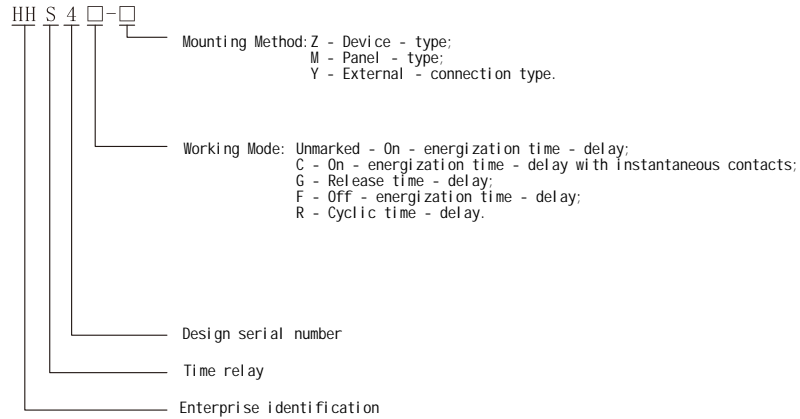


I. Overview

The HHS4 series time relays (hereinafter referred to as relays) are suitable for use as time - delay elements in control circuits with an alternating current of 50Hz, a rated working voltage of 380V or less, or a direct - current working voltage of 24V. They can connect or disconnect the circuit according to the preset time.

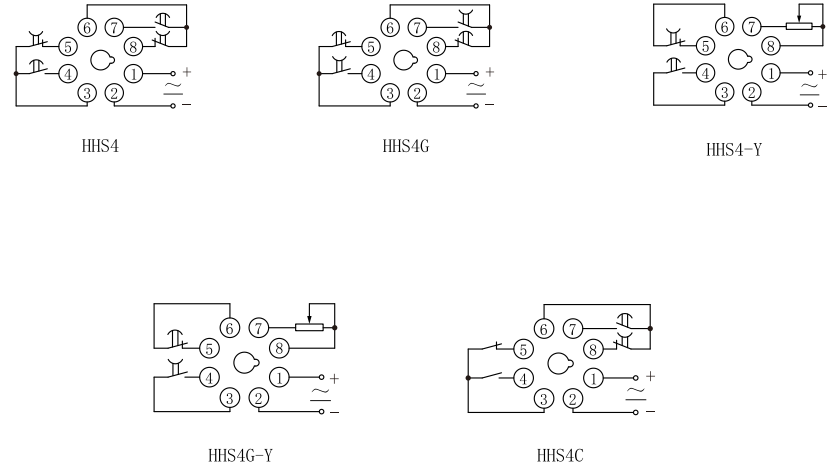
This series of relays complies with the relevant requirements of GB/T 14048.5.

II. Model and Its Meaning



①

IV. Wiring Diagrams



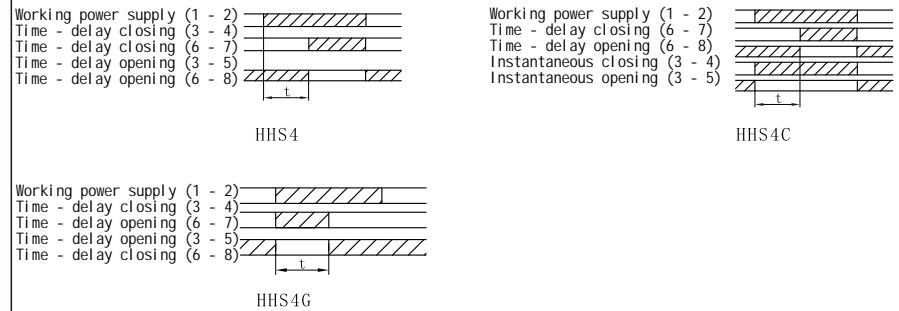
③

III. Main Technical Data

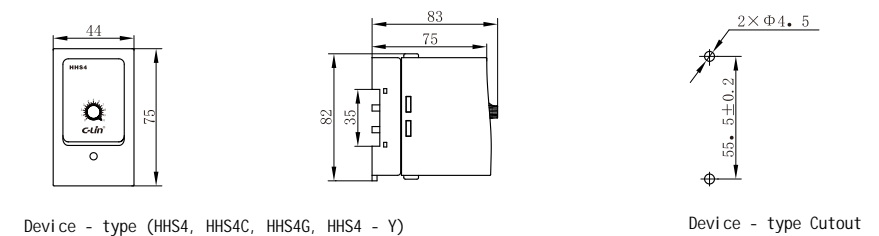
Model	HHS4	HHS4C	HHS4G
Working Power Supply (Control Power Supply Voltage)	AC380V, AC220V, AC110V, AC36V, AC24V at 50Hz, DC24V; allowable voltage fluctuation range is (85% - 110%) of Ue		
Time - delay Range	0.1s~1s, 0.5s~5s, 1s~10s, 3s~30s, 6s~60s, 12s~120s, 18s~180s, 30s~300s, 60s~600s, 90s~900s, 120s~1200s, 180s~1800s, 360s~3600s		
Working Mode	On - energization time - delay	On - energization time - delay with instantaneous contacts	Release time - delay
Repeat Error	When the time - delay range is greater than 1s, Er 1%; when the time - delay range is less than 1s, Dr 50ms		
Number of Contacts	2 sets of time - delay conversions	1 set of instantaneous conversions, 1 set of time - delay conversions	2 sets of time - delay conversions
Contact Capacity	3A AC250V (resistive)		
Ambient Temperature	-5°C ~ 40°C		
Altitude	≤2000m		
Humidity	When the maximum temperature at the installation site is 40°C, the relative humidity of the air is 50%. At relatively low temperatures, a higher relative humidity is allowed, for example, at 20°C it can reach 90%. Special measures should be taken for condensation caused by temperature changes.		
Mounting Method	HHS4: Device - type, DIN - rail type HHS4 - Y: External - connection type	HHS4C: Device - type, DIN - rail type	HHS4G: Device - type, DIN - rail type
Pollution Degree	3		
Conventional Heating Current (Ith)	5A		
Rated Insulation Voltage (Ui)	400V		
Rated Impulse Withstand Voltage (Uimp)	2.5KV		
Ue/Ie	Under the usage category, each rated working voltage Ue/rated working current Ie: AC - 15, Ue: AC250V, Ie: 3A		

