



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	Between contacts	50Hz 1000V
	Between contact and coil	50Hz 5000V
Item 6 of IEC255-5		Item 6 of IEC255-5
Item 6 of IEC255-5		Item 6 of IEC255-5
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

Dimension mm / inch

Dimension: 29±0.2, 1.142±0.008, 12.7±0.2, 0.500±0.008, 15.7±0.2, 0.618±0.008, 0.2, 0.008, 3.6±0.3, 0.142±0.012, 6-0.5X0.8, 0.020×0.031, 2-0.4X0.6, 0.016×0.024, 1.3, 0.051, 1.9, 0.075, 6-Ø1.3, Ø0.051, 8-Ø1.3, Ø0.051, 7.6, 0.295, 1A, 2A, 7.6, 0.299, 1C, 2C, L: 3.5mm or 5.0mm (0.138inch or 0.197inch) Mounting (Bottom view)

Wiring diagram (Bottom view) 12A 16A 1C 1A 1C 2A 2C

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

Reference Data

