



29×12.7×15.8

NT75H

c us E169380

40020063

Features

- Small size, light weight and low coil power consumption.
- 25A contact switching capacity.
- 5kV dielectric strength (between coil and contact).
- PC board mounting available.
- Product in accordance to IEC60335-1 available.
- IEC60079 compliant

Ordering Information

NT75H A S 0.41 5 25 W DC12V

1 2 3 4 5 6 7 8 9

1 Part number: NT75H
 2 Contact arrangement: A:1A; C:1C
 3 Enclosure: S: Wash tight; Z: Flux proof
 4 Coil power: 0.25:0.25W; 0.41:0.41W
 5 Pin distance: 5:5mm

6 Contact current: 25:25A; NIL:20A,16A
 7 Contact plating: Nil:Standard; G:Au plated
 8 W: 335 compliant: Nil:Standard
 9 Coil rated voltage(V): DC: 5,6,9,12,18,24,48

Contact Data

| | | |
|---------------------------|--|--|
| Contact Arrangement | 1A(SPSTNO) 1C(SPDT(B-M)) | |
| Contact Material | AgSnO ₂ | |
| Contact Rating(Resistive) | 1A | 1C |
| | 0.41W: 16A,20A,25A/250VAC 0.25W: 16A/250VAC | 0.41W: NO:16A,/250VAC NC:16A/250VAC 0.25W: NO:16A/250VAC NC:12A/250VAC |
| | Motor Load;1HP 120VAC/240VAC; TV-8 | |
| Inrush Current | 120A/20ms | |
| Max. Switching Power | 6250VA | |
| Max. Switching Voltage | 440VAC | Max. Switching Current:25A |
| Contact Resistance | ≤100mΩ | Item4.12 of IEC61810-7 |
| Operational Life | Electrical | 0.41W 25A/250VAC 105°C 8×10 ⁴ 20A/250VAC 105°C 1×10 ⁵ TV-8 2.5×10 ⁴ 0.25W 16A/250VAC 105°C 1×10 ⁵ Item 4.30 of IEC 61810-7 |
| | Mechanical | 1×10 ⁷ Item 4.31 of IEC 61810-7 |

Coil Parameter

| Dash numbers | Coil voltage VDC | | Coil resistance Ω ± 10% | Pick-up voltage VDC(max.) (70%of rated voltage) | Drop-out voltage VDC(min.) (10% of rated voltage) | Coil power W | Operate time ms | Release time ms |
|--------------|------------------|------|-------------------------|---|---|--------------|-----------------|-----------------|
| | Rated | Max. | | | | | | |
| 005-410 | 5 | 6.5 | 61 | 3.5 | 0.5 | 0.41 | ≤15 | ≤8 |
| 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 | | | |
| 018-410 | 18 | 23.4 | 790 | 12.6 | 1.8 | | | |
| 024-410 | 24 | 31.2 | 1405 | 16.8 | 2.4 | | | |
| 048-410 | 48 | 62.4 | 5620 | 33.6 | 4.8 | | | |

Coil Parameter

| Dash numbers | Coil voltage VDC | | Coil resistance $\Omega \pm 10\%$ | Pick-up voltage VDC(max) (70% of rated voltage) | Drop-out voltage VDC(min) (10% of rated voltage) | Coil power W | Operate time ms | Release time ms |
|--------------|------------------|------|-----------------------------------|---|--|--------------|-----------------|-----------------|
| | Rated | Max. | | | | | | |
| 005-250 | 5 | 6.5 | 100 | 3.5 | 0.5 | 0.25 | ≤ 15 | ≤ 8 |
| 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 | | | |
| 018-250 | 18 | 23.4 | 1296 | 12.6 | 1.8 | | | |
| 024-250 | 24 | 31.2 | 2304 | 16.8 | 2.4 | | | |
| 048-250 | 48 | 62.4 | 9216 | 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.

