

I. Overview

The HHJM-72F/HHJM-72K counting relays are suitable for use as counting elements in control circuits with AC 50/60Hz (rated operating voltage $\leq 380V$) or DC (operating voltage $\leq 240V$). They can connect or disconnect circuits according to preset numerical values.

Equipped with high-performance single-chip microcomputer chips, EEPROM memory, photoelectric isolation for counting signals, and dual-row LED display, these relays feature a wide counting range, multiple counting modes and counting signal inputs, as well as stable and reliable counting performance. They are widely used in industrial automation control.

This product complies with the requirements of GB/T 14048.5.

II. Main Technical Data

1. Operating Voltage (Control Power Supply Voltage) Options: AC380V, AC/DC100~240V, AC/DC24V (50/60Hz)
Allowable voltage fluctuation range: (85%~110%)Ue

2. Counting Range 1~999999

3. Counting Modes: a) Total Quantity Sum of sub-quantities. Two counting methods: [Package Count] and [Accumulation]. Counting stops when the total quantity is reached (only HHJM-72K has OUT2 total output).

b) Sub-quantity: Displays the number of each batch. The OUT1 contact outputs when the sub-quantity is reached.

4. Counting Signals: a) Contact Signals Relay contacts, travel switches, etc.

b) Level Signals Pulse levels (DC5V~30V effective).

c) Sensor Signals Photoelectric switches, proximity switches, Hall switches.

5. Counting Frequency: Adjustable: 1, 10, 30, 300, 1000 times/second, Signal duty cycle: 50% (factory default: 1000 times/second)

6. Reset Methods: a) Total Quantity When DIP switch is NPN: Short total reset terminal [Pin 16] and 0V terminal [Pin 18]. When DIP switch is PNP: Short total reset terminal [Pin 16] and 12V terminal [Pin 10].

b) Sub-quantity Reset by pressing the R key or short sub-quantity reset terminal [Pin 11] and 0V [Pin 18].

7. Ue/Ie: (Rated Voltage/Current) Usage categories and ratings: AC-15 AC250V / 0.75A; AC-12 AC250V / 3A

8. Output Mode: N, C system

9. Contact Capacity: 3A AC250V (resistive)

10. Conventional Heating Current (Ith) 5A

11. Rated Insulation Voltage (Ui) 400V

12. Rated Impulse Withstand Voltage (Uimp): 2.5KV

13. Pollution Degree: Level 3

14. Protection Class: Front panel IP40

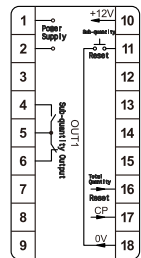
15. Ambient Temperature: -5 ~ +40

16. Relative Humidity: $\leq 90\%$

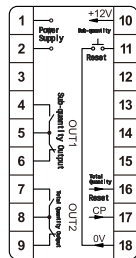
17. Altitude: $\leq 2000m$

18. Installation Method: Panel mounting

III. Wiring Diagrams (Power Terminals Have No Polarity Distinction)

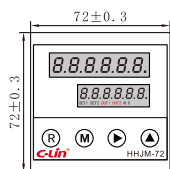


HHJM-72F

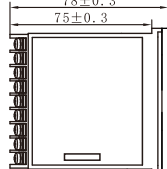


HHJM-72K

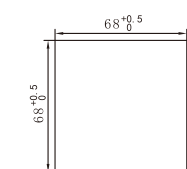
IV. Outline and Mounting Hole Dimensions (mm)



