

## I. Overview

HHS16B and HHS16R time relays are suitable for use as time-delay elements in control circuits with AC 50Hz, rated voltage of 380V or below or DC working voltage of 24V to connect or break the circuit according to the preset time. This series of relays meets the requirements of GB/T14048.5.

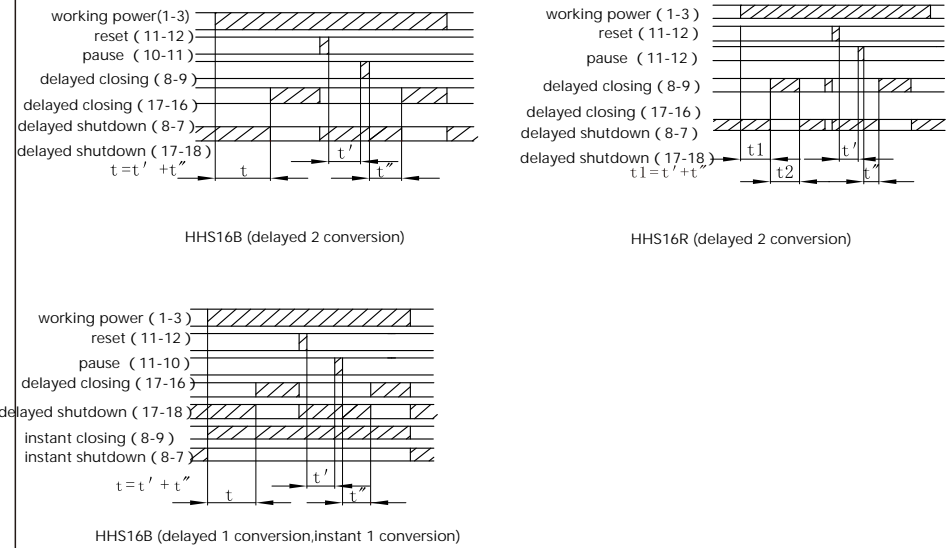
## II. Main Technical Parameters

Table

Model	HHS16B	HHS16R
Working Power	AC380V、AC220V、AC110V、AC36V、AC24V 50Hz; DC24V, Allowable fluctuation range(85%-110%) Ue	
Working Mode	Power-on delay	Cyclic delay
Delay range	0.01s~99990h	0.1s~990h
Repeat error	Er<1%, when the delay range is greater than 1s; Dr<50ms, when the delay range is less than 1s	
Number of contacts	HHS16B : two sets of time delay HHS16B (transient): one group transient, one group time-delayed	Two sets of time delays
Contact capacity	3A AC250V resistive	
Ue/ Ie	Rated operating voltage Ue/rated operating current Ie: AC-15, Ue:AC250V, Ie:3A for each category of use.	
Conventional heating current Ith	5A	
Rated insulation voltage Ui	400V	
Rated impulse withstand voltage Uimp	2.5KV	

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## IV. Work Timing Diagram

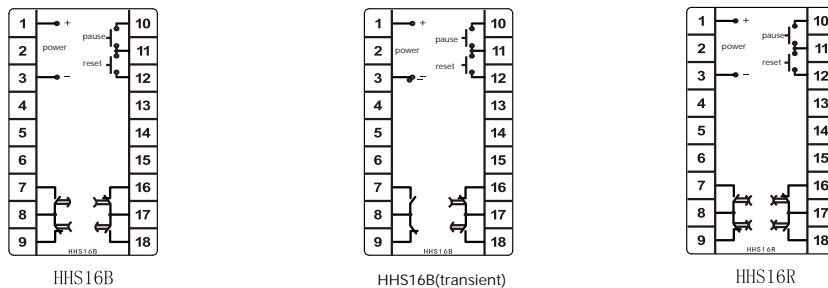


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Table (continued)

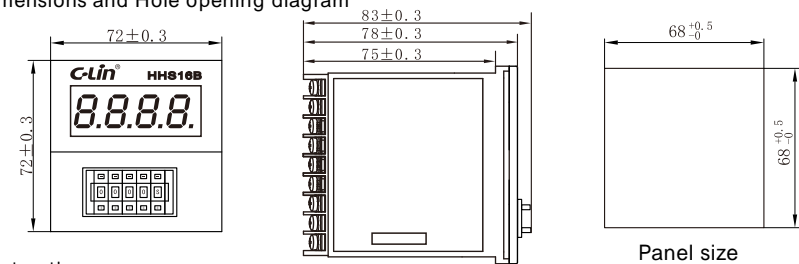
Model	HHS16B	HHS16R
Environmental Temperature	-5°C ~40°C	
Altitudes	≤2000m	
Humidity level	The relative humidity of the air is <50% at a maximum temperature of 40°C at the installation site, higher relative humidity may be permitted at lower temperatures, e.g. up to 90% at 20°C. Special measures should be taken for occasional condensation due to temperature changes.	
Contamination level	level 3	
Installation	Panel Mount	

## III. Wiring Diagram



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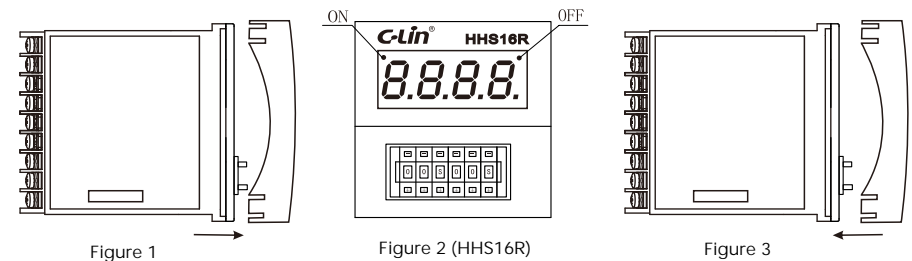
## Dimensions and Hole opening diagram



## VI. Instructions

### 1. Delay setting:

- Snap the concave portions of the left and right sides of the transparent cover and pull them outward (Figure 1).
- Set the delay time and time period as required (Figure 2).
- Cover the transparent cover after setting (Figure 3).



