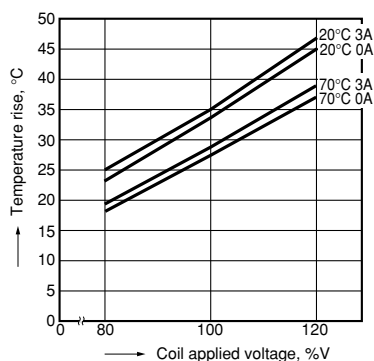


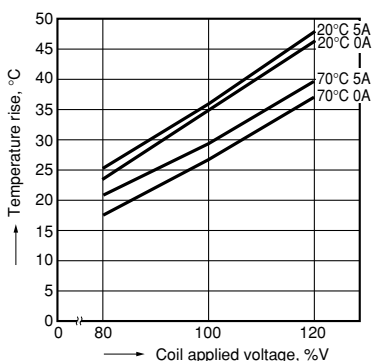
3-(1). Coil temperature rise

Sample: ALA2F12, 6 pcs.  
Measured portion: coil inside  
Contact current: 0 A, 3A



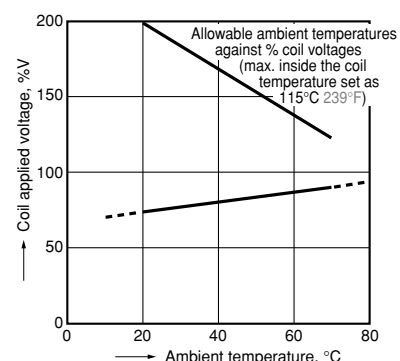
3-(2). Coil temperature rise

Sample: ALA2PF12, 6 pcs.  
Measured portion: coil inside  
Contact current: 0 A, 5A



4. Ambient temperature characteristics and coil applied voltage

Contact current: ALA2F=3A  
ALA2PF=5A

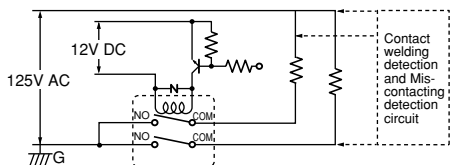


5-(1). Electrical life test

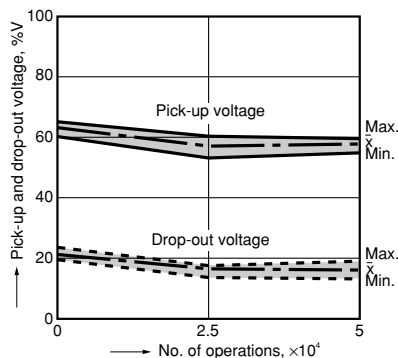
(3 A 125 V AC, resistive load)

Sample: ALA2F12, 6 pcs.  
Operation frequency: 20 times/min.  
(ON/OFF = 1.5s: 1.5s)  
Ambient temperature: 20°C 68°F

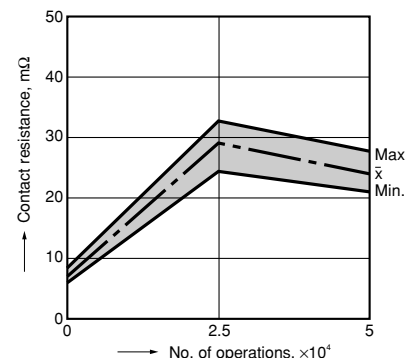
Circuit:



Change of pick-up and drop-out voltage



Change of contact resistance

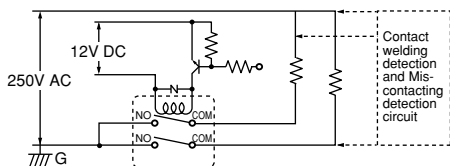


5-(2). Electrical life test

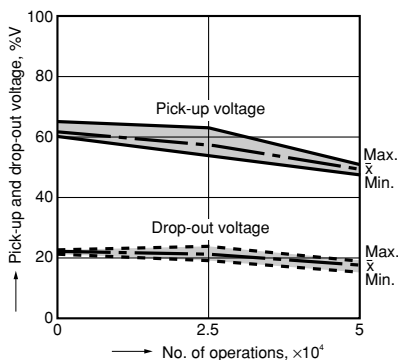
(5 A 250 V AC, resistive load)

Sample: ALA2PF12, 6 pcs.  
Operation frequency: 20 times/min.  
(ON/OFF = 1.5s: 1.5s)  
Ambient temperature: 20°C 68°F

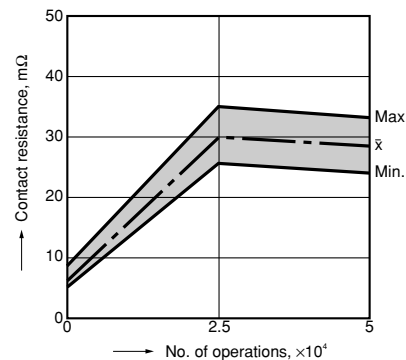
Circuit:



Change of pick-up and drop-out voltage



Change of contact resistance



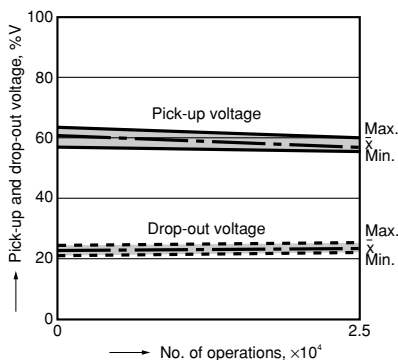
5-(3). Electrical life test

(UL lamp load test TV-4)

