

**3. Electric life**

1. Each 1 Form A contact connected in series

Conditions: Ambient temperature: 20°C 68°F (L/R ≤ 1 ms) (ON : OFF = 1 s : 9 s)

Resistive load	20A 800V DC	Min. 1×10 <sup>3</sup> ope.
	20A 600V DC	Min. 1×10 <sup>4</sup> ope.
Overload	20A 1,000V DC	Min. 10 ope.
Reverse	-20A 400V DC	Min. 1×10 <sup>3</sup> ope.
Inrush current	40A 800V DC	Min. 1×10 <sup>3</sup> ope.

2. 1 Form A contact only

Conditions: Ambient temperature: 20°C 68°F (L/R ≤ 1 ms) (ON : OFF = 1 s : 9 s)

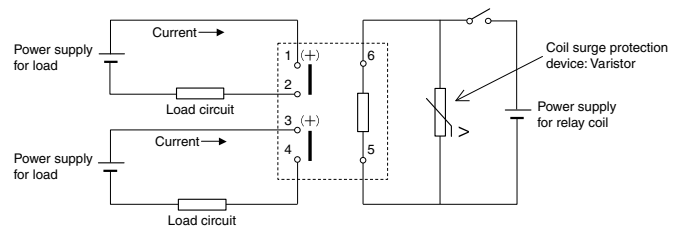
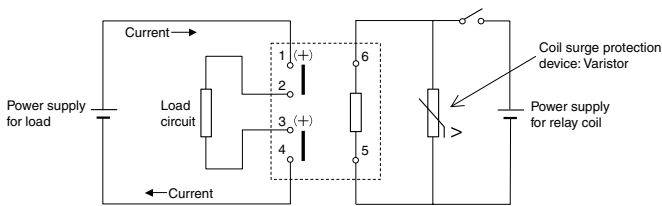
Resistive load	20A 400V DC	Min. 1×10 <sup>3</sup> ope.
	20A 300V DC	Min. 1×10 <sup>4</sup> ope.
Overload	20A 500V DC	Min. 10 ope.
Reverse	-20A 200V DC	Min. 1×10 <sup>3</sup> ope.
Inrush current	40A 400V DC	Min. 1×10 <sup>3</sup> ope.

**Recommended circuit**

Positive polarity of load should be connected to pin 1 and pin 3, refer to the following circuit schematics.

1. Each 1 Form A contact connected in series (Bottom view)

2. 1 Form A contact only (Bottom view)



**REFERENCE DATA**

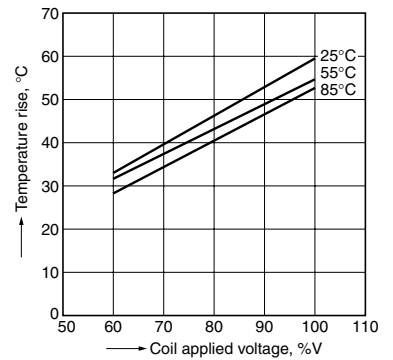
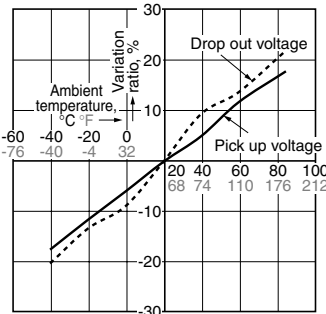
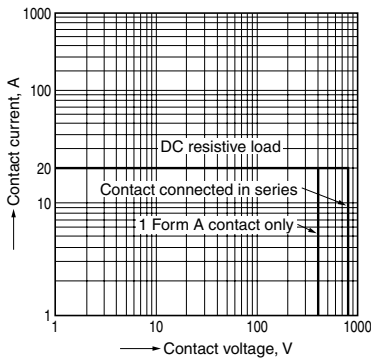
1. Maximum switching power

2. Ambient temperature characteristics

Tested sample: HEV2aN-P-DC12V, 6pcs

3. Coil temperature rise

Measured portion: Inside the coil  
 Ambient temperature: 25°C 77°F, 55°C 131°F, 85°C 185°F  
 Contact current: 20 A

