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**DE** - Informationen zu Preisen und Verfügbarkeit in Ihrem Land erhalten Sie über die unten aufgeführten Links:

**FR** - Pour connaître les tarifs et la disponibilité dans votre pays, cliquez sur l'un des liens suivants:

[G2R-2-SND-DC24\(S\)](#)

**EN**

This Datasheet is presented by  
the manufacturer

**DE**

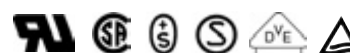
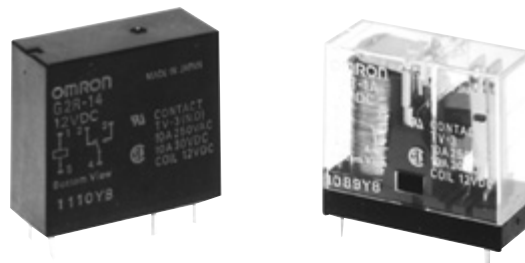
Dieses Datenblatt wird vom  
Hersteller bereitgestellt

**FR**

Cette fiche technique est  
présentée par le fabricant

# Power PCB Relay G2R

- Creepage distance of 8.0 mm (0.31) min. between coil and contact.
- Dual-winding latching type available.
- Plug-in and quick-connect terminals available.
- High sensitivity (360 mW) and high capacity (16 A) types available.
- Highly stable magnetic circuit for latching endurance and excellent resistance to vibration and shock.
- Safety-oriented design assuring high surge resistance: 10,000 V min. between coil and contacts.
- UL, CSA approved, marked with CE.



## Ordering Information

To order: Select the part number and add the desired coil voltage rating (e.g., G2R-14-DC12).

### ■ Non-Latching

#### 1-Pole - PCB Types

| Type             | Contact material | Contact form | Construction | Model     |
|------------------|------------------|--------------|--------------|-----------|
| General purpose  | AgCdO            | SPDT         | Semi-sealed  | G2R-1     |
|                  |                  |              | Sealed       | G2R-14    |
|                  |                  | SPST-NO      | Semi-sealed  | G2R-1A    |
|                  |                  |              | Sealed       | G2R-1A4   |
| High-capacity    |                  | SPDT         | Semi-sealed  | G2R-1-E   |
|                  |                  | SPST-NO      |              | G2R-1A-E  |
| High-sensitivity |                  | SPDT         | Semi-sealed  | G2R-1-H   |
|                  |                  |              |              | Sealed    |
|                  |                  | SPST-NO      | Semi-sealed  | G2R-1A-H  |
|                  |                  |              | Sealed       | G2R-1A4-H |

#### 1-Pole - Plug-in/Quick-connect Types

| Type                                      | Contact material | Contact form | Terminal      | Model     |
|---|------------------|--------------|---------------|-----------|
| General purpose                           | AgCdO            | SPDT         | Plug-in       | G2R-1-S   |
| LED indicator                             |                  |              |               | G2R-1-SN  |
| Surge suppression diode                   |                  |              |               | G2R-1-SD  |
| LED indicator and surge suppression diode |                  |              |               | G2R-1-SND |
| Upper-mount bracket                       |                  | SPDT         | Quick connect | G2R-1-T   |
|   |                  |              |               | SPST-NO   |

- Note:**
1. AgInSn and gold plated contacts available.
  2. Bifurcated button available.
  3. For individual product agency approvals consult factory.
  4. Class B coil insulation available.
  5. Push to test button available on plug-in type. Consult Omron for details.
  6. CE mark only on plug-in and quick connect types (G2R-□-S).

## 2-Pole - PCB Types

| Type             | Contact material | Contact form | Construction | Model     |
|------------------|------------------|--------------|--------------|-----------|
| General purpose  | AgCdO            | DPDT         | Semi-sealed  | G2R-2     |
|                  |                  |              | Sealed       | G2R-24    |
|                  |                  | DPST-NO      | Semi-sealed  | G2R-2A    |
|                  |                  |              | Sealed       | G2R-2A4   |
| High sensitivity | AgCdO            | DPDT         | Semi-sealed  | G2R-2-H   |
|                  |                  |              | Sealed       | G2R-24-H  |
|                  |                  | DPST-NO      | Semi-sealed  | G2R-2A-H  |
|                  |                  |              | Sealed       | G2R-2A4-H |

## 2 Pole - Plug-in/Quick-connect Types

| Type                                      | Contact material | Contact form | Terminal | Model     |
|---|------------------|--------------|----------|-----------|
| General purpose                           | AgCdO            | DPDT         | Plug-in  | G2R-2-S   |
| LED indicator                             |                  |              |          | G2R-2-SN  |
| Surge suppression diode                   |                  |              |          | G2R-2-SD  |
| Led indicator and surge suppression diode |                  |              |          | G2R-2-SND |

- Note:**
1. AgInSn and gold plated contacts available.
  2. Bifurcated button available.
  3. For individual product agency approvals consult factory.
  4. Class B coil insulation available.
  5. Push to test button available on plug-in type. Consult Omron for details.

## ■ Latching

| Type               | Contact form | Construction | Model   |
|--------------------|--------------|--------------|---------|
| Dual coil latching | SPDT         | Semi-sealed  | G2RK-1  |
|                    | SPST-NO      |              | G2RK-1A |
|                    | DPDT         |              | G2RK-2  |
|                    | DPST-NO      |              | G2RK-2A |

## ■ Accessories

### Track Mounted Sockets/Track

| Relay              | Model     |                         |
|--------------------|-----------|-------------------------|
|                    | Socket    | Mounting track          |
| G2R-1-S□□ (1-pole) | P2RF-05   | PFP-100N or             |
|                    | P2RF-05-E | PFP-50N and             |
| G2R-2-S□□ (2-pole) | P2RF-08   | PFP-M end plate         |
|                    | P2RF-08-E | PFP-S (optional spacer) |

**Note:** “-E” models are of finger-safe product construction. Round terminals cannot be used. Use Y-shaped terminals.

### Screwless Clamp Terminal Socket Ordering Information

|                      | 1-pole                  | 2-pole    |
|----------------------|-------------------------|-----------|
| Socket               | P2RF-05-S               | P2RF-08-S |
| Clip & release lever | P2CM-S                  |           |
| Nameplate            | R99-11 nameplate for MY |           |
| Socket bridge        | P2RM-SR, P2RM-SB        |           |

**Note:** For complete specifications see the data sheet at Omron’s Knowledge center at [www.knowledge.omron.com](http://www.knowledge.omron.com).

## Back Connecting Sockets/Plate

| Relay              | Terminal | Model    |                       |
|--------------------|----------|----------|-----------------------|
|                    |          | Socket   | Socket mounting plate |
| G2R-1-S□□ (1-pole) | Solder   | P2R-05-A | P2R-P                 |
|                    | PC       | P2R-05P  |                       |
| G2R-2-S□□ (2-pole) | Solder   | P2R-08A  |                       |
|                    | PC       | P2R-08P  |                       |

## Specifications

### ■ Contact Data

Non-latching general purpose, plug-in, plug-in operation indicator self-contained, plug-in diode self-contained and upper-mount bracket.

| Load                    | 1-pole type                       |   | 2-pole type                     |   |
|-------------------------|-----------------------------------|---|---------------------------------|---|
|                         | Resistive load<br>(p.f. = 1)      | Inductive load<br>(p.f. = 0.4) (L/R = 7 ms) | Resistive load<br>(p.f. = 1)    | Inductive load<br>(p.f. = 0.4) (L/R = 7 ms) |
| Rated load              | 10 A at 250 VAC<br>10 A at 30 VDC | 7.5 A at 250 VAC<br>5 A at 30 VDC           | 5 A at 250 VAC<br>5 A at 30 VDC | 2 A at 250 VAC<br>3 A at 30 VDC             |
| Contact material        | AgCdO                             |   |                                 |   |
| Carry current           | 10 A                              |   | 5 A                             |   |
| Max. operating voltage  | 380 VAC, 125 VDC                  |   |                                 |   |
| Max. operating current  | 10 A                              |   | 5 A                             |   |
| Max. switching capacity | 2,500 VA, 300 W                   | 1,875 VA, 150 W                             | 1,250 VA, 150 W                 | 500 VA, 90 W                                |
| Min permissible load    | 100 mA, 5 VDC                     |   | 10 mA, 5 VDC                    |   |

### Non-latching high capacity 1-pole type

| Load                    | Resistive load<br>(p.f. = 1)      | Inductive load<br>(p.f. = 0.4) (L/R = 7 ms) |
|-------------------------|-----------------------------------|---|
| Rated load              | 16 A at 250 VAC<br>16 A at 30 VDC | 8 A at 250 VAC<br>8 A at 30 VDC             |
| Contact material        | AgCdO                             |   |
| Carry current           | 16 A                              |   |
| Max. operating voltage  | 380 VAC, 125 VDC                  |   |
| Max. operating current  | 16 A                              |   |
| Max. switching capacity | 4,000 VA, 480 W                   | 2,000 VA, 240 W                             |
| Min. permissible load   | 100 mA, 5 VDC                     |   |

