I. Overview

The DH48S (Improved Type) series time relay (hereinafter referred to as the relay) belongs to the power - on delay type. It is suitable for use as a delay element in control circuits with an alternating current of 50/60Hz, a working voltage of 380V and below, or a direct - current working voltage of 24V. It connects or disconnects the circuit according to the preset time.
This series of relays complies with the relevant requirements of GB/T 14048.5.

II. Main Technical Data

Table

Model	DH48S	DH48S-2Z	DH48S-2
Working Power Supply (Control Power Supply Voltage)	AC380V, 220V, 110V, 36V, 24V 50Hz; DC24V, allowable voltage fluctuation range: (85% - 110%) Ue		
Working Mode	Power - on delay		
Delay Range	0.01s～99.99s; 1s～99m99s; 1m～99h99m		
Repeat Error	When the delay range is greater than 1s, Er ≤ 1%; when the delay range is less than 1s, Dr ≤ 50ms		
Contact Quantity	1 - group delay conversion	Conventional type: 2 - group delay conversion; Instantaneous action type: 1 - group delay conversion, 1 - group instantaneous action conversion	2 - group delay conversion
Contact Capacity	3A AC250V (resistive)		
Ambient Temperature	-5℃～40℃		
Pollution Degree	Level 3		
Ue/Ie	For each rated working voltage Ue/rated working current Ie in the usage category: AC - 15 Ue: AC250V, Ie: 3A		
Conventional Heating Current Ith	5A		
Rated Insulation Voltage Ui	400V		
Rated Impulse Withstand Voltage Uimp	2.5KV		

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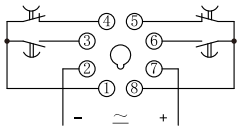
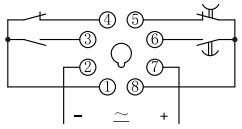
Model	DH48S	DH48S-2Z	DH48S-2
Altitude	≤2000m		
Humidity	When the maximum temperature at the installation site is 40°C, the relative humidity of the air ≤50%. Higher relative humidity is allowed at lower temperatures, for example, up to 90% at 20°C. Special measures should be taken for condensation occasionally generated due to temperature changes.		
Installation Method	Panel - mounted, device - mounted, 35mm rail - mounted		

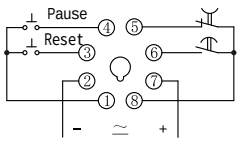
III. Wiring Diagrams



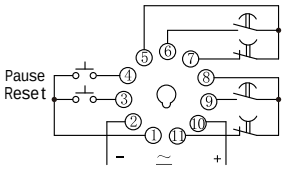
DH48S - 2Z (2 - group delay conversion)



DH48S - Z
(1 - group delay conversion, 1 - group instantaneous conversion)



DH48S



DH48S-2

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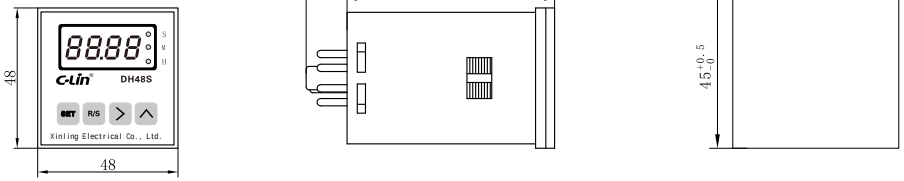
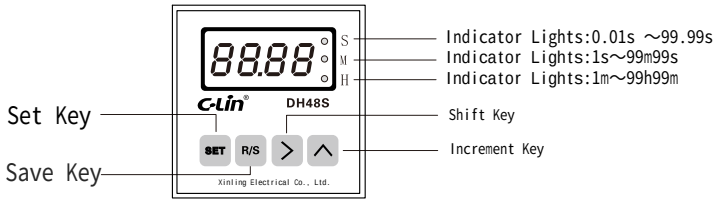
IV. Outline and Cutout Dimension Diagram (mm)



V.Panel and Key Function Description



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"SET" Key:
Press this key to enter the product setting mode; during operation, pressing this key allows querying the set values.
"R/S" Key:
In the setting mode, press this key to save the set parameters; during operation, pressing this key is an invalid operation.
"＞" Key:
In the setting mode, press this key to move the parameter to be set; during operation, pressing this key is an invalid operation.
"∧" Key:In the setting mode, press this key to increment and change the parameter to be set; during operation, pressing this key is an invalid operation.

