

Model Number Legend:

G2R ---

1 2 3 4 5 6 7 8 9

1. Relay Function

None: General-purpose
K: Double-winding latching.

2. Number of Poles

1: 1 pole
2: 2 poles

3. Contact Form

None: SPDT
A: SPST-NO

4. Contact Type

None: Single
Z: Bifurcated
3: Bifurcated crossbar

5. Enclosure Ratings

None: Flux protection
4: Plastic-sealed

6. Terminals

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

7. Classification

None: General-purpose
E: High-capacity
H: High-sensitivity
N: LED indicator
D: Diode
ND: LED indicator
and diode

8. Contact Material

None: AgCdO
ASI: AgSnIn

9. Rated Coil Voltage

■ 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)	P2RF-05-E	PCB terminals	P2R-05P, P2R-057P
	G2R-13-S (G2R-1A3-S)	P2RF-05	Solder terminals	P2R-05A
2 poles	G2R-2-S(N)(D)(ND)	P2RF-08-E	PCB terminals	P2R-08P, P2R-087P
		P2RF-08	Solder terminals	P2R-08A

Note: See "Dimensions" for details on socket size.

Mounting Track

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

*Used to mount several P2R-05A and P2R-08A connecting sockets side by side.

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 (4.0) mA	5.1 mA	4.7 (3.7) 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 (3.1) mA	3.8 mA
Coil resistance*		65 Ω	260 Ω	4,600 Ω	6,500 Ω	20,200 (25,000) Ω	25,000 Ω	26,850 (30,000) 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% max. of rated voltage							
Max. voltage		110% of rated voltage							
Power consumption		Approx. 0.9 VA at 60 Hz (approx. 0.7 VA at 60 Hz)							

Note: 1. Rated voltage of bifurcated crossbar contact type: 100/(110) VAC, 200/(220) VAC, 230 VAC (Approx. 0.7 VA at 60 Hz)
2. Depending on the type of Relay, Some Relays do not have coil specifications. Contact your OMRON representative for more details.

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% min. of rated voltage						
Must release voltage	15% min. of rated voltage						
Max. voltage	110% of rated voltage						
Power consumption	Approx. 0.53 W						

Note: Rated voltage of bifurcated crossbar contact type: 12 VDC, 24 VDC

High-sensitivity Relays

Rated voltage		5 VDC	6 VDC	12 VDC	24 VDC	48 VDC
Rated current (50/60 Hz)		71.4 mA	60 mA	30 mA	15 mA	7.5 mA
Coil resistance		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	7.80	31.20
	Armature ON	0.75	1.07	4.27	15.60	62.40
Must operate voltage	70% max. of rated voltage					
Must release voltage	15% max. of rated voltage					
Max. voltage	110% of rated voltage					
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 ±10% (DC coil resistance).
2. LEDs are used for the built-in operation indicator. For models equipped with these indications, the VAC rated current must be increased by approximately 1 mA; the VDC rated current, by approximately 4 mA.
3. Operating characteristics are measured at a coil temperature of 23°C.

Double-winding Latching Relays

Rated voltage		5 VDC	6 VDC	12 VDC	24 VDC	
Set coil	Rated current*	167 mA	138 mA	70.6 mA	34.6 mA	
	Coil resistance*	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% of rated voltage					
Must reset voltage	70% of rated voltage					
Max. voltage	110% of rated voltage					
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 ±10%.
2. Operating characteristics are measured at a coil temperature of 23°C.