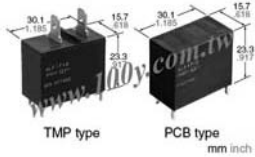




Relays & Solenoids

NAIS_PCB Relays

Detailed product specifications are available on: us.100y.com.tw



FEATURES

1. Ideal for compressor and inverter loads

- 1) Compressor load: 20A 250V AC
- 2) Inverter load: 20A 100V AC, 10A 200V AC

2. High insulation resistance

- Creepage distance and clearances between contact and coil; Creepage Min. 9.5mm .374inch/ Clearance Min. 8mm .315inch
- Surge withstand voltage: Min. 10,000V

3. "PCB" and "TMP" types available

4. Conforms to the various safety standards: UL/CSA, TÜV, VDE approved

Dimension:	Tolerance
Max. 1mm .039 inch:	±0.1 ±.004
1 to 3mm .039 to .118 inch:	±0.2 ±.008
Min. 3mm .118 inch:	±0.3 ±.012

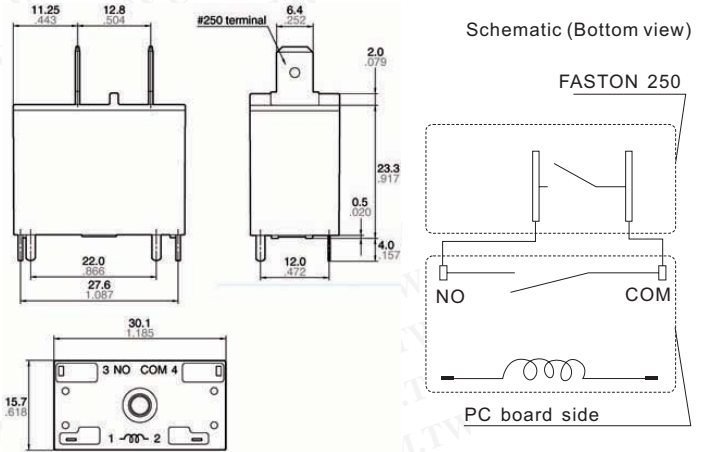
TYPICAL APPLICATIONS

- Air conditioner
- Refrigerators
- OA equipment

SPECIFICATIONS

Characteristics

Max. operating speed (at rated load)	20 cpm	
Initial insulation resistance*1	Min. 1,000 MΩ (at 500 V DC)	
Initial breakdown voltage**	Between open contacts	1,000 Vrms for 1 min.
	Between contacts and coil	5,000 Vrms for 1 min.
Surge voltage between contact and coil**3	Min. 10,000 V	
Operate time**4 (at nominal voltage)	Max. 20 ms (at 20°C 68°F)	
Release time (without diode)**4 (at nominal voltage)	Max. 15 ms (at 20°C 68°F)	
Temperature rise (at nominal voltage)	Max. 45°C (resistance method, contact current 20A, rated coil voltage, 60°C 140°F)	
Shock resistance	Functional**5	Min. 100 m/s ² {10 G}
	Destructive**6	Min. 1,000 m/s ² {100 G}
Vibration resistance	Functional**7	10 to 55Hz at double amplitude of 1.5mm
	Destructive	10 to 55Hz at double amplitude of 1.5mm
Conditions for operation, transport and storage**8 (Not freezing and condensing at low temperature)	Ambient temp.	-40°C to +60°C -40°F to +140°F
	Humidity	5 to 85% R.H.
Unit weight	Approx. 23 g .81 oz	



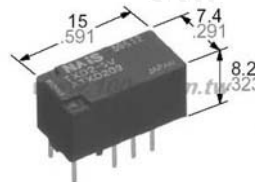
Contact

Arrangement	1 Form A	
Initial contact resistance, max. (By voltage drop 6 V DC 1 A)	100 mΩ	
Contact material	AgSnO ₂ type	
Rating (resistive load)	Nominal switching capacity	20 A 250V AC
	Max. switching power	6,250 VA
	Max. switching voltage	250V AC
	Max. switching current	25 A
Expected life (min. Operations)	Mechanical (at 180 cpm)	2 × 10 ⁵
	Electrical (at 20 cpm) (Resistive load)	10 ⁵

Coil

Nominal operating power	900 mW
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Part No.	Product No.	Manufacturer	Description	Coil Voltage	Type
46957	ALF1T12	NAIS	20A POWER RELAY FOR HOME APPLIANCES	12V	LF



FEATURES

1. Mounting space of the 3A class minimum

- 17.0(L) × 7.0(W) × 16.0(H) mm
- .670(L) × .276(W) × .630(H) inch
- At 84% that of its predecessor (comparison made with our LD Relay), the low foot print saves space.

