## ■ APPROVED STANDARDS

**UL508 (File No. E41643)/CSA C22.2 (No.14) (File No. LR31928)**

| Part number | Contact form | Coil ratings | Contact ratings |
|---|---|---|---|
| G2RL-1A | SPST-NO | 3 to 48 VDC | 12 A at 250 VAC (General use), 100k ops.<br>12 A at 24 VDC (Resistive), 50k ops.<br>1/3 hp, 120 VAC, 30k ops., 60°C |
| G2RL-1 | SPDT | | |
| G2RL-1A-E | SPST-NO (High capacity) | | 16 A at 250 VAC (General use), 100k ops.<br>16 A at 24 VDC (Resistive), 50k ops.<br>20 A at 240 VAC (General use), 85°C<br>15 A at 240 VAC (General use), 105°C<br>1/2 hp, 120 VAC, 100k ops., 70°C (NO) |
| G2RL-1-E | SPDT (High capacity) | | |
| G2RL-2A | DPST-NO | | 8 A at 277 VAC (General use), 100k ops.<br>8 A at 30 VDC (Resistive), 100k ops. |
| G2RL-2 | DPDT | | |

**VDE (VDE0435)**

| Part number | Contact form | Coil ratings | Contact ratings |
|---|---|---|---|
| G2RL | 1 pole | 5, 12, 18, 22, 24, 48 VDC | 12 A at 250 VAC (cosϕ=1)<br>12 A at 24 VDC (L/R=0 ms)<br>AC15: 3 A at 240 VAC<br>DC13: 2.5 A at 24 VDC, 50 ms |
| | 1 pole (High capacity) | | 16 A at 250 VAC (cosϕ=1)<br>16 A at 24 VDC (L/R=0 ms)<br>AC15: 3 A at 240 VAC (NO)<br>1.5 A at 240 VAC (NC)<br>DC13: 2.5 A at 24 VDC (NO), 50 ms |
| | 2 poles | | 8 A at 250 VAC (cosϕ=1)<br>8 A at 24 VDC (L/R=0 ms)<br>AC15: 1.5 A at 240 VAC<br>DC13: 2 A at 30 VDC, 50 ms |

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

# Electrical Life Data

| Part number | Contact rating | Minimum operations |
|---|---|---|
| G2RL-1-E | 16 A at 250 VAC (cosϕ=1) | 100,000 operations min. (1 sec. ON / 9 sec. OFF) |
| | 16 A at 24 VDC | 30,000 operations min. |
| | 8 A at 250 VAC (cosϕ=0.4) | 200,000 operations min. (N.O. side operation) |
| | 8 A at 30 VDC (L/R=7 ms) | 10,000 operations min. |
| G2RL-1 | 12 A at 250 VAC (cosϕ=1) | 100,000 operations min. (1 sec. ON / 9 sec. OFF) |
| | 12 A at 24 VDC | 30,000 operations min. |
| | 5 A at 250 VAC (cosϕ=0.4) | 150,000 operations min. |
| | 5 A at 30 VDC (L/R=7 ms) | 20,000 operations min. |
| G2RL-2 | 8 A at 250 VAC (cosϕ=1) | 100,000 operations min. (1 sec. ON / 9 sec. OFF) |
| | 8 A at 30 VDC | 30,000 operations min. |
| G2RL-1A-E | Pilot duty (A300), 250 VAC | 250,000 operations min. (1 sec. ON / 9 sec OFF) |
| | Pilot duty (A300), 125 VAC | 150,000 operations min. (1 sec. ON / 9 sec OFF) |

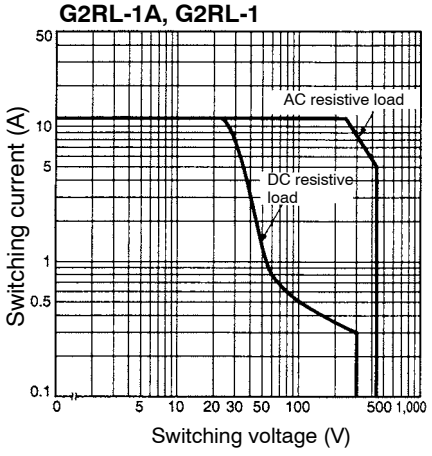
**Note: 1.** The results shown reflect minimum cycles using a very severe duty cycle of 1 sec ON/1 sec OFF (unless otherwise specified above).

