

DTS238-7 ZN/S three phase din rail type multi-function watt hour meter(D3703)



The meter is used in three phase four wire power grid. The meter is designed to measure AC active energy and variable parameter. All of its functions comply with the relative technical requirement for class 1 three phase watt hour meter in IEC61036 and its data communication rules obey the requirement of DL/T645 or MODBUS-RTU. It is a long life meter with the advantage of high stability, high over load capability, low power loss and small volume.

Basic Function

- ★LCD display with backlight
- ★Bi-directional total active energy measurement, reverse active/ energy measure in the total active/reactive energy
- ★The meter also display real voltage, real current, real power, real power factor, real frequency, import active energy, export active energy
- ★Keypad for LCD display step by step
- ★Pulse LED indicates working of meter, Pulse output with optical coupling isolation
- ★Loss phase indication in LCD
- ★Energy data can store in memory chip more than 15 years after power off
- ★RS485 communication port, MODBUS-RTU protocol
- ★35mm din rail installation

Optional Function

- ★reset energy function(the reset energy kWh display is dependent with the total energy display, this reset will not affect the total energy)

Noting : other voltage , current are also available . Other function also can be special design as customer requirement

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Technical Data

Rate voltage	DTS238-7 ZN/S three phase four wire 3x127/220V, 3x120/208V, 3x220/380V, 3x230/400V, 3x240/415V
	DSS238-7 ZN/S three phase three wire(two phase three wire) 2x120/208V, 2x127/220, 3x220V, 3x380V, 3X100V
Working voltage range	0.8~1.2Un
Rate Current	5A/CT, 1.5(6)A, 5(60)A, 10(100)A, or other as required
Frequency	50Hz or 60Hz
Connection mode	CT type or Direct type
Display	LCD
Accuracy class	1.0
Power consumption	<0.5W/5VA /each phase
Start current	0.004Ib
Impulse Voltage	6kV 1.2μs waveform
Over current withstand	30I _{max} for 0.01s
IP grade	IP20
Constant	400~6400 imp/kWh
Pulse output	Passive pulse, pulse width is 80±5 ms
Communication port	RS485 port, baud rate 1200~9600 bps, default is 9600bps, address 1~247, None parity, stop bits 1, data bits 8.
Executive standard	DIN 43880, IEC62053-21, IEC62052-11, MODBUS-RTU
Work temperature	-30℃~70℃
Outline dimension LXMxH	125x88x73mm
Weight	Approx 0.7kg

Accuracy

Voltage	0.5%
Current	0.5%
Power Factor	1%
Active power	±1%
Reactive Power	±2%
Active Energy (kWh)	Class 1.0

Environment

Operating temperature	-25℃~55℃
Storage temperature	-40℃~80℃

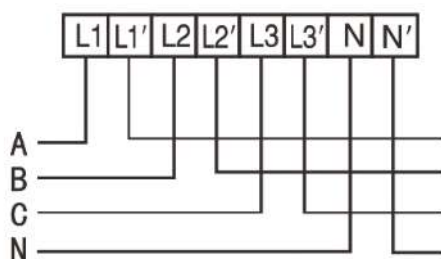
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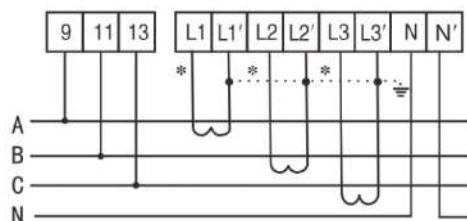
Reference temperature	23°C ± 2°C
Relative humidity	0 to 95%, non-condensing
Altitude	Up to 2500m
Warm up time	10s
Mechanical Environment	M1
Electromagnetic Environment	E2
Degree of pollution	2

Wire connection

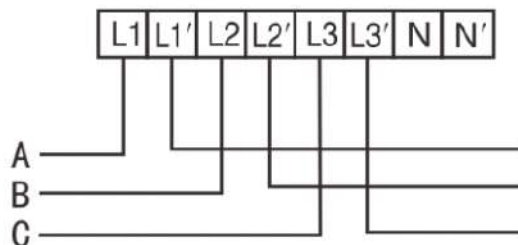
(1) three phase four wire direct connection



(2) three phase four wire through current transformer connection



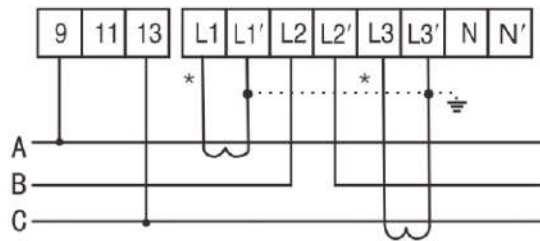
(3) three phase three wire direct connection



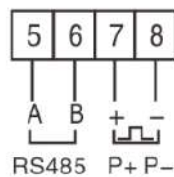
(4) three phase three wire through current transformer connection

Noting : other voltage , current are also available . Other function also can be special design as customer requirement

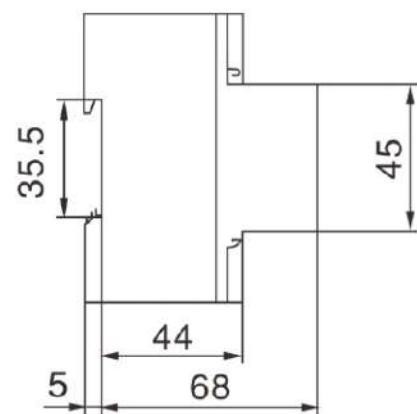
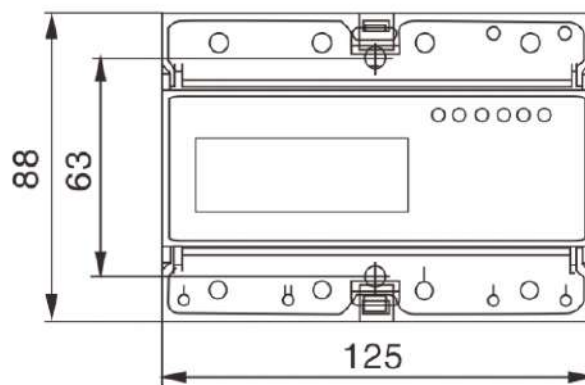
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Terminal function



Outline dimension



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