

## S1A Series 1Points DC input / AC Load SSR Board

### User's Guide



Thank you for purchasing product of SAMWON ACT.

Please check model of product that you purchase first, and read this manual prior to use it.

#### • Caution for Safety

**⚠ Caution** Case that results in serious damage in human body or equipment, and fire if user handles this equipment wrongly

**⚠ Warning** Case that results in slight damage in human body or equipment, and fire if user handles this equipment wrongly

#### **⚠ Caution**

1. When machining and wiring the mounting hole, do not allow foreign matter such as dust or wire covering to enter the connection terminal.  
Failure to do so may result in damage to the unit, heat, or ignition.
2. Be sure to shut off the power supply from the outside before mounting and wiring.

#### **⚠ Warning**

1. Use within the specified temperature range, ( $-10^{\circ}\text{C} \sim +50^{\circ}\text{C}$ ) Damage to the outer case may occur.
2. Use within the specified rated voltage and rated current range.  
This may result in fire or damage to the product.
3. Read this user's guide which is attached to product, and check product's nominal, specification, wiring diagram and how to handle prior to use.
4. Please make sure to check the diagram and the arrangement of the controller PIN (terminal) when wiring.  
It may be the cause of malfunction or damage of this equipment and user's.

## ● Model Selection

Model	Installation Relay	IO Point(s)	Input Rated voltage	Common		Interface		Dimensions (W * Dmm)	Mounting method
				Input	Output	Input	Output		
S1A-5V-2Z	PANASONIC AQQ22105	1Point (1a * 1)	5V DC	Individual Power (Short bar built)	Individual Com. (Short bar built)	Screw Terminal M3 Screw		10,0 * 67,0	DIN Rail (Channel)
S1A-12V-2Z	PANASONIC AQQ22112		12V DC						
S1A-24V-2Z	PANASONIC AQQ22124		24V DC						

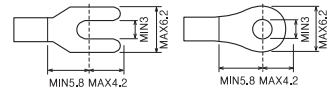
## ● Relay Specification (Ambient temperature 25℃)

Item		AQQ22124		
		AQG22105	AQG22112	AQG22124
Input	Input voltage	4 to 6 V DC	9.6 to 14.4 V DC	19.2~28.8V DC
	Input impedance	Approx. 0.3kΩ	Approx. 0.8kΩ	Approx. 1.6kΩ
	Drop-out voltage, min.	1V		
	Reverse voltage	3V		
Output	Max. load current	2A AC (Max.25℃)		
	Load voltage	75 to 264V AC		
	Frequency	45 to 65 Hz		
	Non-repetitive surge current	30A (In one cycle at 60Hz)		
	Max."OFF-state" leakage current	1.5mA (at 60Hz / 200V AC)		
	Max."ON-state" leakage drop	1.6V (at Max. carrying current)		
	Min. load current	20mA		
Characteristics	Operate time, max.	1/2 cycle of voltage sign wave+1ms		
	Release time, max.	1/2 cycle of voltage sign wave+1ms		
	Breakdown voltage	3000V rms/1min (between input and output)		
	Insulation resistance, min	10Ω (between input and output)		
Country of origin		JAPAN		

## ● Material/Specification

Case	Modified PPO
P.C.B	Epoxy 1.6t / 20z
Applicable wire	AWG22~16 (MAX1.5mm)
Terminal Screw	M3 X 6L
Screw torque	7~8Kgf·cm (0.68~0.78 N·m)
Ambient temperature	-10℃ ~ +50℃ (No condensation)

## ● Applicable crimp terminal

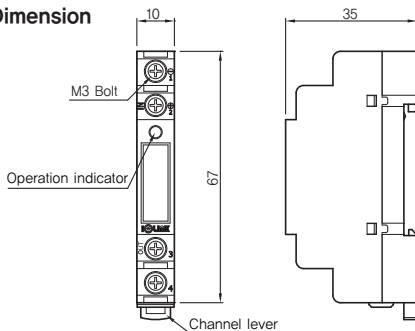


## ● Accessories

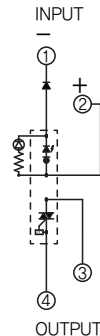
- 4Pole Short bar (When purchasing 10 units, 5 embedded)



## ● Dimension



## ● Diagram



- ※ The above specifications are subject to change without notice.
- ※ Please contact HQ or branch office where you purchased product for A/S of this product or technique.

## Major products

- Relay terminal 1, 2, 4, 6, 8, 16, 32point
- Interface terminal 20, 24, 26, 34, 40, 50, 57, 40 x 2pole
- PLC I/O Connecting cables MITSUBISHI, LSIS, CIMON, OMRON, FUJI, YOKOGAWA, HITACHI, SIEMENS, AB, etc.
- Servo Connecting cables Encoder cable, Power cable, Motion cable / MITSUBISHI, YASKAWA, OMRON, PANASONIC, LSIS, SAMSUNG, etc.
- Wiring harness / Special cable assembly



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