

## A Power Relay for a Variety of Purposes with Various Models

- ROHS compliant
- Conforms to EN 61810-1, UL508, CSA22.2, SEV, SEMKO.
- 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.



## 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	G2R1-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  
 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/EN/SEV/TÜV  
 SKVD: UL/CSA/EN/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	50Hz	93 mA	46.5 mA	11 mA	9.3 mA	5.5 mA	5.1 mA	4.7 mA	4.7 mA
	60Hz	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	30,000 Ω
Coil inductance	Armature OFF	0.19	0.81	13.34	21	51.3	57.5	62	65.5
(H) (ref. value)	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 (50/60Hz)		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	Armature OFF	0.20	0.28	1.15	4.27	13.86	67.2
(H) (ref. value)	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						

# PCB Power Relay – G2R

## High-sensitivity Relays

<b>Rated voltage</b>	5 VDC	6 VDC	12 VDC	24 VDC	48 VDC
<b>Rated current (50/60Hz) (see Note. 1)</b>	71.4 mA	60 mA	30 mA	15 mA	7.5 mA
<b>Coil resistance (see Note. 1)</b>	70 Ω	100 Ω	400 Ω	1,600 Ω	6,400 Ω
<b>Coil inductance (H) (ref. value)</b>	<b>Armature OFF</b>	0.37	0.53	2.14	7.80
	<b>Armature ON</b>	0.75	1.07	4.27	15.60
<b>Must operate voltage</b>	70% max. of rated voltage				
<b>Must release voltage</b>	15% min. of rated voltage				
<b>Max. voltage</b>	170% of rated voltage (at 23°C)				
<b>Power consumption</b>	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

<b>Rated voltage</b>	5 VDC	6 VDC	12 VDC	24 VDC		
<b>Set Coil</b>	<b>Rated current (see note 1.)</b>	167 mA	138 mA	70.6 mA	34.6 mA	
	<b>Coil resistance (see note 1.)</b>	30 Ω	43.5 Ω	170 Ω	694 Ω	
	<b>Coil inductance (H) (ref. value)</b>	<b>Armature OFF</b>	0.073	0.104	0.42	1.74
		<b>Armature ON</b>	0.146	0.208	0.83	3.43
<b>Reset Coil</b>	<b>Rated current</b>	119 mA	100 mA	50 mA	25 mA	
	<b>Coil resistance</b>	42 Ω	60 Ω	240 Ω	960 Ω	
	<b>Coil inductance (H) (ref. value)</b>	<b>Armature OFF</b>	0.003	0.005	0.018	0.079
		<b>Armature ON</b>	0.006	0.009	0.036	0.148
<b>Must set voltage</b>	70% max. of rated voltage					
<b>Must reset voltage</b>	70% max. of rated voltage					
<b>Max. voltage</b>	140% of rated voltage (at 23°C)					
<b>Power consumption</b>	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, Plug-in, Quick-connect Terminal Relays

Item	General-purpose, quick-connect terminal				High-capacity	
Number of poles	1 pole		2 poles		1 pole	
Load	Resistive load ( $\cos\varphi = 1$ )	Inductive load ( $\cos\varphi = 0.4$ ; L/R = 7 ms)	Resistive load ( $\cos\varphi = 1$ )	Inductive load ( $\cos\varphi = 0.4$ ; L/R = 7 ms)	Resistive load ( $\cos\varphi = 1$ )	Inductive load ( $\cos\varphi = 0.4$ ; 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
Contact material	AgSnIn					
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: 1. P level:  $\lambda_{60} = 0.1 \times 10^{-9}$ /operation.

