7) Clock accuracy: Daily timing error less than 0.5s (reference temperature)
(8) Battery capacity: =1000mAh
(9) Data preservation time: =10years
(10) Temperature range:
    - Specified operating range: -25°C~+55°C
    - Limit range of operation: -40°C~+70°C

Main Functions

(1) Active energy measuring
   It can measure total energy and energy of every tariff. The reverse energy is measured and added to the corresponding forward energy. The energy measuring range is from 0 to 99999.999 kWh.
(2) RTC
   An external real time clock realizes the timing and TOU, including calendar programme and daylight saving time setting.
(3) TOU control
   It can offer 4 set schedules to realize multi-TOU control. The day can be maximally
divided into 10 periods with 4 tariffs for each schedule. Work-off days can be also programmed in a week.

(4) Energy Record
It can store energy in billing day of each month. The billing day can be set within 1 to 28 of one month. It may store history energy data for 12 months. All data may be accessed via personal computer (PC) or hand hold unit (HHU).

(5) Display
It can display by LCD indicator during both power supply and power failure. It supports automatically cyclic display mode and button pushing display mode. Display items can be set by user via PC or HHU. If power failure lasts 7 days continuously, display will be turned off and can be awaked by infrared controller or pushing button.

(6) Event Log
It can record last five times of case opening during normal operation and once of such event in case of power failure. The other events will be recorded including power down, programme setting and current reversing. The total happening times of each event plus their respective latest five stating times and ending times can all be accessed via PC or hand hold unit (HHU).

(7) Communication
It can communicate via an infrared interface, which realizes the meter reading and parameter setting. There is a separate battery inside the meter for meter readings under power failure condition.

Structure
The structure of DDSD285 meter is as follows:

Fig. 1: The outline and installation size of DDSD285 meter.
8. Connections

Both symmetrical connection and sequential connection are available. Connection diagrams are as follows:

Fig2: Sequential connection diagram        Fig 3: Symmetrical connection diagram