
特点 Features

- 小型大容量继电器，最大切换负载 30A。
Miniature relay with high switching capability : 30A
- 可提供铜端子产品。
Copper terminal products are available.
- 可供触点与线圈间耐压达 4000VAC 耐浪涌电压 6000VAC (1.2/50us) 的特殊继电器。
Special type with 4000VAC dielectric strength and 6000VAC surge voltage (1.2/50uS) between coil and contact is available.
- 可提供满足 IEC60335-1 的产品。
IEC60335-1 compliant product is available.
- 可提供满足 IEC60079-15 的产品。
IEC60079-15 compliant product is available.

安规认证 Safety certificate

UL、cUL 认证号 (File No.): E190598
 TUV 认证号 (File No.): R50143450
 CQC 认证号 (File No.):
 CQC02001002109、CQC10002050461、CQC21002306488
 VDE 认证号 (File No.): 40036707

触点参数 Contact Data

型号 Type	SLI-DM	SLI-DB	SLI-D
额定负载 (阻性负载) Rated load (Resistive load)	30A 250VAC	15A 250VAC	20A/10A 250VAC
最大切换电流 Max. switching current	30A	20A	20A
最大切换电压 Max. switching voltage	250VAC	250VAC	250VAC
最大切换功率 Max. switching power	7,500VA	5,000VA	5,000VA

性能参数 Characteristics

触点材料 Contact material	银合金 Silver alloy
接触电阻 Contact resistance	100mΩ Max. (1A 6VDC)
吸合时间 (额定电压) Operate time (at rated coil voltage)	15ms Max. (不加二极管 No diode)
释放时间 Release time	10ms Max. (不加二极管 No diode)

绝缘电阻 Insulation resistance	Min. 1,000MΩ (at 500VDC)	
介质耐压 Dielectric strength	触点与触点间 Between open contacts :	AC 1,500V , 50/60Hz for 1min.
	触点与线圈间 Between coil and contact:	AC 2,500V , 50/60Hz for 1min. (可供 4000VAC 高耐压型 4KV available)
抗振动 Vibration resistance	耐久 Destructive	10 ~ 55Hz , 双振幅 1.5 mm. 10 ~ 55Hz, at double amplitude of 1.5mm.
	误动作 Functional	10 ~ 55Hz , 双振幅 1.5 mm. 10 ~ 55Hz, at double amplitude of 1.5mm.
抗冲击 Shock resistance	耐久 Destructive	100G Min.
	误动作 Functional	10G Min.
寿命 Endurance	机械寿命(每小时 10,800 次, 室温) Mechanical endurance (at 10,800 ops./h)	10,000,000 次 10,000,000 cycles(at room temperature)
	电气寿命(每小时 360 次, 室温) Electrical endurance (at 360 ops./h)	100,000 次 100,000 cycles(at room temperature)
环境温度 Ambient temperature	-40°C ~ +85°C (不冷凝 No condensation)	
重量 Weight	约 28.0g Approx.28.0g	

线圈参数 Coil Data (at 20°C)

额定电压 Nominal voltage (VDC)	额定电流 Nominal operating current ±10%(mA)	线圈电阻 Coil resistance ±10%(Ω)	最大连续外加电压 Max. allowable voltage	吸合电压 Operate voltage (Max.)	释放电压 Release voltage (Min.)	额定功率 Nominal operating power
5	180.00	27	额定电压的 130%	额定电压的 75%	额定电压的 5%	0.9W
6	150.00	40				
9	100.00	90				
12	75.00	160				
15	60.00	250				
18	50.00	360				
24	37.50	640				
48	18.75	2,560				
110	8.20	13,400	130% of nominal voltage	75% of nominal voltage	5% of nominal voltage	

上述值为初始值, 请勿在产品上连续施加最大电压 > 10min, 以免线圈过度发热。

The data shown above are initial values. Do not apply maximum allowable voltage on coil for more than 10 minutes to avoid overheating of the coil.

