



19×15.4×15

NT20

UL E169380



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 | 4 Enclosure: S: Wash tight; NIL: Flux proof |
| 2 Terminal: Nil: Standard; W: Wide terminal | 5 Contact rating: 20:20A; 16:16A |
| D: Double terminals | 6 Coil power: NIL:0.36W; L:0.2W |
| 3 Contact arrangement: A:1A; C:1C | 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 ₂		
Contact Rating ¹⁾	0.36W	NO	NC
		20A/250VAC 85℃ 5×10 ⁴ 16A/250VAC 105℃ 1×10 ⁵	12A/250VAC 105℃ 6×10 ³
		10A/28VDC 105℃ 2×10 ⁴ TV-10 240VAC 40℃ 2.5×10 ⁴ 1½HP 250VAC 40℃ 6×10 ³	7A/28VDC 105℃ 3×10 ⁴
	0.2W	16A/250VAC 105℃ 5×10 ⁴	7A/250VAC 105℃ 6×10 ³
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 ⁷		Item 4.31 of IEC 61810-7

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

Coil Parameter

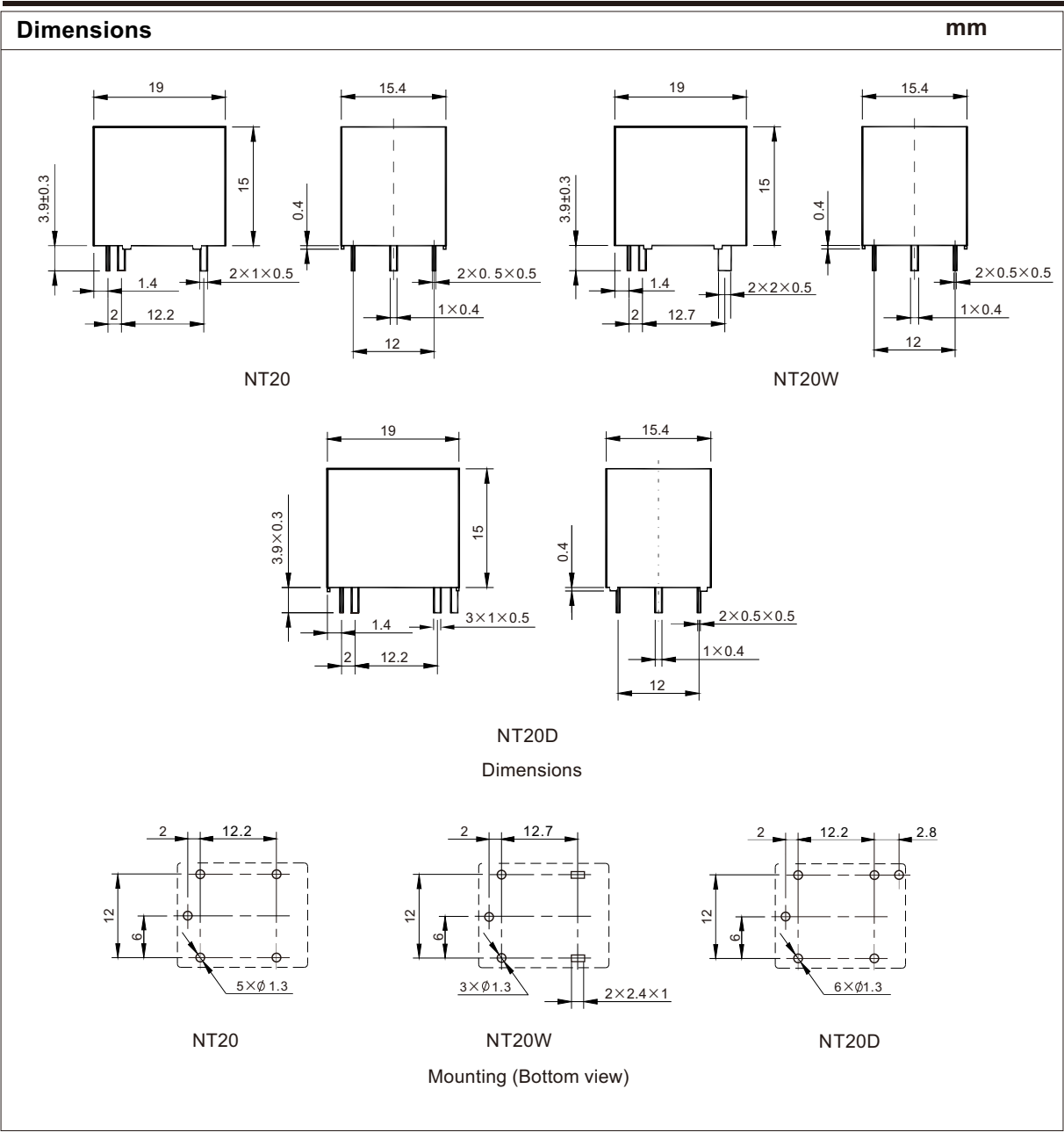
Coil voltage VDC		Coil resistance Ω ± 10%	Pick-up voltage VDC(max) (75%of rated voltage)	Drop-out voltage VDC(min) (10% of rated voltage)	Coil power W	Operate time ms	Release time ms
Rated	Max.						
3	3.9	45	2.25	0.3	0.2	≤10	≤5
5	6.5	125	3.75	0.5			
6	7.8	180	4.50	0.6			
9	11.7	405	6.75	0.9			
12	15.6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



Dimensions

mm

1A

1C

NT20,NT20W

1A

1C

NT20D

Wiring diagram (Bottom view)

Remark: 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.

Reference Data

Contact Switching Capacity

Contact Type	Contact Voltage (V)	Contact Current (A)
NO	100	16
	250	16
NO/NC	100	10
	250	10

Endurance Curve

Contact Current (A)	Operations (x10000 ops) - 20A/250VAC 85°C	Operations (x10000 ops) - 16A/250VAC 105°C
10	25	10
15	15	6
20	8	4

Coil Temperature Rise

Percentage of Nominal Coil Voltage (%)	Temperature Rise (K) - 20A 85°C	Temperature Rise (K) - 16A 105°C
80	45	42
90	50	48
100	55	55
110	60	62