



### ◆ 特点 Features

- ◇ 45A 触点切换能力。  
45A contact switching capability
- ◇ 最适用于太阳能光伏发电用逆变器、UPS。  
Most suitable for solar photovoltaic power inverter, UPS.
- ◇ 触点间隙 2.0mm, 2.3mm。  
Contact clearance 2.0mm, 2.3mm.
- ◇ 环保产品 (符合 RoHS)。  
Environmental protection products (RoHS compliant).

### ◆ 安规 Safety Approval

- ◇ UL/CUL 认证号: E179745-1-31  
UL, CU-L File No : E179745-1-31
- ◇ TUV 认证号: R50540861  
TUV File No : R50540861
- ◇ CQC 认证号: CQC22002336810  
CQC File No : CQC22002336810

### ◆ 触点负载

#### Contact Capacity

型号 Type	SMIC
额定负载 (阻性) Rated load	45A 250VAC
最大切换电流 Max. switching current	45A
最大切换电压 Max. switching voltage	277VAC
最大切换功率 Max. switching power	12465VA

### ◆ 性能参数

#### Characteristic Data

触点材料 Contact arrangement	银合金 Silver alloy	
接触电阻 Contact resistance	100mΩ Max.	
吸合时间 Operate time	20msec. Max.	
释放时间 Release time	10msec. Max.	
绝缘电阻 Insulation resistance	1,000MΩ Min.(DC500V)	
介质耐压 Dielectric strength	触点与触点间: AC2,500V, 50/60Hz 1min. Between open contacts: 2,500VAC, 50/60Hz 1min.	
	触点与线圈间: AC4,500V, 50/60Hz 1min. Between coil and contact: 4,500VAC, 50/60Hz 1min.	
浪涌电压 Impulse withstand voltage	触点与线圈间: AC10,000V, 1.2/50μs Between coil and contact: 10KV(1.2/50us)	
抗振动 Vibration resistance	耐久 Destructive	10 ~ 55Hz, 1.5 mm DA
	误动作 Functional	10 ~ 55Hz, 1.5 mm DA
抗冲击 Shock resistance	耐久 Destructive	100G Min.
	误动作 Functiona	10G Min.
寿命 Endurance(Operations)	机械寿命(每小时 7,200 次) Mechanical endurance(7,200ops/h)	100,000 次 100,000 cycles(at room temperature)
	电气寿命(每小时 360 次) Electrical endurance(360ops/h)	50k 次(250VAac, 20A 接通, 45A 载流, 20A 分断@85°C) 50k cycles(20A make, 45A carry, 20A break at 480VAC, resistive, 85°C)
环境温度 Ambient temperature	-40°C ~ +85°C (不冷凝) -40°C ~ +85°C (no condensation)	

◆ 线圈参数(at 20°C)

Coil Data (at 20°C)

额定电压 Nominal voltage (VDC)	额定电流 ±10% Nominal operating current(mA)	线圈电阻 ±10% Coil resistance±10% (Ω)	最大连续外加电压 Maximum continuous applied voltage	吸合电压 Pick-up voltage (max)	释放电压 Drop-out voltage (min)	额定功率 Nominal operating power
5	320	16	110% 额定电压 110% of rated voltage	75% 额定电压 75% of rated voltage	5% 额定电压 5% of rated voltage	1.6w
6	266.67	23				
9	177.78	51				
12	133.33	90				
18	88.89	203				
24	66.67	360				

◆ 安规认证负载 (注: 更多详细的认证负载, 参考安规证书)

Safety Approval Ratings (Note: Please refer to the certificates for more detailed information of the ratings)

认证类型 certification type	CQC	TUV	UL/CUL
认证号码 File No.	CQC22002336810	R50540861	E179745-1-31
认证负载 Approved ratings	45A 125/250/277VAC	45A 125/250/277VAC, Resistive & General Use	45A 125/250/277VAC, Resistive & General Use 1 HP, 120VAC

(1) 上述未注明温度的负载, 均指环境温度为室温。

All values unspecified are at room temperature.

