

ML602

电源 /5G/ 逆变器类

Power supply / 5G / Inverter



- 外形尺寸 L39 × W21.6 × H32mm
- 双稳态磁保持继电器
- 90A 与 125A 两种负载电流可选
- 良好抗震动性能和抗冲击性能
- 适用于新能源汽车充电桩领域
- Outline dimensions L39 × W21.6 × H32mm.
- Bistable magnetic holding relay.
- 90A and 125A load currents are optional.
- Good vibration resistance and shock resistance.
- Applicable to new energy vehicle charging piles.

ML602	H	S	1	12	B	L1
产品型号 Model	产品结构 Structure	封装形式 Construction	触点组数 Contact Groups	线圈电压 Coil Voltage	触点形式 Contact Form	线圈类型 Coil Type
ML602	无 nil: 低负载 Low Load 90A H: 高负载 High Load 125A	S: 塑封型 Sealed Type	1: 1 组 Group 2: 2 组 Groups	09: 9VDC 12: 12VDC 24: 24VDC 48: 48VDC	A: 常开 NO B: 常闭 NC	L1: 单线圈 Single Coil Latching

备注 Notes:

2 组触点的产品其中一组为辅助触点。Products with two sets of contacts, one of which is auxiliary contact.

触点参数 CONTACT PARAMETERS

触点形式 Contact Arrangement	1A, 1B, 2A, 2B (详见订货标记 See order mark for details)	
触点材料 Contact Material	银合金 Silver Alloy	
接触电阻 Contact Resistance(初始 Initial)	≤1mΩ (1A 6VDC)	
最大切换电流 Max. Switching Current	低负载 Low Load	90A
	高负载 High Load	125A
最大切换功率 Max. Switching Voltage	低负载 Low Load	277VAC, 24VDC
	高负载 High Load	277VAC
最大切换功率 Max. Switching Power	低负载 Low Load	24930VA, 2160W
	高负载 High Load	34625VA
电气寿命 Electrical Life	低负载 Low Load	≥5 × 10 ³ 次 Ops (90A 277VAC, 阻性负载 Res. Load, 23 ± 5℃, 1s On: 9s Off)
		≥1 × 10 ³ 次 Ops (90A 24VDC, 阻性负载 Res. Load, 23 ± 5℃, 1s On: 9s Off)
	高负载 High Load	≥1 × 10 ³ 次 Ops (125A 277VAC, 阻性负载 Res. Load, 23 ± 5℃, 1s On: 9s Off)
机械寿命 Mechanical Life	≥1 × 10 ⁵ 次 Ops	

备注 Notes:

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 23 ± 5℃，大气压力为 96 ± 10% kPa，相对湿度为 50% ± 25% RH。

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℃, 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	1000M Ω (500VDC)
介质耐压 Dielectric Strength	断开主触点间 Between open main contacts : 2000VAC 1min 主触点组间 Between main contacts sets: 2000VAC 1min 断开辅助触点间 Between open auxiliary contacts: 1000VAC 1min 主触点与辅助触点间 Between main and auxiliary contact: 2000VAC 1min 主触点与线圈间 Between main contact and coil: 5000VAC 1min 辅助触点与线圈间 Between auxiliary contact and coil: 2000VAC 1min
浪涌电压 Surge Voltage	10kV (1.2/50us)
动作时间 Set Time	≤ 20 ms
复位时间 Reset Time	≤ 20 ms
环境温度 Ambient Temperature	-40 $^{\circ}$ C ~+85 $^{\circ}$ C
振动 Vibration Resistance	10Hz~55Hz 1.5mm 双振幅 (DA)
冲击 Shock Resistance	稳定性 Functional: 98m/s ² (10G) 强度 Destructive: 980m/s ² (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. 54g

线圈规格表 COIL DATA (@23 $^{\circ}$ C)

低负载 Low Load					
额定电压 Rated Voltage VDC	动作 / 复位电压 Set/Reset Voltage VDC	脉冲宽度 Pulse Width ms	线圈电阻 Coil Resistance $\Omega \pm 10\%$		线圈功率 Coil Power W
9	≤ 6.3	50-100	单线圈 Single Coil	54	约 Approx. 1.5
12	≤ 8.4			96	
24	≤ 16.8			384	
48	≤ 33.6			1536	
9	≤ 6.3		双线圈 Double Coils	27/27	约 Approx. 3.0
12	≤ 8.4			48/48	
24	≤ 16.8			192/192	
48	≤ 33.6			768/768	

高负载 High Load					
额定电压 Rated Voltage VDC	动作 / 复位电压 Set/Reset Voltage VDC	脉冲宽度 Pulse Width ms	线圈电阻 Coil Resistance $\Omega \pm 10\%$		线圈功率 Coil Power W
9	≤ 6.3	50-100	单线圈 Single Coil	40.5	约 Approx. 2.0
12	≤ 8.4			72	
24	≤ 16.8			288	
48	≤ 33.6			1152	
9	≤ 6.3		双线圈 Double Coils	20.2/20.2	约 Approx. 4.0
12	≤ 8.4			36/36	
24	≤ 16.8			144/144	
48	≤ 33.6			576/576	

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安全认证 APPROVALS

安全认证 Approvals	UL	TUV	CQC
证书编号 Certificate No.	/	/	/
认证负载 Certification load	/	/	/

外形尺寸、接线图、安装孔尺寸

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

外形尺寸 Outline Dimensions	
不带辅助触头 Without Auxiliary Contact	带辅助触头 With Auxiliary Contact
安装孔尺寸 PCB Layout (底视 Bottom View)	
不带辅助触头 Without Auxiliary Contact	带辅助触头 With Auxiliary Contact
接线图 Wiring Diagram (底视 Bottom View)	
不带辅助触头 Without Auxiliary Contact	带辅助触头 With Auxiliary Contact

备注 Notes:

- 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 $\pm 0.4\text{mm}$;

- 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 $\pm 0.1\text{mm}$.

声明 STATEMENT:

- 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.

- 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.