

## N4100 (N4100F) & N4100F-2

us 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 radio remote 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; C: 1C  
3 Coil power: NIL:0.36W(Standard);  
B:0.45W(Heavy load); H:0.2W(High sensitivity)  
4 Enclosure: S:Wash tight; NIL:Flux proof

5 Contact rating: 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  
8 Bobbin configuration: C:Combined bobbin

### Contact Data

|                        |                                                              |                            |
|------------------------|--------------------------------------------------------------|----------------------------|
| Contact Arrangement    | 1A(SPSTNO) 1C(SPDT(B-M))                                     |                            |
| Contact Material       | Ag Alloy(Au plated)                                          |                            |
| Contact Rating         | 1A,2A,3A,5A/125VAC,30VDC; 5A/14VDC; 2A/250VAC(N4100F-2 only) |                            |
| Max. Switching Power   | 150W 625VA                                                   |                            |
| Max. Switching Voltage | 30VDC 250VAC                                                 | Max. Switching Current: 5A |
| Contact Resistance     | ≤50mΩ                                                        | Item4 .12 of IEC 61810-7   |
| Electrical Endurance   | 1 × 10 <sup>5</sup> 85℃                                      | Item4 .30 of IEC 61810-7   |
| Mechanical Endurance   | 1 × 10 <sup>7</sup>                                          | Item 4.31 of IEC 61810-7   |

**Notes:** The min. switching current and min. switching voltage is 50mA/6VDC.

### Coil Parameter

| Coil voltage<br>VDC |      | Coil<br>resistance<br>Ω ± 10% | Pick-up voltage<br>VDC(max)<br>(75%of rated<br>voltage ) | Drop-out voltage<br>VDC(min)<br>(10% of rated<br>voltage) | Coil<br>power<br>W | Operate<br>time<br>ms | Release<br>time<br>ms |
|---------------------|------|-------------------------------|----------------------------------------------------------|-----------------------------------------------------------|--------------------|-----------------------|-----------------------|
| Rated               | Max. |                               |                                                          |                                                           |                    |                       |                       |
| 3                   | 3.3  | 45                            | 2.25                                                     | 0.3                                                       | 0.2                | ≤5                    | ≤5                    |
| 5                   | 5.5  | 125                           | 3.75                                                     | 0.5                                                       |                    |                       |                       |
| 6                   | 6.6  | 180                           | 4.50                                                     | 0.6                                                       |                    |                       |                       |
| 9                   | 9.9  | 405                           | 6.75                                                     | 0.9                                                       |                    |                       |                       |
| 12                  | 13.2 | 720                           | 9.00                                                     | 1.2                                                       |                    |                       |                       |
| 18                  | 19.8 | 1620                          | 13.5                                                     | 1.8                                                       |                    |                       |                       |
| 24                  | 26.5 | 2880                          | 18.0                                                     | 2.4                                                       | 0.36               | ≤5                    | ≤5                    |
| 3                   | 3.3  | 25                            | 2.25                                                     | 0.3                                                       |                    |                       |                       |
| 5                   | 5.5  | 75                            | 3.75                                                     | 0.5                                                       |                    |                       |                       |
| 6                   | 6.6  | 100                           | 4.50                                                     | 0.6                                                       |                    |                       |                       |
| 9                   | 9.9  | 225                           | 6.75                                                     | 0.9                                                       |                    |                       |                       |
| 12                  | 13.2 | 400                           | 9.00                                                     | 1.2                                                       |                    |                       |                       |
| 18                  | 19.8 | 900                           | 13.5                                                     | 1.8                                                       | 0.45               | ≤5                    | ≤5                    |
| 24                  | 26.5 | 1600                          | 18.0                                                     | 2.4                                                       |                    |                       |                       |
| 3                   | 3.3  | 20                            | 2.25                                                     | 0.3                                                       |                    |                       |                       |
| 5                   | 5.5  | 56                            | 3.75                                                     | 0.5                                                       |                    |                       |                       |
| 6                   | 6.6  | 80                            | 4.50                                                     | 0.6                                                       |                    |                       |                       |
| 9                   | 9.9  | 180                           | 6.75                                                     | 0.9                                                       |                    |                       |                       |
| 12                  | 13.2 | 320                           | 9.00                                                     | 1.2                                                       |                    |                       |                       |
| 18                  | 19.8 | 720                           | 13.5                                                     | 1.8                                                       |                    |                       |                       |
| 24                  | 26.5 | 1280                          | 18.0                                                     | 2.4                                                       |                    |                       |                       |

**Notes:** 1. The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.  
2. Pick-up and drop-out voltage are for test purposes only and are not to be used as design criteria.

