Figure 1

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BRN RELAY MODULE

BRN series relays are general purpose relays designed for a wide range of applications,
from power to sequence controls in various factory machines and control panels. They
are ideal for electric control panels requiring stable and reliable relays.

Features

- ISmall 4 - bit relay module
- 1C contact selection
- Built-in 4 small, high sensitivity, high voltage resistance 5A
- Relay driven LED indicator light
- The terminals are IN/OUT separated structure, so wiring is convenient
- The coil is protected by surge diode
- U type and E type industrial guide rail can be installed quickly
- DIN guide rail installation and screw installation
- CE ,ROHS

• Order sOcket separately

BRN Series Selection Guide

Part Number	*Coil Voltage*	*Configuration*	*Contact Rating*	*Dimensions (see page 4-)*	*Dimensions (see page 5)*
BRN1A024	24VDC	1/Relay socket	5A	Figure 2	Figure 3
BRN1D024	24VDC	4/MAGNETIC RELAY	5A	Figure2	Figure 3
LSN01	insulation	fittings	\	Figure5	Figure 4
LSN02	\	fittings	\	Figure5	Figure 4

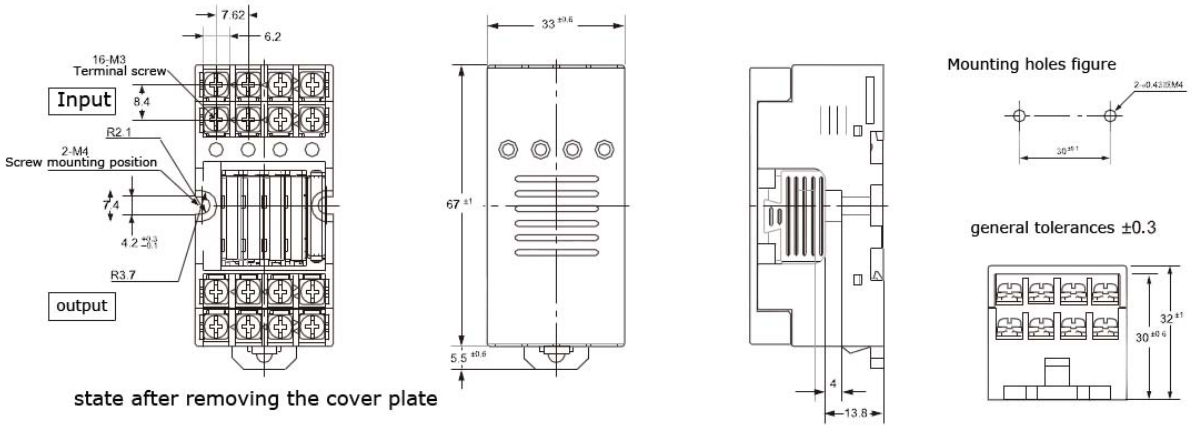
BRN Series Electromechanical Relay Specifications

BRN Series Specification Table		
Part Numbers	BRN1A024	
Contact Specifications		
Current Rating	5A	
Contact Type	4PDT	
Terminal Type	Spade Plug-In Socket	
RatedMax.Resistive Load	5A@250VAC/30VDC(4PDT)	5A@250VAC/30VDC(4PDT)
Maximum switching power	1250VA/150W	
Minimum Recommended Load	30mA @ 6VDC/1A	
Max. Switching Cap. (Resistive Load)	1000MΩ (500VDC)	
contact resistance	100m below (DC6V, 1A)	
insulation resistance	30MΩ （ 5VDC ）	
Max. Contact Rating	5A 250VAC/30VDC	
Coil Specifications		
Options	LED Indicator/Diode Protection	
	Coil (test environment 23 C)	Coil (frequency 50HZ)
Rated voltage	（ V/DC）24	
Rated current	22mA	
Power(w)	530mW	
Coil impedance（ Ω ）	530mW	
Vibration resistance	Maloperation 10-55HZ (double amplitude 1.0mm)	Durable 10-55HZ (double amplitude 1.0mm)
Impact resistance	Strength 980m/s^2	Stability 98m/s^2
General Specifications		
Surge withstand voltage	8000VAC （ 1.2/50μs ）	
Electrical durability	100000 times	
Mechanical durability	10,000,000 times	
contact material	Silver alloy	
Action voltage	80% below (ambient temperature)	
Release voltage	More than 10% (ambient temperature)	
ambient temperature	-40~70 DEG C (work); 20~85%RH	

