

■ Approved Standards

UL Recognized (File No. E41643) / CSA Certified (File No. LR31928) - - Ambient Temp. = 40°C

Model	Contact form	Coil ratings	Contact ratings
G2RL-1A	SPST-NO	3 to 48 VDC	12 A at 250 VAC (General use)
G2RL-1	SPDT		12 A at 24 VDC (Resistive)
G2RL-1A-E	SPST-NO	3 to 48 VDC	16 A at 250 VAC (General use)
G2RL-1-E	SPDT		16 A at 24 VDC (Resistive)
G2RL-1A-H	SPST-NO	5 to 24 VDC	10 A at 250 VAC (General use)
G2RL-1-H	SPDT		10 A at 24 VDC (Resistive)
G2RL-2A	DPST-NO	3 to 48 VDC	8 A at 277 VAC (General use)
G2RL-2	DPDT		8 A at 30 VDC (Resistive)

Note: Consult Omron for additional UL / CSA ratings

VDE (EN61810-1) (License No. 119650)

Model	Contact form	Coil ratings	Contact ratings
G2RL-1(A)	1 pole	5, 12, 18, 22, 24, 48 VDC	12 A at 250 VAC (cosφ=1) 12 A at 24 VDC (L/R=0 ms) AC15: 3 A at 240 VAC DC13: 2.5 A at 24 VDC, 50 ms
G2RL-1(A)-E	1 pole	5, 12, 18, 22, 24, 48 VDC	16 A at 250 VAC (cosφ=1) 16 A at 24 VDC (L/R=0 ms) AC15: 3 A at 240 VAC (NO) 1.5 A at 240 VAC (NC) DC13: 2.5 A at 24 VDC (NO), 50 ms
G2RL-1(A)-H	1 pole	5, 9, 12, 24 VDC	10 A at 250 VAC (cosφ=1) 10 A at 24 VDC (L/R=0 ms)
G2RL-2(A)	2 poles	5, 12, 18, 22, 24, 48 VDC	8 A at 250 VAC (cosφ=1) 8 A at 24 VDC (L/R=0 ms) AC15: 1.5 A at 240 VAC DC13: 2 A at 30 VDC, 50 ms

Note: To achieve approved life cycles on sealed models, the relay should be vented by removing the “knock off vent nib” on top of relay case after the soldering/washing process.

Electrical Life Data

G2RL-1-E	16 A at 250 VAC (cosφ=1)	30,000 operations min.
	16 A at 24 VDC	30,000 operations min.
	8 A at 250 VAC (cosφ=0.4)	200,000 operation min. (normally open side operation)
	8 A at 30 VDC (L/R=7 ms)	10,000 operation min. (normally open side operation)
G2RL-1	12 A at 250 VAC (cosφ=1)	50,000 operations min.
	12 A at 24 VDC	30,000 operations min.
	5 A at 250 VAC (cosφ=0.4)	150,000 operation min. (normally open side operation)
	5 A at 30 VDC (L/R=7 ms)	20,000 operation min. (normally open side operation)
G2RL-1-H	10 A at 250 VAC (cosφ=1)	100,000 operations min.
	10 A at 24 VDC	50,000 operations min.
G2RL-2	8 A at 250 VAC (cosφ=1)	30,000 operations min.
	8 A at 30 VDC	30,000 operations min.

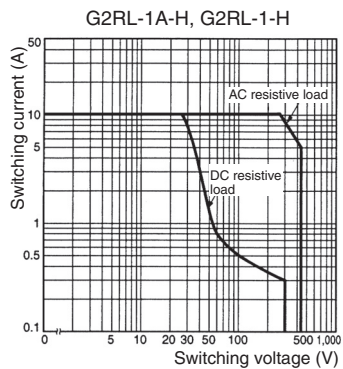
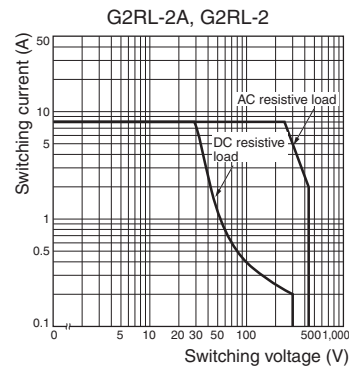
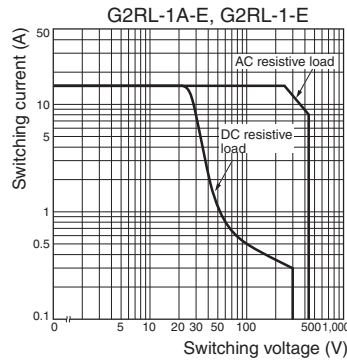
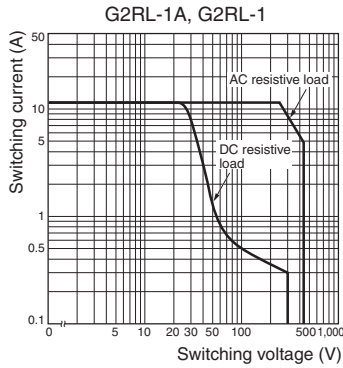
Note: 1. The results shown reflect values measured using very severe test conditions i.e., Duty: 1 s ON/1 s OFF.

