Features



- 20A switching capability
- 4kV dielectric strength (between coil and contacts)
- Plastic sealed and dust proofed types available
- UL insulation system: Class F available
- Environmental friendly product (RoHS compliant)
- Dimensions: 29.0 x 13.0 x 26.5 mm

Application

- Smart Home Solution / Home Appliance / Temperature Control / Industrial Control / Security System / Industrial Control / Anti-Theft System, etc.

Contact Data

Contact Arrangement	1A, 1B, 1C
Contact Material	Ag Alloy
Contact Rating	Resistive: 16A 240VAC / 24VDC 1HP 240VAC TV-8 125VAC (NO contact)
Max. Switching Power	5540VA / 480W
Max. Switching Voltage	277VAC / 30VDC
Max. Switching Current	20A
Contact Resistance	≦50mΩ (at 1A 24VDC)
Electrical Endurance	$1x10^5$ (NO or NC, 16A 240VAC, Resistive load, Room temp., 1s on 9s off) $5x10^4$ (NO or NC, 16A 24VDC, Resistive load, Room temp., 1s on 9s off)
Mechanical Endurance	$1x10^7$

Coil Parameter

Standard Type

Coil Voltage (VDC)		Coil Resistance (Ω±10%)	Pickup Voltage(max) (VDC)	Release Voltage(min) (VDC)	Coil Power Consumption (W)
Rated	Max.				
5	5.5	36	3.60	0.5	0.72
6	6.6	50	4.30	0.6	
9	9.9	115	6.50	0.9	
12	13.2	200	8.60	1.2	
18	19.8	460	13.0	1.8	
24	26.4	820	17.3	2.4	
48	52.8	3300	34.6	4.8	
60	66.0	5100	43.2	6.0	

Sensitive Type

Coil Voltage (VDC)		Coil Resistance (Ω±10%)	Pickup Voltage(max) (VDC)	Release Voltage(min) (VDC)	Coil Power Consumption (W)
Rated	Max.				
5	7.0	47	3.60	0.5	0.53
6	8.4	68	4.30	0.6	
9	12.6	160	6.50	0.9	
12	16.8	275	8.60	1.2	
18	25.2	620	13.0	1.8	
24	33.6	1100	17.3	2.4	
48	67.2	4170	34.6	4.8	
60	84.0	7000	43.2	6.0	

Operation Condition

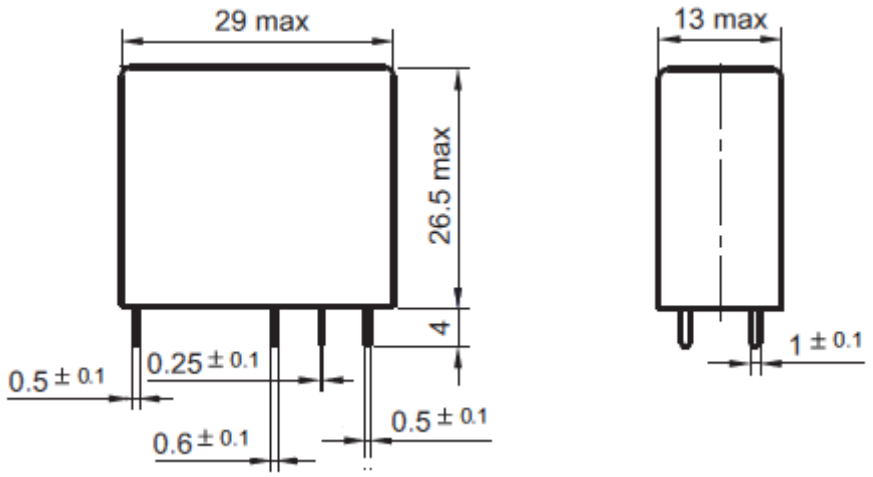
Insulation Resistance		1000MΩ min (at 500VDC)
Dielectric Strength	Between Contacts	1000VAC 1min
	Between Contact and Coil	4000VAC 1min
Shock Resistance	Functional	98m/s^2
	Endurance	980m/s^2
Vibration Resistance		10Hz to 50Hz double amplitude 1.5mm
Ambient Temperature		-40 ~ +85℃
Operate Time		≦15ms
Release Time		≦5ms
Relative Humidity		5%~85%
Weight		Approx. 18.5g

Ordering Information

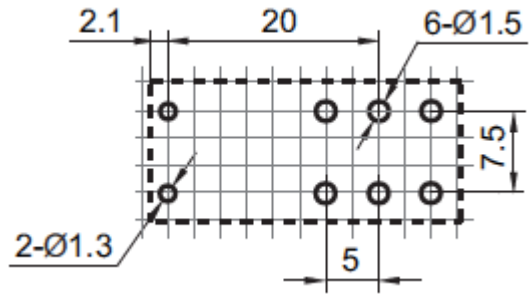
	GQ1	-12D	72	B	-A	B	-S	(XXX)
Model								
Coil Voltage	5, 6, 9, 12, 18, 24, 48, 60VDC							
Coil Power	**Nil**: 530mW **72**: 720mW							
Insulation Standard	**Nil**: Class F **B**: Class B							
Contact Arrangement	**A**: 1 Form A **B**: 1 Form B **C**: 1 Form C							
Contact Material	**Nil**: AgSnO2 **B**: AgCdO							
Construction	**Nil**: Flux tight **S**: Sealed							
Special Code	**Nil**: Standard **XXX**: Customer special requirement							

Dimensions (UNIT: mm)

Outline Dimensions

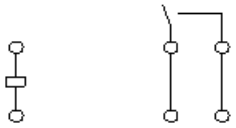


Mounting (Bottom views)

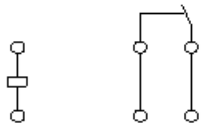


Wiring Diagram (Bottom views)

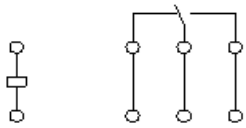
1 Form A



1 Form B

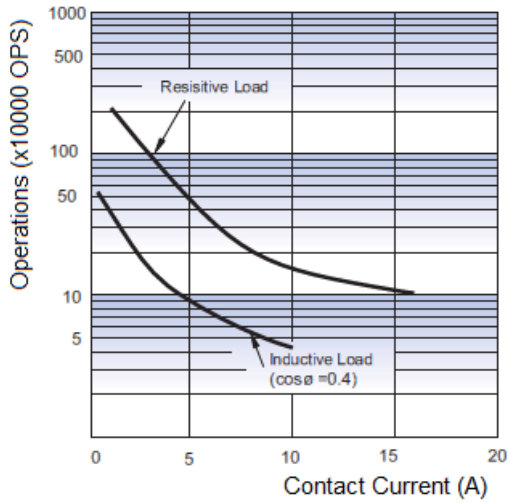


1 Form C



Engineering Data

Endurance curve



Test conditions:
NO, 250VAC, Resistive load, Flux proofed, Room temp., 1s on 9s off.

Coil Temperature Rise

