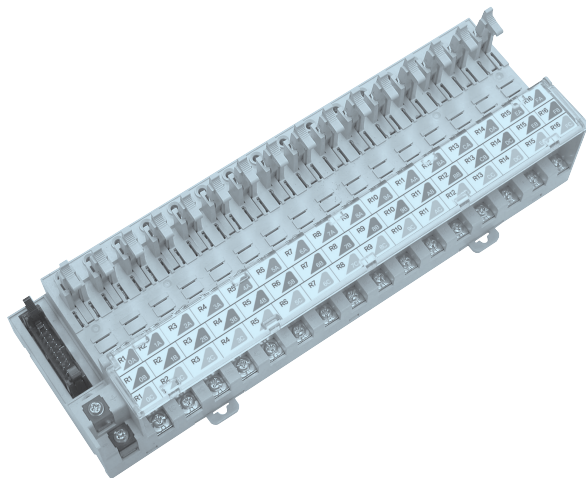# IOLINK
Best Wiring Solution

R16W Series Hybrid 16points Relay Terminal Socket

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. Do Not use other voltage except appointed voltage.
   It may be the cause of fire or damage of equipment.
2. Use it within nominal voltage and current which are marked on load.
   It may be the cause of fire or damage of equipment.
3. 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) : R16W−NC−DC24V
   2) COMMON Polarity of controller is '−' (PNP TYPE) : R16W−PC−DC24V
4. Please make sure to check the internal wiring diagram of the terminal block and the arrangement
   of the controller PIN (terminal) when making the connection cable between the controller (PLC etc.).
   It may be the cause of 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

1. 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.
2. 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.
3. When wiring the terminal block, please tighten it with the 0.68～0.78N · m 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.
4. When replacing a relay, check how to replace the relay on the back of the manual before using it.

● Model Configuration

| Model | IO Point(s) | Coil Rate voltage | Common | | Interface | | Dimensions (W*Hmm) | Mounting method |
			Coil	Contact	Coil	Contact		
R16W−NC−DC24VC	16Point (1c∗16)	24V DC	NPN ⊕COM	Individual Com. (4P Short bar built)	Connector MIL−C− 83503 20Pin	Screw Terminal 13.5㎜ Pitch	236 ∗ 77	DIN Rail (Channel)
R16W−PC−DC24VC			PNP ⊖COM					

● Rating/Specification

Rated current		10A
Dielectric strength	Between connector and terminal	AC 4,000V 60㎐ / 1min
	Between output terminal pitch	AC 2,000V 60㎐ / 1min
	Between connectors	AC 250V 60㎐ / 1min
Insulation resistance		1,000MΩ(500V)
Coil surge suppression device		Diode 1A/400V
Cross connection protecting device		Diode 1A/400V
Applicable wire		1.65㎟ / MAX
Terminal Screw		M3.5 X 10L
Screw torque		7～8Kgf · ㎝ (0.68～0.78N · m)
Ambient temperature		−10℃ ～ +50℃ (No condensation)

● Material/Specification

Case		Modified PPO
Protective cover		Polycarbonate
P.C.B	Coil	Epoxy 1.6t
Pin header	Contact	C2680 t0.8 / C2100 t0.4

● Applicable Relay

Division	MODEL	Input voltage	Rated switching capacity
Noncontact PhotoMOS Relay	CM−Z202D	5～30V DC	Below 2.7A 60V
Noncontact Solid State Relay	CM−G22124	19.2～28.8V DC	2.0A 75～264V AC
Machinery Contact Relay	AHN12024	24V DC	10A 250V AC
	G2R−1−S DC24V	24V DC	10A 30V DC

※ Relays must be ordered separately.

