

# Solid State Relay

## SA-500 Series



### ■ Features

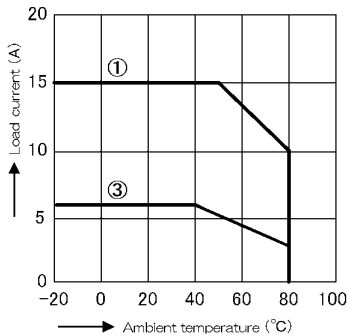
- Keeps the cost down for customized systems.
- Built-in 'varistor' for absorbing external surges
- Easily viewable LED status indicator
- Highly insulated: Dielectric strength between input and output: 4000 V
- Input supply voltage: 4 to 32 V DC
- Versatile! Selectable from 3 types (Max load current: 15 A, 25 A, 40 A)
- Output side terminal cover is standard. (Input side is optional.)

### ■ Standard Specifications

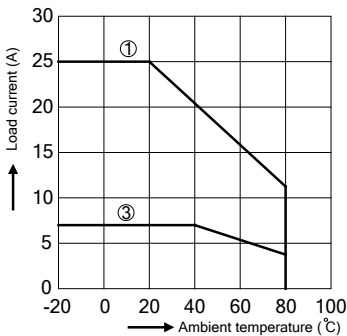
Rating (At 20°C of ambient temperature)	Model		SA-515-Z	SA-525-Z	SA-540-Z
	Input side	Control voltage	4 to 32 V DC		
		Input current	20 mA or less		
		Recovery voltage	1 V or more		
	Output side	Maximum load current	15 A	25 A	40 A
		Load voltage	75 to 250 V AC 45 to 65 Hz		
		Surge-on current (*1)	150 A	250 A	400 A
		"OFF-state" leakage current	10 mA or less (60 Hz)		
"ON-state" voltage drop		1.6 V or less (When applying maximum load)			
Minimum load current (*2)	100 mA				
(*1): 60 Hz 1 cycle (*2): When load current is lower than (and including) the rated load current, use a dummy resistor so that the load current can become 100 mA or more.					
Dielectric Strength	Between input terminal and output terminal: 4000 V AC for 1 minute Between input terminal and case: 2500 V AC for 1 minute				
Ambient Temperature	-20 to 80°C (No icing, non-condensing)				
Storage Temperature	-25 to 85°C (No icing, non-condensing)				
Control System	Zero voltage switching system				
Dimensions	40 x 58 x 25.5 mm (W x H x D) Applies to all models.				
Weight	Approx. 70 g				
Accessories Included	Instruction manual 1 copy				
Accessories Sold Separately	Terminal cover (TC-SA5), Heat sink: AQP813 (for SA-515-Z, SA-525-Z), AQP815 (for SA-540-Z)				

### ■ Ambient Temperature and Load Current

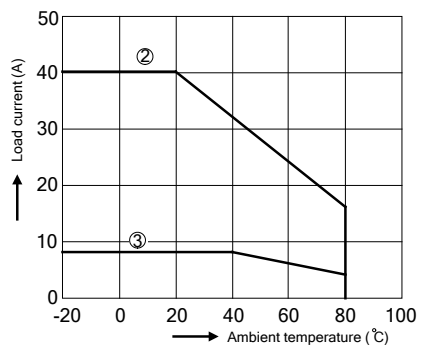
• SA-515-Z



• SA-525-Z



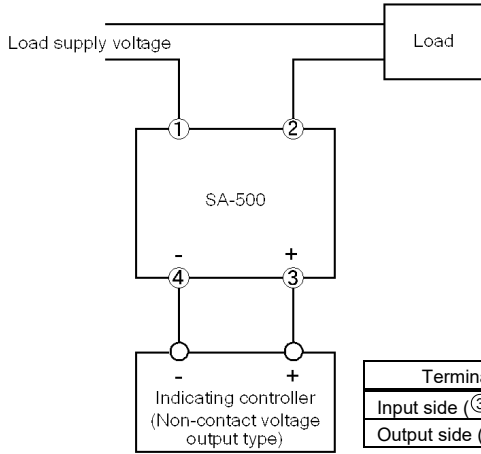
• SA-540-Z



- ① When mounted to the AQP813 type heat sink.
- ② When mounted to the AQP815 type heat sink.
- ③ When using without heat sink.
- The SA-500 can be used at an ambient temperature within the curved line indicated in the above diagrams.