### Non-latching high-sensitivity

| Load                    | 1-pole type                     |   | 2-pole type                     |   |
|-------------------------|---------------------------------|---|---------------------------------|---|
|                         | Resistive load<br>(p.f. = 1)    | Inductive load<br>(p.f. = 0.4) (L/R = 7 ms) | Resistive load<br>(p.f. = 1)    | Inductive load<br>(p.f. = 0.4) (L/R = 7 ms) |
| Rated load              | 5 A at 250 VAC<br>5 A at 30 VDC | 2 A at 250 VAC<br>3 A at 30 VDC             | 3 A at 250 VAC<br>3 A at 30 VDC | 1 A at 250 VAC<br>1.50 A at 30 VDC          |
| Contact material        | AgCdO                           |   |                                 |   |
| Carry current           | 5 A                             |   | 3 A                             |   |
| Max. operating voltage  | 380 VAC, 125 VDC                |   |                                 |   |
| Max. operating current  | 5 A                             |   | 3 A                             |   |
| Max. switching capacity | 1,250 VA, 150 W                 | 500 VA, 90 W                                | 750 VA, 90 W                    | 250 VA, 45 W                                |
| Min permissible load    | 100 mA, 5 VDC                   |   | 10 mA, 5 VDC                    |   |

Latching

| Load                    | 1-pole type                     |   | 2-pole type                     |   |
|-------------------------|---------------------------------|---|---------------------------------|---|
|                         | Resistive load<br>(p.f. = 1)    | Inductive load<br>(p.f. = 0.4) (L/R = 7 ms) | Resistive load<br>(p.f. = 1)    | Inductive load<br>(p.f. = 0.4) (L/R = 7 ms) |
| Rated load              | 5 A at 250 VAC<br>5 A at 30 VDC | 3.50 A at 250 VAC<br>2.50 A at 30 VDC       | 3 A at 250 VAC<br>3 A at 30 VDC | 1.50 A at 250 VAC<br>2 A at 30 VDC          |
| Contact material        | AgCdO                           |   |                                 |   |
| Carry current           | 5 A                             |   | 3 A                             |   |
| Max. operating voltage  | 380 VAC, 125 VDC                |   |                                 |   |
| Max. operating current  | 5 A                             |   | 3 A                             |   |
| Max. switching capacity | 1,250 VA, 150 W                 | 875 VA, 75 W                                | 750 VA, 90 W                    | 375 VA, 60 W                                |
| Min permissible load    | 100 mA, 5 VDC                   |   | 10 mA, 5 VDC                    |   |

- Note: 1. P standard:  $\lambda_{50} = 0.10 \times 10^{-6}$  operation.  
 2. AgInSn contacts available.  
 3. For individual product agency approvals consult factory.

■ Coil Data

Non-latching DC coil

| Rated voltage<br>(VDC) | Rated current<br>(mA) | Coil resistance<br>( $\Omega$ ) | Coil inductance<br>(ref. value) (H) |                | Pick-up<br>voltage | Dropout<br>voltage | Maximum<br>voltage              | Power<br>consumption<br>(mW) |
|------------------------|-----------------------|---------------------------------|-------------------------------------|----------------|--------------------|--------------------|---------------------------------|------------------------------|
|                        |                       |                                 | Armature<br>OFF                     | Armature<br>ON |                    |                    |                                 |                              |
| 3                      | 176                   | 17                              | 0.07                                | 0.14           | 70% max.           | 15% min.           | 110% max.<br>at 70°C<br>(158°F) | Approx. 530                  |
| 5                      | 106                   | 47                              | 0.20                                | 0.39           |                    |                    |                                 |                              |
| 6                      | 88.20                 | 68                              | 0.28                                | 0.55           |                    |                    |                                 |                              |
| 12                     | 43.60                 | 275                             | 1.15                                | 2.29           |                    |                    |                                 |                              |
| 24                     | 21.80                 | 1,100                           | 4.27                                | 8.55           |                    |                    |                                 |                              |
| 48                     | 11.50                 | 4,170                           | 13.86                               | 22.71          |                    |                    |                                 |                              |
| 100                    | 5.30                  | 18,860                          | 67.20                               | 93.20          |                    |                    |                                 |                              |
| 110                    | 4.80                  | 22,900                          | 81.50                               | 110.60         |                    |                    |                                 |                              |

Non-latching AC coil

| Rated voltage<br>(VDC) | Rated current<br>(mA) | Coil resistance<br>( $\Omega$ ) | Coil inductance<br>(ref. value) (H) |                | Pick-up<br>voltage | Dropout<br>voltage | Maximum<br>voltage              | Power<br>consumption<br>(mW) |
|------------------------|-----------------------|---------------------------------|-------------------------------------|----------------|--------------------|--------------------|---------------------------------|------------------------------|
|                        |                       |                                 | Armature<br>OFF                     | Armature<br>ON |                    |                    |                                 |                              |
| 6                      | 150                   | 16                              | 0.05                                | 0.10           | 80% max.           | 30% min.           | 110% max.<br>at 70°C<br>(158°F) | Approx. 0.9                  |
| 12                     | 75                    | 65                              | 0.19                                | 0.39           |                    |                    |                                 |                              |
| 24                     | 37.50                 | 260                             | 0.81                                | 1.55           |                    |                    |                                 |                              |
| 50                     | 18                    | 1,130                           | 3.25                                | 6.73           |                    |                    |                                 |                              |
| 110                    | 10.60                 | 4,600                           | 13.34                               | 26.84          |                    |                    |                                 |                              |
| 120                    | 7.50                  | 6,500                           | 21                                  | 42             |                    |                    |                                 |                              |
| 220                    | 5.30                  | 22,000                          | 51.30                               | 102            |                    |                    |                                 |                              |
| 240                    | 3.80                  | 30,000                          | 65.50                               | 131            |                    |                    |                                 |                              |

Non-latching high-sensitivity DC coil

| Rated voltage<br>(VDC) | Rated current<br>(mA) | Coil resistance<br>( $\Omega$ ) | Coil inductance<br>(ref. value) (H) |                | Pick-up<br>voltage | Dropout<br>voltage | Maximum<br>voltage              | Power<br>consumption<br>(mW) |
|------------------------|-----------------------|---------------------------------|-------------------------------------|----------------|--------------------|--------------------|---------------------------------|------------------------------|
|                        |                       |                                 | Armature<br>OFF                     | Armature<br>ON |                    |                    |                                 |                              |
| 3                      | 120                   | 25                              | 0.13                                | 0.26           | 70% max.           | 15% min.           | 110% max.<br>at 70°C<br>(158°F) | Approx. 360                  |
| 5                      | 71.40                 | 70                              | 0.37                                | 0.75           |                    |                    |                                 |                              |
| 6                      | 60                    | 100                             | 0.63                                | 1.07           |                    |                    |                                 |                              |
| 12                     | 30                    | 400                             | 2.14                                | 4.27           |                    |                    |                                 |                              |
| 24                     | 15                    | 1,600                           | 7.80                                | 15.60          |                    |                    |                                 |                              |
| 48                     | 7.50                  | 6,400                           | 31.20                               | 62.40          |                    |                    |                                 |                              |

Latching dual coil type - Set coil

| Rated voltage (VDC) | Rated current (mA) | Coil resistance (Ω) | Coil inductance (ref. value) (H) |             | Pick-up voltage | Dropout voltage | Maximum voltage                 | Power consumption (mW) |
|---------------------|--------------------|---------------------|----------------------------------|-------------|-----------------|-----------------|---------------------------------|------------------------|
|                     |                    |                     | Armature OFF                     | Armature ON |                 |                 |                                 |                        |
| 3                   | 227                | 10.80               | 0.026                            | 0.052       | 70% max.        | 70% max.        | 110% max.<br>at 70°C<br>(158°F) | Approx. 850            |
| 5                   | 167                | 30                  | 0.073                            | 0.146       |                 |                 |                                 |                        |
| 6                   | 138                | 43.50               | 0.104                            | 0.208       |                 |                 |                                 |                        |
| 12                  | 70.60              | 170                 | 0.42                             | 0.83        |                 |                 |                                 |                        |
| 24                  | 34.60              | 694                 | 1.74                             | 3.43        |                 |                 |                                 |                        |

Latching dual coil type - Reset coil

| Rated voltage (VDC) | Rated current (mA) | Coil resistance (Ω) | Coil inductance (ref. value) (H) |             | Pick-up voltage | Dropout voltage | Maximum voltage                 | Power consumption (mW) |
|---------------------|--------------------|---------------------|----------------------------------|-------------|-----------------|-----------------|---------------------------------|------------------------|
|                     |                    |                     | Armature OFF                     | Armature ON |                 |                 |                                 |                        |
| 3                   | 200                | 15                  | 0.001                            | 0.002       | 70% max.        | 70% max.        | 110% max.<br>at 70°C<br>(158°F) | Approx. 600            |
| 5                   | 119                | 42                  | 0.003                            | 0.006       |                 |                 |                                 |                        |
| 6                   | 100                | 60                  | 0.005                            | 0.009       |                 |                 |                                 |                        |
| 12                  | 50                 | 240                 | 0.018                            | 0.036       |                 |                 |                                 |                        |
| 24                  | 25                 | 960                 | 0.079                            | 0.148       |                 |                 |                                 |                        |

**Note:** 1. The rated current and coil resistance are measured at a coil temperature of 23°C (73°F) with a tolerance of ±10%.  
 2. The operating characteristics are measured at a coil temperature of 23°C (73°F).