2. Low operating power

Compact size, nominal operating power as low as 200mW.

3. Perfect for small load switching of home appliances

- 105 switching operations possible with a 3A 250V AC resistive load.
- Mechanical life: 2 × 10⁶ (at 180 cpm)

4. High insulation resistance

Surge withstand voltage between contact and coil: 6,000 V or more.

5. Conforms to the various safety standards C-UL, VDE approved.

TYPICAL APPLICATIONS

- Air conditioner
- Refrigerator
- Hot water units
- Fan heaters
- Microwave ovens

SPECIFICATIONS

Coil

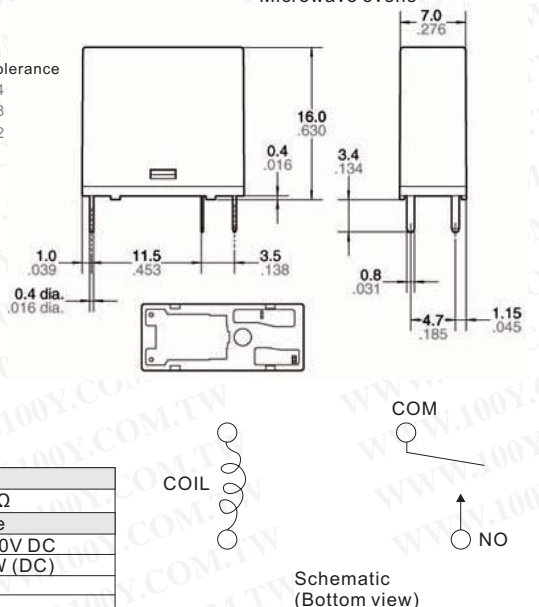
Nominal operating power	200 mW
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Characteristics

Max. operating speed	20 cpm (at rated load)	
Initial insulation resistance*1	Min. 1,000 MΩ (at 500 V DC)	
Initial **2 breakdown voltage	Between open contacts	750 Vrms for 1 min.
	Between contact and coil	3,000 Vrms for 1 min.
Initial surge voltage between contact and coil**3	Min. 6,000 V	
Operate time**4 (at nominal voltage)	Max. 10ms (at 20°C 68°F)	
Release time (with diode)**4 (at nominal voltage)	Max. 10ms (at 20°C 68°F)	
Temperature rise (at 70°C)	Max. 45°C with nominal coil voltage and at 5A contact carrying current (resistance method)	
Shock resistance	Functional**5	Min. 100 m/s ² {approx. 10 G}
	Destructive**6	Min. 1,000 m/s ² {approx. 100 G}
Vibration resistance	Functional**7	10 to 55Hz at double amplitude of 1.5mm
	Destructive	10 to 55Hz at double amplitude of 1.5mm
Unit weight	Approx. 4 g .14 oz	

Contact

Arrangement	1 Form A	
Initial contact resistance, max. (By voltage drop 6 V DC 1 A)	Max. 100 mΩ	
Contact material	AgSnO ₂ type	
Rating (resistive load)	Nominal switching capacity	3A 250V AC 3A 30V DC
	Max. switching power	831VA (AC), 90W (DC)
	Max. switching voltage	277V AC
	Max. switching current	5A
	Min. Switching capacity**1	100 mA, 5 V DC
Expected life (min. Operations)	Mechanical (at 180 cpm)	2 × 10 ⁵
	Electrical (at 20 cpm) (resistive load)	5A 250V AC: 5 × 10 ⁴ 3A 250V AC: 10 ⁵



Part No.	Product No.	Manufacturer	Description	Coil Voltage	Type
46962	ALJ112W	NAIS	3A SLIM POWER RELAY	12V	LJ



T E L : Taiwan: 886-3-5753170
 F A X : Taiwan: 886-3-5753172
 E-mail : Taiwan: us_sale@100y.com.tw

Shenzhen: 86-755-83298787
 Shenzhen: 86-755-83640655
 Shenzhen: 100y@163.com

Shanghai: 86-21-54151736
 Shanghai: 86-21-64605107
 Shanghai: 100y-1@163.com