

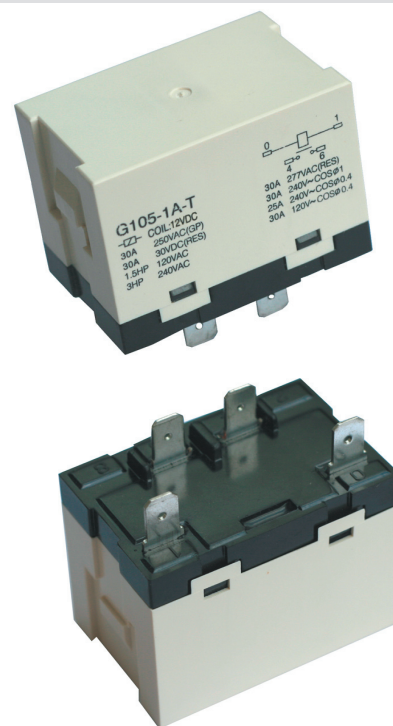
G105-1A-T General Purpose Relay

Descriptions

General Purpose Relays are cost effective, provide excellent functionality and are ideal for any application from controlling smaller loads, to those requiring high current-carrying capacity. Assembly and installation of General Purpose Relays are quick, easy and secure with little risk of damage.

Features & Specifications:

- High capacity, High dielectric strength relay
- Compatible with momentary voltage drops
- No contact chattering for momentary voltage drops up to 50% of rated voltage
- Wide range AC-activated coil that handles 100 to 120 or 200 to 240VAC at either 50 or 60Hz.
- Miniature hinge for maximum switching power, particularly for inductive loads
- Flame resistance materials(UL94V-0-qualifying) used for all insulation material
- Quick-connect, screw, and PCB terminals



Specifications

Coil Ratings:

Rated voltage		Rated current	Coil resistance	Must operate voltage	Must release voltage	Max.voltage	Power consumption (approx.)	Coil internal circuit
AC(~)	12V	142 mA	—	75% max. Of rated voltage	15% min. Of rated voltage	110% Of rated voltage	1.7 to 2.5VA (60Hz)	
	24V	71 mA	—					
	50V	34 mA	—					
	100 to 120V	17.0 to 20.4 mA	—	75V	18V	132V		
	200 to 240V	8.5 to 10.2mA	—	150V	36V	264V		
DC(=)	6V	317 mA	18.9 Ω	75% max. Of rated voltage	15% min. Of rated voltage	110% Of rated voltage	1.9 W	
	12V	158 mA	75 Ω					
	24V	79 mA	303 Ω					
	48V	40 mA	1220 Ω					
	100V	19 mA	5260 Ω					

Note:

1. The rated current and coil resistance are measured at a coil temperature of 23C with tolerances of +15%/-20% for AC rated current and +15% for DC coil resistance.
2. Performance characteristic data measured at a coil temperature of 23C.
3. ~ indicates AC and = indicates DC (IEC417 publications).

Contact Ratings:

Load	G105-1A-T	
	Resistive load ($\cos\phi = 1$)	
Rate load	30A, 220VAC	
Contact material	AgCdO	
Carry current	30A	
Max. Operating voltage	250VAC	
Max. Operating current	30A	
Max. Switching capacity	6,600VA	5,500VA
Min. Permissible load	100mA, 5VDC	

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

Characteristics:

Contact resistance	50mΩ max	
Operate time	30ms max	
Release time	30ms max	
Max. operating frequency	Mechanical	1,800 operations/hour
	Electrical	1,800 operations/hour (under rated load)
Insulation resistance	1,000mΩ min. (at 500VDC)	
Dielectric strength	4,000VAC, min./5,000VAC typical, 50/60Hz for 1 minute between coil and contacts	
	2,000 VAC, 50/60Hz for 1 minute between contacts of same pole	
	2,000 VAC, 50/60Hz for 1 minute between contacts of different poles (DPST-NO type)	
Impulse withstand voltage	Between coil and contact: 10,000V (impulse wave used: $1.2 \times 50^{\mu}s$)	
Vibration	Mechanical durability	10 to 55 Hz, 1.50mm (0.06in) double amplitude
	Malfunction durability	10 to 55 Hz, 1.50mm (0.06in) double amplitude
Shock	Mechanical durability	1,000m/s ² (approx. 100G)
	Malfunction durability	1,000m/s ² (approx. 100G)
Life expectancy	Mechanical	5,000,000 operations min. (at 1,800 operations/hour)
	Electrical	100,000 operations min. (at 1,800 operations/hour under rated load)
Ambient temperature	-20°C to 85°C (-4°F to 185°F)	
Humidity	35% to 85%RH	
Weight	Quick-connect terminal type: approx. 90g (3.17oz)	
	PCB terminal type: approx. 100g (3.52oz)	
	Screw terminal type: approx. 120g (4.32oz)	

Note: Data shown are of initial value.

Characteristic Data:

G105-1A-T