PCB/Flux Protection Relays

Item	Bifurcated contacts		High-sensitivity			
Number of poles	1 pole		1 pole		2 poles	
Load	Resistive load ( $\cos\varphi = 1$ )	Inductive load ( $\cos\varphi = 0.4$ ; L/R = 7 ms)	Resistive load ( $\cos\varphi = 1$ )	Inductive load ( $\cos\varphi = 0.4$ ; L/R = 7 ms)	Resistive load ( $\cos\varphi = 1$ )	Inductive load ( $\cos\varphi = 0.4$ ; 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 Power Relay – G2R

## PCB/Fully Sealed Relays

Item	General-purpose (single contact)				Bifurcated contact	
	1 pole		2 poles		1 pole	
<b>Load</b>	Resistive load ( $\cos\varphi = 1$ )	Inductive load ( $\cos\varphi = 0.4$ ; L/R = 7 ms)	Resistive load ( $\cos\varphi = 1$ )	Inductive load ( $\cos\varphi = 0.4$ ; L/R = 7 ms)	Resistive load ( $\cos\varphi = 1$ )	Inductive load ( $\cos\varphi = 0.4$ ; L/R = 7 ms)
<b>Rated Load</b>	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
<b>Rated carry current</b>	8 A		4 A		5 A	
<b>Max. switching voltage</b>	380 VAC, 125 VDC		380 VAC, 125 VDC		380 VAC, 125 VDC	
<b>Max. switching current</b>	8 A		4 A		5 A	
<b>Max. switching power</b>	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
<b>Failure rate (reference value)</b>	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

Number of poles	1 pole		2 poles	
	Resistive load ( $\cos\varphi = 1$ )	Inductive load ( $\cos\varphi = 0.4$ ; L/R = 7 ms)	Resistive load ( $\cos\varphi = 1$ )	Inductive load ( $\cos\varphi = 0.4$ ; L/R = 7 ms)
<b>Rated Load</b>	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
<b>Rated carry current</b>	5 A		3 A	
<b>Max. switching voltage</b>	380 VAC, 125 VDC		380 VAC, 125 VDC	
<b>Max. switching current</b>	5 A		3 A	
<b>Max. switching power</b>	1,250 VA, 150 W	875 VA, 75 W	750 VA, 90 W	375 VA, 60 W
<b>Failure rate (reference value)</b>	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. (w/built-in diode: 20 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)	
Impulse withstand voltage		10KV 1*40μsec	
Insulation Distance	Creepage (Typ)	10.0 mm	
	Clearance (Typ)	9,3 mm	
Tracking Resistance (CTI)		175 V	
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, 0.75mm single amplitude (1.5mm double amplitude) Malfunction: 10 to 55 to 10 Hz, 0.75mm single amplitude (1.5mm double amplitude)	
Shock resistance		Destruction: 1,000 m/s <sup>2</sup> Malfunction: 200 m/s <sup>2</sup> when energized; 100 m/s <sup>2</sup> when not 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 initial values.

## ■ Accessories (Order Separately)

### Connecting Sockets

Number of poles	Applicable Relay model	Track/surface-mounting Socket	Back-mounting Socket	
			Terminals	Model
1 pole	G2R-1-S(N)(D)(ND)(N)(ND)(G2R-13-S (G2R-1A3-S)	P2RF-05-E P2RF-05	PCB terminals	P2R-05P, P2R-057P
			Solder terminals	P2R-05A
2 poles	G2R-2-S(N)(D)(ND)(N)(ND)	P2RF-06-E P2RF-06	PCB terminals	P2R-06P, P2R-067P
			Solder terminals	P2R-06A

Note: See Dimensions for details on socket size.

### Mounting Track

Applicable socket	Description	Model
Track connecting socket	Mounting track	50 cm (1) x 7.3 mm (1) PFP-50N 1 m (1) x 7.3 mm (1) PFP-100N 1 m (1) x 16 mm (1) PFP-100N2
	End plate	PFP-M
	Spacer	PFP-S
Back connecting socket	Mounting plate	P2R-P*

\*Used to mount several P2R-05A and P2R-06A connecting sockets side by side.

