

INSTRUCTION MANUAL

SOLID STATE RELAY  
SST SERIES

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**RKc<sup>®</sup> RKC INSTRUMENT INC.**

TOKYO JAPAN

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# INSTRUCTION MANUAL

## Three phase solid state relay SST SERIES

Thank you very much for your purchasing SST SERIES SSR(three phase solid state relay).

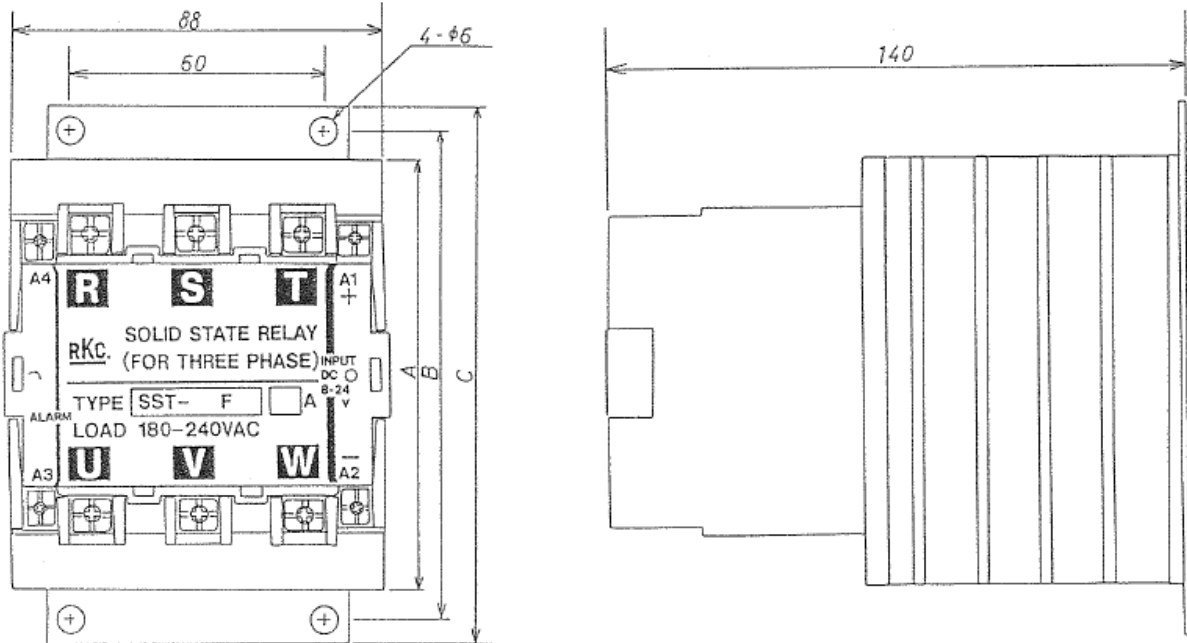
After receipt of the SSR check its (or their) appearance and function and confirm that any damage does not exist in it (or them).

Arrange that this manual will be handed to persons in charge of the SSR.

### 1. MODEL CODE

Model	Model code	Contents
SST	-	Three phase solid state relay
Rated current	10	10A
	20	Max. load current 20A
	30	30A
Fin	F	With Fin
Function	N	None
	A	Element break detect function

