

ME109



- 外形尺寸 L30.4×W15.9×H23.3mm
- 负载可达 50A 277VAC
- 触点间隙多种规格可选
- 适用于光伏逆变器、UPS 电源、工业控制等领域

- Dimensions L30.4×W15.9×H23.3mm
- Loads up to 50A 277VAC
- Various specifications of contact gap are optional
- Suitable for photovoltaic inverters, UPS power supplies, industrial control and other fields

| ME109 | S | 1 | A | J | W | F | 12VDC | 0.9W |
|---------------|----------------------|-------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------|--------------------------------|------------------------------|
| 产品型号 Model | 封装形式 Construction | 触点组数 Number of Poles | 触点形式 Contact Form | 触点负载 Contact Load | 触点间隙 Contact Gap | 绝缘等级 Insulation Class | 线圈电压 Coil Voltage | 线圈功率 Coil Power |
| | S: 塑封型 Wash tight | 1: 1组 1 Pole | A: 常开 NO | 无: 低负载 (26A/31A/33A) J: 高负载 (40A/43A/50A) Nil: low load (26A/31A/33A) J: high load (40A/43A/50A) | 无 Nil: 1.8mm W: 0.8mm X: 1.5mm Y: 2.0mm Z: 2.3mm | F: F 级 Class | 6VDC 9VDC 12VDC 24VDC | 0.9W 1.4W 1.6W 3.8W |

备注 Notes:

- 2.3mm 间隙仅有 1.4W 和 1.6W 可选，且仅可作低负载规格。
2.3mm contact gap is only available for 1.4W and 1.6W, and can only be used as low-load specification.
- 0.9W 继电器触点间隙仅有 0.8mm 和 1.5mm 两种可选。
0.9W relay contact clearance is only available in 0.8mm and 1.5mm.

触点参数 CONTACT PARAMETERS

| | | |
|--------------------------------------|-----------------------------------------------------------------|---------|
| 触点形式 Contact Arrangement | 1a | |
| 触点材料 Contact Material | 银合金 Silver Alloy | |
| 接触电阻 Contact Resistance(初始 Initial) | ≤ 100mΩ (1A 6VDC) | |
| 最大切换电流 Max. Switching Current | 高负载 High Load | 50A |
| | 低负载 Low Load | 33A |
| 最大切换电压 Max. Switching Voltage | 400VAC | |
| 最大切换功率 Max. Switching Power | 高负载 High Load | 16000VA |
| | 低负载 Low Load | 9141VA |
| 电气寿命 Electrical Life | ≥ 3×10 ⁴ 次 Ops (阻性负载 Res. Load, 85°C, 1s On: 9s Off) | |
| 机械寿命 Mechanical Life | 触点间隙 Contact gap < 1.5mm: 1×10 ⁶ 次 Ops | |
| | 触点间隙 Contact gap ≥ 1.5mm: 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。

Notes: The electrical life data is only for reference, and the final product confirmation specification shall prevail.

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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: 4500VAC 1min | |
| | 断开触点间 Between Open Contacts | 1700VAC 1min (触点间隙 Contact gap < 1.5mm) 2500VAC 1min (触点间隙 Contact gap ≥ 1.5mm) |
| 浪涌电压 Surge Voltage | 10kV (1.2/50us) | |
| 动作时间 Operate Time | ≤ 20ms | |
| 释放时间 Release 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 | 功能性的 Functional: 196m/s ² | |
| | 破坏性的 Destructive: 980m/s ² | |
| 引出端形式 Terminal Form | 印制板式 PCB | |
| 封装形式 Construction | 塑封型 Wash tight | |
| 重量 Unit Weight | 约 Approx. 21g | |

线圈规格表 COIL DATA (@23°C)

