可插拔继电器/ Interface Relay-pluggable

MAGNETIC RELYA
BRN1D024　　1 NO

- 5A触点切换能力 — 5A contact switching capability
- 高灵敏度，功耗公为0.12W — High sensitivity, power consumption is 0.12W.
- 采用银合金材料触点，接触非常可靠，耐久性优异 — The contacts are made of silver alloy material, ensuring highly reliable contact and excellent durability.
- 超薄、超小型 — Ultra-thin, ultra-small
- 符合CE, RoHS标准 — CE, RoHS



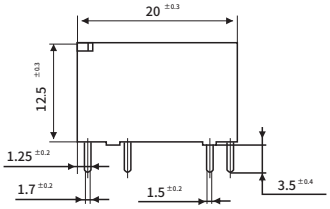
技术参数/ Technical Data

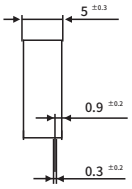
型 号 Type	BRN1D024
触点形式 Contact arrangement	1 a
触点材料 Contact material	Ag alloy
负载 Load	
-阻性 Impedance	5A 250VAC/30VDC
切换电压 Max.switching voltage	Max. 250 VAC / 30VDC
切换电流 Max.switching current	Max. 5A
容许容量 Allowable capacity	Max. 1250VA / 150W
接触电阻 Contact resistance	Min. 6VDC 1A 100mΩ 以下
电气寿命 Electrical endurance	1x10 ^{5}次
机械寿命 Mechanical endurance	1x10 ^{7}次

性能参数/ Characteristics

动作时间 Operating time(at rated voltage)	≤10ms
释放时间 Release time	≤5ms
温度范围 Ambient temperature(at rated voltage)	-40 °C~+85 °C
环境湿度 Environmental humidity	5%~85%RH
引出端形式 Termination	印制板式PCB
封装方式 Packaging method	塑封型 Plastic sealed
重量 Weight	~3g
介质耐压 Dielectric strength	
-线圈和触点间 Contacts coil	3000VAC 1Min
-断开触点间 Between open contacts	1000VAC 1Min
耐冲击 Shock resistance	
-稳定性 Functional	98m/s ^{2}
-强度 Destructive	980m/s ^{2}
耐振动 Vibration resistance	10~55Hz 双振幅: 1.5mm
绝缘电阻 Insulation resistance	≥ 1000MΩ(500VDC)

外形尺寸图/ Dimensions



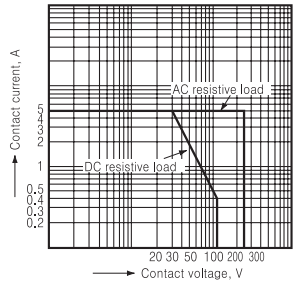


接线图/ Wiring Diagram

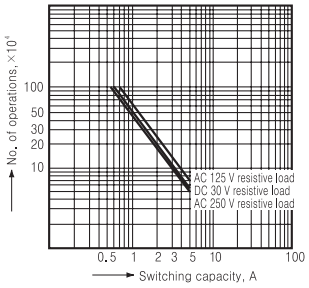


耐久性曲线/ Endurance Curve

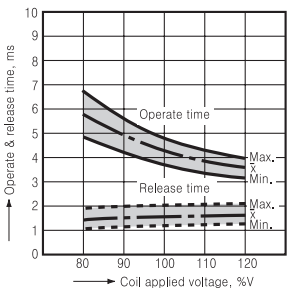
1. Max. switching capacity



2. Life Curve



3. Operate & release time



BALSEAL

BRN终端继电器模组

终端继电器模组/ RELAY MODULE

- 小型的4 位继电器模组
  Small 4-channel relay module
- 1C 触点选择
  1C Contact Selection
- 内置4 只小型、高灵敏度、耐高压5A
  Built-in 4 compact, high-sensitivity and high -withstand-voltage relays rated at 5A
- 继电器带动作LED 指示灯
  Relay with action LED indicator light
- 端子为IN/OUT 分离结构，因此配线方便
  The terminals adopt separated IN/OUT structure for easy wiring.
- 线圈部分内置有浪涌二极管保护
  Built-in surge diode protection for coil part.
- DIN 导轨安装及螺钉安装
  DIN rail mounting and screw mounting
- 符合CE, RoHS标准
  Compliant with CE and RoHS standards