安规认证负载 (更多详细的认证负载, 参考安规证书)

Safety Certificate Ratings (More details of approved ratings, please refer to the safety certificates)

认证类型 Certificates	CQC	TUV	UL/CUL	VDE
认证号码 File No	CQC02001002109 CQC10002050461 CQC21002306488	R50143450	E190598	40036707
认证负载 Approved ratings	Form A : 30A 250VAC Form B : 15A 250VAC Form C : 20A/10A 250VAC	Form A : 30A 250VAC Marking: 80A250VAC(300ms) Breaking : 20A 250VAC Form B : 15A 250VAC Form C : 20A/10A 250VAC	Form A: 40A 277VAC, Resistive 30A 240VAC, Resistive 15A 240VAC 1-1/2HP 240VAC 3/4 HP 120VAC TV-8 120VAC 30A 240VAC, General Use Pilot duty: 470 VA, 240VAC Electronic Ballast: 10A 277VAC /120VAC Form B: 30A 120VAC, General Use 10A 240VAC, Resistive 10A 240VAC, General Use Pilot duty: 275VA, 240VAC Electronic Ballast:5A, 277VAC/120VAC Form C: N.O. 20A 240VAC Resistive 10A 240VAC, Resistive 1-1/2HP 240VAC 3/4HP 125VAC TV-8 120VAC 20A 240VAC,General Use Pilot Duty: 470VA 240VAC Electronic Ballast: 10A 277VAC/120VAC N.C. 10A 240VAC, Resistive 1/2HP 240VAC 1/4HP 125VAC TV-3 120VAC 10A 240VAC,General Use Pilot Duty: 275VA 240VAC Electronic Ballast: 5A 277VAC/120VAC	30A 250VAC,NO 20A 250VAC,CO(test NO) 10A 250VAC,CO(test NC)

(1) 上述未注明温度的负载, 均指环境温度为室温。

All values unspecified are acquired 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 ratings are listed above and the endurance differ in each load. Other specific load information are available upon request.

(3) 对于塑封式、防水式产品试验时, 应打开外壳的透气孔。

For sealed type testing, please open the ventilation hole in the case before test.

订货标记 Ordering Information

型号命名规则 Nomenclature

SLI	-S	-1	12	D	M	K	2	-G	-P	-F	-XX
											-XX 特殊参数：无-标准型，字母或数字-特殊要求 Special Parameter：Nil-Standard type, Letter or number- Special requirement
											绝缘等级：无-普通型，B-Class B，F-Class F Insulation System：Nil-Standard，B-Class B，F-Class F
											COM 快接端子 COM Flat quick-connect terminals： 无-轭铁一体化，P-轭铁铆接铜快接端子 Nil-Yoke, flat quick-connect terminal integration P- Rivet yoke with quick-connect terminal (only for SLI-K)
											参数标记：无-标准型，G-高负载品，双叠片簧片，Φ5.0 触点 Parameter sign：Nil-Standard, G-High contact load, Double-layer spring, Φ5.0 Contact
											触点材质：无-AgSnO ₂ ，2-AgNi+AgSnO ₂ Contact material：Nil-AgSnO ₂ ，2-AgNi+AgSnO ₂
											端子形式 Terminal position： 无-COM 快接端子与 NC/NO 在同侧， Nil-COM terminal and NC/NO terminal on the same side K-COM 快接端子在 NC/NO 异侧 K-COM terminal and NC/NO terminal on the opposite side
											触点形式 Contact Form： Nil - Form C, B - Form B, M - Form A
											线圈功耗 Coil power：D-0.9W
											线圈电压 Rated coil voltage(VDC)： 05, 06, 09, 12, 15, 18, 24, 48, 110
											触点组数 Number of poles：1-1 Pole
											封装形式 Protective construction： S-塑封式 S-Flux proofed， SH-防水式 SH-Sealed type washable
											基本型号 Type：SLI

(1) 塑封式不能在污染环境(含有 H₂S、SO₂、NO₂、粉尘等污染物)中使用。

Flux-proof relays can not be used in the environment with pollutants like H₂S, SO₂, NO₂, dust, etc.

