

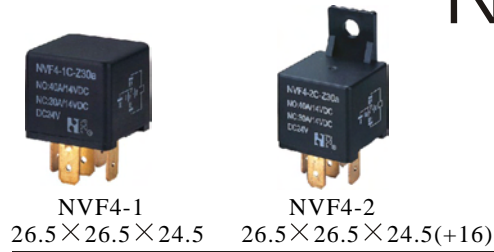
DB ELECTRO^{CO., LTD.}

Présente / Presents:

NINGBO HUAGUAN ELECTRONICS CO., LTD.



NVF4-1 & NVF4-2



Features
<ul style="list-style-type: none"> Small size and light weight. Heavy contact load (40A). Suitable for automobile and lamp accessories application. PC board mounting and direct insert mounting available.

Ordering Information	
NVF4-1 C Z 30 b DC12V 1.6 C D	
1 2 3 4 5 6 7 8 9	
1 Part number: NVF4-1, NVF4-2 (Insulation Bracket), NVF4-2a (Shrouded Type With Metal Bracket, Contact Arrangement: 1A, 1C) NVF4-2b (Shrouded Type With Metal Bracket, Contact Arrangement: 1U) 2 Contact arrangement: A: 1A; B: 1B; C: 1C; U: 1U 3 Enclosure: S: Sealed type; Z: Dust cover; 4 Contact current: A Form: 2x20A, 40A; B Form: 30A C Form: 30A, 40A; U Form: 2x20A	5 Terminals: b: PCB type; a: plug in type 6 Coil rated voltage (V): DC: 6, 12, 24 7 Coil power consumption: 1.6: 1.6W; 1.9: 1.9W 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), 1B (SPSTNC), 1C (SPDT(B-M)), 1U (SPSTNODM)										
Contact Material	AgSnO ₂ , AgNi										
Contact Rating (resistive)	<table border="1"> <tr> <th></th> <th>1A</th> <th>1B</th> <th>1C</th> <th>1U</th> </tr> <tr> <td></td> <td>40A, 2x20A/14VDC</td> <td>30A/14VDC</td> <td>NO: 40A/14VDC NC: 30A, 40A/14VDC</td> <td>2x20A/14VDC</td> </tr> </table>		1A	1B	1C	1U		40A, 2x20A/14VDC	30A/14VDC	NO: 40A/14VDC NC: 30A, 40A/14VDC	2x20A/14VDC
	1A	1B	1C	1U							
	40A, 2x20A/14VDC	30A/14VDC	NO: 40A/14VDC NC: 30A, 40A/14VDC	2x20A/14VDC							
Max. Switching Power	630W										
Max. Switching Voltage	75VDC										
Max. Switching Current	40A										
Contact Resistance or Voltage drop	< 30mΩ										
Operation life	<table border="1"> <tr> <td>Electrical 10⁶</td> <td>Item 3.12 of IEC255-7</td> </tr> <tr> <td>Mechanical 10⁷</td> <td>Item 3.31 of IEC255-7</td> </tr> </table>	Electrical 10 ⁶	Item 3.12 of IEC255-7	Mechanical 10 ⁷	Item 3.31 of IEC255-7						
Electrical 10 ⁶	Item 3.12 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) (10% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max.						
006-1600	6	7.8	22.5	3.9	0.6	1.6	<7	<5
009-1600	9	11.7	50.6	5.9	0.9			
012-1600	12	15.6	90	7.8	1.2			
024-1600	24	31.2	360	15.6	2.4			
048-1600	48	62.4	1440	31.2	4.8			
006-1900	6	7.8	19	3.9	0.6	1.9	<7	<5
012-1900	12	15.6	75.8	7.8	1.2			
024-1900	24	31.2	303.2	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. Pick up 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 750V	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(NVF4-1); 36g(NVF4-2)	

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

NVF4-1 type **NVF4-2 type**

Note: Terminals as shown above are also available.

Dimensions

PCB type **Plug in type**

Mounting (Bottom view)

1A (2x20A) **1U**

Wiring diagram (Bottom view)

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

Reference Data

Coil Temp Rise Contact Carrying Current 40A

Coil Temp Rise Ambient Temp 20°C

Max Value For Switching Capacity