



23.8×12.9×9.9

NV231

Patent No.: 01139153.7,01274370.4

| Features | |
|---|--|
| • Small size, lightweight (8g) . | |
| • Withstands high temperature, operating under 105°C ambient temperature. | |
| • Heavy contact load switching current up to 30A. | |

| Ordering Information | |
|--|--|
| NV231 | 2C |
| Z | S |
| DC12V | N |
| 0.57 | |
| 1 Part number: NV231 | 5 Coil rated voltage(V): DC:10,12 |
| 2 Contact arrangement: 2A:2A; 2C:2C | 6 Contact material: N:AgNi;S:AgSnO ₂ |
| 3 Enclosure: S: Sealed type; Z: Dust cover | 7 Coil power consumption: 0.55:0.55W; 0.57:0.57W |
| 4 Mounting: NIL: Standard; S: SMT | |

| Contact Data | |
|------------------------------------|--|
| Contact Arrangement | 2A (DPSTNO) ,2C (DPDT(B-M)) |
| Contact Material | AgSnO ₂ AgNi |
| Contact Rating | Resistive: 2A:20A/14VDC 2C:NO:20A/14VDC; NC:15A/14VDC |
| Max. Switching Power | 280W |
| Max. Switching Voltage | 24VDC |
| Contact Resistance or Voltage drop | <30mV (at 10A) Item 3.12 of IEC255-7 |
| Operation life | Electrical: 10 ⁵ Item 3.30 of IEC255-7 Mechanical: 10 ⁷ Item 3.31 of IEC255-7 |

| Coil Parameter | | | | | | | | |
|----------------|------------------|------|------------------------|--|---|--------------------------|-----------------|-----------------|
| Dash Numbers | Coil voltage VDC | | Coil resistance Ω ±10% | Pick up voltage VDC(max) (58%of rated voltage) | Release voltage VDC(min) (12.5% of rated voltage) | Coil power consumption W | Operate Time ms | Release Time ms |
| | Rated | Max. | | | | | | |
| 010-550 | 10 | 12 | 2 × 181 | 5.7 | 1.25 | 2 × 0.55 | <3 | <1.5 |
| 012-570 | 12 | 14.4 | 2 × 254 | 6.9 | 1.5 | 2 × 0.57 | <3 | <1.5 |

CAUTION: 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.
2.Pickup and release voltage are for test purposes only and are not to be used as design criteria.

Operation condition

| | | |
|-------------------------|--|-----------------------------|
| Insulation Resistance | 1000MΩ min (at 500VDC) | Item 7 of IEC255-5 |
| Dielectric Strength | 50Hz 500V | Item 6 of IEC255-5 |
| Between contacts | 50Hz 500V | Item 6 of IEC255-5 |
| Between contact and coi | | |
| Shock resistance | 300m/s ² 6ms | IEC68-2-27 Test Ea |
| Vibration resistance | 10~500Hz double amplitude 1.27mm 60m/s ² | IEC68-2-6 Test Fc |
| Terminals strength | 10N | IEC68-2-21 Test Ua1 |
| Solderability | 235°C ± 2°C 3 ± 0.5s | IEC68-2-20 Test Ta method 1 |
| Ambient Temperature | -40~105°C | |
| Relative Humidity | 85% (at 20°C) | IEC68-2-3Test Ca |
| Mass | 8g | |

Qualification inspection:

Perform the qualification test as specified in the table IV of IEC255-19-1 and minimum sample size 24.

Dimensions

mm /inch

The technical drawings include:

- Dimensions:** Top and side views of the relay with dimensions in mm and inches. Key dimensions include 23.8 Max. (0.937 max.), 12.9 Max. (0.508 max.), 9.9 Max. (0.937 max.), and 2.8 (0.110).
- Mounting (Bottom view):** Shows the relay's footprint with dimensions for mounting holes and terminal positions.
- Wiring diagram (Bottom view):** Shows the internal contact arrangement for 2A and 2C configurations.

NOTES 1).Dimensions are in millimeters.
2).Inch equivalents are given for general information only.