




32.4×27.5×28

NT90T (50A)

c  us E174722

Features

- Heavy power relay with small size , heavy load and high reliability.
- Shock and vibration resistance , long service life.
- PC board mounting is available.
- Suitable for vehicle, electric equipment for machine tool , electronic equipment ,air conditioner and various home appliance applications.

Ordering Information

NT90T 50 C E 12 S F
 1 2 3 4 5 6 7

1 Part number: NT90T(T91)
 2 Load: 50:50A
 3 Contact arrangement: A:1A;C:1C
 4 Enclosure: S: Wash tight ;
 E: Flux proof

5 Coil rated voltage(V): DC:5,6,9,12,15,18,24,48
 6 Contact material: S: AgSnO₂
 7 Resist heatclass: F: 155°C

Contact Data

Contact Arrangement	1A (SPSTBNO) 1C (SPDT(B-M))
Contact Material	AgSnO ₂
Contact Rating (Resistive)	NO:50A/240VAC; NC:35A/240VAC TV-5
Max. Switching Power	700W 12000VA
Max. Switching Voltage	30VDC 277VAC Max. Switching Current:50A
Contact Resistance	≤30mΩ Item 4.12 of IEC 61810-7
Operation Life	Electrical 2×10 ⁴ Item 4.30 of IEC 61810-7
	Mechanical 1×10 ⁷ Item 4.31 of IEC 61810-7

Coil Parameter

DC Coil Parameter								
Dash numbers	Coil voltage V		Coil resistance Ω ±10%	Pick-up voltage VDC(max) (75% of rated voltage)	Drop-out voltage VDC(min) (10% of rated voltage)	Coil power W	Operate time ms	Release time ms
	Rated	Max.						
005-1500	5	6.5	17	3.75	0.5	1.5	≤15	≤10
006-1500	6	7.8	24	4.50	0.6			
009-1500	9	11.7	54	6.75	0.9			
012-1500	12	15.6	96	9.00	1.2			
015-1500	15	19.5	150	10.25	1.5			
018-1500	18	23.4	216	13.50	1.8			
024-1500	24	31.2	384	18.00	2.4			
048-1500	48	62.4	1536	36.00	4.8			

NT90T (50A)

Operation condition

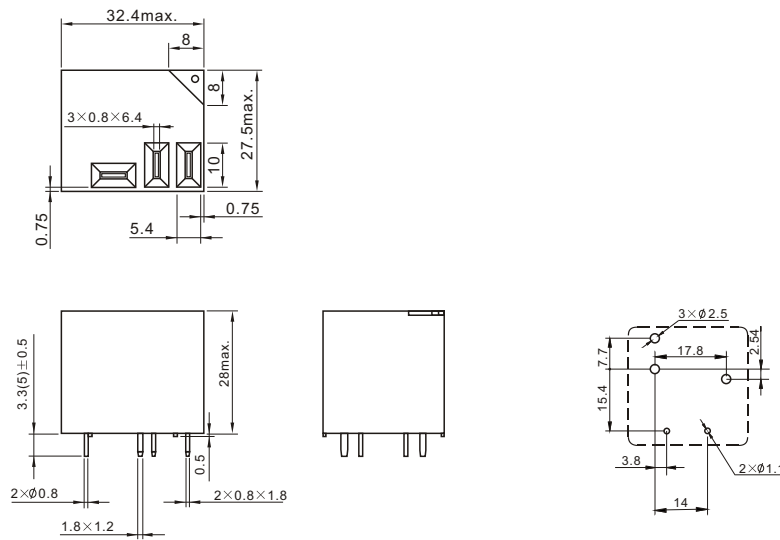
Insulation Resistance	1000M Ω min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength Between Contacts Between Contact and Coil	50Hz 1500V 50Hz 2500V	Item 4.9 of IEC 61810-7 Item 4.9 of IEC 61810-7
Shock Resistance	Functional	98m/s ² 11ms
	Destructive	980m/s ² 11ms
Vibration Resistance	10Hz~55Hz Double amplitude 1.5mm	Item 4.28 of IEC 61810-7
Terminals Strength	10N	Item 4.24 of IEC 61810-7
Ambient Temperature	-55 $^{\circ}$ C~85 $^{\circ}$ C	
Relative Humidity	5% to 85% RH	Item 4.16 of IEC 61810-7
Mass	35g	Item 4.7 of IEC 61810-7

Safety approvals

Safety approval	UL&CUR
Load	NO:50A/240VAC NC:35A/240VAC

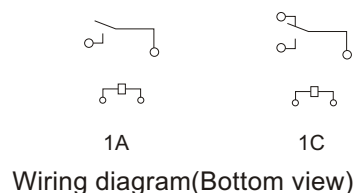
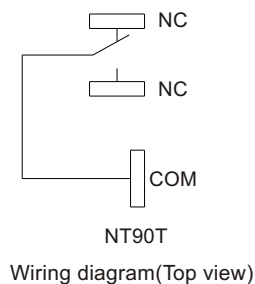
Dimensions

mm



Dimensions

Mounting (Bottom view)



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.