



15.5×11×11.5

# N4100 (N4100F) & N4100F-2

UL E158859 R50080053

### Features

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

### Ordering Information

**N4100** C H S 3 DC12 A C  
 1 2 3 4 5 6 7 8

- 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; 2:2A; 3:3A; 5:5A
- 6 Coil rated voltage(V): DC:3,5,6,9,12,18,24
- 7 Contact material: NIL: AgNi; A:Ag; B:AgCdO; F:Silver with tin plated bronze sheet base
- 8 Bobbin configuration:NIL:Standard; C:combined bobbin

### Contact Data

Contact Arrangement	1A (SPSTNO) 1B (SPSTNC) 1C (SPDT(B-M))
Contact Material	Ag (Au gold) AgNi(Au gold) AgCdO(Au gold) Silver with tin plated bronze sheet base(Au gold)
Contact Rating ( resistive )	1A,2A,3A,5A/30VDC,125VAC ;5A/14VDC 2A/250VAC(N4100F-2 only)
Max. Switching Power	150W 625VA
Max. Switching Voltage	60VDC 220VAC Max. Switching Current: 5A
Contact Resistance or Voltage drop	≤50mΩ Item4 .12 of IEC 61810-7
Operational life	Electrical 10 <sup>9</sup> Item4 .30 of IEC 61810-7
	Mechanical 10 <sup>7</sup> Item 4.31 of IEC 61810-7

**CAUTION:** 1.For the intermediate current, it only applies to the room temperature.  
 2.For gold plated version, the min. Switching current and min. switching voltage is 50mA/6VDC; for non gold plated version (standard type),the min. switching current and min. switching voltage is 100mA/6VDC.

### 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			
018-200	18	19.8	1620	13.5	1.8			
024-200	24	26.5	2880	18.0	2.4	0.45	<5	<5
003-360	3	3.3	25	2.25	0.3			
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			
018-360	18	19.8	900	13.5	1.8	0.45	<5	<5
024-360	24	26.5	1600	18.0	2.4			
003-450	3	3.3	20	2.25	0.3			
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	0.45	<5	<5
018-450	18	19.8	720	13.5	1.8			
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.Ω min (at 500VDC)	Item 7 of IEC 60255-5
Dielectric Strength	Between contacts	50Hz 500V
	Between contact and coil	50Hz 1000V
Item 6 of IEC 60255-5		Item 6 of IEC 60255-5
Shock resistance	100m/s <sup>2</sup> 11ms	IEC 68-2-27 Test Ea
Vibration resistance	10Hz~55Hz double amplitude 1.5mm	IEC 68-2-6 Test Fc
Terminals strength	5N	IEC 68-2-21 Test Ua1
Solderability	235°C ±2°C 3s ±0.5s	IEC 68-2-20 Test Ta method 1
Ambient Temperature	-25°C~70°C	
Relative Humidity	85% (at 40°C)	IEC 68-2-3 Test Ca
Mass	3.5g	

### Safety approvals

Safety approval	UL&CUR	TUV
Load	5A/125VAC 5A/30VDC 5A/14VDC	N4100F-2: 2A/250VAC 5A/30VDC

### Dimensions

**Dimensions** mm/inch

**Mounting (Bottom view)**

**Wiring diagram (Bottom view)**

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

### Reference Data

