



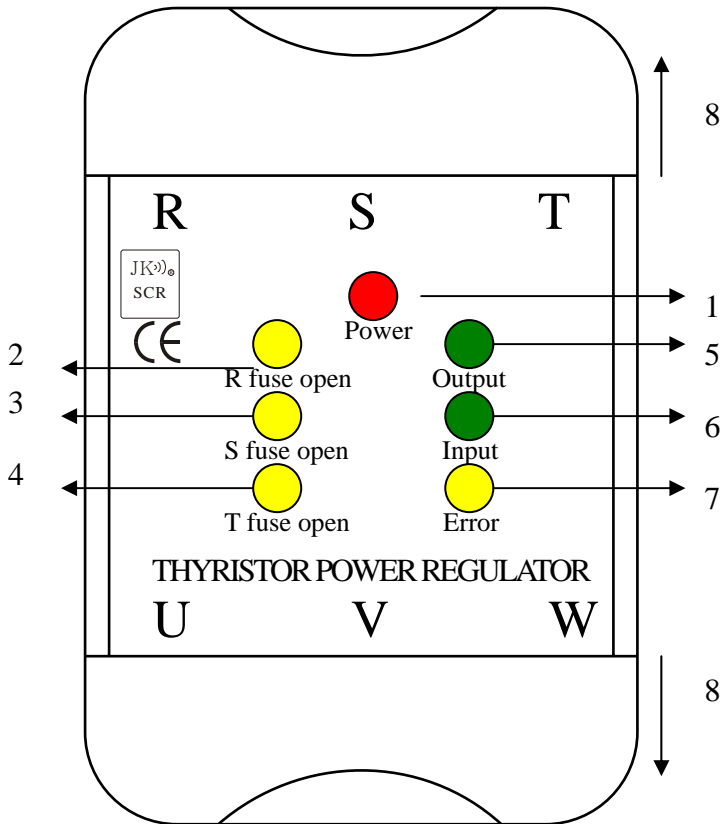
# Thyristor Switched Capacitors Modules. Hand Book



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# I. The function of the faceplate is explained.



1. Auxiliary voltage indicator lamp.
2. R phase blew the fuse indicator lamp.
3. S phase blew the fuse indicator lamp.
4. T phase blew the fuse indicator lamp.
5. Output indicator lamp.
6. Input indicator lamp.
7. Error indicator lamp.
8. The top cover and below cover can be according to the instruction press and push open.

1-1. Faceplate LED indicator lamp explain.

1-1-1. Power: Assistance voltage lamp (AC1 , AC2) " Power " bright light when input voltage 220VAC 50/60Hz.

1-1-2. R fuse open: " R fuse open " bright light when R phase fuse blew.

1-1-3. S fuse open: " S fuse open " bright light when S phase fuse blew.

1-1-4. T fuse open: " T fuse open " bright light when T phase fuse blew.

1-1-5. Output: The bright light when **Thyristor Switched Capacitors Modules** is output.

1-1-6. Input: The bright light when **Thyristor Switched Capacitors Modules** is signal inputting.

1-1-7. Error: Unusual indicator lamp, fuse blew or temperature of the products is too high.

1-1-8. R、S、T three-phase LED indicator lamp and bright light at the same time of ERROR indicator lamp, the reason three-phase current has not been passed.( Or a phase has no power).



Q & A

Q: If "Error" indicator lamp bright light, How to reset.

A: Please solve the reason of the unusual problem first, and then do action of the reset. Close assistance voltage for 10 seconds, and then transmit the voltage and can finish reset action again.

