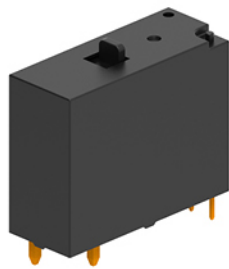


MALC

智能家居类 Smart Home

- 50A 触点切换能力
- 马达负载控制能力达 5HP
- 具备手动开关调试功能
- 灯负载控制能力高达 5000W
- 外形尺寸 L × W × H: 39 × 15 × 29.3mm
- 抗浪涌电流能力达 500A/2ms
- 环保产品 (符合 RoHS)
- 50A Switching capability
- Motor load up to 5HP
- Manual switch function available environmental
- Lamp load up to 5000W
- Max.Inrush current 500A/2ms
- Environmental friendly products (RoHS compliant)
- Outline dimensions L × W × H: 39 × 15 × 29.3mm



MALC - S - 1 - 12 - A - L1 - R - 1

产品型号 Mode	产品结构 Structure	触点组数 Contact Group	线圈电压 Coil Voltage	触点形式 Contact Form	线圈类型 Coil Type	极性特点 Polarity	系列代号 Version
	S: 塑封型 无: 防焊剂型 S: Sealed Nil: Flux Proofed	1: 1 组 1: 1 Group	05, 06, 09 12, 24, 48 VDC	A: 常开 B: 常闭 A:NO B:NC	L1: 单线圈磁保持 L2: 双线圈磁保持 L1: Single Coil Latching L2: Double Coils Latching	R: 反极性 无: 标准极性 R: Negative Polarity Nil: Positive Polarity	1: 有手动开关 无: 无手动开关 1: With Auxiliary Convexity Nil: No Auxiliary Convexity

注意: A 表示继电器出厂时触点处于断开状态; B 表示继电器出厂时触点处于闭合状态。

Note: A means that relay is on the "reset" status when delivery; B means that relay is on the "set" status when delivery.

触点参数 Contact Parameters

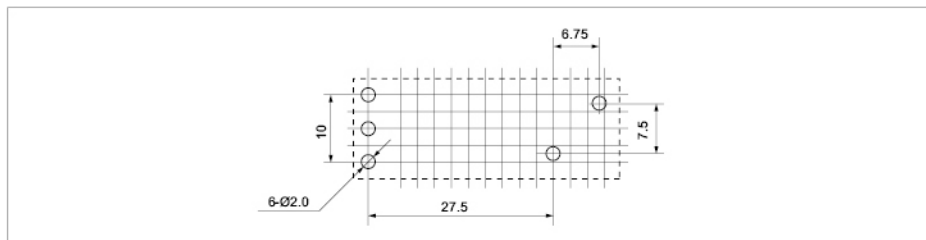
触点形式 Contact Arrangement	1A, 1B
触点材料 Contact Material	银合金 Silver Alloy
接触电阻 (初始) Contact Resistance (Initial)	≤20mΩ (1A 24VDC)
触点负载 (阻性) Contact Rating (Res. load)	50A 250VAC
最大切换电流 Max.Switching Current	50A
最大切换电压 Max.Switching Voltage	277VAC
最大切换功率 Max.Switching Power	13850VA
电气寿命 (阻性负载) Electrical Life (Resistive load)	50A 277VAC, 1 × 10 ⁵ 次 OPS 5000W 240VAC, 3 × 10 ⁴ 次 OPS (白炽灯 Incandescent Lamp) 16A 277VAC, 6 × 10 ³ 次 OPS (电子镇流器 Electronic ballast) 5HP 277 VAC, 3 × 10 ⁴ 次 OPS (马达负载 Motor)
机械寿命 Mechanical Life	1 × 10 ⁵ 次 OPS

性能参数 Characteristics

绝缘电阻 Insulation Resistance	1000MΩ (500VDC)	
介质耐压 Dielectric Strength	触点与线圈间 Between Coil & Contacts: 4000VAC 1min 断开触点间 Between Open Contacts: 1500VAC 1min	
动作时间 Set Time	≤15ms	
复归时间 Reset Time	≤15ms	
环境温度 Ambient Temperature	-40℃ ~+85℃	
振动 Vibration	10Hz~500Hz, 49m/s ² (5G)	
冲击 Shock	稳定性 Functional	98m/s ² (10G)
	强度 Destructive	980m/s ² (100G)
引出端方式 Terminal Form	印刷电路板引出端 PCB	
封装形式 Construction	防焊剂型 Flux Proofed、塑封型 Sealed	
重量 Unit Weight	约 Approx.32g	

