

Specifications

Input Ratings

Rated voltage	Rated current ^{*1}			Must operate voltage	Must release voltage	Power consumption		Input voltage
	AC		DC			% of rated voltage	AC (VA) Approx.	
	50 Hz	60 Hz		% of rated voltage				
12 VDC	---	---	27.2 mA	80%	10%	---	300 mW	±10%
24 VDC	---	---	13.3 mA			---	300 mW	
24 VAC/DC	21.1 mA	22.5 mA	13.0 mA			0.5 VA	300 mW	
48 VAC/DC	8.5 mA	9.0 mA	5.2 mA			0.4 VA	250 mW	
110 VAC	7.1 mA	7.5 mA	---			0.8 VA	---	
230 VAC	7.3 mA	7.9 mA	---			1.7 VA	---	
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*1) Rated currents are measured at 23 degrees Celsius (ambient)

Contact Ratings

Item	Standard type (G2RV-SL700, 500, 701, 501)		Input type (G2RV-SL700-AP, 500-AP) ^{*2}
Number of poles	1 pole		
Load	Resistive load (cosφ = 1)	Inductive load (cosφ = 0.4, L/R = 7 ms)	Resistive load (cosφ = 1)
Rated load	6 A at 250 VAC; 6 A at 30 VDC	2.5 A at 250 VAC; 2 A at 30 VDC	50 mA at 30 VAC; 50 mA at 36 VDC
Rated carry current	6 A		50 mA
Max. switching voltage	400 VAC, 125 VDC		30 VAC, 36 VDC
Max. switching current	6 A		50 mA
Max. switching power	1,500 VA 180 W	500 VA 60 W	---
Failure rate (reference value) ^{*1}	10 mA at 5 VDC (P level)		1 mA at 100 mVDC (P level)

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

*2) If a gold layer is destroyed, contact ratings of standard type are applicable.

Characteristics

Item	Standard type (G2RV-SL700, 500, 701, 501)	Input type (G2RV-SL700-AP, 500-AP)
Contact resistance	100 mΩ max.	
Operate (set) time	20 ms max.	
Release time	40 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	4,000 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	
Vibration resistance	Destruction: 10 to 55 to 10 Hz, 0.50 mm single amplitude (1.0 mm double amplitude) Malfunction: 10 to 55 to 10 Hz, 0.50 mm single amplitude (1.0 mm double amplitude)	
Shock resistance	Destruction: 1,000 m/s ² Malfunction: 200 m/s ² when energized; 100 m/s ² when not energized	
Endurance	Mechanical: 5,000,000 operations min. Electrical: 100,000 Typical; NO 70,000 operations min. ; NC 50,000 operations min.	Mechanical: 5,000,000 operations min. Electrical: 5,000,000 operations min.
Ambient temperature	Operating: -40°C to 55°C (with no icing or condensation)	
Ambient humidity	Operating: 5% to 85%	
Weight	Approx. 35 g	
Overvoltage category	III	
Pollution degree	2	
Contact material	AgSnIn	AgSnIn + Gold Plating
Creepage distance	7.0 mm	
Clearance distance	5.5 mm	

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

■ Approved Standards

UL 508 (File No. E41643)

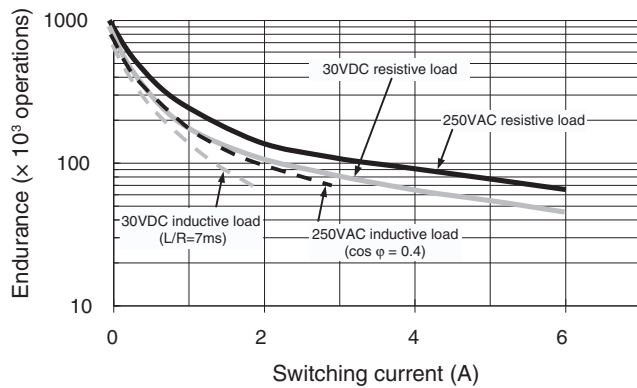
Model	Contact form	Coil ratings	Contact ratings	Operations
G2RV-SL Series	SPDT	12 to 48 VDC 24 to 230 VAC	250 VAC 6 A (Resistive Load) 30 VDC 6 A (Resistive Load) 400 VAC 2 A (Resistive Load)	6,000

IEC/VDE (EN 61810)

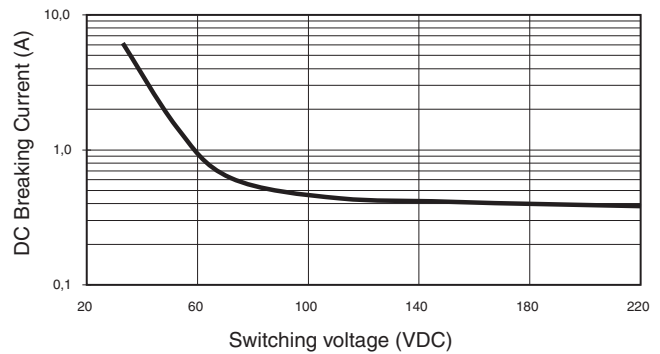
Contact form	Coil ratings	Contact ratings	Operations
SPDT	12, 24 VDC 24, 48 VAC/DC 110, 230 VAC	250 VAC 6 A (Resistive Load) 30 VDC 6 A (Resistive Load) 400 VAC 2 A (Resistive Load)	50,000 50,000 6,000

Engineering Data

■ Endurance



Switching capacity of DC resistive load



Typical Operating and Release Time

Model number	Operating time (typical)	Release time (typical)
G2RV-SL7□□/5□□ DC12	5 ~ 7 ms	5 ~ 8 ms
G2RV-SL7□□/5□□ DC24	5 ~ 7 ms	6 ~ 9 ms
G2RV-SL7□□/5□□ AC/DC24	5 ~ 7 ms	17 ~ 22 ms
G2RV-SL7□□/5□□ AC/DC48	5 ~ 7 ms	22 ~ 30 ms
G2RV-SL7□□/5□□ AC110	12 ~ 15 ms	22 ~ 30 ms
G2RV-SL7□□/5□□ AC230	12 ~ 15 ms	22 ~ 30 ms