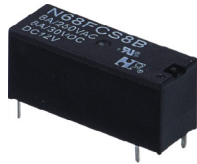


# DB ELECTRO<sup>CO., LTD.</sup>

Présente / Presents:

NINGBO HUAGUAN ELECTRONICS CO., LTD.





28.5×10.1×12.3

# N68F



E158859

Patent NO.:03209705.0

## Features

- Slim type and small occupying area can offer high density P.C.B. technique.
- Employment of suitable plastic materials to be applied to high temperature and various chemical solution.
- Dielectric strength 5000V.
- Creepage distance >8mm.

## Ordering Information

**N68F C S 8 C DC12V F**  
 1 2 3 4 5 6 7

1 Part number: N68F

2 Contact arrangement: A:1A;C:1C

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

4 Contact current: 8A

5 Contact material: NIL:AgNi (Gold clad); W:AgNi

CD:AgCdO (Gold clad); C:AgCdO

6 Coil rated voltage(V): DC:5,6,12,18,24,48,60

7 Resist heat class: B:130℃; F:155℃

## Contact Data

Contact Arrangement	1A (SPSTNO) 、1C (SPDT(B-M))		
Contact Material	Ag · CdO Ag · SnO <sub>2</sub>		
Contact Rating	Resistive	8A/250VAC	30VDC
Max. Switching Power	Resistive	300W	2500VA
Max. Switching Voltage	125VDC	380VAC	Max. Switching Current:10A
Contact Resistance or Voltage drop	≤100mΩ	Item 3.12 of IEC255-7	
Operational life	Electrical	10 <sup>5</sup>	Item 3.30 of IEC255-7
	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) (75%of rated voltage )	Release voltage VDC (min) (10% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max						
005-220	5	11.8	113	3.75	0.5	0.22	<7	<3
006-220	6	14.1	164	4.5	0.6			
012-220	12	28.2	620	9.0	1.2			
018-220	18	42.3	1295	13.5	1.8			
024-220	24	56.4	2350	18.0	2.4			
048-250	48	112.8	9600	36.0	4.8	0.25	<7	<3
003-250	60	141.0	12500	45.0	6.0			

**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.

3.Unless otherwise stated, the rated coil voltage specified in coil parameter table shall be used for all tests and its application to the relay.

## Operation condition

Insulation Resistance	1000M $\Omega$ min (at 500VDC)	Item 7 of IEC255-5
Dielectric Strength Between contacts Between contact and coil	50Hz 1000V 50Hz 5000V	Item 6 of IEC255-5 Item 6 of IEC255-5
Shock resistance	Functional 100m/s <sup>2</sup> 11ms Survival: 1000m/s <sup>2</sup> 6ms	IEC68-2-27 Test Ea
Vibration resistance	10~500Hz double amplitude 1.5mm 200m/s <sup>2</sup>	IEC68-2-6 Test Fc
Terminals strength	10N	IEC68-2-21 Test Ua1
Solderability	235 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C 3 $\pm$ 0.5s	IEC68-2-20 Test Ta method 1
Ambient Temperature	-40~70 $^{\circ}$ C	
Relative Humidity	85% (at 40 $^{\circ}$ C)	IEC68-2-3Test Ca
Mass	8.2g	

## Qualification inspection:

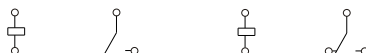
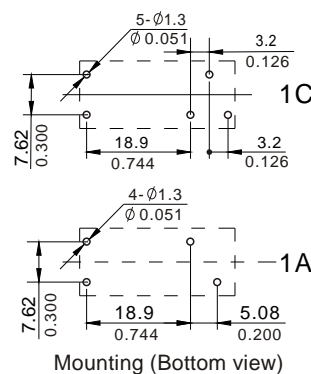
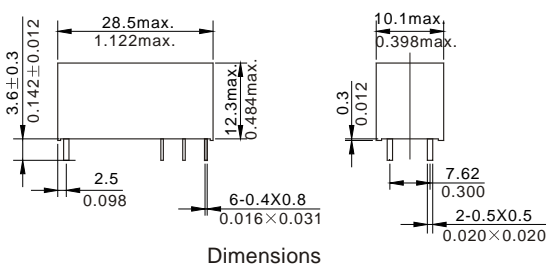
Perform the qualification test as specified in the table IV of IEC255-19-1 and minimum sample size 24.

## Safety approvals

Safety approval	UL & CUR
Load	8A/250VAC,30VDC

## Dimensions

mm /inch



1A

1C

Wiring diagram  
(Bottom view)

NOTES 1).Dimensions are in millimeters.

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

## Reference Data

