

# INSTRUCTIONS

DTS353C

## THREE-PHASE FOUR WIRE DIN RAIL ELECTRONIC METER

### 1. Standard

The performance of this meter complies with the following standards:

IEC 62052-11:2003 Electricity metering equipment(AC) -General Requirements, Tests and Test Conditions-Part 11: Metering equipment

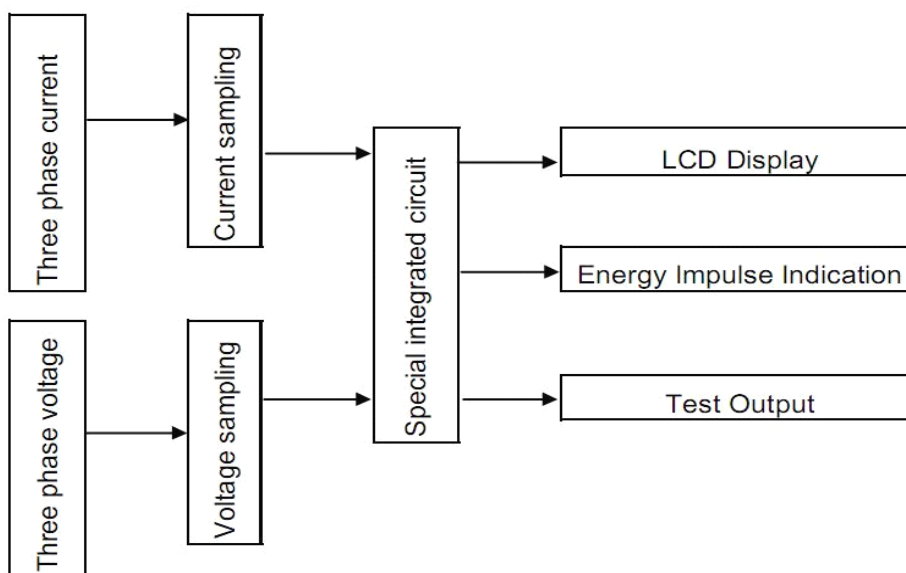
IEC 62053-21:2003 Electricity metering equipment(AC)-Particular requirements-Part 21: Static meters for active energy(classes 1 and 2)

EN50470-1:2006 Electricity metering equipment(a.c.)-Part1:General requirements, tests and test conditions-Metering equipment(class indexes A, B and C)

EN50470-3:2006 Electricity metering equipment(a.c.)-Part3: Particular requirements-Static meters for active energy(class indexes A,B and C).

The meter is intended for indoor and it has the metering function without any other communications.

### 2. Principium



**Figure 1**

Showing as figure 1, sending the sampling current and sampling voltage into the special IC, through the inner cushion amplifier, deliver to multiplying unit, multiply the voltage signal and current signal. Then through A/D conversion, convert the logic signal to the digital signal, then through frequency dividing circuit and drive circuit, use impulse output of electricity quantity signal for the drive impulse and electro- Indexes.

### 3. Technical specification

3.1 LCD backlight display: optional

3.2 LCD display without electricity: optional

3.3 Technical parameters:

Voltage: 3\*230/400V

Current: 0,25-5(80)A

Constant: 800imp/kWh

Frequency: 50Hz

Accuracy class: B

Display: LCD 6+2

Location of installation: Indoor

3.4 Starting

The meter can be started and recorded continuously at the reference current(see the table)

Meter	Meter class			Power factor
	A	B	C	
Via mutual inductor	0.05Itr	0.04Itr	0.04Itr	1

3.5 Creep

Its output is less than 1 impulse when the rated voltage is 115% or current loop without current.

