

22.3×17.3×15 21.4×16.5×15 (NT72-2)

## NT72&NT72-2



### Features

- Small size, light weight.
- Reliable performance.
- PC board mounting.
- Suitable for household electrical appliances, automation system, electronic equipment, instrument, meter, telecommunication facilities and remote control facilities.

### Ordering Information

**NT72 C S 10 DC12V 0.36**

1 Part number: NT72, NT72-2  
2 Contact arrangement: A:1A; B:1B; C:1C  
3 Enclosure: S:Wash tight; NIL: Flux proof

4 Contact rating: 3:3A,5:5A,10:10A,12:12A  
5 Coil rated voltage(V): DC:3,5,6,9,12,18,24,48  
6 Coil power: 0.36:0.36W; 0.45:0.45W; 0.51:0.51W

### Contact Data

|                        |                                                                                                               |
|------------------------|---------------------------------------------------------------------------------------------------------------|
| Contact Arrangement    | 1A(SPSTNO) 1B(SPSTNC) 1C(SPDT(B-M))                                                                           |
| Contact Material       | AgSnO <sub>2</sub>                                                                                            |
| Contact Rating         | 5A,10A,12A/125VAC,28VDC;6A/300VAC,28VDC<br>3A,5A,10A/240VAC,250VAC<br>Motor load : 1/3HP 120VAC; 1/3HP 240VAC |
| Max. Switching Power   | 336W 2500VA                                                                                                   |
| Max. Switching Voltage | 30VDC 300VAC Max. Switching Current:15A                                                                       |
| Contact Resistance     | ≤50mΩ Item 4.12 of IEC 61810-7                                                                                |
| Electrical Endurance   | 1×10 <sup>5</sup> Item 4.30 of IEC 61810-7                                                                    |
| Mechanical Endurance   | 1×10 <sup>7</sup> Item 4.31 of IEC 61810-7                                                                    |

### Coil Parameter

| Coil voltage VDC |      | Coil resistance Ω ± 10% | Pick-up voltage VDC(max)<br>(75% of rated voltage) | Drop-out voltage VDC(min)<br>(10% of rated voltage) | Coil power W | Operate time ms | Release time ms |
|------------------|------|-------------------------|----------------------------------------------------|-----------------------------------------------------|--------------|-----------------|-----------------|
| Rated            | Max. |                         |                                                    |                                                     |              |                 |                 |
| 3                | 3.9  | 25                      | 2.25                                               | 0.3                                                 | 0.36         | ≤7              | ≤4              |
| 5                | 6.5  | 69                      | 3.75                                               | 0.5                                                 |              |                 |                 |
| 6                | 7.8  | 100                     | 4.50                                               | 0.6                                                 |              |                 |                 |
| 9                | 11.7 | 225                     | 6.75                                               | 0.9                                                 |              |                 |                 |
| 12               | 15.6 | 400                     | 9.00                                               | 1.2                                                 |              |                 |                 |
| 18               | 23.4 | 900                     | 13.5                                               | 1.8                                                 |              |                 |                 |
| 24               | 31.2 | 1600                    | 18.0                                               | 2.4                                                 |              |                 |                 |
| 3                | 3.9  | 20                      | 2.25                                               | 0.3                                                 | 0.45         | ≤7              | ≤4              |
| 5                | 6.5  | 56                      | 3.75                                               | 0.5                                                 |              |                 |                 |
| 6                | 7.8  | 80                      | 4.50                                               | 0.6                                                 |              |                 |                 |
| 9                | 11.7 | 180                     | 6.75                                               | 0.9                                                 |              |                 |                 |
| 12               | 15.6 | 320                     | 9.00                                               | 1.2                                                 |              |                 |                 |
| 18               | 23.4 | 720                     | 13.5                                               | 1.8                                                 |              |                 |                 |
| 24               | 31.2 | 1280                    | 18.0                                               | 2.4                                                 |              |                 |                 |
| 48               | 62.4 | 4518                    | 36.0                                               | 4.8                                                 | 0.51         |                 |                 |

**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 release voltage are for test purposes only and are not to be used as design criteria.

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## Characteristics

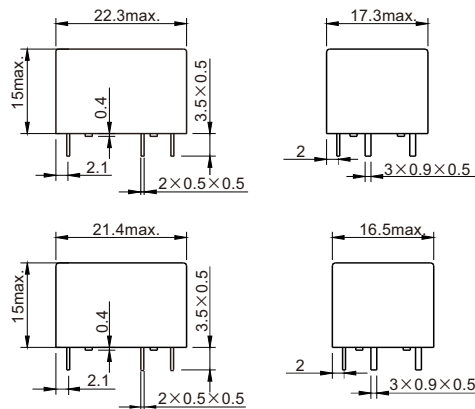
|                                                                          |                                              |                          |
|--------------------------------------------------------------------------|----------------------------------------------|--------------------------|
| Insulation Resistance                                                    | 500M $\Omega$ min (at 500VDC)                | Item 4.11 of IEC 61810-7 |
| Dielectric Strength<br>Between Open Contacts<br>Between Contact and Coil | 1000VAC 1min<br>2500VAC/4000VAC(NT72-2) 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                                                       | 10N                                          | Item 4.24 of IEC 61810-7 |
| Ambient Temperature                                                      | -40℃~85℃                                     |                          |
| Relative Humidity                                                        | 5% to 85%                                    | Item 4.16 of IEC 61810-7 |
| Weight (Approx.)                                                         | 11g                                          | Item 4.7 of IEC 61810-7  |

## Safety Approvals

| Safety approval | UL&CUR                                                              | TüV               | CQC       |
|-----------------|---------------------------------------------------------------------|-------------------|-----------|
| Load            | 12A/125VAC, 28VDC<br>10A/240VAC ; 6A/300VAC<br>1/3HP 120VAC, 240VAC | 10A/250VAC, 28VDC | 5A/250VAC |

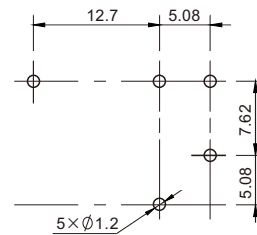
## Dimensions

mm

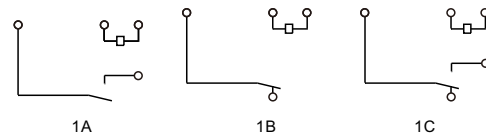


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Mounting (Bottom view)



Wiring diagram  
(Bottom view)

**Remark:** In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$ mm, tolerance should be  $\pm 0.2$ mm ;  
outline dimension  $> 1$ mm and  $\leq 5$ mm, tolerance should be  $\pm 0.3$ mm; outline dimension  $> 5$ mm, tolerance should be  $\pm 0.4$ mm.

## Reference Data