(2) 塑封式装入 PCB 焊接后，不能进行整体清洗或表面处理。

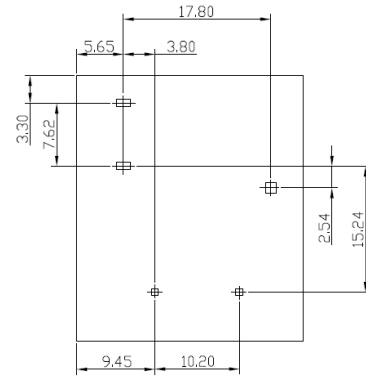
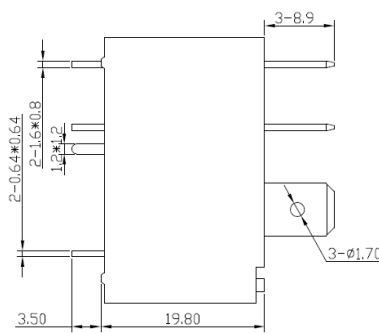
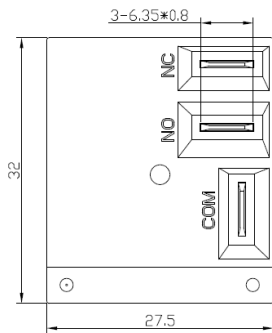
Water cleaning or surface process is not suggested after the flux-proof relays are assembled on PCB.

(3) 客户特殊要求(XX)，由我司评估后，按特性符号标识。

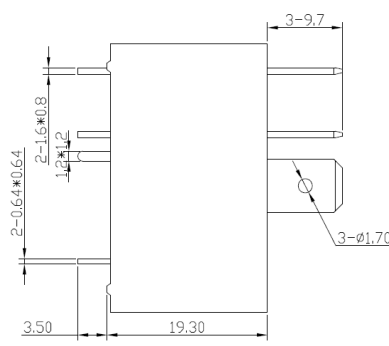
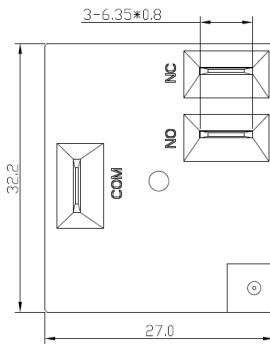
Customized special suffix is available after being evaluated by Sanyou.

外形尺寸图、接线图、安装孔位图 (单位: mm)
Outline dimension, wiring diagram, PCB layout (Unit: mm)

SLI



SLI-K



未标注尺寸公差:

< 1mm : ±0.2mm

1-5mm : ±0.3mm

> 5mm : ±0.4mm

注: 1.引出脚尺寸为预焊前尺寸

2.安装孔尺寸公差: ±0.1mm

3.外形尺寸底视图 SLI/SLI-K 相同

Unless otherwise specified:

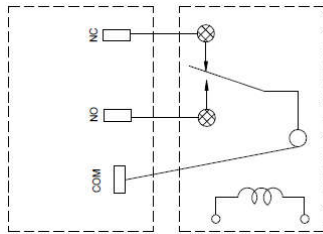
If dimension < 1 mm, tolerance: ±0.2 mm;

If dimension 1~5mm, tolerance: ±0.3 mm;

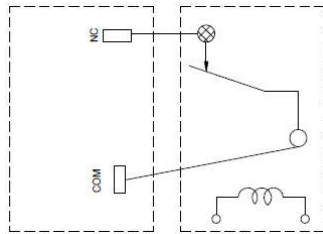
If dimension > 5mm, tolerance: ±0.4 mm.

Note: 1. The dimension of pin is the size before tinning.

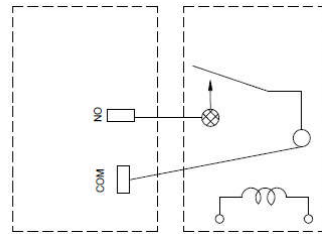
2. Tolerance of P.C.B. layout: ±0.1 mm.



