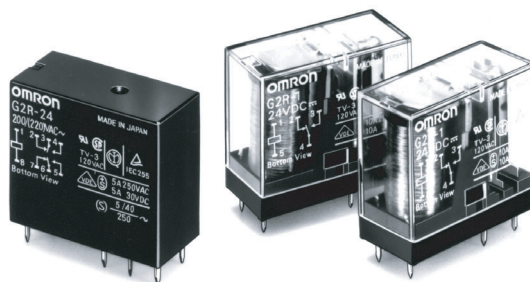


A Power Relay for a Variety of Purposes with Various Models

- Conforms to VDE (EN61810-1), UL508, CSA22.2.
- Meets EN60335-1 requirements for household products.
- Clearance and creepage distance: 8 mm/8 m.
- Models with CTI250 material available.
- High-sensitivity (360 mW) and high-capacity (16 A) types available.
- Double-winding latching type available.



RoHS Compliant Refer to pages 16 to 17 for details.



Ordering Information

| Classification | | Enclosure ratings | Coil ratings | Contact form | | | |
|--|--------------------|-------------------|--------------|--------------|---------|----------|---------|
| | | | | SPST-NO | SPDT | DPST-NO | DPDT |
| PCB terminal | General-purpose | Flux protection | AC/DC | G2R-1A | G2R-1 | G2R-2A | G2R-2 |
| | | Fully sealed | | G2R-1A4 | G2R-14 | G2R-2A4 | G2R-24 |
| | Bifurcated contact | Flux protection | DC | G2R-1AZ | G2R-1Z | --- | --- |
| | | Fully sealed | | G2R-1AZ4 | G2R-1Z4 | --- | --- |
| | High-capacity | Flux protection | AC/DC | G2R-1A-E | G2R-1-E | --- | --- |
| | High-sensitivity | Flux protection | DC | G2R-1A-H | G2R-1-H | G2R-2A-H | G2R-2-H |
| Double-winding latching | Flux protection | G2RK-1A | | G2RK-1 | G2RK-2A | G2RK-2 | |
| Quick-connect (upper bracket mounting) | General-purpose | Unsealed | AC | G2R-1A-T | G2R-1-T | --- | --- |
| | | | DC | | | | |

Note: 1. When ordering, add the rated coil voltage to the model number.

Example: G2R-1A 12 VDC

Rated coil voltage

2. Models with CTI250 material are also available.
Contact your OMRON representative for more details.

Model Number Legend

G2R --- VDC (VAC)
 1 2 3 4 5 6 7 8 9

1. Relay Function

None: Single-side stable
 K: Double-winding latching.

2. Number of Poles

1: 1 pole
 2: 2 poles

3. Contact Form

None: PDT
 A: PST-NO

4. Contact Type

None: Single
 Z: Bifurcated

5. Enclosure Ratings

None: Flux protection
 4: Fully sealed

6. Terminals

None: Straight PCB
 T: Quick-connect (upper bracket mounting)

7. Classification

None: General-purpose
 E: High-capacity
 H: High-sensitivity

8. Safety standards

None: UL/CSA/VDE/SEV/TÜV
 SKVD: UL/CSA/VDE/SEV/TÜV/SEMKO

9. Rated Coil Voltage

Refer to *Coil Ratings*.

Specifications

■ Coil Ratings

| Rated voltage | | 12 VAC | 24 VAC | 100/ (110) VAC | 120 VAC | 200/ (220) VAC | 220 VAC | 230 VAC | 240 VAC |
|-------------------------------------|--------------|---|---------|-------------------|---------|-------------------|----------|----------|----------|
| Rated current | 50 Hz | 93 mA | 46.5 mA | 11 mA | 9.3 mA | 5.5 mA | 5.1 mA | 4.7 mA | 4.7 mA |
| | 60 Hz | 75 mA | 37.5 mA | 9/ (10.6) mA | 7.5 mA | 4.5 (5.3) mA | 4.1 mA | 3.8 mA | 3.8 mA |
| Coil resistance | | 65 Ω | 260 Ω | 4,600 Ω | 6,500 Ω | 20,200 Ω | 25,000 Ω | 26,850 Ω | 30,000 Ω |
| Coil inductance (H) (ref. value) | Armature OFF | 0.19 | 0.81 | 13.34 | 21 | 51.3 | 57.5 | 62 | 65.5 |
| | Armature ON | 0.39 | 1.55 | 26.84 | 42 | 102 | 117 | 124 | 131 |
| Must operate voltage | | 80% max. of rated voltage | | | | | | | |
| Must release voltage | | 30% min. of rated voltage | | | | | | | |
| Max. voltage | | 140% of rated voltage (at 23°C) | | | | | | | |
| Power consumption | | Approx. 0.9 VA at 60 Hz (approx. 0.7 VA at 60 Hz) | | | | | | | |

| Rated voltage | | 5 VDC | 6 VDC | 12 VDC | 24 VDC | 48 VDC | 100 VDC |
|-------------------------------------|--------------|---------------------------------|---------|---------|---------|---------|----------|
| Rated current (50/60 Hz) | | 106 mA | 88.2 mA | 43.6 mA | 21.8 mA | 11.5 mA | 5.3 mA |
| Coil resistance | | 47 Ω | 68 Ω | 275 Ω | 1,100 Ω | 4,170 Ω | 18,860 Ω |
| Coil inductance (H) (ref. value) | Armature OFF | 0.20 | 0.28 | 1.15 | 4.27 | 13.86 | 67.2 |
| | Armature ON | 0.39 | 0.55 | 2.29 | 8.55 | 27.71 | 93.2 |
| Must operate voltage | | 70% max. of rated voltage | | | | | |
| Must release voltage | | 15% min. of rated voltage | | | | | |
| Max. voltage | | 170% of rated voltage (at 23°C) | | | | | |
| Power consumption | | Approx. 0.53 W | | | | | |

High-sensitivity Relays

| | | | | | |
|---|---------------------------------|-------|--------|---------|---------|
| Rated voltage | 5 VDC | 6 VDC | 12 VDC | 24 VDC | 48 VDC |
| Rated current (50/60 Hz) (See note 1.) | 71.4 mA | 60 mA | 30 mA | 15 mA | 7.5 mA |
| Coil resistance (See note 1.) | 70 Ω | 100 Ω | 400 Ω | 1,600 Ω | 6,400 Ω |
| Coil inductance (H) (ref. value) | Armature OFF | 0.37 | 0.53 | 2.14 | 31.20 |
| | Armature ON | 0.75 | 1.07 | 4.27 | 62.40 |
| Must operate voltage | 70% max. of rated voltage | | | | |
| Must release voltage | 15% min. of rated voltage | | | | |
| Max. voltage | 170% of rated voltage (at 23°C) | | | | |
| Power consumption | Approx. 0.36 W | | | | |

- Note:**
1. The rated current and coil resistance are measured at a coil temperature of 23°C with a tolerance of $+15\%$ / -20% (AC rated current) or $\pm 10\%$ (DC coil resistance).
 2. Operating characteristics are measured at a coil temperature of 23°C.
 3. Depending on the type of Relay, some Relays do not have coil specifications. Contact your OMRON representative for more details.

