

# LF-G (ALFG)

## REFERENCE DATA

### Standard type

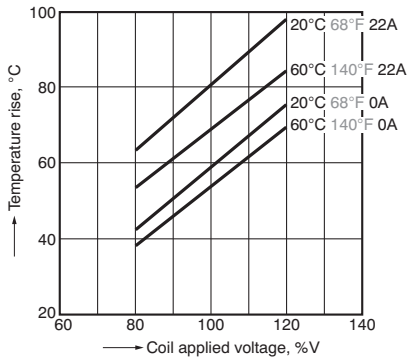
#### 1. Coil temperature rise

Sample: ALFG1PF09, 6 pcs.

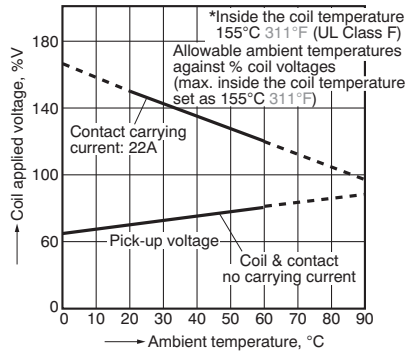
Point measured: coil inside

Ambient temperature: 20°C 68°F, 60°C 140°F

Contact carrying current: 22A



#### 2. Ambient temperature characteristics and coil applied voltage



#### 3. Electrical life test

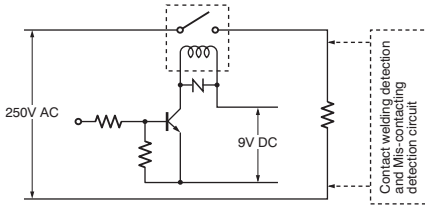
(22A 250V AC Resistive load)

Sample: ALFG1PF09, 6 pcs.

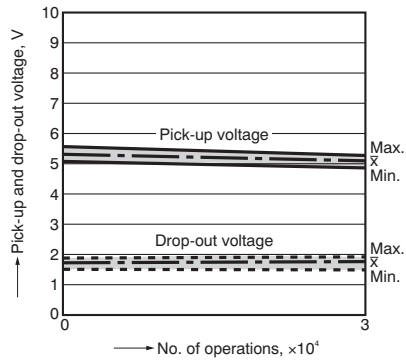
Operation frequency: ON:OFF = 1.5s:1.5s

Ambient temperature: 85°C 185°F

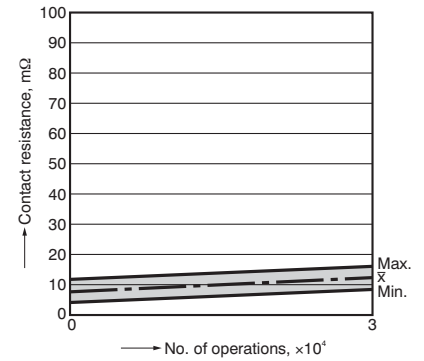
Circuit:



#### Change of pick-up and drop-out voltage



#### Change of contact resistance



#### 4. Electrical life test

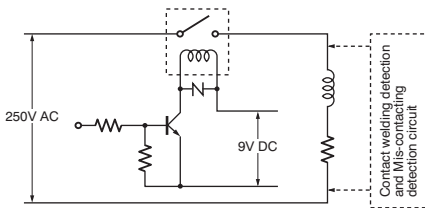
(22A 250V AC cosφ = 0.8 Inductive load)

Sample: ALFG1PF09, 6 pcs.

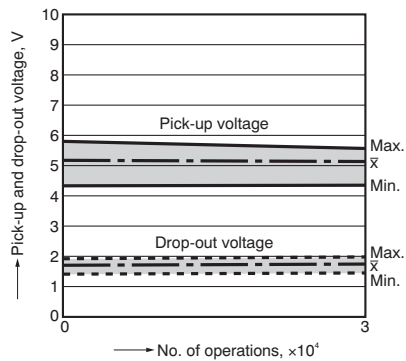
Operation frequency: ON:OFF = 0.1s:10s

Ambient temperature: 85°C 185°F

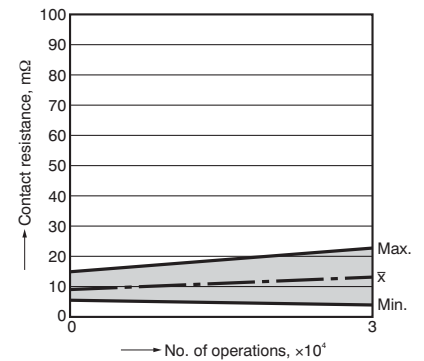
Circuit:



#### Change of pick-up and drop-out voltage



#### Change of contact resistance



## High capacity type

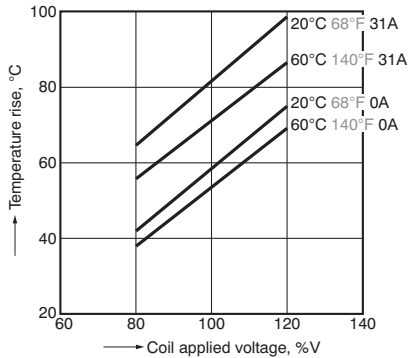
### 1. Coil temperature rise

Sample: ALFG2PF09, 6 pcs.