## 4. Weather condition

4.1 Temperature range

Working temperature: -25°C to 55°C

Limit range of storage temperature: -25°C to 55°C

transportation temperature: -25°C to 70°C

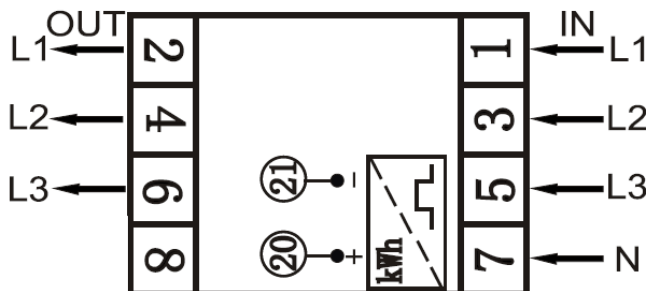
4.2 Humidity range

Average humidity per year: ≤75%, 30 days in one year(pervasion as a natural way), the humidity can reach up to 95%, and it usually can reach 85%

## 5.Installation of Meter

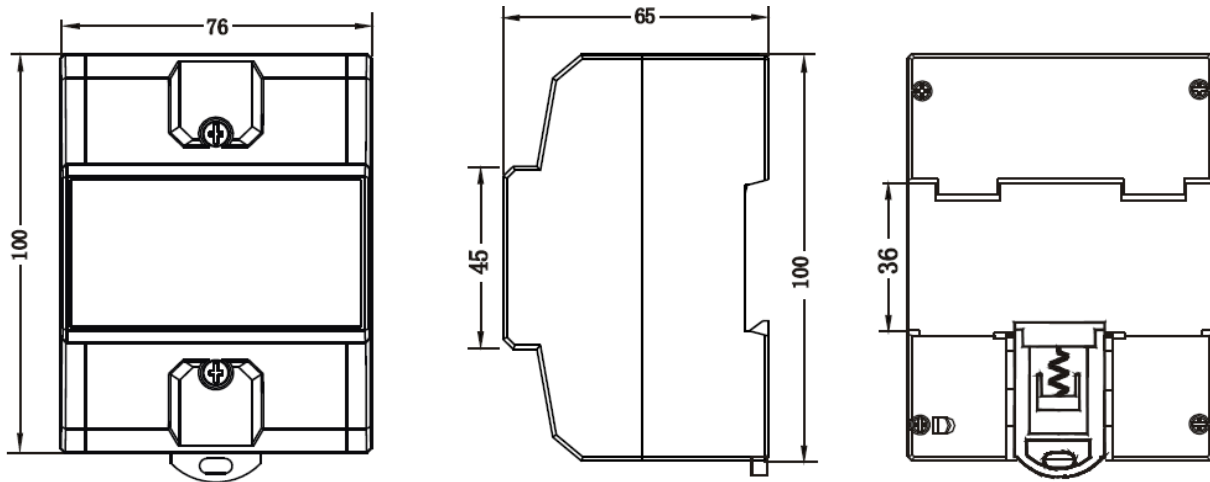
5.1 Exterior dimension: 100mm×76mm×65mm Weight: 0.5kg

5.2 Connection diagram



**Direct connection**

5.3 Installation dimension (Figure 2) mm



**Figure2**

#### 5.4 Installation Instructions

- The meter with seal is qualified before leave factory, then it can be installed.
- The meter should be installed indoor or in the outdoor electric meter box.
- According to the wiring diagram on the meter, install the meter with copper wire.
- The meter is intended to be installed in a Mechanical Environment 'M1', with Shock and Vibrations of low significance, as per 2004/22/EC Directive. The meter is intended to be installed in Electromagnetic Environment 'E2', as per 2004/22/EC Directive.

### 6. Assurance term

The manufactory will repair or exchange the products while the lead seal is still existed, within 18 months, when discovering the products not accordance with the technical specification.

### 7. Transportation and storage

7.1 The meter shall not be subjected to throwing, dropping, kicking or other physical abuse, as there are high Precision components inside that will break or make the meter measure in accurately. The process of transportation, handling and installation should be according to transportation and storage rule of GB13384-2008.

7.2 Keep the meter in the original package when stored. The storage temperature range should be 0-40°C. relative humidity  $\leq 85\%$ . There should be no toxic or corrosive substance or gases in the air.

7.3 The meters shall be stacked on the platform in storage. Don't stack more than 10 units high.

7.4 Time limit of guarantee.

Within 18 months from the day of sale, and on the condition that the users abide by the specifications and installation procedures, and the sealing is kept completely intact. If the meter does not correspond with the rule of the enterprise standard, the meter shall be repaired free or replaced.

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