■ Characteristics

| Item                  |                        | Non-latching  | Latching   |
|-----------------------|------------------------|---|--|
| Contact resistance    |                        | 100 mΩ  |  |
| Operate (set) time    |                        | 15 ms. max.   | 20 ms max.   |
| Release (reset) time  |                        | AC: 10 ms max.; DC: 5 ms max.   | 20 ms max.   |
| Bounce time           | Operate                | ---   | Mean value approx. 3 ms  |
|                       | Release                | ---   | Mean value approx. 8 ms  |
| Operating frequency   | Mechanical             | 18,000 operations/hour  |  |
|                       | Electrical             | 1,800 operations/hour (under rated load)  |  |
| Insulation resistance |                        | 1,000 MΩ min. (at 500 VDC)  |  |
| Dielectric strength   |                        | 5,000 VAC, 50/60 Hz for 1 minute between coil and contacts  |  |
|                       |                        | 1,000 VAC, 50/60 Hz for 1 minute across contacts of same pole   |  |
|                       |                        | 3,000 VAC, 50/60 Hz for 1 minute between contact sets, 2-pole non-latching                                  |  |
|                       |                        | 1,000 VAC, 50/60 Hz for 1 minute between set and reset coils of dual coil latching                          |  |
| Vibration             | Mechanical durability  | 10 to 55 Hz; 1.50 mm (0.06) double amplitude  |  |
|                       | Malfunction durability | 10 to 55 Hz; 1.50 mm (0.06) double amplitude  |  |
| Shock                 | Mechanical durability  | 1,000 m/s <sup>2</sup> (approx. 100G)   |  |
|                       | Malfunction durability | 200 m/s <sup>2</sup> (approx. 20 G) when energized<br>100 m/s <sup>2</sup> (approx. 10 G) when de-energized | 500 m/s <sup>2</sup> (approx. 50 G) at set<br>100 m/s <sup>2</sup> (approx. 10 G) at reset |
| Ambient temperature   |                        | -40 to 70°C (-40 to 158°F)  |  |
| Humidity              |                        | 35% to 85% RH   |  |
| Service life          | Mechanical             | AC: 10,000,000 operations min.<br>DC: 20,000,000 operations min.<br>(at 18,000 operations/hour)             | 10,000,000 operations min.<br>(at 18,000 operations/hour)                                  |
|                       | Electrical             | See "Characteristics Data"  |  |
| Weight                |                        | Approx. 17 g (0.60 oz.)   | Approx. 17 g (0.60 oz.)  |

**Note:** Data shown are of initial value.

## ■ Characteristic Data

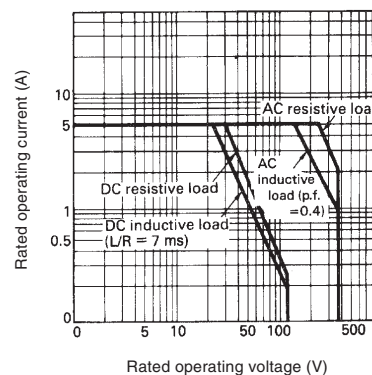
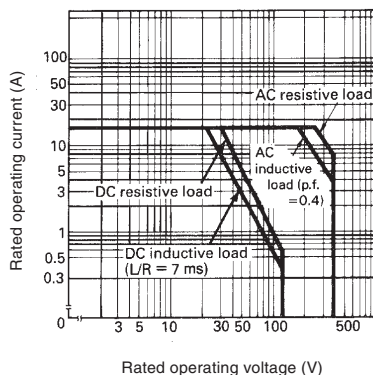
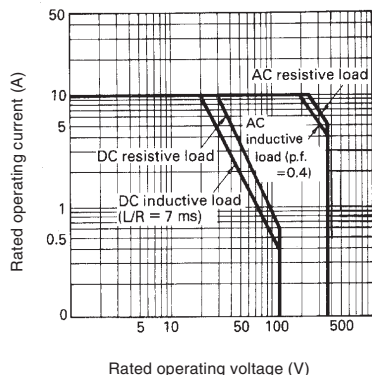
### Maximum Switching Capacity - Non-latching Types

PCB: Single-pole general purpose  
Semi-sealed

Plug-in: Single-pole single button  
Quick-connect

High capacity

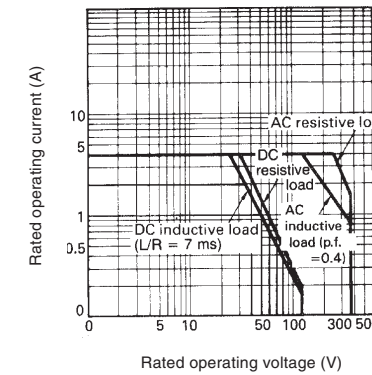
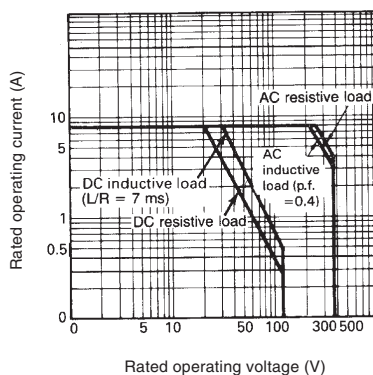
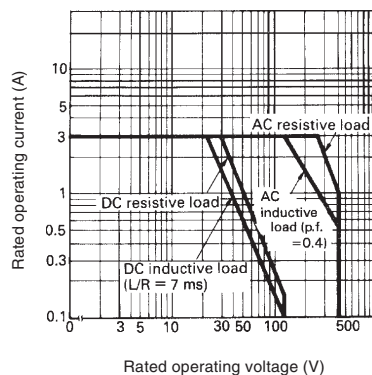
PCB: Single-pole high sensitivity  
Two-pole general purpose  
Plug-in: Two-pole single button



PCB: Two-pole high sensitivity

PCB: Single-pole general purpose  
Sealed

PCB: Two-pole general purpose  
Sealed



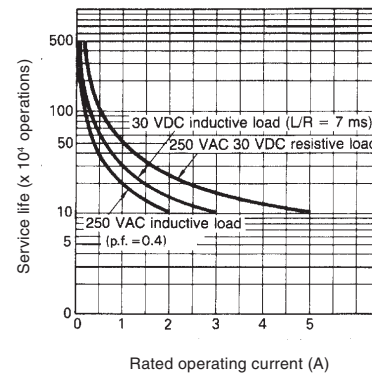
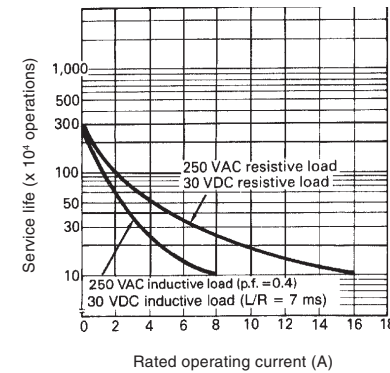
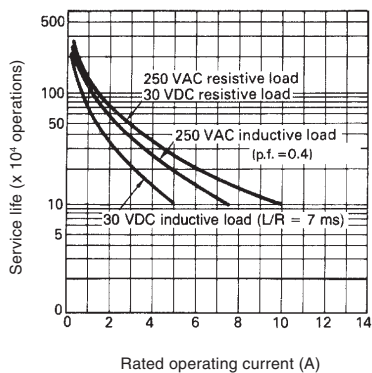
### Electrical Service Life - Non-latching Types

PCB: Single-pole general purpose  
Semi-sealed

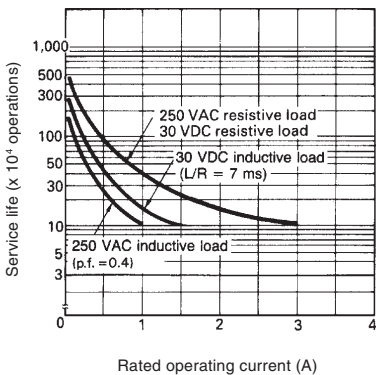
High capacity

PCB: Single-pole high sensitivity  
Two-pole general purpose  
Plug-in: Two-pole single button

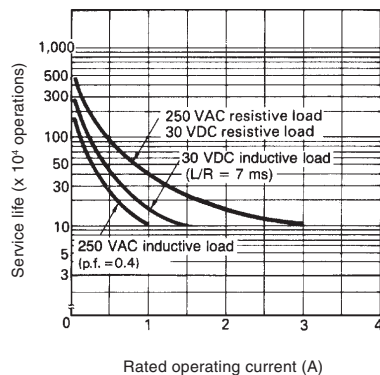
Plug-in: Single-pole single button  
Quick connect



