

Please note that please be sure to understand the precautions before ordering.



CE

Certification Number:
ICR Polska/VC/HD230501

RoHS

Certification Number:
TNVROHSRY551

Characteristics

- 4-way normally open relay module, only 32mm wide, suitable for compact installation
- DIN35 standard rail mounting
- Single contact load capacity 5A250VAC/30VDC
- With short connectors, common-positive wiring or common-negative wiring can be performed simply
- Relays with sockets for quick replacement and easy maintenance
- It has a protective cover against electric shock
- 0.2-1.5mm²/24-16AWG wide range wiring capacity

Order specifications

Order number	RY1H4-G5NB/DC24
Packing Units	10 pcs
Minimum order quantity	10 pcs
Unit weight (without relay)	about 65 g
Unit weight (including relay)	about 82 g
Origin	WZ

Example of an order mark

RY 1H 4 - G5NB / DC24 - (XXX)

① ② ③ ④ ⑤ ⑥

- ① RY: Corporate Code
- ② Output channel type 1H: A set of normally open
- ③ The number of control channels is 4:4 channels
- ④ G5NB = Omron Relay G5NB-A1-E
- ⑤ Coil voltage: refer to the coil electrical parameter table
- ⑥ Customer Code: Any letter or combination of letters

Note:

1. When ordering, refer to the coil specification table for relay voltage selection;
2. The special requirements of customers will be identified in the form of characteristic numbers after being reviewed by our technical department.

Inputs

Rated voltage	24VDC
Single-channel operating power consumption	< 250mW
Wiring polarity requirements	Yes (please note the wiring sequence)
Wiring	Fence type screw terminals
Controls the number of channels	4

Output

Relay model	OMRON G5NB-1A-E (see Annex 1)
Contact type	1NO
Rated voltage	250VAC/30VDC
Current rating	5A/way
Wiring	Fence type screw terminals
Minimum Load ⁽¹⁾	32mW
Maximum switching frequency	30 times/min (@1A-5A)
	60 times/min (@0.5A-1A)
	300 times/min (@ < 0.5A)

Other parameters

Operating temperature	-40°C~80°C	
Storage temperature	-40°C~80°C	
Vibration	10~55~10Hz Single amplitude 0.75mm (double amplitude 1.5mm)	
	10~55~10Hz Single amplitude 0.75mm (double amplitude 1.5mm)	
Impact	1000m/s ²	
Standards Compliance	IEC61984	
Creepage distance	Between output channels	≥1.5mm
	Between the input and output channels	≥3mm
Air gaps	Between output channels	≥1.5mm
	Between the input and output channels	≥3mm
Overvoltage (1.2/50us)	Between output channels	2.5kV
	Between the input and output channels	2.5kV

Installation and maintenance

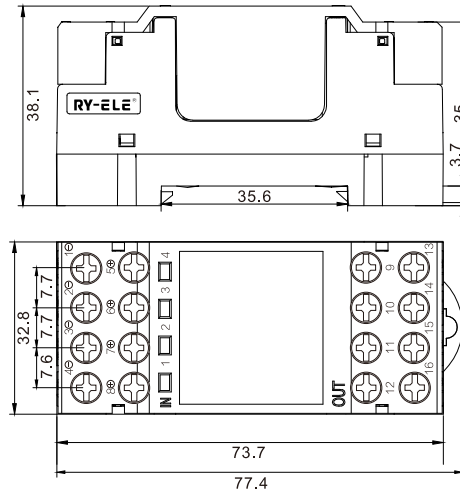
Installation	DIN35 rail mounting
Relay replacement	Replaceable
Comes with a short splice	Distribution (Part No.: RY1H4-H)

Note:

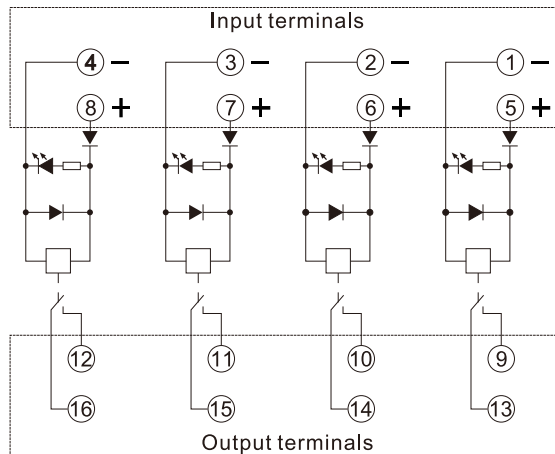
- Under the premise of satisfying the minimum load, the load voltage is ≥5V, and the load current is ≥1mA

Exterior Dimension Drawing

Unit: mm



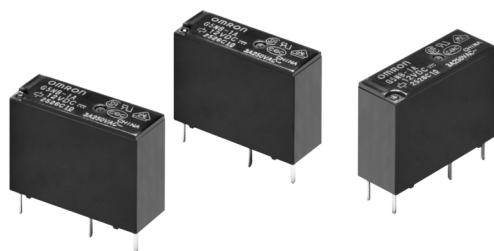
Wiring diagram



Wiring Instructions:

1. Input: 1, 2, 3, 4 are the negative terminal points of each input; 5, 6, 7, and 8 points are divided into positive terminal points for each input
2. Output: 9, 10, 11, 12 are the normally open points of each output; 13, 14, 15, and 16 are the moving contacts of each output

Appendix 1: Relay parameter table (Omron G5NB-1A-E)



Characteristics

- 5A Contact Switching Capability
- The Medium Between The Coil and The Contact is 4kV
- Ultra-thin and Ultra-small
- High Sensitivity (200mW) with High-power Electromagnetic Circuit
- 1-pole 3A/5A Opening and Closing Miniature Relay with 10kV Shock Voltage
- Mechanical Life More Than 5 Million Times
- Sockets are Available

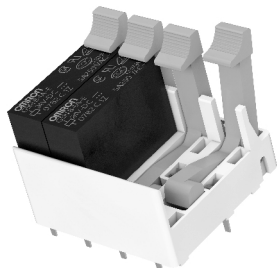
Contact parameters

Contact form	1H
Contact resistance	100mΩ or less
Contact material	Ag alloy (no Cd material)
Contact load	5A 250VAC/30VDC
Maximum switching voltage	250VAC/30VDC
Maximum switching current	5A
Power consumption	200mW
Mechanical durability	More than 5 million times
Electrical durability	More than 100,000 times AC250V, 5A
	More than 200,000 times DC30V, 3A

Performance parameters

Rated coil power	90W
Insulation resistance	1000mΩ or more
The medium is pressure-resistant	AC4000V between coil and contact 50/60Hz for 1min
	AC750V 50/60Hz 1min between contacts at the same level
Flammability category under UI94	V-0

Appendix 2: PCB Solder Foot Holder (G5NB-A2)



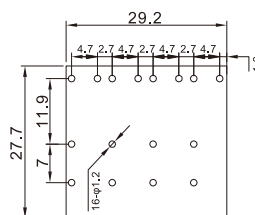
Characteristics

- Four-for-one
- Phosphor copper contact piece
- Pull-out pliers, fixed with locking function
- PCB soldering use

Exterior Dimension Drawing

PCB cut-out dimension drawing

Unit: mm



Appendix 3: Supporting Short Splice (RY1H4-H)

Exterior Dimension Drawing

