

1-Phase AMMETER/VOLTMETER /FREQUENCY OPERATING MANUAL

1. Main Technical Data

1.1 4 analog digital display, Display Range: 0.000-9999;

1.2 Accuracy Class: Class 0.5;

1.3 Overload: Continuous: 1.2 times, Instantaneous:
current 10 times/5 seconds, voltage 2 times/1 second.

1.4 Nominal input: AC current 1A、5A;

AC voltage 100V、220V、380V、1000V;

DC current 75mV、20mA、4-20mA;

DC voltage 2V、20V、200V、1000V.

1.5 Power Supply: AC220V; AC/DC 85-265V;

AC380V; DC10-36V

1.6 Power Consumption: $\leq 2\text{VA}$;

1.7 Dielectric strength: 2kV/1min;

2. Wiring Diagram: Refer to real object.

Note:

1、 AC current CT value: $CT = \frac{\text{Current transformer primary current value}}{\text{Current transformer secondary current value}}$
DC current CT value: $CT = \frac{\text{Shunt primary current value}}{5}$ (signal input DC

75mV) $CT = \frac{\text{display value}}{1}$ (signal input DC 20mA、 DC 4-20mA)

2、 AC voltage PT value: $PT = \frac{\text{Voltage transformer primary voltage value}}{\text{Voltage transformer secondary voltage value}}$

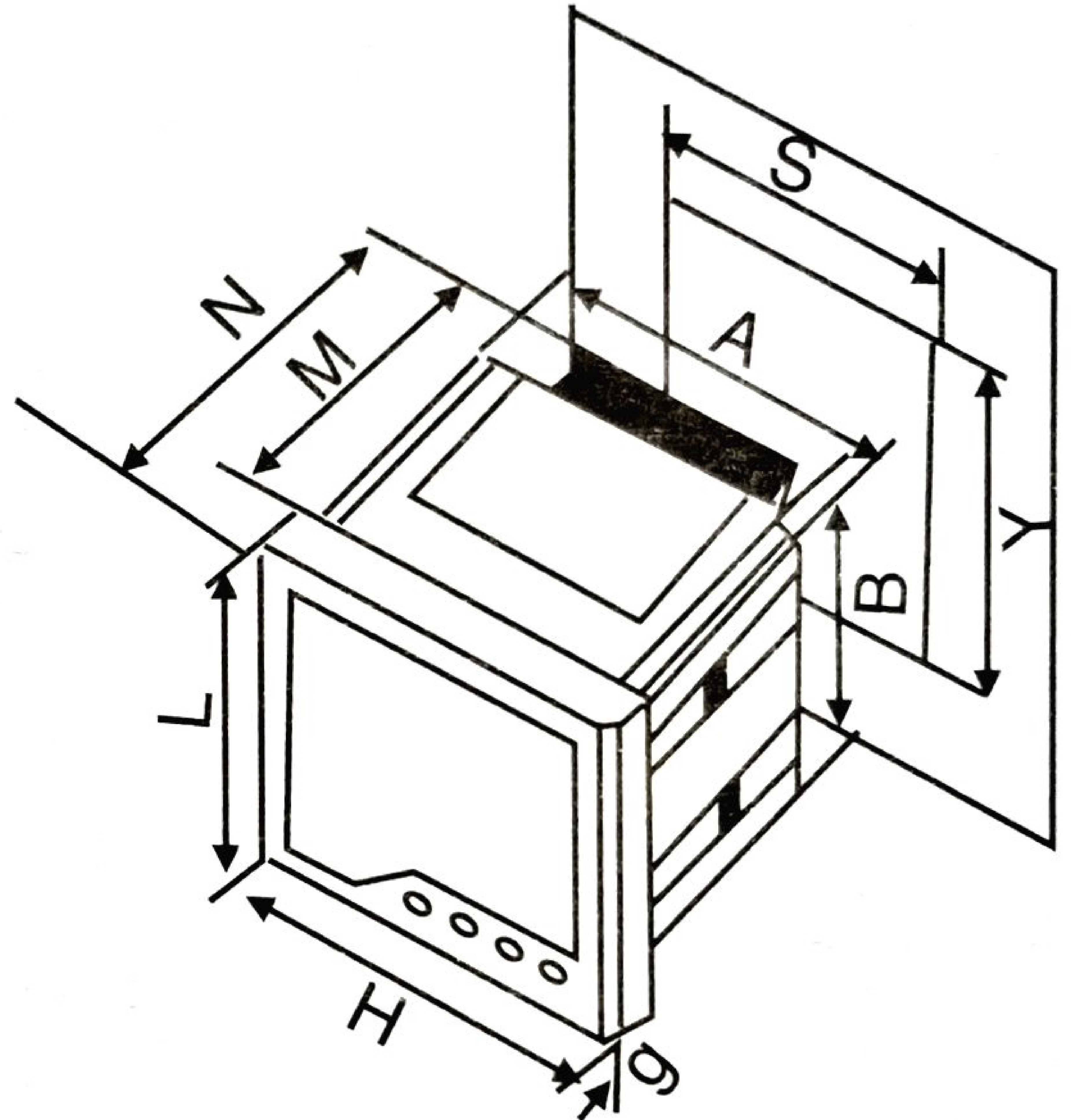
3、 DC voltage PT value: $PT = \frac{\text{display value}}{\text{input value}}$