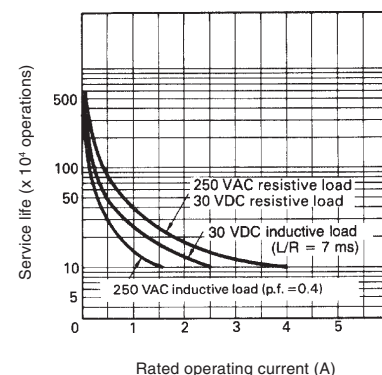
PCB: Two-pole high sensitivity



PCB: Single-pole general purpose Sealed

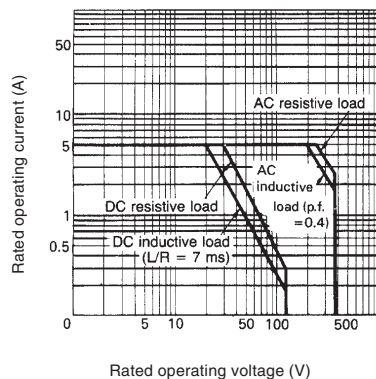


PCB: Two-pole general purpose Sealed

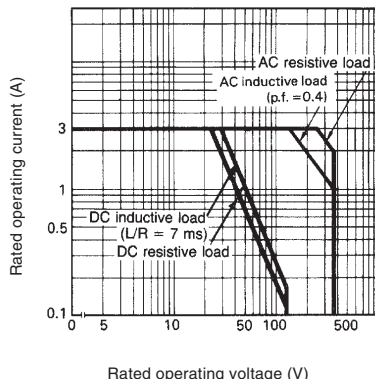


**Maximum Switching Capacity - Latching Types**

One pole

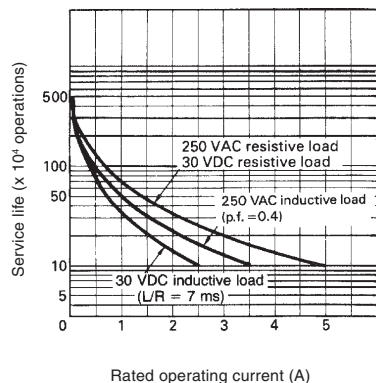


Two-pole

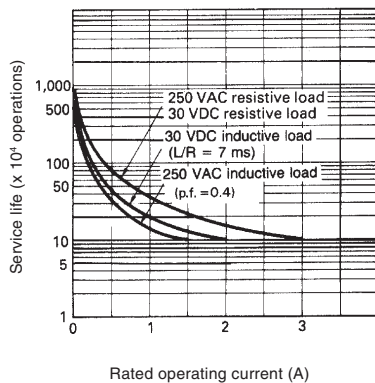


**Electrical Service Life - Latching Types**

One pole



Two-pole



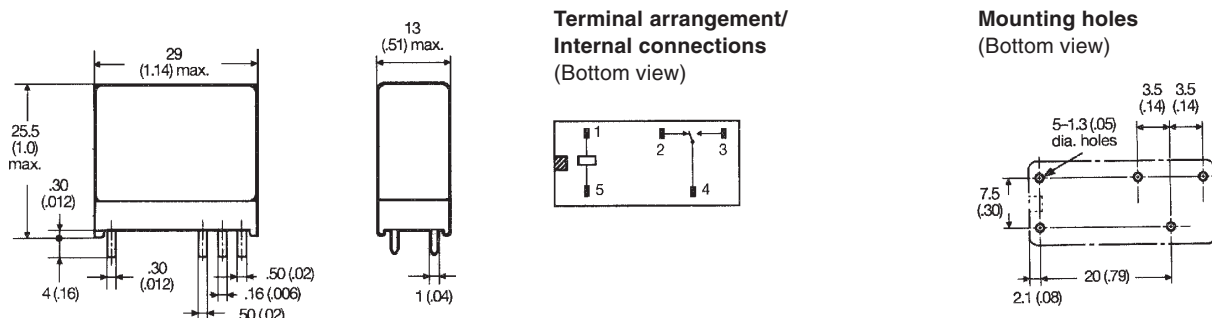


# Dimensions

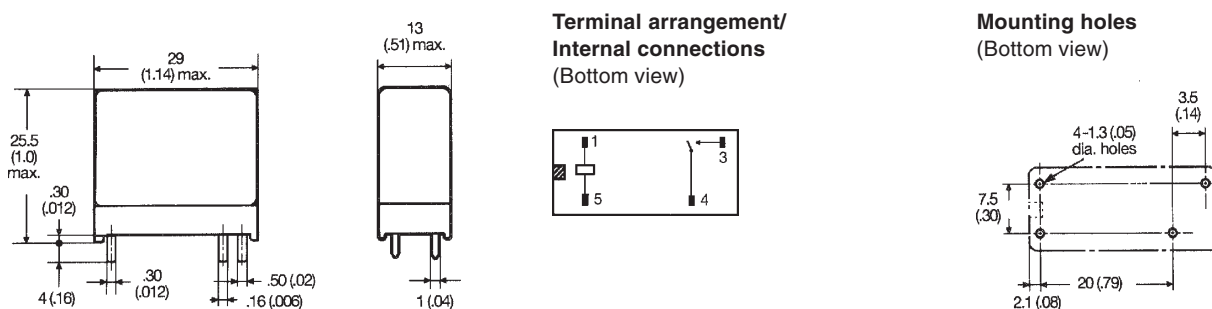
Unit: mm (inch)

## ■ Non-latching

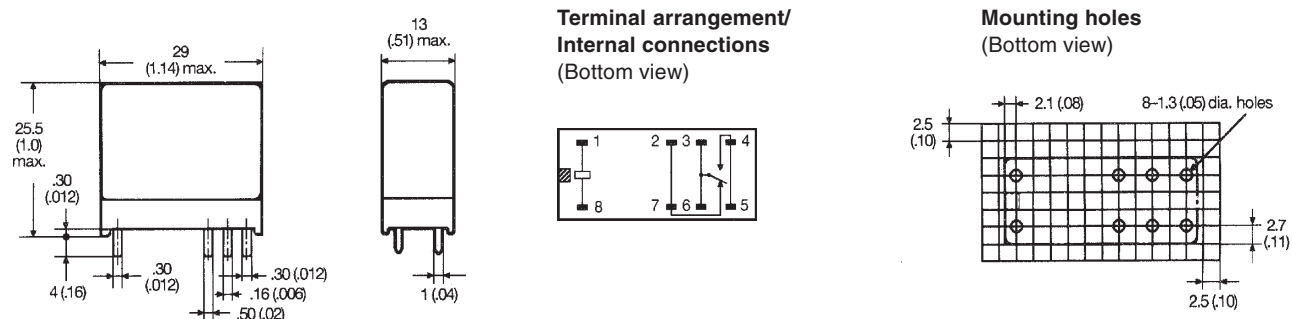
PCB Terminal: SPDT, general purpose & high sensitivity



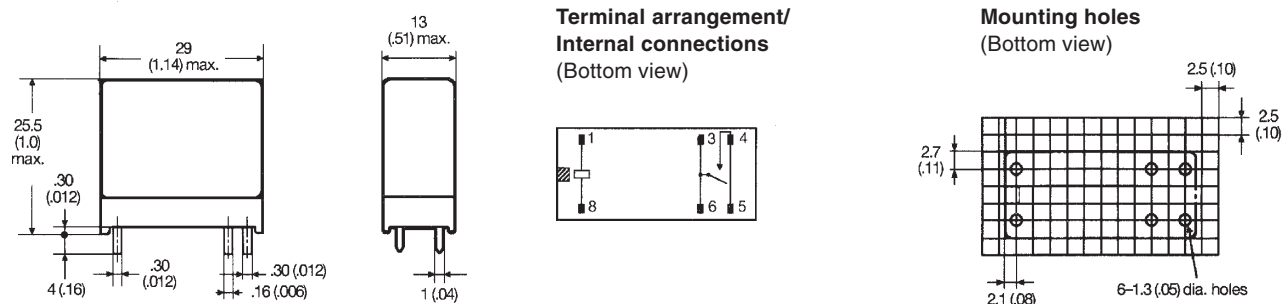
PCB Terminal: SPST-NO, general purpose & high sensitivity



PCB Terminal: SPDT, high capacity

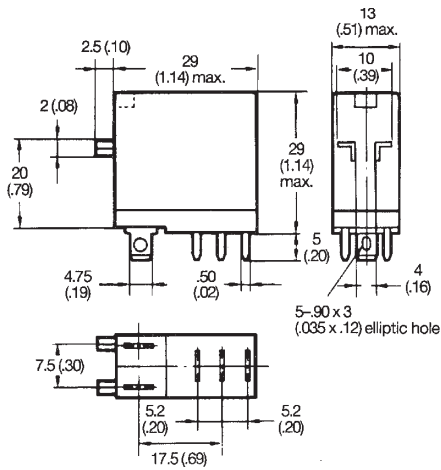


PCB Terminal: SPST-NO, high capacity



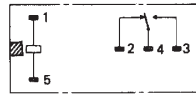
- Note: 1. and indicate mounting orientation marks.  
 2. A tolerance of  $\pm 0.10$  (0.004) applies to the above dimensions.