(2) 以上仅列出了该产品认证的部分负载, 每个负载的详细测试条件不同, 因此电寿命次数不一样。如需了解详细情况, 请联系三友。

Only typical loads are listed above. Other load specifications can be available upon request. The electrical endurance cycles of each load is different due to the different test conditions. If more details are required, please contact us.

(3) 对于塑封式、防水式产品试验时, 应打开外壳的透气孔。

The electrical endurance test has been carried out on flux proofed version.

型号命名规则 Nomenclature

SMIC -S -1 12 G M 1 -XX

特殊参数: 空-标准型, 1-触点间隙 2.3mm

Special code: Nil-Standard, 1-Contact gap 2.3mm

触点材质: 空-AgSnO<sub>2</sub>, 1-AgSnO<sub>2</sub>+AgNi

Contact material: Nil--AgSnO<sub>2</sub>, 1-AgSnO<sub>2</sub>+AgNi

触点形式: M-FormA

Contact form: M-FormA

负载电流: G-45A

Load current: G-45A

线圈规格: 05, 06, 09, 12, 18, 24 (VDC)

Rated coil voltage(VDC): 05,06,09,12,18,24(VDC)

触点组数: 1-1 组

Number of poles : 1-1Pole

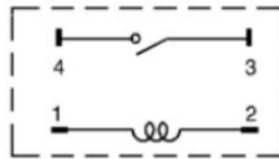
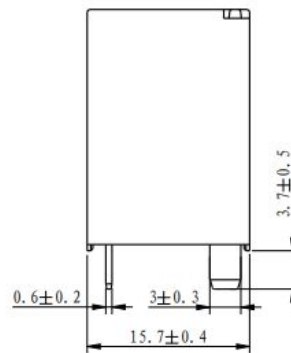
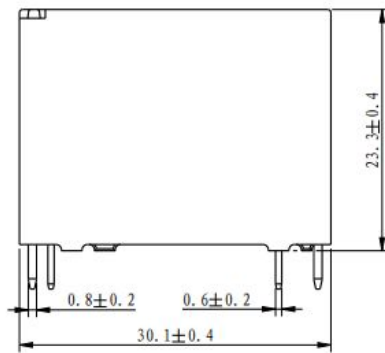
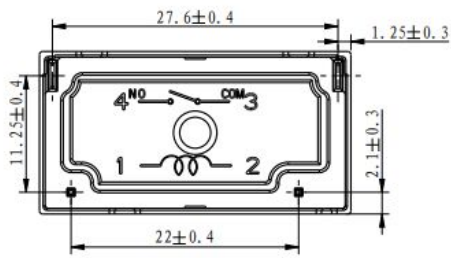
封装形式: S-塑封式, SH-防水式

Protective construction: S-Flux proofed, SH-Sealed type washable

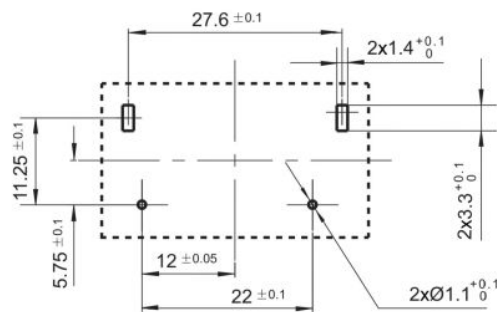
基本型号: SMIC

Basic series: SMIC

◆ 外形尺寸、安装孔位图 (单位:mm)  
 Outline Dimensions, Wiring Diagram, P.C. Board Layout (unit:mm)



接线图 (底视图)  
 Wiring diagram (bottom view)



安装孔位图 (底视图)  
 Mounting hole bitmap(bottom view)

## ◆ 典型用途

Typical application

- ◇ 最适用于太阳能光伏发电用逆变器、UPS。

Most suitable for solar photovoltaic power inverter, UPS.

## ◆ 性能曲线

Performance curve

### 声明:

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。

对三友而言, 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配的产品。对于密封继电器在安装清洗后, 使用前请打开外壳上的透气孔。若有疑问, 请与三友联系获取更多的技术支持, 但产品选型责权由客户负责。

### Disclaimer:

The specification is for reference only. Specifications subject to change without notice.

We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Sanyou for the technical service. However, it is the user's responsibility to determine which product should be used only.

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