

## DSS3/DTS3 Three-Phase Static Active Energy Meter

### Summary

DSS3/DTS3 three-phase static energy meter is based on special large scale integrated circuit and SMT technology; by adopting microelectronic and computer technology as core technology and depending on modern management. we developed this metering product with high dependability and precision. It's one of the newest energy metering products in the world. It meets all technical requirements of IEC 62053-21: class 1 and class 2 static alternating active watt-hour meter, it measures positive and negative active power energy with frequency of 50/60Hz in three-phase electricity network.



### Technical specification

#### 1. Electrical condition

Accuracy class: 1.0 class, 2.0 class;

Normal working voltage: 0.9~1.1 reference voltage;

Limit working voltage: 0.8~1.15 reference voltage;

Insulation voltage endurance:  $\geq 2000\text{VAC}$ ;

Power consumption: each phase voltage loop power consumption  $\leq 1.0\text{W}$ ;

Start-up current: direct type is 4‰ reference current, current transformer type-in is 2‰ reference current;

Shunt running: voltage line adding 15% $U_n$ , current loop current is 0, energy meter no measurement;

#### 2. Ambient condition

Normal working temperature:  $-30^{\circ}\text{C}\sim+55^{\circ}\text{C}$ ;

Limit working temperature:  $-40^{\circ}\text{C}\sim+70^{\circ}\text{C}$ ;

Stockpile and transportation temperature:  $-45^{\circ}\text{C}\sim+70^{\circ}\text{C}$ ;

Relative humidity: annual average  $< 80\%$ ;

#### 3. Conformed standards: IEC62053; GB/T 17215-2002;

#### 4. Life: 10 years.

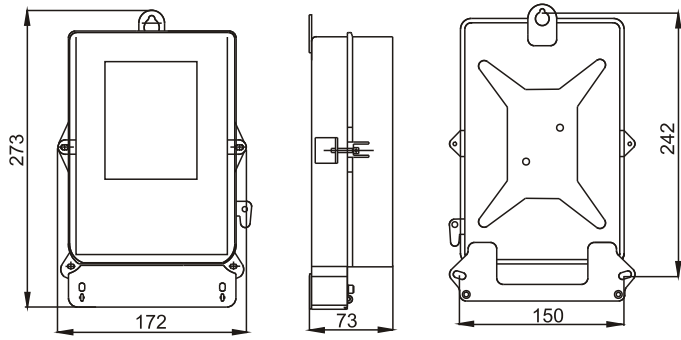
### Model

Model	Reference voltage(V)	Rated frequency(Hz)	Nominal current(A)	Meter constant (imp/kwh)
Three phase four wire DTS3	$3 \times 220(240)/380(415)$	50/60	1.5(6),2.5(10), 5(20),10(40), 15(60),20(80), 30(100)	As nameplate
	$3 \times 57.5(63.5)/110$	50/60		
Three phase three wire DSS3	$3 \times 100/110$	50/60		
	$3 \times 380/415$	50/60		

### Product function

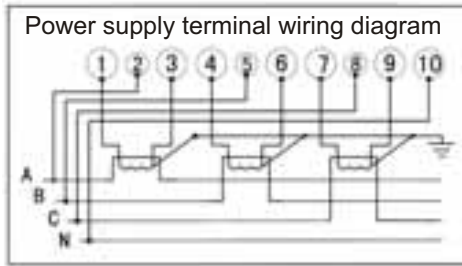
1. Bi-directional measure function, precisely measure positive and negative power, free from checkout in longtime, accumulate electricity energy in one direction.
2. Three-phase power supply, the metering accuracy is out of influence when one or two phase break down, phase shortage state is indicated as light is off.
3. Adopting the photoelectric isolation technology to output impulse signal, LED power indication.

## Outline dimension and wiring diagram

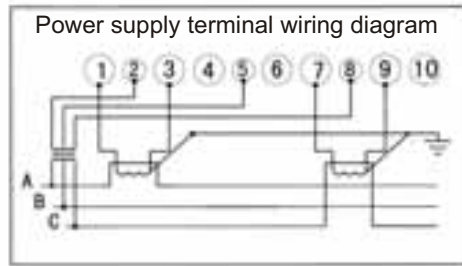


Diag 1 Outline dimension

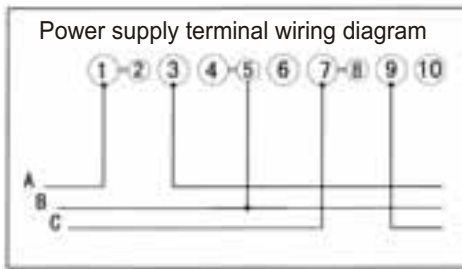
### Current transformer type



### Current/Potential transformer type



### Three phase three wire direct type



### Three phase four wire direct type