Plug-in: SPDT, single button general purpose, LED indicator, surge suppression diode

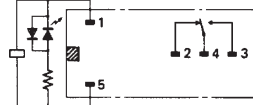


Terminal arrangement/Internal connections (Bottom view)

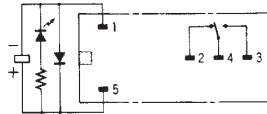
G2R-1-S



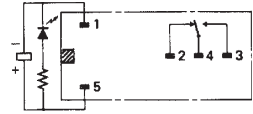
G2R-1-SN(AC)



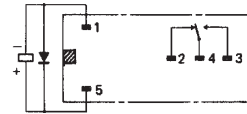
G2R-1-SND(DC)



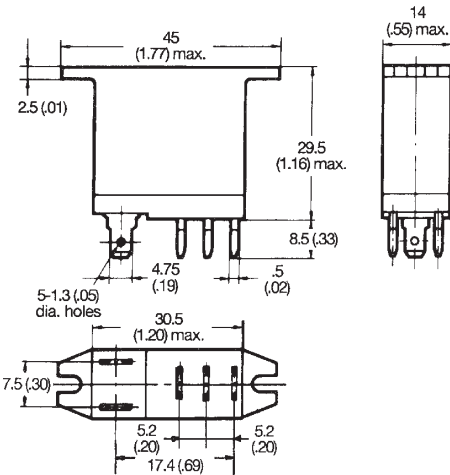
G2R-1-SN(DC)



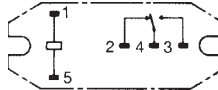
G2R-1-SD(DC)



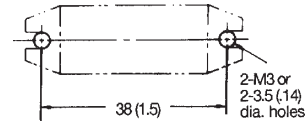
Quick-connect: SPDT



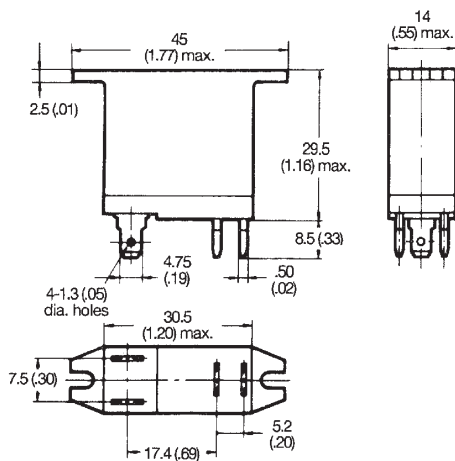
Terminal arrangement/Internal connections (Bottom view)



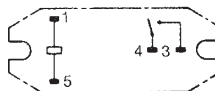
Mounting holes (Bottom view)



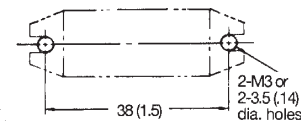
Quick-connect: SPST-NO



Terminal arrangement/Internal connections (Bottom view)

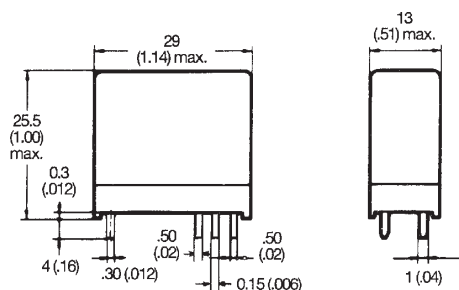


Mounting holes (Bottom view)

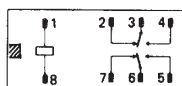


Note: 1. and indicate mounting orientation marks.  
 2. A tolerance of ±0.10 (0.004) applies to the above dimensions

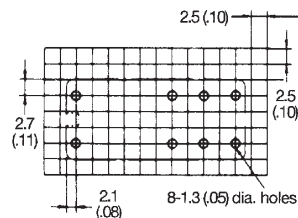
**PCB Terminal: DPDT, general purpose & high sensitivity**



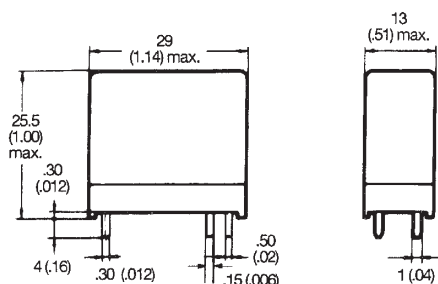
**Terminal arrangement/  
Internal connections**  
(Bottom view)



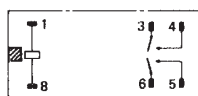
**Mounting holes**  
(Bottom view)



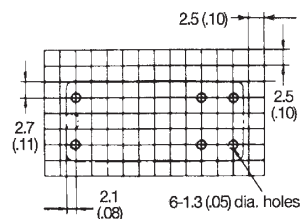
**PCB Terminal: DPST-NO, general purpose & high sensitivity**



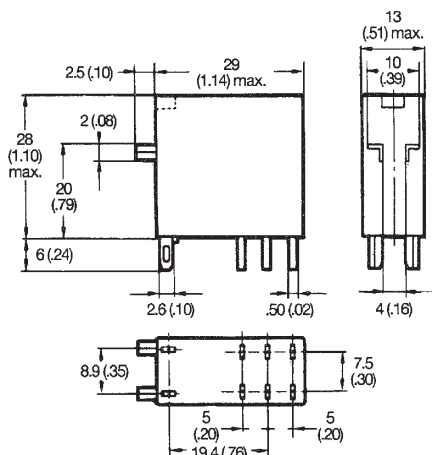
**Terminal arrangement/  
Internal connections**  
(Bottom view)



**Mounting holes**  
(Bottom view)

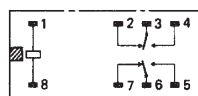


**Plug-in: DPDT**

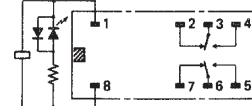


**Terminal arrangement/Internal connections**  
(Bottom view)

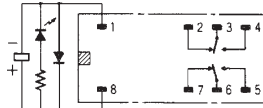
**G2R-2-S**



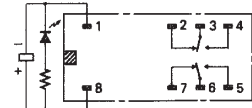
**G2R-2-SN(AC)**



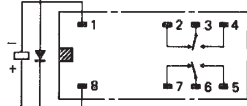
**G2R-2-SND(DC)**





**G2R-2-SN(DC)**



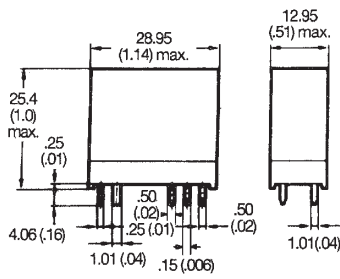
**G2R-2-SD(DC)**



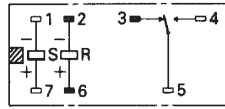
**Note:** 1.  and  indicate mounting orientation marks.  
2. A tolerance of  $\pm 0.10$  (0.004) applies to the above dimensions.

