

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



#### 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
- PT push-in wiring

### Order specifications

Order number	RY1H4-16-T/DC24
Packing Units	10 pcs
Minimum order quantity	10 pcs
Unit weight (without relay)	about 81 g
Unit weight (including relay)	about 91 g
Origin	WZ

### Example of an order mark

<u>RY</u> <u>1H</u> <u>4</u> - <u>16</u> <u>T</u> / <u>DC24</u> - <u>(XXX)</u> 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 Input and output points 16: 16 points in total
- (5) Wiring method T: PT push-in wiring
- ® Coil voltage: refer to the coil electrical parameter table
- ⑦ 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	PT push-in wiring
Controls the number of channels	4

## Output

Relay model	Panasonic APAN3124 (see Annex 1)
Contact type	1NO
Rated voltage	250VAC/30VDC
Current rating	5A/way
Wiring	PT push-in wiring
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 a	mplitude 1.5mm)
	10~55~10Hz Single amplitude 0.75mm (double a	mplitude 1.5mm)
Impact	1000m/s²	
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-HT)

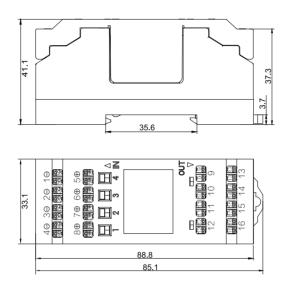
#### ① Note:

1. Under the premise of satisfying the minimum load, the load voltage is  $\geq 5V$ , and the load current is  $\geq 1mA$ 

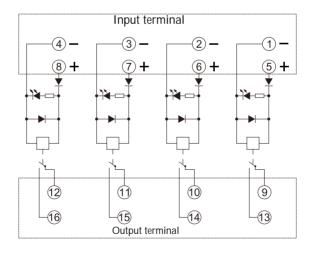


## **Exterior Dimension Drawing**

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 (Panasonic APAN3124)



#### Characteristics

- Low power consumption: 110mV
- Equipped with an optional socket
- Between contact and coil: 5.29 mm or more, along the surface: 5.35 mm or more
- Withstand voltage: 3000V, surge voltage: 6000V
- For high-density installations: 20×5×12.5mm
- Explosion-proof specifications (ANSI/ISA 12.12.01)
- Obtained IEC61010 certification in accordance with reinforced insulation standards

#### Contact parameters

Contact form	1H
Contact resistance	30mΩ or less (by 6VDC 1A voltage drop method)
Contact material	AgNi type Au
Contact load	5A 250VAC/30VDC
Maximum switching voltage	250VAC/30VDC
Maximum switching current	5A
Power consumption	200mW
Mechanical durability	More than 20,000,000 times (on/off frequency: 180 times/min)
Electrical durability	More than 50,000 times (on/off frequency 6 times/min), 5A
	More than 2,100,000 times (on/off frequency 20 times/min), 3A

### Performance parameters

Rated coil power	110W
Insulation resistance	1000m $Ω$ or more
The medium is pressure-resistant	1000Vrms between contacts for 1 minute
	3000 Vrms between contact and coil for 1 minute
Flammability category under UI94	V-0



# Appendix 2: PCB Solder Foot Holder (RY1H4-A1)



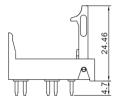
#### Characteristics

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

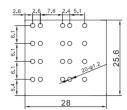
**Exterior Dimension Drawing** 

PCB cut-out dimension drawing

Unit: mm







# Appendix 3: Supporting Short Splice (RY1H4-HT)

**Exterior Dimension Drawing** 

