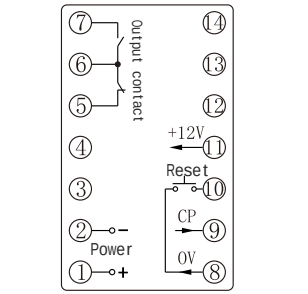
I. Overview

JDM9 - 4 counting relay (hereinafter referred to as counter) is suitable for use as a counting element in control circuits with AC 50/60Hz, rated operating voltages of AC380V, AC/DC100 - 240V, and AC/DC24V, to switch on or off the circuit according to the preset number.
This product complies with the requirements of GB/T 14048.5.

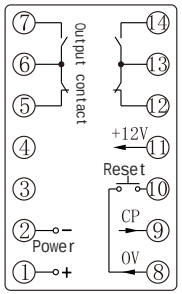
II. Main Technical Data

1.Working voltage (control power supply voltage): AC380V, AC/DC100 - 240V, AC/DC24V 50/60Hz, allowable voltage fluctuation range is (85% - 110%) Ue;
2.Counting range: 1 - 9999;
3.Counting signal: a) Contact signal: relay contact, limit switch, etc.; b) Level signal: pulse high (H: DC5V - 30V effective, L: 0 - DC3V invalid); c) Sensor signal: photoelectric switch, proximity switch, Hall switch;
4.Counting frequency: ≤100 times/second;
5.Reset mode: button reset or short - circuit terminal ⑧, ⑩ for reset;
6.Power - off memory: 10 years;
7.Output mode: N, C mode;
8.Auxiliary output power: DC12V 30mA (max);
9.Contact capacity: 3A AC250V (resistive);
10.Ue/Ie: Under each use category, rated operating voltage Ue / rated operating current Ie: AC - 15 AC250V / 0.75A; AC - 12 AC250V / 3A;
11.Rated heating current Ith: 5A;
12.Rated insulation voltage Ui: 400V;
13.Rated impulse withstand voltage Uimp: 2.5KV;
14.Pollution degree: 3;
15.Protection level: front panel IP20;
16.Ambient temperature: - 5℃ - + 40℃;
17.Relative humidity: ≤90%;
18.Altitude: ≤2000m;
19.Installation method: panel - type;

III. Wiring Diagram



Conventional type (one group of contacts)

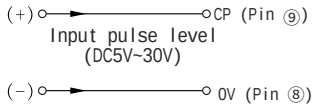


Special type (two groups of contacts)

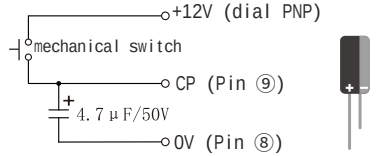
Note 1: ① and ② are power input terminals (when DC, ① is positive and ② is negative); ⑤ and ⑥ are normally - closed contacts; ⑥ and ⑦ are normally - open contacts; ⑧ is the 0V terminal; ⑨ is the counting - signal input terminal; ⑩ is the reset terminal; ⑪ is the DC12V sensor auxiliary - power output terminal.
Note 2: JDM9 - 4 - 2 has two groups of contacts, which needs to be specified when ordering.

IV. Counting Signal Input

Pulse Level Signal

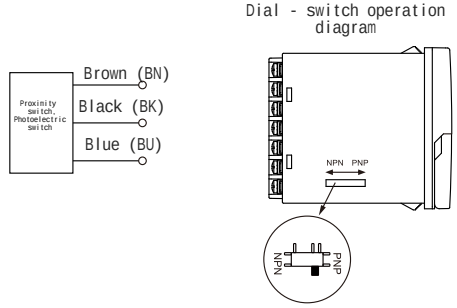


Contact Signal



Note 1: To connect +12V, adjust the dial switch to PNP.
Note 2: If there is a mis - count, connect a 4.7μF/50V electrolytic capacitor between CP and 0V. CP connects to the positive pole of the capacitor, 0V connects to the negative pole (connecting the capacitor is invalid when the dial switch is PNP).

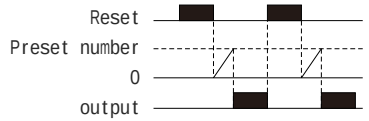
Sensor Signal



Note：Sensors are divided into PNP and NPN types. Before use, switch the dial switch on the product's side to the corresponding gear. It is recommended to use our company's DC10~30V photoelectric/proximity/Hall switch.

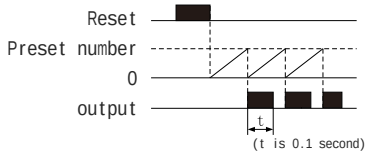
V. Output Mode Diagram

N - mode



When the preset number is reached, stop counting, the output contact is engaged, and press the reset button to count again.

C - mode

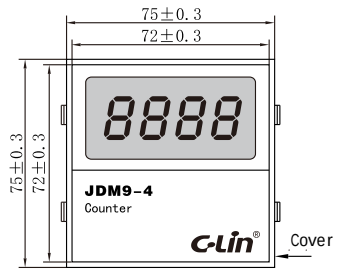


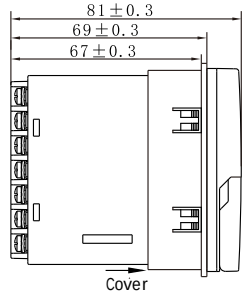
When the preset number is reached, it automatically resets to zero and counts again, and the relay is engaged for t seconds

Note: N - mode requires manual reset, C-mode is automatic reset.

