

Rated Voltage (VDC)	Rated current (mA)	Coil resistance (Ω)	Must operate voltage (V)	Must release voltage (V)	Max. voltage (V)	Power consumption (mW)
			% of rated voltage			
3	101	30	80% max.	10% min.	150% (at 23°C)	Approx. 300
5	60.2	83				
6	50.1	120				
12	25.2	476				
24	12.6	1912				

Note 1. The rated current and coil resistance are measured at a coil temperature of 23°C with a tolerance of ±10%.

Note 2. The operating characteristics are measured at a coil temperature of 23°C.

Note 3. The "Max. voltage" is the maximum voltage that can be applied to the relay coil.

● Contacts

Load	Resistive load
Contacts type	Single
Contacts material	Ag-alloy (Cd free)
Rated load *	10 A at 250 VAC, (NO) resistive load 8 A at 250 VAC, resistive load 5 A at 30 VDC, resistive load
Rated carry current	10 A
Max. switching current	NO: 10 A, NC: 8 A

* G6RL-1(A), G6RL-1(A)4-ASI: 8 A 250 VAC, resistive load; 5 A 24 VDC resistive load.

■ Characteristics

Contact resistance *1	100 mΩ max.	
Operate time	10 ms max. (SR Models: 15 ms max.)	
Release time	5 ms max.	
Insulation resistance *2	1,000 Ω min. (at 500 VDC)	
Dielectric strength	Between coil and contacts	5,000 VAC, 50/60 Hz for 1 min
	Between contacts of the same polarity	1,000 VAC, 50/60 Hz for 1 min
Impulse withstand voltage	Between coil and contacts	10kV (1.2×50μs)
	Destruction	10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5 mm double amplitude)
Vibration resistance	Malfunction	10 to 55 to 10 Hz, 0.825 mm single amplitude (1.65 mm double amplitude) when energized 10 to 55 to 10 Hz, 0.4 mm single amplitude (0.8 mm double amplitude) when de-energized.
	Destruction	1,000 m/s ²
Shock resistance	Malfunction	NO: 200 m/s ² , NC: 50 m/s ²
	Mechanical	10,000,000 operations min. (at 18,000 operations/h)
Endurance	Electrical	G6RL-1(A) 50,000 operations min. (NO) at 250 VAC, 8A (resistive load) 50,000 operations min. (NC) at 250 VAC, 8A (resistive load) 50,000 operations min. at 24 VDC, 5A (resistive load) (at 600 operations/h)
		G6RL-1(A)-(SR)-ASI-(PL) 100,000 operations min. (NO) at 250 VAC, 10A (resistive load) 100,000 operations min. at 250 VAC, 8A (resistive load) 50,000 operations min. at 30 VDC, 5A (resistive load) (at 1,800 operations/h)
		G6RL-1(A)4-ASI 50,000 operations min. (NO) at 250 VAC, 8A (resistive load) 50,000 operations min. (NC) at 250 VAC, 8A (resistive load) 50,000 operations min. at 24 VDC, 5A (resistive load) (at 1,800 operations/h)
		G6RL-14-SR-ASI 50,000 operations min. (NO) at 250 VAC, 8A (resistive load) 100,000 operations min. (NC) at 250 VAC, 3A (resistive load) 50,000 operations min. (NO) at 24 VDC, 5A (resistive load) 30,000 operations min. (NC) at 24 VDC, 5A (resistive load) (at 1,800 operations/h)
Failure rate (P level) (reference value) *3	10 mA at 5 VDC	
Ambient operating temperature	-40°C to 85°C (with no icing or condensation)	
Ambient operating humidity	5% to 85%	
Weight	Approx. 7.8 g	

Note. The given values are initial values.

*1. Measurement conditions: 5 VDC, 1 A, voltage drop method.

*2. Measurement conditions: The insulation resistance was measured with a 500 VDC megohmmeter at the same locations as the dielectric strength was measured.

*3. This value was measured at a switching frequency of 120 operations/min.

■ Other data

Enclosure rating	Flux protection	Fully sealed
Insulation material group	IIIa	
Rated Insulation Voltage	250 V	
Pollution degree	3	2
Rated voltage system	250 V	400 V
Overvoltage category	III	
Creepage distance	10 mm	
Clearance distance	10 mm	
RoHS	Compliant	
Tracking Index of relay base	PTI 250	
Flammability class according to UL94	V-0	
Flammability-flame	GWFI (IEC 60695-2-12)	850°C
	GWIT (IEC 60695-2-13)	750°C
Ball pressure test (IEC 60695-10-2)	170°C	