Double-winding Latching Relays

| | | | | | | |
|---------------------------|--|---------------------|--------|---------|---------|-------|
| Rated voltage | 5 VDC | 6 VDC | 12 VDC | 24 VDC | | |
| Set coil | Rated current (See note 1.) | 167 mA | 138 mA | 70.6 mA | 34.6 mA | |
| | Coil resistance (See note 1.) | 30 Ω | 43.5 Ω | 170 Ω | 694 Ω | |
| | Coil inductance (H) (ref. value) | Armature OFF | 0.073 | 0.104 | 0.42 | 1.74 |
| | | Armature ON | 0.146 | 0.208 | 0.83 | 3.43 |
| Reset coil | Rated current | 119 mA | 100 mA | 50 mA | 25 mA | |
| | Coil resistance | 42 Ω | 60 Ω | 240 Ω | 960 Ω | |
| | Coil inductance (H) (ref. value) | Armature OFF | 0.003 | 0.005 | 0.018 | 0.079 |
| | | Armature ON | 0.006 | 0.009 | 0.036 | 0.148 |
| Must set voltage | 70% max. of rated voltage | | | | | |
| Must reset voltage | 70% max. of rated voltage | | | | | |
| Max. voltage | 140% of rated voltage (at 23°C) | | | | | |
| Power consumption | Set coil: Approx. 850 mW; Reset coil: Approx. 600 mW | | | | | |

- Note:**
1. The rated current and coil resistance are measured at a coil temperature of 23°C with a tolerance of $\pm 10\%$.
 2. Operating characteristics are measured at a coil temperature of 23°C.

■ Contact Ratings

PCB/Flux Protection, Quick-connect Terminal Relays

| Item | General-purpose, quick-connect terminal | | | | High-capacity | |
|---|---|---|--------------------------------------|---|--------------------------------------|---|
| | 1 pole | | 2 poles | | 1 pole | |
| Load | Resistive load ($\cos\phi = 1$) | Inductive load ($\cos\phi = 0.4$; L/R = 7 ms) | Resistive load ($\cos\phi = 1$) | Inductive load ($\cos\phi = 0.4$; L/R = 7 ms) | Resistive load ($\cos\phi = 1$) | Inductive load ($\cos\phi = 0.4$; L/R = 7 ms) |
| Rated load | 10 A at 250 VAC; 10 A at 30 VDC | 7.5 A at 250 VAC; 5 A at 30 VDC | 5 A at 250 VAC; 5 A at 30 VDC | 2 A at 250 VAC; 3 A at 30 VDC | 16 A at 250 VAC; 16 A at 30 VDC | 8 A at 250 VAC; 8 A at 30 VDC |
| Rated carry current | 10 A | | 5 A | | 16 A | |
| Max. switching voltage | 380 VAC, 125 VDC | | 380 VAC, 125 VDC | | 380 VAC, 125 VDC | |
| Max. switching current | 10 A | | 5 A | | 16 A | |
| Max. switching power | 2,500 VA, 300 W | 1,875 VA, 150 W | 1,250 VA, 150 W | 500 VA, 90 W | 4,000 VA, 480 W | 2,000 VA, 240 W |
| Failure rate (reference value) | 100 mA at 5 VDC | | 10 mA at 5 VDC | | 100 mA at 5 VDC | |

Note: P level: $\lambda_{60} = 0.1 \times 10^{-6}/\text{operation}$

PCB/Flux Protection Relays

| Item | Bifurcated contacts | | High-sensitivity | | | |
|-----------------------------------|--------------------------------------|---|--------------------------------------|---|--------------------------------------|---|
| | 1 pole | | 1 pole | | 2 poles | |
| Load | Resistive load ($\cos\phi = 1$) | Inductive load ($\cos\phi = 0.4$; L/R = 7 ms) | Resistive load ($\cos\phi = 1$) | Inductive load ($\cos\phi = 0.4$; L/R = 7 ms) | Resistive load ($\cos\phi = 1$) | Inductive load ($\cos\phi = 0.4$; L/R = 7 ms) |
| Rated load | 5 A at 250 VAC; 5 A at 30 VDC | 2 A at 250 VAC; 3 A at 30 VDC | 5 A at 250 VAC; 5 A at 30 VDC | 2 A at 250 VAC; 3 A at 30 VDC | 3 A at 250 VAC; 3 A at 30 VDC | 1 A at 250 VAC; 1.5 A at 30 VDC |
| Rated carry current | 5 A | | 5 A | | 3 A | |
| Max. switching voltage | 380 VAC, 125 VDC | | 380 VAC, 125 VDC | | 380 VAC, 125 VDC | |
| Max. switching current | 5 A | | 5 A | | 3 A | |
| Max. switching power | 1,250 VA, 150 W | 500 VA, 90 W | 1,250 VA, 150 W | 500 VA, 90 W | 750 VA, 90 W | 250 VA, 45 W |
| Failure rate (reference value) | 1 mA at 5 VDC | | 100 mA at 5 VDC | | 10 mA at 5 VDC | |

Note: P level: $\lambda_{60} = 0.1 \times 10^{-6}$ /operation

PCB/Fully sealed Relays

| Item | General-purpose (single contact) | | | | Bifurcated contact | |
|-----------------------------------|--------------------------------------|---|--------------------------------------|---|--------------------------------------|---|
| | 1 pole | | 2 poles | | 1 pole | |
| Load | Resistive load ($\cos\phi = 1$) | Inductive load ($\cos\phi = 0.4$; L/R = 7 ms) | Resistive load ($\cos\phi = 1$) | Inductive load ($\cos\phi = 0.4$; L/R = 7 ms) | Resistive load ($\cos\phi = 1$) | Inductive load ($\cos\phi = 0.4$; L/R = 7 ms) |
| Rated load | 8 A at 250 VAC; 8 A at 30 VDC | 6 A at 250 VAC; 4 A at 30 VDC | 4 A at 250 VAC; 4 A at 30 VDC | 1.5 A at 250 VAC; 2.5 A at 30 VDC | 5 A at 250 VAC; 5 A at 30 VDC | 2 A at 250 VAC; 3 A at 30 VDC |
| Rated carry current | 8 A | | 4 A | | 5 A | |
| Max. switching voltage | 380 VAC, 125 VDC | | 380 VAC, 125 VDC | | 380 VAC, 125 VDC | |
| Max. switching current | 8 A | | 4 A | | 5 A | |
| Max. switching power | 2,000 VA, 240 W | 1,500 VA, 120 W | 1,000 VA, 120 W | 375 VA, 75 W | 1,250 VA, 150 W | 500 VA, 90 W |
| Failure rate (reference value) | 100 mA at 5 VDC | | 10 mA at 5 VDC | | 1 mA at 5 VDC | |

