



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

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/250VAC; 16:16A/250VAC

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 ₂		
Contact Rating	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		
Electrical Endurance	Refer to the table for the rating details		
Mechanical Endurance	1×10 ⁷		

Coil Parameter

Dash numbers	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.						
003-200	3	3.9	45	2.25	0.3	0.2	≤10	≤5
005-200	5	6.5	125	3.75	0.5			
006-200	6	7.8	180	4.50	0.6			
009-200	9	11.7	405	6.75	0.9			
012-200	12	15.6	720	9.00	1.2			
024-200	24	31.2	2880	18.0	2.4			
048-200	48	62.4	11520	36.0	4.8			
003-360	3	3.9	25	2.25	0.3	0.36	≤10	≤5
005-360	5	6.5	69.4	3.75	0.5			
006-360	6	7.8	100	4.50	0.6			
009-360	9	11.7	225	6.75	0.9			
012-360	12	15.6	400	9.00	1.2			
024-360	24	31.2	1600	18.0	2.4			
048-360	48	62.4	6400	36.0	4.8			

Characteristics

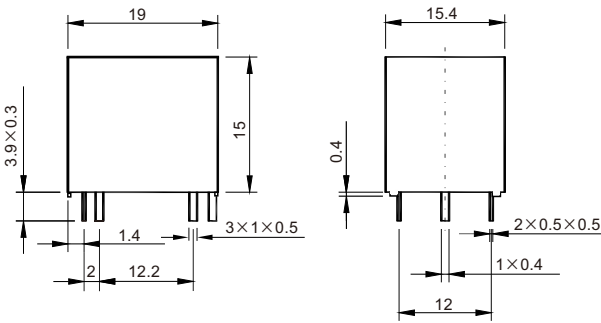
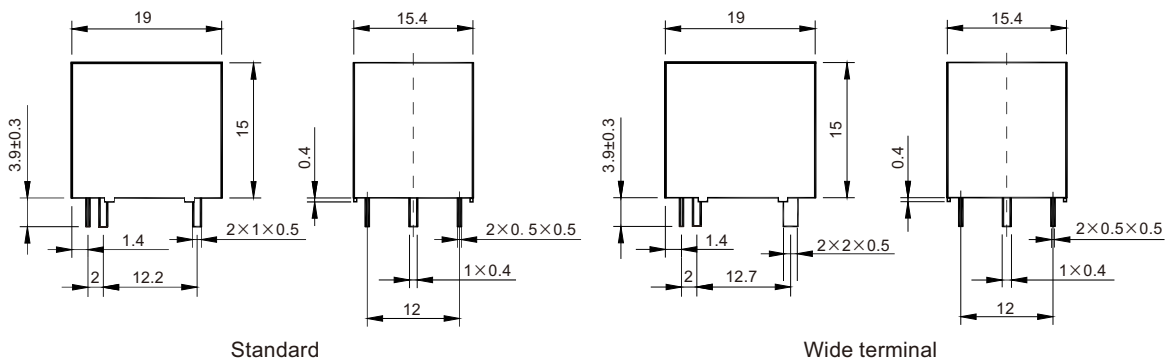
Insulation Resistance	100MΩ min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength Between Contacts Between Contact and Coil	1000VAC 1min 2500VAC 1min	Item 4.9 of IEC 61810-7
Shock Resistance	98m/s ² 11ms	Item 4.26 of IEC 61810-7
Vibration Resistance	10Hz~55Hz Double amplitude 1.5mm	Item 4.28 of 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

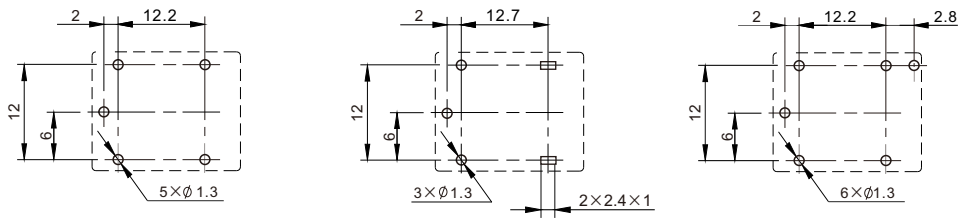
Safety approval	UL&CUR	VDE
Load	NO: 20A/250VAC 85℃, 16A/250VAC 105℃, 10A/28VDC 105℃ 1½HP 250VAC 40℃; TV-10 240VAC 40℃ NC: 12A/250VAC 105℃, 7A/28VDC 105℃	NO: 20A/250VAC 85℃ NO: 16A/250VAC 105℃

Dimensions

mm



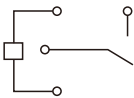
Double terminals
Dimensions



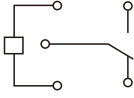
Standard Wide terminal Double terminals
Mounting (Bottom view)

Dimensions

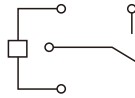
mm



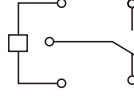
1A



1C



1A



1C

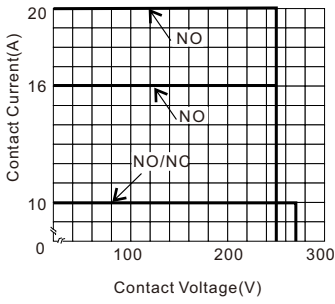
Double terminals

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.

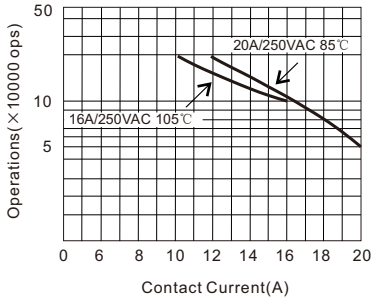
Reference Data

Contact Switching Capacity



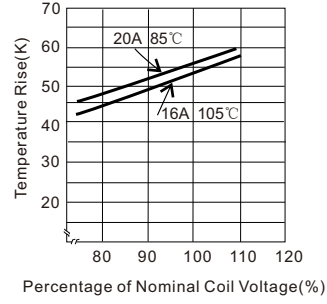
Graph showing Contact Current (A) on the Y-axis (0 to 20) versus Contact Voltage (V) on the X-axis (0 to 300). The graph displays three curves for different contact configurations: NO (top curve), NO (middle curve), and NO/NC (bottom curve).

Endurance Curve



Graph showing Operations (× 10000 ops) on the Y-axis (0 to 50) versus Contact Current (A) on the X-axis (0 to 20). The graph displays two curves for different conditions: 20A/250VAC 85°C (top curve) and 16A/250VAC 105°C (bottom curve).

Coil Temperature Rise



Graph showing Temperature Rise (K) on the Y-axis (20 to 70) versus Percentage of Nominal Coil Voltage (%) on the X-axis (80 to 120). The graph displays two curves for different conditions: 20A 85°C (top curve) and 16A 105°C (bottom curve).