BRN **Appearance and mounting dimensions**

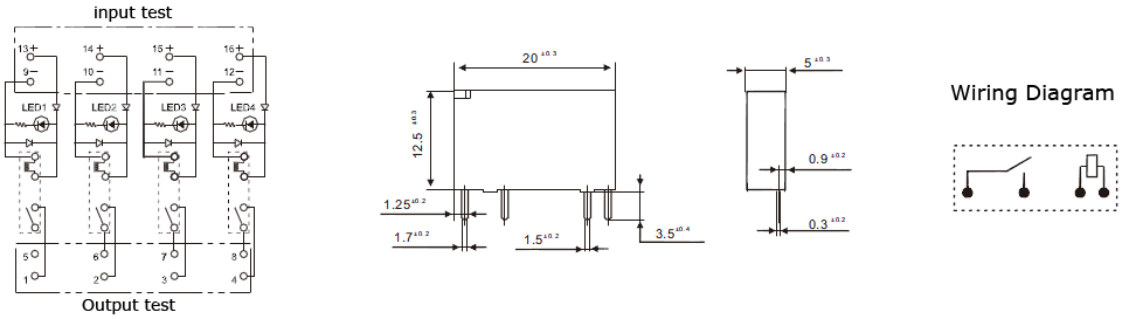
Size chart

BRN1A024



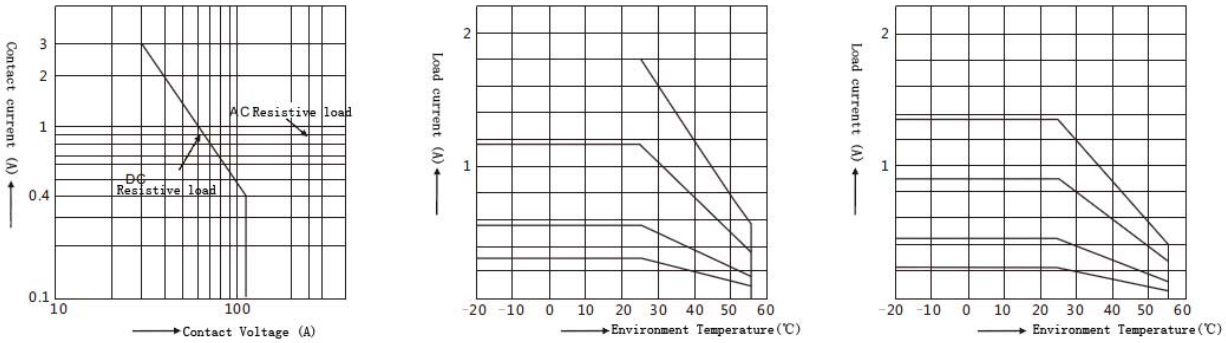
BRN Wiring Diagram

BRN Series module



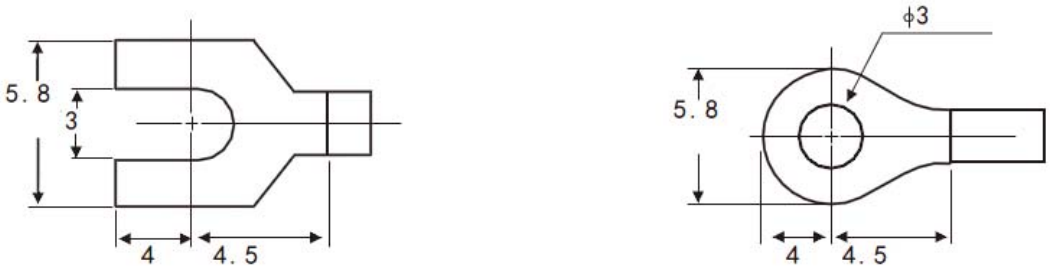
BRN Performance curve

BRN Performance curve



BRN attachment

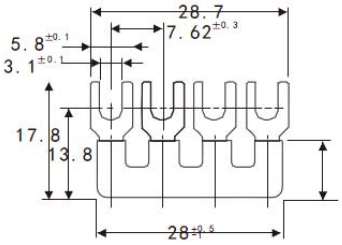
BRN attachment



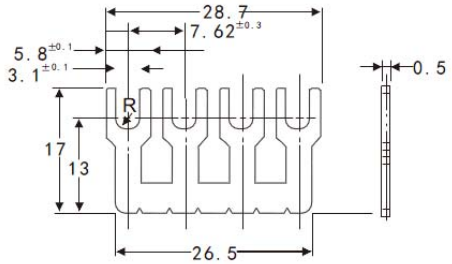
BRN Wiring diagram

BRN Series high power relay module

With insulation



NO insulation



General Tolerances ±0. 5

Installation and precautions

Matters needing attention

1. Do not carry modules (relays) other than those specified, otherwise abnormal operation of the product may be caused.

Failure of equipment or connection, etc.

2. When a single item drops, please be sure to confirm its appearance and characteristics before using it.

3. The action and load voltage of B R N relay are the values when the relay terminals are facing down.

4. The on-off life of the output relay varies with the driving circuit, load type, on-off frequency, on-off phase and surrounding environment, etc Please confirm this through the actual machine.
Especially when the load is as follows, be sure to pay attention.

(1) when the on and off phase of ac load is synchronized, contact transfer may easily lead to locking or deposition.

Installation and precautions

Matters needing attention

(2) when the load is on and off at high frequency

In the case of contact on-off, arc energy may be generated when the load generating arc is high-frequency on-off

This causes the N in the air to combine with the O to form H N O 3, which corrodes the metal.

