



20.3×15.3×22.5

N V F

### Features

- Switching capacity up to 20A.
- PC board mounting and insert mounting available.
- Suitable for automation system and automobile auxiliary etc.

### Ordering Information

**NVF A Z 20 DC12V b D**  
1 2 3 4 5 6 7

1 Part number: NVF

2 Contact arrangement: A:1A ; B:1B

3 Enclosure: S: Sealed type; Z: Dust cover;

4 Contact Current: 15:15A/14VDC; 20:20A/14VDC

5 Coil rated Voltage(V): DC:12,24

6 Terminals: b: PCB type; a: plug in type

7 Coil transient suppression: D: with diode;

R: with resistance; .

NIL: standard

### Contact Data

Contact Arrangement

1A (SPSTNO), 1B (SPSTNC)

Contact Material

Ag·SnO<sub>2</sub> , AgNi, Ag·CdO

Contact Rating (resistive)

1A: 20A/14VDC; 1B: 15A/14VDC

Max. Switching Power

280W

Max. Switching Voltage

75VDC

Max. Switching Current:30A

Contact Resistance or Voltage drop

≤20mV(at 10A)(B:40mV)

Item 3.12 of IEC255-7

Operation | Electrical

5 × 10<sup>5</sup> , 2 × 10<sup>5</sup> (B)

Item 3.30 of IEC255-7

life | Mechanical

10<sup>7</sup>

Item 3.31 of IEC255-7

### Coil Parameter

Dash numbers	Coil voltage VDC		Coil resistance Ω±10%	Pickup voltage VDC(max) (60%of rated voltage )	release voltage VDC(min) (11% of rated voltage)	Coil power consumption	Operate Time ms	Release Time ms
	Rated	Max.						
012-1160	12	18	124	7.2	1.3	1.16	≤10	≤7
024-1160	24	35	489	14.4	2.8			

**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**

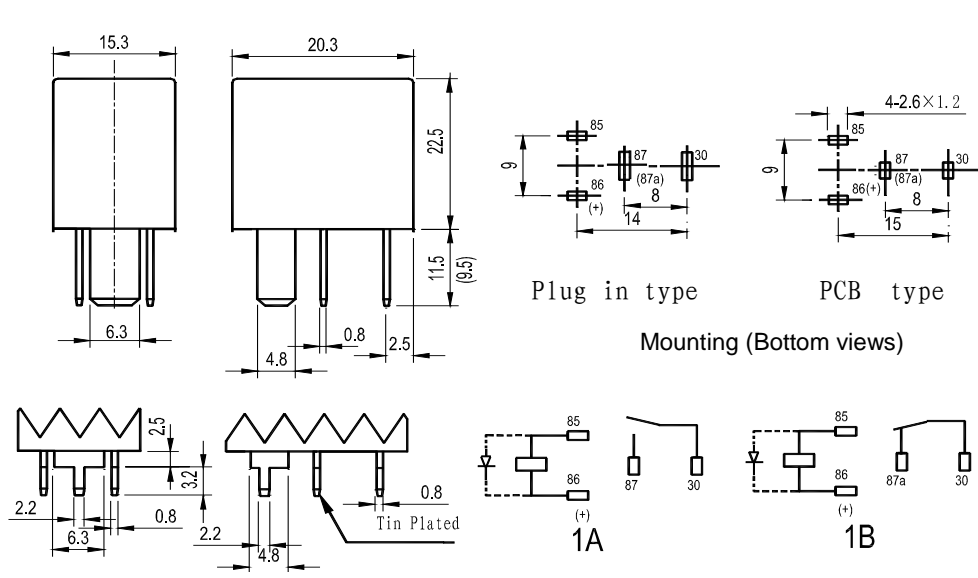
Insulation Resistance <sup>1)</sup>	100MΩ min (at 500VDC)	Item 7 of IEC255-5
Dielectric Strength <sup>1)</sup>		
Between contacts	50Hz 500V	Item 6 of IEC255-5
Between contact and coil	50Hz 1000V	Item 6 of IEC255-5
Shock resistance	100m/s <sup>2</sup> 11ms	IEC68-2-27 Test Ea
Vibration resistance	10~40Hz double amplitude 1.27mm	IEC68-2-6 Test Fc
Terminals strength	100N	IEC68-2-21 Test Ua2
Solderability	235°C ± 2°C 3 ± 0.5s	IEC68-2-20 Test Ta method 1
Ambient Temperature	-40~85°C	
Relative Humidity	85% (at 40°C)	IEC68-2-3 Test Ca
Mass	14g	

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)**



Note: Footprint as shown above is also available.

Dimensions

Wiring diagram (Bottom views)

NOTES 1).Dimensions are in millimeter.

2).Inch equivalents are given for general information only.

**Reference Data**

