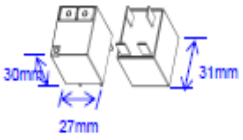
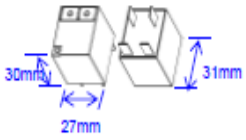
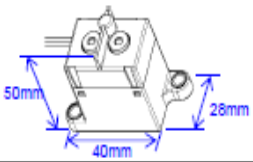
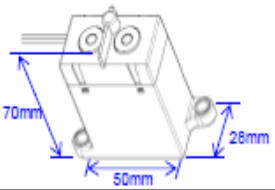
DC Power Relays

G9E series Selection Guide

Type name		G9EJ	G9EJ-1-E	G9EN	G9EM
Classification		Switching	Switching/current conduction	Switching/current conduction	Switching/current conduction
Appearance					
Features		Switches 400V, 25A Inrush load	Carries 15A Carries/switches 400-V,15-A loads	Carries 60A Carries/switches 400-V,60-A loads	Carries 150A Carries/switches 400-V,150-A loads
Contacts	Contact form	1a			
	Contact structure	Double-break, single			
	Contact resistance	100 mΩ max.	50mΩ max.	5 mΩ max.	5 mΩ max.
	Switching voltage	0.5Vmax. (@5A)	0.75V MAX (@15A)	0.1Vmax. (@60A)	0.1Vmax. (@150A)
	Electrical endurance	400VDC, 25A Inrush, 100,000 operations min.	400VDC, 25A Inrush, 65,000 operations min. 400VDC, 15A, 3,000	400VDC, 60A, 3,000 operations min.	400VDC, 150A, 1,000 operations min.
	Rated carry current	-	-	60A	150A
	Short-time carry current	20A (1 min.)	20A (2 min.)	180 A (1 min.)	250 A (1 min.)
	Overload interruption	400VDC 30A (100times)	400VDC 30A (50times)	400VDC 500A (3 times)	400VDC 1000A (1 times)
Coil (See note2.)	Rated voltage	12 VDC			
	Rated current	167mA	100mA	417mA	417mA
	Coil resistance	72 Ω	120Ω	28.8 Ω	28.8 Ω
	Must-operate voltag	7.2Vmax.	7.2Vmax.	6.9Vmax.	7.6Vmax.
	Must-release voltag	0.6V min.	0.6V min.	0.6Vmin.	0.6Vmin.
	Maximum voltage	DC15.5 V max. (2 min. max.)	DC15.5 V max. (1 hour max.)	DC15.5 V max. (1 hour max.)	DC15.5 V max. (1 hour max.)
	Power consumption	Approx. 2.0W	Approx. 1.2W	Approx. 5.0W	Approx. 5.0W
Operate time		50 ms max.	50 ms max.	40 ms max.	40 ms max.
Release time		30 ms max.	30 ms max.	20 ms max.	20 ms max.
Mechanical endurance		200,000 operations min.	200,000 operations min.	100,000 operations min.	100,000 operations min.
Insulation resistance (See note3.)	Between coil and	1,000 MΩ min.			
	Between contacts of the same polarity	1,000 MΩ min.			
Dielectric strength	Between coil and contacts	2,500VAC, 1min.			
	Between contacts of the same polarity	2,500VAC, 1min.			
Impulse withstand voltage (see note4.)		4,500V			
Vibration resistance	Destruction	5 to 200 to 5 Hz, 5.0-mm single amplitude (Acceleration: 44.1 m/s2)			
	Malfunction	5 to 200 to 5 Hz, 5.0-mm single amplitude (Acceleration: 44.1 m/s2)			
Shock resistance	Destruction	490 m/s^2			
	Malfunction	energized: 490 m/s2 deenergized: 98 m/s2			
Ambient operating temperature		-40 to +85℃ (with no icing or condensation)			
Ambient operating humidity		5 ~ 85%RH			
Coil terminal	Tab terminals	Available	Available	Available	Available
	Lead wire output	-	-	Available	Available
Weight		Approx. 45g	Approx. 45g	Approx. 140g	Approx. 240g

Note: 1. The above values are initial values at an ambient temperature of 23℃ unless otherwise specified.
2. The figures for the rated current and coil resistance are for a coil temperature of 23℃ and have a tolerance of ±10%.
3. The insulation resistance was measured with a 500-VDC megohmmeter.

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