## PCB Power Relay – G2R

### Double-winding Latching Relays

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

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

**■ Approved Standards**

**UL 508 (File No. E41643), CSA 22.2 No.14 (File No. LR31928)**

Model	Contact form	Coil ratings	Contact ratings
G2R-1 G2R-14 G2R-1-H G2R-1-S 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-S 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)
G2R-1A-E	SPST-NO		TV-3 (NO contact only); 1/3 hp, 120 VAC For UL)
G2R-2 G2R-24 G2R-2-H G2R-2-S	DPDT		5 A, 30 VDC (resistive) 5 A, 250 VAC (general use) TV-3 (NO contact only)
G2R-2A G2R-2A4 G2R-2A-H G2R-2A-S	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), (For UL) TV-8 (NO contact only); 1/4 hp, 125 VAC (For CSA)



**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		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 3 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) 3 to 70 VDC (for H coil)	10 A, 250 VAC ( $\cos\varphi = 1.0$ ) 10 A, 30 VDC (0 ms) 16 A, 250 VAC ( $\cos\varphi = 1.0$ ) (AgSnIn contact)
2 poles		8 A, 250 VAC ( $\cos\varphi = 0.4$ ) 5 A, 250 VAC ( $\cos\varphi = 1.0$ ) 5 A, 30 VDC (0 ms) 2.5 A, 250 VAC ( $\cos\varphi = 0.4$ )

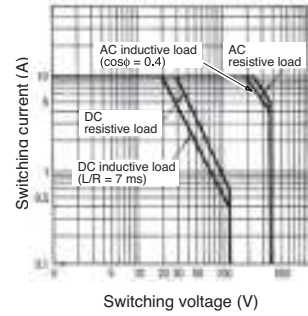
**EN 61810-1 (VDE)**

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 ( $\cos\varphi = 1.0$ ) 10 A, 30 VDC (0 ms) 16 A, 250 VAC ( $\cos\varphi = 1.0$ )
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 ( $\cos\varphi = 1.0$ ) 5 A, 30 VDC (0 ms)

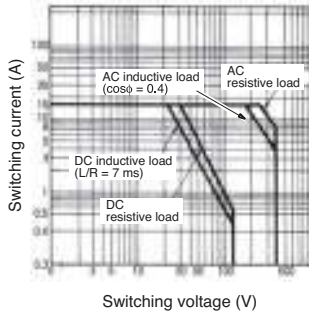
Engineering Data

Maximum Switching Power

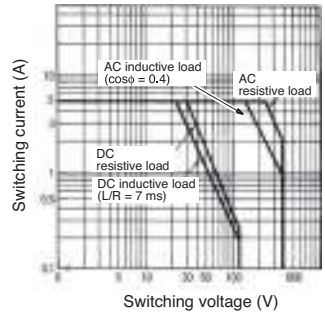
Flux Protection/Plug-in Relays  
G2R-1, G2R-1A, G2R-1-T, G2R-1A-T



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

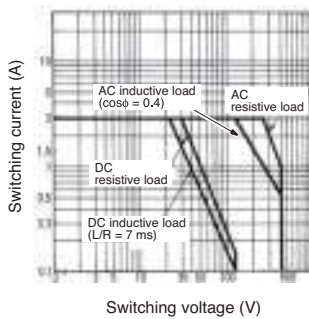
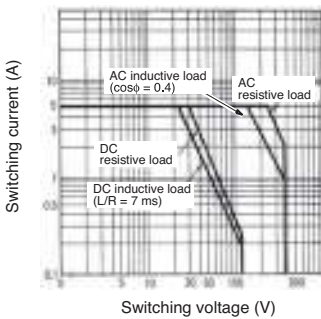


G2R-1Z, G2R-1AZ



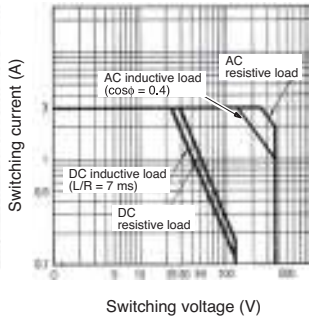
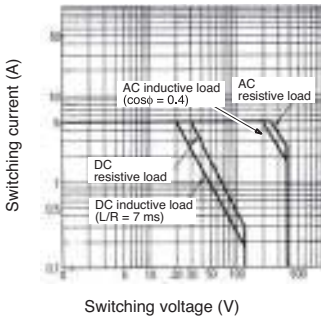
G2R-1-H, G2R-1A-H, G2R-2, G2R-2A

