



29×12.7×15.7

NT75

UL E158859 On pending R2033977 CQC 04001010697

Patent No.: 200520013535.9 200510050849.0 200620105885.2

Features

- Small size, lightweight.
- Low coil consumption.
- Switching capacity up to 16A.
- PC board mounting.
- Suitable for household electrical appliances, automation system, electrical equipment, instrument, meter telecommunication facilities and remote control facilities.

Ordering Information

NT75 C S 12 DC12V 0.25 3.5 N G
 1 2 3 4 5 6 7 8 9

1 Part number: NT75
 2 Contact arrangement: A: 1A; C: 1C
 2A: 2A; 2C: 2C
 3 Enclosure: S: Sealed type; Z: Dust cover
 4 Contact rating: 1A, 1C: 12A/250VAC 30VDC;
 1A, 1C(0.72W): 16A/250VAC 30VDC;
 2A, 2C(0.41W): 8A/250VAC 30VDC
 5 Coil rated voltage(V): DC: 5, 6, 9, 12, 24, 48, 60, 110
 6 Coil power consumption: 0.25; 0.25W; 0.41; 0.41W; 0.48; 0.48W; 0.72; 0.72W
 7 Pole-distance: 3.5; 3.5mm; 5.0; 5.0mm
 8 Contact material: NiL: AgSnO₂ N: AgNi
 9 Contact plating: NiL: Standard; G: Gold plated

Contact Data

| | |
|------------------------------------|---|
| Contact Arrangement | 1A (SPSTNO) 1C (SPDT(B-M)) 2A (DPSTNO) 2C (DPDT(B-M)) |
| Contact Material | AgNi AgSnO ₂ AgSnO ₂ In ₂ O ₃ |
| Contact Rating (resistive) | 1A, 1C: 12A/250VAC, 30VDC; 1A, 1C(0.72W): 16A/250VAC, 30VDC 2A, 2C: 8A/250VAC, 30VDC |
| Max. Switching Power | 480W 4000VA 2C: 2×150W 2×1250VA |
| Max. Switching Voltage | 125VDC 440VAC Max. Switching Current: 16A |
| Contact Resistance or Voltage drop | <100mΩ Item 3.12 of IEC255-7 |
| Operational life | Electrical 10 ⁵ Item 3.30 of IEC255-7 |
| | Mechanical 10 ⁷ Item 3.31 of IEC255-7 |

Coil Parameter

| Dash numbers | Coil voltage VDC | | Coil resistance Ω ±10% | Pickup voltage VDC(max) (70% of rated voltage) | Release voltage VDC(min) (10% of rated voltage) | Coil power consumption W | Operate Time ms | Release Time ms |
|--------------|------------------|------|------------------------|--|---|--------------------------|-----------------|-----------------|
| | Rated | Max. | | | | | | |
| 005-250 | 5 | 6.5 | 100 | 3.5 | 0.5 | 0.25 | ≤10 | <5 |
| 006-250 | 6 | 7.8 | 144 | 4.2 | 0.6 | | | |
| 009-250 | 9 | 11.7 | 324 | 6.3 | 0.9 | | | |
| 012-250 | 12 | 15.6 | 576 | 8.4 | 1.2 | | | |
| 024-250 | 24 | 31.2 | 2304 | 16.8 | 2.4 | | | |
| 048-250 | 48 | 62.4 | 9216 | 33.6 | 4.8 | | | |
| 060-250 | 60 | 78 | 12857 | 42 | 6.0 | | | |
| 005-410 | 5 | 6.5 | 61 | 3.5 | 0.5 | 0.41 | ≤10 | <5 |
| 006-410 | 6 | 7.8 | 88 | 4.2 | 0.6 | | | |
| 009-410 | 9 | 11.7 | 198 | 6.3 | 0.9 | | | |
| 012-410 | 12 | 15.6 | 351 | 8.4 | 1.2 | | | |
| 024-410 | 24 | 31.2 | 1405 | 16.8 | 2.4 | | | |
| 048-410 | 48 | 62.4 | 5620 | 33.6 | 4.8 | | | |
| 060-480 | 60 | 78 | 7500/±15% | 42 | 6.0 | 0.48 | ≤10 | <5 |
| 110-480 | 110 | 143 | 25200/±15% | 77 | 11.0 | | | |
| 005-720 | 5 | 6.5 | 34.7 | 3.5 | 0.5 | 0.72 | <10 | <5 |
| 006-720 | 6 | 7.8 | 50 | 4.2 | 0.6 | | | |
| 009-720 | 9 | 11.7 | 112.5 | 6.3 | 0.9 | | | |
| 012-720 | 12 | 15.6 | 200 | 8.4 | 1.2 | | | |
| 024-720 | 24 | 31.2 | 800 | 16.8 | 2.4 | | | |
| 048-720 | 48 | 62.4 | 3200 | 33.6 | 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.

Operation condition

| | | |
|--------------------------|--------------------------------|-----------------------------|
| Insulation Resistance | 1000MΩ min (at 500VDC) | Item 7 of IEC255-5 |
| Dielectric Strength | 50Hz 1000V | Item 6 of IEC255-5 |
| Between contacts | 50Hz 5000V | Item 6 of IEC255-5 |
| Between contact and coil | | |
| Shock resistance | 100m/s ² 11ms | IEC68-2-27 Test Ea |
| Vibration resistance | 10~55Hz double amplitude 1.5mm | IEC68-2-6 Test Fc |
| Terminals strength | 10N | IEC68-2-21 Test Ua1 |
| Solderability | 235°C ± 2°C 3 ± 0.5s | IEC68-2-20 Test Ta method 1 |
| Ambient Temperature | -40~85°C | |
| Relative Humidity | 85% (at 40°C) | IEC68-2-3 Test Ca |
| Mass | 11g 12g(NT75-2) | |

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 | TUV | CQC |
|-----------------|---|------------------|---|
| Load | 1A, 1C: 16A/250VAC, 30VDC 2A, 2C: 8A/250VAC, 30VDC | 16A/250VAC 30VDC | 1A, 1C: 16A/250VAC, 30VDC 2A, 2C: 8A/250VAC, 30VDC |

Dimensions

mm / inch

Dimension

12A 16A

1C 1A 1C 2A 2C

Wiring diagram (Bottom view)

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

Reference Data