Installation size: $A \times B$

Hole size: $S \times Y$

Panel size: $L \times H$

Depth: M



$(A \times B)$ (mm)	$(L \times H)$ (mm)	$(S \times Y)$ (mm)	(M) (mm)
90×44	96×48	91×45	78
67×67	72×72	67×67	78
75×75	80×80	76×76	78
91×91	96×96	91×91	78
110×110	120×120	111×111	78

3.Indicator light:

“ k ” :thousand, K means that the practical value is display is 1000 times.

4. Display character explanation:

Character	Instruction	Parameter and specification
SET	Setting	0000-9999
CT	Current ratio	0001-9999
PT	Voltage ratio	0001-9999

5. Panel Key Manual

5.1 Key Meaning

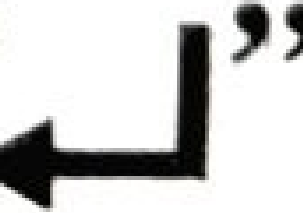
SET: Enter manu,confirm setting value

Reduce “ → ” : reduce the flashing number(from 9-0)

Add “ ← ” : add the flashing number(from 0-9)

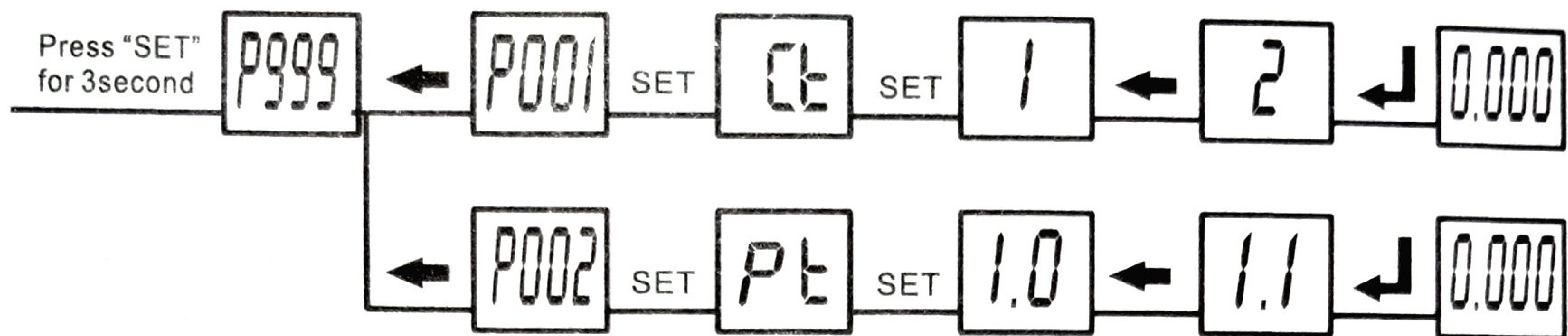
Confirmation  : select the LED. The selected LED will be flashing.