VI. Overall and Cutout Dimensions (mm)

Installation cutout dimensions:
a) $67.5^{+0.5}_{0}\times67.5^{+0.5}_{0}$ mm (No cover is needed for this dimension);
b) $71^{+0.5}_{0}\times71^{+0.5}_{0}$ mm (For users who use the old - size cutout, a cover is needed during installation)





VII. Parameter Setting

First, hook your hand on the concave part on the right side of the cover (as shown in Figure 1), gently pull outward. After opening the cover, it is as shown in Figure 2, then start the setting.
Example: The set value in Figure 2 is 100, and the state is hold (power - off memory).

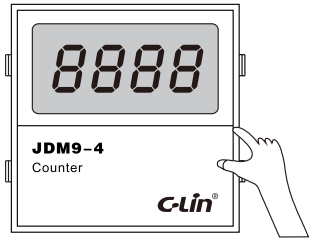


Table 1

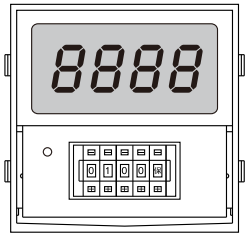


Table 2

1.Button Functions

① "+" add key: Press the "+" key once, the preset number +1 (setting range: 1 - 9999);

② "-" subtract key: Press the "-" key once, the preset number -1 (setting range: 1 - 9999;

③ Reset key: a) Press this key during counting to reset the counter;
b) After setting the preset number, press the reset key to save the setting.

2.Preset Number Setting

Scenario 1: Without power supply → Press + / - key to modify → Preset number setting range: 1 - 9999,takes effect automatically when powered on.

Scenario 2: Power on → Display → Factory count value → Press + / - key to modify → Setting range: 1 - 9999, press the reset key to save the setting.

3.Memory Function Setting

Scenario 1: Without power supply → Press + / - key to modify → Keep: power - off memory; Non - keep: power - off clear. Takes effect automatically when powered on.

Scenario 2: Power on → Press + / - key to modify → Keep: power - off memory; Non - keep: power - off clear. Press the reset key to save.

VIII. Instructions for Use

1. During installation, first remove the cover from the counter, install the cover on the cutout panel as shown in Figure 3, then install the counter on the cover as shown in Figure 4 (if the cutout size is 67.5mm×67.5mm no cover is needed).
2. If the product needs to be removed, just press the upper and lower clips of the counter and pull the counter fromthe inside out.
3. When counting with contact signals, if a miscount occurs, connect a 4.7μF/50V electrolytic capacitor between terminals ⑧ and ⑨, with ⑧ connected to the negative pole of the electrolytic capacitor and ⑨ connected to the positive pole (connecting the capacitor is invalid when the dial switch is NPN).
4. The counting signal input wire and reset control wire should be as short as possible. Avoid sharing the same pipeor twisting with other wires such as power lines and power - driven lines. Use shielded wires if necessary, and do not input voltage at the reset terminal to avoid damaging the product.
5. For sensors, please use our company's (DC10～30V) PNP or NPN normally open type photoelectric/proximity/Hall Switch.

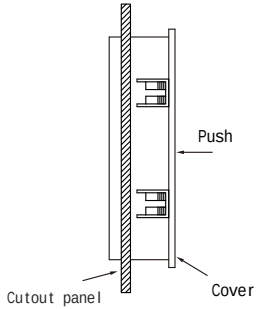


Table 3

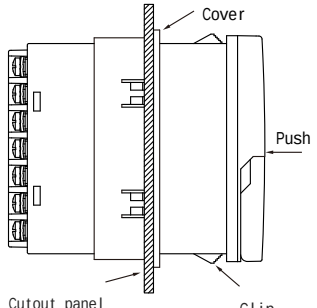


Table 4

IX. Environmental Protection and Other Legal Regulations

To protect the environment, when this product or its components are discarded, please properly dispose of them as industrial waste; or hand them over to a recycling station for classified dismantling, recycling, and reuse in accordance with relevant national regulations.

X. Ordering Instructions

When placing an order, the product model, operating voltage, output mode, and quantity must be specified.
Note: JDM9 - 4 - 2 has two groups of contacts, which needs to be noted when ordering.
Examples:1)JDM9 - 4 AC380V N - mode 500 pieces;
2)JDM9 - 4 AC/DC100~240V C - mode 500 pieces;
3)JDM9 - 4 - 2 AC/DC100~240V N - mode 500 pieces;
4)JDM9 - 4 AC/DC24V N - mode 500 pieces.

产品合格证

产品合格证

符合标准: GB/T 14048.5
检 验 员: 检01
出厂日期: 见产品或包装
本产品经检验合格,准予出厂。
C-Lin 欣灵电气股份有限公司

C-Lin
欣灵电气股份有限公司
XINLING ELECTRICAL CO., LTD.
地址：浙江省乐清经济开发区纬十九路328号
电话：0577-62735555 传真：0577-62722963
官网：www.c-lin.cn 邮箱：xl@xinling.com
技术咨询：400-8236-775

RECYCLABLE

国家高新技术企业 浙江省知名商号

C-Lin 欣灵

使用说明书
Products Instructions

JDM9 - 4
Counting Relay

Thank you very much for using C-Lin products.
Please read the instruction manual before use!

29A087Q0