Please take the following effective measures:

(1) access to the arc suppression circuit.

(2) reduce the on-off frequency.

(3) reduce the humidity of the surrounding environment.

5. About the use environment

(1) during installation, please try to stay away from high voltage lines, high voltage equipment, power lines, power equipment, with service

The equipment of the transmitting department such as the radio station and the equipment that can produce large fault surges.

(2) the main body is made of molding resin, so please do not attach gasoline, thinner, alcohol, etc

Machine solvent and ammonia, sodium hydroxide and other strong alkali substances such as the site or in the environment of these substances used.

(3) please do not work in places where inflammable gas and corrosive gas will be produced, or in places where there is much dust

Directly touch the droplet of the place and vibration, impact violent place for use.

6. Installation and disassembly of modules

(1) please point the terminal in the same direction as the socket base and insert the module.

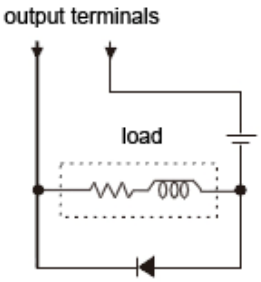
(2) the module can be easily removed by using the disassembly key.

Circuit precautions

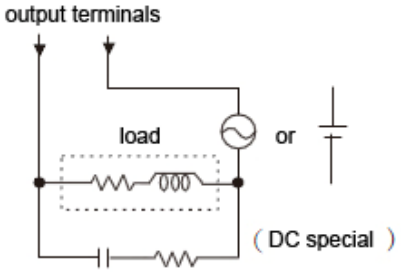
Circuit precautions

When inductive load is present, limit the peak voltage generated by the load to below the maximum load voltage.

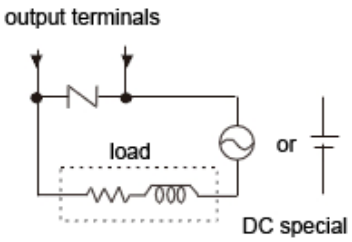
A representative circuit example is shown below



① Load access diode



② Connect the load to the RC inrush



③ Stick the piezoresistor to the output terminal

• Order sOcket separately

Product certification