5.2 Operation

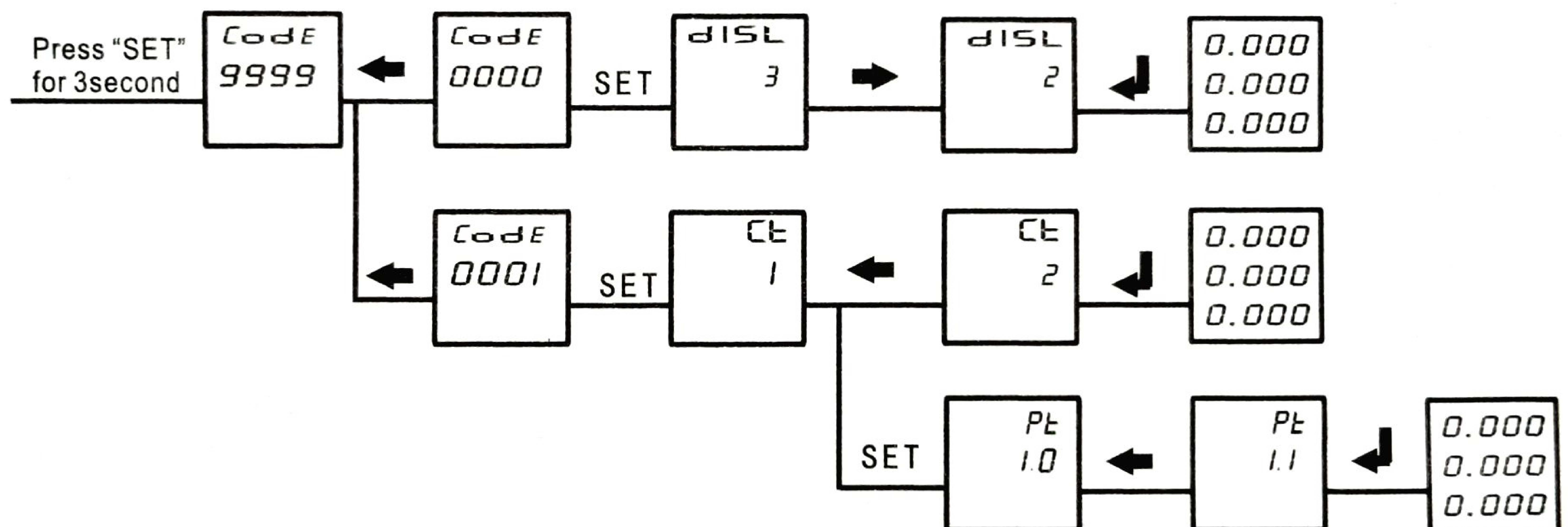
“ SET ” key for 2second, it will enter the parameter setting menu. Press “SET” enter the menu's value, press “←” or “” adjust the value, press “ SET ” to confirm the value and enter the next option. If no next option, the meter will back to measure status.

6. Instrument operation diagram

6.1 Single-phase instrument operation diagram



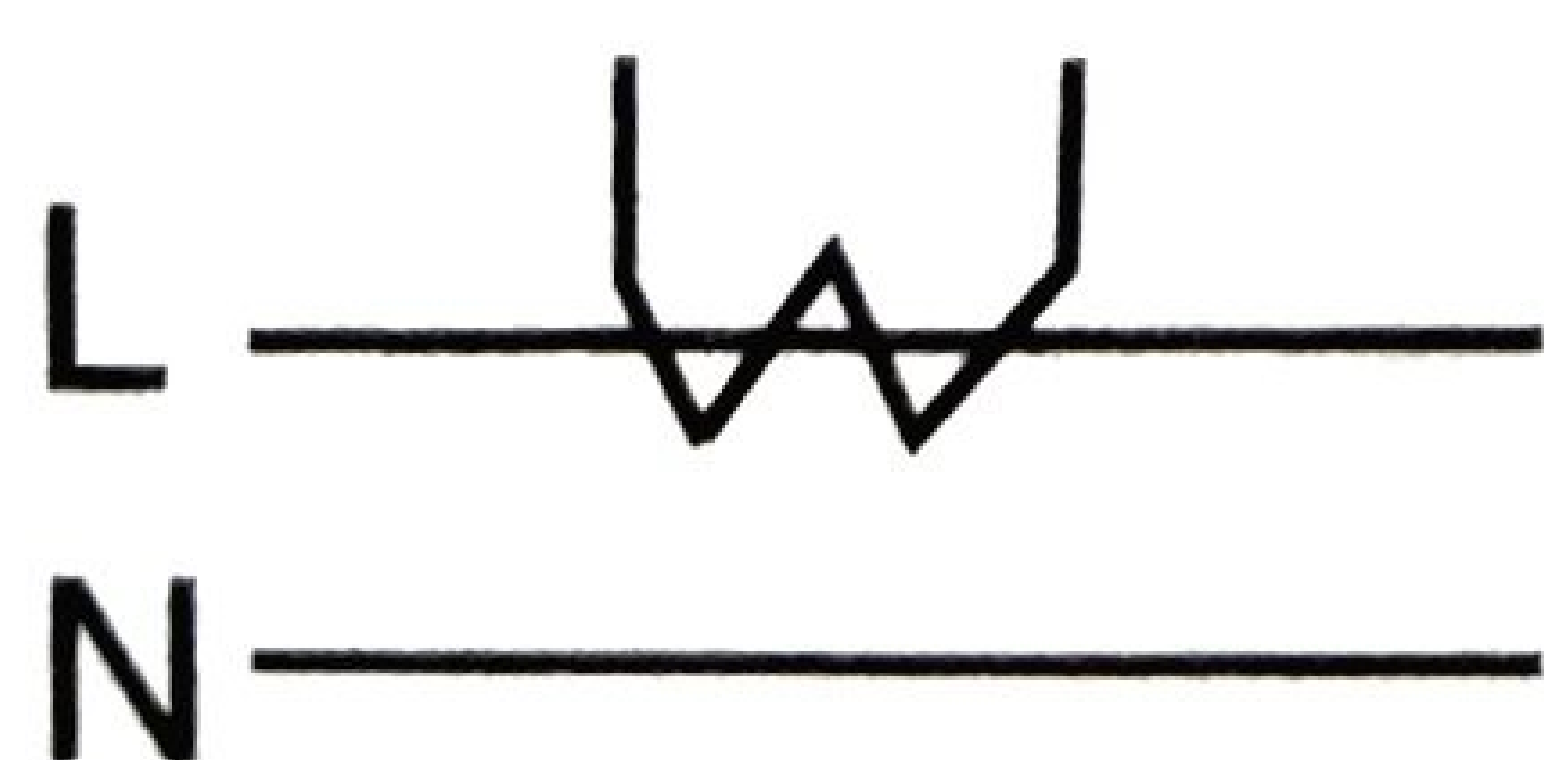
6.2 Single phase Ammeter/Voltmeter/frequency combination instrument operation diagram



