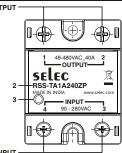
# RSS-TA1A240ZP / RSS-TA1A225ZP / RSS-TA1A240ZPL / RSS-TA1A225ZPL

Operating Instructions



57.50 X 44.50

### PRODUCT DESCRIPTION



- 4 INPUT
- 1 Load output connection screw (M5) terminals
- 2 Indication area for product label or markings
- 3 Control input voltage LED indicator
- 4 Control input connection screw (M4) terminals

#### **SPECIFICATION**

# INPUT

Control Input Voltage
 Nominal input impedance
 Must operate voltage
 Must release voltage
 390 - 280VAC
 11k Ohms
 90VAC
 45VAC

Maximum turn-on time
 Maximum turn-off time
 Zero crossing turn-on
 1½ cycle + 1ms
 1½ cycle + 1ms
 2 rycle + 1ms
 2 rycle + 1ms
 3 rycle + 1ms
 2 rycle + 1ms
 3 rycle + 1ms
 3 rycle + 1ms
 4 rycle + 1ms
 5 rycle + 1ms
 6 rycle + 1ms
 7 rycle + 1ms
 8 rycle + 1ms
 9 rycle + 1ms
 1 rycle +

### **OUTPUT**

 $\begin{array}{ll} \bullet \mbox{ RMS on-state current}(\mathbf{I}_{\tau}) & : \mbox{ 40A / 25A} \\ \bullet \mbox{ Load voltage range} & : \mbox{ 48-480VAC} \\ \bullet \mbox{ Minimum load current} & : \mbox{ 100mA} \\ \end{array}$ 

Off-state leakage current : 20mA max(at 480VAC)

On-state voltage drop

Operating frequency range

1.5V(RMS)max

47 - 63Hz

• Minimum power factor : 0.5

• Repetitive peak Off-state Non-repetitive peak On-state Current( $I_{\rm TSM}$ )

For  $I_T = 40A$  : 400A • For  $I_T = 25A$  : 250A

• Rate of rise of Off-state

Voltage( $\frac{dV}{dt}$ ) : 500 V/µs / 1000 V/µs

### General specification

Dielectric strength : 4000VAC,50/60Hz for 1 min

Ambient temperature : Operating : - 30 °C to 80 °C
 Storage : - 30 °C to 100 °C

Ambient humidity : 93% non-condensing

Pollution degree : II
 Installation actorior : III

Installation categoryDimensions(lxwxh)mm57.5 x 44.5 x 27.3

Mounting typeProduct WeightPanelApprox 87 g

Heat sink must be used when SSR has to switch a load current above 4A

ORDER CODE INFORMATION				
Product	Max Load Current	Max Load Voltage	Certification	
RSS-TA1A240ZP	40A	48-480VAC	_	
RSS-TA1A240ZPL	404		_	
RSS-TA1A225ZP	25A	48-480VAC	_	
RSS-TA1A225ZPL			_	

	Repetitive peak Off-state Voltage	Application
RSS-TA1A240ZP	800V	Resistive load and
RSS-TA1A225ZP		heater control.
RSS-TA1A240ZPL	1200V	Inductive load, Resistive load and
RSS-TA1A225ZPL	12000	heater control.

### WARNING

# MARNING:

- Minor human hazard by electric shock and burns occasionally occur.
- Heat sink must be connected to earth in the end product.

### **CAUTION**

# **A** CAUTION:

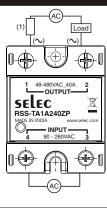
- Do not touch the SSR or the heat sink either while the power supply is ON or immediately after the power is turned OFF. The SSR and the heat sink may be hot.
- Do not touch the SSR main circuit terminals immediately after the power is turned Off. The internal snubber circuit is charged.
- SSR may occasionally rupture in case of short circuit. To protect against short-circuit accident, install a protective device, such as a quick-burning fuse or a circuit breaker.

### **A** SAFETY PRECAUTIONS

### Mounting

- Mount SSR in the orientation such that the heat sink fins are always positioned in vertical orientation in order to ensure proper heat ventilation & do not obstruct air flow to the SSR heat sink. Air convection for SSR is necessary.
- If a material with high thermal resistance is used for heat sink,heat generated by SSR may occasionally cause fire or burning.
- When installing SSR directly into a control panel such that the panel can be used as a heat sink, use a panel material with low thermal resistance such as Aluminium / Steel.
- Tighten the SSR screws securely. Loose terminals generate abnormal heat which may result in fire.

### **WIRING**



### **FUSE INFORMATION**

Product	(1) Suitable Fuse	
RSS-TA1A240ZP		
RSS-TA1A240ZPL	45A Class J	
RSS-TA1A225ZP	30A Class J	
RSS-TA1A225ZPL	00/1 01833 0	

### **WIRING GUIDELINES**

- Ensure the use of proper cable sizes. Abnormal heating of wire may cause burning.
- Do not use wire with broken sheaths. It may cause electric shock.
- Use cable with crimp terminals of appropriate size for terminations.
- Heat generated by incorrect terminations may result in fire.
- Loose terminals generate abnormal heat which may result in fire.
- Tighten screws to the specified torque. Re-tighten after 48 hours to minimize wire cold flow. Re-torque every 3 to 6 months.
- When tightening terminal screws ensure no nonconductive foreign matter is caught in screw.
- Be sure to conduct wiring with power supply turned off.
   Touching the terminals when they are charged may occasionally result in minor electric shock.

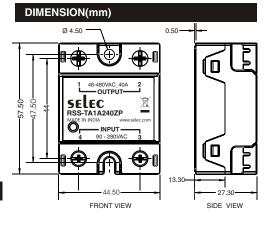
### **TIGHTENING TORQUE**

SCREW SIZE	TIGHTENING TORQUE	
M4 screws(Control Input)	1.2N-m	
M5 screws (Load Output)	2.0N-m	

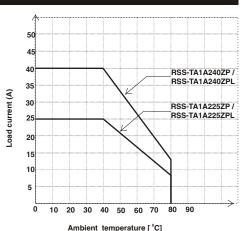
## USAGE

- Always use SSR within its rated specifications, otherwise malfunction, damage or fire may result.
- Select a load within the rated range.Inappropriate load may cause misoperation, trouble or burning.
- Select the power supply within the rated frequency range.
   Inappropriate power frequency may cause misoperation, trouble or burning.

 Use of SSR in domestic environments may cause radio interference, in this case the user may be required to employ additional mitigation methods.







Note.: Heat sink used with a radiation efficiency of 1 °C/W

(Specifications are subject to change, since development is a continuous process.)

### Selec Controls Pvt. Ltd., India

Factory Address:

EL-27/1, Electronic Zone, TTC Industrial Area, MIDC, Mahape, Navi Mumbai - 400 710, INDIA.

Tel. No.: +91-22-41 418 468/41 418 452

Fax No.:+91-22-28471733 | Toll free: 1800 227 353 Website: www.selec.com | Email: sales@selec.com

Doc. name: OP INST RSS-TA1A240ZP OP2044-V01 (Page 1 of 1)