

PCB Power Relay – G2R

High-sensitivity Relays

Rated voltage	5 VDC	6 VDC	12 VDC	24 VDC	48 VDC
Rated current (50/60Hz) (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	7.80
	Armature ON	0.75	1.07	4.27	15.60
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, 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.