Note: P level: $\lambda_{60} = 0.1 \times 10^{-6}$ /operation

Latching Relays

| Item | 1 pole | | 2 poles | |
|-----------------------------------|----------------------------------|--------------------------------------|---|--------------------------------------|
| | Load | Resistive load ($\cos\phi = 1$) | Inductive load ($\cos\phi = 0.4$; L/R = 7 ms) | Resistive load ($\cos\phi = 1$) |
| Rated load | 5 A at 250 VAC; 5 A at 30 VDC | 3.5 A at 250 VAC; 2.5 A at 30 VDC | 3 A at 250 VAC; 3 A at 30 VDC | 1.5 A at 250 VAC; 2 A at 30 VDC |
| Rated carry current | 5 A | | 3 A | |
| Max. switching voltage | 380 VAC, 125 VDC | | 380 VAC, 125 VDC | |
| Max. switching current | 5 A | | 3 A | |
| Max. switching power | 1,250 VA, 150 W | 875 VA, 75 W | 750 VA, 90 W | 375 VA, 60 W |
| Failure rate (reference value) | 100 mA at 5 VDC | | 10 mA at 5 VDC | |

Note: P level: $\lambda_{60} = 0.1 \times 10^{-6}$ /operation

■ Characteristics

Standard Relays

| Item | 1 pole | 2 poles |
|--------------------------|--|--|
| Contact resistance | 30 mΩ max. (high-capacity type: 100 mΩ max.) | 50 mΩ max. |
| Operate (set) time | 15 ms max. | |
| Release (reset) time | AC: 10 ms max.; DC: 5 ms max. | |
| Max. operating frequency | Mechanical: 18,000 operations/hr Electrical: 1,800 operations/hr (under rated load) | |
| Insulation resistance | 1,000 MΩ min. (at 500 VDC) | |
| Dielectric strength | 5,000 VAC, 50/60 Hz for 1 min between coil and contacts 1,000 VAC, 50/60 Hz for 1 min between contacts of same polarity | 5,000 VAC, 50/60 Hz for 1 min between coil and contacts 3,000 VAC, 50/60 Hz for 1 min between contacts of different polarity 1,000 VAC, 50/60 Hz for 1 min between contacts of same polarity |
| Vibration resistance | Destruction: 10 to 55 to 10 Hz, 0.75-mm single amplitude (1.5-mm double amplitude) Malfunction: 10 to 55 to 10 Hz, 0.75-mm single amplitude (1.5-mm double amplitude) | |
| Shock resistance | Destruction: 1,000 m/s ² Malfunction: 200 m/s ² when energized; 100m/s ² when no energized | |
| Endurance | Mechanical: AC coil: 10,000,000 operations min.; DC coil: 20,000,000 operations min. (at 18,000 operations/hr) Electrical: 100,000 operations min. (at 1,800 operations/hr under rated load) | |
| Ambient temperature | Operating: -40°C to 70°C (with no icing) | |
| Ambient humidity | Operating: 5% to 85% | |
| Weight | Approx. 17 g | |

Note: Values in the above table are the initial values.

Double-winding Latching Relays

| Item | 1 pole | 2 poles |
|-----------------------------|--|---|
| Contact resistance | 30 mΩ max. | 50 mΩ max. |
| Set time | 20 ms max. | |
| Reset time | 20 ms max. | |
| Min. set/reset signal width | 30 ms max. | |
| Max. operating frequency | Mechanical: 18,000 operations/hr Electrical: 1,800 operations/hr (under rated load) | |
| Insulation resistance | 1,000 MΩ min. (at 500 VDC) | |
| Dielectric strength | 5,000 VAC, 50/60 Hz for 1 min between coil and contacts 1,000 VAC, 50/60 Hz for 1 min between contacts of same pole; 1,000 VAC, 50/60 Hz for 1 min between set and reset coil | 5,000 VAC, 50/60 Hz for 1 min between coil and contacts 3,000 VAC, 50/60 Hz for 1 min between contacts of different poles 1,000 VAC, 50/60 Hz for 1 min between contacts of same pole 1,000 VAC, 50/60 Hz for 1 min between set and reset coil |
| Vibration resistance | Destruction: 10 to 55 to 10 Hz, 0.75-mm single amplitude (1.5-mm double amplitude) Malfunction: 10 to 55 to 10 Hz, 0.75-mm single amplitude (1.5-mm double amplitude) | |
| Shock resistance | Destruction: 1,000 m/s ² (approx. 100G) Malfunction: Set: 500 m/s ² (approx. 50G); 200m/s ² (approx. 20G) Reset: 100 m/s ² (approx. 10G) | |
| Endurance | Mechanical: 10,000,000 operations min (at 18,000 operations/hr) Electrical: 100,000 operations min. (at 1,800 operations/hr under rated load) | |
| Ambient temperature | Operating: -40°C to 70°C (with no icing) | |
| Ambient humidity | Operating: 5% to 85% | |
| Weight | Approx. 17 g (Quick-connect type: approx. 20 g) | |

Note: Values in the above table are the initial values.

■ Approved Standards

UL 508 (File No. E41643)

| Model | Contact form | Coil ratings | Contact ratings |
|---|--------------|------------------------------|--|
| G2R-1 G2R-14 G2R-1-H G2R-1-T | SPDT | 3 to 110 VDC 3 to 240 VAC | 10 A, 30 VDC (resistive) 10 A, 250 VAC (general use) TV-3 (NO contact only) |
| G2R-1A G2R-1A4 G2R-1A-H G2R-1A-T | SPST-NO | | |
| G2R-1-E | SPDT | | 16 A, 30 VDC (resistive, NO contact only) 16 A, 250 VAC (general use, NO contact only) TV-3 (NO contact only); 1/3 hp, 120 VAC |
| G2R-1A-E | SPST-NO | | |
| G2R-2 G2R-24 G2R-2-H | DPDT | | 5 A, 30 VDC (resistive) 5 A, 250 VAC (general use) TV-3 (NO contact only) |
| G2R-2A G2R-2A4 G2R-2A-H | DPST-NO | | |
| G2R-1A-ASI | SPST-NO | | 10 A, 30 VDC (resistive) 10 A, 250 VAC (general use) TV-5/TV-8 (NO contact only) |

CSA 22.2 No.0, No.14 (File No. LR31928)

| Model | Contact form | Coil ratings | Contact ratings |
|---|--------------|------------------------------|--|
| G2R-1 G2R-14 G2R-1-H G2R-1-T | SPDT | 3 to 110 VDC 3 to 240 VAC | 10 A, 30 VDC (resistive) 10 A, 250 VAC (general use) T-3 (NO contact only) |
| G2R-1A G2R-1A4 G2R-1A-H G2R-1A-T | SPST-NO | | |
| G2R-1-E | SPDT | | 16 A, 30 VDC (resistive, N.O only) 16 A, 250 VAC (general use, NO contact only) TV-3 (NO contact only) |
| G2R-1A-E | SPST-NO | | |
| G2R-2 G2R-24 G2R-2-H | DPDT | | 5 A, 30 VDC (resistive) 5 A, 250 VAC (general use) TV-3 (NO contact only) |
| G2R-2A G2R-2A4 G2R-2A-H | DPST-NO | | |
| G2R-1A-ASI | SPST-NO | | 10 A, 30 VDC (resistive) 10 A, 250 VAC (general use) TV-8 (NO contact only); 1/4 hp, 125 VAC |

