

## ■ Ratings

### Coil: 1-Pole, Single-side Stable Type (Including models for ultrasonically cleanable)

Item	Rated current (mA)	Coil resistance (Ω)	Must operate voltage (V)	Must release voltage (V)	Max. voltage (V)	Power consumption (mW)
Rated voltage			% of rated voltage			
3 VDC	67	45	70% max.	10% min.	160% (at 23°C)	Approx. 200
5 VDC	40	125				
6 VDC	33.3	180				
12 VDC	16.7	720				
24 VDC	8.3	2,880				

### Coil: Single-winding Latching Type (Including models for ultrasonically cleanable)

Item	Rated current (mA)	Coil resistance (Ω)	Must set voltage (V)	Must reset voltage (V)	Max. voltage (V)	Power consumption	
						Set coil (mW)	Reset coil (mW)
Rated voltage			% of rated voltage				
3 VDC	67	45	70% max.	70% max.	160% (at 23°C)	200	200
5 VDC	40	125					
6 VDC	33.3	180					
12 VDC	16.7	720					
24 VDC	8.3	2,880					

### Coil: Double-winding Latching Type (Including models for ultrasonically cleanable)

Item	Rated current (mA)		Coil resistance (Ω)		Must set voltage (V)	Must reset voltage (V)	Max. voltage (V)	Power consumption	
	Set coil	Reset coil	Set coil	Reset coil				Set coil (mW)	Reset coil (mW)
Rated voltage					% of rated voltage				
3 VDC	93.5	93.5	32.1	32.1	70% max.	70% max.	130% (at 23°C)	280	280
5 VDC	56.0	56.0	89.3	89.3					
6 VDC	46.7	46.7	129	129					
12 VDC	23.3	23.3	514	514					
24 VDC	11.7	11.7	2,056	2,056					

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

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

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

## Contact

Contact Form	SPST-NO (1a)		SPST-NO (1a) + SPST-NC (1b)	
	Resistive load	Inductive load (cosφ = 0.4; L/R = 7 ms)	Resistive load	Inductive load (cosφ = 0.4; L/R = 7 ms)
Rated load	10 A (8 A) at 250 VAC 10 A (10 A) at 30 VDC	5 A (5 A) at 250 VAC 5 A (5 A) at 30 VDC	8 A (8 A) at 250 VAC 8 A (8 A) at 30 VDC	3.5 A (3.5 A) at 250 VAC 3.5 A (3.5 A) at 30 VDC
Item				
Contact type	Single			
Contact material	Ag-Alloy (Cd free)			
Rated carry current	10 A (10 A)		8 A (8 A)	
Max. switching voltage	380 VAC, 125 VDC			
Max. switching current	10 A (10 A)		8 A (8 A)	

Note. The values shown in parentheses ( ) are for -FD models only.

## Characteristics (Including models for ultrasonically cleanable)

Item	Classification	Single-side Stable	Single-winding Latching	Double-winding Latching
Contact resistance *1		30 mΩ max.		
Operate (set) time		10 ms max.		
Release (reset) time		10 ms max.		
Min. set pulse width		-	20 ms (at 23°C)	
Min. reset pulse width		-	20 ms (at 23°C)	
Insulation resistance *2	Between coil and contacts	1,000 mΩ min.		
	Between contacts of the same polarity	1,000 mΩ min.		
	Between contacts of different polarity	1,000 mΩ min. (SPST-NO, SPST-NC)		
	Between set and reset coils	-	-	1,000 mΩ min.
Dielectric strength	Between coil and contacts	2,000 VAC 50/60Hz for 1min		
	Between contacts of the same polarity	1,000 VAC 50/60Hz for 1min		
	Between contacts of different polarity	2,000 VAC 50/60Hz for 1min (SPST-NO, SPST-NC)		
	Between set and reset coils	-	-	250 VAC 50/60Hz for 1min
Vibration resistance	Destruction	10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5 mm double amplitude)		
	Malfunction	10 to 55 to 10 Hz, 0.75 mm single amplitude (1.5 mm double amplitude)		
Shock resistance	Destruction	1,000 m/s <sup>2</sup>		
	Malfunction	100 m/s <sup>2</sup>		
Durability	Mechanical	50,000,000 operations min. (at 18,000 operations/hr)		
	Electrical	100,000 operation min. (at 1,800 operations/hr under rated load)		
Failure rate (P level) (reference value) *3		10 mA at 5 VDC		
Ambient operating temperature		-25°C to 70°C (with no icing or condensation)		
Ambient operating humidity		5% to 85%		
Weight		Approx. 5.6 g		

Note. The given values are initial values.

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

\*2. Testing conditions: measured with a 500 VDC megohmmeter (at 250 VDC between set/reset coil).

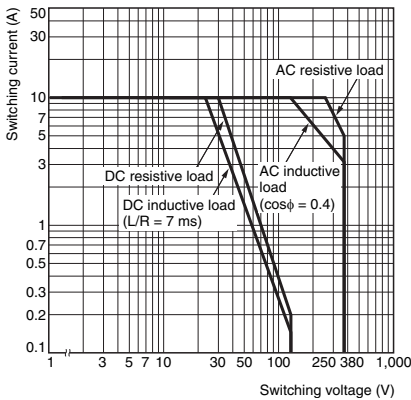
\*3. This value was measured at a switching frequency of 120 operations/min.

## Engineering Data

### Maximum Switching Capacity

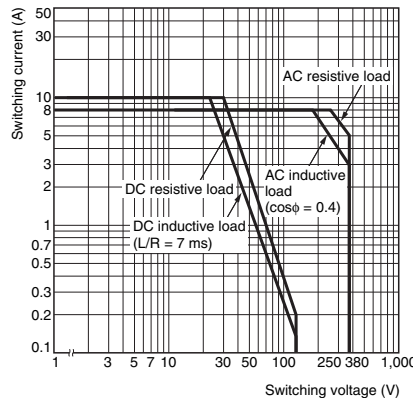
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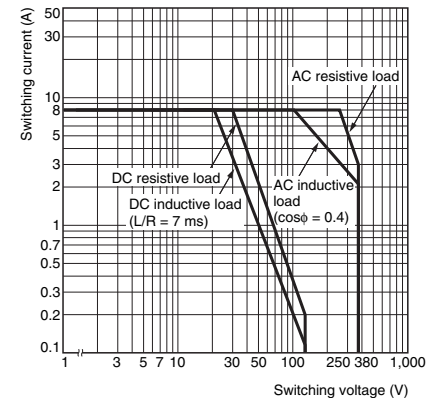
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G6C-2114P-US

G6C-2117P-US



G6C-2114P-FD-US

G6C-2117P-FD-US

