

JSS48A Series
Time Delay Relay

User Instruction

Safety Warning

- ① Only professional technicians are allowed for installation and maintenance.
- ② Installation in any damp, condensed-phase environment with inflammable and explosive gas is forbidden.
- ③ When the product is being installed or maintained, the power must be switched off.
- ④ You are prohibited from touching the conductive part when the product is operating.
- ⑤ The product shall be stored, installed and used in accordance with the rated control power supply voltage and specified conditions indicated in the user instructions.

1 Use Purpose

JSS48A series time delay relay ("relay" in short) is mainly used as time control component in the control circuit with AC frequency of 50Hz/60Hz, rated control power supply voltage up to 380V and DC rated control power supply voltage up to 240V for connecting and disconnecting the circuit at preset time.

2 Main Technical Parameters

Table 1 Ambient Conditions

Normal use conditions	Ambient temp.: -5°C~+40°C; average value within 24h not exceeding +35°C; altitude not exceeding 2000m
Atmospheric conditions	RH shall not exceed 50% when maximum temperature is +40°C; in case of lower temperature, higher RH is allowed. Measures should be taken against occasional condensation due to temperature change.
Installation category	II
Transport and storage conditions	-25°C~+55°C

Table 3 Main Circuit and Auxiliary Circuit Technical Parameters

No.	Product model	JSS48A, JSS48A-2Z, JSS48A-11, JSS48A-G2~G4, JSS48A-P2~P4, JSS48A-S		
1	Rated control supply voltage Us (V), frequency (Hz)	AC/DC24V~48V, AC/DC100V~240V, AC220V, AC380V,50Hz/60Hz		
2	Allowable fluctuation range of rated control supply voltage	85%Us~110%Us		
3	Agreed free air heating current Ith (A)	5		
4	Rated operating voltage Ue(V)	AC240V	AC415V	DC220V
5	Utilization category and rated operating current Ie(A)	AC-15 0.75A	AC-15 0.47A	DC-13 0.27A
6	Rated insulation voltage Ui (V)	415V		
7	Rated impulse withstand voltage Uimp (kV)	4		
8	Enclosure protection class (if applicable)	IP20		
9	Pollution class	Class 2		
10	Type and maximum value of short circuit protection	RT36-00/6A		
11	Electrical life/mechanical life (10,000 times)	10/100		

Table 2 Product Specifications and Main Technical Parameters

Model	JSS48A	JSS48A-2Z	JSS48A-11	JSS48A-G2	JSS48A-G3	JSS48A-G4	JSS48A-P2	JSS48A-P3	JSS48A-P4	JSS48A-S
Preset digits	4			2	3	4	2	3	4	T1: 2 T2: 2
Delay range	0.01s~99.99s, 1s~99min99s, 1min~99h99min Multi-span delay, time base adjustable			0.01s~9.99s, 0.01s~99.99s, 0.1s~9.9s, 0.1s~99.9s, 0.1s~999.9s, 1s~99s, 1s~999s, 1s~9999s, 0.1min~9.9min, 0.1min~99.9min, 0.1min~999.9min, 1min~99min, 1min~999min, 1min~9999min, 0.1h~999.9h			Single-span delay, time base non-adjustable			1s~99s, 1min~99min, 1h~99h, Multi-span delay, time base adjustable
Indication form	Digitron					Indicator			Digitron	
Number of contacts	Delay 1 change-over sets	Delay 2 change-over sets							Delay 1 change-over sets	
Operating method	Power-on delay									Shuttling (cycling) delay
Setting error	When delay setting value is between 0.01s~5s, setting absolute error ≤0.05s; when delay setting value is bigger than 5s, setting absolute error ≤1%									
Reset time	≤1s									
Installation method	Panel type									

Table 4 Immunity to Interference

No.	Test type	Test level
1	Electrostatic discharge immunity test	8kV (air discharge)
2	RF electromagnetic field immunity test	10V/m
3	Electrical fast transient/burst immunity test	2kV/5kHz on the power supply side
4	Surge immunity test	1kV (wire to wire)

3 Installation

3.1 Outline and installation size: see Figure 1~ Figure 2, unit: mm.

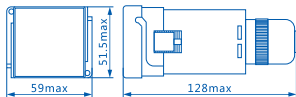
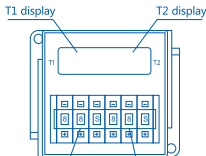


