

Miniature High Power Relay

NCT

Features

- High switching capacity
: 40A for 1 Form A and 1 Form C
- PCB coil terminals, ideal for heavy duty load
- Low coil consumption
- Small size, light weight



(File No.: R 50471215)

1. COIL DATA (at 23°C)

Nominal Voltage (VDC)	Pick-up Voltage (VDC)	Drop-out Voltage (VDC)	Max Allowable Voltage (VDC)	Coil Current (mA)(±10%)	Coil Resistance (Ω)	Coil Power (mW)
6	4.50	0.6	6.60	155.0	36.8 x (1±10%)	930
9	6.75	0.9	9.90	103.3	82.7 x (1±10%)	
12	9.00	1.2	13.2	77.50	147.1 x (1±10%)	
18	13.5	1.8	19.8	51.67	331.0 x (1±10%)	
24	18.0	2.4	26.4	38.75	588.4 x (1±10%)	
36	27.0	3.6	39.6	25.83	1323.9 x (1±10%)	
48	36.0	4.8	52.8	19.38	2353.5 x (1±10%)	

2. CONTACT DATA

Contact Arrangement		1 Form A	1 Form B	1 Form C	
				NO	NC
Contact Resistance		100mΩ max.			
Contact Material		AgSnO ₂			
Contact rating	Standard (Nil type)	30A 240VAC 30A 28VDC	20A 240VAC 20A 28VDC	30A 240VAC 30A 28VDC	20A 240VAC 20A 28VDC
	High Capacity (H type)	40A 240VAC 40A 28VDC	30A 240VAC 30A 28VDC	40A 240VAC 40A 28VDC	30A 240VAC 30A 28VDC
Life Expectancy	Electrical	100,000 operations (20A 250VAC / 30VDC)			
	Mechanical	10,000,000 operations			

3. CHARACTERISTICS

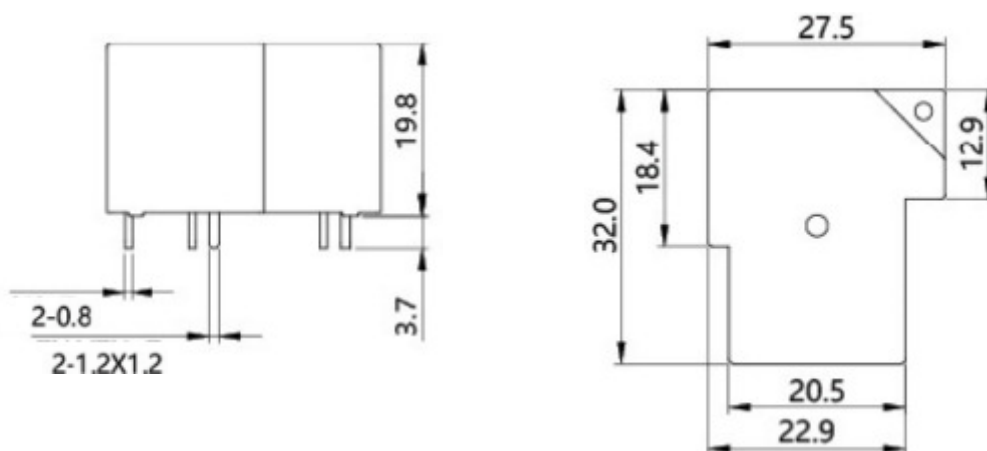
Insulation Resistance		100MΩ (at 500VDC)
Dielectric Strength	Open Contacts	1500VAC 50Hz/1min, Leakage current 1mA
	Coil and Contacts	1500VAC 50Hz/1min, Leakage current 1mA
Temperature Range		-55℃ ~ 70℃
Shock Resistance		10G (Sinusoidal half-wave pulse: 11ms)
Vibration Resistance		10 ~ 55Hz, 1.5mm DA
Atmospheric Pressure		86 ~ 106KPa
Operate Time (at nominal voltage)		15ms max.
Release Time (at nominal voltage)		10ms max.
Humidity		35 ~ 80% RH
Termination		PCB
Weight		Approx. 33g
Outline Dimension (L x W x H)		32.0 x 27.5 x 19.8mm

4. ORDERING INFORMATION

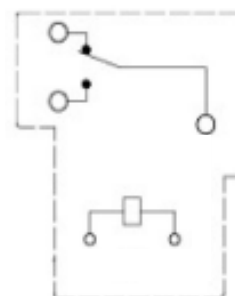
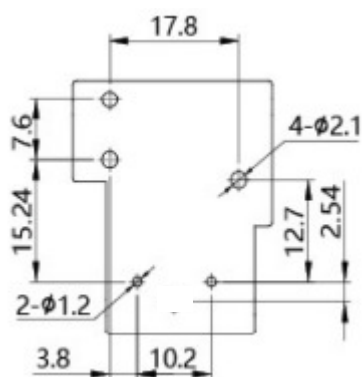
<u>NCT</u> <u>11</u> - <u>D12</u> <u>S</u> <u>H</u> ① ② ③ ④ ⑤	
① Relay Model	NCT
② Contact Arrangement	11: 1 Form A (SPST-NO) 1B: 1 Form B (SPST-NC) 1: 1 Form C (SPDT)
③ Coil Voltage	D6=6VDC, D9=9VDC, D12=12VDC, D18=18VDC, D24=24VDC, D36=36VDC, D48=48VDC
④ Construction	S: Plastic sealed type
⑤ Contact Rating	Nil: 30A (Standard) H: 40A (High Capacity)

5. DIMENSIONS (Unit: mm)

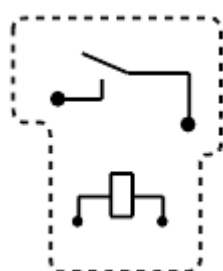
Outline Dimensions



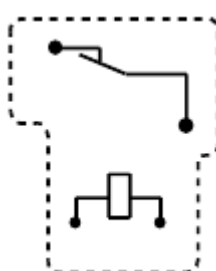
PCB Layout (Bottom View)



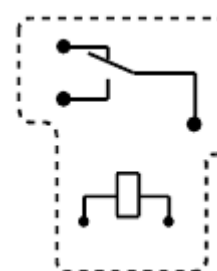
Wiring Diagram (Bottom View)



1 Form A



1 Form B



1 Form C

Remark: 1) 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 $\pm 0.4\text{mm}$.
2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

6. CHARACTERISTIC CURVES