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

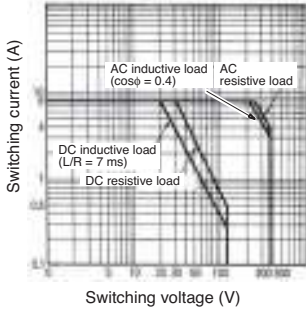


G2RK-1A, G2RK-1

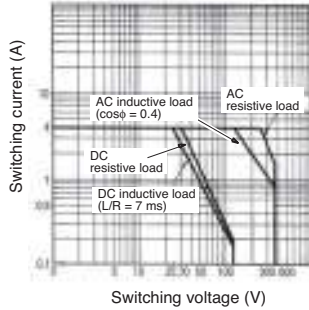
G2RK-2A, G2RK-2



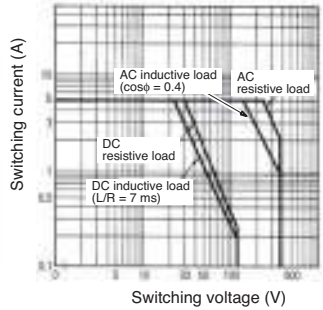
## Fully Sealed Relays G2R-14, G2R-1A4



## G2R-24, G2R-2A4

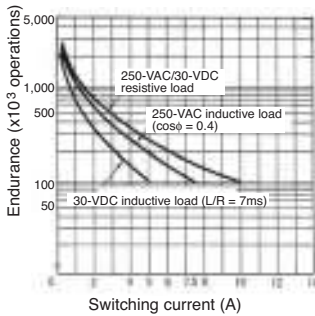


## G2R-1Z4, G2R-1AZ4

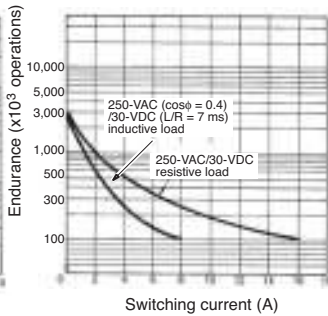


## Endurance

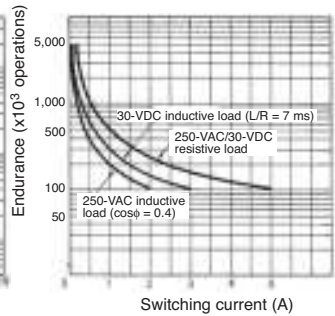
### Flux Protection/Plug-in Relays G2R-1, G2R-1A, G2R-1-T, G2R-1A-T



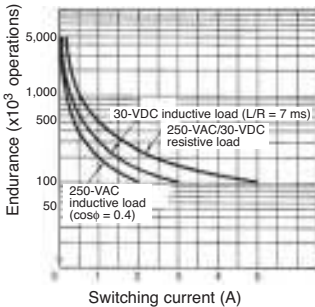
### G2R-1-E, G2R-1A-E



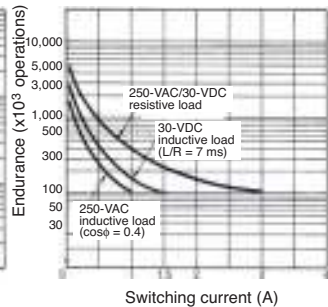
### G2R-1Z, G2R-1AZ



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

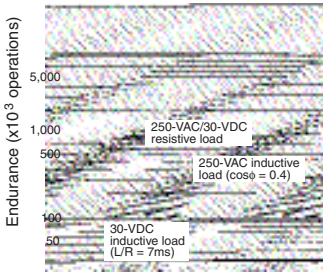


### G2R-2-H, G2R-2A-H



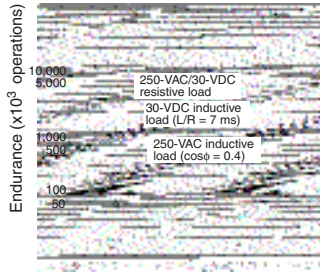
Engineering Data (cont.)

