



29×12.7×15.8

NT75H

us E158859 40020063
 10002042304

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 rating: 25:25A; NIL:20A,16A
7 Contact plating: Nil:Standard; G:Au plated
8 Special request: 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	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	
Max. Switching Power	6250VA	
Max. Switching Voltage	440VAC	Max. Switching Current:25A
Contact Resistance	≤100mΩ	Item4.12 of IEC61810-7
Electrical Endurance	25A/250VAC 105℃ 8×10 ⁴ 20A/250VAC 105℃ 1×10 ⁵ 16A/250VAC 105℃ 1×10 ⁵ 1HP 120VAC/240VAC 6×10 ³ TV-8 2.5×10 ⁴ Item 4.30 of IEC 61810-7	
Mechanical Endurance	1×10 ⁷	Item 4.31 of IEC 61810-7

Coil Parameter

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.						
5	6.5	61	3.5	0.5	0.41	≤15	≤8
6	7.8	88	4.2	0.6			
9	11.7	198	6.3	0.9			
12	15.6	351	8.4	1.2			
18	23.4	790	12.6	1.8			
24	31.2	1405	16.8	2.4			
48	62.4	5620	33.6	4.8			

Coil Parameter

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.						
5	6.5	100	3.5	0.5	0.25	≤ 15	≤ 8
6	7.8	144	4.2	0.6			
9	11.7	324	6.3	0.9			
12	15.6	576	8.4	1.2			
18	23.4	1296	12.6	1.8			
24	31.2	2304	16.8	2.4			
48	62.4	9216	33.6	4.8			

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

Characteristics

Insulation Resistance	1000M Ω min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength Between Open Contacts Between Contact and Coil	1000VAC 1min 5000VAC 1min	Item 4.9 of IEC 61810-7
Surge voltage (Between Contact and Coil)	10kV(1.2/50 μ s)	Item 4.10 of IEC 61810-7
Shock Resistance	Functional: 98m/s ² 11ms	Item 4.26 of IEC 61810-7
	Destructive: 980m/s ² 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 $^{\circ}$ C~105 $^{\circ}$ C	
Relative Humidity	5% to 85%	Item 4.16 of IEC 61810-7
Weight (Approx.)	13.5g	Item 4.7 of IEC 61810-7

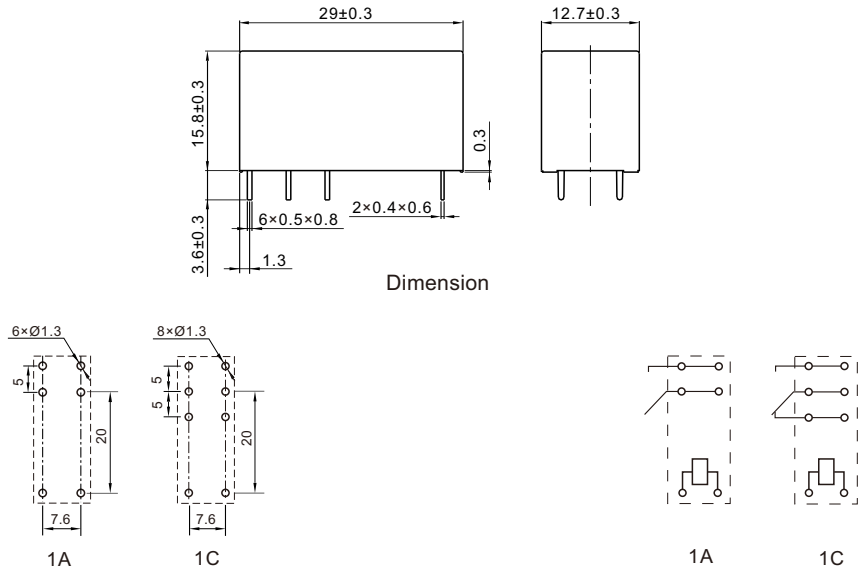
Safety Approvals

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

FORWARD RELAYS

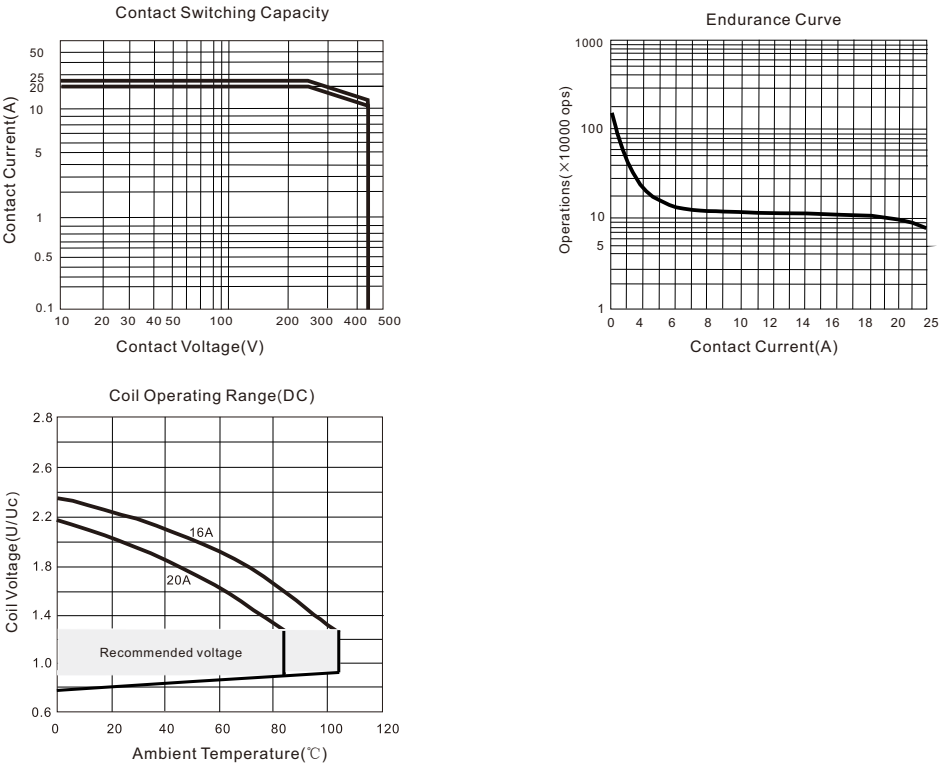
Dimensions

mm



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

Reference Date



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