

.Overview

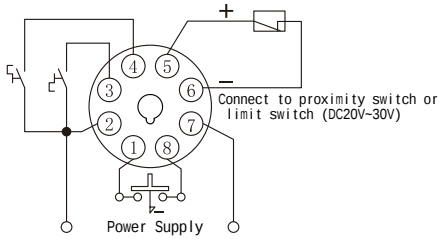
HHD7-H4 (JZF-11E) Forward-Reverse Controller (hereinafter referred to as the controller) adopts single-chip microcomputer control and LED digital display. It allows free setting of forward rotation, reverse rotation and injection time. It is applicable as a control device in control circuits with AC 50Hz and operating voltage of 380V or below. It can automatically position the injection location via proximity switches or limit switches, and can set the stop positioning time to ensure the nozzle faces downwards when stopped. This controller complies with the relevant requirements of GB/T 14048.5.

.Main Technical Parameters

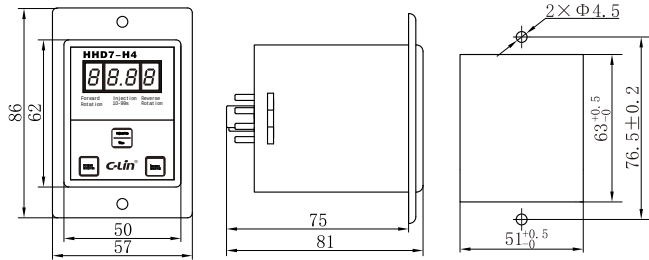
- 1.Operating Power Supply (Control Power Supply Voltage): AC380V, AC220V 50Hz; DC24V; Allowable voltage fluctuation: (85%-110%)Ue;
- 2.Forward-Reverse Cycle Count: 1~9 times;
- 3.Injection Time: 10s~99s;
- 4.Stop Positioning Time: 0.1s~24s;
- 5.Power Capacity: $\geq 3\text{VA}$;
- 6.Contact Capacity: 2A/250V (resistive) (utilization category AC-15);
- 7.Ambient Temperature: -10 ~40 ;
- 8.Altitude: $\leq 2000\text{m}$;
- 9.Humidity: When the maximum temperature at the installation site is 40 , the relative humidity of air is $\leq 50\%$. Higher relative humidity is allowed at lower temperatures (e.g., up to 90% at 20). Condensation occasionally caused by temperature changes shall be properly handled;
- 10.Pollution Degree: Class 3;
- 11.Mounting Method: Surface-mounted, panel-mounted, DIN rail-mounted;
- 12.Conventional Heating Current Ith: 5A;
- 13.Rated Insulation Voltage Ui: 250V;
- 14.Rated Impulse Withstand Voltage Uimp: 4kV.

Note: The base required for installation shall be purchased separately by the user, and the base model is PF083A.

III.Wiring Diagram



IV.Outline and Mounting Hole Dimensions (mm)



V.Operating Instructions

1.Button Functions

(1)The Forward Rotation Button is used to set the number of forward rotation cycles. Each press increases the display value by 1 (the set data will be saved and take effect when the button is released). The range is 1 to 9 cycles, and it is inactive when the device is in operation.

(2)Reverse Rotation Button: Sets the number of reverse rotation cycles. Each press increases the display by 1 (set data is saved when the button is released). Range: 1~9 cycles; inactive during operation.

(3)Injection/Time Button: Sets injection time (range: 10s~99s; long press for rapid increment). During operation, it sets "Stop Positioning Time" (range: 0.1s~24s; long press for rapid increment — the product operates normally while setting this time).

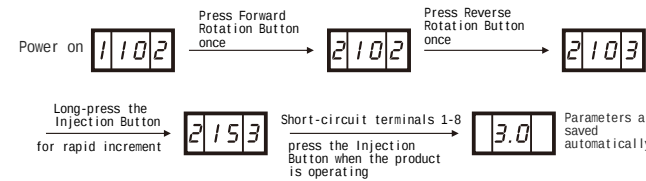
(4)Forward Rotation Light Indicator: Stays lit when the forward rotation contact is closed; flashes during forward rotation 's "Stop Positioning Time" phase.

(5)Reverse Rotation Light Indicator: Stays lit when the reverse rotation contact is closed; flashes during reverse rotation 's "Stop Positioning Time" phase.

2.Parameter Settings

(1)Follow the wiring diagram on the controller housing, and connect the product to the control circuit by referring to the circuit example in Section 7.