G2RK-1A, G2RK-1



Switching current (A)

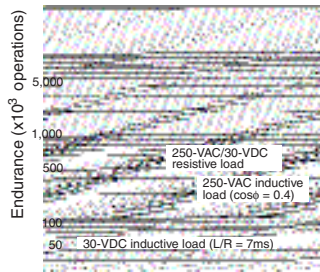
G2RK-2A, G2RK-2



Switching current (A)

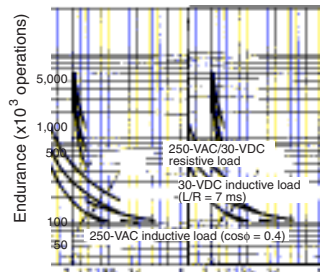
Fully sealed Relays

G2R-14, G2R-1A4



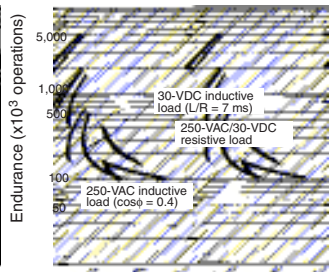
Switching current (A)

G2R-24, G2R-2A4



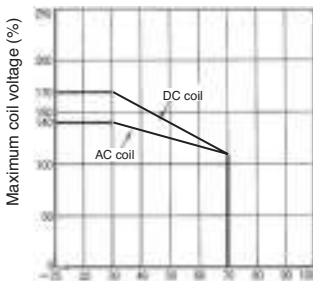
Switching current (A)

G2R-1Z4, G2R-1AZ4



Switching current (A)

Ambient Temperature vs Maximum Coil Voltage



Ambient temperature (°C)

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

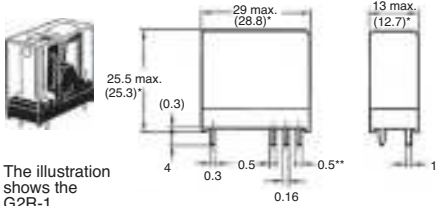
## Dimensions

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

2. Orientation marks are indicated as follows:  

### Relays with PCB Terminals

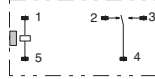
#### SPDT Relays G2R-1, G2R-1Z, G2R-1-H



The illustration shows the G2R-1.

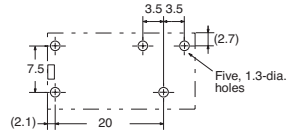
\*Average value  
\*\*0.3 (-H Type)

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



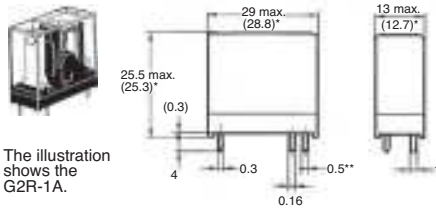
#### Mounting Holes (Bottom View)

Tolerance:  $\pm 0.1$



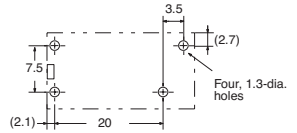
(No coil polarity)

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



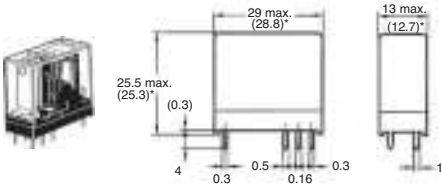
The illustration shows the G2R-1A.

\*Average value  
\*\*0.3 (-H Type)

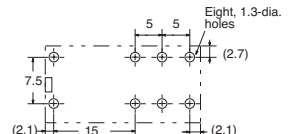
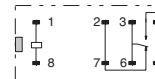


(No coil polarity)

#### SPDT/High-capacity Relays G2R-1-E

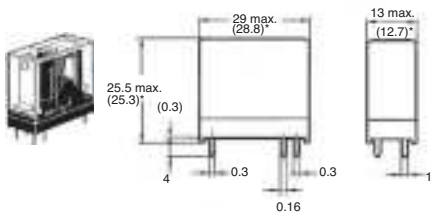


\*Average value

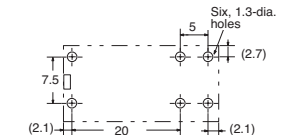
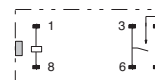


