

POWER RELAY 功率继电器

TRG1(H)

- 10A switching capability 10A 触点切换能力
- Standard PC layout 标准 PCB 脚位
- Sealed type available 密封型
- Surge resistance of 5000V 冲击电压 5000V
- Conform to RoHS,ELV directive 符合 RoHS、ELV 指令



CQC 08002028070

UL E173485

R50108695

CONTACT DATA 触点参数

Contact Arrangement 触点形式	1H	
Contact Material 触点材料	Silver Alloy 银合金	
Load 负载	Resistive load 阻性负载 (COS Φ=1)	
Contact Ratings 触点负载	1H-D: 10A 125VAC 5A 250VAC/30VDC	1H-L: 5A 250VAC/30VDC
Min. Contact Load 最小负载	100mA 5VDC	
Max. Switching Voltage 最大切换电压	277VAC/30VDC	
Max. Switching Current 最大切换电流	10A	
Max. Switching Power 最大切换功率	1H-D: 1200VA/150W	1H-L: 750VA/90W
Contact Resistance 接触电阻	≤100mΩ (6VDC 1A)	
Electrical Endurance 电耐久性	1×10 ⁵ OPS(at 6 OPS/min) 1×10 ⁵ 次(6次/分钟)	
Mechanical Endurance 机械耐久性	1×10 ⁷ OPS(at 300 OPS/min) 1×10 ⁷ 次(300次/分钟)	

CHARACTERISTICS 性能参数

Insulation Resistance 绝缘电阻	100MΩ Min. at 500VDC	
Dielectric Strength 介质耐压	Between Open Contacts 触点间	1000VAC (50/60Hz 1 min)
	Between Contacts and Coil 触点与线圈间	4000VAC (50/60Hz 1 min)
Operate Time 动作时间	1H-D: ≤10ms	1H-L: ≤15ms
Release Time 释放时间	≤4ms	
Ambient Temperature 环境温度	-40℃ ~ +85℃ (+105℃)	
Shock Resistance 冲击	Functional 稳定性: 10G	
	Destructive 强度: 100G	
Vibration Resistance 振动	10~55Hz, 1.5mm DA 双振幅	
Humidity 湿度	20~85%	
Unit Weight 重量	Approx. 6g 约6克	

COIL DATA 线圈参数 (at 23℃)

Rated Voltage 额定电压 (VDC)	3	5	6	9	12	18	24	0.2W
Coil Resistance 线圈电阻 (Ω±10%)	45	125	180	405	720	1620	2880	
Rated Current 额定电流 (mA)	66.67	40	33.33	22.22	16.67	11.11	8.33	
Max. Operate Voltage 最大动作电压 (VDC)	2.25	3.75	4.5	6.75	9	13.5	18	
Min. Release Voltage 最小释放电压 (VDC)	0.15	0.25	0.3	0.45	0.6	0.9	1.2	
Max. Voltage 最大电压	3.9	6.5	7.8	11.7	15.6	23.4	31.2	

Coil Resistance线圈阻值($\Omega \pm 10\%$)	20	56	80	180	320	720	1280	0.45W
Rated Current额定电流(mA)	150	90	75	50	37.5	25	18.75	
Max Operate Voltage 最大吸合电压(VDC)	2.25	3.75	4.5	6.75	9	13.5	18	
Min Release Voltage最小释放电压(VDC)	0.15	0.25	0.3	0.45	0.6	0.9	1.2	
Max. Voltage 最大电压	3.9	6.5	7.8	11.7	15.6	23.4	31.2	

Remark: Max. Voltage refers to the maximum voltage which relay coil could endure in a period of time.

