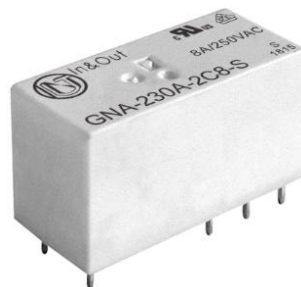


Features

- AC voltage coil type
- 16A switching capability
- 1 & 2 pole configurations
- Low height: 15.7 mm
- Creepage distance: 10mm
- 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

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

Contact Data

| | | |
|------------------------|---|-----------------------|
| Contact Arrangement | 1A, 1B, 1C | 2A, 2B, 2C |
| Contact Material | Ag Alloy | |
| Contact Rating | 12A, 16A 250VAC (resistive) | 8A 250VAC (resistive) |
| Max. Switching Power | 12A:3000VA 16A:4000VA | 2000VA |
| Max. Switching Voltage | 440VAC | |
| Max. Switching Current | 12A / 16A | 8A |
| Contact Resistance | $\leq 100\text{m}\Omega$ (at 1A 6VDC) | |
| Electrical Endurance | 5×10^4 (1 Form A type, 16A 250VAC, Resistive load, Room temp., 1s on 9s off) $(2 \text{ Form A type, } 8\text{A } 250\text{VAC, Resistive load, Room temp., 1s on 9s off})$ | |
| Mechanical Endurance | 1×10^5 | |

● Coil Parameter (at 23°C)

Standard Type

| Coil Voltage (VAC) | Coil Current (mA) | Coil Resistance ($\Omega \pm 10\%$) | Pickup Voltage(max) (VAC) | Release Voltage(min) (VAC) | Coil Power Consumption (VA) |
|--------------------|-------------------|---------------------------------------|---------------------------|----------------------------|-----------------------------|
| 24 | 31.6 | 350 | 18.0 | 3.6 | 0.75 |
| 115 | 6.6 | 8100(1 \pm 15%) | 86.3 | 17.3 | |
| 230 | 3.2 | 32500(1 \pm 15%) | 172.5 | 34.5 | |

● Operation Condition

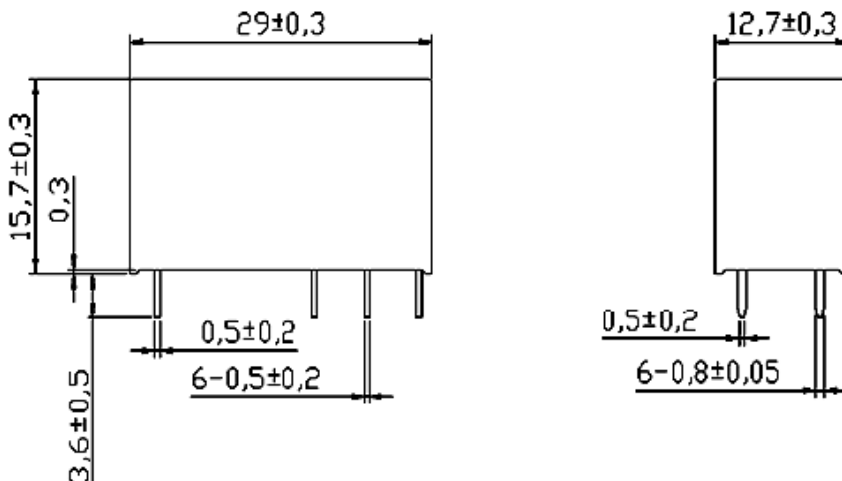
| | | |
|-----------------------------------|---------------------------|--------------------------------|
| Insulation Resistance | | 1000M Ω min (at 500VDC) |
| Dielectric Strength | Between Coil and Contacts | 5000VAC 1min |
| | Between Open Contacts | 1000VAC 1min |
| | Between Contact Sets | 2500VAC 1min |
| Shock Resistance | Functional | 98m/s ² |
| | Endurance | 980m/s ² |
| Temperature Rise (at nomi. volt.) | | $\leq 85K$ |
| Vibration Resistance | | 10Hz to 150Hz 10g / 5g |
| Ambient Temperature | | -40 ~ +70°C |
| Relative Humidity | | 5%~85% |
| Weight | | Approx. 13.5g |

