



15.5×11×11.5

**c** **AL** **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

Electrical

 10<sup>5</sup>

life

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                                             | 0.36                     | ≤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                                             |                          |                 |                 |
| 024-360      | 24               | 26.5 | 1600                  | 18.0                                           | 2.4                                             | 0.45                     | ≤5              | ≤5              |
| 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                                             |                          |                 |                 |
| 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°C $\pm$ 2°C 3 $\pm$ 0.5s   | IEC68-2-20 Test Ta method 1 |
| Ambient Temperature      | -25~70°C                       |                             |
| Relative Humidity        | 85% (at 40°C)                  | IEC68-2-3 Test Ca           |
| Mass                     | 3.5g                           |                             |

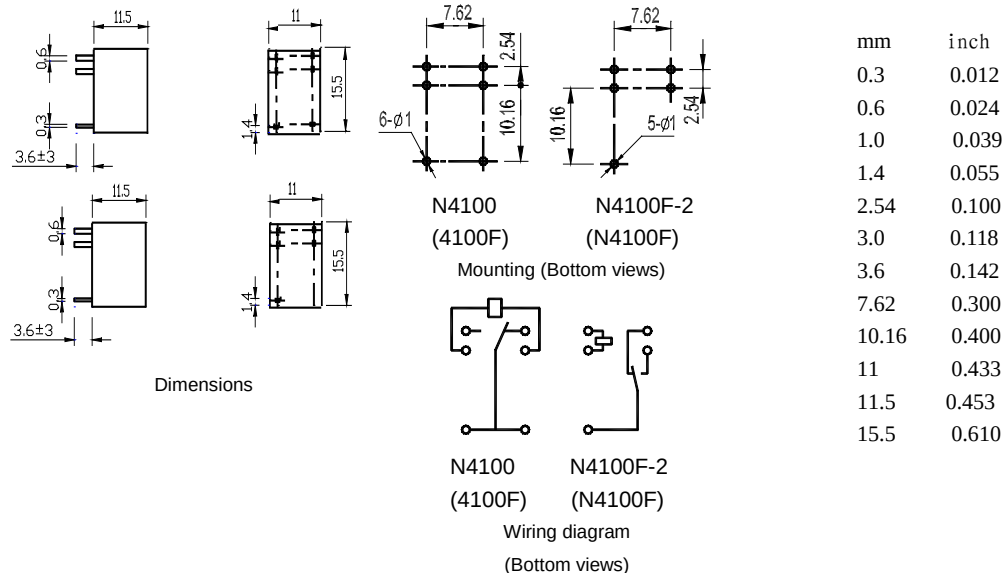
### Qualification inspection:

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)



NOTES 1).Dimensions are in millimeter.

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

### Reference Data