SEV

| Contact form | Coil ratings | Contact ratings |
|--------------|------------------------------|---|
| 1 pole | 3 to 110 VDC 3 to 240 VAC | 16 A, 250 VAC1 (AgSnIn contact) 16 A, 30 VDC1 (AgSnIn contact) 10 A, 250 VAC1 5 A, 250 VAC3 10 A, 30 VDC1 |
| 2 poles | 3 to 110 VDC 3 to 240 VAC | 5 A, 250 VAC1 2 A, 380 VAC1 5 A, 30 VDC1 |

SEMKO

| Contact form | Coil ratings | Contact ratings |
|--------------|------------------------------|--|
| 1 pole | 3 to 110 VDC 6 to 240 VAC | 10/80 A, 250 VAC 3/100 A, 250 VAC 16/128 A, 250 VAC (AgSnIn contact) |
| 2 poles | | 5/40 A, 250 VAC |

TÜV (EN61810-1)

| Contact form | Coil ratings | Contact ratings |
|--------------|--|---|
| 1 pole | 3 to 110 VDC, 6 VAC to 240 VAC (for Standard coil) 3 to 48 VDC (for K, U coil) | 10 A, 250 VAC ($\cos\phi = 1.0$) 10 A, 30 VDC (0 ms) 16 A, 250 VAC ($\cos\phi = 1.0$) (AgSnIn contact) |
| 2 poles | 3 to 70 VDC (for H coil) | 8 A, 250 VAC ($\cos\phi = 0.4$) 5 A, 250 VAC ($\cos\phi = 1.0$) 5 A, 30 VDC (0 ms) 2.5 A, 250 VAC ($\cos\phi = 0.4$) |

VDE (EN61810-1), IMQ

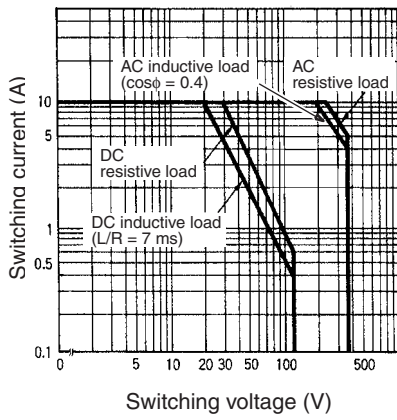
| Contact form | Coil ratings | Contact ratings |
|--------------|---|---|
| 1 pole | 5, 6, 9, 12, 18, 24, 48, 60, 100, 110 VDC 12, 18, 24, 48, 50, 100/(110), 110, 120, 200/(220), 220, 230, 240 VAC | 10 A, 250 VAC ($\cos\phi = 1.0$) 10 A, 30 VDC (0 ms) 16 A, 250 VAC ($\cos\phi = 1.0$) |
| 2 poles | 5, 6, 9, 12, 18, 24, 48, 60, 100, 110 VDC 12, 18, 24, 48, 50, 100/(110), 110, 120, 200/(220), 220, 230, 240 VAC | 5 A, 250 VAC ($\cos\phi = 1.0$) 5 A, 30 VDC (0 ms) |

Engineering Data

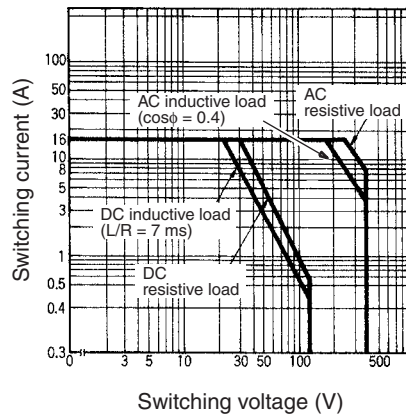
Maximum Switching Power

Flux Protection/Plug-in Relays

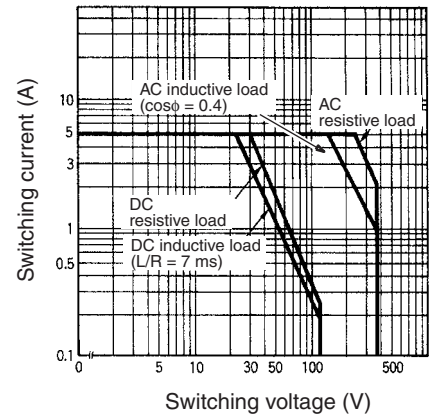
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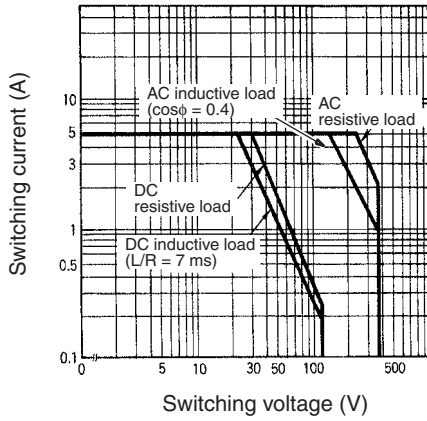
G2R-1-E, G2R-1A-E



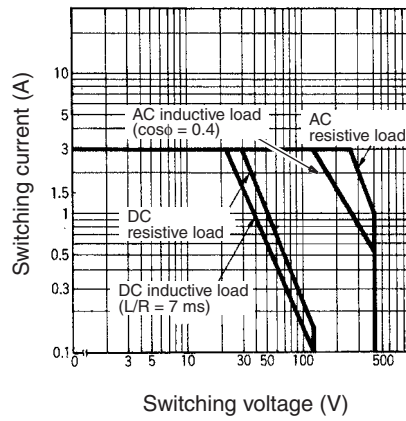
G2R-1Z, G2R-1AZ



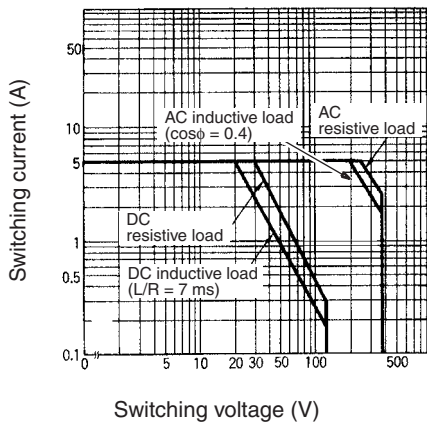
G2R-1-H, G2R-1A-H, G2R-2
G2R-2A



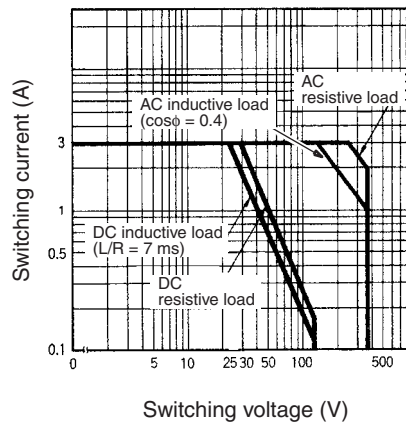
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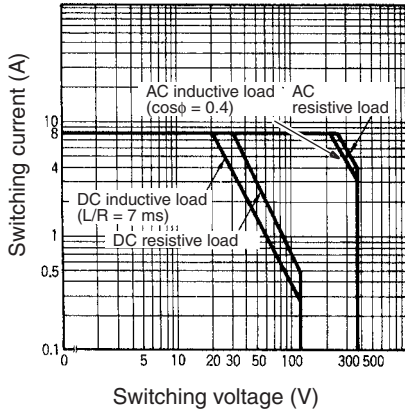
G2RK-1A, G2RK-1



