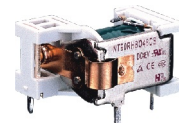
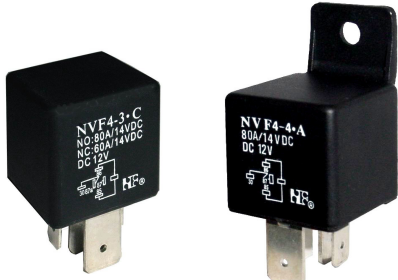


DB ELECTRO^{CO., LTD.}

Présente / Presents:


NINGBO HUAGUAN ELECTRONICS CO., LTD.





NVF4-3 29×29×26.5
 NVF4-4 29×29×26.5(+16)

NVF4-3&NVF4-4

| Features | |
|--|---|
| <ul style="list-style-type: none"> Miniature. Contact load capacity up to 80A. Suitable for automobile. Terminal types as inserting. |  |

| Ordering Information | | | | | | | |
|--|----------|----------|-----------|--|--------------|----------|----------|
| NVF4-3 | C | Z | 30 | b | DC12V | C | D |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 Part number: NVF4-3, NVF4-4 (Insulation Bracket), NVF4-4a (Metal Bracket) | | | | 5 Terminals: b: PCB type; a: plug in type | | | |
| 2 Contact arrangement: A:1A; B:1B; C:1C; U:1U | | | | 6 Coil rated Voltage(V): DC:6,12,24 | | | |
| 3 Enclosure: S: Sealed type; Z: Dust cover | | | | 7 Contact material: C:AgCdO; N:AgNi; NIL: Ag-SnO ₂ | | | |
| 4 Contact Current: A Form:60A,80A; B Form:40A,70A; C Form :60A,80A; U Form:2×25A | | | | 8 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) 1B(SPSTNC) 1C(SPDT(B-M)) 1U(SPSTNODM)
 Contact Material Ag-SnO₂ , AgNi

| Contact Rating (resistive) | 1A | 1B | 1C | 1U |
|----------------------------|---------------|---------------|--------------------------------------|-------------|
| | 60A,80A/14VDC | 40A,70A/14VDC | NO:60A,80A/14VDC NC:40A,70A/14VDC | 2×25A/14VDC |

| | | |
|------------------------------------|--|----------------------------|
| Max. Switching Power | 980W | Max. Switching Current:80A |
| Max. Switching Voltage | 75VDC | Item 3.12 of IEC255-7 |
| Contact Resistance or Voltage drop | ≤30mΩ | Item 3.30 of IEC255-7 |
| Operator life | Electrical 10 ⁵ Mechanical 10 ⁷ | Item 3.31 of IEC255-7 |

Coil Parameter

| Dash numbers | Coil voltage VDC | | Coil resistance Ω±10% | Pickup voltage VDC(max) (65%of rated voltage) | release voltage VDC(min) (10% of rated voltage) | Coil power consumption W | Operate Time ms | Release Time ms |
|--------------|------------------|------|-----------------------|--|---|--------------------------|-----------------|-----------------|
| | Rated | Max. | | | | | | |
| 006-1800 | 6 | 7.8 | 20 | 3.9 | 0.6 | 1.8 | ≤7 | ≤5 |
| 012-1800 | 12 | 15.6 | 80 | 7.8 | 1.2 | | | |
| 024-1800 | 24 | 31.2 | 320 | 15.6 | 2.4 | | | |

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⁾ | 100M Ω 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) | IEC68-2-20 Test Ta method 1 |
| Solderability | 235 \times 2 \times 3 3 \times 0.5s | |
| Ambient Temperature | -40~85 \times | IEC68-2-3 Test Ca |
| Relative Humidity | 85% (at 40 \times) | |
| Mass | 46g(NVF4-3);48g(NVF4-4) | |

Note: 1). When testing, coil terminals shall be connect ,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 (Unit: mm)

40A~60A NVF4-3 type 70A~80A NVF4-4 type

70A~80A PCB 式

Note: Footprint as shown above is also available.

Dimensions

40A~60A PCB type 70A~80A PCBtype

Mounting (Bottom views)

Wiring diagram (Bottom views)

| | |
|------|-------|
| mm | inch |
| 0.3 | 0.012 |
| 0.8 | 0.031 |
| 1.4 | 0.055 |
| 1.5 | 0.059 |
| 1.93 | 0.076 |
| 2.16 | 0.085 |
| 2.5 | 0.098 |
| 2.6 | 0.102 |
| 3.0 | 0.118 |
| 3.2 | 0.126 |
| 3.8 | 0.150 |
| 4.6 | 0.181 |
| 5.5 | 0.217 |
| 6.3 | 0.248 |
| 7.3 | 0.287 |
| 8 | 0.315 |
| 8.4 | 0.331 |
| 9.5 | 0.374 |
| 9.8 | 0.386 |
| 11.5 | 0.453 |
| 12 | 0.472 |
| 15.2 | 0.598 |
| 16.8 | 0.661 |
| 17 | 0.669 |
| 17.9 | 0.705 |
| 19 | 0.748 |
| 22 | 0.866 |
| 26.5 | 1.043 |
| 29 | 1.142 |

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

Reference Data

