



# NT20



19×15.4×15

 E158859

 25002476377

 40061059

## Features

- Small size, light weight and heavy switching power.
- 20A switching capability. TV-12 switching capability.
- Product in accordance to IEC60335-1 available.
- Suitable for household electrical appliances, automation system, electronic equipment, instrument and meter application. TV remote control TV receivers, monitor display, audio equipment high and rushing current application.

## Ordering Information

NT20   W   C   S   20   L   DC12V  
 1   2   3   4   5   6   7

1 Part number: NT20

2 Terminal: Nil: Standard; W: Wide terminal  
 D: Double terminals

3 Contact arrangement: A:1A; C:1C

4 Enclosure: S: Wash tight; NIL: Flux proof

5 Contact rating: 20:20A; 16:16A

6 Coil power: NIL:0.36W; L:0.2W

7 Coil rated voltage(V): DC:3,5,6,9,12,24,48

## Contact Data

Contact Arrangement	1A(SPSTNO) 1C(SPDT(B-M))		
Contact Material	AgSnO <sub>2</sub>		
Contact Rating <sup>1)</sup>	0.36W	NO	NC
		20A/250VAC 85°C 5×10 <sup>4</sup> 16A/250VAC 105°C 1×10 <sup>5</sup>	12A/250VAC 105°C 6×10 <sup>3</sup>
	0.2W	10A/28VDC 105°C 2×10 <sup>4</sup> TV-10 240VAC 40°C 2.5×10 <sup>4</sup> 1½HP 250VAC 40°C 6×10 <sup>7</sup>	7A/28VDC 105°C 3×10 <sup>4</sup>
		16A/250VAC 105°C 5×10 <sup>4</sup>	7A/250VAC 105°C 6×10 <sup>3</sup>
Max. Switching Power	280W 5000VA		
Max. Switching Voltage	28VDC 277VAC		Max. Switching Current:20A
Contact Resistance	≤100mΩ		Item 4.12 of IEC 61810-7
Electrical Endurance	Refer to the table for the rating details		Item 4.30 of IEC 61810-7
Mechanical Endurance	1×10 <sup>7</sup>		Item 4.31 of IEC 61810-7

**Notes:** 1)The vent hole should be opened when testing enclosed relay.

## Coil Parameter

Coil voltage VDC		Coil resistance Ω ± 10%	Pick-up voltage VDC(max) (75%of rated voltage)	Drop-out voltage VDC(min) (10% of rated voltage)	Coil power W	Operate time ms	Release time ms
Rated	Max.						
3	3.9	45	2.25	0.3	0.2	≤10	≤5
5	6.5	125	3.75	0.5			
6	7.8	180	4.50	0.6			
9	11.7	405	6.75	0.9			
12	15.6	720	9.00	1.2			
24	31.2	2880	18.0	2.4			
48	62.4	11520	36.0	4.8			
3	3.9	25	2.25	0.3	0.36	≤10	≤5
5	6.5	69.4	3.75	0.5			
6	7.8	100	4.50	0.6			
9	11.7	225	6.75	0.9			
12	15.6	400	9.00	1.2			
24	31.2	1600	18.0	2.4			
48	62.4	6400	36.0	4.8			