(2)Example: If the previous parameters are 1 forward rotation cycle, 2 reverse rotation cycles, 10s injection time, 10s stop positioning time — and you need to reset to 2 forward cycles, 3 reverse cycles, 15s injection time, 3.0s stop positioning time:



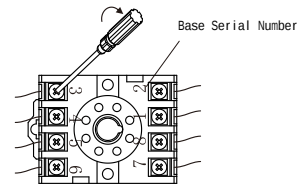
(3) After parameter configuration, use a self-locking button or relay to connect terminals 1-8. The controller cycles through the following workflow: Rotate forward to the injection position and stop → Decrease the set forward rotation count by 1 → Run the set injection time → Rotate forward again and inject → After completing the set forward rotations, switch to reverse rotation → injection, until the set reverse rotations are finished, then rotate forward again.

(4) At any time, disconnecting terminals 1-8 will trigger the stop procedure: The device rotates to the injection position and stops, the indicator light flashes, and it stops automatically after the set "Stop Positioning Time" elapses.

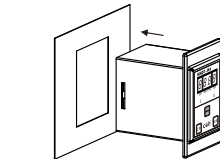
VI.Installation and Disassembly Methods

Note: The main circuit power supply must be cut off before installation or disassembly.

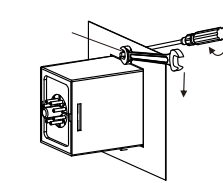
- 1.Panel-mounted installation: (1) → (2) → (3) → (4)
- 2.Unit-mounted installation: (5) → (6) → (7)
- 3.Rail-mounted installation: (8) → (9) → (10)



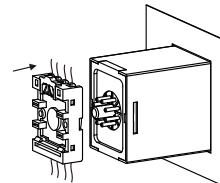
(1) Connect the wires according to the base serial number and tighten the terminal screws



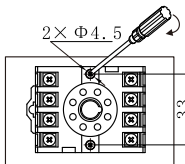
(2) Insert the controller into the panel



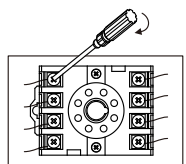
(3) Install the mounting screws, then use a wrench to tighten the nuts



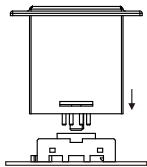
(4) Install the base, align the protruding platform of the top plug with the groove of the base



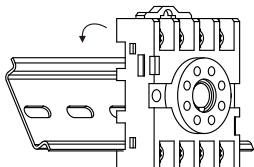
(5) Tighten the mounting screws



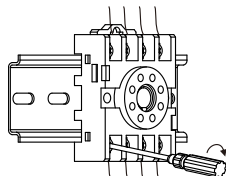
(6) Connect the wires according to the base serial number and tighten the terminal screws



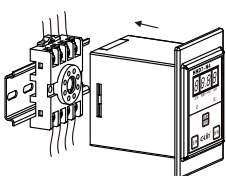
(7) Install the controller, align the protruding platform of the top plug with the groove of the base



(8) Snap the base into the guide rail

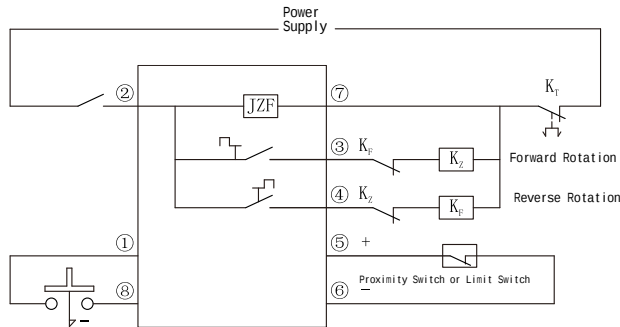


(9) Connect the wires according to the base serial number and tighten the terminal screws



(10) Install the controller, align the protruding platform of the top plug with the groove of the base

VII.Application Circuit Example



Note: The proximity switch must be of the normally closed type, and the limit switch should connect to the normally closed contact.

VIII.Ordering Instructions

Please specify the product model, voltage class, and quantity when placing an order. If there are special requirements, please note them separately.

Example: HHD7-H4 (JZF-11E) AC220V, 100 pieces



C-Lin

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

Address: No. 328, 19th Weilu Road, Yueqing Economic Development Zone, Zhejiang Province
Telephone: 0577-6273 5555 Fax: 0577-6272 2963
Official Website: www.c-lin.cn E-mail: C-Lin@xinling.com
Technical Consultation: 400-8236-775



C-Lin 欣灵

使用说明书
Products Instructions

HHD7-H4

Special-Purpose Forward-Reverse Rotation Controller for Yarn Dyeing Machines

Thank you very much for using the C-Lin brand forward-reverse rotation controller. Please read the user manual before use!