

ML603



- 外形尺寸 L40 × W18.5 × H42.6mm
- 双稳态磁保持继电器
- 100A 负载电流
- 体积小抗短路性能强
- Outline dimensions L40 × W18.5 × H42.6mm.
- Bistable magnetic holding relay.
- 100A load current
- Small size and strong short-circuit resistance

ML603	1	12	A	-	L1	R	XXX
产品型号 Model	触点组数 Contact Groups	线圈电压 Coil Voltage	触点形式 Contact Form		线圈类型 Coil Type	极性特点 Polarity Characteristic	特性号 Special Code
	1: 1组 Group	06:6VDC 09:9VDC 12:12VDC 24: 24VDC	A: 常开 NO B: 常闭 NC		L1: 单线圈 Single Coil Latching L2: 双线圈 Double Coils Latching	R: 反极性 Negative Polarity (如接线图所示) 无: 标准极性 Positive Polarity (如接线图所示)	XXX: 客户特殊要求 Customer Special Requirement

备注 Notes:

双常开和双常闭产品，其中一组为辅助触点。

One set of contacts for dual normally open and dual normally closed products is auxiliary contact.

触点参数 CONTACT PARAMETERS

触点形式 Contact Arrangement	1A、1B (详见订货标记 See ordering information for details)
触点材料 Contact Material	银合金 Silver Alloy
接触电阻 Contact Resistance	≤ 1mΩ (1A 6VDC) (初始 Initial)
最大切换电流 Max. Switching Current	100A
最大切换电压 Max. Switching Voltage	230VAC, cosΦ=±0.8
最大切换功率 Max. Switching Power	23000VA
电气寿命 Electrical Life1)	≥ 12×10 ³ 次 Ops (阻性负载 Res. Load, 23±5°C, 10s On: 20s Off)
机械寿命 Mechanical Life	≥ 1×10 ⁵ 次 Ops

备注: 电气寿命数据仅供参考, 以最终产品确认规格书为准。除非特别申明, 测量或试验的标准环境条件如下: 环境温度为 23±5°C, 大气压力为 96±10% kPa, 相对湿度为 50%±25% RH。

Notes: The electrical life data is only for reference, and the final product confirmation specification shall prevail. Unless otherwise explicitly stated, the standard environment conditions for measurement or testing are listed as follows: Ambient temperature is 23±5°C, Atmospheric pressure is 96±10% kPa, Relative humidity is 50%±25% RH.

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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: 2000VAC 1min
浪涌电压 Surge Voltage	6kV
动作时间 Set Time	≤ 10ms
复归时间 Reset Time	≤ 10ms
环境温度 Ambient Temperature	-40°C ~+85°C
振动 Vibration Resistance	10Hz~55Hz 1.5mm 双振幅 (DA)
冲击 Shock Resistance	稳定性 Functional: 98m/s2(10G) 强度 Destructive: 980m/s2(100G)
引出端方式 Terminal Form	印制板式 PCB
封装形式 Construction	防焊剂型 Flux Proofed, 塑封型 Sealed Type
重量 Unit Weight	约 Approx. 70g

线圈规格表 COIL DATA (@23°C)

额定电压 Rated Voltage VDC	动作 / 复归电压 Set/Reset Voltage VDC	脉冲宽度 Pulse Width ms	线圈电阻 Coil Resistance Ω±10%	线圈功率 Coil Power W	
9	≤ 6.3	50-100	单线圈 Single Coil Latching	27	约 Approx. 3.0
12	≤ 8.4			48	
24	≤ 16.8			192	
48	≤ 33.6			768	
9	≤ 6.3		双线圈 Double Coils Latching	13.5/13.5	约 Approx. 6.0
12	≤ 8.4			24/24	
24	≤ 16.8			96/96	
48	≤ 33.6			384/384	

备注 Notes:

- (1) 线圈保持电压为线圈施加额定电压100ms以上的线圈电压。The coil holding voltage is the voltage of coil after being applied rated voltage for 100ms
- (2) 继电器线圈不允许长时间施加超过保持电压的上限值, 防止继电器过热烧毁。The relay coil is not allowed to exceed the upper limit of the holding voltage for a long time, preventing the relay from overheating and burning.

