



Temperature detection type SSR SERIES

INSTRUCTION MANUAL

Thank you for purchasing our 'woonyoung' product!

**Be sure to read and use the "Precautions for safety"
before using the product.**

■ Precautions for safety

	Warning	When there is the possibility that serious injury or death can occur when violating directions.
	Caution	When there is the possibility that slight injury or the damage of products can occur when violating directions.

Warning

- When using in instruments that have great influence on lives or properties(for examples: nuclear energy control, medical equipment, vehicles, railroad, aviation, combustion apparatus, entertainment systems or safety device), use after being sure to attach duplex safety device.
 - There may be fire, loss of lives, or property damages.
- Use after being sure to attach to panel, and ground FG or terminal.
 - There may be the possibility of electric shock.
- Don't connect, inspect and repair under the power-up.
 - There may be the possibility of electric shock.
- Don't remodel products except by the company's engineers.
 - There may be the possibility of fire or electric shock.
- Be sure to check input power source options, and connect after checking terminal number when connecting power sources.
 - There may be the possibility of fire.
- Don't touch the terminal of load side immediately after power source is cut off.
 - There may be the possibility of electric shock.

Caution

- When connecting power source and load wiring, pay attention to the thickness of cables according to load current.
 - There may be the danger of fire if the thickness of cables is small for the current.
- Tighten the screw of port by the regulated torque. The regulated torque : M3-0.6~1.2N·m, M5-1.57~2.45N·m
- The main terminal may reach a high temperature during product operation.
 - For maintenance or inspection, please turn off the power and allow sufficient cooling before performing any work.
- Be sure to use within the range of rating and performance.
 - Product's life is shortened, and it may be a cause of troubles.
- Don't use water or organic solvent when cleaning.
 - There may be the possibility of electric shock, fire and product deformation.
- Don't install or operate in places with inflammable gas, explosive gas, direct ray of light, radiation heat, vibration and shock.
 - There may be the possibility of troubles and fire.
- Prevent dust, wiring debris, or other harmful conductors from entering the product interior.
 - There is a risk of malfunction or fire.
- Dispose as industrial waste when discarding products.

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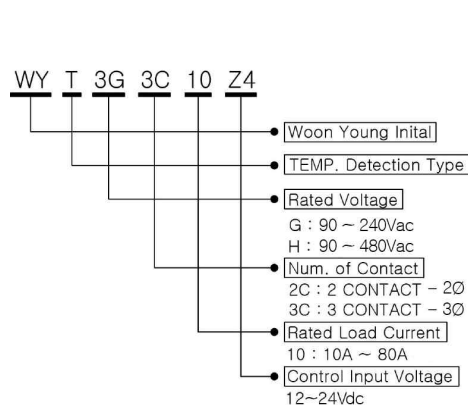
■ Product descriptions

This product consists of a 1P&3P 2 line product and 3P 3 line product and have a total of 28 models, ranging from 10A to 80A. This product is being attached to a dedicated heat sink for each capacity, but can also be purchased as an SSR single product. Unlike conventional SSR, this product requires a separate DC24V AUX power source for the operation of the temperature detection circuit, but if this power is not present, the temperature detection function is stopped, but it operates in the same mode as the conventional SSR.

■ Product Features

- This SSR opens the AL60 alarm contact point by flashing the yellow warning LED when the temperature of its own heat sink reaches 60°C to inform the danger. When the temperature of the heat sink continues to rise and the temperature of the heat sink reaches 80°C due to the lack of separate cooling measures, the SSR stops the output operation while opening the AL80 alarm contact, preventing SSR damage and load burnout accidents. After that, when the power is re-energized after the temperature rise factor is removed, it returns to normal operation.
- As an internal temperature detection device, a semiconductor thermoelectric conversion sensor with excellent straightness and stable high-temperature characteristics is applied, and the two alarm contacts are normal close and NPN open collector methods. This product has a rotary terminal protection cover that does not deviate from the main body, so there is no risk of loss. And the cover is made of a folder with a folding middle, so it does not interfere with wiring by a 6-inch power tip

