



32.5 × 27.6 × 20.5

NT90 (50A)

c us E174722 R50126373

Features
<ul style="list-style-type: none"> 50A contact switching capability. The temperature rise is <80K under 70°C. Terminal width: 1.8mm and 3.3mm available. PC board mounting available. PV power, UPS power, charger, electric car, electric equipment, air conditioner, etc.

Ordering Information								
NT90	R	50	A	S	24	S	F	.9
1	2	3	4	5	6	7	8	9
1 Part number: NT90					6 Coil rated voltage(V): DC:5,6,9,12,15,18,24,48 AC:24,110,220,240,277			
2 Terminal: R:without Pin 6; Nil:with Pin 6; W:3.3mm					7 Contact material: S: AgSnO ₂			
3 Load: 50:50A					8 Resist heat class: F:155°C			
4 Contact arrangement: A:1A; C:1C					9 Coil Power(W): .9:0.9W; NIL:1.5W,2.7VA			
5 Enclosure: S: Wash tight ; E: Flux proof								

1) Wash tight plastic case with knock off nib.

Contact Data			
Contact Arrangement	1A(SPSTNO) 1C(SPDT(B-M))		
Contact Material	AgSnO ₂		
Contact Rating (Resistive)	NO:50A/240VAC; NC:35A/240VAC; Motor Load: 2HP 250VAC; TV-8		
Max. Switching Power	12000VA		
Max. Switching Voltage	280VAC	Max. Switching Current: 50A	
Contact Resistance	≤ 30mΩ	Item 4.12 of IEC 61810-7	
Operation Life	Electrical	3 × 10 ⁴ (50A/277VAC, Resistive load, 40°C, 1s on 9s off) 6 × 10 ³ (50A/277VAC, Resistive load, 85°C, 1s on 9s off)	Item 4.30 of IEC 61810-7
	Mechanical	1 × 10 ⁷	Item 4.31 of IEC 61810-7

2) Remove vent nib after soldering and cleaning.

Coil Power	DC	AC
	0.9W, 1.5W	2.7VA

Coil Parameter								
DC Coil Parameter								
Dash numbers	Rated voltage VDC		Coil resistance Ω ± 10%	Pick-up voltage V(max) (75% of rated voltage)	Drop-out voltage V(min) (10% of rated voltage)	Coil power W	Operate time ms	Release time ms
	Rated	Max						
005-900	5	6.5	28	3.75	0.5	0.9	≤ 15	≤ 10
006-900	6	7.8	40	4.50	0.6			
009-900	9	11.7	90	6.75	0.9			
012-900	12	15.6	160	9.00	1.2			
015-900	15	19.5	250	10.25	1.5			
018-900	18	23.4	360	13.50	1.8			
024-900	24	31.2	640	18.00	2.4			
048-900	48	62.4	2560	36.00	4.8			
005-1500	5	6.5	16.7	3.75	0.5	1.5	≤ 15	≤ 10
006-1500	6	7.8	24	4.50	0.6			
009-1500	9	11.7	54	6.75	0.9			
012-1500	12	15.6	96	9.00	1.2			
015-1500	15	19.5	150	10.25	1.5			
018-1500	18	23.4	216	13.50	1.8			
024-1500	24	31.2	384	18.00	2.4			
048-1500	48	62.4	1536	36.00	4.8			

NT90(50A)

Coil Parameter

AC Coil Parameter									
Dash numbers	Coil voltage VDC		Rated current mA	Coil resistance $\Omega \pm 10\%$	Pick-up voltage V(max) (75%of rated voltage)	Drop-out voltage V(min) (10%of rated voltage)	Coil power VA	Operate time ms	Release time ms
	Rated	Max							
024AC-2700	24	28.8	112.5	96	18	7.2	2.7VA	—	—
110AC-2700	110	132	22.5	2320	82.5	33			
220AC-2700	220	264	12.3	9500	165	66			
240AC-2700	240	288	11.3	11600	180	72			
277AC-2700	277	332	9.7	15600	208	83			

Characteristics

Insulation Resistance	1000M Ω min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength		
Between Contacts	50Hz 1500V	Item 4.9 of IEC 61810-7
Between Contact and Coil	50Hz 2500V 4000V(without pin 6)*	Item 4.9 of IEC 61810-7
Shock Resistance	Functional: 98m/s ² 11ms Destructive: 980m/s ² 11ms	Item 4.26 of IEC 61810-7 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	-55 $^{\circ}$ C~85 $^{\circ}$ C	
Relative Humidity	5% to 85%	Item 4.16 of IEC 61810-7
Mass	27g	Item 4.7 of IEC 61810-7

* Please contact with the sales personnel for the 4000VAC version.

Safety Approvals

Safety approval	UL&CUR	TüV
Load	NO: 50A/240VAC,277VAC 85 $^{\circ}$ C NC: 35A/240VAC,277VAC 40 $^{\circ}$ C	NO:50A/240VAC 40 $^{\circ}$ C NC:35A/240VAC 40 $^{\circ}$ C

Dimensions