## Characteristics

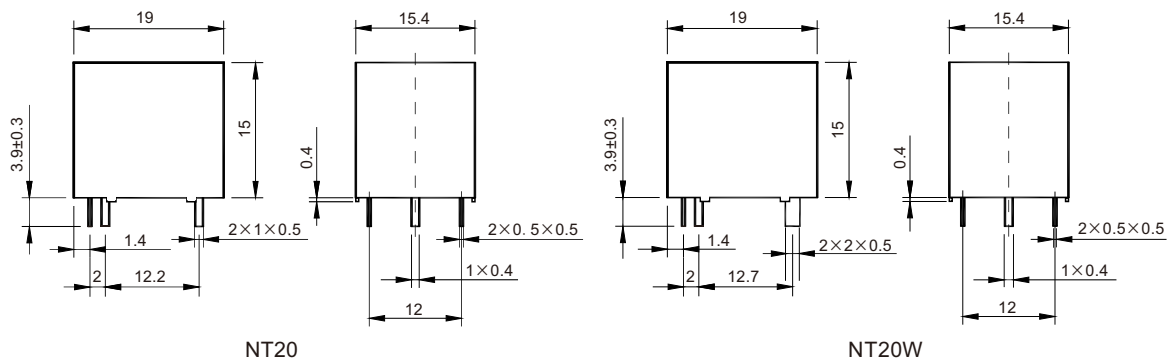
Insulation Resistance	100MΩ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength Between Open Contacts Between Contact and Coil	1000VAC 1min 2500VAC 1min	Item 4.9 of IEC 61810-7
Shock Resistance	98m/s <sup>2</sup> 11ms	Item 4.26 of IEC 61810-7
Vibration Resistance	10Hz~55Hz Double amplitude 1.5mm	Item 4.28 of IEC 61810-7
Terminals Strength	10N	Item 4.24 of IEC 61810-7
Ambient Temperature	-40℃~105℃	
Relative Humidity	5%~85%	Item 4.16 of IEC 61810-7
Weight (Approx.)	10.5g	Item 4.7 of IEC 61810-7

## Safety Approvals

Safety approval	UL&CUR	VDE	CQC
Load	NO: 20A/250VAC 85℃;16A/250VAC 105℃;10A/28VDC 105℃ 1½HP 250VAC 40℃; TV-10 240VAC 40℃ NC: 12A/250VAC 105℃;7A/28VDC 105℃	NO: 20A/250VAC 85℃ NO:16A/250VAC 105℃	NO: 20A 277/250VAC 85℃ NO:16A 277/250VAC 105℃ NC:12A 277/250VAC 105℃

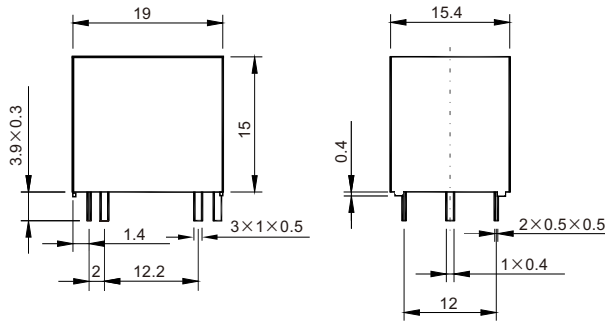
## Dimensions

mm



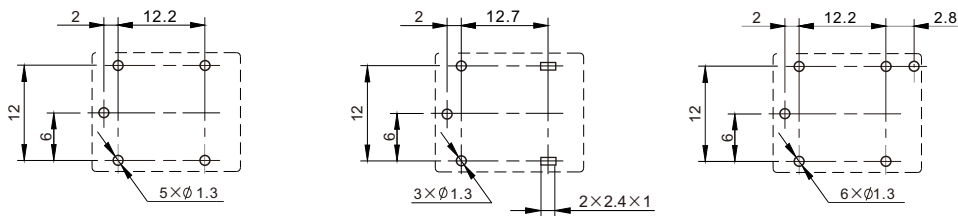
NT20

NT20W



NT20D

Dimensions



NT20

NT20W

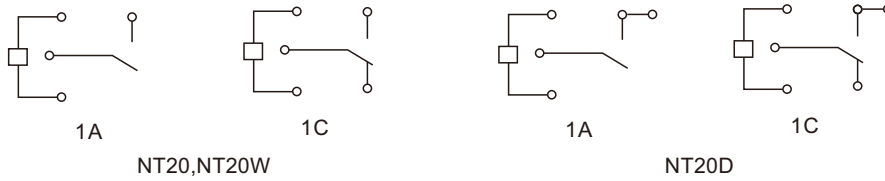
NT20D

Mounting (Bottom view)

# FORWARD RELAYS

## Dimensions

mm



Wiring diagram (Bottom view)

**Remark:** 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.

## Reference Data