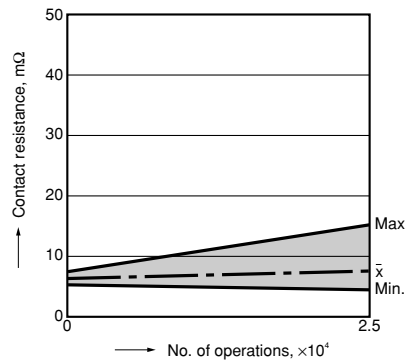
Tested sample: ALA2PF12, 6 pcs.

- Overload test  
Load: 6.0 A 120 V AC (60 Hz),  
Inrush: 91 A  
Operation frequency: 10 times/min  
(ON: OFF = 1 s: 5 s)  
No. of operations: 50 ope.
- Endurance test  
Load: 4A 120 V AC (60 Hz),  
Inrush: 65 A  
Operation frequency: 10 times/min  
(ON: OFF = 1 s: 5 s)  
No. of operations: 25,000 ope.

Change of pick-up and drop-out voltage



Change of contact resistance



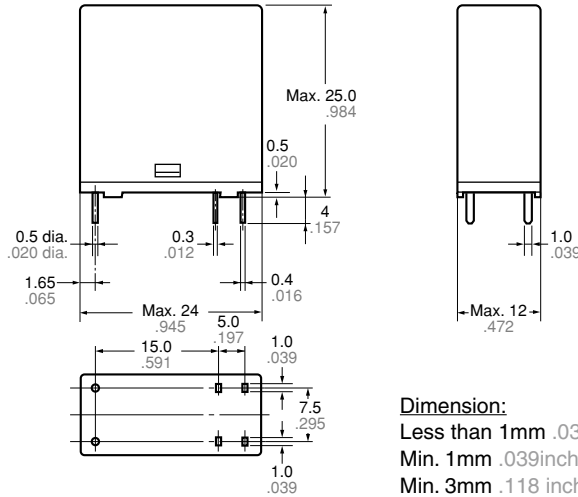
**DIMENSIONS** (mm inch)

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

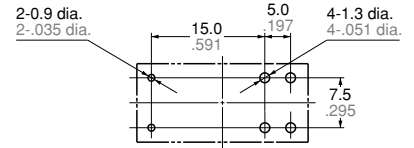
**CAD Data**



**External dimensions**



**PC board pattern (Bottom view)**



Tolerance : ±0.1 ±.004

**Schematic (Bottom view)**



**Dimension:**

Less than 1mm .039inch:

Min. 1mm .039inch less than 3mm .118 inch: ±0.2 ±.008

Min. 3mm .118 inch: ±0.3 ±.012

**General tolerance**

±0.1 ±.004

±0.2 ±.008

±0.3 ±.012

**SAFETY STANDARDS**

Item	UL (Recognized)			CSA (Certified)		VDE (Certified)				TÜV (Certified)			TV rating (UL/CSA)	
	File No.	Contact rating	Cycles	File No.	Contact rating	File No.	Contact rating	Temp.	Cycles	File No.	Contact rating	Cycles	File No.	Contact rating
3A type	E43149	3A 125V AC	10 <sup>5</sup>	LR26550	3A 125V AC	40012000	3A 125V AC (cosφ=1.0)	70°C 158°F	10 <sup>4</sup>	B 12 06 13461 324	3A 125V AC (cosφ=1.0)	10 <sup>4</sup>	—	—
		3A 30V DC	6 × 10 <sup>3</sup>		3A 30V DC		3A 30V DC (0ms)	70°C 158°F	10 <sup>4</sup>		3A 30V DC (0ms)	10 <sup>4</sup>		
		5A 50V DC	6 × 10 <sup>3</sup>		5A 50V DC		—	—	—		—	—		
5A TV type	E43149	5A 277V AC	6 × 10 <sup>3</sup>	LR26550	5A 277V AC	40012000	5A 250V AC (cosφ=1.0)	70°C 158°F	10 <sup>4</sup>	B 12 06 13461 324	5A 250V AC (cosφ=1.0)	10 <sup>4</sup>	UL: E43149	TV-4
		5A 30V DC	6 × 10 <sup>3</sup>		5A 30V DC		5A 30V DC (0ms)	70°C 158°F	10 <sup>4</sup>		5A 30V DC (0ms)	10 <sup>4</sup>	CSA: LR26550	TV-4

**EN/IEC VDE Certified  
INSULATION CHARACTERISTIC (IEC61810-1)**

Item	Characteristic
Clearance/Creepage distance (IEC61810-1)	Min. 5.5mm/5.5mm
Category of protection (IEC61810-1)	RT II
Tracking resistance (IEC60112)	PTI 175
Insulation material group	III a
Over voltage category	III
Rated voltage	250V
Pollution degree	2
Type of insulation (Between contact and coil)	Reinforced insulation
Type of insulation (Between open contacts)	Micro disconnection

**NOTES**

1. For cautions for use, please read "GENERAL APPLICATION GUIDELINES".