# ■ Latching

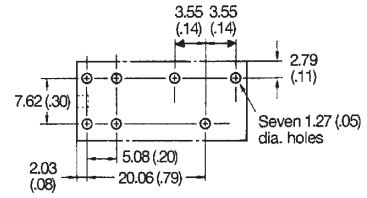
## SPDT, Dual coil latching G2RK-1



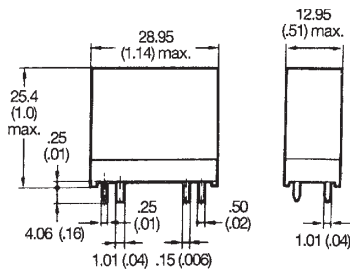
Dual coil



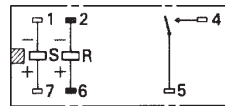
Dual coil



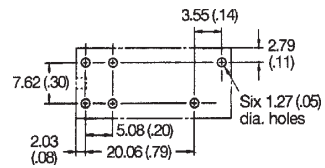
## SPST-NO, Dual coil latching G2RK-1A



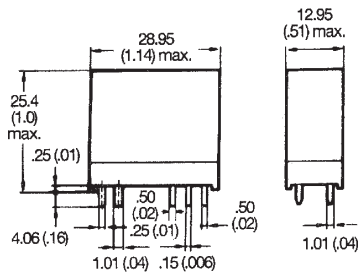
Dual coil



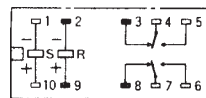
Dual coil



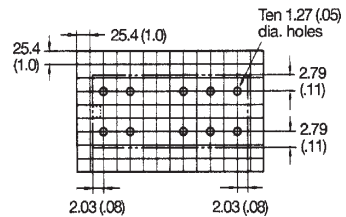
## DPDT, Dual coil latching G2RK-2



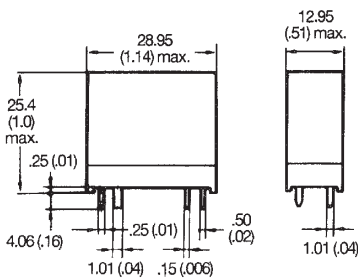
Dual coil



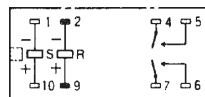
Dual coil



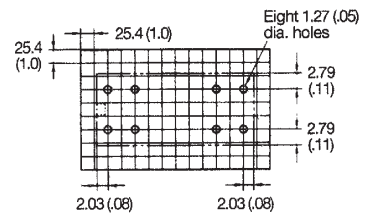
## DPST-NO, Dual coil latching G2RK-2A



Dual coil



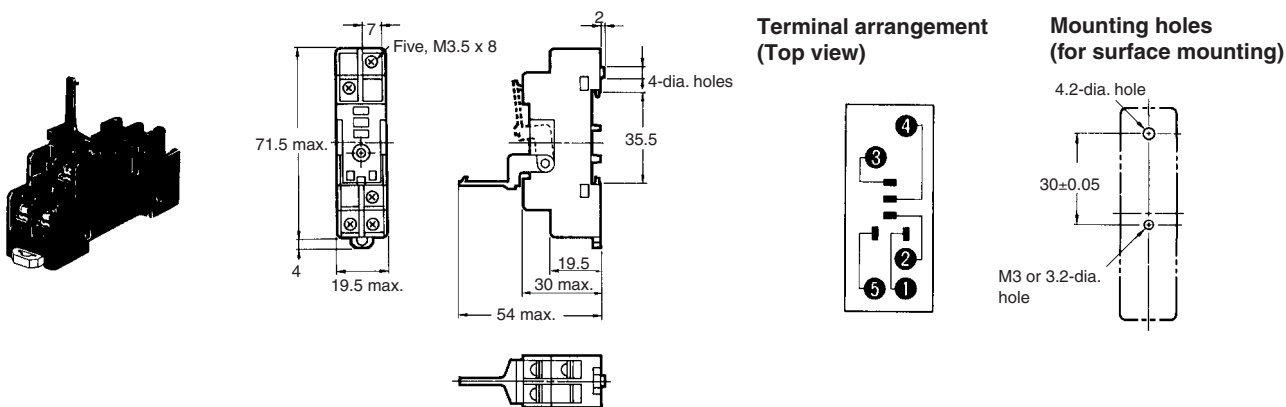
Dual coil



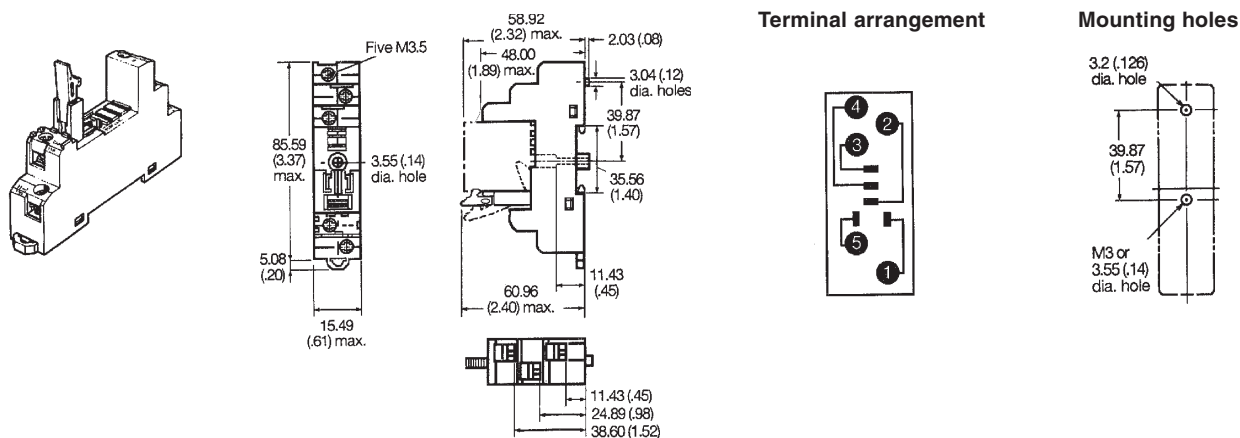
- Note: 1. and indicate mounting orientation marks.  
2. A tolerance of  $\pm 0.10$  (0.004) applies to the above dimensions.

## Accessories

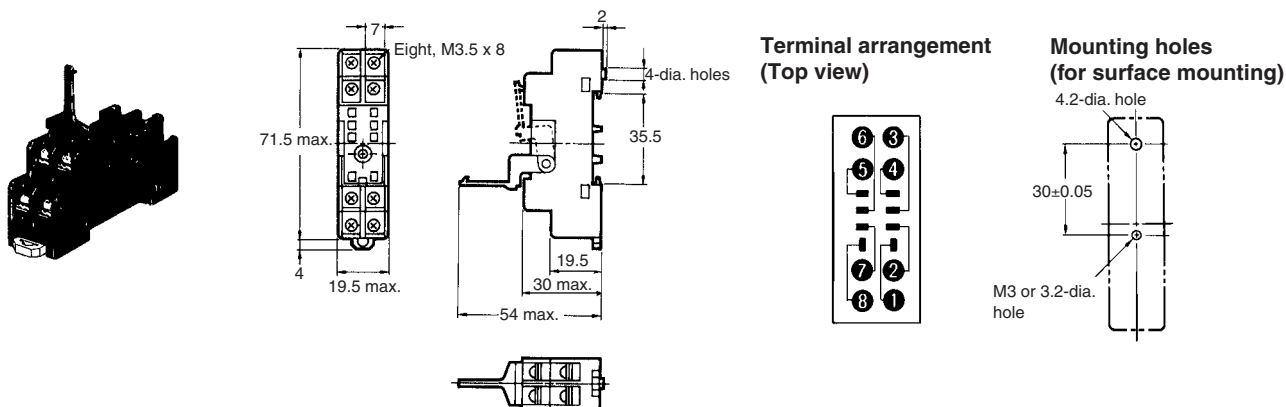
### Track mounted socket P2RF-05 (UL E87929/CSA LR31928)



### Track mounted socket P2RF-05-E (UL E87929/CSA LR31928)

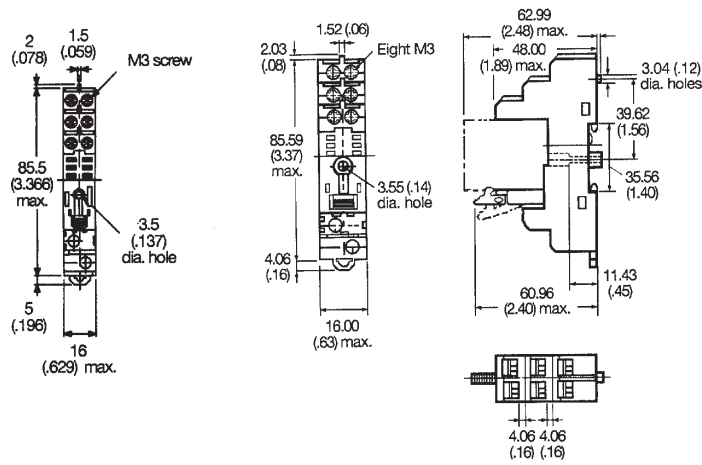


### Track mounted socket P2RF-08 (UL E87929/CSA LR31928)

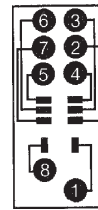


- Note:** 1. and indicate mounting orientation marks.  
2. A tolerance of ±0.10 (0.004) applies to the above dimensions.

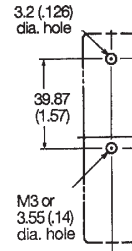
**Track mounted socket**  
**P2RF-08-E (UL E87929/CSA LR31928)**





**Terminal arrangement**

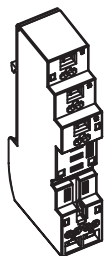


**Mounting holes**

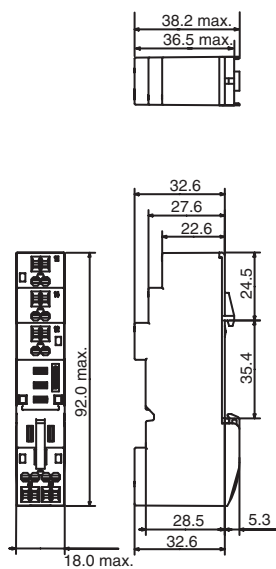


- Note:** 1.  and  indicate mounting orientation marks.  
 2. A tolerance of  $\pm 0.10$  (0.004) applies to the above dimensions.

