



39×15×30.2

# NT96L

## Features

- Latching relay.
- 100A contact switching capability.
- Max. Inrush current of 500A/2ms.
- DC load capability of 100A/60VDC.
- Electrical endurance capability: breaking under 2000A for 0.3ms for 300 times.
- Suitable for smart home, PV, automatic equipment, smart meter, etc.

## Ordering Information

**NT96L** A D Z R L S DC12V

1 2 3 4 5 6 7 8

1 Part number: NT96L	5 Polarity: Nil: Standard; R: Reverse polarity
2 Contact arrangement: A:1A; C:1C;	6 Type of load: Nil: AC rating; L:DC rating
3 Coil: Nil:Single coil; D:Double coils	7 Contact gap: Nil: Standard; S:1.5mm <sup>1)</sup>
4 Enclosure: Z: Flux proof; S: Wash tight	8 Coil rated voltage(V): DC: 6,9,12,24,48

1) 1.5mm contact gap only applies to A type.

## Contact Data

Contact Arrangement	1A(SPSTNO) 1C(SPDT(B-M))	
Contact Material	AgSnO <sub>2</sub>	
Contact Rating	1A	1C
	90A/277VAC:1×10 <sup>4</sup> 100A/60VDC:1×10 <sup>4</sup> 3HP 277VAC:3×10 <sup>4</sup> 20A/277VAC(Standard rating):3×10 <sup>4</sup> 16A/277VAC(Electronic ballast):3×10 <sup>4</sup>	70A/277VAC:3×10 <sup>4</sup>
Max. Switching Power	6000W 30800VA	
Max. Switching Voltage	440VAC	Max. Switching Current:100A
Contact Resistance	≤10mΩ(1A/24VDC)	Item 4.12 of IEC 61810-7
Operational Life	Electrical	Refer to the table for the rating details
	Mechanical	1×10 <sup>6</sup>

## Coil Parameter

Dash numbers	Rated voltage VDC	Coil resistance Ω ± 10%	Set/Reset voltage VDC (80% of rated voltage)	Pulse duration ms	Coil power W	Set time ms	Reset time ms
1 Coil							
006-3000	6	12	4.8	≥50	3	≤15	≤15
009-3000	9	27	7.2				
012-3000	12	48	9.6				
024-3000	24	192	19.2				
048-3000	48	768	38.4				
2 Coils							
006-6000	6	2×6	4.8	≥50	2×6	≤15	≤15
009-6000	9	2×13.5	7.2				
012-6000	12	2×24	9.6				
024-6000	24	2×96	19.2				
048-6000	48	2×384	38.4				

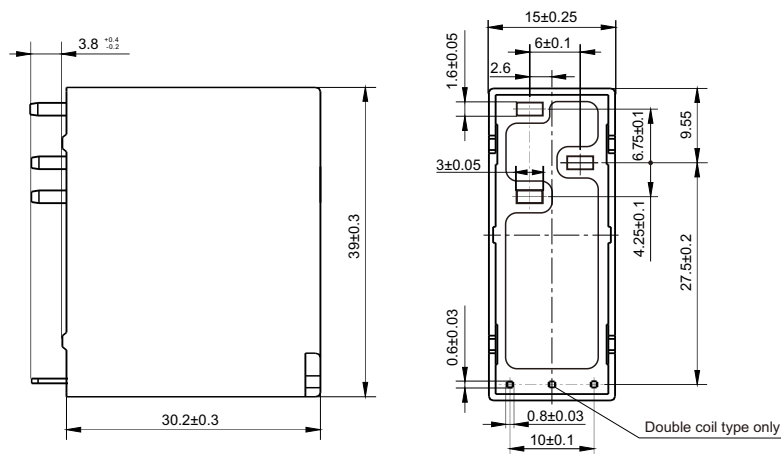
**CAUTION:** 1.When latching relays are installed in equipment, the latch and reset coil should not be powered simultaneously. Coil should not be pulsed with less than the nominal coil voltage and pulse width should be a minimum of three times the specified operate time of the relay. If these conditions are not followed, it is possible for the relay to in be the magnetically neutral position .  
2.The above set voltage, reset voltage are the test value for relay without load. Please use 1~1.5 times of rated voltage to drive the the relay for your application

