

I. Overview

The HHS13S (ST6P) series time relays (hereinafter referred to as relays) are suitable for use as time - delay elements in AC 50Hz, working voltage 380V and below or DC working voltage 220V and below control circuits to connect or disconnect circuits according to the preset time.

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

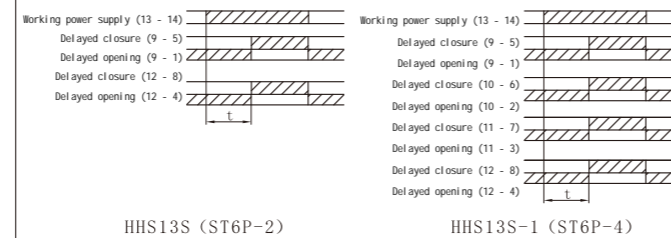
II. Main Technical Data

Product Model	HHS13S (ST6P-2)	HHS13S-1 (ST6P-4)
Product Name	Time Relay	
Working Power Supply (Control Power Supply Voltage)	AC24V, 220V, 380V 50Hz; DC24V, Allowable Voltage Fluctuation Range (85% - 110%) Ue	
Time - delay Range	0.1s~100h (7 kinds of time bases adjustable in total)	
Repeat Error	≤1%	
Working Mode	Power - on Time - delay	
Contact Quantity	2 sets of time - delay conversion contacts	4 sets of time - delay conversion contacts
Contact Capacity	5A AC250V (Resistive)	3A AC250V (Resistive)
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 higher relative humidity is allowed, for example, up to 90% at 20℃. Special measures should be taken for occasional condensation due to temperature changes.	
Pollution Degree	Grade 3	
Installation Method	Can be installed in the device type and 35mm guide rail type with different bases	
Conventional Heating Current Ith	5A	
Rated Insulation Voltage Ui	400V	
Rated Impulse Withstand Voltage Uimp	2.5kV	
Ue/Ie	For each rated working voltage Ue/rated working current Ie under the use category: AC - 15 Ue: AC250V, Ie: 3A	

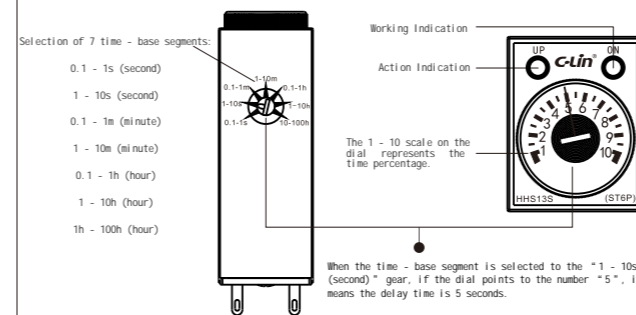
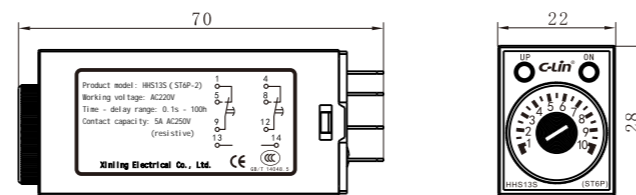
III. Wiring Diagrams



IV. Working Sequence Diagrams



V. Outline Dimension Drawings (mm) and Time - delay Setting Diagrams



VI. Instructions for Use

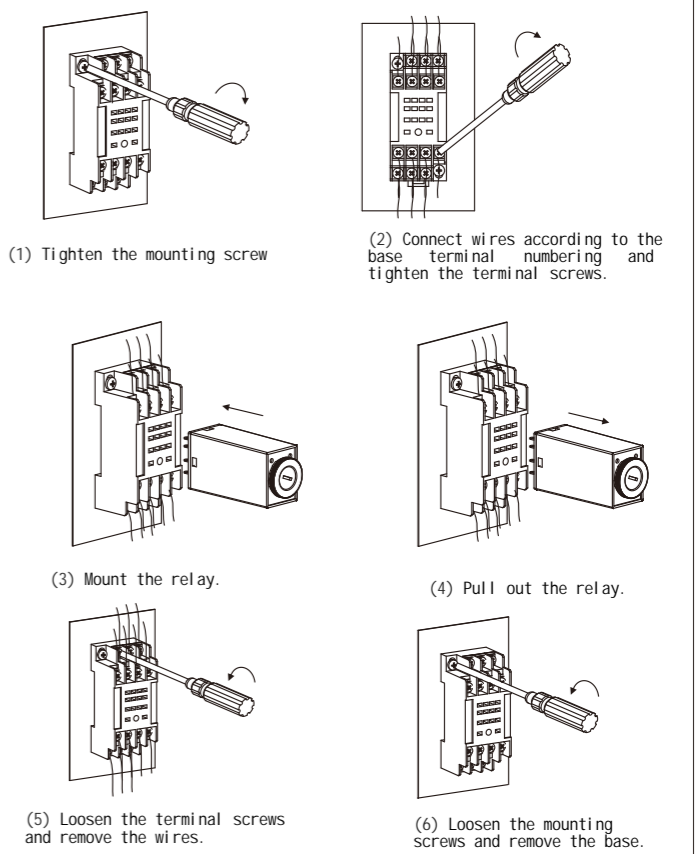
1. Connect the product to the control circuit according to the wiring diagram on the relay enclosure and with reference to the circuit example in Article 8.
2. Adjust the potentiometer to preset the delay time, turn on the power supply, and the relay will start operating in the corresponding working sequence specified in Article 4.
3. Since the set time of the product is determined by a potentiometer (which is non-linear), when selecting a delay specification, users should choose within the range from 2/3 of the rated value to the maximum value. Avoid using a large delay specification to set a small delay time, as this may cause a significant time deviation.
4. The interval between repeated starts of the relay shall be 0.5 seconds.