备注：最大电压是指继电器线圈在短时间内能够承受的最大电压值。

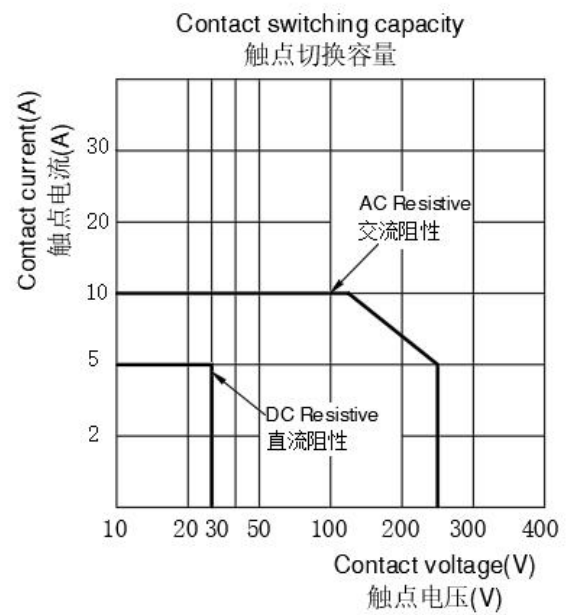
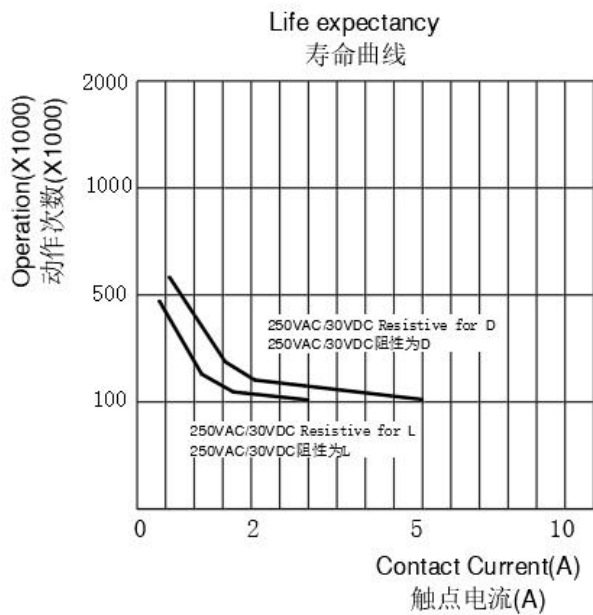
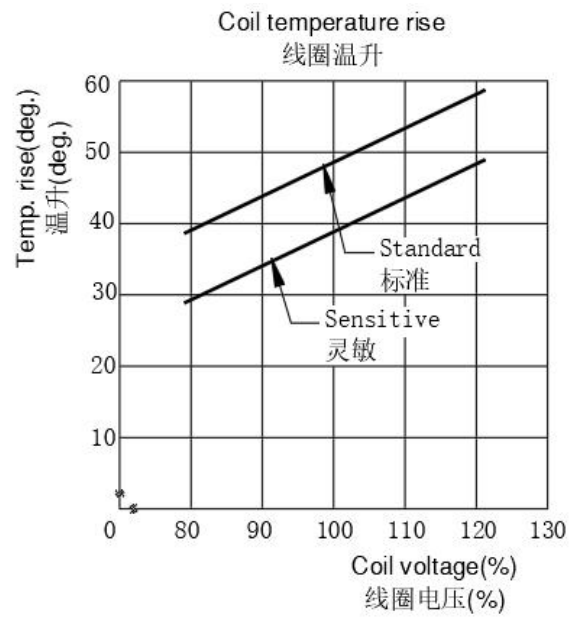
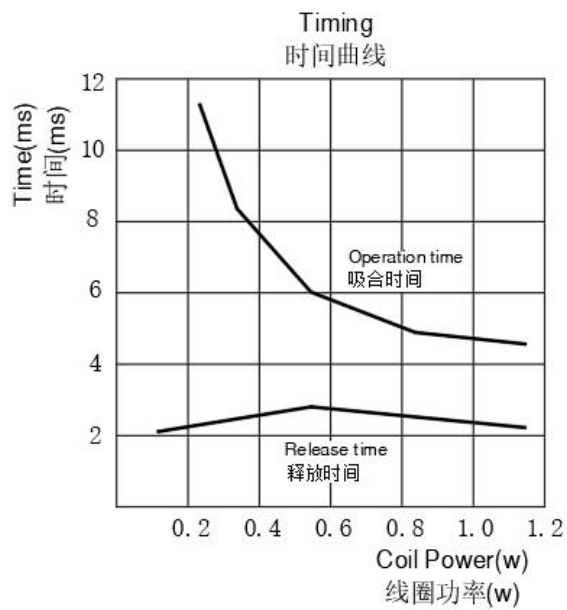
■SAFETY APPROVED RATINGS 安全认证