**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 of the P.C.B.
Contact Omron for applications where venting of the sealed relay is not possible.

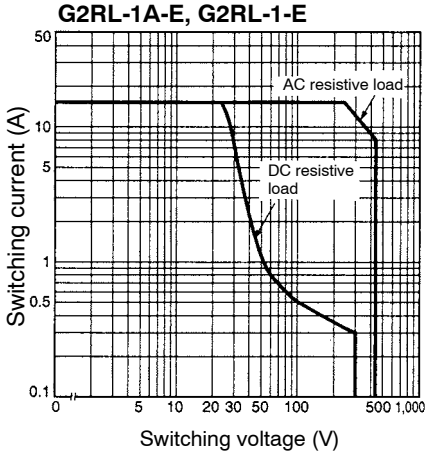
# Engineering Data

## ■ MAXIMUM SWITCHING CAPACITY

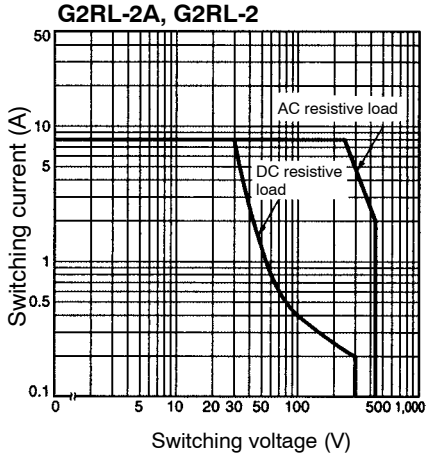
**G2RL-1A, G2RL-1**



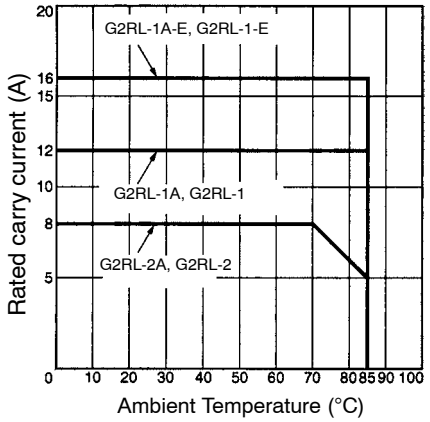

**G2RL-1A-E, G2RL-1-E**



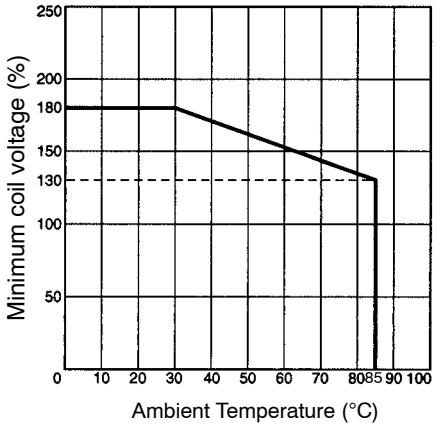

**G2RL-2A, G2RL-2**




## ■ AMBIENT TEMPERATURE VS RATED CARRY CURRENT




## ■ AMBIENT TEMPERATURE VS MAXIMUM COIL VOLTAGE

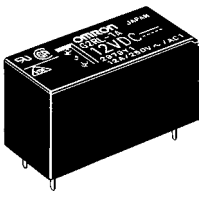


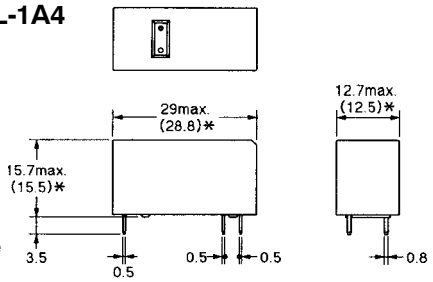

**Note:** The maximum coil voltage refers to the maximum value in a varying range of operating power voltage, not a continuous voltage.

# Dimensions

Unit: mm (inch)

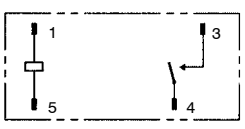
**G2RL-1A, G2RL-1A4**






* Indicates average dimensions.

Terminal Arrangement/
Internal Connection
(Bottom View)




Mounting Holes
(Bottom View)