



32.5×27.6×20.5

# NT90L(50A)

UL US E160644 CEC 13002104039

## Features

- 50A switching capability.
- Single coil and dual coils latching relay available.
- Energy saving and enviromental friendly product.

## Ordering Information

**NT90L** **50** **C** **S** **24 - 1.5** **D**  
1 2 3 4 5 6 7

1 Part number: NT90L  
2 Contact rating: 50:50A  
3 Contact arrangement: A:1A; B:1B; C:1C

4 Enclosure: S:Wash tight; E:Flux proof  
5 Coil rated voltage(V): DC: 5,12,24,48  
6 Coil power: 1.5:1.5W; Nil: 2×3W  
7 Coil: NIL:Single coil; D:Double coils

## Contact Data

Contact Arrangement	1A(SPSTNO) 1B(SPSTNC) 1C(SPDT(B-M))	
Contact Material	AgSnO <sub>2</sub>	
Contact Rating	50A/277VAC Incandescent lamp:3000W 240VAC Electronic ballast:16A/280VAC Motor load:5HP 250VAC	
Max. Switching Power	14000VA	
Max. Switching Voltage	440VAC	Max. Switching Current:50A
Contact Resistance	≤20mΩ	Item 4.12 of IEC 61810-7
Electrical Endurance	5×10 <sup>4</sup>	Item 4.30 of IEC 61810-7
Mechanical Endurance	1×10 <sup>6</sup>	Item 4.31 of IEC 61810-7

## Coil Parameter

Coil Parameters:

Coil voltage VDC	Coil resistance Ω ± 10%	Set/Reset voltage VDC (80%of rated voltage)	Operating voltage range VDC	Plus duration ms	Coil power W	Set time ms	Reset time ms
1 Coil							
5	16.7	4	5~6	≥50	1.5	≤15	≤15
12	96	9.6	12~14.4				
24	384	19.2	24~28.8				
48	1536	38.4	48~57.6				
2 Coils							
5	2×8.3	4	5~6	≥50	2×3.0	≤15	≤15
12	2×48	9.6	12~14.4				
24	2×192	19.2	24~28.8				
48	2×768	38.4	48~57.6				

**Notes:** 1.When latching relays are installed in equipment, the latch and reset coil should not be powered simultaneously. Coil should not be pulsed with less than the nominal coil voltage and pulse width should be a minimum of three times the specified operate time of the relay. If these conditions are not followed, it is possible for the relay to in be the magnetically neutral position .  
2.Switching voltage is for test purpose only and are no to be used as design criteria.

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## Characteristics

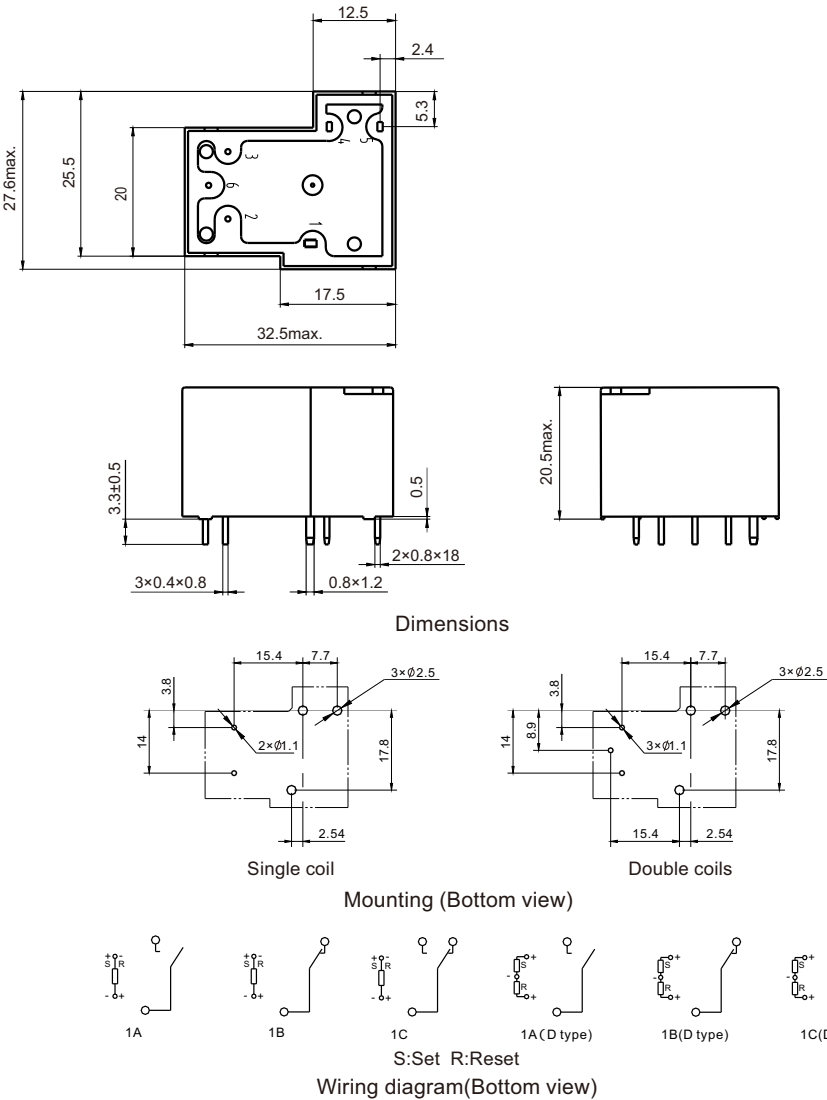
Insulation Resistance	1000MΩ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength Between Open Contacts Between Contact and Coil	1500VAC 1min 2500VAC/4000VAC(Without Pin 6) 1min	Item 4.9 of IEC 61810-7
Shock Resistance	196m/s <sup>2</sup> 11ms	Item 4.26 of IEC 61810-7
Vibration Resistance	10Hz~55Hz Double amplitude 1.5mm	Item 4.28 of IEC 61810-7
Terminals Strength	10N	Item 4.24 of IEC 61810-7
Ambient Temperature	-40℃~85℃	
Relative Humidity	5% to 85%	Item 4.16 of IEC 61810-7
Weight (Approx.)	27g	Item 4.7 of IEC 61810-7

## Safety Approvals

Safety approval	UL&CUR	CQC
Load	50A/277VAC	50A/277VAC

## 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.