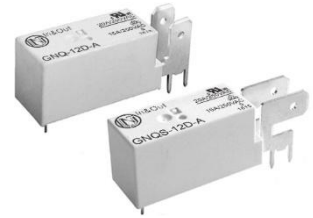


● Features

- 20A Switching capability
- Ambient temperature up to 125°C
- 5kV dielectric strength (between coil and contacts)
- Low height: 15.7mm
- Creepage distance >8mm
- UL insulation system: Class F
- Environmental friendly product (RoHS compliant)
- Dimensions: Vertical: 41 x 12.7 x 15.7 mm

Horizontal: 45 x 12.7 x 15.7 mm



● Application

- Household Electrical Appliance / Automation System / Electrical Equipment / Instrument / Meter / Telecommunication Facilities / Remote Control System / Security System, etc.

● Contact Data

Contact Arrangement	1A, 1B
Contact Material	Ag Alloy
Contact Rating	20A 250VAC
Max. Switching Power	5000VA
Max. Switching Voltage	440VAC / 300VDC
Max. Switching Current	20A
Contact Resistance	$\leq 100\text{m}\Omega$ (at 1A 6VDC)
Electrical Endurance	3×10^4 (20A 277VAC, Resistive load, Room temp., 1s on 9s off)
Mechanical Endurance	1×10^7

● 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	

● Operation Condition

Insulation resistance		1000M Ω min (at 500VDC)
Dielectric strength	Between contacts	1000V
	Between contact and coil	5000V
Surge voltage (between coil & contacts)		10kV (1.2 / 50 μ s)
Shock resistance	Functional	98m/s ²
	Endurance	980m/s ²
Vibration resistance	1A	10~150Hz 10g
	1B	10~150Hz 5g
Ambient temperature		-40 ~ +125°C
Operate time		15ms
Release time		8ms
Relative Humidity		5%~85%
Weight		Approx. 16g

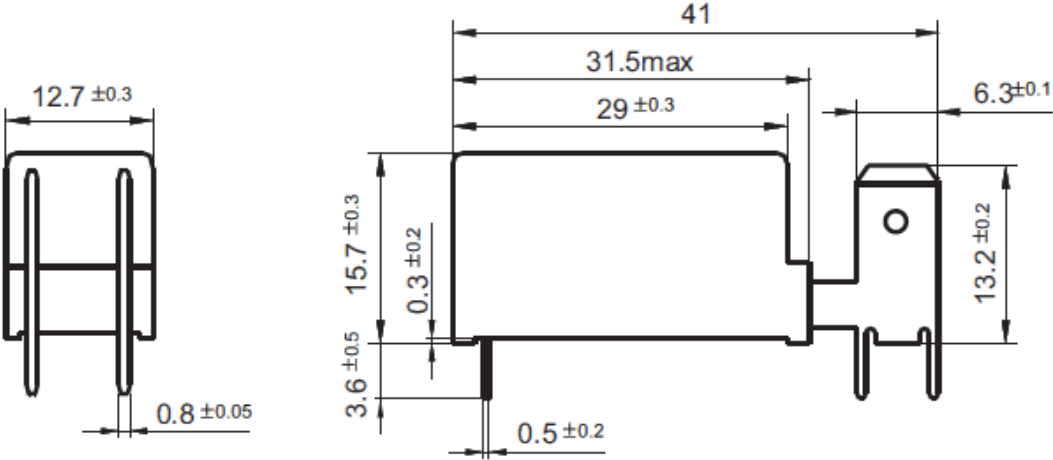
● Ordering Information

		GNQ	S	-12D	-A	(XXX)
Model						
Terminals	Nil: Quick connect terminals vertical S: Quick connect terminals horizontal					
Coil Voltage	5, 6, 9, 12, 18, 24, 48, 60VDC					
Contact Arrangement	A: 1 Form A B: 1 Form B					
Special Code	Nil: Standard XXX: Customer special requirement					

● Dimensions (UNIT: mm)

Outline Dimensions

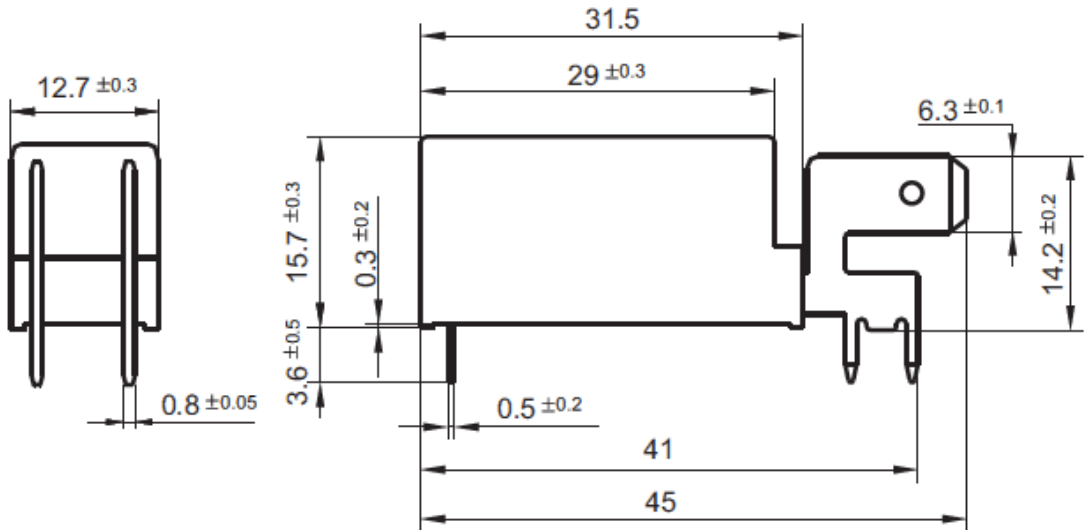
GNQ type (Quick connect terminals vertical)