2. In order to obtain the full rated life cycles on the fully sealed models, the relay should be properly vented by removing the “knock off vent nib” on top of the relay case after the soldering/washing process.

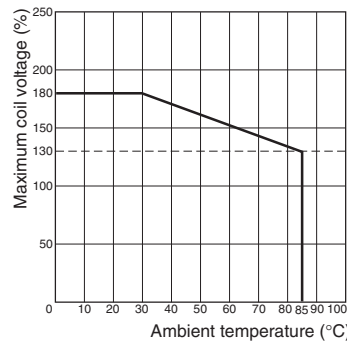
3. Electrical endurance will vary depending on the test conditions. Contact your OMRON representative if you require more detailed information for the electrical endurance under your test conditions.

Engineering Data

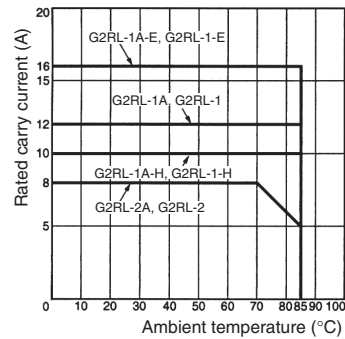
Maximum Switching Capacity



Ambient Temperature vs Maximum Coil Voltage

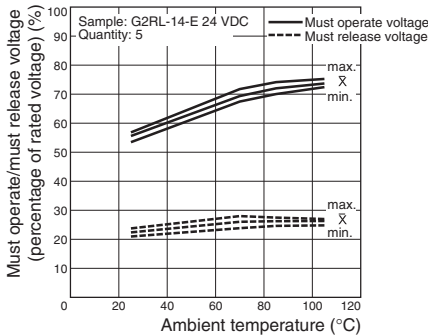


Ambient Temperature vs Rated Carry Current



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

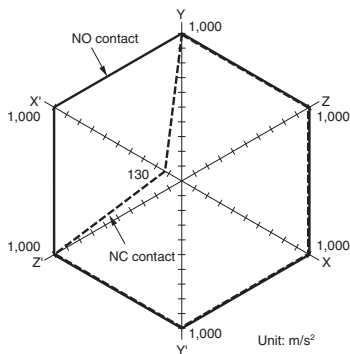
Ambient Temperature vs Must Operate and Must Release Voltages



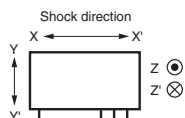
Note: Contact your OMRON representative for the data on fully sealed models.

Shock Malfunction

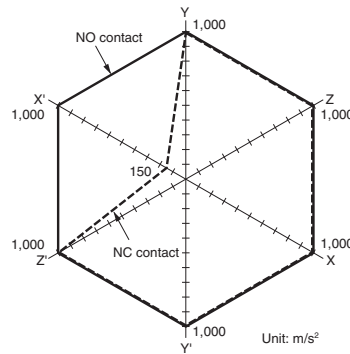
G2RL-1 (A)-E



Sample: G2RL-14 DC12V
 Number of Relays: 5pcs
 Conditions: Shock is applied in ±X, ±Y, ±Z directions three times each with and without energizing the Relays to check the number of malfunctions.
 Requirement: None malfunction 100m/s²



G2RL-2 (A)



Sample: G2RL-24 DC12V
 Number of Relays: 5pcs
 Conditions: Shock is applied in ±X, ±Y, ±Z directions three times each with and without energizing the Relays to check the number of malfunctions.
 Requirement: None malfunction 100m/s²