| 额定电压 Rated Voltage VDC | 动作电压 Operate Voltage VDC | 释放电压 Release Voltage VDC | 最大允许电压 Max. Voltage VDC | 线圈电阻 Coil Resistance Ω±10% | 线圈功耗 Coil Power W |
|------------------------------|--------------------------------|--------------------------------|-------------------------------|----------------------------------|-------------------------|
| 6 | ≤ 4.2 | ≥ 0.3 | 6.6 | 9.5 | 3.8W |
| 9 | ≤ 6.3 | ≥ 0.45 | 9.9 | 21.3 | |
| 12 | ≤ 8.4 | ≥ 0.6 | 13.2 | 38 | |
| 24 | ≤ 16.8 | ≥ 1.2 | 26.4 | 152 | |
| 6 | ≤ 4.5 | ≥ 0.3 | 6.6 | 22.5 | 1.6W |
| 9 | ≤ 6.75 | ≥ 0.45 | 9.9 | 50.6 | |
| 12 | ≤ 9.0 | ≥ 0.6 | 13.2 | 90 | |
| 24 | ≤ 18 | ≥ 1.2 | 26.4 | 360 | |
| 6 | ≤ 4.5 | ≥ 0.6 | 6.6 | 25.7 | 1.4W |
| 9 | ≤ 6.75 | ≥ 0.9 | 9.9 | 58 | |
| 12 | ≤ 9.0 | ≥ 1.2 | 13.2 | 103 | |
| 24 | ≤ 18 | ≥ 2.4 | 26.4 | 410 | |
| 6 | ≤ 4.5 | ≥ 0.6 | 6.6 | 40 | 0.9W |
| 9 | ≤ 6.75 | ≥ 0.9 | 9.9 | 90 | |
| 12 | ≤ 9.0 | ≥ 1.2 | 13.2 | 160 | |
| 24 | ≤ 18 | ≥ 2.4 | 26.4 | 640 | |

线圈保持电压 COIL HOLDING VOLTAGE

| 线圈功率 Coil Power | 3.8W | < 3.8W |
|----------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------|
| 保持电压 Holding Voltage | 40% to 70%U _N (at 23°C) 40% to 55%U _N (at 85°C) | 50% to 100%U _N (at 23°C) 55% to 80%U _N (at 85°C) |

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.

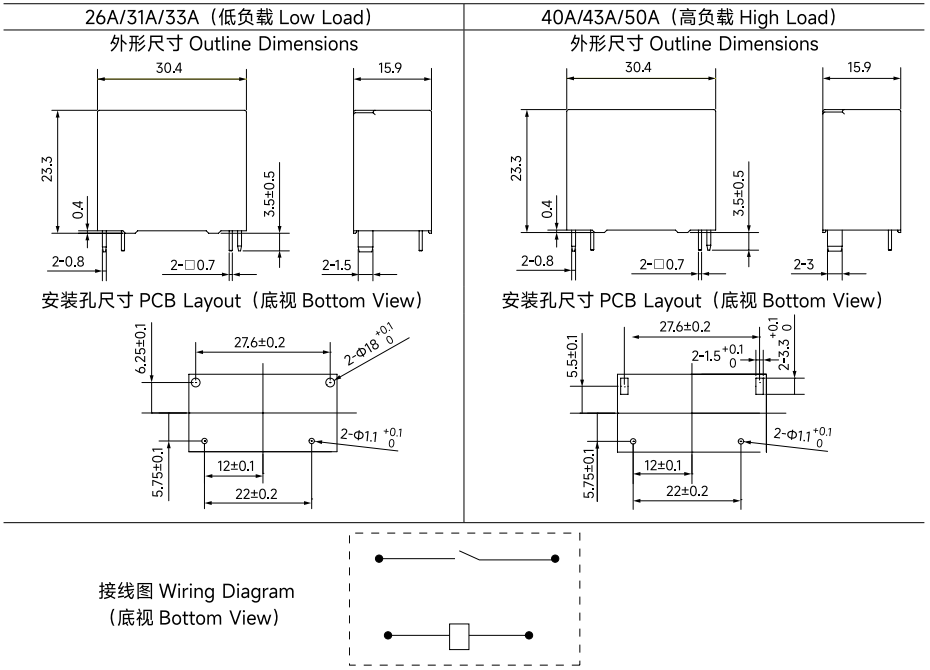
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安全认证 SAFETY STANDARD APPROVALS

| 安全认证 Safety Standard Approvals | UL | TUV | CQC | VDE |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 证书编号 Certificate No. | E313266 | B1197500001 | CQC22002333025 | 40057570 |
| 负载 Load | 26A 277VAC/30VDC 33A 277VAC COSφ0.8 43A 277VAC 50A 277VAC Making 20 277VAC Loading 50 277VAC Breaking 20 277VAC | 26A 277VAC/30VDC 33A 277VAC COSφ0.8 43A 277VAC 50A 277VAC Making 20 277VAC Loading 50 277VAC Breaking 20 277VAC | 26A 277VAC/30VDC 33A 277VAC COSφ0.8 43A 277VAC 50A 277VAC Making 20 277VAC Loading 50 277VAC Breaking 20 277VAC | 16A 250/277VAC 20A 250/277VAC 22A 250/277VAC 25A 250/277VAC 26A 250/277VAC 16A 30VDC/20A 30VDC 22A 30VDC/25A 30VDC 26A 30VDC |

外形尺寸、接线图、安装孔尺寸

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



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 $1\text{--}5\text{mm}$ 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 $\pm 0.4\text{mm}$;
- 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:

- 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.