

I.Overview

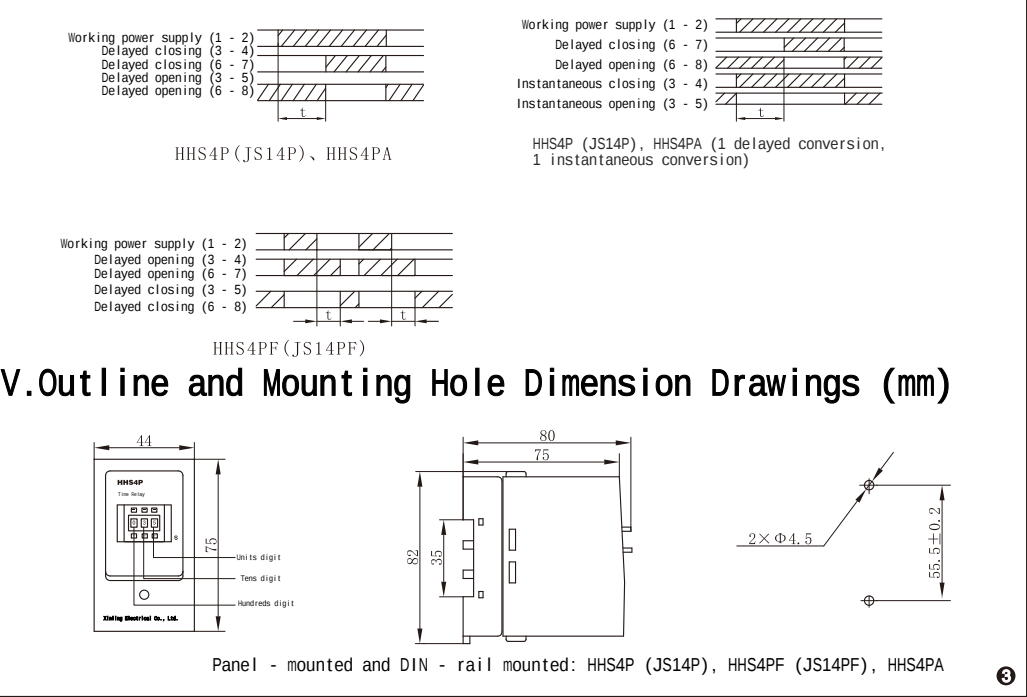
The HHS4P series time relays (hereinafter referred to as relays) are suitable for control circuits with an AC frequency of 50Hz, an operating voltage of 380V and below, or a DC operating voltage of 24V. They act as time-delay components to connect or disconnect circuits according to the preset time. This series of relays meets the relevant requirements of GB/T 14048.5.

II.Main Technical Data

Table			
Product Model	HHS4P (JS14P)	HHS4PA	HHS4PF (JS14PF)
Working Power Supply (Control Power Supply Voltage)	AC380V, AC220V, AC110V, AC36V, AC24V 50Hz; DC24V, the allowable voltage fluctuation range is (85% - 110%) Ue		
Action Form	Power - on delay		Power - off delay
Time - delay Range	0.01s~0.99s; 0.1s~9.9s; 1s~99s; 0.1s~99.9s; 1s~999s; 0.1m~9.9m; 1m~99m; 1h~99h;	0.1s - 99h (adjustable)	0.1s~9.9s 1s~99s 1s~199s
Contact Quantity	Time - delay 2 - conversion; Time - delay 1 - conversion, Instantaneous 1 - conversion		2 groups of delay conversions
Contact Capacity	3A AC250V (resistive)		
Repeat Error	When the time - delay range is greater than 1s, Er ≤ 1%; When the time - delay range is less than 1s, Dr ≤ 50ms		when the time - delay range is greater than 1s, Er ≤ 5%; when the time - delay range is less than 1s, Dr ≤ 100ms
Ue/Ie	For each rated operating voltage Ue/rated operating current Ie in the use category: AC - 15 Ue: AC250V, Ie: 3A		

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IV.Working Timing Diagrams



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Table (Continued)			
Product Model	HHS4P (JS14P)	HHS4PA	HHS4PF
Ambient Temperature	-5℃~40℃		
Altitude	≤2000m		
Humidity	When the maximum temperature at the installation site is 40℃, the relative humidity of the air is ≤50%. At lower temperatures, a relatively high relative humidity is allowed, for example, reaching 90% at 20℃. Special measures should be taken for condensation occasionally generated due to temperature changes.		
Pollution Degree	Grade 3		
Installation Method	HHS4P (JS14P): Panel - mounted or DIN - rail mounted	HHS4PA: Panel - mounted or DIN - rail mounted	HHS4PF (JS14PF): Panel - mounted or DIN - rail mounted
Conventional Heating Current Ith	5A		
Rated Insulation Voltage Ui	400V		
Rated Impulse Withstand Voltage Uimp	2.5KV		