顶视图 底视图
top view bottom view
1c



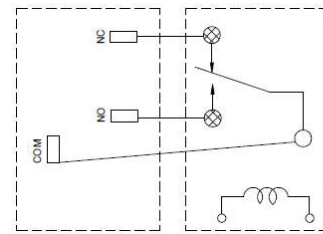
顶视图 底视图
top view bottom view
1b



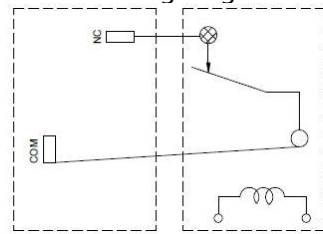
顶视图 底视图
top view bottom view
1a

SLI 接线图

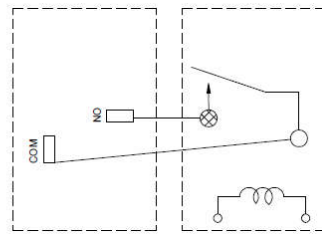
SLI Wiring Diagram



顶视图 底视图
top view bottom view
1c



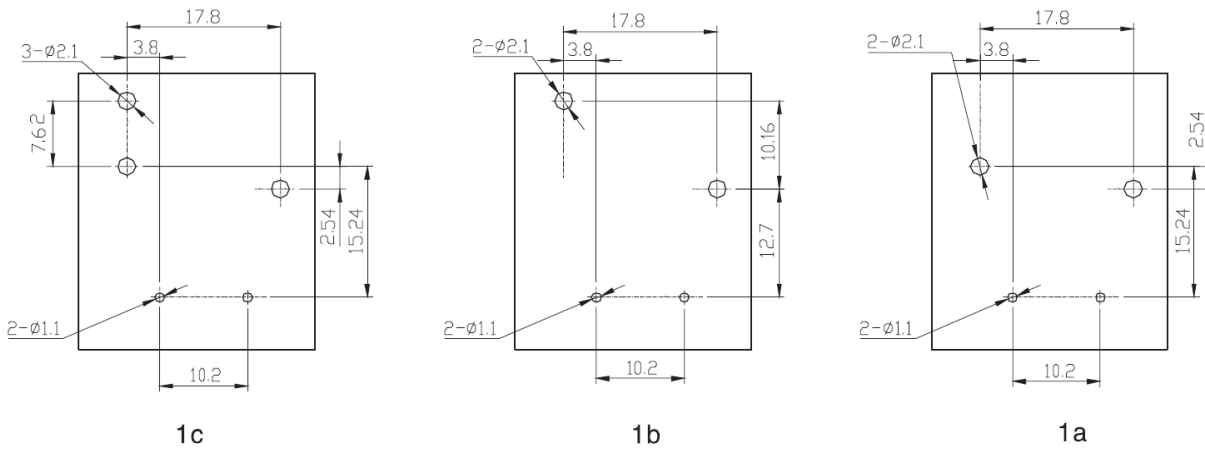
顶视图 底视图
top view bottom view
1b



顶视图 底视图
top view bottom view
1a

SLI-K 接线图

SLI-K Wiring Diagram

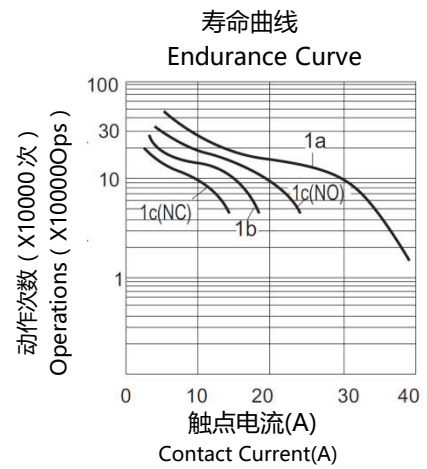
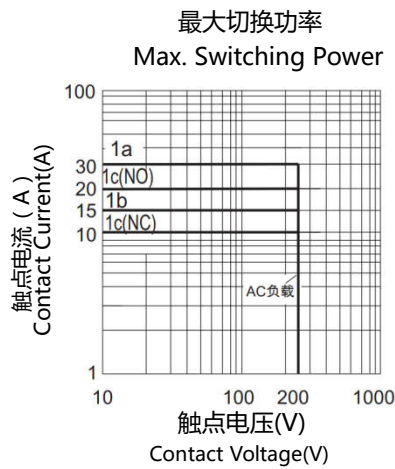
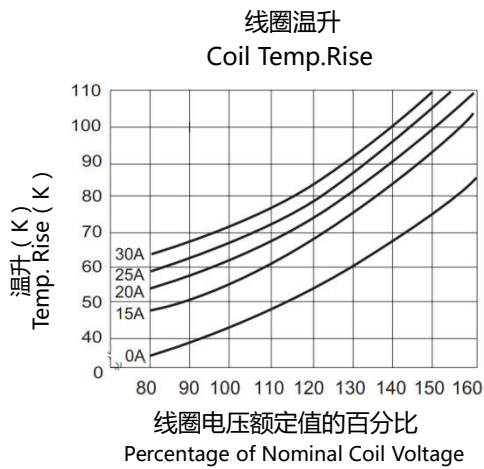


1c 1b 1a
 安装孔尺寸图 (底视图)
 P.C.B Layout (bottom view)

