



19.7×16.2×17.2

# NT73-3

us E160644 R50480454  
 08001023923 40014769

## Features

- Superminiature, High power.
- Low coil power consumption.
- PC board mounting.
- Suitable for household appliances, automation system, electronic equipment, instrument and meter, communication facilities and remote control facilities.

## Ordering Information

**NT73-3**   **C**   **S**   **20**   **DC12V**   **0.36**   **F**

1            2            3            4            5            6            7

|   |   |
|---|---|
| 1 Part number: NT73-3                       | 4 Contact current: 5:5A; 7:7A; 10:10A; 12:12A; 15:15A; 20:20A |
| 2 Contact arrangement: A:1A; B:1B; C:1C     | 5 Coil rated voltage(V): DC:3,5,6,9,12,18,24,36,48            |
| 3 Enclosure: S: Wash tight<br>D: Flux proof | 6 Coil power: 0.36:0.36W; 0.45:0.45W; 0.6:0.6W; 0.8:0.8W      |
|   | 7 Resistance heat Class: NIL:130°C ; F:155°C                  |

## Contact Data

|                            |  |  |
|----------------------------|--|--|
| Contact Arrangement        | 1A(SPSTNO) 1B(SPSTNC) 1C(SPDT(B-M))  |  |
| Contact Material           | AgSnO <sub>2</sub>   |  |
| Contact Rating (Resistive) | 5A,10A/250VAC; 7A,16A/277VAC;12A,20A/125VAC; 15A/250VAC(1A) TV-8<br>Motor Load: NO:1HP(AFLA)125VAC,250VAC 20A/125VAC<br>NC:1/2HP(AFLA)125VAC,250VAC 20A/125VAC |  |
| Max. Switching Power       | 4450VA   |  |
| Max. Switching Voltage     | 277VAC   | Max. Switching Current:20A   |
| Contact Resistance         | ≤100mΩ   | Item 4.12 of IEC 61810-7   |
| Operational Life           | Electrical   | 1×10 <sup>5</sup> ;5×10 <sup>4</sup> (1C);1×10 <sup>4</sup> (15A/250VAC 85°C) Item 4.30 of IEC 61810-7 |
|                            | Mechanical   | 1×10 <sup>7</sup> Item 4.31 of IEC 61810-7   |

**CAUTION:** 1.For the intermediate current, it only applies to the room temperature.

## Coil Parameter

| Dash numbers | Coil voltage VDC |      | Coil resistance Ω ± 10% | Pick-up voltage VDC(max) (75%of rated voltage) | Drop-out voltage VDC(min) (10% of rated voltage) | Coil power W | Operate time ms | Release time ms |      |     |     |
|--------------|------------------|------|-------------------------|--|--|--------------|-----------------|-----------------|------|-----|-----|
|              | Rated            | Max. |                         |  |  |              |                 |                 |      |     |     |
| 003-360      | 3                | 3.9  | 25                      | 2.25   | 0.3  | 0.36         | ≤15             | ≤10             |      |     |     |
| 005-360      | 5                | 6.5  | 69                      | 3.75   | 0.5  |              |                 |                 |      |     |     |
| 006-360      | 6                | 7.8  | 100                     | 4.50   | 0.6  |              |                 |                 |      |     |     |
| 009-360      | 9                | 11.7 | 225                     | 6.75   | 0.9  |              |                 |                 |      |     |     |
| 012-360      | 12               | 15.6 | 400                     | 9.00   | 1.2  |              |                 |                 |      |     |     |
| 018-360      | 18               | 23.4 | 900                     | 13.5   | 1.8  |              |                 |                 |      |     |     |
| 024-360      | 24               | 31.2 | 1600                    | 18.0   | 2.4  |              |                 |                 |      |     |     |
| 036-360      | 36               | 46.8 | 3600                    | 27.0   | 3.6  |              |                 |                 |      |     |     |
| 048-360      | 48               | 62.4 | 6400                    | 36.0   | 4.8  |              |                 |                 |      |     |     |
| 003-450      | 3                | 3.9  | 20                      | 2.25   | 0.3  |              |                 |                 | 0.45 | ≤15 | ≤10 |
| 005-450      | 5                | 6.5  | 55.6                    | 3.75   | 0.5  |              |                 |                 |      |     |     |
| 006-450      | 6                | 7.8  | 80                      | 4.50   | 0.6  |              |                 |                 |      |     |     |
| 009-450      | 9                | 11.7 | 180                     | 6.75   | 0.9  |              |                 |                 |      |     |     |
| 012-450      | 12               | 15.6 | 320                     | 9.00   | 1.2  |              |                 |                 |      |     |     |
| 024-450      | 24               | 31.2 | 1280                    | 18.0   | 2.4  |              |                 |                 |      |     |     |
| 048-450      | 48               | 62.4 | 5120                    | 36.0   | 4.8  |              |                 |                 |      |     |     |
| 003-600      | 3                | 3.9  | 15                      | 2.25   | 0.3  | 0.60         | ≤15             | ≤10             |      |     |     |
| 005-600      | 5                | 6.5  | 42                      | 3.75   | 0.5  |              |                 |                 |      |     |     |
| 006-600      | 6                | 7.8  | 60                      | 4.50   | 0.6  |              |                 |                 |      |     |     |
| 009-600      | 9                | 11.7 | 135                     | 6.75   | 0.9  |              |                 |                 |      |     |     |
| 012-600      | 12               | 15.6 | 240                     | 9.00   | 1.2  |              |                 |                 |      |     |     |
| 024-600      | 24               | 31.2 | 960                     | 18.0   | 2.4  |              |                 |                 |      |     |     |
| 048-600      | 48               | 62.4 | 3840                    | 36.0   | 4.8  |              |                 |                 |      |     |     |

