



32.4×27.5×20(28.5)

NT91L(50A)

c  us E174722

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 | 5 Coil rated voltage(V): DC: 5, 12, 24, 48 |
| 2 Contact rating: 50:50A | 6 Coil power: 1.5:1.5W; Nil:2×3W |
| 3 Contact arrangement: A:1A; 1B:1B; C:1C | 7 Coil: NIL:Single coil; D:Double coils |
| 4 Enclosure: S:Wash tight; E:Flux proof | 8 High: NIL:Standard; L:Low profile type |

Contact Data

Contact Arrangement	1A(SPSTNO) 1B(SPSTNC) 1C(SPDT(B-M))	
Contact Material	AgSnO ₂	
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 ⁴	Item 4.30 of IEC 61810-7
Mechanical Endurance	1×10 ⁶	Item 4.31 of IEC 61810-7

Coil Parameter

Coil Parameter							
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	≤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.

NT91L(50A)

Characteristics

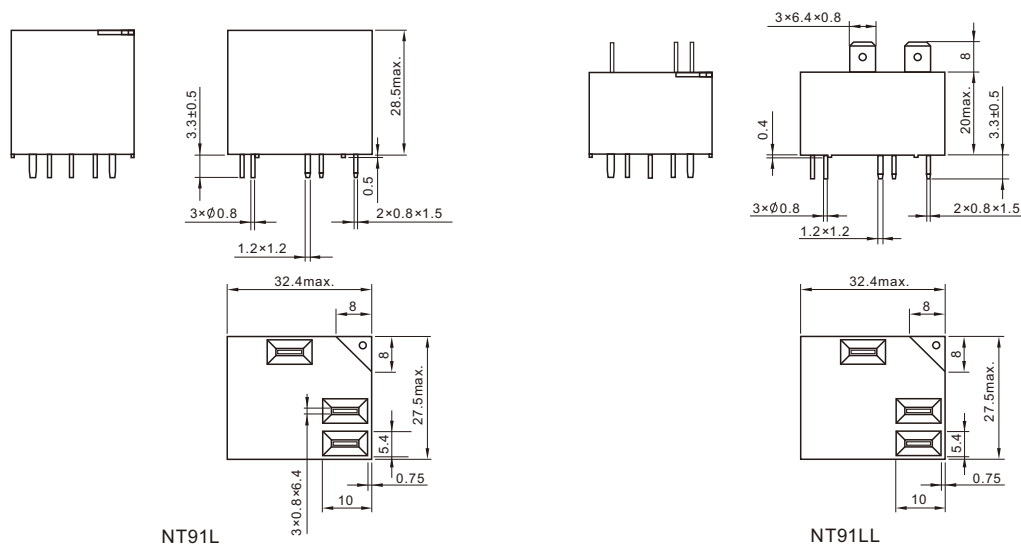
Insulation Resistance	1000MΩ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength		
Between Open Contacts	1500VAC 1min	Item 4.9 of IEC 61810-7
Between Contact and Coil	2500VAC 1min	Item 4.9 of IEC 61810-7
Shock Resistance	196m/s ² 11ms	Item 4.26 of IEC 61810-7
Vibration Resistance	10Hz~55Hz Double 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
Weight (Approx.)	31g (Low profile type) 35g	Item 4.7 of IEC 61810-7

Safety Approvals

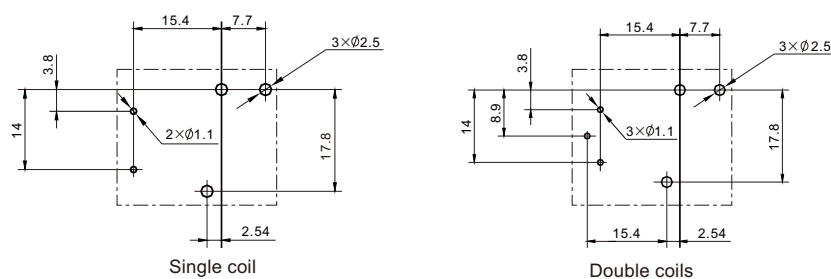
Safety approval	UL&CUR
Load	50A/277VAC

Dimensions

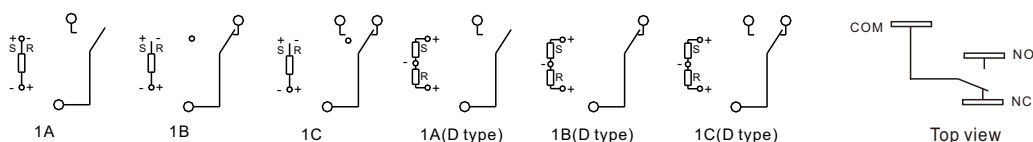
mm



Dimensions



Mounting (Bottom view)



S:Set R:Reset

Wiring diagram(Bottom view)

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