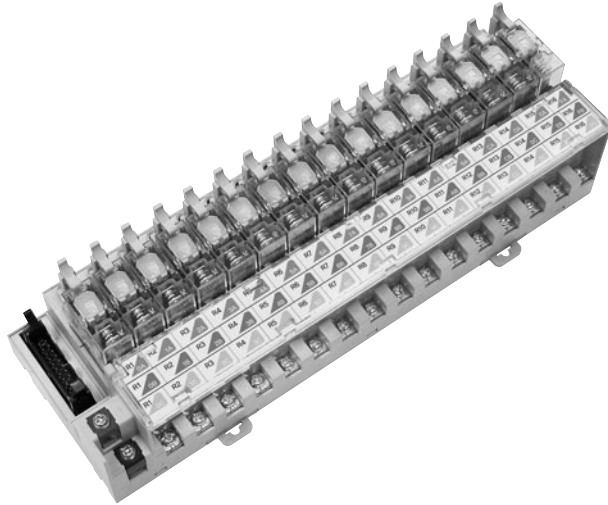


# R16A / R16P Series 16Points High Capacity Relay Terminal

## 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

- Do Not use other voltage except appointed voltage.  
It may be the cause of fire or damage of equipment.
- Use it within nominal voltage and current which are marked on load.  
It may be the cause of fire or damage of equipment.
- Check COMMON polarity of using controller (PLC, etc) first, and then select proper product.  
It may be the cause of fire or damage of this equipment and user's.  
1) COMMON Polarity of controller is '+' (NPN TYPE) : R16A(P)-NC-DC24V  
2) COMMON Polarity of controller is '-' (PNP TYPE) : R16A(P)-PC-DC24V
- Make controller and connection cable between relay boards after checking internal wiring of relay board and PIN (terminal or socket) array of controller if you want to make it for yourself.  
It may be the cause of fire, and malfunction or damage of this equipment and user's.

※ The connection cable for PLC of various makers is provided by us. Please refer to the catalogue or contact Head or branch office if you need more detail models and specifications.

### ⚠ Warning

- Plug or unplug power line and/or connector for signal after making sure to shut off power so as that it is prevented to be damaged or malfunctioned.
- Read this user's guide which is attached to product, and check product's performance, specification, operation pattern, signal, and how to handle prior to use. Keep user's guide please.
- When wiring the terminal block, please tighten it with the specified torque using the appropriate tool. If it is outside of this range torque, it may cause malfunction due to breakage or looseness of tightening surface terminal.
- When replacing a relay, check how to replace the relay on the back of the manual before using it.

### • Model Configuration

Model	Installation Relay	IO Point(s)	Coil Rate voltage	Common		Interface		Dimensions (W*H*mm)	Mounting method
				Coil	Contact	Coil	Contact		
R16A-NC-DC24V	SAMWON ACT SHN12324	16Point (1c*16)	24V DC	NPN	Individual Com. (4P Short bar built)	Connector MIL-C-83503 20Pin	Screw Terminal 13.5mm Pitch	236.0*77.0	DIN Rail (Channel)
R16A-PC-DC24V				PNP					
R16P-NC-DC24V	OMRON G2R-1-S DC24V	16Point (1c*16)	24V DC	NPN					
R16P-PC-DC24V				PNP					

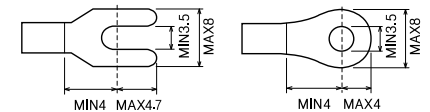
### • SHN/G2R Relay Specification

Item		SHN12324	G2R-1-S DC24V
Contact	Arrangement	1 Form C (1C)	1 Form C (1C)
	Nominal switching capacity (resistive load)	10A 250V AC / 10A 30V DC	10A 250V AC / 10A 30V DC
	Max. switching current	10A	10A
	Max. switching voltage	250V AC / 30V DC	380V AC / 125V DC
	Max. switching power	3,000VA, 360W	2,500VA, 300W
Coil	Nominal voltage	24V DC	24V DC
	Pick-up voltage	75% max.	70% max.
	Drop-out voltage	10% min.	15% min.
	Coil resistance	1,100Ω	1,100Ω
	Nominal operating power	Approx. 530mW	Approx. 530mW
	Max. allowable voltage	110%	170%
Initial breakdown voltage between contact and coil		5,000VAC/1mm	5,000V AC 50/60Hz 1min
Country of origin		CHINA	MALAYSIA

### • Material/Specification

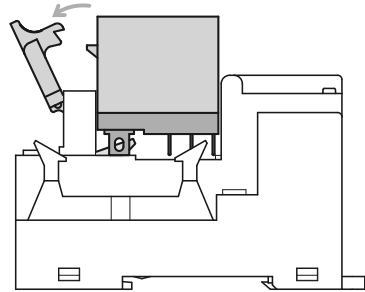
Case		Modified PPO
Protective cover		Polycarbonate
P.C.B	Coil	Epoxy 1,6t
Pin header	Contact	C2680 t0.8 / C2100 t0.3
Applicable wire		AWG22~16 (MAX / 1.5mm <sup>2</sup> )
Terminal Screw		M3.5 X 10L
Screw torque		7~8Kgf • cm (0.68~0.78 N • m)
Ambient temperature		-10°C ~ +50°C (No condensation)

### • Applicable crimp terminal



## • How to replace relay

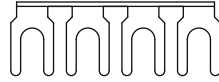
- When you push the lever as direction of an arrow, the relay will be removed.