**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.

| Dash numbers | Coil voltage VDC |      | Coil resistance $\Omega \pm 10\%$ | Pickup voltage VDC(max) (75% of rated voltage) | Drop-out voltage VDC(min) (10% of rated voltage) | Coil power W | Operate time ms | Release time ms |
|--------------|------------------|------|-----------------------------------|--|--|--------------|-----------------|-----------------|
|              | Rated            | Max. |                                   |  |  |              |                 |                 |
| 003-800      | 3                | 3.9  | 11                                | 2.25   | 0.3  | 0.80         | $\leq 15$       | $\leq 10$       |
| 005-800      | 5                | 6.5  | 31                                | 3.75   | 0.5  |              |                 |                 |
| 006-800      | 6                | 7.8  | 45                                | 4.50   | 0.6  |              |                 |                 |
| 009-800      | 9                | 11.7 | 101                               | 6.75   | 0.9  |              |                 |                 |
| 012-800      | 12               | 15.6 | 180                               | 9.00   | 1.2  |              |                 |                 |
| 024-800      | 24               | 31.2 | 720                               | 18.0   | 2.4  |              |                 |                 |
| 048-800      | 48               | 62.4 | 2880                              | 36.0   | 4.8  |              |                 |                 |

### Characteristics

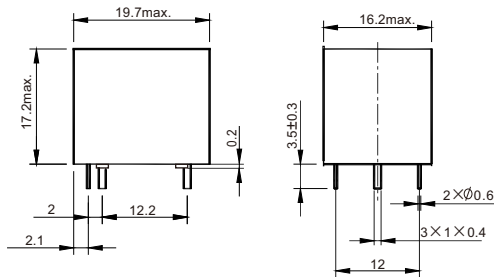
|  |                                  |                          |
|--|----------------------------------|--------------------------|
| Insulation Resistance                        | 250M $\Omega$ min (at 500VDC)    | Item 7 of IEC 60255-5    |
| Dielectric Strength Between Contacts         | 50Hz 1000V                       | Item 4.9 of IEC 61810-7  |
| Dielectric Strength Between Contact and Coil | 50Hz 2500V Surge Voltage:4kV     | 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 1.0mm | Item 4.28 of IEC 61810-7 |
| Terminals Strength                           | 5N                               | Item 4.24 of IEC 61810-7 |
| Ambient Temperature                          | -40 $^{\circ}$ C~85 $^{\circ}$ C |                          |
| Relative Humidity                            | 5% to 85%                        | Item 4.16 of IEC 61810-7 |
| Mass   | 11.5g                            | Item 4.7 of IEC 61810-7  |

### Safety Approvals

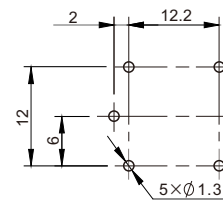
| Safety approval | UL&CUR  | TUV           | VDE                           | CQC        |
|-----------------|---|---------------|-------------------------------|------------|
| Load            | 16A/277VAC;10A/250VAC;TV-8<br>NO:1HP(16AFLA)125VAC,250VAC;20A/125VAC<br>NC:1/2HP(9.8AFLA)125VAC,250VAC;20A/125VAC | NO:15A/250VAC | NO:10A/250VAC<br>NC:7A/250VAC | 10A/250VAC |

### Dimensions

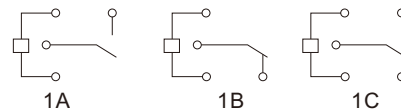
mm



Dimensions



Mounting (Bottom view)



Wiring diagram (Bottom view)

**CAUTION:** 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

