

MLQ-100

智能电表 / 电网应用

Smart Meters And Power Grid Applications

- 100A 触点切换能力
- 线圈与触点间耐压为 4KV
- 环保产品（符合 RoHS）
- 可根据客户要求焊接附件
- 外形尺寸 L×W×H: 39×30×18.5mm
- 100A switching capability
- 4KV Dielectric strength between coil & contacts
- Environmental friendly product(RoHS Compliant)
- Accessories can be welded according to customer requirements
- Profile Dimension L×W×H: 39×30×18.5mm



MLQ - 100 1 12 - A L1 - R XXX							
产品型号 Model	负载规格 Load	触点组数 Number of Poles	线圈电压 Coil Voltage	触点形式 Contact Form	线圈类型 Coil Type	极性特点 Polarity	特性号 Special Code
	100: 100A	1: 1 组 1 Pole	05, 06, 09 12, 24, 48 VDC	A: 常开 NO B: 常闭 NC	L1: 单线圈 Single L2: 双线圈 Dual	R: 反向极性 无: 标准极性 R: Reversed Polarity Nil: Default Polarity	XXX: 客户特殊要求 XXX: Customer Special Requirement

触点参数 CONTACT PARAMETERS

触点形式 Contact Form	1a, 1b
触点材料 Contact Material	银合金 Silver Alloy
接触电阻 Contact Resistance	≤ 1.0mΩ (1A 6VDC)
触点负载（阻性）Contact Rating (Res. load)	100A 250VAC
最大切换电流 Max.Switching Current	100A
最大切换电压 Max.Switching Voltage	250VAC
最大切换功率 Max.Switching Power	25000VA
电气寿命 Electrical Life	1×10 ⁴ 次 OPS
机械寿命 Mechanical Life	1×10 ⁵ 次 OPS

性能参数 CHARACTERISTICS

绝缘电阻 Insulation Resistance	1000MΩ Min. (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
动作时间 Set Time	≤ 20ms
回归时间 Reset Time	≤ 20ms
冲击 Shock	功能性的 Functional 98m/s ² 破坏性的 Destructive 980m/s ²
振动 Vibration	10Hz~55Hz 1.5mm 双振幅 (DA)
湿度 Humidity	5%-85%RH
温度范围 Ambient Temperature	-40℃ ~ +85℃
封装方式 Construction	防尘罩型 Dust Protected
重量 Unit Weight	约 Approx.55g

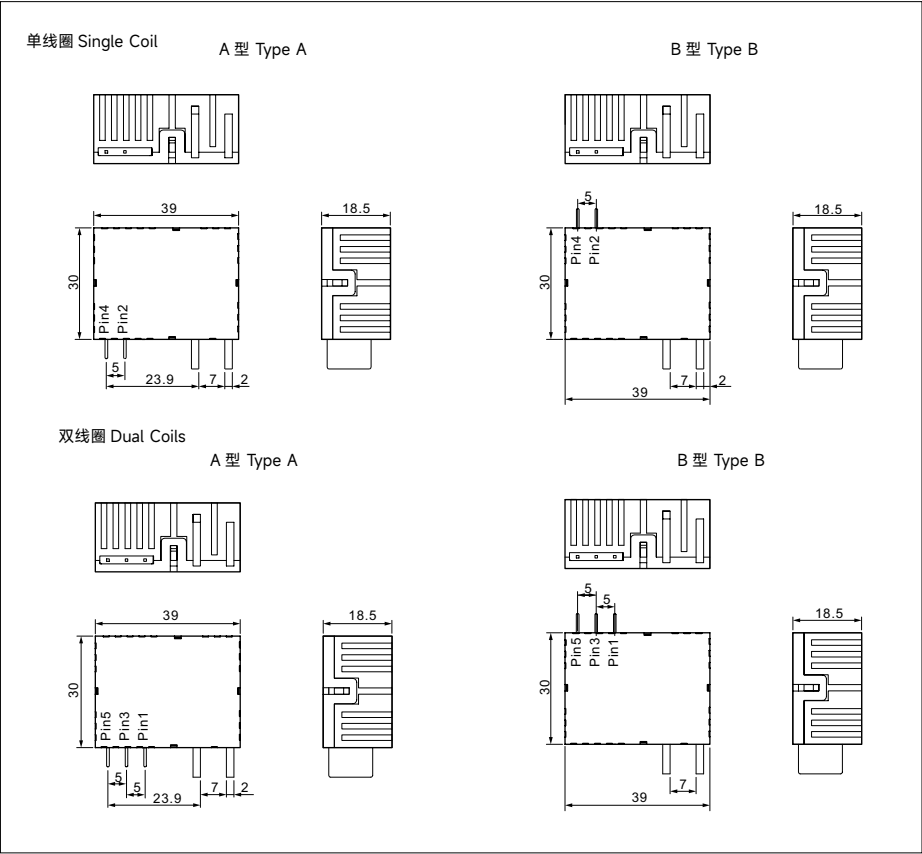
MLQ-100

线圈规格表 COIL DATA(23°C)