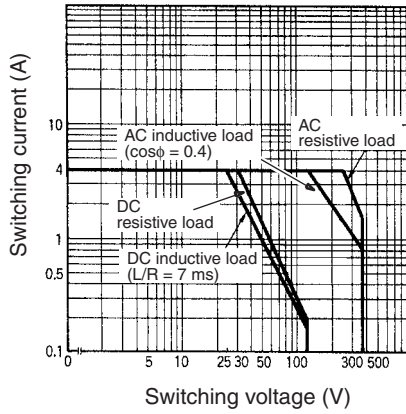
G2RK-2A, G2RK-2



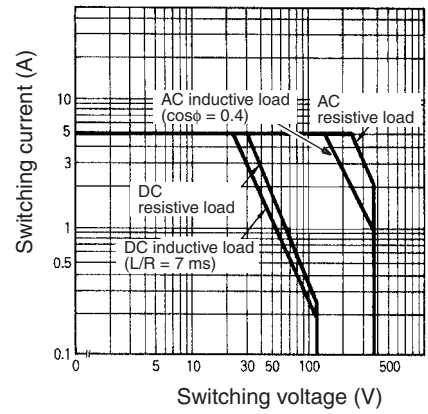
Fully Sealed Relays
G2R-14, G2R-1A4



G2R-24, G2R-2A4

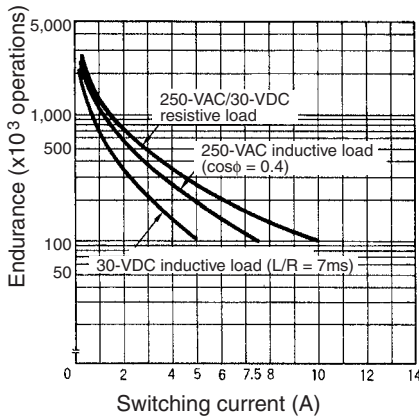


G2R-1Z4, G2R-1AZ4

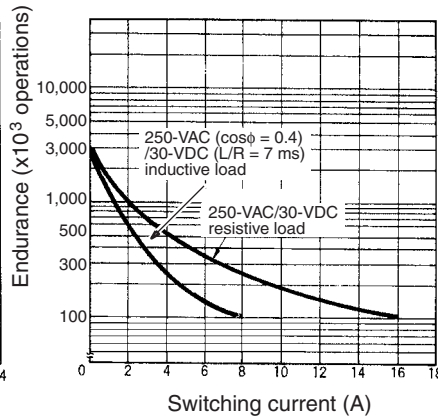


Endurance

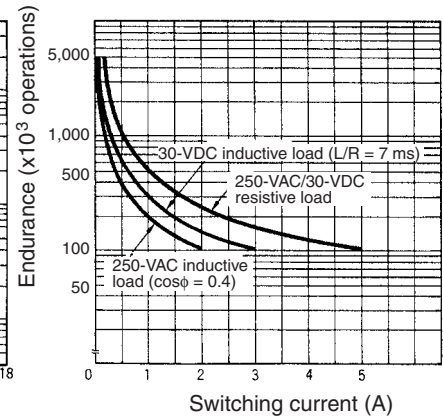
Flux Protection/Plug-in Relays
G2R-1, G2R-1A, G2R-1-T, G2R-1A-T