Type(型号)	Coil Voltage (线圈电压)	Safety Approval (安全认证)	Contact Ratings (触点负载)	
TRG1	3 ~ 24VDC	UL	10A 120VAC /277VAC 5A 240VAC/250VAC/277VAC 3A 240VAC 3A 30VDC 1/4HP 115/120/125/230/240/250/277VAC TV-5 120VAC	
		CQC	5A 240VAC/250VAC	
		TÜV	1H-D	5A 250VAC 10A 125VAC 5A 30VDC
			1H-L	3A/5A 250VAC 3A/5A 30VDC

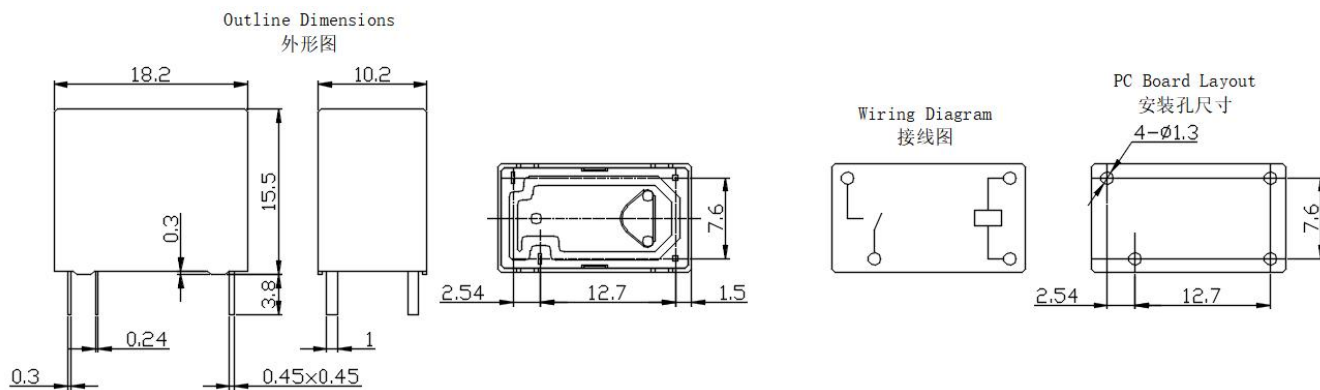
■ORDERING INFORMATION 订货标记示例

	TRG1	D	-12VDC	-S	-H	/XX
Type 型号						
Coil Power 线圈功率	D: 0.45W, L: 0.2W					
Coil Voltage 线圈电压	03, 05, 06, 09, 12, 18, 24VDC					
Construction 封装方式	S: Plastic sealed or flux proofed S: 塑封型或防焊剂型					
Contact Arrangement 触点形式	H: 1 Form A H: 一组常开					
Special Code 特性号	XX: Customer Special Requirement, Nil: Standard Type, IT: Compliant with IEC 60335-1 (GWT), Ex nC IIC Gc: Explosion-Proof, TBF-1: CLASS F(155℃) XX: 客户特殊要求, 无: 标准型, IT: 满足 IEC 60335-1 (GWT), Ex nC IIC Gc: 防爆, TBF-1: 绝缘等级 F 级(155℃)					

■ CHARACTERISTIC CURVES 性能曲线图



■ OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT 外形图、接线图、安装孔尺寸



备注:

- 1) 产品外形图的标注尺寸为沾锡前尺寸（沾锡后会变大），安装孔尺寸为推荐的 PCB 板孔的设计尺寸，具体 PCB 板孔设计尺寸可根据产品实物进行测绘、调整；
- 2) 产品部分外形尺寸中未注尺寸公差：当外形尺寸 $\leq 1\text{mm}$ 时，公差为 $\pm 0.2\text{mm}$ ；当外形尺寸在 $1\sim 5\text{mm}$ 时，公差为 $\pm 0.3\text{mm}$ ；当外形尺寸 $> 5\text{mm}$ 时，公差为 $\pm 0.4\text{mm}$ 。
- 3) 安装孔尺寸中未注尺寸公差均为 $\pm 0.1\text{mm}$ 。

Remark:

- 1) 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) The additional tin top is max. 1mm.
- 3) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

声明:

本产品规格书仅供客户使用时参考，如有更改，恕不另行通知。

Disclaimer:

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