## II. Function introduction.

- 1.Small size, good cooling, this controller is tally with CE international quality standard confirmation. EN61000-6-2 、 EN61000-6-4 、 IEC60158-2.
  - 2.The return circuit holds the control component with zero point input, Protect capacitor when the zero point of the overvoltage is input, can prevent from because inrush voltage and electric current to come into being cause the arc light to damage and avoid transient to come into being.
  - 3.There is not transient that closed the electric current, there is no contact to wear and tear, increase the service life of the equipment.
  - 4.Three kinds of input control the signal:
    - (1) AC control, 220VAC  $\pm 20\%$
    - (2) DC control, 12~24VDC
    - (3) The contact controlling.
  - 5.Every phase breaks and checks with the notice: R 、 S 、 T three LED indicator lamps and bright lights at the same time of ERROR indicator lamp, the reason three-phase current has not been passed.
- P.S.: If fused two-phase fuses at the same time, R 、 S 、 T three-phase LED indicator lamp and bright light at the same time of ERROR indicator lamp, the reason three-phase current has not been passed.
- 6.Load short circuit protecting: Implicit " High speed fuse reserved for the use of semiconductor " of products needn't worry about capacitor short circuit.
  - 7.Intelligent cooling fan: Having temperature control, 55°C works in the temperature of the heat sink , 45°C stops, can improve fan 2~3 times of service life.

8. This product heat sink has exceeded to warm protector; The temperature of the products is too high, the system will be transformed into the state of protecting automatically, will break away from the power.
9. Unusual output contact: products to offer unusual output contact; The products are exceeded to warm or the fuse fused, offer one group NO · COM · NC unusual output contact to control and use for the system promptly.  
Capacity of contact 240VAC/10A.

### III. General characteristic.

3-1. Main power voltage: 3  $\phi$  220VAC, 380VAC, 440VAC, 480VAC  $\pm 10\%$ .

3-2. Auxiliary voltage: 220 VAC  $\pm 15\%$  , 50/60 Hz.

3-3. Rated current: 35A, 50A, 60A, 80A, 100A, 125A, 160A, 180A, 225A, 250A, 300A, 350A.

3-4. Input control signal: AC control, 220VAC  $\pm 20\%$ , DC control, 12~24VDC, The contact controlling.

3-5. Work frequency: 47 ~ 63 Hz.

3-6. Used environment:  $-10^{\circ}\text{C} \sim 50^{\circ}\text{C}$ , humidity under 90 % RH.

“Annotate 1”



Annotate 1: Working temperature of environment:  $-10^{\circ}\text{C} \sim 50^{\circ}\text{C}$ .

Relative humidity: 93% RH without dew.

3-7. Working temperature of environment:  $-10^{\circ}\text{C} \sim 50^{\circ}\text{C}$ .

3-8. Output type: Zero crossing.

## IV. Specification.

Auxiliary voltage.	Main power voltage.	Rated current.	Model(3 $\phi$ 3W)	L(mm)	W(mm)	H(mm)
220VAC	208~240VAC	35A	JK3PSZT-22035	220	142	154
		50A	JK3PSZT-22050	243	142	154
		60A	JK3PSZT-22060	243	142	154
		80A	JK3PSZT-22080	243	142	154
		100A	JK3PSZT-22100	243	142	154
		125A	JK3PSZT-22125	305	141	172
		160A	JK3PSZT-22160	305	141	172
		180A	JK3PSZT-22180	355	141	172
		225A	JK3PSZT-22225	355	141	172
		250A	JK3PSZT-22250	400	263	210
		300A	JK3PSZT-22300	400	263	210
		350A	JK3PSZT-22350	527	306	246
		400A	JK3PSZT-22400	527	306	246
220VAC	380~480VAC	35A	JK3PSZT-48035	220	142	154
		50A	JK3PSZT-48050	243	142	154
		60A	JK3PSZT-48060	243	142	154
		80A	JK3PSZT-48080	243	142	154
		100A	JK3PSZT-48100	243	142	154
		125A	JK3PSZT-48125	305	141	172
		160A	JK3PSZT-48160	305	141	172
		180A	JK3PSZT-48180	355	141	172
		225A	JK3PSZT-48225	355	141	172
		250A	JK3PSZT-48250	400	263	210
		300A	JK3PSZT-48300	400	263	210
		350A	JK3PSZT-48350	527	306	246
		400A	JK3PSZT-48400	527	306	246