安装孔尺寸(底视图) PCB Layout (Bottom View)

单位 Unit: mm



- 备注: (1) 产品部分外形尺寸未注尺寸公差, 当外形尺寸 $\leq 1\text{mm}$, 公差为 $\pm 0.2\text{mm}$;
 当外形尺寸在 $1\sim 5\text{mm}$ 之间时, 公差为 $\pm 0.3\text{mm}$; 当外形尺寸 $> 5\text{mm}$ 时, 公差为 $\pm 0.4\text{mm}$;
 (2) 安装孔尺寸中未注尺寸公差均为 $\pm 0.1\text{mm}$ 。

REMARK:

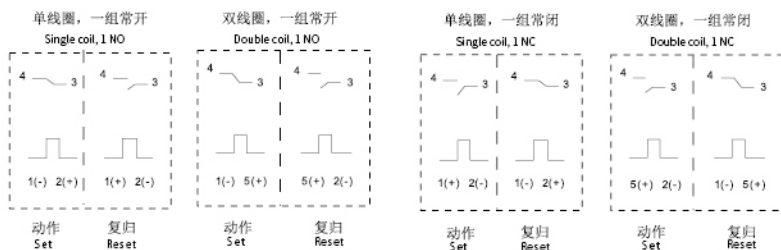
- (1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$, tolerance should be $\pm 0.4\text{mm}$;
 (2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

接线图 Wiring Diagram

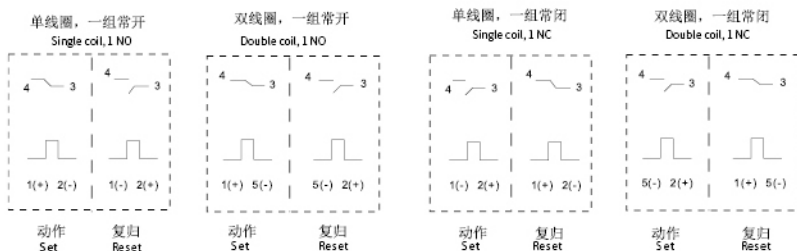
线圈接线图 Coil wiring diagram



标准极性 Positive Polarity



反极性 Negative Polarity



注意事项：

- 1、磁保持继电器出厂状态为动作或复归状态，但因运输或继电器安装时受到冲击等因素的影响，可能会改变状态，因而使用时（电源接入时）请根据需要重新将其设置为复归状态或动作状态；
- 2、为了确保磁保持继电器动作或复归，施加到线圈上的激励电压须达到额定电压，脉冲宽度须大于动作或复归时间的5倍；不要同时向动作线圈和复归线圈施加电压；不要长时间（大于1分钟）向线圈施加电压；
- 3、不带软铜绞线的磁保持继电器负载引出脚不能焊锡，不能随意扳动。
- 4、继电器通常为防尘罩结构，外接线按照客户特殊要求定制，所以推荐此产品的储存时间小于6个月，并注意仓储环境；同时为保证产品接触可靠性，在客户没有特别申明的情况下，我司将控制继电器触点为闭合状态。

NOTICE

1. Relay is on the "reset" or "set" status when being released from stock, with the consideration of shock risen from transit and relay mounting, relay would be changed to "reset" or "set" status, therefore, when application (connecting the power supply), please reset the relay to "reset" or "set" status on request.
2. In order to maintain "reset" or "set" status, energized voltage to coil should reach the rated voltage, impulse width should be 5 times more than "reset" or "set" time. Do not energize voltage to "reset" coil and "set" coil simultaneously. And also long energized time (more than 1min) should be avoided.
3. The terminals of relay without twisted copper wire can not be tin-soldered, can not be moved willfully, more over two terminals can't be fixed at the same time.
4. Relays used for metering measuring applications are usually made with dust proof structure, while most relays could be made specially per customer's specific requirements. No longer than 6 months' storage time is recommended for this kind of relay, and please pay attention to the storage environment. To ensure contact reliability, we will keep contact status be closed when delivery if no special required by customer.

