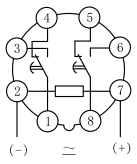
I. Overview

HHS6 series time relay (hereinafter referred to as relay) belongs to the power-on delay type, suitable for AC 50/60Hz, working voltage 380V and below or DC working voltage 24V control circuit as a delay element, connecting or disconnecting the circuit according to the predetermined time.
This series of relays meets the relevant requirements of GB/T14048.5.

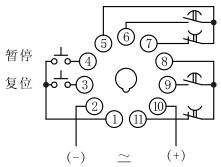
II. Main technical parameters

Part number	HHS6S-2	HHS6-1	HHS6N-2	HHS6	HHS6R	HHS6R-2
Display mode	Digital tube display					
Working power supply (control power supply voltage)	AC380V、AC220V、AC127V、AC110V、AC36V、AC24V 50Hz； DC24V					
Action mode	Power-on delay				Cycle delay	
Delay range	0.01s～9990h	0.01s～99.99s； 1s～99m99s；1m～99h99m			0.1s～990h	
Repeatability error	When the delay range is greater than 1s, Er≤1%; when the delay range is less than 1s, Dr≤50ms.					
Number of contacts	Delay 2 switching	Delay 1 switching with reset pause function	A: Delay 2 conversion B: Delay 1 conversion Instant 1 conversion	Two groups of delay with reset and pause function	Delay 1 conversion with reset pause function	Delay 2 conversion
Contact capacity	3A AC250V (resistive); DC24V 5A					
Ambient temperature	-5℃～40℃					
Pollution level	3					
Altitude	≤2000m					
Humidity	When the highest temperature at the installation site is 40℃, the relative humidity of the air is ≤50%. At lower temperatures, higher relative humidity is allowed, for example, 90% at 20℃. Special measures should be taken for occasional condensation due to temperature changes.					
Installation	Panel type, 35mm rail type, installation type					
Ith	Conventional heating current Ith 5A					
Ui	Rated insulation voltage 400V					
Uimp	Rated impulse withstand voltage Uimp 2.5KV					
Ue/Ie	Rated operating voltage Ue/rated operating current Ie under the use category: AC-15Ue: AC250V, Ie: 3A					

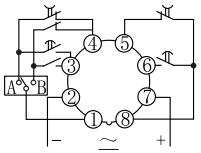
III. Wiring diagram



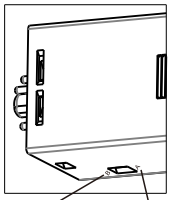
HHS6S-2



HHS6



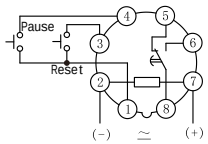
HHS6N-2



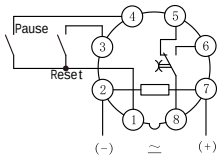
B: Delay 1 conversion
Instant 1 conversion

A: Delay 2 conversion

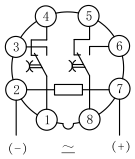
(Note: A and B gears must be switched to the correct position)



HHS6-1



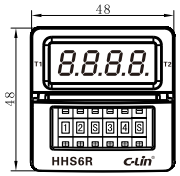
HHS6R

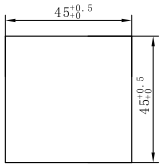


HHS6R-2

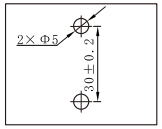
IV. Appearance and opening dimensions (mm)

1. Dimensions

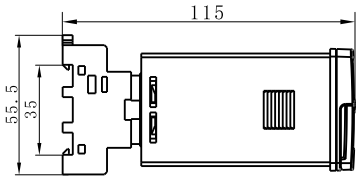




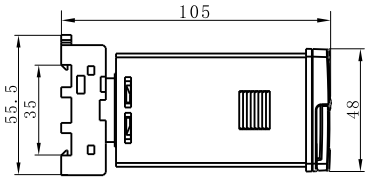
Panel mounting dimensions



Installation base mounting screw hole size



HHS6



HHS6-1、HHS6S-2、HHS6N-2、HHS6R、HHS6R-2

V. Instructions for use

1. Delay setting:
   a) Step 1: Hold the concave parts on the left and right sides of the cover with your hands and pull outward as shown in Figure 1;
   b) Step 2: Set the delay time and period as required (as shown in Figure 2);
   c) Step 3: After setting, close the cover.