安全认证 SAFETY STANDARD APPROVALS

安全认证 Safety Standard Approvals	UL	TUV	CQC
证书编号 Certificate No.	E313266	B119750000500	CQC23002410509
负载 Rating	100A 230VAC,85°C 12×10 ⁵ 次 Ops, 阻性 Resistive	100A 230VAC 85°C, 12×10 ⁵ 次 Ops, 阻性 Resistive	100A 230VAC 85°C, 12×10 ⁵ 次 Ops, 阻性 Resistive.

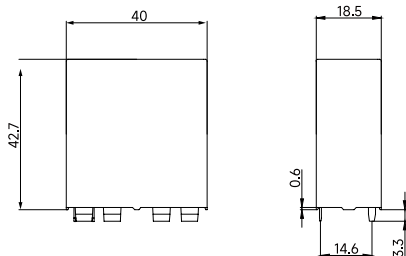
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外形尺寸、接线图、安装尺寸

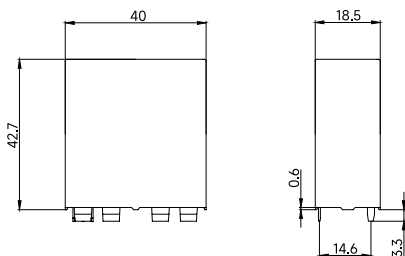
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PCB LAYOUT (单位 Unit: mm)

外形尺寸 Outline Dimensions

ML603-1 □ -A/B-L1

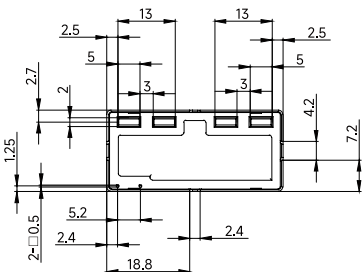


ML603-1 □ -A/B-L2

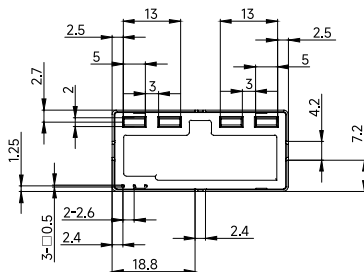


安装孔尺寸 PCB Layout (底视 Bottom View)

ML603-1 □ -A/B-L1

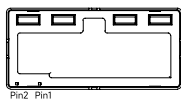


ML603-1 □ -A/B-L2

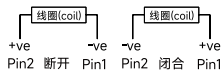


接线图 Wiring Diagram (底视 Bottom View)

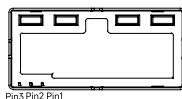
ML603-1 □ -A/B-L1



接线图
(wiring diagram)



ML603-1 □ -A/B-L2



接线图
(wiring diagram)



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备注 Notes:

- 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 $1\text{--}5\text{mm}$ 之间时，公差为 $\pm 0.3\text{mm}$ ；当外形尺寸 $> 5\text{mm}$ 时，公差为 $\pm 0.4\text{mm}$ 。
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) 安装孔尺寸中未注尺寸公差均为 $\pm 0.1\text{mm}$ 。
The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

声明 STATEMENT:

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；

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. 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；

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. 本产品规格书仅供客户使用时参考，若有更改，恕不另行通知。

This product specification for client's reference, if any change without notice.

4. 对美硕而言，不可能评定继电器在每个具体应用领域的所有性能参数要求，因而客户应该根据具体的使用条件选择与之相匹配的产品，若有疑问，请与美硕联系获取更多的技术支持。但产品选型责任仅由客户负责。

For MEISHUO, cannot require evaluation of relays in each specific application of all the performance parameters, so customers should be selected according to the matching conditions for the use of specific products, if you have any questions, please contact us and get more technical support. However, product selection responsibility only by the customer.