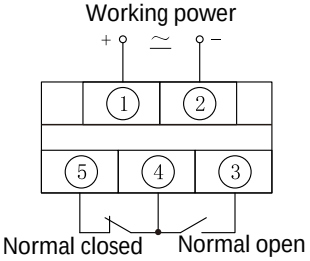
I. Overview

HHQ15 time control switch (hereinafter referred to as time switch) adopts special timing chip and LCD display, and has the advantages of high timing accuracy and wide time control range.
It is widely used in places such as street lamps, neon lights, advertising sign lights, production equipment, radio and television equipment, etc., where electrical equipment and household appliances need to be turned on and off at a scheduled time.
This time switch meets the relevant requirements of GB/T14048.5.

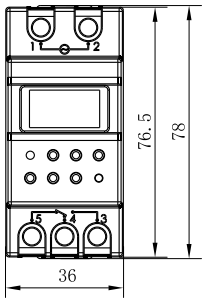
II. Main technical data

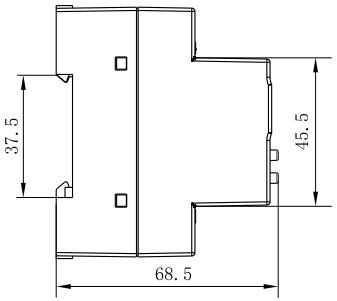
1. Working power supply (control power supply voltage): AC220V 50Hz, the allowable voltage fluctuation range is (85%~110%) Ue;
2. Time control range: 1m~168h;
3. Timing times: 16 groups, automatic and manual;
4. Timing error: ≤±1 second/day;
5. Power consumption: ≤5VA;
6. Ambient temperature: -5°C~40°C;
7. Altitude: ≤2000m;
8. Humidity: When the highest temperature at the installation site is 40°C, the relative humidity of the air is ≤50%. Higher relative humidity is allowed at lower temperatures, such as 90% at 20°C. Special measures should be taken for occasional condensation due to temperature changes;
9. Pollution level: Level 3;
10. Contact capacity: 16A AC250V (resistive);
11. Installation method: 35mm rail installation;
12. Conventional heating current Ith: 16A;
13. Rated insulation voltage Ui: 400V;
14. Rated impulse withstand voltage Uimp: 2.5KV;
15. Ue/Ie: Rated working voltage Ue/rated working current Ie under the use category: AC-14 Ue: AC220V, AC230V, AC250V, Ie: 16A.

III. Wiring diagram

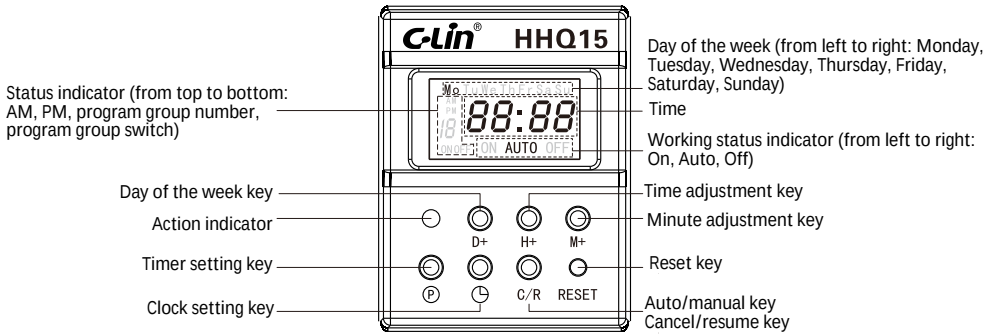


IV. Dimensions (mm)



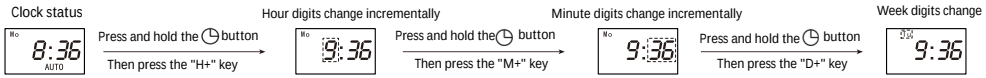


V. Panel description



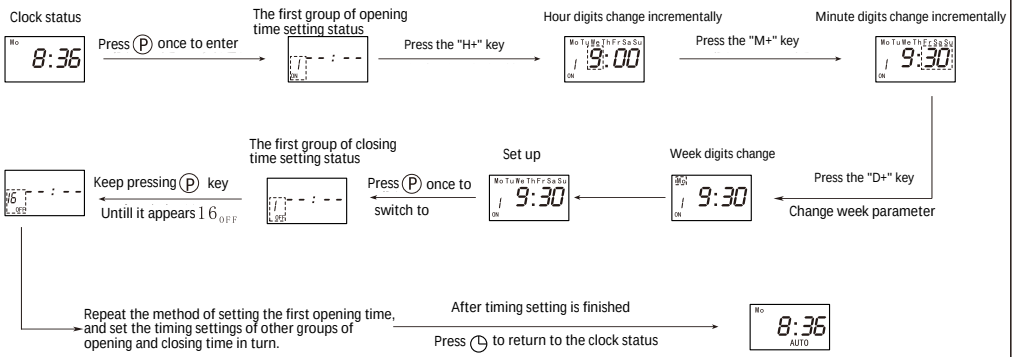
VI. Instructions for use

1. Clock calibration



2. Timing setting

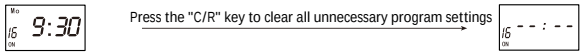
Take the timing setting from Monday to Sunday at 9:30 every day as an example



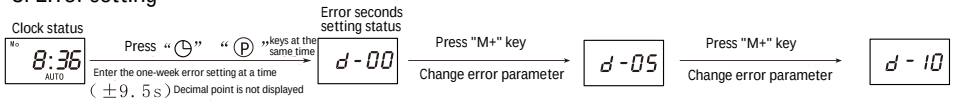
Note: There are 9 week modes:

1. Monday to Sunday are the same;
2. Monday to Sunday are different;
3. Monday to Friday are the same;
4. Monday to Saturday are the same;
5. Saturday and Sunday are the same;
6. Monday, Wednesday and Friday are the same;
7. Tuesday, Thursday and Saturday are the same;
8. Monday to Wednesday are the same;
9. Thursday to Saturday are the same.

