NT91L(50A)

32.4×27.5×20(28.5)

c UL us E160644

Features

- Single and double coils magnet latching relay available.
- Switching capacity up to 50A.
- Energy saving and enviromental friendly product.

Ordering Information

NT91L	50	C	S	12	-	1.5	D	L
1	2	3	4	5		6	7	8

1 Part number: NT91L
2 Load: 50A/277VAC; Resistive load;
3000W 240VACJIncandescent Lamp;
16A/280VAC; Electronic ballast;
5HP 250VAC; Motor load;

3 Contact arrangement: A:1A; 1B:1B; C:1C
4 Enclosure: S: Wash tight; E: Flux proof
5 Coil rated voltage(V): 5,12,24,48
6 Coil power: 1.5:1.5W
7 Coil: NIL:Single coil; D: Double coils
8 High: H:Standard; L: Low profile type

Contact Data

Contact Arrangement		1A(SPSTNO) 1B(SPSTNC) 1C(SPDT(B-M))	
Contact Material		$AgSnO_2$	
Contact Rating(Resistive)		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
Operation Life	Electrical	5×10^4	Item 4.30 of IEC 61810-7
	Mechanical	1×10^6	Item 4.31 of IEC 61810-7

Coil Parameter

1 Coil

Dash numbers	Rated 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
005-1500	5	16.7	4	5~6	≥50	1.5	≤15	≤15
012-1500	12	96	9.6	12~14.4				
024-1500	24	384	19.2	24~28.8				
048-1500	48	1536	38.4	48~57.6				

2 Coils								
Dash numbers	Rated 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
005-3000	5	2×8.3	4	5~6	⩾50	2×3.0	⩽15	⩽15
012-3000	12	2×48	9.6	12~14.4				
024-3000	24	2×192	19.2	24~28.8				
048-3000	48	2×768	38.4	48~57.6				

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.Switching voltage is for test purpose only and are no to be used as design criteria.

Safety Approvals

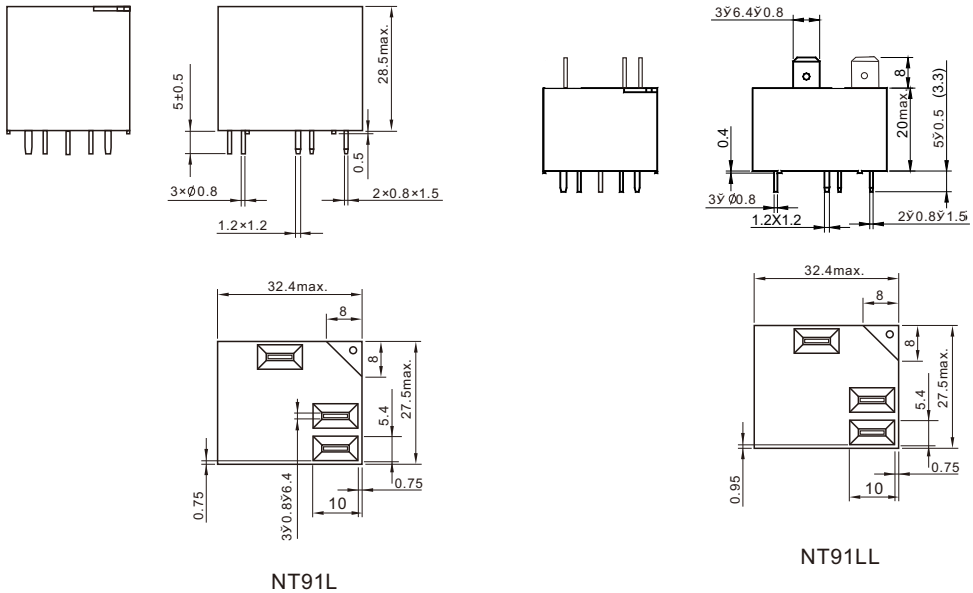
Safety approval	UL&CUR
Load	50A/277VAC

Characteristics

Insulation Resistance	1000MΩ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength Between Contacts Between Contact and Coil	 50Hz 1500V 1min 50Hz 2500V 1min	 Item 4.9 of IEC 61810-7 Item 4.9 of IEC 61810-7
Shock Resistance	196m/s^2 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
Mass	31g（Low Profile Type）35g	Item 4.7 of IEC 61810-7

Dimensions

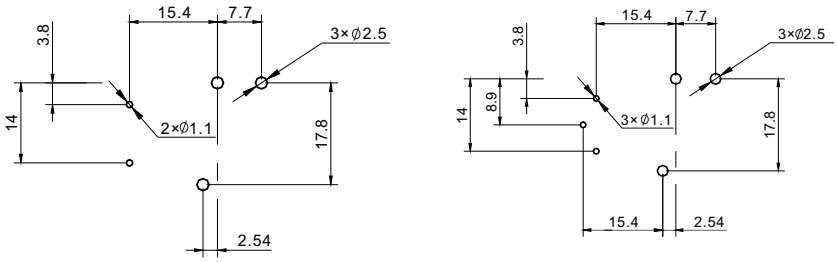
mm



NT91L

NT91LL

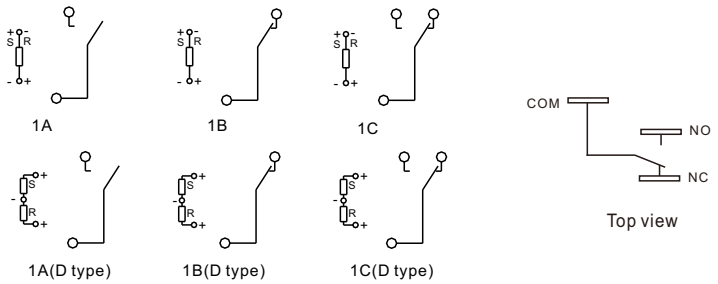
Dimensions



Single coil

Double coils

Mounting (Bottom view)



Top view

S:Set R:Reset

Wiring diagram(Bottom view)

CAUTION: 1.Relays shall have plus(+) signs or “+”and “-” placed on the circuit diagram as shown.
2.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.