Front View

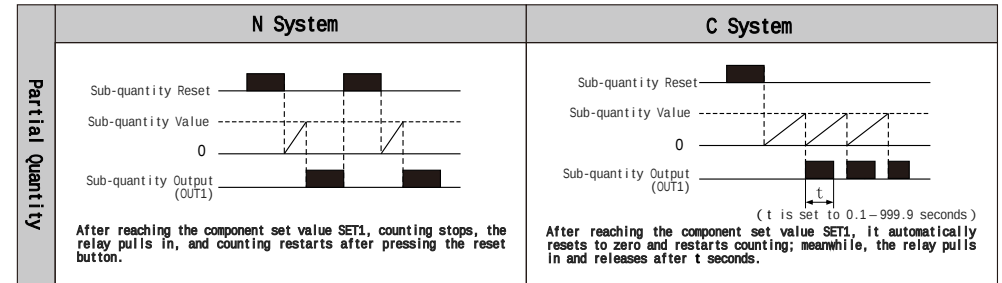
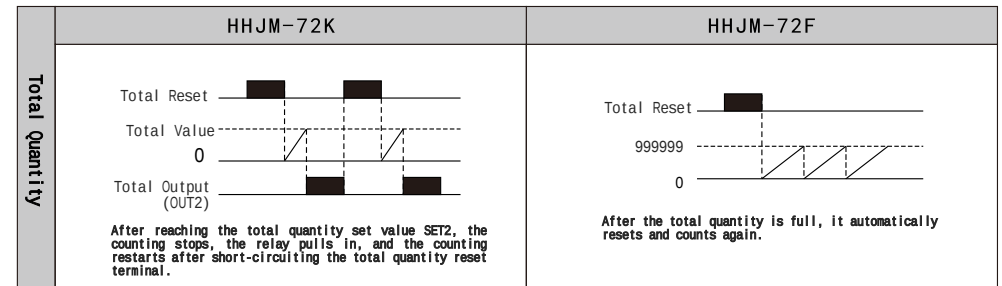


Left View



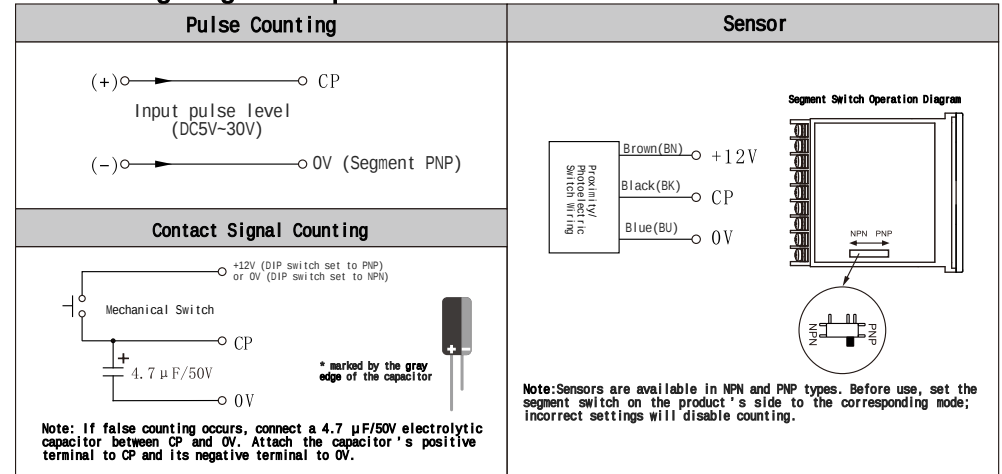
Mounting Hole Dimensions

V. Output Mode Diagrams

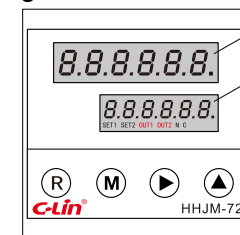


Note: The N system requires manual reset, while the C system resets automatically. HHJM-72F has no total output function and cannot set a total value.

VI. Counting Signal Input



VII. Function Setting



Total Quantity Display

Component Quantity Display

SET1: For setting the component quantity.
SET2: For setting the total quantity.
OUT1: Component output.
OUT2: Total output.

1.Button Functions

“M” Function Key: Press the “M” key once to display SET1:Component Value(setting range:1-99999). Press “M” again to display SET2:Total Value(only for HHJM-72K, setting range: 1-99999). Long-press “M” for 3 seconds; each press cycles through displays of *CPS*, *OUT*, *C.R-t*, *rSt*;

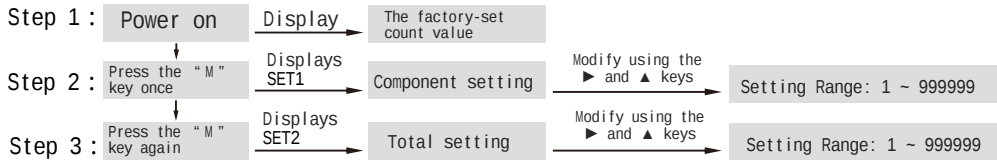
“►” Shift Key: Press to shift the digit position (e.g., from the tens place to the units place). Long-press for 3 seconds to open the *COUNT* setting menu.