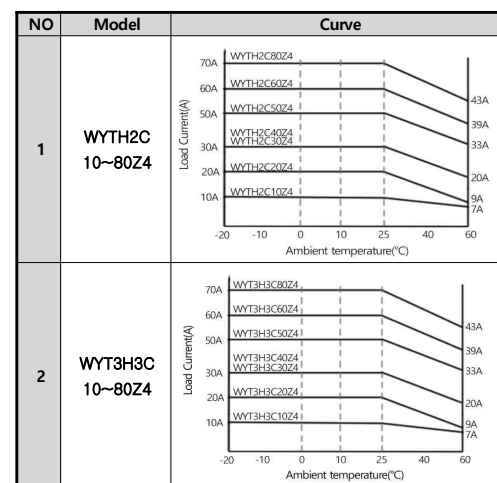
■ Model Name onfiguration



■ Specification

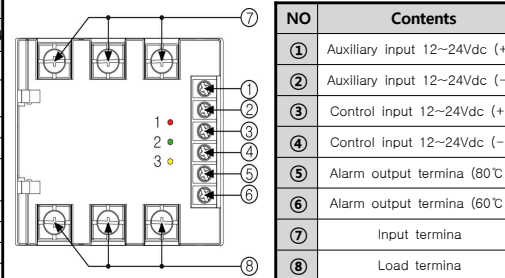
ITEM		WYT2C10~80Z4	WYTH2C10~80Z4
		WYT3G3C10~80Z4	WYT3H3C10~80Z4
Output	Load operating voltage	90~240Vac	90~480Vac
	Peak voltage (non-recurring)	600Vac	1200Vac
	Frequency	50/60Hz	
	Rated load current	10/20/30/40/50/60/80A	
	Surge On Current Flow Rate (60 Hz, Cycles)	168/260/420/420/480/480/575A	
	Voltage Drop	< 1.6V	
	Leakage Current	< 10mA	
Sense	Minimum operating current	1A	
	Temperature sensing circuit voltage	12~24Vdc	
Input	Temperature sensing circuit current	18±3mA (On alarm output: 30±3mA)	
	Rated control circuit voltage	12~24Vdc	
	Rated control circuit current	10±3mA	
Common	Minimum operating voltage	8Vdc	
	Return voltage	6.8Vdc	
	Withstand voltage	2500Vac for 1min	
	Insulation resistance	DC 500V 100MΩ	
	Rated insulation voltage	G : 139Vac for BI,RI / 240Vac for FI H : 277Vac for BI,RI / 480Vac for FI	
	Response Speed	8.3 ± 1ms	
	Type of contro	Zero Cross Type	
	Ambient temperature in use	-20 ~ 60°C	
	Storage ambient temperature	-20 ~ 80°C	
	Conformity specification	IEC 62314	
	Rated impulse tolerance	2.5KV	4KV
	Contamination level of contamination	2	
	Protective structure	IP 10	
	Load Category	LC A	
	Weight (Except for Heatsink, Fan)	2P : 0.3Kg, 3P : 0.32Kg	

■ Load Current Characteristic



* Exceeding the operating temperature or rated current may cause performance degradation or malfunction. Always use the product within the specified limits.

■ Name of each part



■ LED Status Configuration Diagram

NO	Color	LED Status	Display
1	Red	Turn off	Temperature Detection Circuit OFF
		Turn on	Temperature Detection Circuit ON
2	Green	Turn off	SSR OFF
		Turn on	SSR ON
3	Yellow	Turn off	Heat sink temperature : below 60°C
		Blinking	Heat sink temperature : between 60°C and 80°C
		Turn on	Heat sink temperature : over 80°C

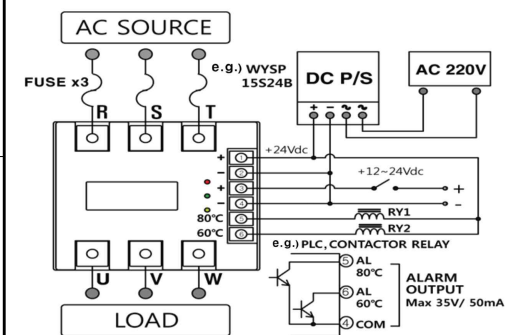
* When the amber LED is lit, the SSR is turned off and power must be re-energized to release.

■ Alarm Output (AL 60, 80)

NO	Status	Alarm Terminal Output
1	Under 60°C	Normal operation
2	Between 60~80°C	Yellow LED Blinking
3	Over 80°C	Yellow LED Turn on

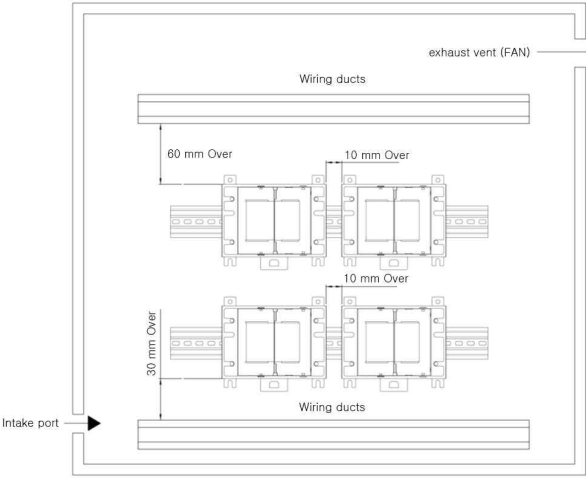
* 3-phase 80A products light yellow LED at 100°C or higher

