



22.5×16.5×16.5

N C F 2

Patent No. 01210551.1 01310478.0

Features

- Small size, light weight.
- Low coil power consumption.
- Operation noise: less than 50db.
- PC board mounting.
- Suitable for automobile, automation system, electronic equipment.

Ordering Information

NCF2 Q 2×1C DC12V
 1 2 3 4

1 Part number: NCF2

2 Noise: NIL: Standard; Q: Quiet

3 Contact arrangement: 2×1C

4 Coil rated Voltage(V): DC:12

Contact Data

Contact Arrangement	2 × 1C (2 × SPDT(B-M)) (H-Bridge)
Contact Material	Ag-SnO ₂
Contact Rating (resistive)	NO: 20A/14VDC; NC: 10A/14VDC
Max. Switching Power	300W
Max. Switching Voltage	16VDC
Contact Resistance or Voltage drop	≤50mΩ
Operation life	Electrical 10 ⁵
	Mechanical 10 ⁷
	Max. Switching Current:20A Item 3.12 of IEC255-7 Item 3.30 of IEC255-7 Item 3.31 of IEC255-7

Coil Parameter

Dash numbers	Coil voltage VDC	Operating Voltage Range VDC	Coil resistance Ω±10%	Pickup voltage VDC(max) (60%of rated voltage)	release voltage VDC(min) (8% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated							
012-640	12	10-16	225	7.2	1.0	0.64	≤10	≤10

CAUTION: 1.The use of any coil voltage overstep operating voltage range of coil , it 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.

Sound Pre. Characteristics (Q type):

Operation noise: <50db

Coil voltage :12VDC

Operation condition

Insulation Resistance	100M Ω min (at 500VDC)	Item 7 of IEC255-5
Dielectric Strength		
Between contacts	50Hz 1000V	Item 6 of IEC255-5
Between contact and coil	50Hz 1000V	Item 6 of IEC255-5
Shock resistance	Functional: 100m/s ² 11ms; Survival: 1000 m/s ² 6ms	IEC68-2-27 Test Ea
Vibration resistance	10~100Hz 45 m/s ²	IEC68-2-6 Test Fc
Terminals strength	10N	IEC68-2-21 Test Ua1
Solderability	235 \pm 2 $^{\circ}$ C 3 \pm 0.5s	IEC68-2-20 Test Ta method 1
Ambient Temperature	-40~85 $^{\circ}$ C	
Relative Humidity	85% (at 40 $^{\circ}$ C)	IEC68-2-3Test Ca
Mass	17g(Q type); 15g	

Qualification inspection:

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

Dimensions (Unit: mm)		mm	inch
	Dimensions	0.3	0.012
		0.4	0.016
	Mounting (Bottom views)	0.5	0.020
		1.0	0.039
		1.1	0.043
		1.5	0.059
		2.54	0.100
		3.9	0.153
		3.81	0.150
		5.08	0.200
		6.35	0.250
		7.62	0.300
	Wiring diagram (Bottom views)	10.16	0.400
		12.7	0.500
		16.5	0.650
		22.5	0.886

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