### 2. INSULATION AND DIMENSIONAL DETAILS



Unit: mm

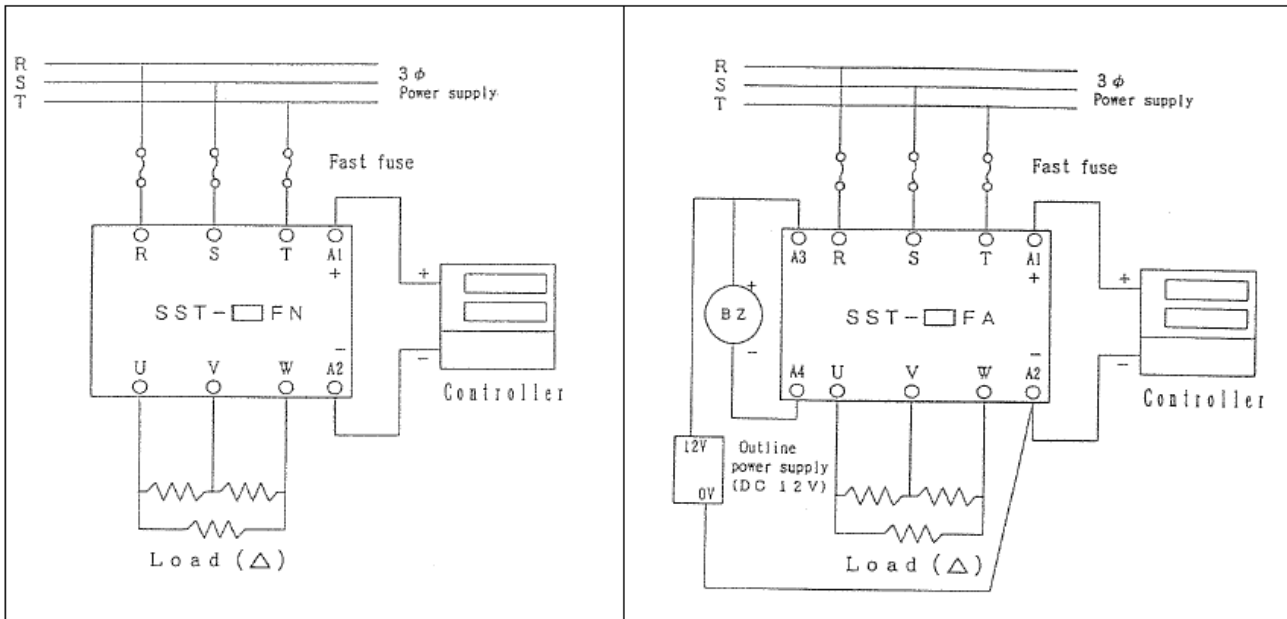
	A	B	C
SST-10F□	80	92	104
SST-20F□	100	113	125
SST-30F□	145	158	170

\* Caution for installation:

1. Mount SRR in a fully ventilated place.
2. When ambient temperature of mounting place is more than 40°C, limit current refer to temperature quality.
3. Load current should be within be current rating.

### 3. EXTERNAL WIRING

#### \* Element break detect function



#### \* Caution for wiring

Recommended tightening torque of terminal screws:

Terminal A1 to A4: 0.5N·m [5kgf·cm]

Terminal R, S, T, U, V and W: 1.2N·m [12kgf·cm]

#### \* Note

This solid state relays for three phase receive control signal (DC voltage pulse input; Low(OFF):0V, High(ON):8 to 24V) and switch on and off the three phase load.

Be sure to check the input impedance and the control capacity (load current) of this unit before operation so that the solid state relay receives the control signal properly.

### 4. Option function

#### Element break detect function

The following two alarms are available.

(1) When input signal is ON and output is OFF.

(Element breakdown)

(2) When input signal is OFF and output is ON.

(Element melt)

Caution : When input signal is OFF and load power is not supplied, alarm output is ON.

Output rate : Open collector 12V, 50mA

Power supply rated : 12V, 1A

\* Element break detect function type SSR is not possible three SSRs parallel connection per RKC controller 1 unit.

## 5. Specification

Max.current rating	10A	20A	30A
Min.current rating	AC100mA		
Non repeatedly max. current	160A 60HZ (1 cycle)	250A 60HZ (1 cycle)	330A 60HZ (1 cycle)
Input signal	DC voltage Pulse input OFF(LOW): 0V, ON(HIGH): 8-24V		
Input impedance	800 - 2.4Kohm (Within fixed current circuit:13mA)		
Response time	Less than 0.5 cycle of load current		
Input protection	Reverse polarity protection		
Output protection	CR protection circuit and varistor		
ON voltage drop	Less than 2V(RMS) AC200V		
Load voltage	AC180-240V (50/60Hz)		
Ambient temperature	0 - 40C		
Allowable humidity	45 - 85%RH		
Insulating resistance	More than 100Mohm (DC 500V MEGGER)		
Puncture test voltage	AC2000V (1minute)		
Leak current	10mA AC200V		
Isolating method	Photo triac		

### Temperature characteristics