- The relay will be installed to the socket with the lever tilted.

## • Accessories

- 4Pole Short bar (4ea)

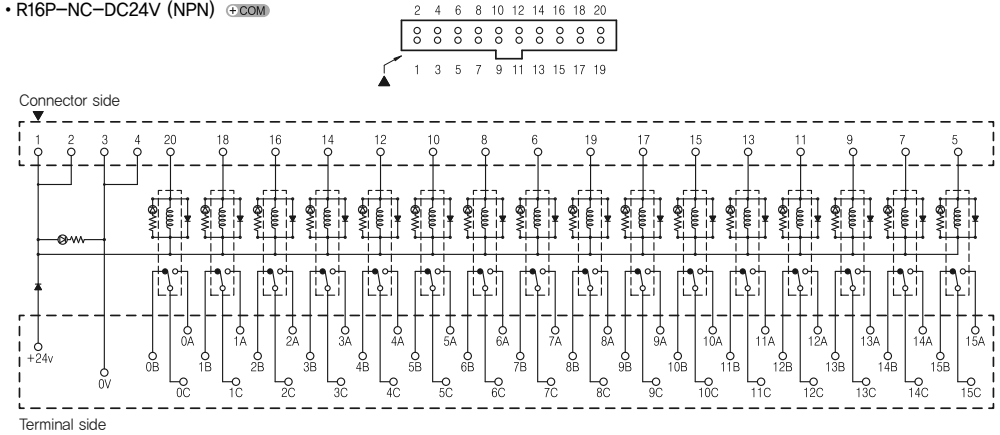


## • Replacement relay

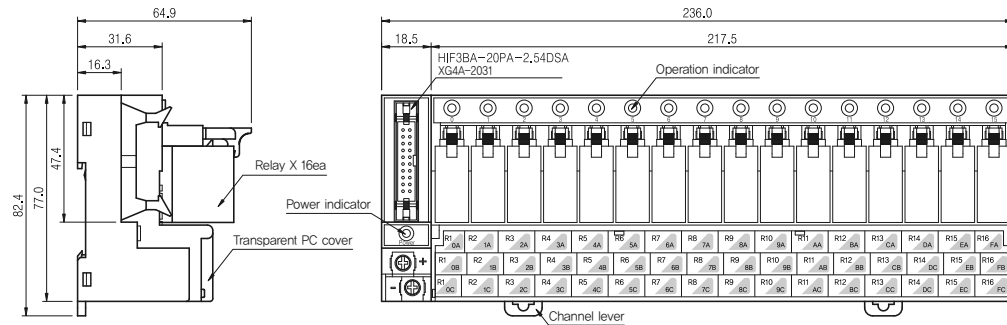
R16A	SHN12324
R16P	G2R-1-S DC24V

## • Wiring Diagram

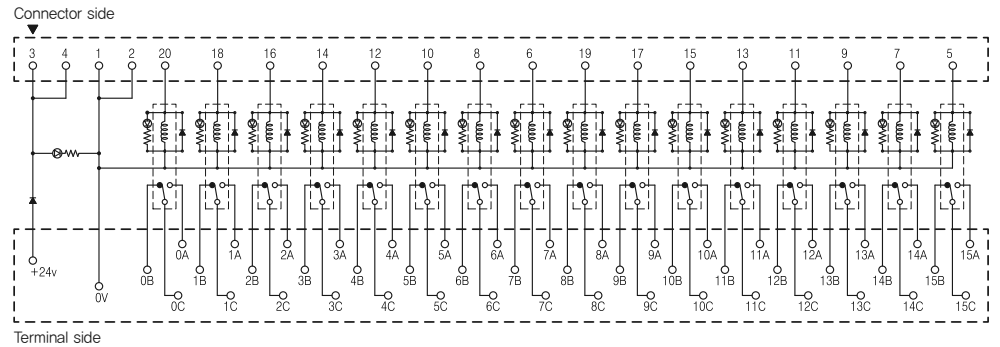
- R16A-NC-DC24V (NPN) (+COM)
- R16P-NC-DC24V (NPN) (+COM)



## • Dimension



- R16A-PC-DC24V (PNP) (-COM)
- R16P-PC-DC24V (PNP) (-COM)



- ※ 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