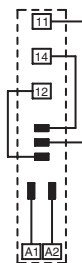
**Screwless Clamp Terminal Socket  
P2RF-05-S (UL E8729/CSA LR31928)**



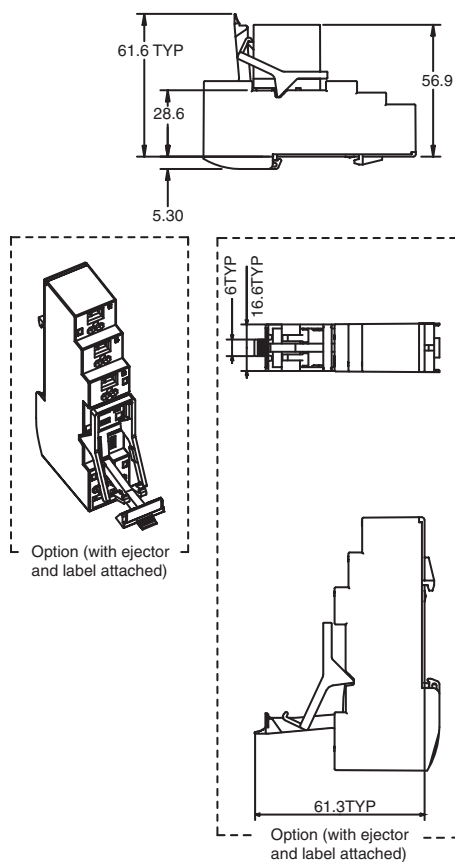
Standard Model



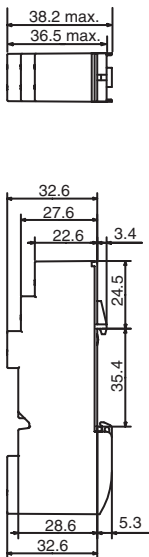
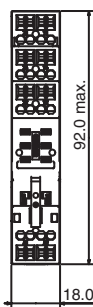
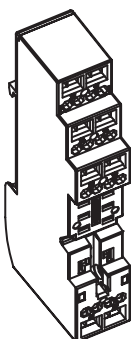
**Terminal Arrangement**



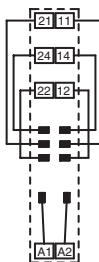
**Mounting Height (with lever)**



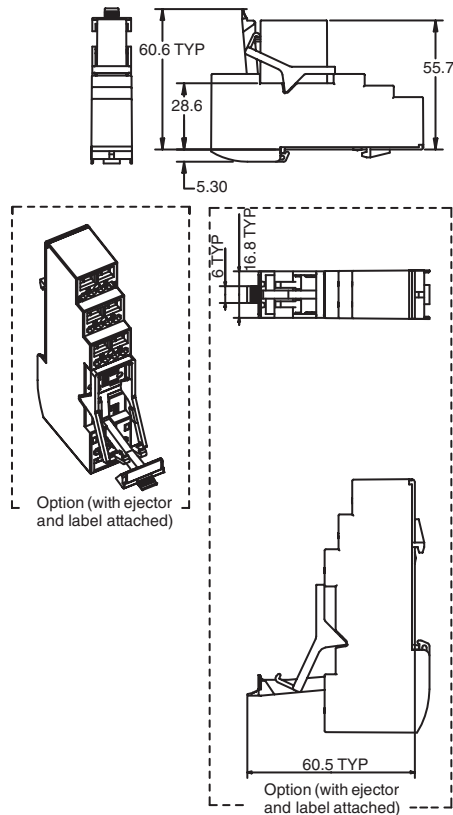
**Screwless Clamp Terminal Socket  
P2RF-08-S (UL E8729/CSA LR31928)**



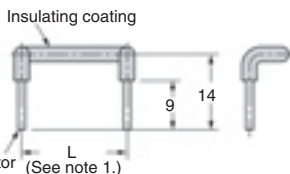
**Terminal Arrangement**



**Mounting Height (with lever)**



**Socket**



**Note: 1.** The relationship between the model, the length L, and the color of the insulating coating is shown in the following table.

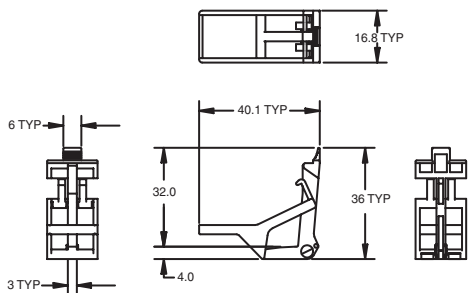
| Model   | Length (L) mm | Color of insulating coating |
|---------|---------------|-----------------------------|
| P2RM-SR | 14.3          | Red                         |
| P2RM-SB |               | Blue                        |

- 2. The insulating coating must be able to withstand a voltage of 3,000 V for 1 minute. Use either PE or PA as the material of the insulating coating.
- 3. The positions of the ends of the insulating coating must not vary more than 0.5 mm.

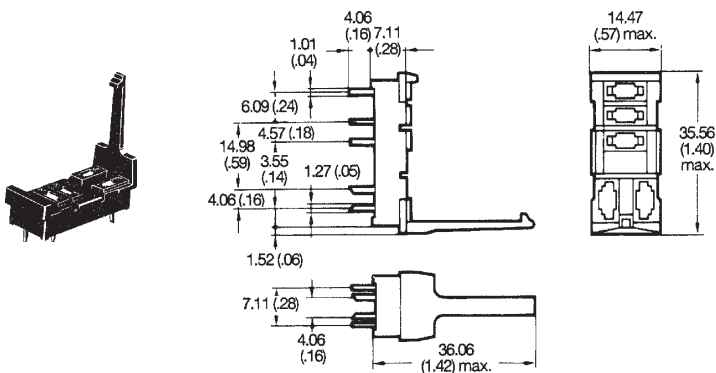
4. The characteristics of the socket bridge are shown in the following table.

| Item                          | Characteristic         |
|-------------------------------|------------------------|
| Rated ON current              | 10 A                   |
| Rated insulation voltage      | 250 VAC                |
| Temperature rise              | 35°C max.              |
| Dielectric strength           | 3,000 VAC for 1 minute |
| Ambient operating temperature | -55 to 70°C            |

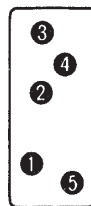
**Clip and Release Lever**



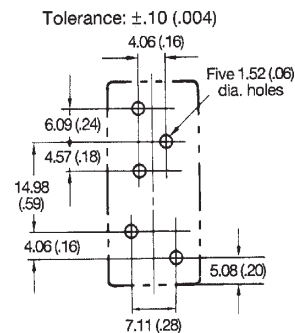
**Back connecting socket  
P2R-05P (1-pole) (UL E87929/CSA LR31928)**



**Terminal arrangement**



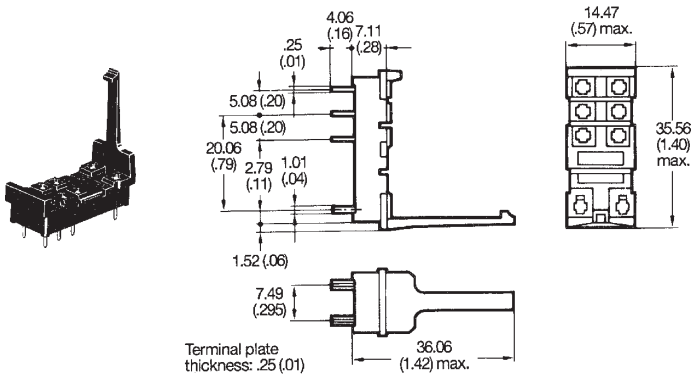
**Mounting holes**



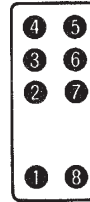
- Note: 1.** and indicate mounting orientation marks.
- 2. A tolerance of ±0.10 (0.004) applies to the above dimensions.