■ Connection Diagram



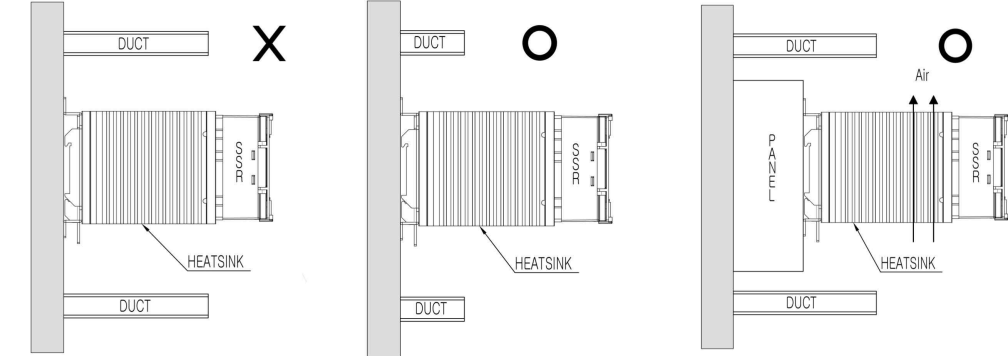
- The (-) terminals of the SSR are internally connected in common, so please take this into account when wiring the circuit.
- There is no fuse installed in the SSR, so please install it externally as shown and then supply power.

■ SSR Installation Interval (Panel Installation Condition)



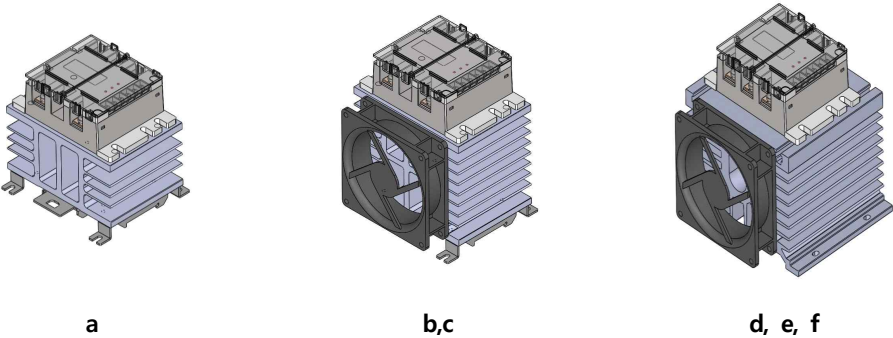
- Install the installation intervals above the appropriate dimensions as shown in the picture on the left.
- Make sure that the wiring duct is not more than half the height of the heat sink to prevent airflow.
- Our SSR guarantees rated capacity under ambient temperature of 25°C or less.
- Use appropriate wiring for the appropriate load to prevent temperature transfer to the interior of the SSR.
- SSR recommends vertical installation. 50% rating is guaranteed when installed horizontally.

■ Relationship between SSR and Duct (Duct Height)

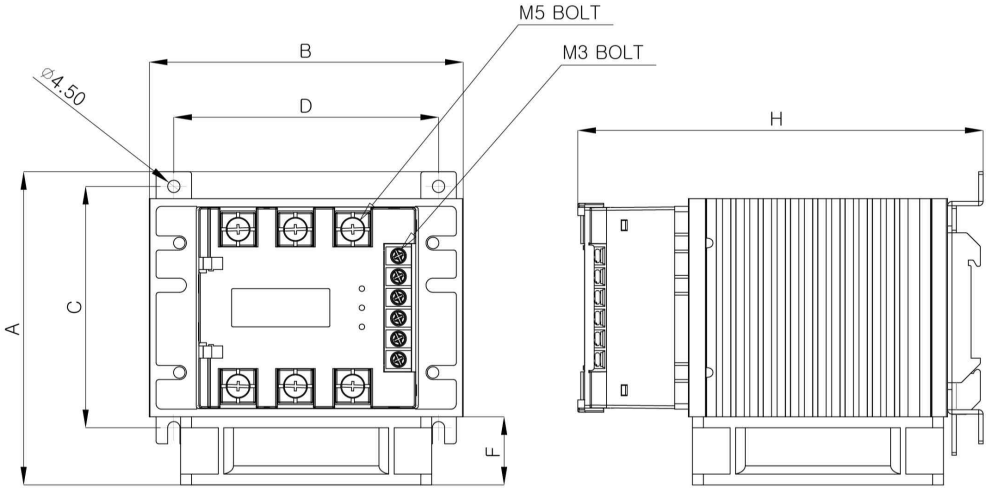


- Ducting the top and bottom of the heat sink reduces heat dissipation efficiency.
- Use a low duct.
- If the duct is high, use a pedestal to raise the SSR position.

■ Model geometry by type



■ Dimension



Dim TYPE	A	B	C	D	F	H	FAN	Model Name
a	99.8	115	88.5	97	–	114	x	WYT(G/H)2C10/20Z4, WYT3(G/H)3C10/20Z4
b	125	115	88.5	97	25	148.5	92×92×25mm	WYT(G/H)2C30/50Z4, WYT3(G/H)3C30/50Z4
c	128	140	88.5	130	38	148.5	92×92×38mm	WYT(G/H)2C40Z4, WYT3(G/H)3C40Z4
d	148	140	60	130	38	139.5	92×92×38mm	WYT(G/H)2C60Z4, WYT3(G/H)3C60Z4
e	148	140	60	130	38	139.5	92×92×38mm	WYT(G/H)2C80Z4
f	178	140	90	130	38	139.5	92×92×38mm	WYT3(G/H)3C80Z4

■ NOTE

Date of Purchase :

Place of Purchase :