1. DW9L Multi-function Power Meter

Photos and Features

Features:

- Segment LCD display (white backlight)
- Measure 28 electrical parameters including voltage/current/active power/reactive power/frequency/power factor etc.
- Active energy/reactive energy/four-quadrant reactive energy metering function, and pulse output port.
- Standard RS485 communication interface, Modbus RTU protocol.
- Standard with 4 DI and 2 alarm output, input/output fully isolated, tele signaling & telecontrol function.
- Optional 1 channel 4~20mA analog transmission output function.
- Standard with three-phase voltage and current harmonic measurement (2 to 32 times)
- Standard 8 time periods, 4 rate statistics functions (multi-rate function)

Model Illustration

DW 9 L-□□□ 3 8

- Communication：8:1 loop RS485　9:2 loops RS485（be ordered）　6:Ethernet+RS485
- Measure unit：3：3 phase network input
- Alarm：C：2 alarms　D：4 alarms（When 4 alarms required, it cannot have transmission function and needs to be customized）
- Alarm type：R：Relay alarm output
- Analog output：Blank：No analog output　I：1 channel 4～20mA output　2I：2 channels 4～20mA output（be ordered）
- Display：L：Segment LCD display
- Dimension(mm)：9：96W×96H
- DW series 3 phase multi-function power meter

Ordering Information

Model	Analog	Alarm	DI	Communication	Multi Rate	Total Harmonic	Input range	Code
DW9L-RC38	No	2	4	RS485	Yes	Yes	10～480V (L-L) 0.02～6A	A01200DW9L03
DW9L-IRC38	4～20mA	2	4	RS485	Yes	Yes		A01400DW9L03
DW9L-RC36	No	2	4	Ethernet+RS485	Yes	Yes		A01200DW9L03
DW9L-IRC36	4～20mA	2	4	Ethernet+RS485	Yes	Yes		A01400DW9L03

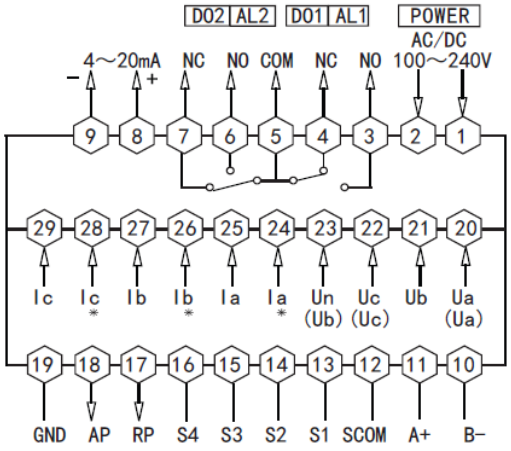
Technical Specifications

Input Signal	Input voltage	10～480V（L-L）　Power consumption per phase<1VA
	Voltage impedance	≥300KΩ
	Input current	0.02～6A　Power consumption per phase <0.4VA
	Current impedance	＜20mΩ
	Rated frequency	50Hz、60Hz
	Accuracy	Active power: 0.5S　Reactive power: 2.0　Voltage, current: 0.2%FS
	Measuring range	Current: 0.02A～6A, Voltage: Phase voltage　L-N: 10～277V,　Line voltage L-L: 10～480V
Electrical parameters	Relay capacity	AC 250V 5A　DC24V 5A (resistive load)
	Analog output	DC 4～20mA　Load＜500Ω
	Display	Industrial grade segment LCD，　Clock accuracy: <0.5 seconds/day
	DI	Dry contact input, input voltage <DC 24V
Comm.	Communication port	RS485 interface (Modbus RTU and DL/645 protocol) Baud rate: 4.8kbps, 9.6kbps, 19.2kbps can be customized

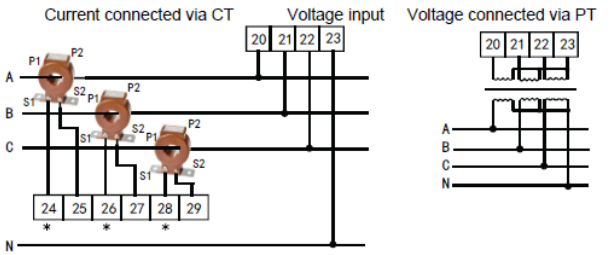
Technical Parameters

	Pulse output	1 electric energy pulse output (photocoupler relay) Pulse constant 9000imp/kwh
Electromagnetic compatibility	ESD	IEC/EN61000-4-2 Air±8KV/Contact ±6KV perf.Criteria B
	Pulse traip	IEC/EN61000-4-4 ±4KV perf.Criteria B
	Frequency drop	IEC/EN61000-4-11 0%-70% perf.Criteria B
	Lightning surge	IEC/EN61000-4-5 ±2KV/±4KV perf.Criteria B
	Radiated disturbance	CISPR22/EN55022 CLASS B
	Conducted disturbance	CISPR22/EN55022 CLASS B
	Radiated immunity	IEC/EN61000-4-3 10V/M perf.Criteria A
	Conducted Immunity	IEC/EN61000-4-6 10 Vr.m.s perf.Criteria A
	Power frequency immunity	IEC/EN61000-4-8 10A/M perf.Criteria A
Environment	Work Environment	Temperature range: 0℃~50℃, extreme condition -10℃~55℃, humidity range: 5~90%R.H (no condensation)
	Storage temperature	-25℃~60℃
Housing	Housing material	VO grade flame retardant PC+ABS, PC panel, protection grade IP65 (front panel), Insulation resistance: input, output, power supply to housing > 100MΩ
	Shock resistance	10~57Hz(XYZ direction 2G/30 minutes)
Power	Power supply	AC/DC 100~240V 50/60Hz, power consumption <10VA
Safety	Dielectric strength	Signal input and power supply 2000VAC, signal input and output 2000VAC, power supply and transmission output, 485 interface, pulse output interface ≥AC 2000V
Weight		About 0.6Kg

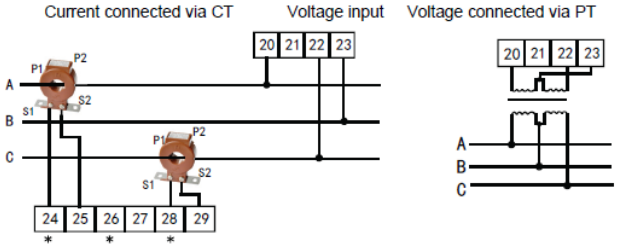
Connection



Method 1 (3 CTs): Three-phase four-wire wiring method



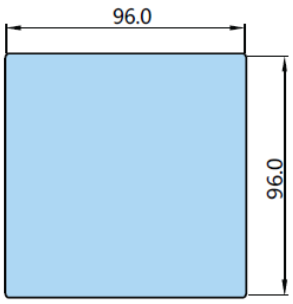
Method 2 (2 CTs): Three-phase three-wire wiring method



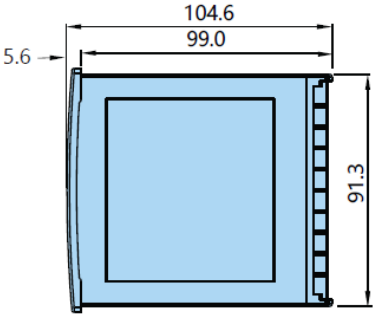
Note: ① Voltage input terminal, the number in brackets indicates the 3 phase 3 wire connection method; if any change, please subject to the connection drawing on the meter.
② Current "*" is the current input terminal, all input and output lines must be unified, otherwise it will cause inaccurate measurement.

Dimensions（Units: mm）

Panel size



Side size



Hole Size