



32.5 × 27.6 × 20.5

NT90W

 US E174722

Features

- Applicable to inverter used for photovoltaic power generation systems.
- Ideal for UPS.
- Contact gap >1.8mm.
- 50A switching capability.
- Product in accordance to IEC 60335 available.
- Ideal for charger.

Ordering Information

NT90W **50** **A** **S** **12** **S** **S** **L** **W**

1 2 3 4 5 6 7 8 9

1 Part number: NT90W
 2 Load: 50: 50A
 3 Contact arrangement: A:1A
 4 Enclosure: S: Wash tight relay; E: Flux proof relay

5 Coil rated voltage(V): DC:12,24
 6 Contact material: S: AgSnO₂
 7 Contact gap: S:1.8mm; Nil: Standard gap
 8 Coil power: Nil:2.25W; L:1.5W
 9 W:335 compliant; Nil:Standard

Contact Data

Contact Power	1.5W	2.25W
Contact Arrangement	1A (SPSTNO)	1A (SPSTNO)
Contact Material	AgSnO ₂	AgSnO ₂
Contact Rating (Resistive)	50A/277VAC	50A/277VAC 35A/277VAC(1.8mm) 40A/30VDC
Max. Switching Power	13850VA	1200W 13850VA
Max. Switching Voltage	277VAC	30VDC 277VAC
Max. Switching Current	50A	
Contact Resistance	≤ 30mΩ	Item 4.12 of IEC 61810-7
Operation Life	Electrical	1 × 10 ⁵ (35A/277VAC 105°C) 1 × 10 ⁴ (50A/277VAC 85°C) 2 × 10 ⁴ (50A/277VAC 40°C) 6 × 10 ⁴ (35A/240VAC 40°C)
	Mechanical	1 × 10 ⁶

Coil Parameter

DC Coil Parameter								
Dash numbers	Rated voltage V		Coil resistance Ω ±10%	Pick up voltage V(max) (75% of rated voltage)	Release voltage V(min) (10% of rated voltage)	Coil power W	Operate Time ms	Release Time ms
	Rated	Max						
012-1500	12	15.6	96	9.00	1.2	1.5	≤15	≤10
024-1500	24	31.2	384	18.00	2.4			
012-2250	12	15.6	64	9.00	1.2	2.25	≤15	≤10
024-2250	24	31.2	256	18.00	2.4			

After the energization time of 100 ms with rated voltage the coil requires a reduction of the coil voltage to 40% • • 50%.

Operation condition

Insulation Resistance	1000M Ω min (at 500VDC)	Item 4.11 of IEC 61810-7
Dielectric Strength		
Between contacts	50Hz 1500V 2500V(S gap)	Item 4.9 of IEC 61810-7
Between contact and coil	50Hz 2500V 4000V*	Item 4.9 of IEC 61810-7
Shock resistance	Functional	98m/s ²
	Destructive	980m/s ²
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
Surge Voltage (Between Coil & Contacts)	6kV	Item 4.10 of IEC 61810-7
Ambient Temperature	-45 $^{\circ}$ C~85 $^{\circ}$ C	
Relative Humidity	85% (at 40 $^{\circ}$ C)	Item 4.16 of IEC 61810-7
Mass	27g	Item 4.7 of IEC 61810-7

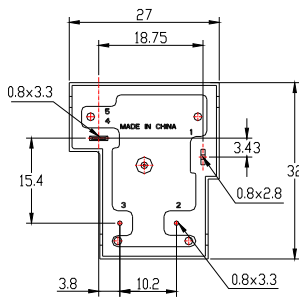
* Please contact the sales representative if 4000V is required.

Safety approvals

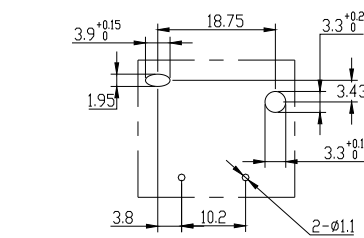
Safety approval	UL&CUR
Load	50A/277VAC 40 $^{\circ}$ C 35A/277VAC 85 $^{\circ}$ C

Dimensions

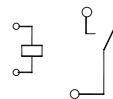
mm



Dimensions



Mounting (Bottom view)



1A

Wiring diagram(Bottom view)

CAUTION: In case of no tolerance shown in outline dimension: outline dimension ≤ 1 mm, tolerance should be ± 0.2 mm; outline dimension > 1 mm and ≤ 5 mm, tolerance should be ± 0.3 mm; outline dimension > 5 mm, tolerance should be ± 0.4 mm.

Reference Data

