



# NCT

## I

17.4×14×13.5（1C: 17.4×7.2×13.5）

### Features

- Ultra small size, light weight.
- Low coil power consumption.
- Forward/reverse motor control is possible with a single relay.
- PC board mounting.
- Suitable for automobile, automation system, electronic equipment.

### Ordering Information

**NCT 2 DC12V**  
1 2 3

1 Part number: NCT 3 Coil rated Voltage(V): DC:12  
2Contact arrangement: 1:1C; 2:2×1C; 5:2C

### Contact Data

Contact Arrangement	1C (SPDT(B-M)) 2C (DPDT(B-M)) 2×1C (2×SPDT(B-M) (H-Bridge)		
Contact Material	Silver alloy Ag·SnO <sub>2</sub>		
Contact Rating (resistive)	NO: 20A/14VDC; NC: 10A/14VDC		
Max. Switching Power	300W		
Max. Switching Voltage	16VDC		
Contact Resistance or Voltage drop	≤100mΩ (200mV at 10A)		
Operation life	Electrical	10 <sup>5</sup>	
	Mechanical	10 <sup>7</sup>	
		Max. Switching Current:20A	
		Item 3.12 of IEC255-7	
		Item 3.30 of IEC255-7	
		Item 3.31 of IEC255-7	

### Coil Parameter

Dash numbers	Coil voltage VDC	Operating Voltage Range VDC	Coil resistance Ω±10%	Pickup voltage VDC(max) (60%of rated voltage )	release voltage VDC(min) (8% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated							
012-800	12	10-16	180	7.2	1.0	0.8	≤10	≤10

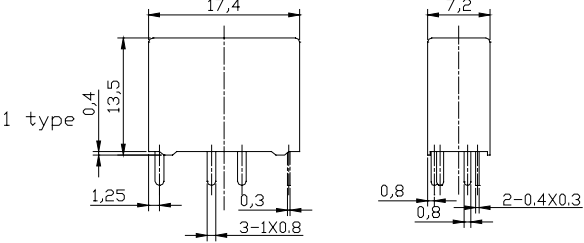
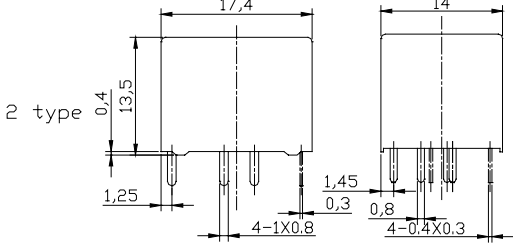
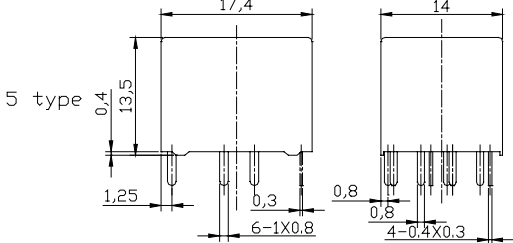
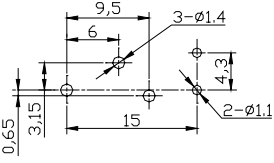
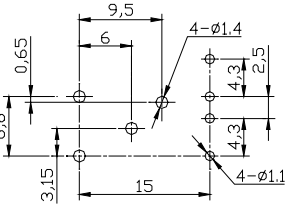
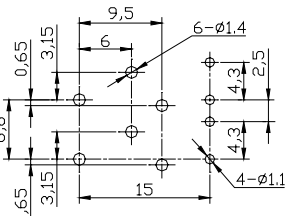
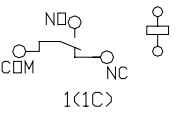
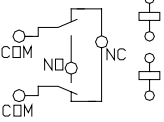
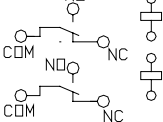
**CAUTION:** 1.The use of any coil voltage overstep operating voltage range of coil , it will compromise the operation of the relay.  
2.Pickup and release voltage are for test purposes only and are not to be used as design criteria.

Operation condition

Insulation Resistance	100M $\Omega$ min (at 500VDC)	Item 7 of IEC255-5
Dielectric Strength		
Between contacts	50Hz 500V	Item 6 of IEC255-5 (Detection current:10m A)
Between contact and coil	50Hz 500V	Item 6 of IEC255-5 (Detection current:10m A)
Shock resistance	Functional: 100m/s <sup>2</sup> 11ms; Survival: 1000 m/s <sup>2</sup> 6ms	IEC68-2-27 Test Ea
Vibration resistance	10~100Hz 44 m/s <sup>2</sup>	IEC68-2-6 Test Fc
Terminals strength	10N	IEC68-2-21 Test Ua1
Solderability	235 $^{\circ}$ C $\pm$ 2 $^{\circ}$ C 3 $\pm$ 0.5s	IEC68-2-20 Test Ta method 1
Ambient Temperature	-40~85 $^{\circ}$ C	
Relative Humidity	85% (at 40 $^{\circ}$ C)	IEC68-2-3Test Ca
Mass	8g,4g (1C )	

Qualification inspection:

Perform the qualification test as specified in the table IV of IEC255-19-1 and minimum sample size 24.

Dimensions (Unit: mm)		
<div>1 type</div> 	mm	inch
	0.3	0.012
	0.4	0.016
	0.65	0.026
	0.8	0.031
	1.0	0.039
	1.1	0.043
	1.25	0.049
	1.4	0.055
	1.45	0.057
	2.5	0.098
	3.15	0.124
	3.5	0.138
<div>2 type</div> 	4.3	0.169
	6.0	0.236
	6.8	0.268
	7.2	0.283
	9.5	0.374
	13.5	0.551
	14	0.551
	15	0.591
	17.4	0.685
<div>5 type</div> 		
Mounting (Bottom views)		
		
		
		
Wiring diagram (Bottom views)		
		
		
		
NOTES 1).Dimensions are in millimeter.		
2).Inch equivalents are given for general information only.		