“▲” Increment Key: Press to increment the blinking digit in one direction, or switch parameters.

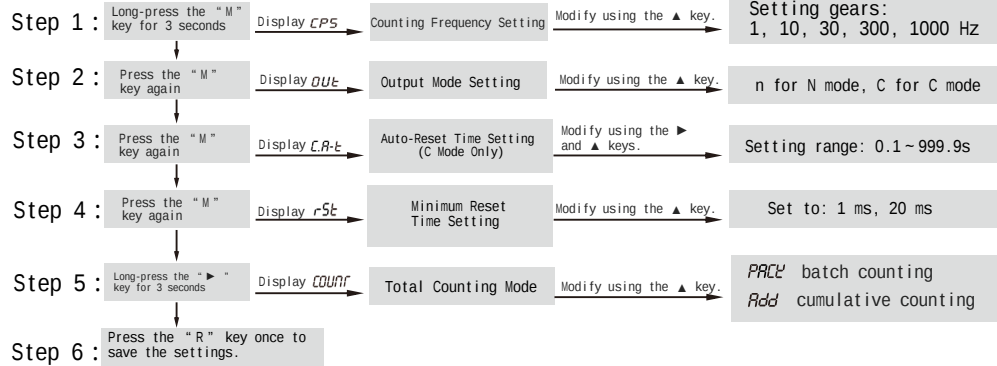
“R” Reset Key: Press to reset the component value, or save and exit the setting interface.

Symbol	Name	Description	Setting Range	Factory Default
<i>CPS</i>	Counting Frequency	The set value cannot be lower than the frequency of the input signal.	1、10、30、300、1000Hz	1000
<i>OUT</i>	Output Mode	n = N mode; C = C mode.		C
<i>C.R-t</i>	Auto-Reset Time	Only applicable for C mode.	0.1~999.9s	1.0
<i>rSt</i>	Minimum Reset Time	Sets the minimum width of the external reset signal input.	1ms、20ms	1
<i>COUNT</i> <i>PACK</i>	Batch Count	E.g.If the component value is set to 100, the total value increases by 1 each time the component counts 100.	Add	
<i>COUNT</i> <i>Add</i>	Cumulative Count	E.g.If the component value is set to 100, both the component and total values count 100. When the component resets and recounts to 20, the total value accumulates to 120.		

2.Total/Component Setting (HHJM-72F has no third-step setting)



3.Parameter Setting



Note 1: During the setting process, pressing the “R” key at any time will save the settings and exit the setting interface.

Note 2: In cumulative counting mode, the set total value must be greater than the component value. For example, if the total value is set to 50 and the component value is set to 100, the counter will stop counting when it reaches 50 (the HHJM-72F has no total value setting function).

IX.Usage Instructions

- 1.Keep the counting signal input wires and reset control wires as short as possible. Avoid running them in the same conduit or twisting them with power cables, motor wires, or other lines. Use shieldedcables if necessary. Never apply voltage to the reset terminal, as this may damage the product.
- 2.For contact signal counting: If false counting occurs, connect a 4.7 μ F/50V electrolytic capacitor between CP and OV. Connect the capacitor 's positive terminal to CP and its negative terminal to OV.
- 3.If no counting or false counting happens, adjust the CPS counting frequency parameter: The set value must not be lower than the input signal frequency, nor excessively high. Ensure it matches the gear levels.
- 4.For HHJM-72K: After the total count reaches the set value, counting stops and requires a short-circuit reset:If the DIP switch is set to NPN, short-circuit the total reset terminal and OV.If the DIP switch is set to PNP, short-circuit the total reset terminal and +12V.For component reset: Press the “R” key, or short-circuit the component reset terminal and OV.

5.The “R” reset key is only for component reset and cannot reset the total count.

X.Ordering Instructions

When placing an order, specify the product model, operating voltage, and quantity.

Examples:1)HHJM-72F AC/DC100-240V 800 units
2)HHJM-72K AC/DC24V 800 units

国家高新技术企业 浙江省知名品牌

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使用说明书
Products Instructions

HHJM-72F
HHJM-72K

Counting Relay N/C Mode

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

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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
XINLING ELECTRICAL CO., LTD.

产品合格证

欣灵电气股份有限公司
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