

2. Specifications

Characteristics	Item	Specifications	
Contact	Arrangement	1 Form A 1 Form B, 2 Form A	
	Contact material	Au-flashed AgSnO <sub>2</sub> type	
	Contact resistance (Initial)	Max. 30 mΩ (By voltage drop 6 V DC 1A)	
Rating	Max. switching power (resistive load)	3,040 VA, 150 W	
	Max. switching voltage	380 V AC, 250 V DC	
	Max. switching current	8 A	
	Nominal operating power	Approx. 240mW (Single side stable, 2 coil latching)	
	Min. switching capacity (Reference value)*1	100 mA 5V DC	
Electrical characteristics	Insulation resistance (Initial) (at 25°C, 50% relative humidity)	Min. 1,000MΩ (at 500V DC) Measurement at same location as "Breakdown voltage" section.	
	Breakdown voltage (Initial)	Between open contacts	1,200 Vrms for 1 min. (Detection current: 10 mA)
		Between contact sets	2,000 Vrms for 1 min. (Detection current: 10 mA)
		Between contact and coil	3,750 Vrms for 1 min. (Detection current: 10 mA)
	Surge breakdown voltage (Initial)*2	6,000 V (Between contact and coil)	
	Operate time [Set time] (at 20°C 68°F)	Max. 15 ms [Max. 15 ms] (Nominal coil voltage applied to the coil, excluding contact bounce time.)	
	Release time [Reset time] (at 20°C 68°F)	Max. 10 ms [Max. 15 ms] (Nominal coil voltage applied to the coil, excluding contact bounce time.) (without diode)	
	Temperature rise (coil) (at 60°C 140°F)	Max. 55°C (By resistive method, nominal voltage applied to the coil; contact carrying current: 8A.)	
Mechanical characteristics	Shock resistance	Functional	Min. 196 m/s <sup>2</sup> (Half-wave pulse of sine wave: 11 ms; detection time: 10μs.)
		Destructive	Min. 980 m/s <sup>2</sup> (Half-wave pulse of sine wave: 6 ms.)
	Vibration resistance	Functional	10 to 55 Hz at double amplitude of 2 mm (Detection time: 10μs.)
		Destructive	10 to 55 Hz at double amplitude of 3 mm
Expected life	Mechanical	Min. 10 <sup>7</sup> (at 180 times/min.)	
	Electrical	Min. 10 <sup>6</sup> (8 A 250 V AC resistive) (ON : OFF = 1 s : 5 s)	
Conditions	Conditions for operation, transport and storage*3	Ambient temperature: -40°C to +60°C -40°F to +140°F; Humidity: 5 to 85% R.H. (Not freezing and condensing at low temperature)	
	Max. operating speed	30 cps	
Unit weight		Approx. 10g .353 oz	

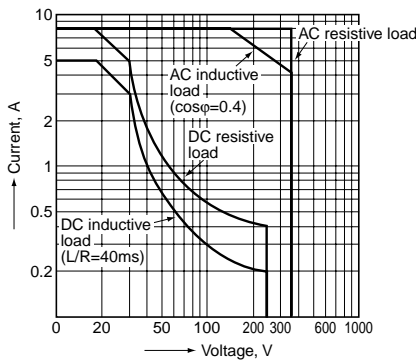
Notes: \*1. This value can change due to the switching frequency, environmental conditions, and desired reliability level, therefore it is recommended to check this with the actual load.

\*2. Wave is standard shock voltage of ±1.2×50μs according to JEC-212-1981

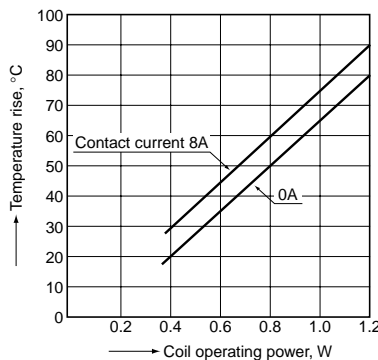
\*3. The upper limit of the ambient temperature is the maximum temperature that can satisfy the coil temperature rise value. Refer to Usage, transport and storage conditions in NOTES.

