

# NT78



15.7×12.3×14

UL E160644 CQC 03001003504

Patent No.: 99206529.1  
200520013192.6

Features
<ul style="list-style-type: none"> <li>Small size, lightweight.</li> <li>Low coil consumption.</li> <li>PC board mounting.</li> <li>Suitable for household electrical appliances, automation system, electronic equipment, instrument, meter, telecommunication facilities and remote control facilities.</li> </ul>

Ordering Information
<b>NT78</b> <u>C</u> <u>S</u> <u>10</u> <u>DC12V</u> <u>0.6</u> 1 2 3 4 5 6
1 Part number: NT78 2 Contact arrangement: A:1A; B:1B; C:1C; U:1U 3 Enclosure: S: Sealed type; NIL: Dust cover
4 Contact rating: 5A,10A/14VDC; 10A/120VAC; 5A/250VAC 5 Coil rated voltage(V): DC:6,9,12,24 6 Coil power consumption: 0.6:0.6W; 0.8:0.8W

Contact Data	
Contact Arrangement	1A (SPSTNO) 1B (SPSTNC) 1C (SPDT(B-M)) 1U (SPSTNODM)
Contact Material	AgCdO AgSnO <sub>2</sub>
Contact Rating (resistive)	NO:20A/14VDC 10A/120VAC,5A/250VAC NC:15A/14VDC,10A/120VAC,5A/250VAC IU:2×10A/14VDC Motor load : 1/2HP 125VAC Lamp load :TV-5
Max. Switching Power	280W 1250VA
Max. Switching Voltage	42VDC 380VAC Max. Switching Current:20A
Contact Resistance or Voltage drop	≤50mΩ Item 4.12 of IEC 61810-7
Operational life	Electrical 10 <sup>5</sup> Item 4.30 of IEC 61810-7
	Mechanical 10 <sup>7</sup> Item 4.31 of IEC 61810-7

Coil Parameter								
Dash numbers	Coil voltage VDC		Coil resistance Ω ±10%	Pickup voltage VDC(max) (80% of rated voltage)	Release voltage VDC(min) (5% of rated voltage)	Coil power consumption W	Operate Time ms	Release Time ms
	Rated	Max.						
006-600	6	6.6	60	4.8	0.30	0.6	≤10	≤5
009-600	9	9.9	135	7.2	0.45			
012-600	12	13.2	240	9.6	0.60			
024-600	24	26.4	960	19.2	1.20			
006-800	6	6.6	45	4.8	0.30	0.8	≤10	≤5
009-800	9	9.9	102	7.2	0.45			
012-800	12	13.2	180	9.6	0.60			
024-800	24	26.4	720	19.2	1.20			

**CAUTION:** 1.The use of any coil voltage less than the rated coil voltage 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	100MΩ min (at 500VDC)	Item 7 of IEC 60255-5
Dielectric Strength	50Hz 500V	Item 6 of IEC60255-5
Between contacts	50Hz 500V	Item 6 of IEC60255-5
Between contact and coil		
Shock resistance	100m/s <sup>2</sup> 11ms	IEC68-2-27 Test Ea
Vibration resistance	10~55Hz double amplitude 1.5mm	IEC68-2-6 Test Fc
Terminals strength	10N	IEC68-2-21 Test Ua1
Solderability	235°C ±2°C 3±0.5s	IEC68-2-20 Test Ta method 1
Ambient Temperature	-40~85°C	
Relative Humidity	85% (at 20°C)	IEC68-2-3 Test Ca
Mass	6g	

Safety approval	UL&CUR	CQC
Load	NO: 20A/14VDC 10A/120VAC NC: 10A/14VDC 1/2HP 125VAC TV-5	5A/250VAC

### Dimensions

Dimensions: 15.7mm (Max. 0.618max), 12.3mm (Max. 0.484max), 3.5mm, 0.4mm, 0.016mm, 0.138mm, 1.45mm, 0.057mm, 5-1.1x0.4mm, 0.551max, 0.043x0.016mm, 5-0.197x0.0197mm, 5mm, 0.098mm, 10.2mm, 0.401mm, 5-0.14mm, 0.055mm.

### Mounting (Bottom view)

### Wiring diagram (Bottom view)

NOTES 1).Dimensions are in millimeters.  
2).Inch equivalents are given for general information only.