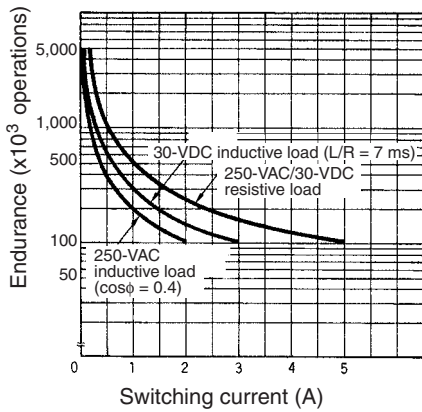
G2R-1-E, G2R-1A-E



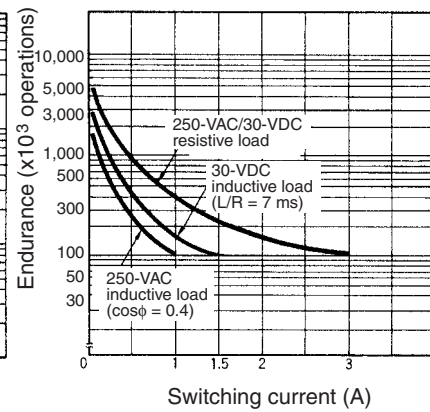
G2R-1Z, G2R-1AZ



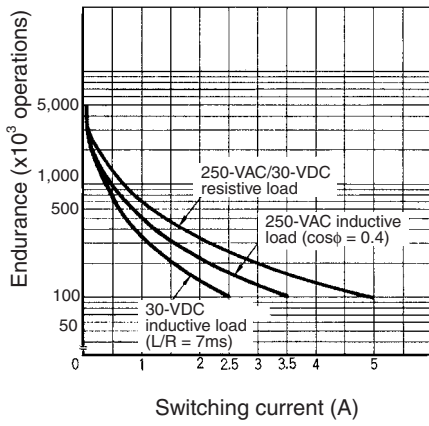
G2R-1-H, G2R-1A-H, G2R-2, G2R-2A



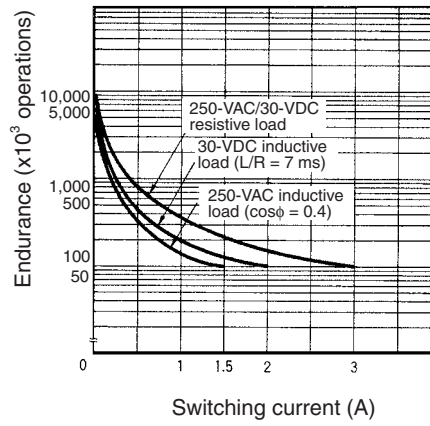
G2R-2-H, G2R-2A-H



G2RK-1A, G2RK-1

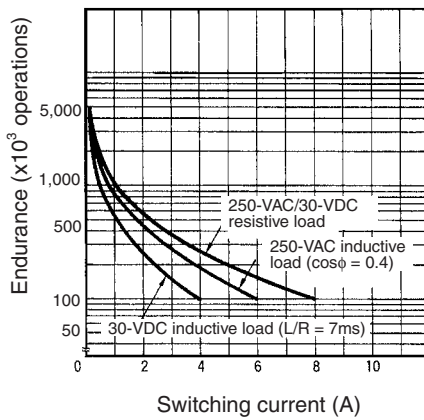


G2RK-2A, G2RK-2

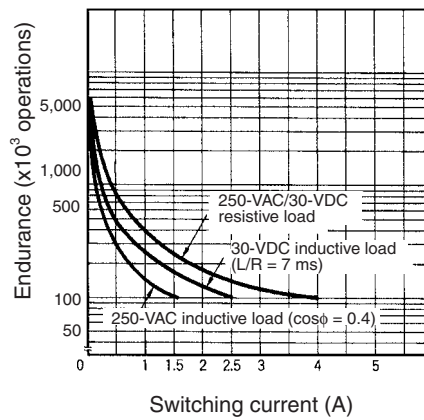


Fully sealed Relays

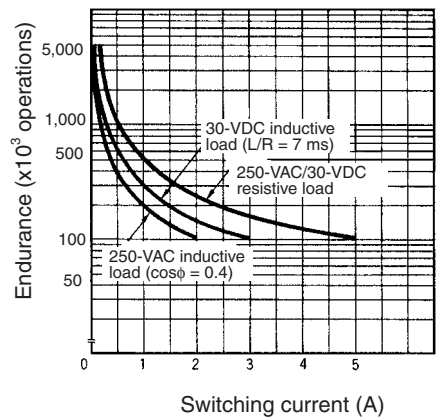
G2R-14, G2R-1A4



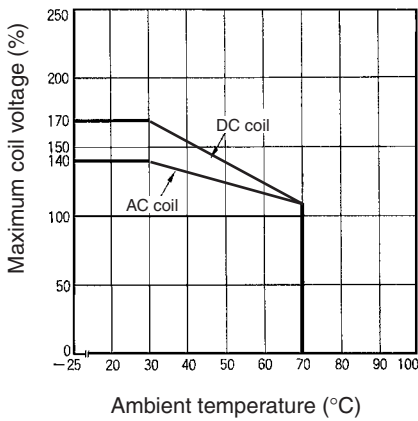
G2R-24, G2R-2A4



G2R-1Z4, G2R-1AZ4





Ambient Temperature vs Maximum Coil Voltage



Note: The maximum coil voltage refers to the maximum value in a varying range of operating power voltage, not a continuous voltage.

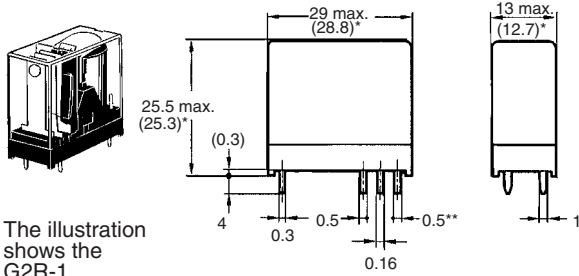
Dimensions

Note: 1. All units are in millimeters unless otherwise indicated.

2. Orientation marks are indicated as follows:  

Relays with PCB Terminals

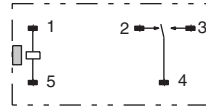
SPDT Relays G2R-1, G2R-1Z, G2R-1-H



The illustration shows the G2R-1.

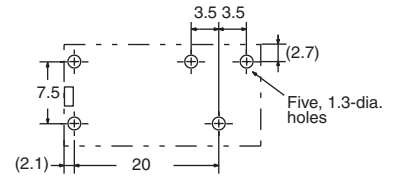
*Average value
**0.3 (-H Type)

Terminal Arrangement/ Internal Connections (Bottom View)



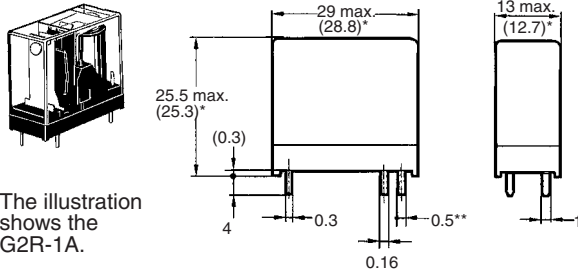
Mounting Holes (Bottom View)

Tolerance: ± 0.1



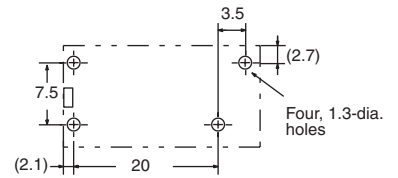
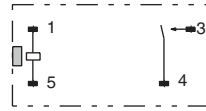
(No coil polarity)

SPST-NO Relays G2R-1A, G2R-1AZ, G2R-1A-H



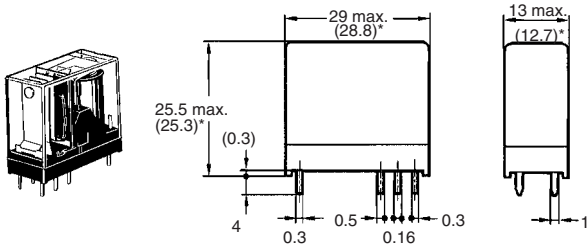
The illustration shows the G2R-1A.

*Average value
**0.3 (-H Type)

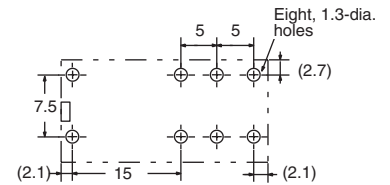
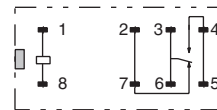


(No coil polarity)

SPDT/High-capacity Relays G2R-1-E

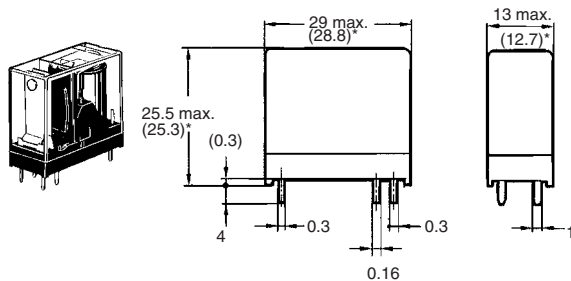


*Average value

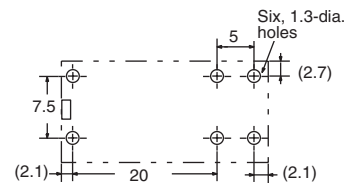
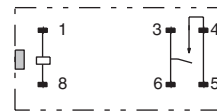


(No coil polarity)

SPST-NO/High-capacity Relays G2R-1A-E



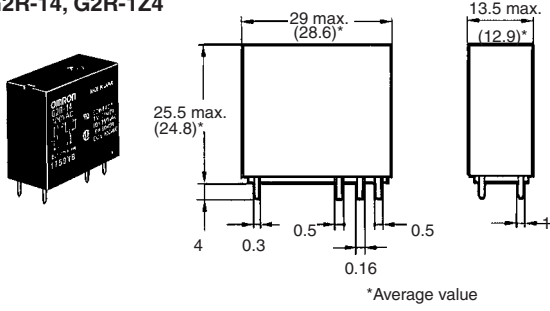
*Average value



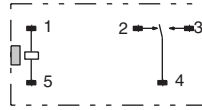
(No coil polarity)