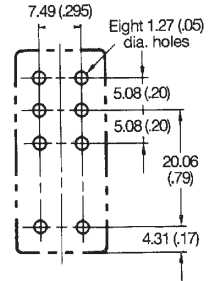
**Back connecting socket  
P2R-08P (2-pole) (UL E87929/CSA LR31928)**



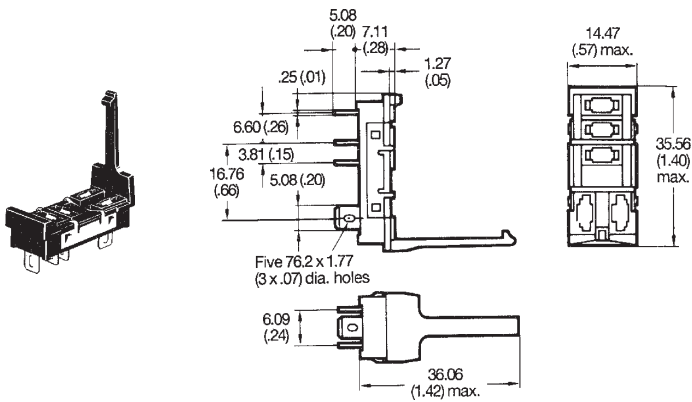
**Terminal arrangement**



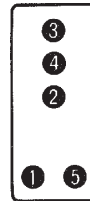
**Mounting holes**



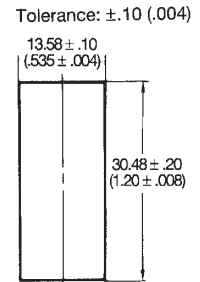
**Back connecting socket  
P2R-05A (1-pole) (UL E87929/CSA LR31928)**



**Terminal arrangement**

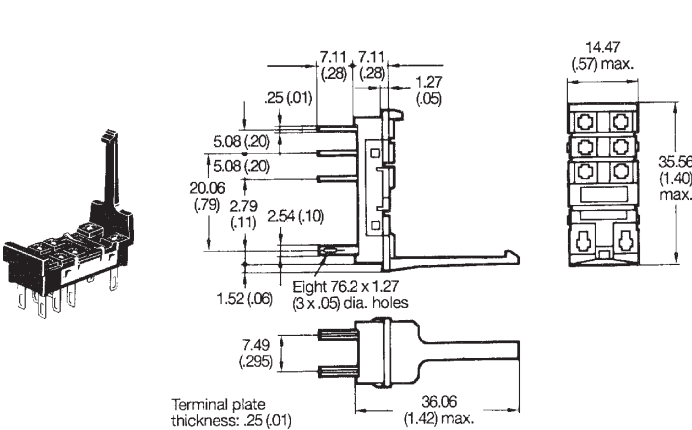


**Mounting holes  
(Bottom view)**

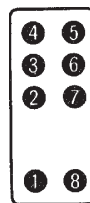


Recommended thickness of the panel is 1.52 (.06) to 2.03 (.08)

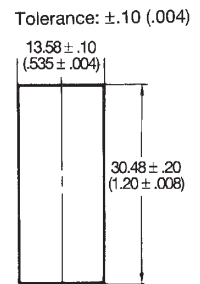
**Back connecting socket  
P2R-08A (2-pole) (UL E87929/CSA LR31928)**





**Terminal arrangement**



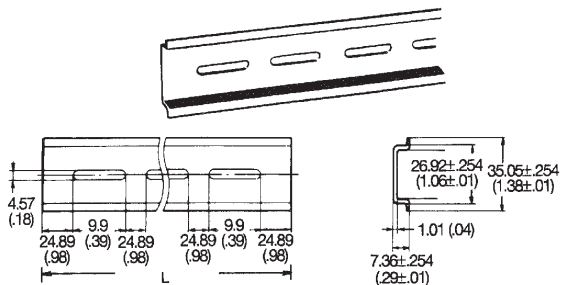
**Mounting holes  
(Bottom view)**



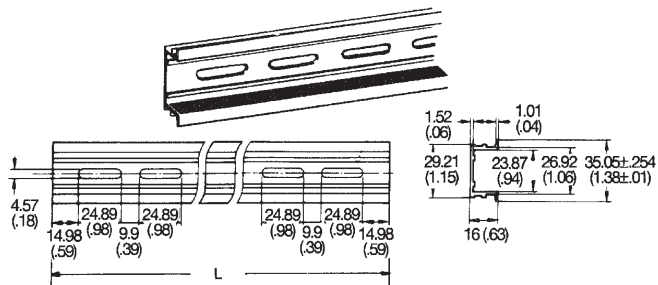
Recommended thickness of the panel is 1.52 (.06) to 2.03 (.08)

- Note:** 1.  and  indicate mounting orientation marks.  
2. A tolerance of ±0.10 (0.004) applies to the above dimensions.

**Mounting track  
PFP-100N, PFP-50N**

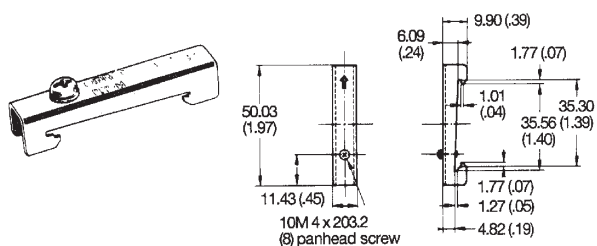


**Mounting track  
PFP-100N2**

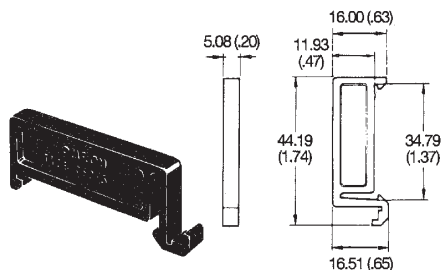


- Note: 1. It is recommended that a panel thickness of 0.06 to 0.08 mm (0.002 to 0.003 in) be used.  
 2. L = Length  
 PFP-100N ..... L = 990.60 mm (39.00 in)  
 PFP-50N ..... L = 497.84 mm (19.60 in)  
 PFP-100N2 ..... L = 990.60 mm (39.00 in)

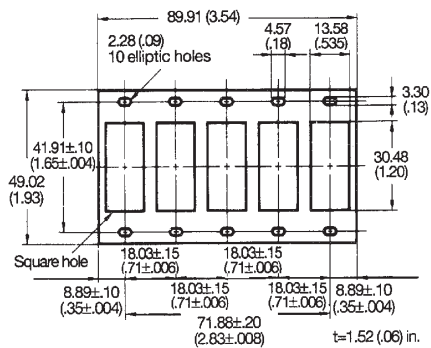
**End plate  
PFP-M**



**Spacer  
PFP-S**



**Connecting socket mounting plate  
P2R-P**



## ■ Approvals

UL (File No. E41643)/ CSA (File No. 31928)

| Type   | Contact form | Coil rating                  | Contact ratings   |
|--|--------------|------------------------------|---|
| G2R-1<br>G2R-14<br>G2R-1-H<br>G2R-14-H<br>G2R-1-S<br>G2R-1-T                                     | SPDT         | 3 to 110 VDC<br>3 to 240 VDC | 10 A, 30 VDC (Resistive)<br>10 A, 250 VAC (General purpose)<br>10 A, 277 VAC (General purpose)<br>TV-3, 120 VAC (NO contact)<br>360 WT, 120 VAC (Tungsten)<br>1/3 HP, 125 VAC (NO contact)<br>1/2 HP, 250 VAC (NO contact)<br>1/2 HP, 277 VAC (NO contact)<br>TV-8, 120 VAC (NO contact, ASI contacts)<br>B300 (Pilot duty) |
| G2R-1A<br>G2R-1A4<br>G2R-1A-H<br>G2R-1A4-H<br>G2R-1A-T   | SPST-NO      |                              |   |
| G2R-1-E  | SPDT         | 3 to 110 VDC<br>3 to 240 VAC | 20 A, 277 VAC (General purpose)<br>16 A, 30 VDC (Resistive)<br>16 A, 250 VAC (General purpose)<br>360 WT, 120 VAC (Tungsten)<br>TV-3, 120 VAC (NO contact)<br>1/2 HP, 240 VAC<br>1 HP, 240 VAC<br>TV-8, 120 VAC (No contact, ASI contacts)  |
| G2R-1A-E   | SPST-NO      |                              |   |
| G2R-2<br>G2R-24<br>G2R-2-H<br>G2R-24-H<br>G2R-2-S<br>G2R-2-A<br>G2R-2A4<br>G2R-2A-H<br>G2R-2A4-H | DPDT         | 3 to 110 VDC<br>3 to 240 VAC | 10 A, 30 VDC (Resistive)<br>10 A, 277 VAC (General purpose)<br>5 A, 250 VAC (General purpose)<br>TV-3, 120 VAC (NO contact)<br>1/6 HP, 120 VAC<br>1/3 HP, 240 VAC<br>1/3 HP, 265 VAC<br>250 VA, 120 VAC (Pilot duty)<br>B300 (Pilot duty)   |
| G2RK-1   | SPDT         | 3 to 24 VDC                  | 10 A, 30 VDC (Resistive)<br>10 A, 250 VAC (General purpose)<br>TV-3 (NO contact)<br>1/6 HP, 120 VAC<br>1/2 HP, 120 VAC<br>A300 (Pilot duty)   |
| G2RK-1A  | SPST-NO      |                              |   |
| G2RK-2   | DPDT         | 3 to 24 VDC                  | 5 A, 30 VDC (Resistive)<br>5 A, 250 VAC (General purpose)<br>TV-3 (NO contact)<br>1/6 HP, 120 VAC<br>1/3 HP, 240 VAC  |
| G2RK-2A  | DPST-NO      |                              |   |

**Note:** 1. The rated values approved by each of the safety standards (e.g., UL and CSA) may be different from the performance characteristics individually defined in this catalog.

2. In the interest of product improvement, specifications are subject to change.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters into inches, divide by 25.4



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[G2R-2-SND-DC24\(S\)](#)

**EN**

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Cette fiche technique est  
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