型号选型

BRN	4	A	024	*
系列代码	触点数量 4 :1Form Ax4	继电器类型 A:DC专用型 D:AC,DC兼用型	控制电压 012: 12VDC 024: 24VDC	特殊要求 G：镀金触点



技术参数/ Technical Data

接触电阻	Contact resistance	30mΩ 以下（DC6V 1A）
动作电压	Operating voltage	75% 以下（常温环境）
释放电压	Release voltage	10% 以上（常温环境）
动作时间	action time	10ms 以下
释放时间	release time	5ms 以下
介质耐压	Medium pressure resistance	输入和输出之间 2 000VAC（1min）
		继电器相互之间 1 5 0 0VAC（1min）
耐浪涌电压	Surge voltage withstand	二极管（1A 400V）
绝缘电阻	Insulation resistance	1000MΩ（500VDC）
耐振动性	Vibration resistance	10-55HZ（双振幅1.0mm）
耐　久		10-55HZ（双振幅1.0mm）
耐冲击性	Impact resistance	稳定性 49m/s^2
		耐久 980m/s^2
电气耐久性	Electrical durability	AC250V 3A 3万次以上、DC30V 3A 3万次以上　AC250V 2A 10万次以上、DC30V 2A 10万次以上
机械耐久性	Mechanical durability	20,000,000 次（通断频率 180 次 / 分钟）
使用环境温度	-40~85℃	使用环境湿度　5%~85%RH

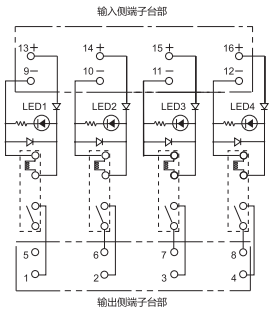
触点特性/Contact characteristics

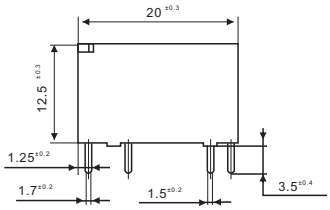
触点构成	Contact composition	常开型（1 form A）	1 form A
接点材质	Contact material	银合金	Ag alloy
触点负载	Contact load	5A 250VAC/30VDC	5A 250VAC/30VDC
最大切换电流	Maximum switching current	5A	5A
最大切换功率	Maximum switching power	1250VA/150W	3000VA/360W

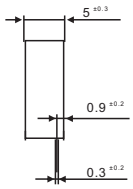
线圈特性 /Coil characteristics

（V/DC）		
额定电压/Rated Voltage	线圈阻抗/Coil Impedance	最大电压/Maximum Voltage
（V/DC）	（Ω）	（V/DC）
12	1200±15%	14.4
24	3200±15%	28.8

接线及继电器/Wiring and Relay



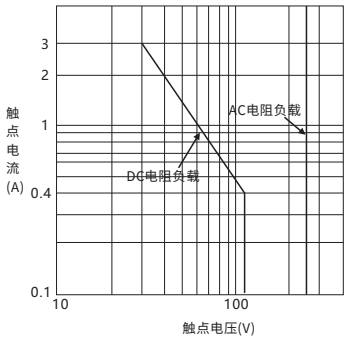


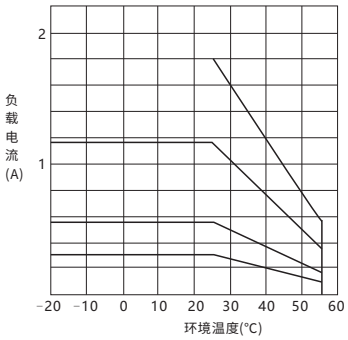


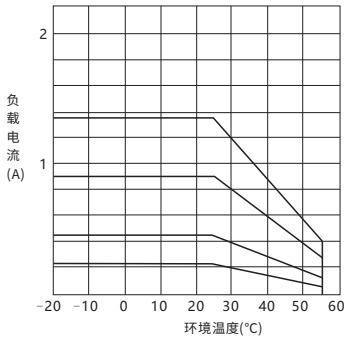


接线图(底视图)