# N4100 (N4100F) & N4100F-2

## Characteristics

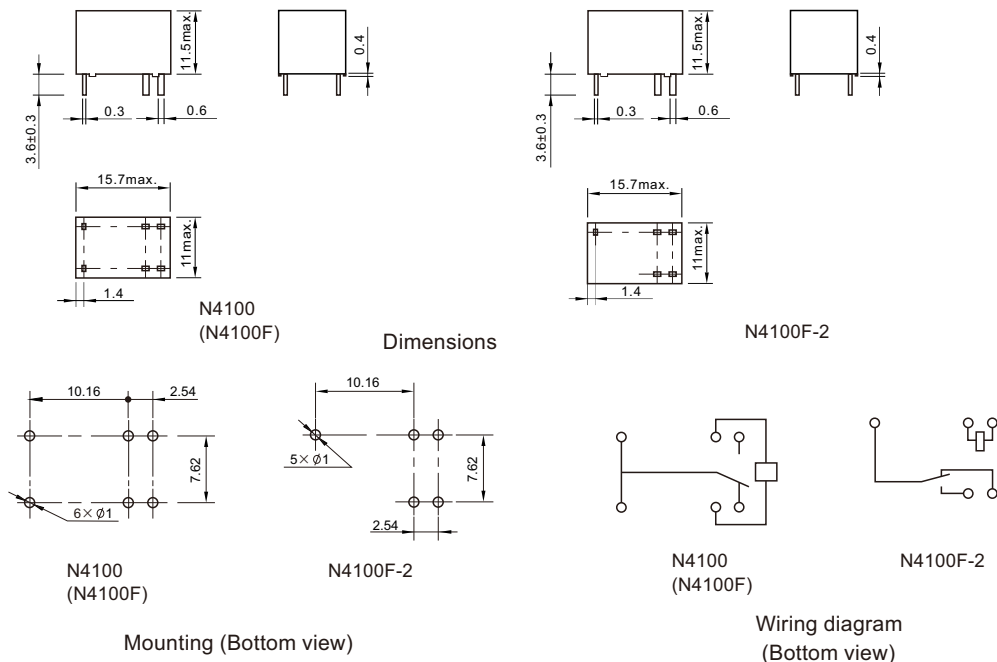
|                                                                          |                                  |                          |
|--------------------------------------------------------------------------|----------------------------------|--------------------------|
| Insulation Resistance                                                    | 100MΩ min (at 500V)              | Item 4.11 of IEC 61810-7 |
| Dielectric Strength<br>Between Open Contacts<br>Between Contact and Coil | 500VAC 1min<br>1000VAC 1min      | Item 4.9 of IEC 61810-7  |
| Shock Resistance                                                         | 98m/s <sup>2</sup> 11ms          | Item 4.26 of IEC 61810-7 |
| Vibration Resistance                                                     | 10Hz~55Hz Double amplitude 1.5mm | Item 4.28 of IEC 61810-7 |
| Terminals Strength                                                       | 5N                               | Item 4.24 of IEC 61810-7 |
| Ambient Temperature                                                      | -25℃~85℃                         |                          |
| Relative Humidity                                                        | 5% to 85%                        | Item 4.16 of IEC 61810-7 |
| Weight(Approx.)                                                          | 3.8g                             | Item 4.7 of IEC 61810-7  |

## Safety Approvals

|                 |                           |                               |
|-----------------|---------------------------|-------------------------------|
| Safety approval | UL&CUR                    | TüV                           |
| Load            | 5A/125VAC,30VDC; 5A/14VDC | N4100F-2: 2A/250VAC; 5A/30VDC |

## Dimensions

mm



**Remark:** In case of no tolerance shown in outline dimension: outline dimensions ≤ 1mm, tolerance should be ±0.2mm; outline dimension > 1mm and ≤ 5mm, tolerance should be ±0.3mm; outline dimension > 5mm, tolerance should be ±0.4mm.

## Reference Data

