

N4100 (4100F) & N4100F-2 (N4100F)



15.5×11×11.5

**UL** US E158859

Patent No.: 95 2 11073.3

**Features**

- Low coil power consumption.
- High sensitivity.
- Small size, light weight.
- PC board mounting.
- Suitable for automation facilities, telecommunication equipment, household electrical appliance, wireless radio remote control, sound control toys application etc.

**Ordering Information**

**N4100 C H S 3 DC12V**  
1 2 3 4 5 6

1 Part number: N4100(N4100F) N4100F-2

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

3 Coil power consumption: NIL:0.36W (Standard);

B:0.45W (Heavy load); H:0.2W (High sensitivity)

4 Enclosure: S: Sealed type; NIL: Dust cover

5 Contact current: NIL:1A; 3:3A; 5:5A

6 Coil rated Voltage(V): DC:3,5,6,9,12,24

**Contact Data**

Contact Arrangement	1A (SPSTNO), 1B (SPSTNC), 1C (SPDT(B-M))
Contact Material	Ag AgNi Ag-CdO
Contact Rating ( resistive)	1A,3A,5A/125VAC; 1A,2A,3A/30VDC ;5A/14VDC,30VDC
Max. Switching Power	90W 625VA
Max. Switching Voltage	60VDC 220VAC
Contact Resistance or Voltage drop	≤50mΩ
Operation life	Electrical 10 <sup>5</sup> Mechanical 10 <sup>7</sup>
	Max. Switching Current: 5A 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		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.						
003-200	3	3.3	45	2.25	0.3	0.2	≤5	≤5
005-200	5	5.5	125	3.75	0.5			
006-200	6	6.6	180	4.50	0.6			
009-200	9	9.9	405	6.75	0.9			
012-200	12	13.2	720	9.00	1.2			
024-200	24	26.5	2880	18.0	2.4			
003-360	3	3.3	25	2.25	0.3	0.36	≤5	≤5
005-360	5	5.5	75	3.75	0.5			
006-360	6	6.6	100	4.50	0.6			
009-360	9	9.9	225	6.75	0.9			
012-360	12	13.2	400	9.00	1.2			
024-360	24	26.5	1600	18.0	2.4			
003-450	3	3.3	20	2.25	0.3	0.45	≤5	≤5
005-450	5	5.5	56	3.75	0.5			
006-450	6	6.6	80	4.50	0.6			
009-450	9	9.9	180	6.75	0.9			
012-450	12	13.2	320	9.00	1.2			
024-450	24	26.5	1280	18.0	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	100M $\Omega$ min (at 500VDC)	Item 7 of IEC255-5
Dielectric Strength		
Between contacts	50Hz 500V	Item 6 of IEC255-5
Between contact and coil	50Hz 500V	Item 6 of IEC255-5
Shock resistance	100m/s <sup>2</sup> 11ms	IEC68-2-27 Test Ea
Vibration resistance	10~55Hz double amplitude 1.5mm	IEC68-2-6 Test Fc
Terminals strength	5N	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	-25~70 $^{\circ}$ C	
Relative Humidity	85% (at 40 $^{\circ}$ C)	IEC68-2-3Test Ca
Mass	3.5g	

## 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	3A 5A/125VAC 3A/30VDC 5A/14VDC

## Dimensions (Unit: mm)

Dimensions

	mm	inch
	0.3	0.012
	0.6	0.024
	1.0	0.039
	1.4	0.055
	2.54	0.100
	3.0	0.118
	3.6	0.142
	7.62	0.300
	10.16	0.400
	11	0.433
	11.5	0.453
	15.5	0.610

N4100  
(4100F)

N4100F-2  
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Wiring diagram  
(Bottom views)

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

## Reference Data