III.Wiring Diagrams

HHS4P (JS14P)、HHS4PA

HHS4P (JS14P), HHS4PA (Time - delay 1 - conversion, Instantaneous 1 - conversion)

HHS4PF (JS14PF)

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VI.Instructions for Use

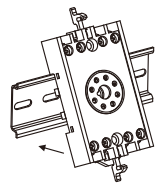
1. According to the wiring diagram on the label of the relay housing, refer to the circuit examples in Article 8 to connect the product to the control circuit.
2. Adjust the DIP switches, preset the delay time, connect the power supply, and the relay will start to operate according to the corresponding working sequence in Article 4.
3. After the power supply is connected, when the delay reaches the preset time, the relay will actuate for conversion to realize timing control. For HHS4PF, after the power supply is connected, the relay will actuate for conversion without delay temporarily; when the power supply is disconnected, when the delay reaches the preset time, the relay will reset to realize timing control. The power - on delay of HHS4PF shall be ≥ 2s.
4. The interval time for repeated starting of the relay shall be ≥ 0.5s.

VII.Installation Methods

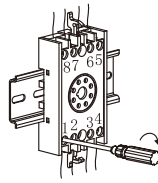
Note: The main circuit power supply must be cut off before installation or disassembly.

1. Panel - mounted installation: (1) → (2) → (3) → (4)
 2. DIN - rail mounted installation: (1) → (5) → (6) → (7)
 3. Front - panel mounted installation: (8) → (9) → (10) → (11)
- (1) The panel - mounted and DIN - rail mounted installations take HHS4P (JS14P) as an example.
- (1) Pull apart the hooks and pull off the base. (2) Tighten the mounting screws. (3) Connect the wires in accordance with the serial number of the base and tighten the terminal screws. (4) Mount the relay and close the hooks.

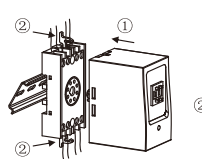
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(5) Snap the base into the DIN rail.

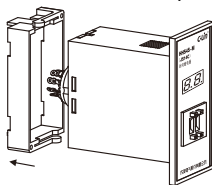


(6) Connect wires per the base serial number and tighten terminal screws.

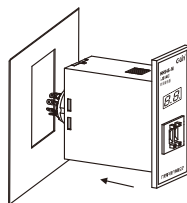


(7) Mount the relay and close the hooks.

(2) Panel - mount example: HHS4S - M (JS14PC)



(8) Remove the clip - on cover.



(9) Insert the relay into the panel.

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

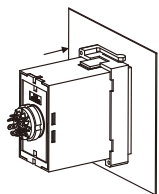
2.The function of the relay in the examples is as follows: When the power supply is connected, the load or KM (AC contactor) is powered on. When the delay reaches the preset value, the load or KM (AC contactor) is powered off.Note 1: The load can be a street lamp or a bulb, and can be directly connected to the two wires at the terminal of the street lamp or the bulb (as shown in Example 1). Note 2: KM is the coil of the AC contactor. Terminals A1 and A2 can be wired according to Example 2, Example 3 and Example 4.Note 3: The working voltage of the relay and KM in Example 3 is both AC380V. Pay attention to the voltage level of the selected product.

IX.Ordering Information

It is necessary to specify the product model, voltage level, delay range and quantity. If there are special requirements, they should be specified additionally.

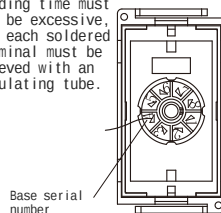
For example: HHS4P AC220V 999s 100 pieces.

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(10) Attach the clip-on cover; it shall engage snugly with the panel.

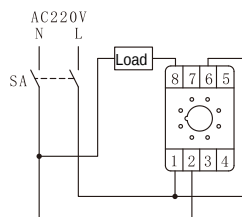
Welding time must not be excessive, and each soldered terminal must be sleeved with an insulating tube.



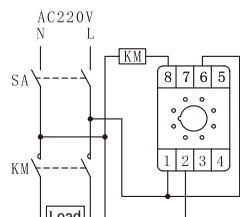
(11) Solder wires according to the base serial number.

VIII.Application Circuit Examples , Taking HHS4P (JS14P) as a Typical Example

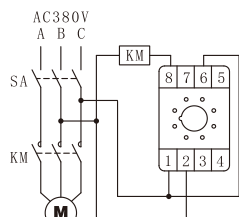
Example 1 :



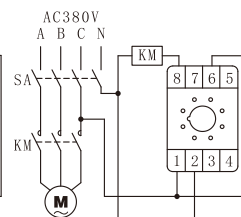
Example 2 :



Example 3 :



Example 4 :



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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。
	欣灵电气股份有限公司 XINLING ELECTRIC CO., LTD.

C-Lin®
欣灵电气股份有限公司
XINLING ELECTRICAL CO., LTD.
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技术咨询: 400-8236-775



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

HHS4P Series
Time Relay

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

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