7. Wiring and Terminal Diagram

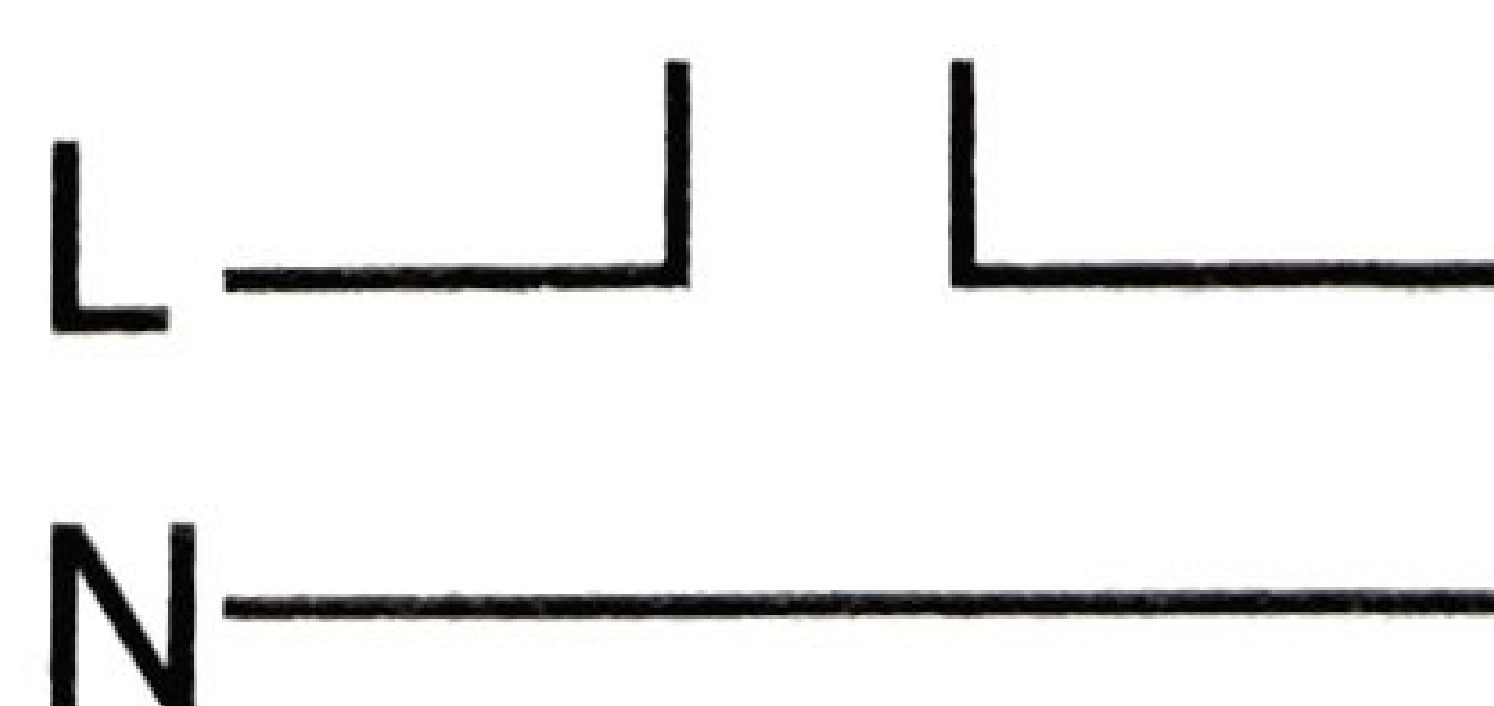
7.1 Connection Mode

With Current Transformer



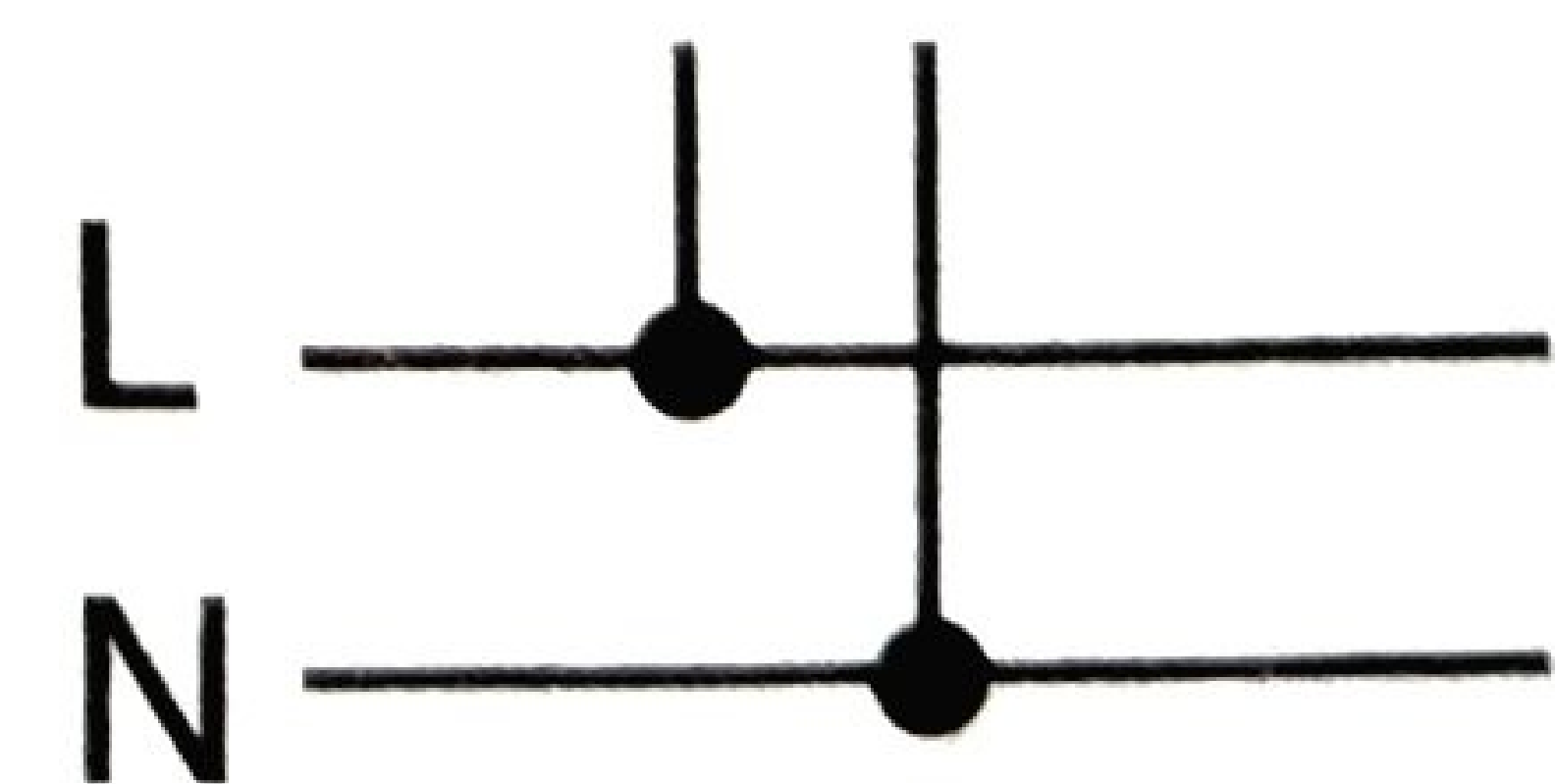
Current Input

Direct Current



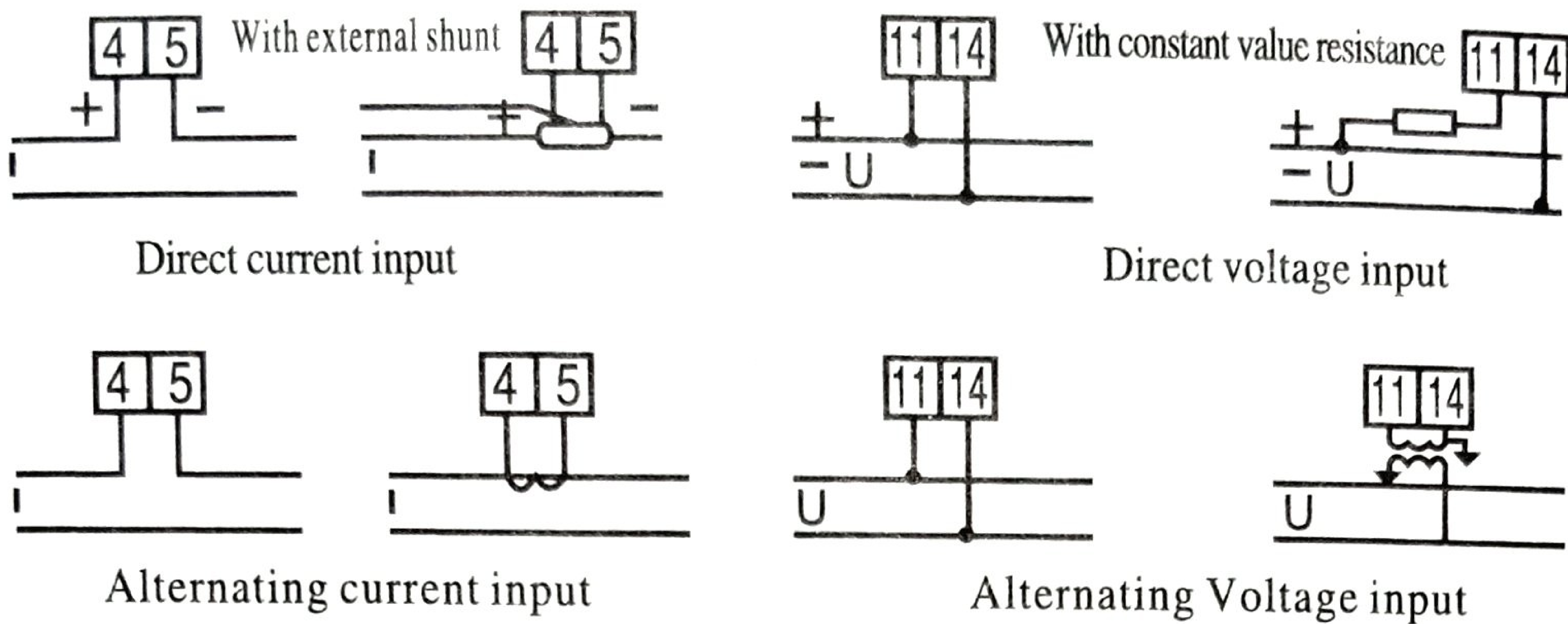
Current Input

Voltage Input or Frequency Input



Voltage Input

7.2 Terminal Diagram



Note: Current with “*” symbol is input end.

Power		Anolog Output		RS485		Voltage		Current Signal	
N	L	COM	BS 1	B	A	UL	UN	I	I*
1	2	30	31	59	58	14	11	5	4

Dimension: 72×72、80×80

Note: Current with “*” symbol is input end.

Power		Standby Alarm			Anolog Output		RS485		Voltage		Current Signal	
N	L				COM	BS 1	B	A	UL	UN	I	I*
1	2				30	31	59	58	14	11	5	4

Dimension: 96×96、120×120

Note:

1. When above wiring and terminal diagram is different from the actual wiring and terminal diagram at products' backside, please take the actual wiring and terminal diagram at the products' backside as the standard.