(No coil polarity)

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



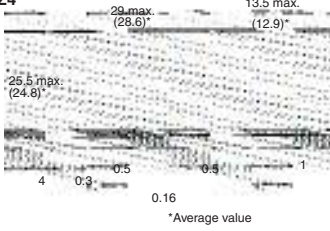
\*Average value



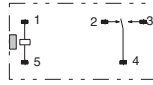
(No coil polarity)

## Relays with PCB Terminals

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

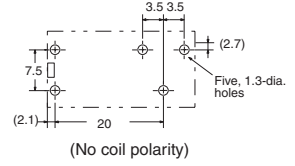


### Terminal Arrangement/ Internal Connections (Bottom View)

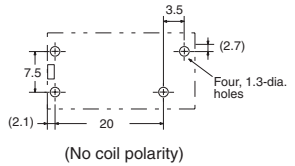
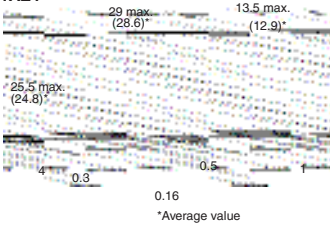


### Mounting Holes (Bottom View)

Tolerance:  $\pm 0.1$

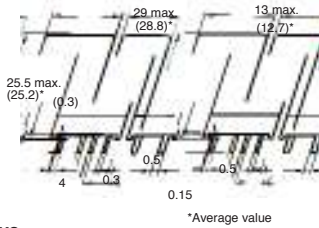


### SPST-NO Relays G2R-1A4, G2R-1AZ4

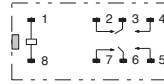


## Relays with PCB Terminals

### DPDT Relays G2R-2, G2R-2-H

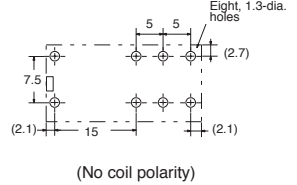


### Terminal Arrangement/ Internal Connections (Bottom View)

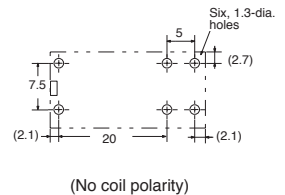
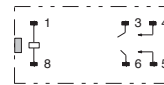
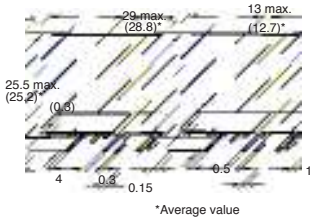


### Mounting Holes (Bottom View)

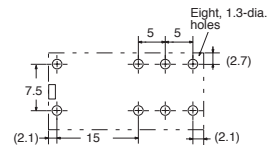
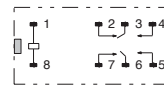
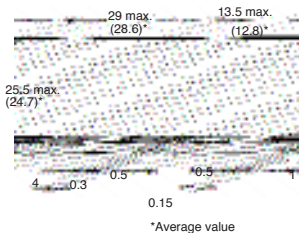
Tolerance:  $\pm 0.1$



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

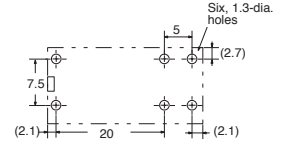
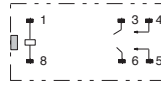
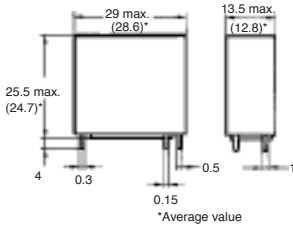


### DPDT Relays G2R-24



# PCB Power Relay – G2R

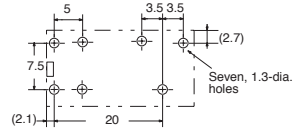
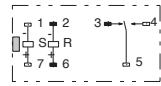
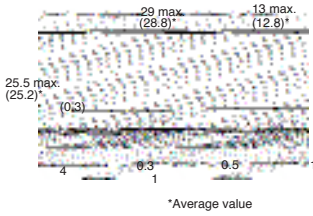
## DPST-NO Relays G2R-2A4