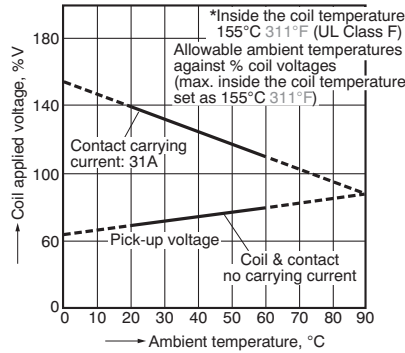
Point measured: coil inside

Ambient temperature: 20°C 68°F, 60°C 140°F

Contact carrying current: 31A



### 2. Ambient temperature characteristics and coil applied voltage



### 3. Electrical life test

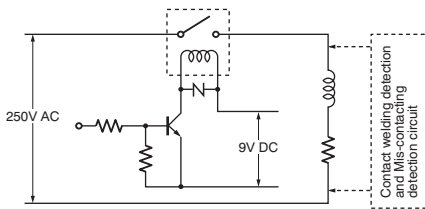
(31A 250V AC  $\cos\phi = 0.8$  Inductive load)

Sample: ALFG2PF09, 6 pcs.

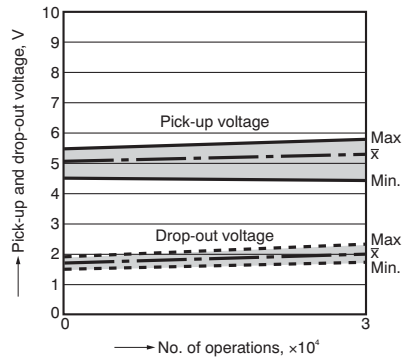
Operation frequency: ON:OFF = 0.1s:10s

Ambient temperature: 85°C 185°F

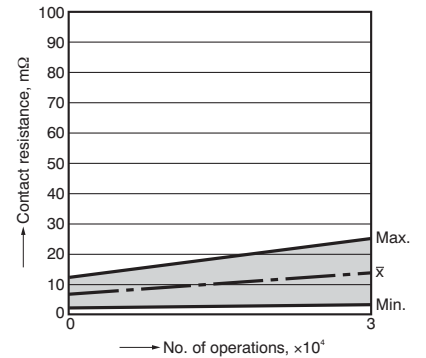
Circuit:



### Change of pick-up and drop-out voltage



### Change of contact resistance



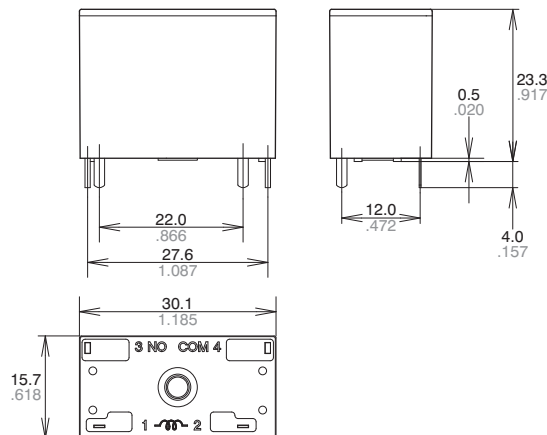
## DIMENSIONS (mm inch)

Interested in CAD data? You can obtain CAD data for all products with a **CAD Data** mark from your local Panasonic Electric Works representative.

CAD Data



### External dimensions



#### Dimension:

Max. 1mm .039 inch:

1 to 3mm .039 to .118 inch:  $\pm 0.2 \pm 0.08$

Min. 3mm .118 inch:

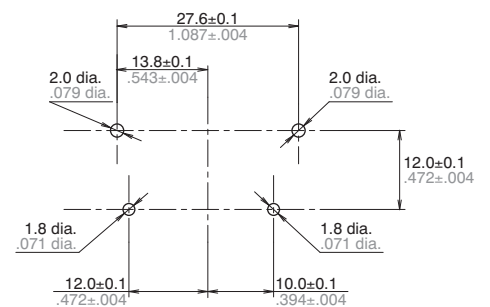
#### General tolerance

$\pm 0.1 \pm 0.04$

$\pm 0.2 \pm 0.08$

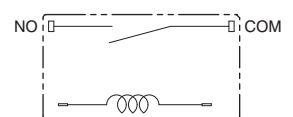
$\pm 0.3 \pm 0.12$

### PC board pattern (Bottom view)



Tolerance:  $\pm 0.1 \pm 0.04$

### Schematic (Bottom view)



## SAFETY STANDARDS

Certification authority	Standard type	High capacity type
UL, C-UL	22A 277V AC General Use (at 85°C 185°F)	31A 277V AC General Use (at 85°C 185°F)
VDE (VDE0435)	22A 250V AC $\cos\phi = 0.8$ (at 85°C 185°F)	31A 250V AC $\cos\phi = 0.8$ (at 85°C 185°F)