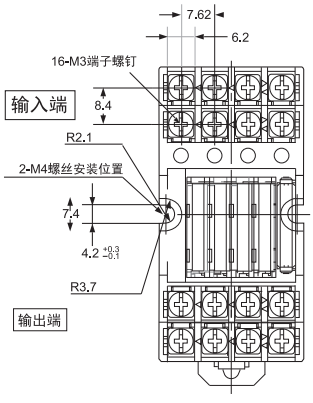
性能曲线图/ Performance curve



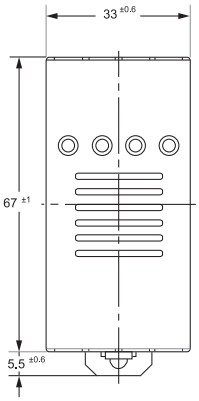


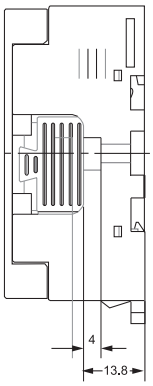


外形尺寸图/ Dimensions

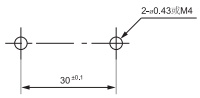


拆下盖板后的状态

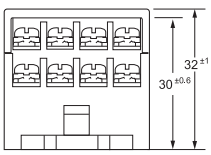




安装孔图



一般公差 ±0.3



注意事项/Notes

注意事项
*1.切勿搭载指定以外的模块(继电器)，否则可能会导致产品异常动作、故障或连接的设备故障等。
*2.单品掉落时，请务必确认外观、特性后再使用。
*3.搭载BRN继电器时的动作、负载电压是将继电器端子朝下时的值。
*4.输出继电器的通断寿命因驱动电路、负载种类、通断频率、通断相位、周围环境等而异，因此请通过实际机器进行确认。

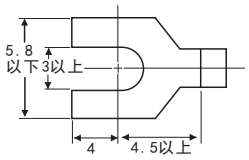
有关更多信息，请联系经销商。

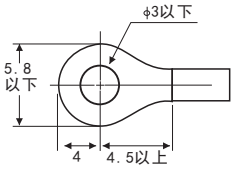
Notes
1.Do not install any modules (relays) other than the specified ones, otherwise it may cause abnormal operation, product failure or malfunction of connected equipment.
2.Inspect the appearance and performance thoroughly before use if the unit is dropped.
3.The operating specifications and load voltage for installed BRN relays are measured with relay terminals facing downward.
4.The switching lifespan of output relays varies depending on drive circuit, load type, switching frequency, switching phase and ambient conditions. Please verify it with actual equipment.

For further information, please contact your distributor.

端子台部的接线/Wiring of Terminal Block

- 建议使用压接端子台进行接线。
  It is recommended to wire with crimp terminal blocks.
- 适用电线0.25~1.65mm²
  Applicable wire: 0.25~1.65mm²
- 适用压接端子（单位mm）
  Applicable Crimp Terminals (Unit: mm)



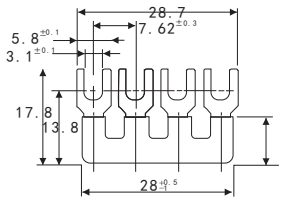


附件/Attachment

- 4点单元继电器用短路板/Shorting Bar for 4-point Unit Relay

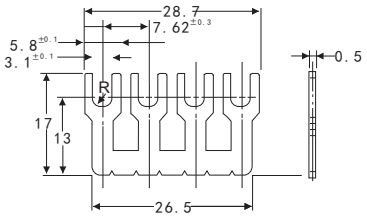
带绝缘/With insulation





无绝缘/Without insulation





一般公差±0.5