



Relays & Solenoids

NAIS_PCB Relays

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



FEATURES

- 40 A rating at 85°C 185°F
- ISO type terminals
- High shock resistance for drop test requirements (2 meters 6.6 feet)
- Low temperature rise — all current carrying material is copper
- Plug-in and PC board type

SPECIFICATIONS

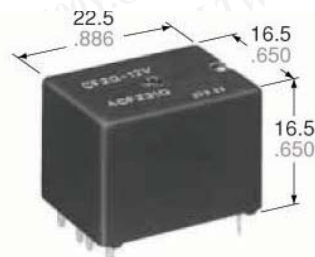
Contact
Standard type (24V coil voltage)

Arrangement	1 Form A	
Rating	Nominal switching capacity	20 A 28V DC
	Max. carry current (Initial) (at 85°C 185°F)	20 A 28V DC

Part No.	Product No.	Manufacturer	Description	Coil Voltage	Type
47131	CB1a-P-24V	NAIS	HIGH POWER AUTOMOTIVE RELAY	24V	CB

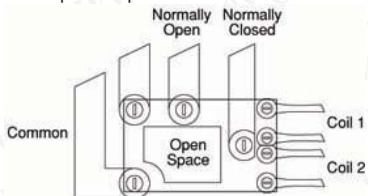
Characteristics

Max. operating speed (at rated load)	15 cpm	
Initial insulation resistance ^{*2}	Min. 20 MΩ (at 500 V DC)	
Initial breakdown voltage ^{*3}	Between open contacts	500 Vrms for 1 min.
	Between contacts and coil	500 Vrms for 1 min.
Operate time ^{*4} (at nominal voltage)	Max. 15 ms (Initial)	
Release time (without diode) ^{*4} (at nominal voltage)	Max. 15 ms (Initial)	
Shock resistance	Functional	Min. 200 m/s ² {20 G}
	Destructive	Min. 1,000 m/s ² {100 G}
Vibration resistance	Functional	10 Hz to 500 Hz, Min. 44.1 m/s ² {4.5G}
	Functional ^{*5}	10 Hz to 2,000 Hz, Min. 44.1 m/s ² {4.5G}
Mass	Approx. 33 g 1.16 oz	



FEATURES

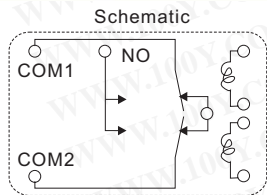
- 7 Amp Steady/30 Amp Inrush current capability
- Simple footprint enables ease of PC board layout



SPECIFICATIONS

Contact

Arrangement	1 Form C×2 (H bridge)	
Contact material	Aq alloy (Cadmium free)	
Initial contact voltage drop	Max. 0.2 V (at 20 A)	
Rating	Nominal switching capacity	N.O.: 20A 14 V DC N.C.: 10A 14 V DC
	Max. carrying current	30 A (2 minutes), 20 A (1 hour) (coil applied voltage: 12 V, at 20°C) 25 A (2 minutes), 15 A (1 hour) (coil applied voltage: 12 V, at 85°C)
	Min. switching capacity ^{*1}	1 A 12 V DC



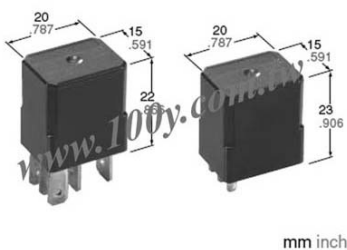
Characteristics

Max. operating speed (at rated load)	120 cpm	
Initial insulation resistance ^{*1}	Min. 100 MΩ (at 500 V DC)	
Initial breakdown voltage ^{*2}	Between open contacts	1,000 Vrms for 1 min.
	Between contacts and coil	1,000 Vrms for 1 min.
Shock resistance	Functional ^{*4}	Min. 100 m/s ² {10 G}
	Destructive ^{*5}	Min. 1,000 m/s ² {100 G}
Vibration resistance	Functional ^{*6}	Approx. 44.1 m/s ² {4.5 G}, 10 Hz to 100 Hz
	Destructive ^{*7}	Approx. 44.1 m/s ² {4.5 G}, 10 Hz to 500 Hz

TYPICAL APPLICATIONS

- Power windows
- Auto door lock
- Electrically powered sunroof
- Electrically powered mirrors
- Powered seats
- Lift gates
- Slide door closers, etc. (for DC motor forward/reverse control circuits)

Part No.	Product No.	Manufacturer	Description	Coil Voltage	Type
47124	CF2-12V	NAIS	TWIN POWER AUTOMOTIVE RELAY	12V	CF

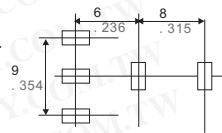


FEATURES

- Micro-ISO type terminals
- Small size: 20 mm(L)×15 mm(W)×22 mm(H)
.787 inch(L)×.591 inch(L)×.866 inch(H)
- Wide line-up
PC board and Plug-in type, Resistor and diode inside type. 24V DC type is also available.
- Compact and high-capacity 35A load switching
N.O.: 35A 14V DC, N.C.: 20A 14V DC (Sealed type)
Min. 5 × 10⁵ N.O.: 35A 14V DC, N.C.: 20A 14V DC (Flux-resistant type)
Min. 10⁵ *12V DC type

- Uses international standard ISO terminal arrangement.

The ISO international standard terminal arrangement is used.



TYPICAL APPLICATIONS

- Fan motor
- Heater
- Head lamp
- Air Compressor
- EPS
- ABS
- Blower fan
- Defogger, etc.

SPECIFICATIONS

Type	24 V coil voltage	
Contact material	Ag alloy (Cadmium free)	
Initial contact resistance (Initial) (By voltage drop 6 V DC 1 A)	Typ. 2 mΩ	
Rating (resistive load)	Nominal switching capacity	N.O.: 15 A 28 V DC N.C.: 8 A 28 V DC
	Max. carrying current	N.O.: 15 A (28 V DC, at 85°C 185°F) N.C.: 8 A (28 V DC, at 85°C 185°F)
	Min. switching capacity ^{*1}	1 A 24 V DC

Characteristics

Type	24V coil type	
Max. operating speed (at nominal switching capacity)	15 cpm	
Initial insulation resistance ^{*2}	Min. 20 MΩ (at 500 V DC)	
Shock resistance	Functional ^{*5}	Min. 200 m/s ² {20G}
	Destructive ^{*6}	Min. 1,000m/s ² {100G}
Vibration resistance	Functional	10 Hz to 500 Hz, Min. 44.1 m/s ² {4.5 G}
	Destructive ^{*7}	10 Hz to 2,000 Hz, Min. 44.1 m/s ² {4.5 G}
Mass	Approx. 20g .71oz	

Part No.	Product No.	Manufacturer	Description	Coil Voltage	Type
47129	CM1F-P-24V	NAIS	AUTOMOTIVE MICRO-ISO RELAY	24V	CM