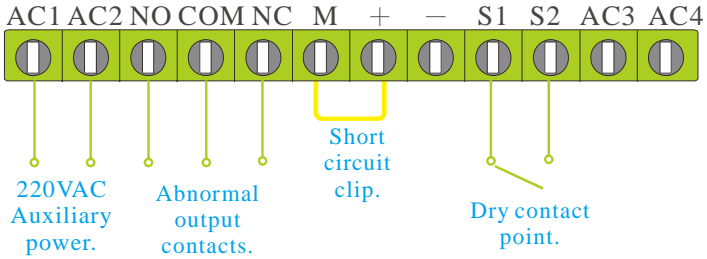


## V. Install the precautions.

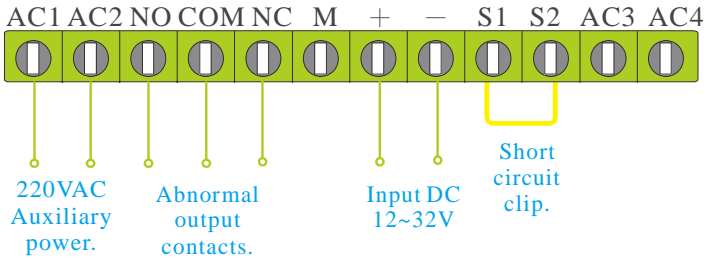
- 5-1. Ventilation and Cooling: **Thyristor Switched Capacitors Modules** must be placed at the place with good ventilation, and the temperature of the place can't be higher than 45°C, and lower than -10°C.
- 5-2. **Thyristor Switched Capacitors Modules** itself will cause the heat, so, please install in the place with good ventilation, and keep 10 cm from the article next to it for cooling.
- 5-3. When install in the control box, please make a window on up side and down side in order to cool air in from down side, and hot air out from up side, and please place the filter net on up side to prevent the dust or waste in, and clean the filter net regularly to avoid the filter net block.
- 5-4. Add the fans if the temperature in the box over 45°C to enhance air convection, keep the temperature in the box lower than 45°C for the best running condition.
- 5-5. Please set signal of machine for keeping normal operating before this **Thyristor Switched Capacitors Modules** have main power.

# VI. Control the wiring diagram.

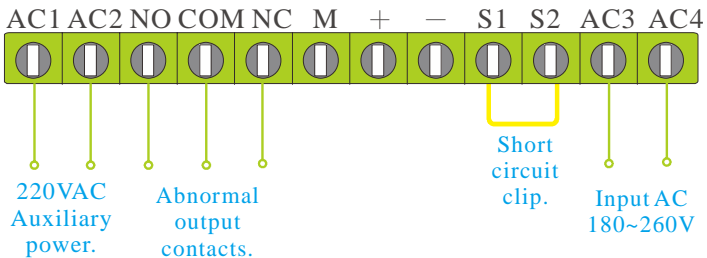
## 1. Dry contact by relay control.



## 2. DC control.



## 3. AC control.



1. AC1、AC2: Input auxiliary voltage 220VAC $\pm$ 15% 50~60Hz.
2. NO、COM、NC: Unusual output contact, capacity of contact 240VAC/10A.
3. M: Output DC 12V/100mA.
4. S1、S2: Inputting the contact in order to start the contact, there can't be voltage in this contact.
5. AC3、AC4: Input AC to control the voltage of the signal 180~260VAC.

## VII. Environment characteristic.

Operation position	Vertical.
Relative humidity	Over 45% , 93% RH without dew.
Working temperature of Environment	-10°C ~ under 45°C
Frequency	50 Hz or 60 Hz , manual-adjust
3 $\phi$ Power , Voltage	220 VAC $\pm$ 10% 380 VAC $\pm$ 10% 480 VAC $\pm$ 10%
Vibration	Under 0.5G
Height	Under 1,000m

## VIII. Guarantee of product.



We guarantee that our products are conformed to each specification list on the manual; the product can be operating normally with suitable and proper installation.

Warranty : one year from the date of production. We shall offer free maintenance if our product has any flaw certainly within warranty period. The warranty doesn't include error installation, man-made damage, and the damage caused by irresistible natural disasters.

**This guarantee offer repair guarantee of the product only, not includes other damage caused by any direct or indirect accidents.**

Model No. :	<input type="checkbox"/> JK3PSZT <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
	<input type="checkbox"/> JK3PSZT <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Serial No. :	S/N:		
Date of Installation:	Month:	Date:	Year:
Agent:			



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