



29×12.7×15.8

# NT75H

c  us E158859  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.

## Ordering Information

**NT75H** A S 0.41 5 N G DC12V W  
 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: 3.5:3.5mm; 5:5mm  
 6 Contact material: NIL:AgSnO<sub>2</sub>; N:AgNi  
 7 Contact plating: Nil:Standard; G:Au plated  
 8 Coil rated voltage(V): DC: 5,6,9,12,18,24,48  
 9 W: 335 compliant; Nil:Standard

## Contact Data

Contact Arrangement	1A(SPSTNO) 1C(SPDT(B-M))	
Contact Material	AgSnO <sub>2</sub> AgNi	
Contact Rating(Resistive)	0.41W	NO
		NC
		25A/250VAC(5mm)
		16A/250VAC(5mm)
	0.25W	12A/250VAC(5mm)
		12A/250VAC(3.5mm)
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 1×10 <sup>5</sup> (25A/250VAC 105°C) 1×10 <sup>5</sup> (20A/250VAC 105°C) 2.5×10 <sup>4</sup> ( TV-8 ) 0.25W 1×10 <sup>5</sup> (16A/250VAC 85°C) Item 4.30 of IEC 61810-7
	Mechanical	1×10 <sup>7</sup> 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			
012-410	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	$\leq 15$	$\leq 8$
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

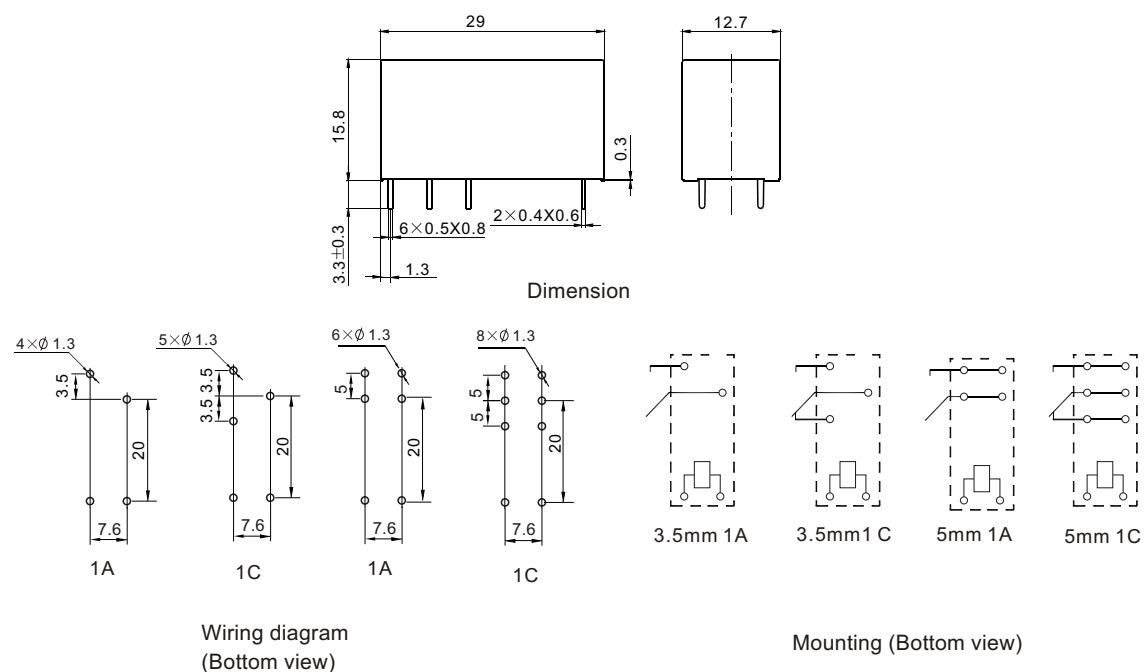
Safety approval	UL&CUR	VDE
Load	041W 1A:20A/250VAC 105°C $5 \times 10^4$ 1C:16A/250VAC 105°C $1 \times 10^5$ 1HP 120VAC/240VAC $6 \times 10^3$ TV-8 $2.5 \times 10^4$	0.25W 16A/250VAC 105°C $1 \times 10^5$ 20A/250VAC 85°C $5 \times 10^4$ 16A/250VAC 105°C $1 \times 10^5$

## Characteristics

Insulation Resistance	1000M $\Omega$ 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 $\mu$ s)	Item 4.10 of IEC 61810-7
Shock Resistance	Functional:98m/s <sup>2</sup> 11ms	Item 4.26 of IEC 61810-7
	Destructive:980m/s <sup>2</sup> 11ms	
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

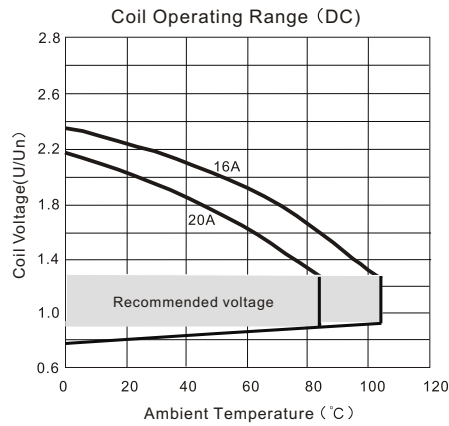
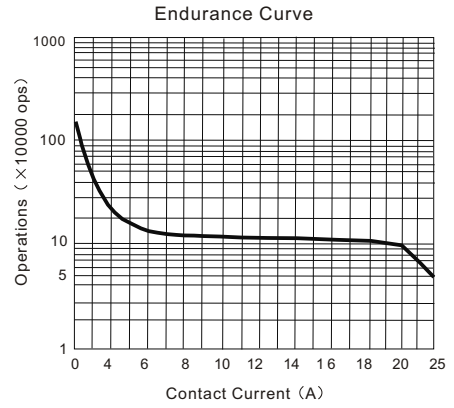
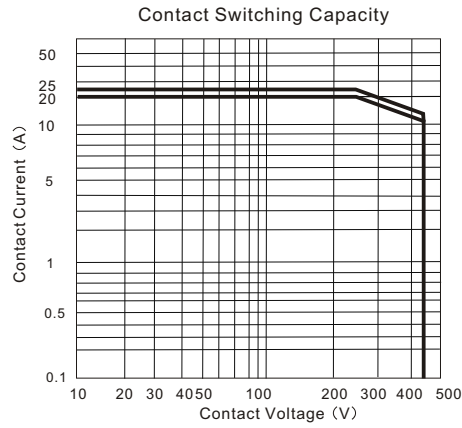
## Dimensions

mm



**CAUTION:** In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$ 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 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.