## Characteristics

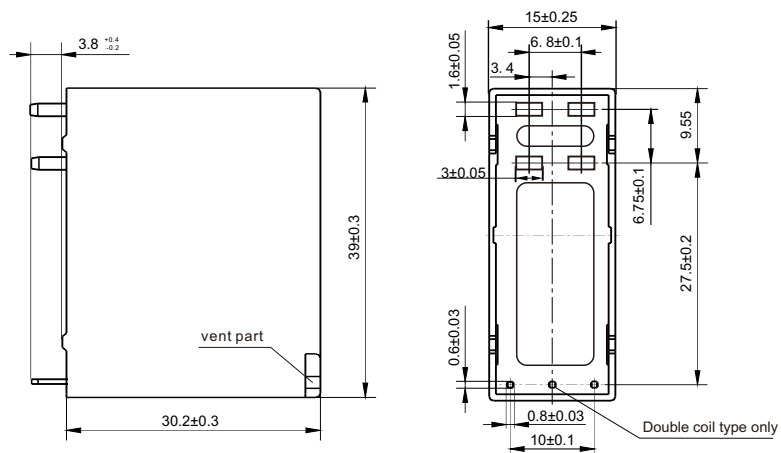
Insulation Resistance	1000M $\Omega$ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength Between Contacts Between Contact and Coil	50Hz 1500V 50Hz 4000V	Item 4.9 of IEC 61810-7 Item 4.9 of IEC 61810-7
Creepage Distance	8mm	
Shock Resistance	Functional: 98m/s <sup>2</sup> 11ms	Item 4.26 of IEC 61810-7
	Destructive: 980m/s <sup>2</sup> 11ms	
Vibration Resistance	10Hz~55Hz Double amplitude 1.5mm	Item 4.28 of IEC 61810-7
Ambient Temperature	-40°C~70°C	
Relative Humidity	5% to 85%	Item 4.16 of IEC 61810-7
Mass	40g	Item 4.7 of IEC 61810-7

## Dimensions

mm



NT96LCDS



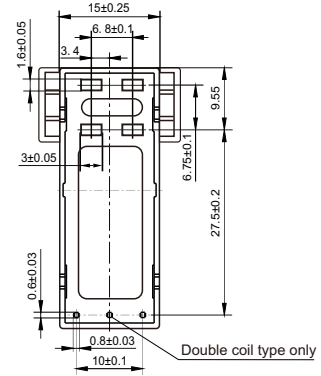
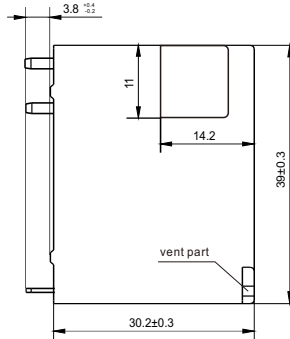
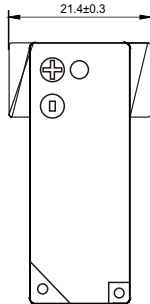
NT96LCDSS

Dimension

## Dimensions

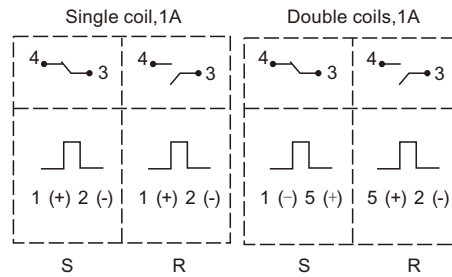
mm

### NT96LCDSL

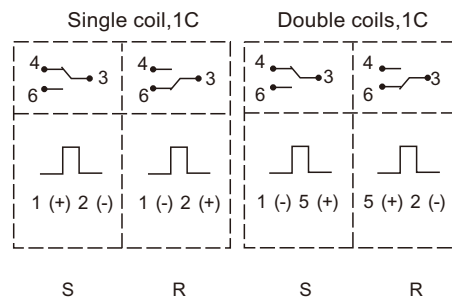
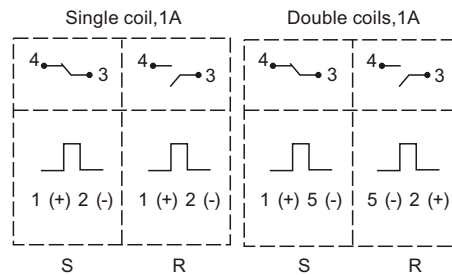


Dimension

#### Standard



#### Reverse polarity



S:Set  
R:Reset

Wiring diagram(Bottom view)

**CAUTION:** In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$ mm, tolerance should be  $\pm 0.2$ mm ;  
outline dimension  $> 1$ mm and  $\leq 5$ mm, tolerance should be  $\pm 0.3$ mm; outline dimension  $> 5$ mm, tolerance should be  $\pm 0.4$ mm.