



NVF4-7 26.5×26.5×25
 NVF4-8 26.5×26.5×25(+16)

NVF4-7 & NVF4-8

| Features | |
|---|--|
| • Small size and light weight. | |
| • Heavy contact load (70A). | |
| • Contact arrangement Form A and C available. | |
| • Suitable for automobile and lamp accessories application. | |
| • PC board mounting and direct insert mounting available. | |

Ordering Information

NVF4-1 A Z 70 b DC12V 1.6 C D
 1 2 3 4 5 6 7 8 9

| | |
|--|---|
| 1 Part number: NVF4-7, NVF4-8 (Insulation Bracket), NVF4-8a (Shrouded Type With Metal Bracket, Contact Arrangement: 1A,) | 5 Terminals: b: PCB type; a: plug in type |
| 2 Contact arrangement: A: 1A; | 6 Coil rated voltage (V): DC: 6, 12, 24 |
| 3 Enclosure: S: Sealed type; Z: Dust cover; | 7 Coil power consumption: 1.6: 1.6W; 1.9: 1.9W |
| 4 Contact current: 50: 50A; 70: 70A | 8 Contact material: C: AgCdO; N: AgNi; NIL: AgSnO ₂ |
| | 9 Coil transient suppression: D: with diode.; 2D: with two diodes.; R: with resistance.; DR: with diode and resistance; NIL: standard |

| Contact Data | | | |
|------------------------------------|---------------------------|-----------------------------|-----------------------|
| Contact Arrangement | 1A (SPSTNO) | | |
| Contact Material | AgSnO ₂ , AgNi | | |
| Contact Rating (resistive) | 70A/14VDC | | |
| Max. Switching Power | 1000W | | |
| Max. Switching Voltage | 75VDC | Max. Switching Current: 80A | |
| Contact Resistance or Voltage drop | < 30mΩ | 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) (65% of rated voltage) | Release voltage VDC(min) (15% of rated voltage) | Coil power consumption W | Operate Time ms | Release Time ms |
| | Rated | Max. | | | | | | |
| 006-1600 | 6 | 7.8 | 22.5 | 3.9 | 0.9 | 1.6 | <7 | <5 |
| 012-1600 | 12 | 15.6 | 90 | 7.8 | 1.8 | | | |
| 024-1600 | 24 | 31.2 | 360 | 15.6 | 3.6 | | | |
| 006-1900 | 6 | 7.8 | 19 | 3.9 | 0.9 | 1.9 | <7 | <5 |
| 012-1900 | 12 | 15.6 | 75.8 | 7.8 | 1.8 | | | |
| 024-1900 | 24 | 31.2 | 303.2 | 15.6 | 3.6 | | | |

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 ¹⁾ | 100MΩ min (at 500VDC) | Item 7 of IEC255-5 |
| Dielectric Strength ¹⁾ | | |
| Between contacts | 50Hz 500V | Item 6 of IEC255-5 |
| Between contact and coil | 50Hz 500V | Item 6 of IEC255-5 |
| Shock resistance | 147m/s ² 11ms | IEC68-2-27 Test Ea |
| Vibration resistance | 10~40Hz double amplitude 1.5mm | IEC68-2-6 Test Fc |
| Terminals strength | 8N 4N (PC type) | IEC68-2-21 Test Ua2 |
| Solderability | 235°C ± 2°C 3 ± 0.5s | IEC68-2-20 Test Ta method 1 |
| Ambient Temperature | -40~125°C | |
| Relative Humidity | 85% (at 40°C) | IEC68-2-3 Test Ca |
| Mass | 31g (NVF4-7); 36g (NVF4-8) | |

Note: 1). When testing, coil terminals should be connected, If coil transient suppression is installed in relay.

Qualification inspection:

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

Dimensions

mm / inch

Dimensions

Plug in type

PCB type

Wiring diagram (Bottom view)

PCB式

Note: Terminals as shown above are also available.

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