Notes:1、In the setting mode, if there is no operation for 30 seconds, it will return to the operation mode.
2、Press the "＞" and "∧" keys simultaneously to reset the product.

VI. Instructions for Use

In the time parameter setting, the user can set as required. Since this product has a memory function, the parameter setting status displayed after power - on is the last parameter setting status. Take setting the timing value as 12h34m and the last set parameter as 00.00s as an example.
1、According to the wiring diagram on the relay housing label, refer to the circuit example in Article 7 to connect the product to the control circuit.
2、During operation, pressing the set key allows querying the settings and making modifications at any time. Setting and operation can be performed simultaneously without pausing the operation.

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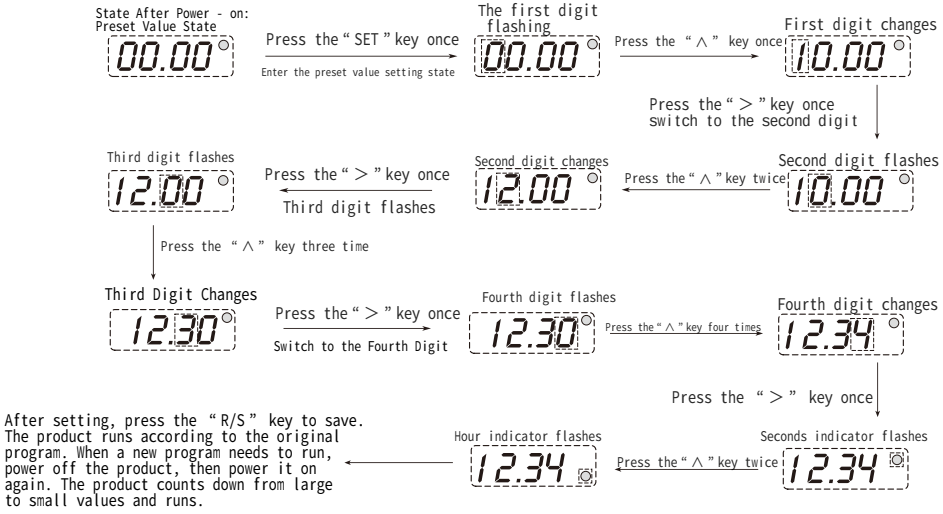


1. For Single - phase Loads：When the resistive current of the load is ≤ 3A or the inductive current is ≤ 0.5A, the relay controls directly. Refer to Example 1 for wiring. When the resistive current of the load > 3A or the inductive current > 0.5A, the relay expands capacity through an AC contactor. Refer to Example 2 for wiring. For three - phase loads, 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. Function of the Example Relay：When the power supply is connected, the load or KM (AC contactor) is energized. When the preset value is reached after a delay, 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 at the street lamp or bulb terminal (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 power supply of the relay and KM in Example 3 is both AC380V. Pay attention to the voltage level of the selected product.

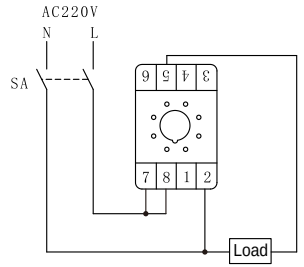
VIII. Ordering Information

The product model, voltage level, and quantity need to be specified. If there are special requirements,they should be additionally noted.

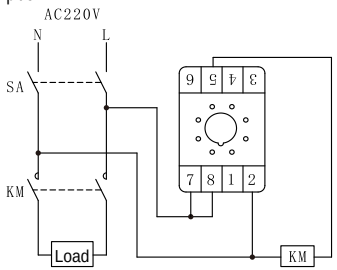
Example: DH48S AC220V 100 pieces.

VII. Application Circuit Examples (Taking DH48S as an Example)

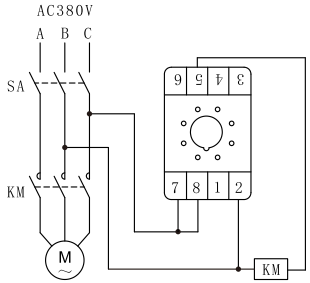
Example 1



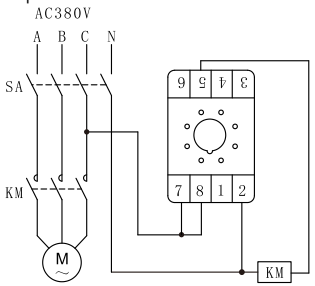
Example 2



Example 3



Example 4



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.

产品合格证

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国家高新技术企业 浙江省知名商号

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使用说明书
Products Instructions

DH48S (Improved Type) 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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