Figure 1 Outline Size



Figure 2 Installation Size

3.1 JSS48A-S panel diagram: see Figure 3; JSS48A series product wiring diagram: see Figure 4~ Figure 7.



T1 time frame setting and selection

T2 time frame setting and selection

Figure 3 panel diagram of JSS48A-S

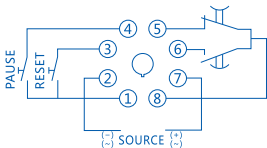


Figure 4 wiring diagram of JSS48A

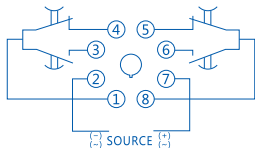


Figure 5 wiring diagram of JSS48A-2Z/JSS48A-G/JSS48A-P

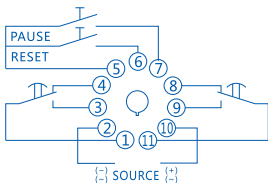


Figure 6 wiring diagram of JSS48A-11

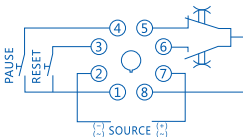


Figure 7 wiring diagram of JSS48A-S

Notes:

- 1) Check if the wiring is correct before connecting the power. Set the delay time and time base at the needed position.
- 2) Set the time frame of T1 and T2 of cycling delay product (JSS48A-S). After the power is connected, press preset time T1 to start counting; when there are only seconds left, the relay will begin to flash and stop timing when the relay implements change-over. T1 comes to an end. The relay will be counting according to the preset time T2 until it releases. Then the cycle will start again from T1 delay.
- 3) After the power is connected, the relay will operate according to the set time. When the preset time is reached, the contacts will implement change-over.
- 4) The relay adopts panel mounting with mounting clamps, 8 or 11 lead outlet and transparent anti-dust shield as standard delivery. If you prefer rail mounting, choose CZS08C or CZF11A-E base.
- 5) If you connect the reset terminal at any time, the delay contact will go back to the initial position; after disconnection, the digital display timing will start from zero; and the reset function can be used as power-off delay.
- 6) If you connect the suspension terminal at any time, the counting will suspend; the display will retain the current timing; after disconnection, the counting will continue.
- 7) When using suspension and reset functions, do not connect external power to the suspension or reset terminals.
- 8) After completing the product setting, please install the transparent shield that comes with the product to protect the product from being affected by adverse environment.
- 9) The relay has memory function; the value set after turn-on or reset will not change, and if you want to change the value, you have to reset the product.
- 10) The interval between disconnecting and connecting the power should be greater

than 1s; if the interval is shorter, it is suggested you use reset terminal to reset, and the reset time should last more than 0.02s.

- 11) Do not place the signal input cord among other electric cords or bind it with other cords. Please use shield wire when necessary; wiring should be short enough to prevent interference with the operation of the product.

4 Maintenance

4.1 The terminal of the relay should be tightened on a regular basis.

4.2 Avoid squeezing the product; the product should be stored in a well-ventilated place.

Table 5 Fault Analysis and Troubleshooting

Symptoms	Cause analysis	Troubleshooting method
The digitron is not on after power-on.	The lead of the power supply is not connected to the wire, the wiring is incorrect or is disconnected, resulting in disconnected power supply, or the inconsistency between the control supply voltage and the rated control supply voltage of the product.	Choose control supply voltage that is consistent with the rated control supply voltage of the product; wire the product securely according to the product manual.
The relay operates abnormally after power-on.	The wiring of relay control is incorrect or disconnected. The presetting of delay value is incorrect, and the fluctuation of control supply voltage is out of range.	Choose control supply voltage that is consistent with the rated control supply voltage of the product; wire the product securely according to the product manual.

5 Environmental Protection

In order to protect the environment, the product or product parts should be disposed of according to the industrial waste treatment process, or be sent to the recycling station for assortment, dismantling and recycling according to local regulations.

CHINT

QC PASS

JSS48A Series
Time Delay Relay
IEC/EN 60947-5-1

JDQ Check 10

Test date: Please see the packing

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CHINT

CHINT ELECTRICS

JSS48A Series Time Delay Relay User Instruction

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