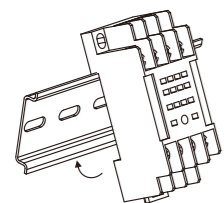
VII. Installation and Disassembly Methods

1. Panel - mount installation: (1) (2) (3)
2. Panel - mount disassembly: (4) (5) (6)
3. Rail - mount installation: (7) (8) (9)
4. Rail - mount disassembly: (10) (11) (12)

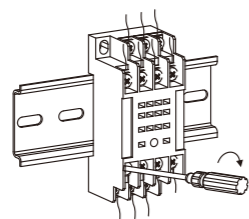
Note: Before installation or disassembly, the power supply of the main circuit must be disconnected.

Remark: The base required for installation shall be purchased separately by the user. The base model for HHS13S is PYF08A, and the base model for HHS13S - 1 is PYF14A.

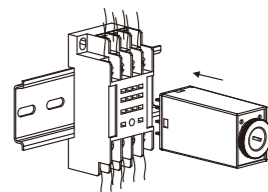




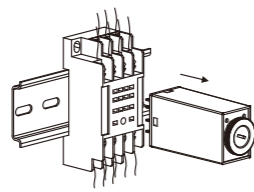
(7) Snap the base onto the rail.



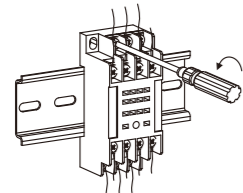
(8) Connect wires according to the base terminal numbering and tighten the terminal screws



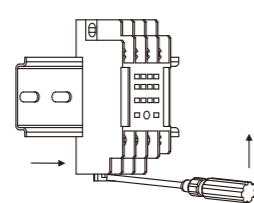
(9) Mount the relay.



(10) Pull out the relay.



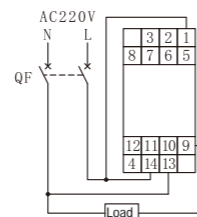
(11) Loosen the terminal screws and remove the wires.



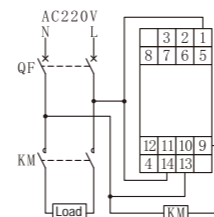
(12) Pry open the rail clip and remove the base.

VIII. Application Circuit Examples [Taking HHS13S-1 (ST6P-4) as an Example]

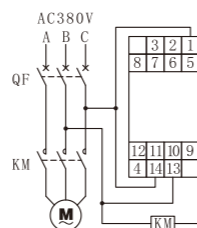
Example 1



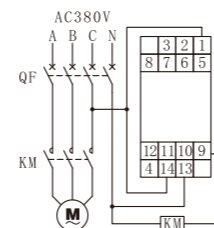
Example 2



Example 3



Example 4



1. For single - phase loads: If the load's resistive current $\leq 3A$ or 1. inductive current $\leq 0.5A$, the relay controls directly (refer to Wiring Example 1); if the load's resistive current $> 3A$ or inductive current $> 0.5A$, the relay expands capacity via an AC contactor (refer to Wiring Example 2). For three - phase loads: When the AC contactor and relay are powered by AC380V, refer to Wiring Example 3; when powered by AC220V, refer to Wiring Example 4.

2. In the examples, the relay functions as such: When power is connected, the load or KM (AC contactor) is energized; when the preset time - delay value is reached, the load or KM (AC contactor) is de - energized.

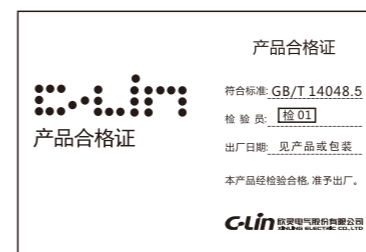
Note 1: The load can be a street lamp or a bulb, and can be directly connected to the two wires of the street lamp or bulb port (as shown in Example 1).

Note 2: KM is the coil of the AC contactor; terminals A1 and A2 can be wired according to Examples 2, 3, and 4.

Note 3: The working power supply of both the relay and KM in Example 3 is AC380V. Pay attention to the voltage class of the selected product.

IX. Ordering Instructions

The product model, voltage class, time - delay range, and quantity shall be specified. For special requirements, additional notes shall be made.
Example: HHS13S AC220V, 100 pieces.



C-Lin
欣灵电气股份有限公司
XINLING ELECTRICAL CO., LTD.

地址: 浙江乐清经济开发区纬十九路528号
电话: 0577-6273 5555 传真: 0577-6272 2963
官网: www.c-lin.cn E-mail: xl@xinling.com
技术咨询热线: 400-8236-775



国家高新技术企业 浙江省知名品牌

C-Lin 欣灵

使用说明书
Products Instructions

**HHS13S (ST6P) Series
Time Relays**

Thank you very much for using the C-Lin brand HHS13S (ST6P) series time relays. Please read the instruction manual before use!

01A115Q0