典型用途 Typical Applications

- 汽车 Car
- 加热器和通风装置 Heater and ventilation equipment
- 空调 Air conditioner
- 家用电器 Home appliance

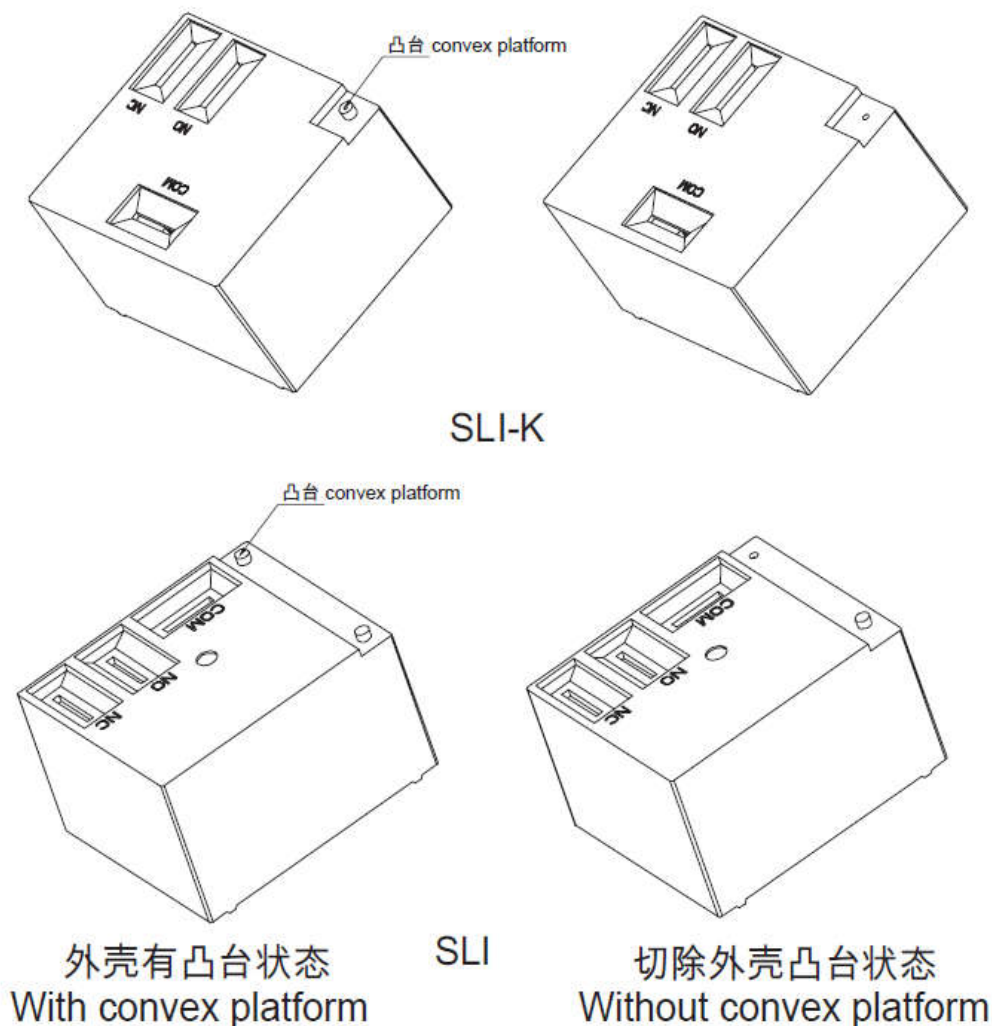
性能曲线图 Characteristic Curves



备注 Note :

若客户选型是密封品，在 PCB 板作业完成后，建议客户在使用前，请切除外壳顶部的凸，以保证继电器之正常性能。如以下示意图所示：

If you choose the sealed type, please remove the convex platform at the top of the case before using to ensure normal performance of the relay after the completion of PCB processes. The guidance of the removal of the convex platform is shown as below :



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匹配的产品。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。如有疑问，请与三友联系获取更多的技术支持。但产品选型责任仅由客户负责。

Disclaimer : The specification is for reference only. Specifications are subject to change without prior notice.

We could not evaluate all the performance and all the parameters for every possible applications. Thus the users should in a right position to choose suitable product for their own application. For sealed relays, after installation and cleaning, please open the ventilation hole in the case before use. If there is any query, please contact Sanyou for technical services. However it is the user's responsibility to determine which product should be used.