Safety Approvals

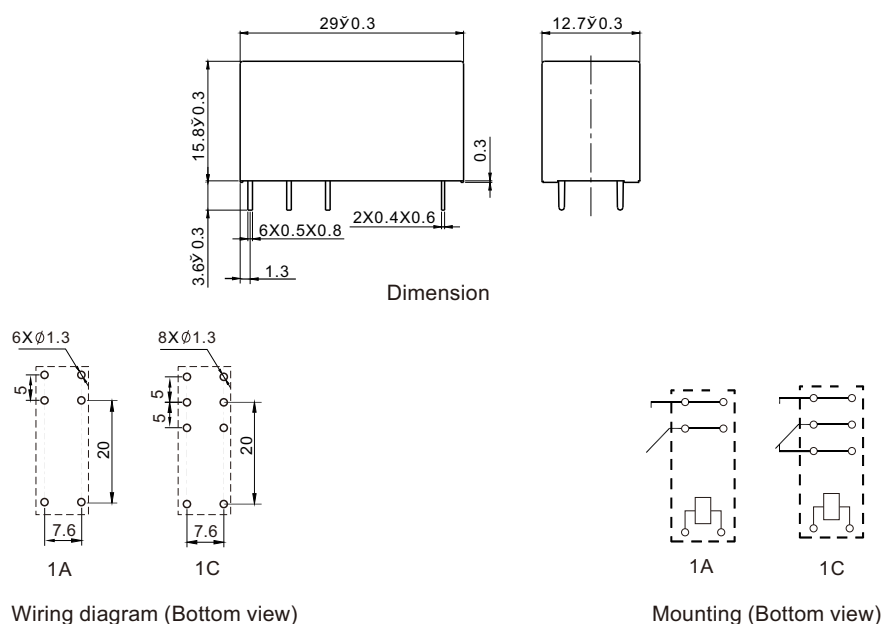
| Safety approval | UL&CUR | VDE | |
|-----------------|---|--|---|
| Load | 0.41W NO:25A/250VAC 105°C 8×10^4 NO:20A/250VAC 105°C 5×10^4 NO:16A/250VAC 105°C 1×10^5 1HP 120VAC/240VAC 6×10^3 TV-8 2.5×10^4 | 0.25W 16A/250VAC 105°C 1×10^5 | 20A/250VAC 85°C 5×10^4 16A/250VAC 105°C 1×10^5 |

Characteristics

| | | |
|--|--|--|
| Insulation Resistance | 1000M Ω min (at 500VDC) | Item 4.11 of IEC 61810-7 |
| Dielectric Strength Between Open Contacts Between Contact and Coil | 50Hz 1000V 50Hz 5000V | Item 4.9 of IEC 61810-7 Item 4.9 of IEC 61810-7 |
| Surge Voltage (Between Coil and Contact) | 10kV(1.2/50 Ω s) | Item 4.10 of IEC 61810-7 |
| Shock Resistance | Functional:98m/s ² 11ms Destructive:980m/s ² 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°C~105°C | |
| Relative Humidity | 5% to 85% | Item 4.16 of IEC 61810-7 |
| Mass | 14g | Item 4.7 of IEC 61810-7 |

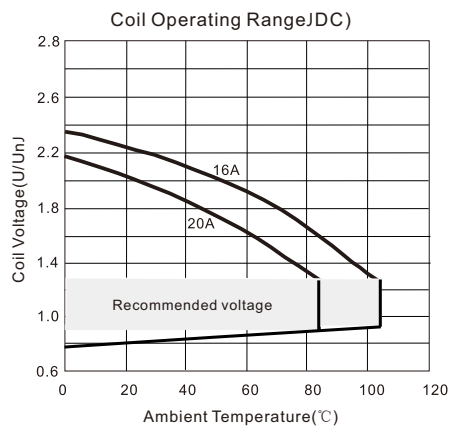
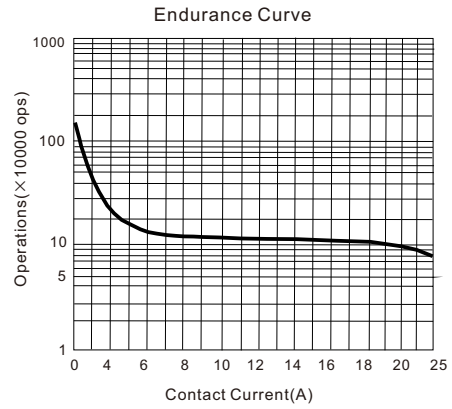
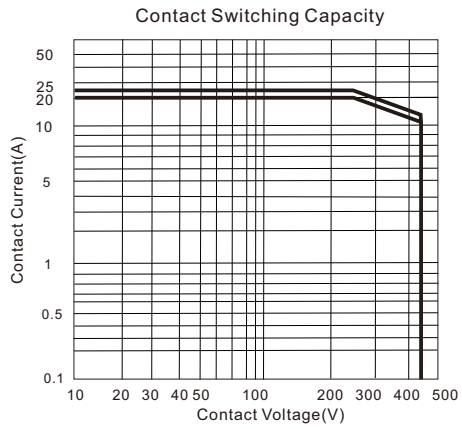
Dimensions

mm



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

Reference Date



Notes: The use of a relay with an energising voltage other than the rated coil voltage may lead to reduced electrical life. An energising voltage over the above range may damage the insulation of relay coil.