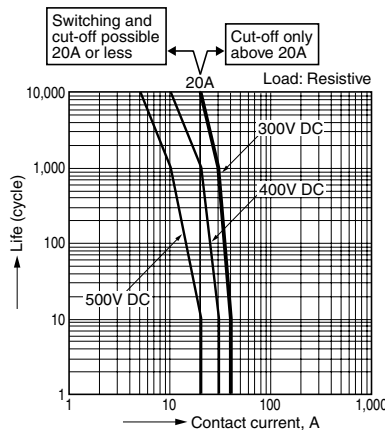
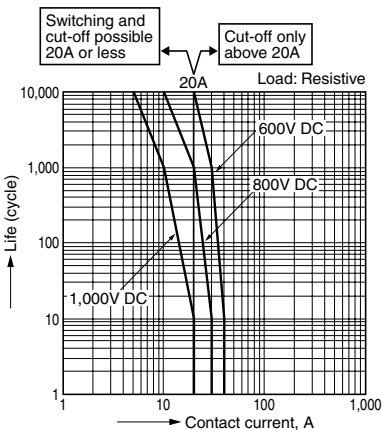


4.-(1) Cut-off life curve (forward direction)

Contact connected in series

4.-(2) Cut-off life curve (forward direction)

1 Form A contact only



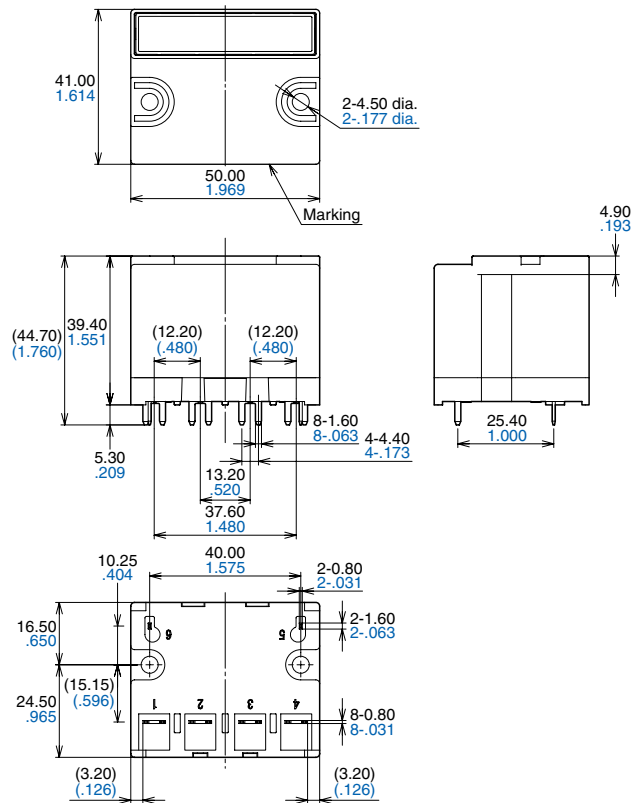
# HE-V

## DIMENSIONS (mm inch)

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

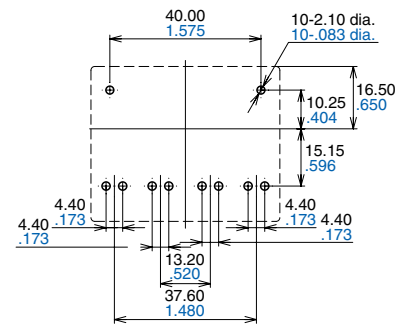
### CAD Data

### External dimensions



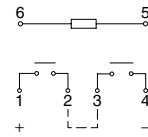
General tolerance:  $\pm 0.3 \pm 0.12$

### PC board pattern (Bottom view)



Tolerance:  $\pm 0.1 \pm 0.04$

### Schematic (Bottom view)



## SAFETY STANDARDS

UL/C-UL (Recognized)		VDE (Certified)	
File No.	Contact rating	File No.	Contact rating
E43028	20A 600V DC 6,000 ope. (at 85°C 185°F, Same polarity only)	40006681	20A 600V DC 10,000 ope. (at 85°C 185°F) 20A 800V DC 1,000 ope. (at 85°C 185°F) 20A 1000V DC 10 ope. (at 85°C 185°F)