● Ordering Information

| | | GNA | S | -115A | -A | 16 | -S | (XXX) | |
|-----------------------------------|--|------------------------|--------------|-------|----|----|----|-------|--|
| Model | | | | | | | | | |
| Version(See Wiring Diagram Below) | | Nil: 5.0mm S: 3.5mm | | | | | | | |
| Coil Voltage | | 24, 115, 230VAC | | | | | | | |
| Contact | A: 1 Form A | B: 1 Form B | C: 1 Form C | | | | | | |
| Arrangement | 2A: 2 Form A | 2B: 2 Form B | 2C: 2 Form C | | | | | | |
| Contact Current | 8: 8A (8A only for 2 pole 5mm) | | | | | | | | |
| | 12: 12A (only for 1 pole 3.5mm or 1 pole 5mm) | | | | | | | | |
| | 16: 16A (only for 1 pole 5mm, double pinnig) | | | | | | | | |
| Construction | Nil: Flux tight | S: Sealed | | | | | | | |
| Special Code | Nil: Standard XXX: Customer special requirement | | | | | | | | |

● Dimensions (UNIT: mm)

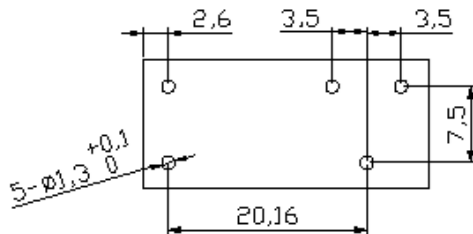
Outline Dimensions



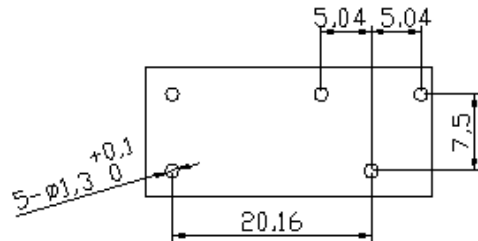
● Dimensions (UNIT: mm)

Mounting (Bottom views)

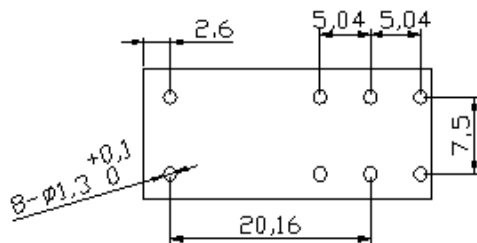
GNAS 3.5mm 1Pole 12A



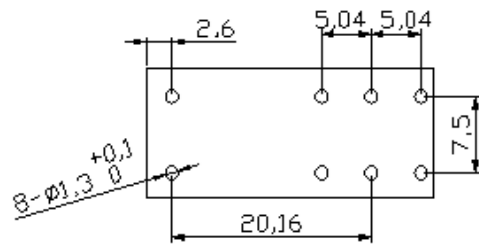
GNA 5mm 1Pole 12A



GNA 5mm 1Pole 16A



GNA 5mm 2Pole 8A



Wiring Diagram (Bottom views)

GNAS 3.5mm / GNA 5mm, 1Pole 12A

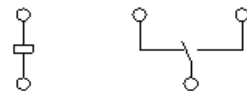
1 Form A



1 Form B

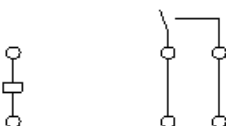


1 Form C

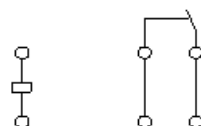


GNA 5mm 1Pole 16A

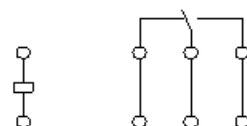
1 Form A



1 Form B



1 Form C

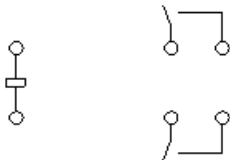


● Dimensions (UNIT: mm)