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2. According to the wiring diagram on the label of the relay shell, refer to the circuit example in 7 for correct wiring, the power supply voltage and frequency must meet the requirements.
3. Adjust the dip switch, preset the delay time, turn on the power, the relay starts to run according to the corresponding working time sequence of the fourth article.
4. It is necessary to preset the delay time before power on with above figures because the relay has a memory function. After power on, the preset time is invalid, and the interval time between repeated starts of the relay should be  $>0.5s$ .
5. HHS16B briefly function: set the dip switch, turn on the power, start timing, to the preset time display window upper-left corner indicator light, delay contact conversion.
6. HHS16R briefly function: Finding in Figure 2. Set the time base and preset number of T1 and T2, and then turn on the power, the left two digital tubes show the delay data of T1, and OFF indicator is on at the same time; When the delay time reaches the set value of T1, the relay operates, and the right two digital tubes show the delay data of T2, and ON indicator is on; When the delay time reaches the set value of T2, the relay releases, and T1 starts to delay again, so as to realize cyclic delay control.
7. Reset function: Turn on the reset terminal in any time, the relay returns to the initial state.
8. Pause function: In the process of timing, turn on the pause terminal, the timing stops, and display the time at this moment. After disconnecting, the timing will continue, and this function can be used as a totalizer.
9. In the strong electric environment and the reset and pause terminals are connected with long wires, please use shielded wires.
10. Do not input voltage to the reset and pause terminals to avoid damage the product.

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1. For single-phase load, if the load resistive current is  $<3A$  or inductive current is  $\leq 0.5A$ , the relay is controlled directly, refer to wiring example 1; if the load resistive current is  $>3A$  or inductive current is  $>0.5A$ , the relay expands the capacity through AC contactor, refer to wiring example 2; for three-phase load, the power supply of AC contactor and relay is AC380V, refer to wiring example 3; if the power supply of AC contactor and relay is AC220V, refer to wiring example 4. When the power supply of AC contactor and relay is AC220V, refer to Example 4 for wiring.
2. The function of the example relay is as follows: When the power is turned on, the load or KM (AC contactor) is energized. When the delay time reaches the preset value, the load or KM (AC contactor) is de-energized.

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

Note 2: KM is the coil of AC contactor, A1, A2 ends can be wired according to Example 2, Example 3, Example 4.

Note 3: The power supply of relay and KM in Example 3 is AC380V, and you should pay attention to the voltage level of the selected product.

### VIII. Ordering Instructions

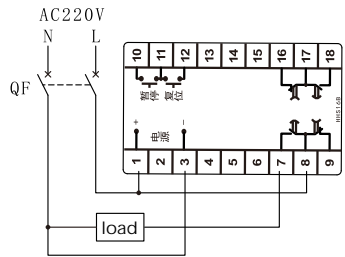
It is necessary to specify the product model, voltage, delay range, quantity. If there are special requirements, it should be indicated separately.

Example: HHS16B AC220V 100pcs

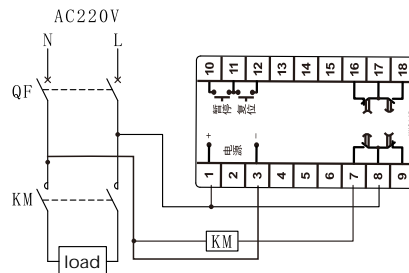
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### VII. Examples of application circuits (HHS16B)

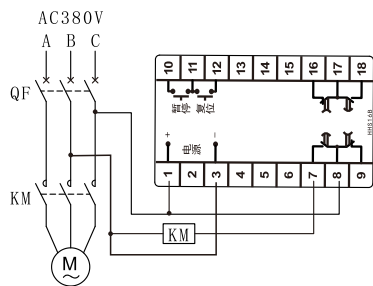
Example 1



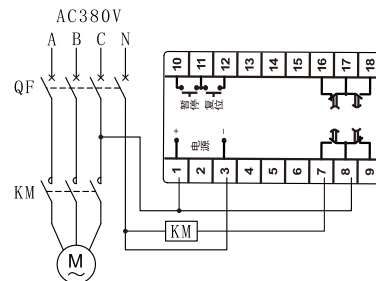
Example 2



Example 3



Example 4



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**C-Lin**<sup>®</sup>  
欣灵电气股份有限公司  
XINLING ELECTRICAL CO., LTD.  
地址: 浙江绍兴经济开发区纬十九路328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: 400-8236-775



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使用说明书  
Products Instructions

HHS16 SERIES  
Time Relay

Thank you for using C-LIN Time Relay, please read the manual before using the product.

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