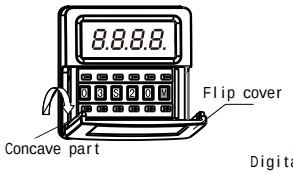


Figure 1

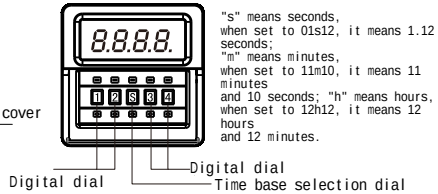


Figure 2 (using HHS6 as an example)

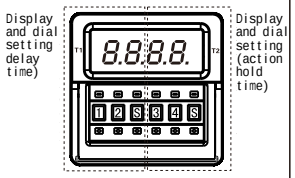
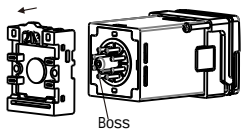


Figure 3 (HHS6R)

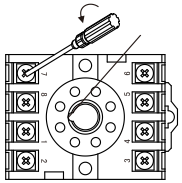
2. Before the relay is powered on, refer to the figure above to preset the delay time. After power on, the time set is the next working time. The relay restart interval is 0.5s.
3. Functional description: Set the DIP switch digital and time switch H, M, S as needed, turn on the power, start timing, and when the preset time comes, the middle point of the digital tube does not flash, and the delay contact is switched to achieve timing control.
4. Reset function: Connect the reset terminal at any time, the relay returns to the initial state, and starts timing from "0" after disconnection.
5. Pause function: During the timing process, connect the pause terminal, the timing stops, and the current time is displayed. After disconnection, the timing continues. This function can be used as a cumulative timer.
6. When used in a strong electric environment or when the reset and pause terminal wires are long, please use shielded wires, and do not run them in the same pipe as the power line.
7. The reset and pause control terminals should be connected to passive switch contacts (such as buttons, travel switches, and contacts of AC contactors), and no voltage or current signals can be connected in series.
8. Do not input voltage or ground the reset and pause terminals to avoid damaging the product.

VI. Installation and disassembly methods (taking HHS6-1 as an example)

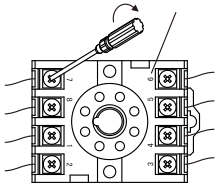
Panel installation sequence: (1)→(2)→(3)→(4)→(5)→(6)→(7)
Panel disassembly sequence: (8)→(9)
Guide rail installation sequence: (1)→(2)-→(3)→(10)→(11)
Guide rail disassembly sequence: (12)→(13)
Device installation sequence: (1)→(2)→(3)→(14)→(15)
Device disassembly sequence: (16)→(17)



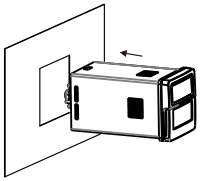
(1) Pull out the base and cover



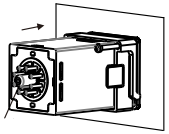
(2) Loosen the wiring screws



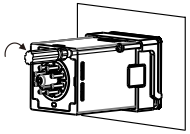
(3) Connect the wires according to the base serial number and tighten the connection screws



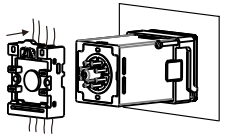
(4) Panel installation:
Install the relay into the panel



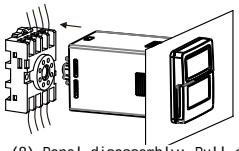
(5) Panel installation:
Install the card cover,
and the card cover and
the panel should be locked tightly



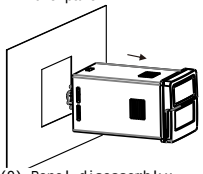
(6) Panel installation: If the cover cannot be fastened, you can use a screwdriver to tighten the screws to the panel.



