

Specifications

Coil Ratings

The rated currents for some of the built-in operation indicator models differ from the values given in this table. Refer to note 5 below.

Rated voltage	Rated current		Coil resistance	Coil inductance (ref.value)		Must operate	Must release	Max. voltage	Power consumption
	50 Hz	60 Hz		Armature OFF	Armature ON				
6 VAC	295 mA	233 mA	8.9 Ω	0.048 H	0.065 H	80 % max.	30 % min.	110%	Approx. 1.4 VA
12 VAC	148 mA	117 mA	34 Ω	0.166 H	0.257 H				
24 VAC	73 mA	58 mA	136 Ω	0.691 H	1.04 H				
50 VAC	35 mA	28 mA	530 Ω	3.08 H	4.53 H				
100/ 110 VAC	17.7/21.4 mA	14/16.8 mA	2,200 Ω	12.42/12.38 H	18/16.4 H				
200/220 VAC	8.9/10.8 mA	7/8.4 mA	8,800 Ω	42.2/41.8 H	72/65.5 H				
6 VDC	176 mA		34 Ω	0.14 H	0.26 H	10 % min.	110%	Approx. 1.1 W	
12 VDC	88 mA		136 Ω	0.6 H	1.0 H				
24 VDC	45 mA		530 Ω	2.7 H	4.6 H				
48 VDC	22 mA		2,200 Ω	11 H	19 H				
100 VDC	11.4 mA		8,800 Ω	43 H	73 H				

- Note: 1. The rated current and coil resistance are measured at a coil temperature of 23°C with tolerances of +15%/–20% for AC rated current and ±15% for DC coil resistance.
 2. The AC coil resistance and coil inductance values are for reference only.
 3. Performance characteristic data is measured at a coil temperature of 23°C.
 4. The maximum voltage is one that is applicable instantaneously to the Relay coil at an ambient temperature of 23°C and not continuously.
 5. For built-in operation indicator models rated at 6, 12, and 24 VDC, add an LED current of approx. 5 mA to the rated currents.

Contact Ratings

Load	Resistive load (cosΦ = 1)	Inductive load (cosΦ = 0.4) (L/R = 7 ms)
Contact type	Crossbar bifurcated	
Contact material	Movable: AgAu-clad AgPd Fixed: AgPd	
Rated load	0.3 A at 110 VAC 0.5 A at 24 VDC	0.2 A at 110 VAC 0.3 A at 24 VDC
Rated carry current	3 A	
Max. switching power	250 VAC, 125 VDC	

Characteristics

Classification	Standard/Acr barrier equipped/Built-in operation indicator models (G2A-[-N])	Built-in diode/Built-in operation indicator models (G2A-[-N1])
Contact resistance (see note 2)	100 mΩ max.	
Operate time (see note 3)	15 ms max.	
Release time (see note 3)	15 ms max.	30 ms max.
Max. operating frequency	Mechanical: 18,000 operations/hour Electrical: 1,800 operations/hour (under rated load)	
Insulation resistance (see note 4)	100 MΩ min. (at 500 VDC)	
Dielectric strength	1,500 VAC, 50/60 Hz for 1 min between coil and contacts and contacts of different polarities (700 VAC between contacts of same polarity)	
Vibration resistance	Destruction: 10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5 mm double amplitude) Malfunction: 10 to 55 to 10 Hz, 0.5 mm single amplitude (1.0 mm double amplitude)	
Shock resistance	Destruction: 1,000 m/s ² Malfunction: 100 m/s ²	
Error rate (level P) (Reference value) (see note 6)	1 mA at 100 mVDC	
Endurance	Mechanical: 100,000,000 operations min. (at operating frequency of 18,000 operations/hour) Electrical: 5,000,000 operations min. (under rated load and at operating frequency of 1,800 operations/hour) (see note 5)	
Ambient temperature	Operating: -10°C to 40°C (with no icing or condensation)	
Ambient humidity	Operating: 5% to 85%	
Weight	Approx. 38 g	

Note: 1. The data shown above are initial values.

2. The contact resistance was measured with 0.1 A at 5 VDC using the voltage drop method.

3. The operate or release time was measured with the rated voltage imposed with any contact bounce ignored at an ambient temperature of 23°C.

4. The insulation resistance was measured with a 500-VDC megger applied to the same places as those used for checking the dielectric strength.

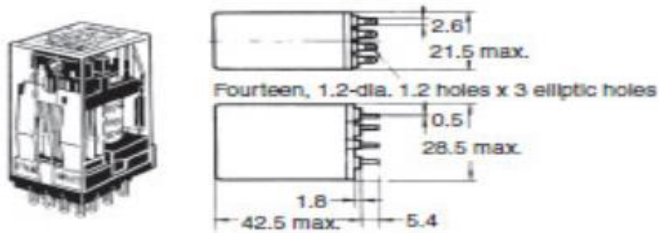
5. The electrical endurance was measured at an ambient temperature of 23°C.

6. This value was measured at a switching frequency of 60 operations per minute.

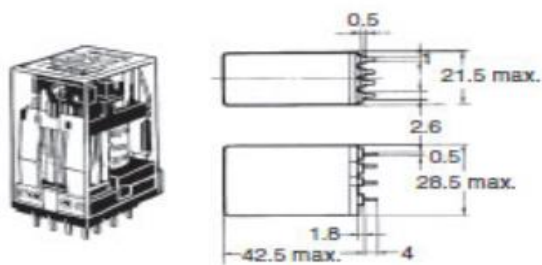
Dimensions

Note: Dimensional tolerances are ± 0.1 mm.

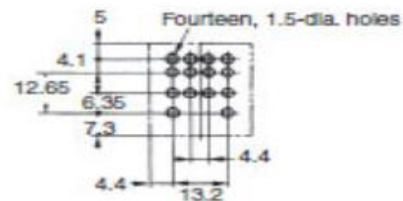
Solder Terminal Models



PCB Terminal Models



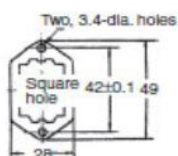
Mounting Holes on PCB (Bottom View)



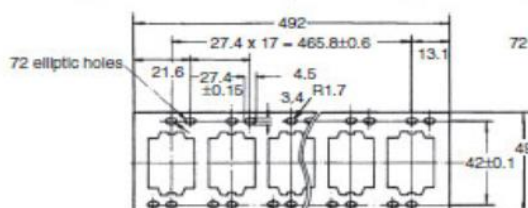
Socket Mounting Plates (t = 1.6 mm)

Use any of these plates when mounting two or more Sockets side-by-side

PYP-1 (for Single Socket Mounting)



PYP-18 (for Mounting 18 Sockets)



Note: PYP-18 and PYP-36 can be cut to a desired length for mounting less than 18 or 36 Sockets, respectively.

PYP-36 (for Mounting 36 Sockets)