REFERENCE DATA

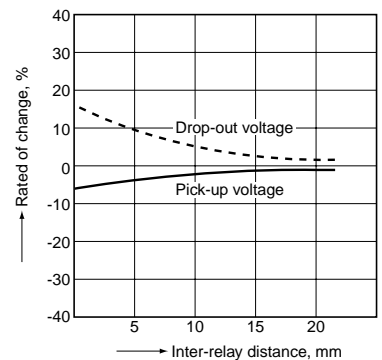
1. Max. switching power



2. Coil temperature rise



3. Influence of adjacent mounting



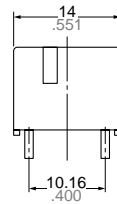
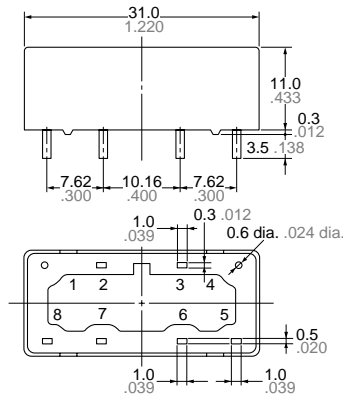
**DIMENSIONS** (mm inch)

The CAD data of the products with a **CAD Data** mark can be downloaded from: <http://industrial.panasonic.com/ac/e/>

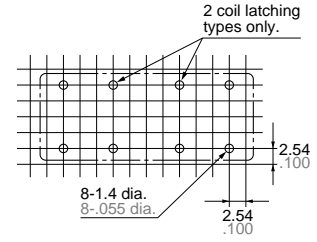
**CAD Data**



**External dimensions**



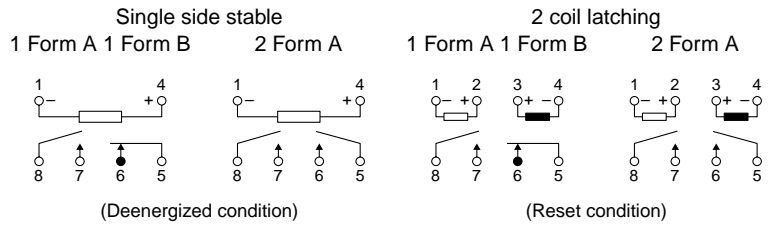
**PC board pattern (Bottom view)**



Tolerance:  $\pm 0.1 \pm .004$

General tolerance:  $\pm 0.5 \pm .020$

**Schematic (Bottom view)**



(Deenergized condition)

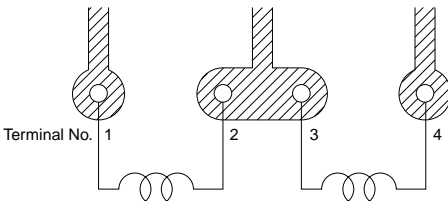
(Reset condition)

**SAFETY STANDARDS**

UL/C-UL (Recognized)		CSA (Certified)		VDE (Certified)		TV rating (UL/CSA)	
File No.	Contact rating	File No.	Contact rating	File No.	Contact rating	File No.	Rating
E43028	8A 250V AC 1/4HP 125, 250V AC 5A 30V DC	LR26550 etc.	8A 250V AC 1/4HP 125, 250V AC 5A 30V DC	1017	8A 250V AC ( $\cos\phi=1.0$ ) 4A 250V AC ( $\cos\phi=0.4$ ) 5A 30V DC	UL: E43028 CSA: LR26550	—

**NOTES**

- For cautions for use, please read "GENERAL APPLICATION GUIDELINES" on page B-1.
- PC board patterns for 2 coil latching types  
When applying relays in power supply operation circuits for finished products regulated by the Electrical Appliance and Material Safety Law, use the pattern shown below.



- Soldering should be done under the following conditions:
  - 250°C 482°F within 10s  
300°C 572°F within 5s  
350°C 662°F within 3s
  - For automatic cleaning, the boiling method is recommended. Avoid ultrasonic cleaning which subjects the relays to high frequency vibrations, which may cause the contacts to stick. It is recommended that a fluorinated hydrocarbon or other alcoholic solvents be used.

- When using, please be aware that the a contact and b contact sides of 1 Form A 1 Form B type may go on simultaneously at operate time and release time.