Relays with PCB Terminals

**SPDT Relays
G2R-14, G2R-1Z4**

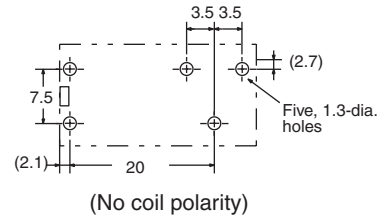


**Terminal Arrangement/
Internal Connections
(Bottom View)**

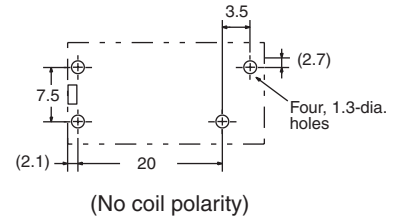
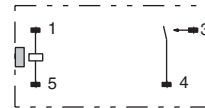
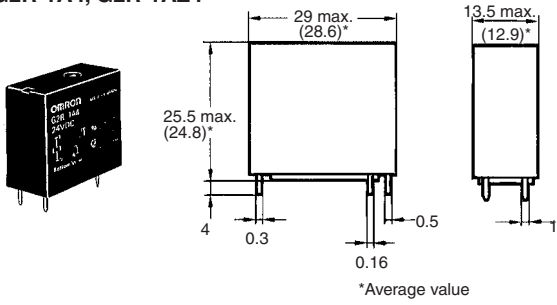


**Mounting Holes
(Bottom View)**

Tolerance: ± 0.1

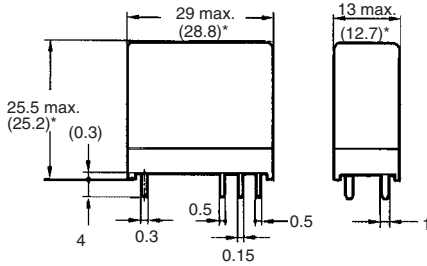
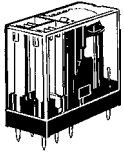


**SPST-NO Relays
G2R-1A4, G2R-1AZ4**



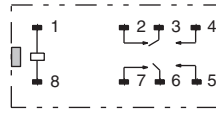
Relays with PCB Terminals

DPDT Relays
G2R-2, G2R-2-H



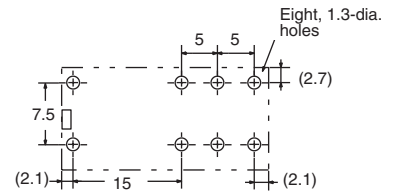
*Average value

Terminal Arrangement/
Internal Connections
(Bottom View)



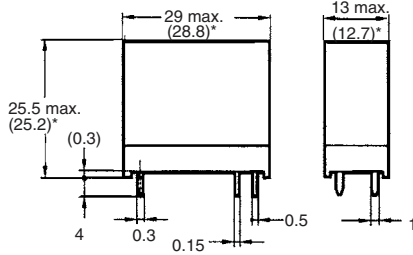
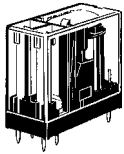
Mounting Holes
(Bottom View)

Tolerance: ± 0.1

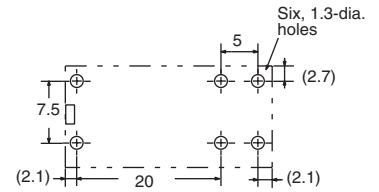
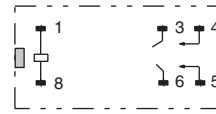


(No coil polarity)

DPST-NO Relays
G2R-2A, G2R-2A-H

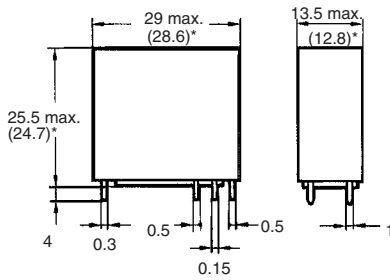
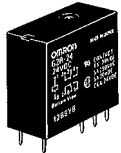


*Average value

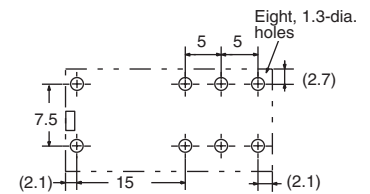
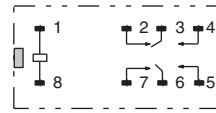


(No coil polarity)

DPDT Relays
G2R-24

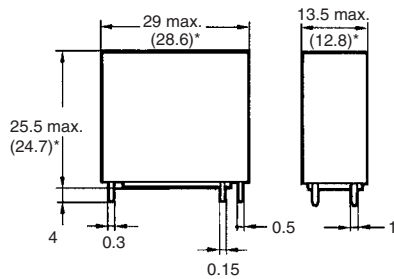
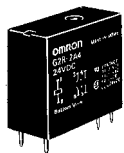


*Average value

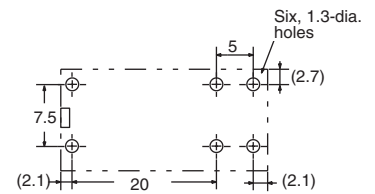
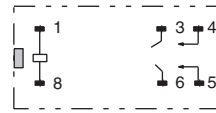


(No coil polarity)

DPST-NO Relays
G2R-2A4



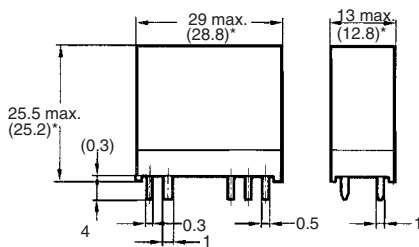
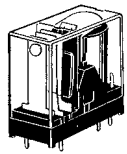
*Average value



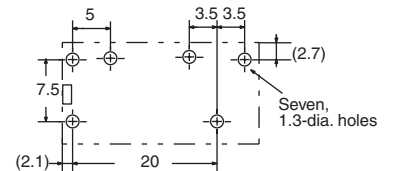
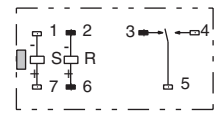
(No coil polarity)

Double-winding Latching Relays with PCB Terminals

SPDT Relays
G2RK-1



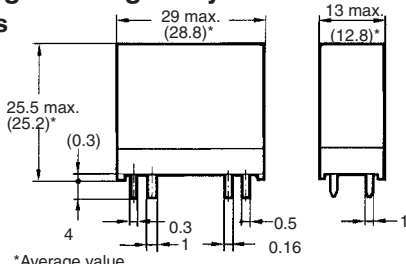
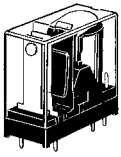
*Average value



(After confirming coil polarity, wire correctly.)