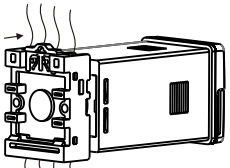
(7) Panel installation:
Install the base, and the
boss should be aligned
with the groove of the base.



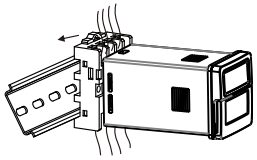
(8) Panel disassembly: Pull out the base and cover



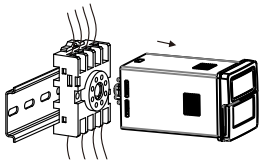
(9) Panel disassembly:
Pull out the relay



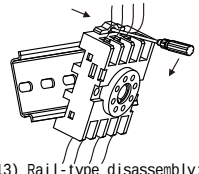
(10) Guide rail installation:
install the base, and the upper
boss should be aligned with the
groove of the base.



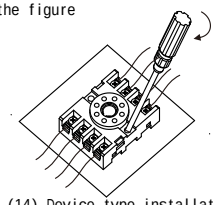
(11) Guide rail installation:
snap the product into the guide
rail in the direction shown in
the figure



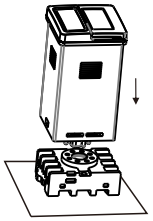
(12) Rail-type disassembly:
pull out the relay



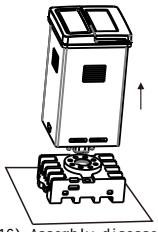
(13) Rail-type disassembly:
remove the base



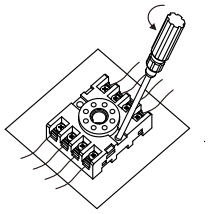
(14) Device-type installation:
tighten the mounting screws



(15) Installation:
install the relay, and align the
upper boss with the groove on
the base

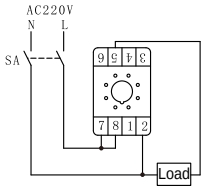


(16) Assembly disassembly:
Pull out the relay

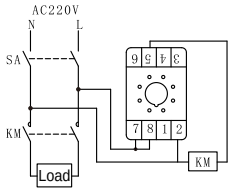


(17) Installation disassembly:
loosen the mounting screws and
wiring screws

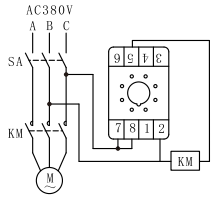
Example 1:



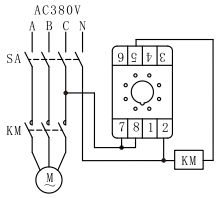
Example 2:



Example 3:



Example 4:



1. For single-phase load, if the load resistive current is <3A or the inductive current is <0.5A, the relay is directly controlled, and the wiring is referenced to Example 1; if the load resistive current is >3A or the inductive current is >0.5A, the relay is expanded through the AC contactor, and the wiring is referenced to Example 2; for three-phase load, when the AC contactor and relay power supply is AC380V, the wiring is referenced to Example 3; when the AC contactor and relay power supply is AC220V, the wiring is referenced to Example 4.

2. The function of the example relay is: when the power is turned on, the load or KM (AC contactor) is energized, and after the 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 of the street lamp or light bulb port (as shown in Example 1).

Note 2: KM is the coil of the AC contactor, and the ends of A1 and A2 can be connected according to Examples 2, 3, and 4

Note 3: The working power supply of the time relay and KM in Example 3 is AC380V. Please pay attention to the voltage level of the selected product.

VIII. Ordering Instructions

The product model, delay range, voltage level, and quantity should be specified. If there are special requirements, they should be specified separately.
For example: HHS6 99m99s AC220V 100 pieces.

产品合格证

C-Lin

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 ELECTRIC CO.,LTD

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官网: www.c-lin.cn E-mail: xl@xinling.com
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

HHS6 Series
(Improved type) time relay

Thank you very much for using Xinling brand time relay. Please read the instruction manual before using the product!

01A113Q0