NT90(T90)

Features

· Small size, light weight, Low coil power consumption, heavy contact load.
· Strong anti-shock and anti-vibration, high reliability, long life.
· Suitable for automobile, machine, electronic equipment, air conditioner and household appliance applications
PC board mounting.

Ordering Information

NT90	R	H	A	S	DC12V	C	B	0.9
1	2	3	4	5	6	7	8	9

1 Part number :NT90(T90)
2 Terminal : R : without Pin6 ; NIL: With Pin 6
3 Load : H:30A: N:40A
4 Contact arrangement : 1A:1A; 1B:1B; 1C:1C
5 Enclosure:
S:Sealed type; D:Dust cover;
E:Covered; O:Open type

6 Coil rated Voltage(V) :
AC: 12, 24, 110, 120, 220
DC: 3, 5, 6, 9, 12, 15, 18, 24, 48, 110
7 Contact material:
C:AgCdO; S:AgSnO2
8 Resist heat class: B:130℃ F:155℃
9 Coil power consumption:
0.6:0.6W; 0.9:0.9W, NIL:2VA

Contact Data

Contact Arrangement		1A(SPSTNO), 1B(SPSTNC), 1C(SPDT(B-M))
Contact Material		AgCdO AgSnO2 AgSnO2In 2O3
Contact Rating (resistive)		NO:30A/240VAC,14VDC; NO:20A/240VAC;30A/14VDC NO:40A/250VAC,30VDC;NC:30A/250VAC,30VDC(0.9W) NO:30A/277VAC;NC:20A/277VAC Motor load: 2HP 250VAC; 1.5HP 250V Lamp load: TV-5
Max. Switching Power		1100W 7200VA
Max. Switching Voltage		110DC 250VAC Max.Switching Current:40A
Max.Switching Current		40A
Contact Resistance or Voltage drop		≤30mΩ Item 3.12of 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	Ratedl voltage V		Coil resistance Ω±10%	Pick up voltage VAC(max) (75% of rated voltage)	Pick up voltage VAC(min) (30% of rated voltage)	Coil power	Operate Time ms	Release Time ms
	Rated	Max						
012AC	12	15,6	27	9,0	3,6	2VA	-	-
024AC	24	31,2	120	18,0	7,2			
110AC	110	143	2360	82,5	33,0			
120AC	120	156	3040	90,0	36,0			
220AC	220	286	13490	165,0	66,0			

Coil Parameter

DC Coil Parameter

Dash numbers	Rated voltage V		Coil resistance Ω±10%	Pick up voltage V(max) (75% of rated voltage)	Pick up voltage V(min) (10 %of rated voltage)	Coil power W	Operate Time ms	Release Time ms
	Rated	Max						
003-900	3	3,9	10	2,25	0,3	0,9	< 15	< 10
005-900	5	6,5	28	3,75	0,5			
006-900	6	7,8	40	4,50	0,6			
009-900	9	11,7	90	6,75	0,9			
012-900	12	15,6	160	9,00	1,2			
015-900	15	19,5	250	10,25	1,5			
018-900	18	23,4	360	13,50	1,8			
024-900	24	31,2	640	18,00	2,4			
048-900	48	62,4	2560	36,00	4,8			
110-900	110	143	13445	82,50	11,0			

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

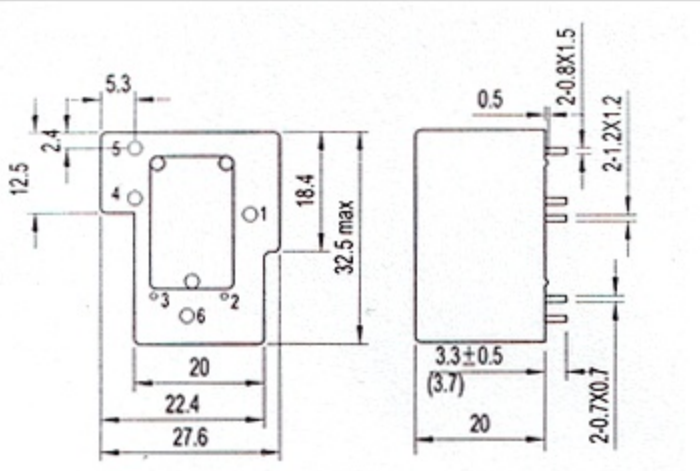
Insulation Resistance	1000MΩmin(at 500VDC)	Item 7 of IEC255-5
Dielectric Strength		
Between contacts	50 Hz 1500V	Item 6 of IEC255-5
Between contact and coil	50 Hz 2500V 4000V (without Pin 6)	Item 6 of IEC255-5
Shock resistance	200 m/s^2 11ms	IEC68-2-27 Test Ea
Vibration resistance	10~55 Hz double amplitude 1.5mm	IEC68-2-6 Test Fc
Terminals strength	10N	IEC68-2-21 Test Ua1
Solderability	235℃± 2℃ 3±0.5s	IEC68-2-20 Test method 1
Ambient Temperature	-55~100℃ -55~125℃	
Relative Humidity	85%(at 40℃)	IEC68-2-3 Test Ca
Mass	27g (Open type) 30g	

Qualification inspection:
Perform the qualification test as specified in the table IV of IEC255-19-1 and minimum sample size 24.

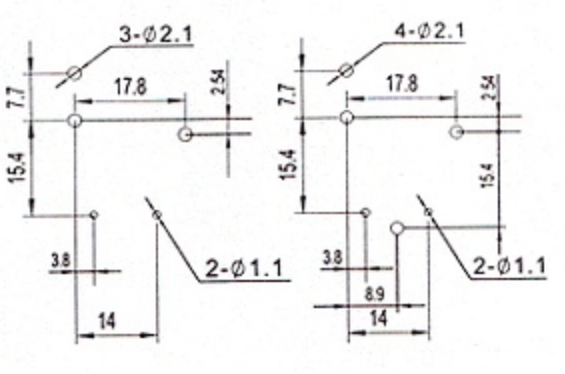
Safety approvals

Safety approval	UL&CUR	TUV	CQC
Load	NO:40A/250VAC 30A/277VAC NC:30A/250VAC 20A/277VAC 2HP 250VAC TV-5 11/2HP 250VAC Insulation: B-class F-class	NO:40A/240VAC 14VAC NC:30A/250VAC 14VAC Insulation: B-class F-class	NO:30A/240VAC NC:20A/240VAC

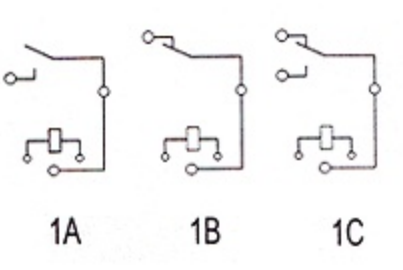
Dimension



Dimensions



Mounting(Bottom views)



Wiring diagram(Bottom views)

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