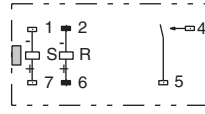
Double-winding Latching Relays with PCB Terminals

**SPST-NO Relays
G2RK-1A**



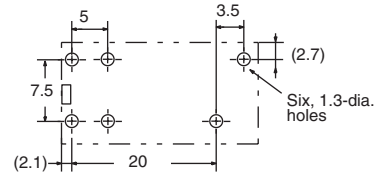
*Average value

**Terminal Arrangement/
Internal Connections
(Bottom View)**



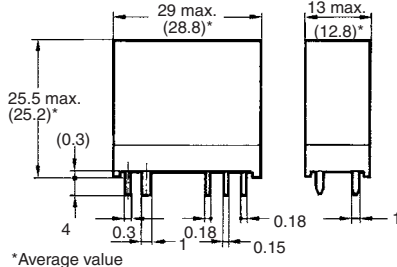
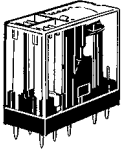
**Mounting Holes
(Bottom View)**

Tolerance: ± 0.1

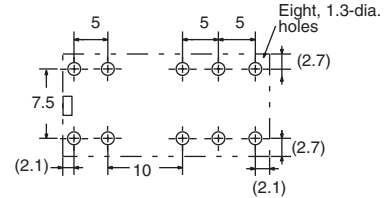
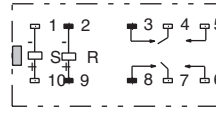


(After confirming coil polarity, wire correctly.)

**DPDT Relays
G2RK-2**

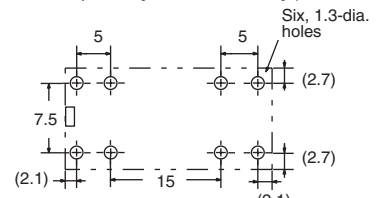
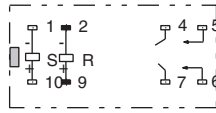
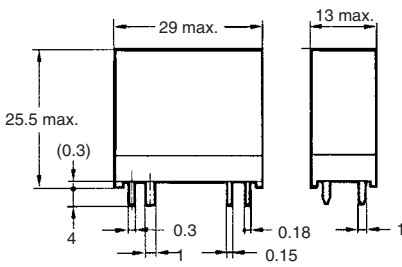
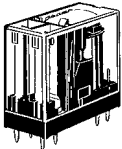


*Average value



(After confirming coil polarity, wire correctly.)

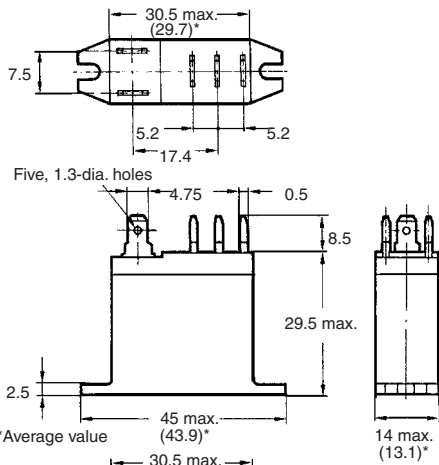
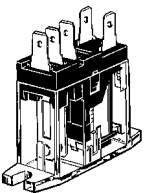
**DPST-NO Relays
G2RK-2A**



(After confirming coil polarity, wire correctly.)

Relays with Quick-connect Terminals

**SPDT Relays
G2R-1-T**



*Average value

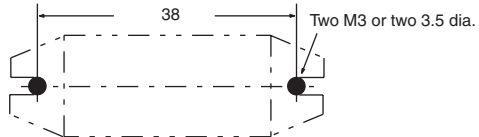
**Terminal Arrangement/Internal Connections
(Bottom View)**



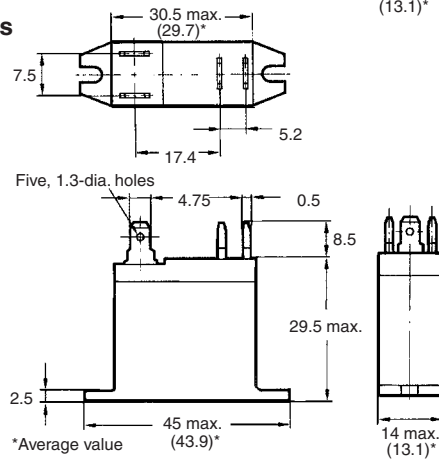
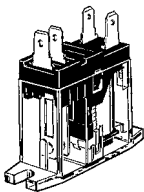
(No coil polarity)

Mounting Holes (Bottom View)

Tolerance: ± 0.1



**SPST-NO Relays
G2R-1A-T**



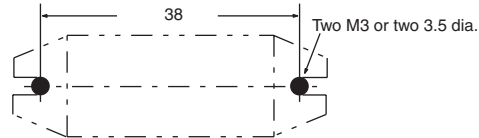
*Average value

**Terminal Arrangement/Internal Connections
(Bottom View)**



(No coil polarity)

Mounting Holes (Bottom View)

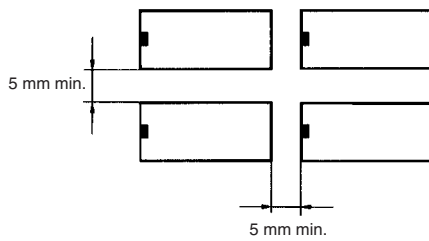


Note: Model number of quick-connect terminal is 187.

Precautions

■ Mounting

When mounting a number of relays on a PCB, be sure to provide a minimum mounting space of 5 mm between the two juxtaposed relays as shown below.



The above minimum mounting space is necessary due to mutual thermal interference generated by the relays. This restriction may be ignored, however, depending on the operating conditions of the relays. Consult OMRON for details.

There is no restriction on the mounting direction of each relay on the PCB.

When using this circuit, confirm the set and reset states and then take into account the circuit constant.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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[6031007G](#) [6131406HQ](#) [6-1393099-3](#) [6-1393099-8](#) [6-1393122-4](#) [6-1393123-2](#) [6-1393767-1](#) [6-1393843-7](#) [6-1415012-1](#) [6-1419102-2](#) [6-](#)
[1423698-4](#) [6-1608051-6](#) [6-1608067-0](#) [6-1616170-6](#) [6-1616248-2](#) [6-1616282-3](#) [6-1616348-2](#) [6-1616350-1](#) [6-1616350-8](#) [6-1616358-7](#) [6-](#)
[1616359-9](#) [6-1616360-9](#) [6-1616931-6](#) [6-1617039-1](#) [6-1617052-1](#) [6-1617090-2](#) [6-1617090-5](#) [6-1617347-5](#) [6-1617353-3](#) [6-1617801-8](#) [6-](#)
[1617802-2](#) [6-1618107-9](#) [6-1618248-4](#) [M83536/1-027M](#) [CX-4014](#) [MAHC-5494](#) [MAVCD-5419-6](#) [703XCX-120A](#) [7-1393100-5](#) [7-1393111-7](#)
[7-1393144-5](#) [7-1393767-8](#)