额定电压 Rated Voltage VDC	动作 / 复归电压 Operate/Reset Voltage VDC	脉冲宽度 Pulse Duration ms	线圈电阻 Coil Resistance $\Omega \pm 10\%$		线圈功耗 Coil Power W
5	≤ 4	≥ 100	单线圈 Single Coil Latching	16.7	约 Approx. 1.5
6	≤ 4.8			24	
9	≤ 7.2			54	
12	≤ 9.6			41	
24	≤ 19.2			164	
5	≤ 4			8.4/8.4	
6	≤ 4.8	≥ 100	双线圈 Dual Coils Latching	12/12	约 Approx. 3
9	≤ 7.2			27/27	
12	≤ 9.6			21/21	
24	≤ 19.2			82/82	
24	≤ 19.2			192/192	
48	≤ 38.4			768/768	

外形尺寸 PROFILE DIMENSION

单位 Unit: mm



MLQ-100

备注 Notes:

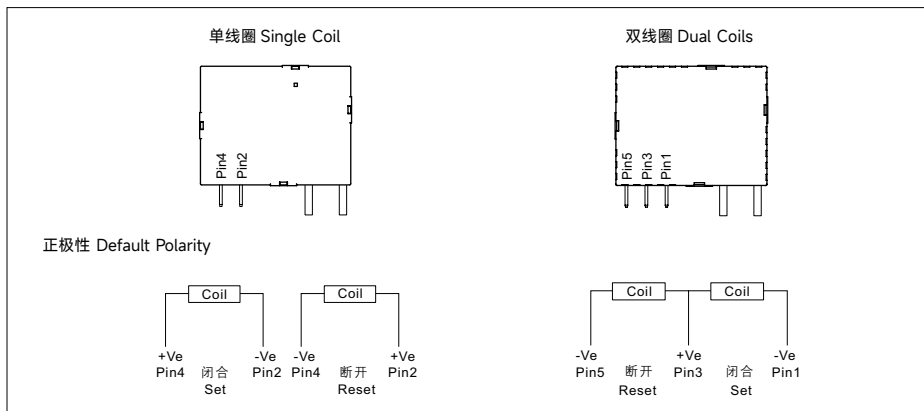
1) 产品部分外形尺寸未注尺寸公差, 当外形尺寸 $\leq 1\text{mm}$, 公差为 $\pm 0.2\text{mm}$; 当外形尺寸在 $1\sim 5\text{mm}$ 之间时, 公差为 $\pm 0.3\text{mm}$; 当外形尺寸 $> 5\text{mm}$ 时, 公差为 $\pm 0.4\text{mm}$ 。

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的均为 $\pm 0.1\text{mm}$ 。

The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

接线图 WIRING DIAGRAM



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, 在客户没有特别声明的情况下, 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.

声明 STATEMENT:

1. 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.

2. 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。

MEISHUO cannot evaluate all performance parameters for each specific application. Customers should select products based on matching conditions. For technical support, please contact us. Product selection responsibility lies solely with the customer.

本目录虽经多次校对以求正确，但仅供参考之用，一切以产品实物为准。
Although this catalogue has been proofread for many times, it is only for reference.
All items are subject to the actual products.



继电器综合样本

RELAYS COMPONENTS



浙江美硕电气科技股份有限公司
ZHEJIANG MEISHUO ELECTRIC TECHNOLOGY CO.,LTD.

地址：浙江省乐清市经济开发区纬十二路 158 号

电话：+86-0577-62518886 62518811

传真：+86-0577-62518821

Http://www.msrelay.com www.msrelay.cn

E-mail: sales@msrelay.com

Add.: No. 158, Wei 12 Road, Yueqing Economic

Development Zone, Yueqing City, Zhejiang, China

Tel: +86-0577-62518811, 62518886

Fax: +86-0577-62518821

Http://www.msrelay.com

E-mail: sales@msrelay.com



扫一扫 关注公众号
Follow us

© 版权所有浙江美硕电气科技股份有限公司，保留所有权利。
Copyright Zhejiang Meishuo Electric Technology Co., Ltd. All rights reserved.

环保纸印刷
Eco paper printing

2025.11.11

2025