②

V. Working Timing Diagrams



VI. Outline and Cutout Dimension Diagram (mm)



④

VII. Instructions for Use

1. Connect the wires correctly according to the wiring diagram on the label of the relay cover and refer to the circuit examples in Article 9. The power supply voltage and frequency must meet the requirements.
2. Adjust the potentiometer, preset the time - delay time, and connect the power supply. The relay will start to operate according to the corresponding working timing in Article 5.
3. The interval between repeated startups of the relay should be 0.5s.

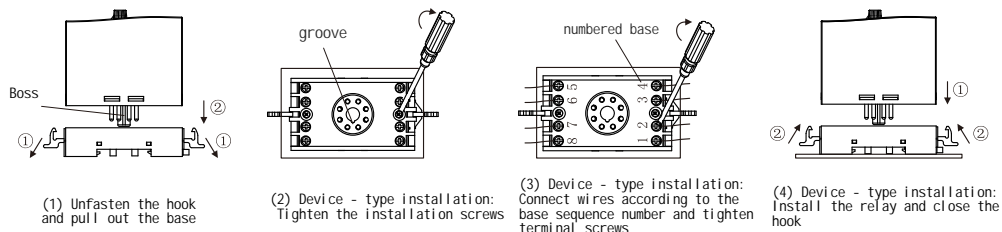
VIII. Installation and Disassembly Methods

Note: The main circuit power supply must be cut off before installation or disassembly.

1. Device - type Installation Sequence: (1) (2) (3) (4)

2. DIN - rail - type Installation Sequence: (1) (5) (6) (7)

Note: Both device - type and DIN - rail - type are exemplified by HHS4.



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1. For single - phase loads: When the resistive load current $\leq 3A$ or the inductive load current $\leq 0.5A$, the relay controls directly. Refer to Example 1 for wiring. When the resistive load current $> 3A$ or the inductive load current $> 0.5A$, the relay expands capacity through an AC contactor. Refer to Example 2 for wiring. For three - phase loads, when the power supply of the AC contactor and the relay is AC380V, refer to Example 3 for wiring; when it is AC220V, refer to Example 4 for wiring.

2. The function of the demonstration relay is as follows: When the power supply is connected, the load or KM (AC contactor) gets powered. After a delay reaches the preset value, the load or KM (AC contactor) loses power or disconnects.

Note 1: The load can be a street lamp or a light bulb, which can be directly connected to the two wires at the port of the street lamp or light bulb (as shown in Example 1).

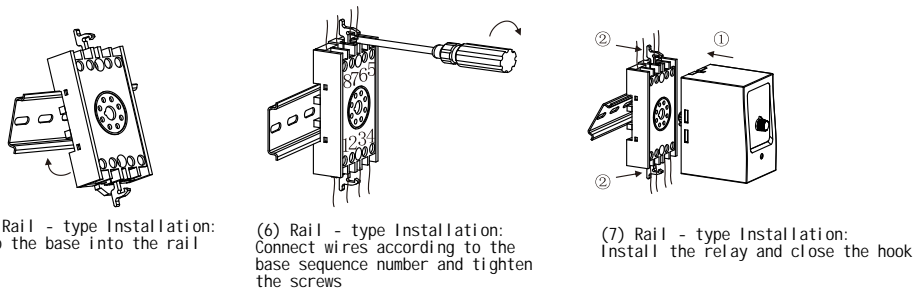
Note 2: KM is the coil of the AC contactor, and the two ends A1 and A2 can be connected as per Example 2, Example 3, and Example 4.

Note 3: The working power supply of the time relay and KM in Example 3 is AC380V. Pay attention to the voltage rating of the selected products.

X. Ordering Instructions

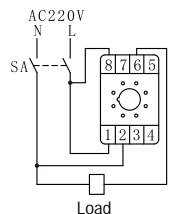
It is necessary to state the product model, delay range, voltage rating, and quantity. For special requirements, additional remarks should be made. For example: HHS4 18s - 180s AC220V 100 pieces.

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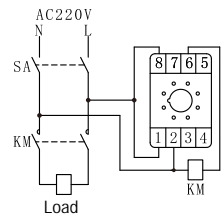


IX. Application Circuit Examples (Taking HHS4 as an Example)

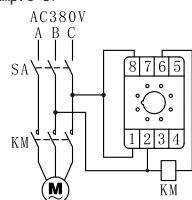
Example 1:



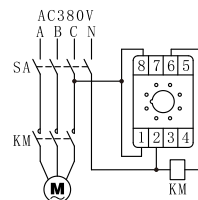
Example 2:



Example 3:



Example 4:



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使用说明书
Products Instructions

HHS4 Series
Time Relays

Thank you very much for using C-Lin brand time relays. Please read the instruction manual before using the product!

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