● How to replace relay

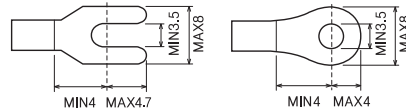· When you push the lever as direction of an arrow, the relay will be removed.
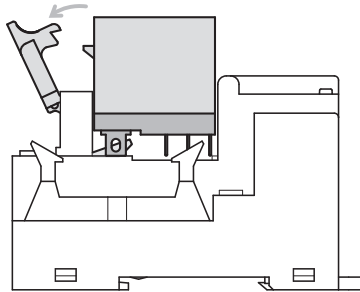
· The relay will be installed to the socket with the lever tilted.
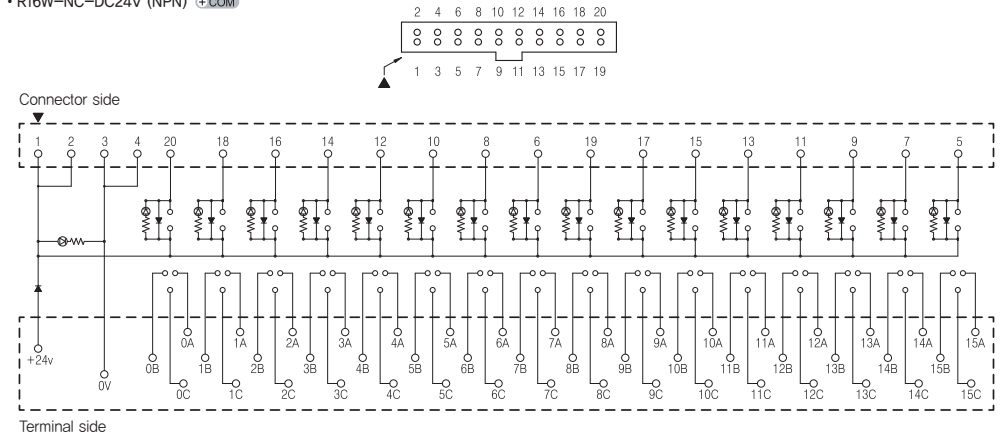
● Accessories

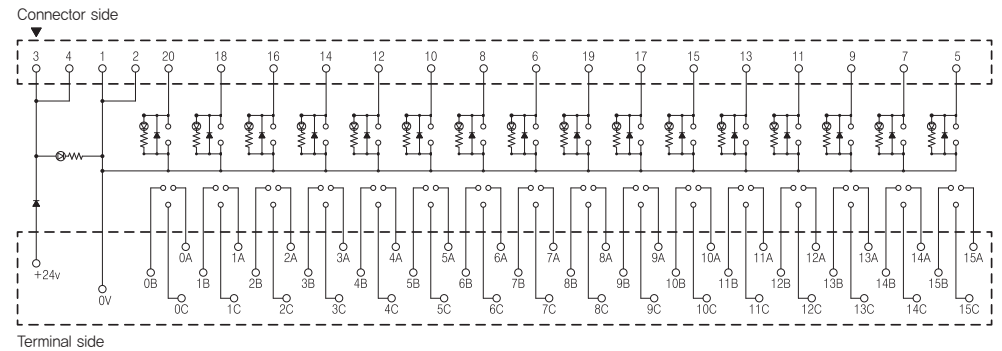· 4Pole Short bar (4ea)

● Applicable crimp terminal

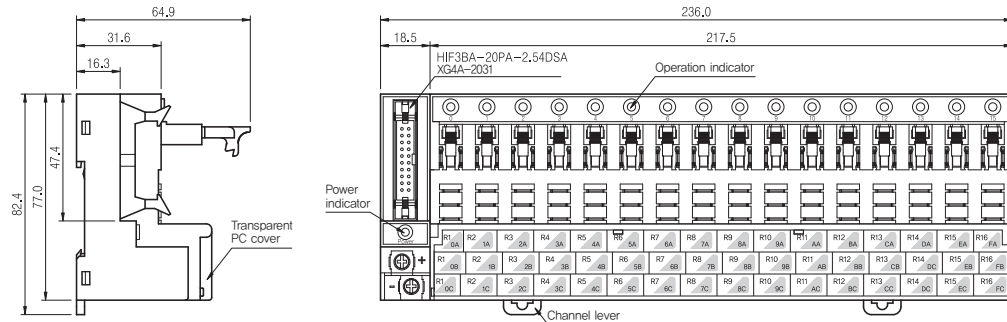
MIN3.5 MAX8   MIN4 MAX4.7

MIN3.5 MAX8   MIN4 MAX4

● Diagram

· R16W-NC-DC24V (NPN) +COM

· R16W-PC-DC24V (PNP) -COM

● Dimension

64.9
31.6
16.3
82.4 77.0 47.4

236.0
18.5 217.5
HIF3BA-20PA-2.54DSA
XG4A-2031
Operation indicator
Power indicator
Transparent PC cover
Channel lever

※ 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