If you do not need to set 16 switches



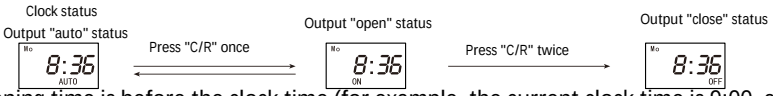
3. Error setting



Example: a、 d 15 Indicates that the time increases by 1.5 seconds in one week;

b、 d-15 Indicates that the time decreases by 1.5 seconds in one week.

4. Manual operation

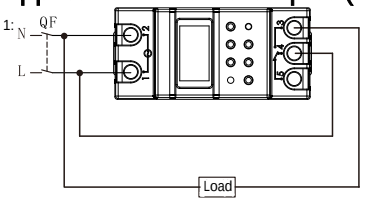


5. If the set opening time is before the clock time (for example, the current clock time is 9:00, and the set opening time is 8:00), the system defaults to not opening this time, and automatically opens next time.

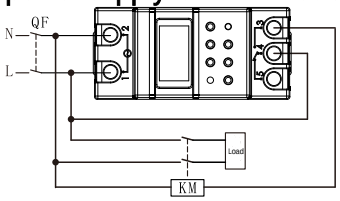
If you want to open it, you need to press the "C/R" key to adjust it to the "0N" (manual opening) state, open it manually this time, then adjust the state back to the "AUTO" (automatic) state, and perform automatic control.

VII. Application circuit examples (the product power supply is AC220V as an example)

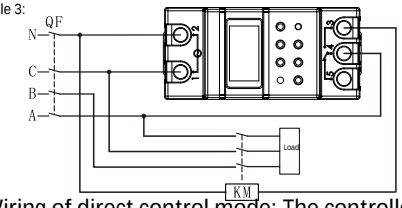
Example 1:



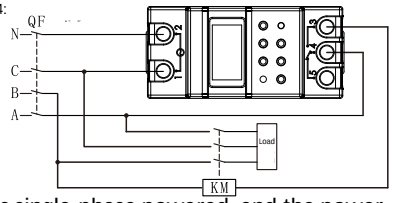
Example 2:



Example 3:



Example 4:



1. Wiring of direct control mode: The controlled load is single-phase powered, and the power consumption does not exceed the rated capacity of this time-controlled switch. Direct control mode can be used, and the wiring method is shown in Example 1.
2. Wiring of single-phase expansion mode: The controlled load is single-phase powered, but the power consumption exceeds the rated capacity of this time-controlled switch (resistive load exceeds 16A, inductive load exceeds 3A), and an AC contactor with a capacity exceeding the load power consumption is required to expand the capacity. The wiring method is shown in Example 2 (the working voltage of the AC contactor coil is AC220V).
3. Wiring of three-phase working mode:
a) The controlled load is three-phase powered, and an external AC contactor is required.
b) The coil voltage of the control contactor is AC220V50Hz, and the wiring method is shown in Example 3.
c) The coil voltage of the control contactor is AC380V50Hz, and the wiring method is shown in Example 4.

VIII. Troubleshooting

If the time-controlled switch does not work properly according to the program you set, it may be due to the following reasons:
1. When the "C/R" key is pressed until the display shows "ON", the switch cannot be turned on and the action indicator light is not on. It may be that the power supply is not connected properly. Check whether the power input terminal is correctly connected to a power supply that matches the product's operating voltage.
2. The product cannot be turned on and off normally according to the expected time. It may be due to the following reasons:

a) When "timing setting", the week mode is not set correctly. Please reset the correct week mode according to the method in "timing setting" as needed.
b) When "timing setting", redundant program groups are set. Press the "C/R" key to cancel the redundant program groups and display "--:--".
c) "Working status" is set incorrectly, that is, when the current time is in the automatic opening state, the bottom of the display screen should display "AUTO". If it is not in this position, please adjust it from "0N" or "OFF" to "AUTO" according to the opening or closing of the current time.
3. Key failure or no operation: The product may be caused by severe electromagnetic interference, ambient temperature or other reasons, causing the product to freeze. Press the reset button to reset the product.
4. If the above methods cannot eliminate the fault, please contact our company or local dealer for processing.

IX. Precautions

1. In the state of no voltage input, if there is no key operation for 2 consecutive minutes, the display will turn off the display and enter the power saving mode. In the power saving mode, press any key to wake up, and the display will show the clock status.
2. If the product works in a humid, corrosive and high metal content gas, or the product is stained with oil or water, it will affect the normal operation of the product.
3. To prevent the contacts from heating up under strong current, be sure to tighten the screws of the terminal when wiring.
4. After the time switch is connected to the power supply, do not touch the live parts.

X. Ordering Instructions

It is necessary to specify the product model, voltage level, and quantity. If there are special requirements, please specify them separately.
For example: HHQ15AC220V100 pieces.

Product qualified certificate

C-Lin

Standards: GB/T 14048.5

Inspector: 检01

Product qualified certificate

Product date: Packaging

This product has passed the inspection and is allowed to ship out of the factory

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C-Lin®

欣灵电气股份有限公司

XINLING ELECTRICAL CO.,LTD.

RECYCLABLE

国家高新技术企业 浙江省知名商号

C-Lin 欣灵

Product Instruction

HHQ15 (Improved type)
Time control switch

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

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