

Features

- Special contact struction
- Incandescent lamp load: 3000W 230VAC
- Low height: 15.7 mm
- Creepage distance: 11mm
- Meeting reinforce insulation
- 5kV dielectric strength (between coil and contacts)
- Plastic sealed and flux proofed types available
- UL insulation system: Class F available
- Environmental friendly product (RoHS compliant)
- Dimensions: 29.0 x 12.7 x 15.7 mm



Application

- Intelligent Building / Intelligent Office / Intelligent Home Control / Lighting Control, etc.

Contact Data

Contact Arrangement	1A
Contact Material	Ag Alloy
Contact Rating	Resistive: 16A 250VAC Incandescent Lamp: 3000W 230VAC Inrush current: 165A / 20ms LED (Electronic ballast): 492A / 1.5ms
Max. Switching Power	4000VA
Max. Switching Voltage	440VAC
Max. Switching Current	16A
Contact Resistance	$\leq 100\text{m}\Omega$ (at 1A 6VDC)
Electrical Endurance	1.2×10^4 (3000W 230VAC, Incand escentlamp load, Room temp., 1s on 11s off)
Mechanical Endurance	5×10^6

● Coil Parameter

Coil Voltage (VDC)		Coil Resistance ($\Omega \pm 10\%$)	Pickup Voltage(max) (VDC)	Release Voltage(min) (VDC)	Coil Power Consumption (W)
Rated	Max.				
5	7.5	62	3.50	0.5	0.40
6	9.0	90	4.20	0.6	
9	13.5	202	6.30	0.9	
12	18.0	360	8.40	1.2	
18	27.0	810	12.6	1.8	
24	36.0	1440	16.8	2.4	
48	72.0	5760(1 $\pm$ 15%)	33.6	4.8	
60	90.0	7500(1 $\pm$ 15%)	42.0	6.0	
110	165.0	25200(1 $\pm$ 15%)	77.0	11.0	

● Operation Condition

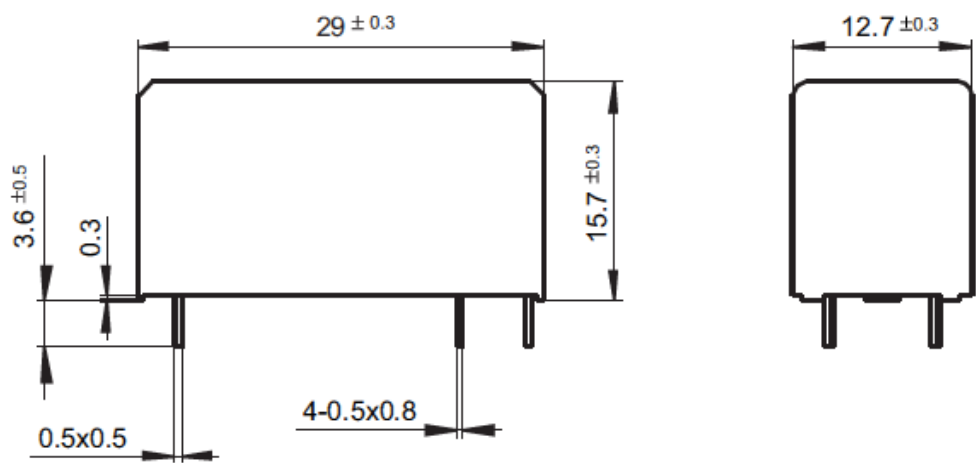
Insulation Resistance		1000M Ω min (at 500VDC)
Dielectric Strength	Between Coil and Contacts	5000VAC 1min
	Between Open Contacts	1250VAC 1min
Surge Voltage (Between Coil & Contacts)		10kV (1.2 / 50 μ s)
Shock Resistance	Functional	98m/s ²
	Endurance	980m/s ²
Temperature Rise (at Nomi. Volt.)		$\leq 55K$
Vibration Resistance		10Hz to 150Hz 10g
Ambient Temperature		-40 ~ +85 $^{\circ}C$
Operate Time		10ms
Release Time		5ms
Relative Humidity		5%~85%
Weight		Approx. 13.5g

● Ordering Information

	GNL	-12D	-A	-S	(XXX)
Model					
Coil Voltage	5, 6, 9, 12, 18, 24, 48, 60, 110VDC				
Contact Arrangement	A: 1 Form A				
Construction	Nil: Flux tight S: Sealed				
Special Code	Nil: Standard XXX: Customer special requirement				

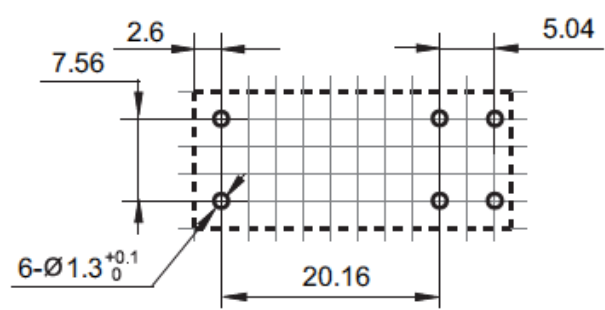
● Dimensions (UNIT: mm)

Outline Dimensions



● Dimensions (UNIT: mm)

Mounting (Bottom views)



Wiring Diagram (Bottom views)