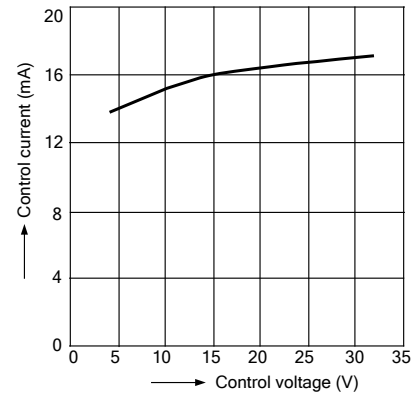
**Shinko**

## ■ Wiring Example



Terminal	Screw	Specified Value
Input side (③, ④)	M3 screw	0.5 N·m
Output side (①, ②)	M4 screw	1.0 N·m

## ■ Characteristics of Control Voltage & Current

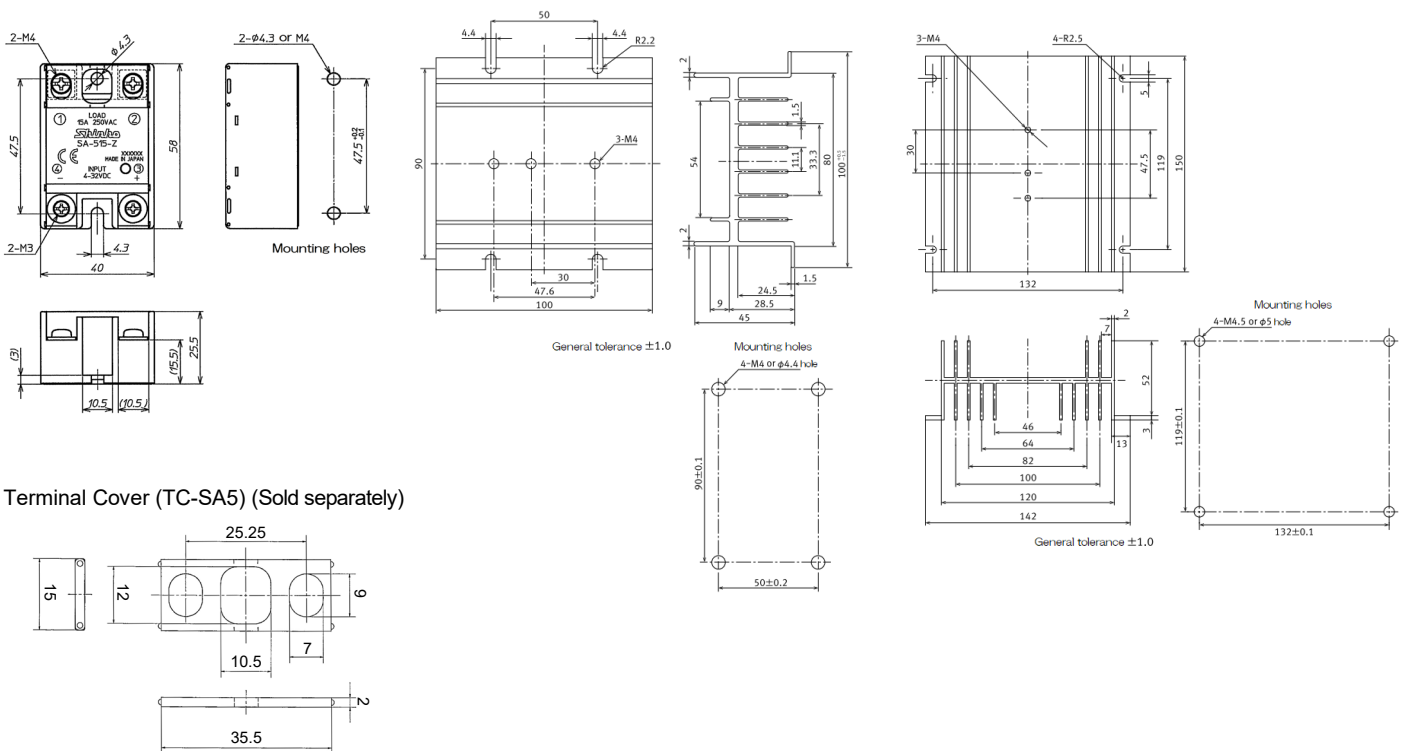



## ■ External Dimensions (Scale: mm)

SA-515-Z, SA-525-Z, SA-540-Z

Heat Sink AQP813(SA-515-Z, SA-525-Z) (Sold separately)

Heat Sink AQP815(SA-540-Z) (Sold separately)





**SAFETY PRECAUTIONS**

- To ensure safe and correct use, thoroughly read and understand the manual before using this instrument.
- This instrument is intended to be used for industrial machinery, machine tools and measuring equipment. Verify correct usage after consulting purpose of use with our agency or main office. (Never use this instrument for medical purposes with which human lives are involved.)
- External protection devices such as protection equipment against excessive temperature rise, etc. must be installed, as malfunction of this product could result in serious damage to the system or injury to personnel. Also proper periodic maintenance is required.
- This instrument must be used under the conditions and environment described in the manual. Shinko Technos Co., Ltd. does not accept liability for any injury, loss of life or damage occurring due to the instrument being used under conditions not otherwise stated in this manual.

**Caution with respect to Export Trade Control Ordinance**

To avoid this instrument from being used as a component in, or as being utilized in the manufacture of weapons of mass destruction (i.e. military applications, military equipment, etc.), please investigate the end users and the final use of this instrument. In the case of resale, ensure that this instrument is not illegally exported.

- This catalog is as of Sep. 2020 and its contents are subject to change without notice.
- Photos used in this catalog do not show unit in operating status.
- If you have any inquiries, please consult us or our agency.

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