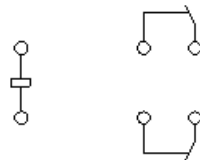
Wiring Diagram (Bottom views)

GNA 5mm 2Pole 8A

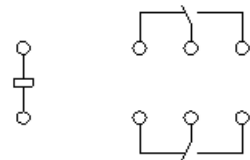
2 Form A



2 Form B

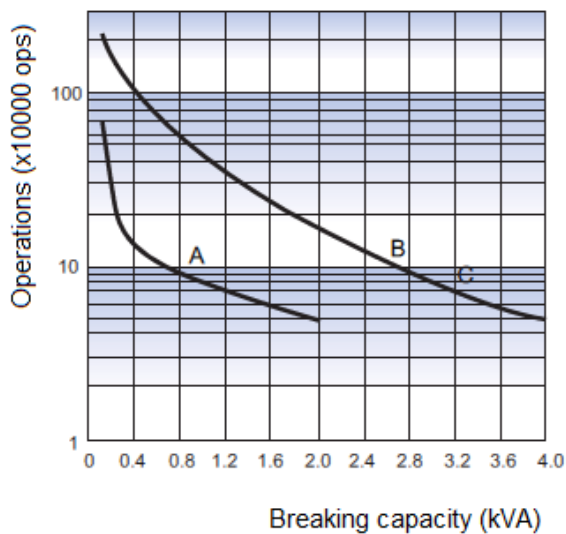


2 Form C



● Engineering Data

Endurance Curve



Notes:

1) Curve A: 2 Form A type (2Pole, 8A)

Curve B: 1 Form A type (1 pole, 12A)

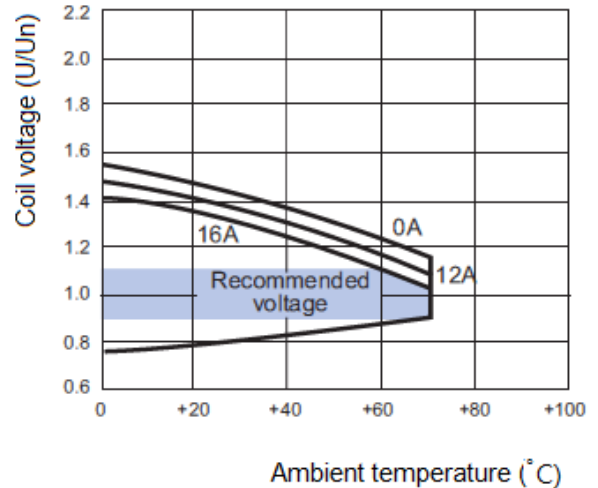
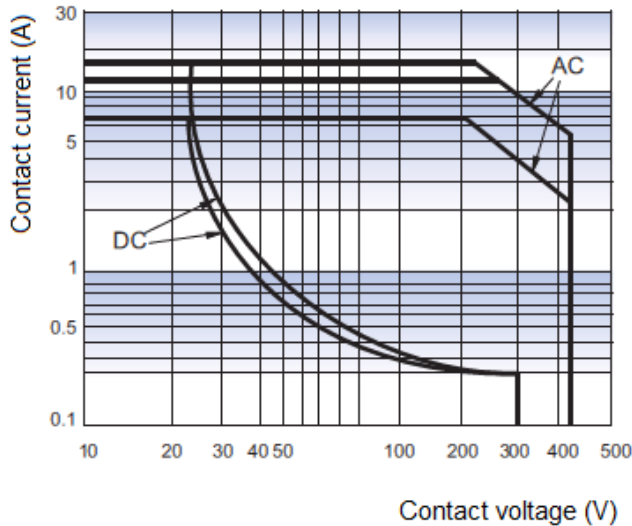
Curve C: 1 Form A type (1 pole, 16A)

2) Test conditions:

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

● Engineering Data

Maximum Switching Power



Coil Operating Range (AC) *

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.

Remark: 1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$, tolerance should be $\pm 0.5\text{mm}$.

2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

Disclaimer

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change without notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact IOEC for the technical service. However, it is the user's responsibility to determine which product should be used only.

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