

General Purpose Relay

Description

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



G105-1A-T



G105-1A-B

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 23 C 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 23 C.

3. ~ indicates AC and = indicates DC (IEC417 publications).

Contact Ratings

Load	G105-1A-T G105-1A-B
Rate load	30A,220VAC
Contact material	AgCdO
Carry current	30A
Max.Operating voltage	250VAC
Max.Operating current	30A
Max.Switching capacity	6,600VA
Min.Permissible load	100mA,5VDC
Mounting	Panel mount
Terminals	Quick-connect, screw, PCB
Coli voltage	12VDC,24VAC,110VAC,220VAC

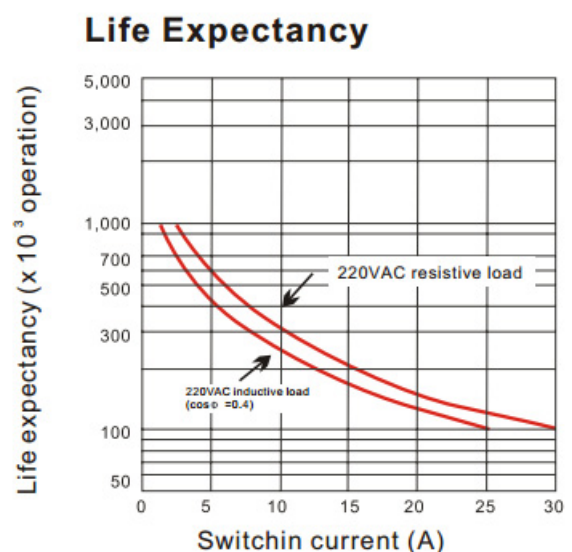
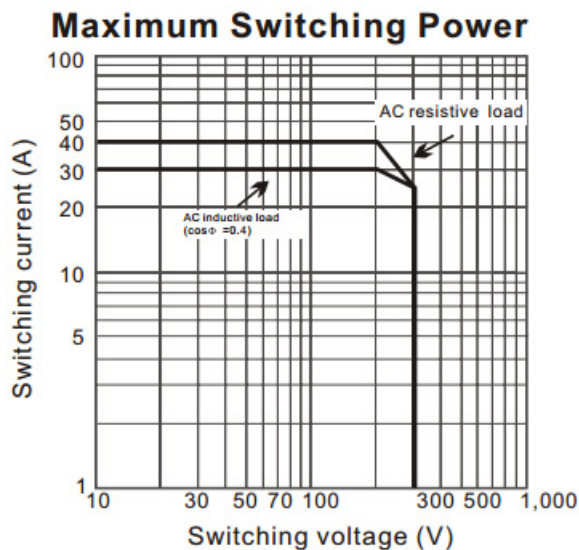
Note:P level: =0.1x10 /operation

Characteristics

Contact resistance		50m Ω 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		1,000m Ω 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 1minute between contacts of same pole
		2,000 VAC, 50/60Hz for 1minute between contacts of different poles(DPST-NO type)
Impulse withstand voltage		Between coil and contact:10,000V(impulse wave used:1.2x50 μ 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 G105-1A-B



Part Number Scheme

G105 - 1A - T - 24VAC

Code	Description
G105	General Purpose Relay

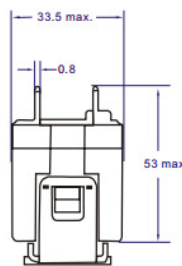
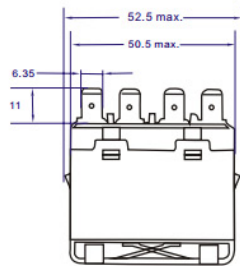
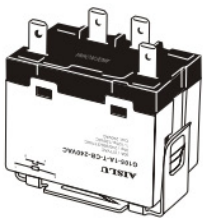
Code	Description
1A	SPST-NO
2A	DPST-NO

Code	Coil Voltage
24	24VAC
110	110VAC
220	220VAC
12	12VDC

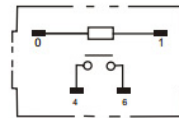
Code	Terminal Shape
T	Quick-connect Terminals
B	Screw Terminals

Quick - connect Terminals with E-bracket

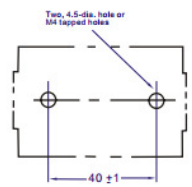
G105-1A-T



Terminal Arrangement/
Internal Connections
(Top View)

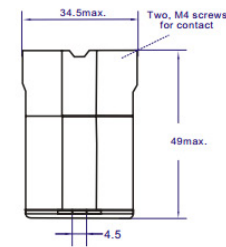
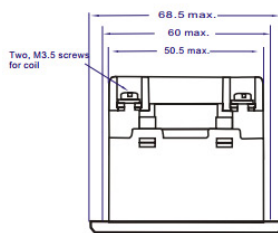
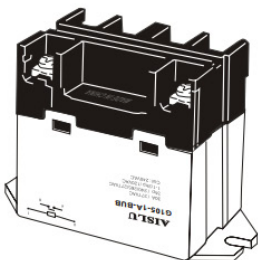


Mounting Holes

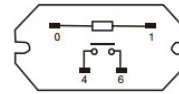


Screw terminals with Upper Bracket

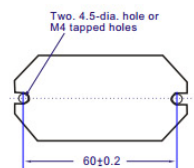
G105-1A-BUB



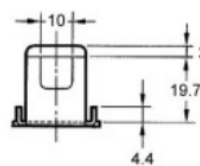
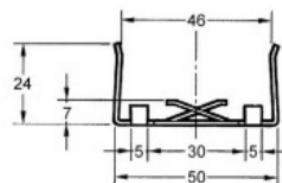
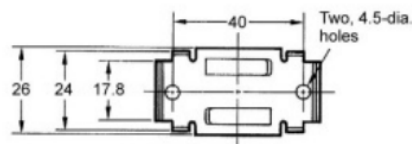
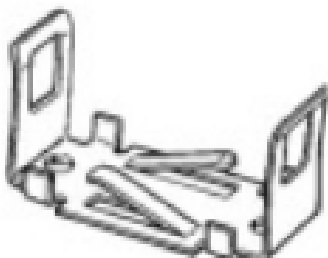
Terminal Arrangement/
Internal Connections
(Top View)



Mounting Holes



E-Bracket



Mounting Holes
(Bottom View)