(No coil polarity)

## Double-winding Latching Relays with PCB Terminals

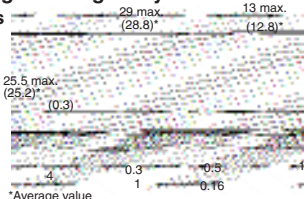
### SPDT Relays G2R-K1



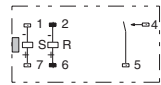
(After confirming coil polarity, wire correctly.)

## Double-winding Latching Relays with PCB Terminals

### SPST-NO Relays G2R-K1A

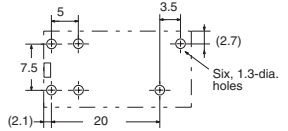


### Terminal Arrangement/ Internal Connections (Bottom View)



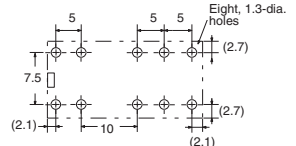
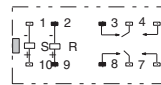
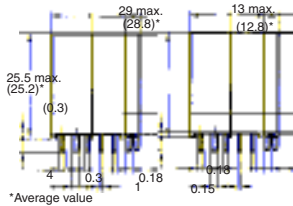
### Mounting Holes (Bottom View)

Tolerance: ±0.1



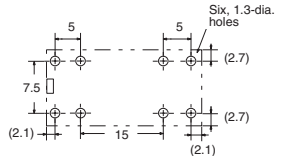
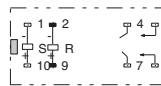
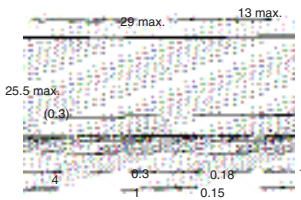
(After confirming coil polarity, wire correctly.)

### DPDT Relays G2R-K2



(After confirming coil polarity, wire correctly.)

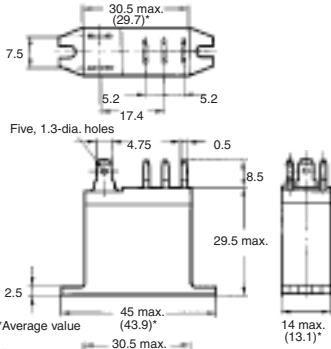
### DPST-NO Relays G2R-K2A



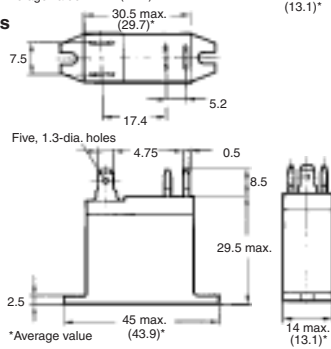
(After confirming coil polarity, wire correctly.)

## Relays with Quick-connect Terminals

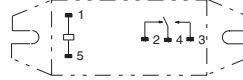
### SPDT Relays G2R-1-T



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



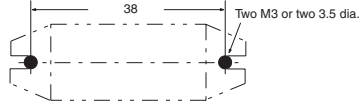
### Terminal Arrangement/Internal Connections (Bottom View)



(No coil polarity)

### Mounting Holes (Bottom View)

Tolerance:  $\pm 0.1$

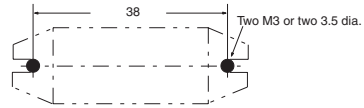


### Terminal Arrangement/Internal Connections (Bottom View)



(No coil polarity)

### Mounting Holes (Bottom View)

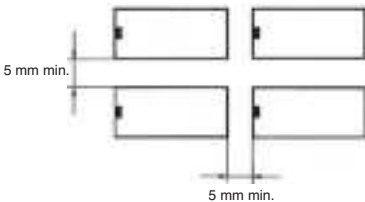


**Note:** Model number of quick-connect terminal is 187.

## 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.