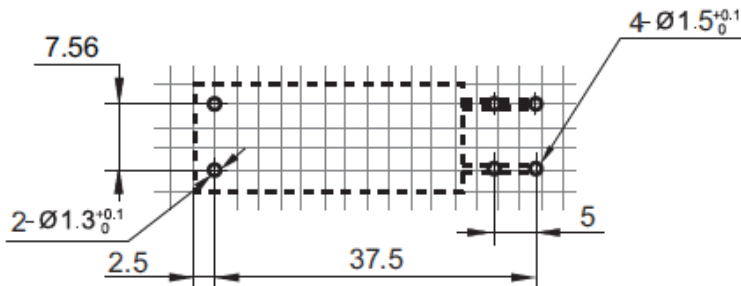
● Dimensions (UNIT: mm)

Outline Dimensions

GNQS type (Quick connect terminals horizontal)



Mounting (Bottom views)



Wiring Diagram (Bottom views)

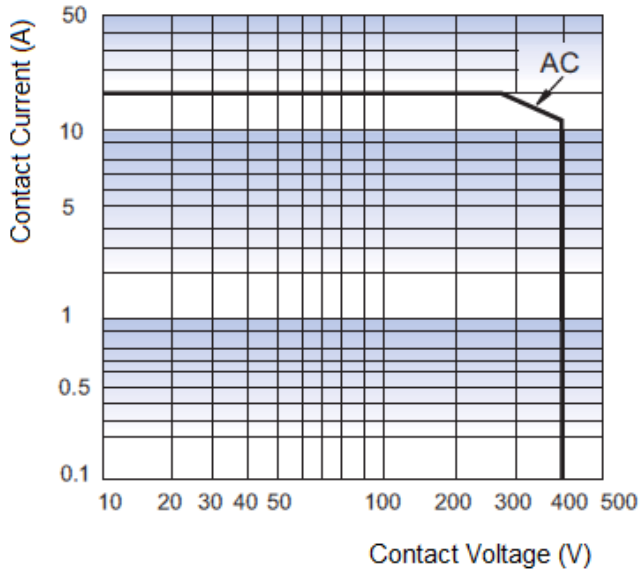
1 Form A

1 Form B

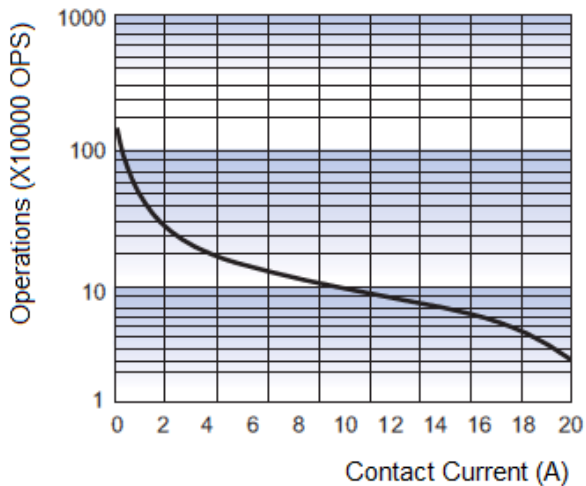


● Engineering Data

Maximum Switching Power



Endurance Curve



Notes:

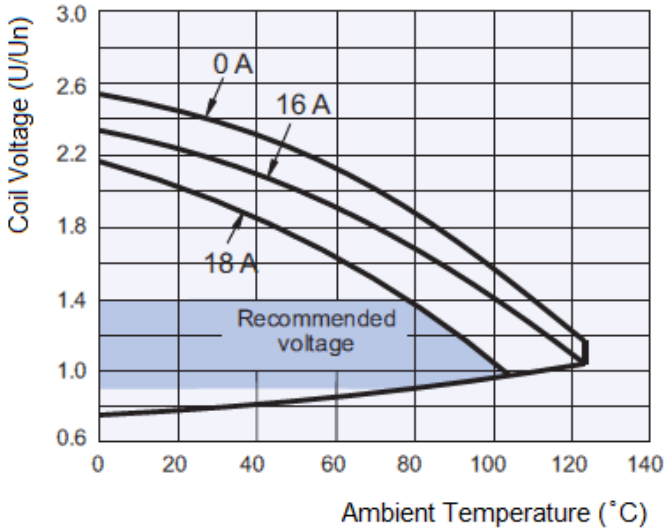
1) Curve: 1A type

2) Test conditions:

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

● Engineering Data

Coil Operating Range (DC) *



Notes: *The use of a relay with an energizing voltage other than the rated coil voltage may lead to reduced electrical life. An energizing voltage over the above range may damage the insulation of relay coil.