

POWER RELAY 功率继电器	TRA3
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- Creepage distance:8.0mm Min
爬电距离: 至少 8mm
- Au-clad contact available
可提供镀金触点
- Transparent sealed available
可提供透明外壳
- Class B/F available
绝缘等级 B/F 级
- Conform to RoHS,ELV directive
符合 ROHS,ELV 指令



CONTACT DATA 触点参数

Contact Arrangement 触点形式	2H/2Z
Contact Material 触点材料	Silver Alloy 银合金
Load 负载	Resistive load 阻性负载 (cosΦ=1)
Contact Ratings 触点负载	5A240VAC 5A 30VDC
Min. Contact Load 最小负载	100mA 5VDC
Max. Switching Voltage 最大切换电压	250VAC/30VDC
Max. Switching Current 最大切换电流	8A
Max. Switching Power 最大切换功率	1250VA/240W
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	5×10 ⁶ OPS(at 300 OPS/min) 5×10 ⁶ 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 5000VAC (50/60Hz 1 min)
Operate Time 动作时间	≤20ms
Release Time 释放时间	≤10ms
Ambient Temperature 环境温度	-40℃to+85℃
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	40~85%
Unit Weight 重量	Approx. 14g 约14克

■ COIL DATA 线圈参数 (at 23°C)

Rated Voltage 额定电压 (VDC)	3	5	6	9	12	24	48	0.24W
Coil Resistance 线圈电阻 ($\Omega \pm 10\%$)	38	104	150	338	600	2400	9600	
Rated Current 额定电流 (mA)	80	48	40	26.7	20	10	5	
Max. Operate Voltage 最大动作电压 (VDC)	2.4	4	4.8	7.2	9.6	19.2	38.4	
Min. Release Voltage 最小释放电压 (VDC)	0.15	0.25	0.3	0.45	0.6	1.2	2.4	
Coil Resistance 线圈电阻 ($\Omega \pm 10\%$)	17	46	67	150	270	1050	4250	0.54W
Rated Current 额定电流 (mA)	180	108	90	60	45	22.5	11.3	
Max. Operate Voltage 最大动作电压 (VDC)	2.4	4	4.8	7.2	9.6	19.2	38.4	
Min. Release Voltage 最小释放电压 (VDC)	0.15	0.25	0.3	0.45	0.6	1.2	2.4	
Coil Resistance 线圈电阻 ($\Omega \pm 10\%$)	13	35	50	110	200	800	3200	0.72W
Rated Current 额定电流 (mA)	240	144	120	80	60	30	15	
Max. Operate Voltage 最大动作电压 (VDC)	2.4	4	4.8	7.2	9.6	19.2	38.4	
Min. Release Voltage 最小释放电压 (VDC)	0.15	0.25	0.3	0.45	0.6	1.2	2.4	
Max. Voltage 最大电压	3.9	6.5	7.8	11.7	15.6	31.2	62.4	

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

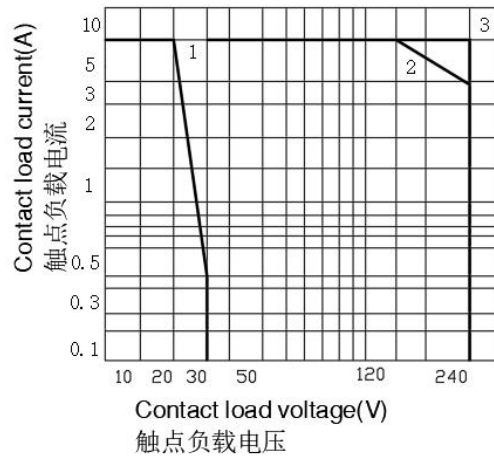
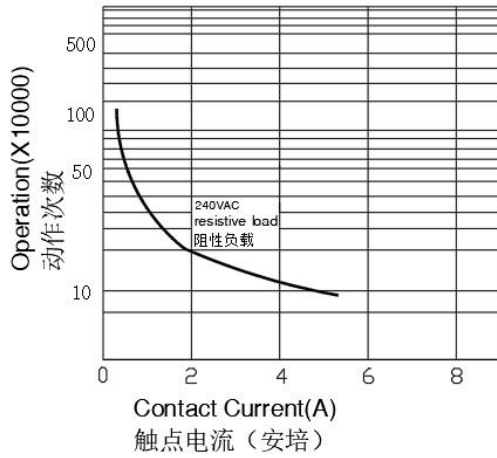
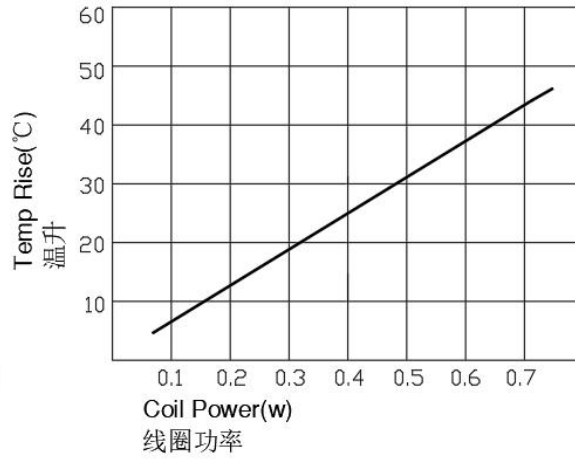
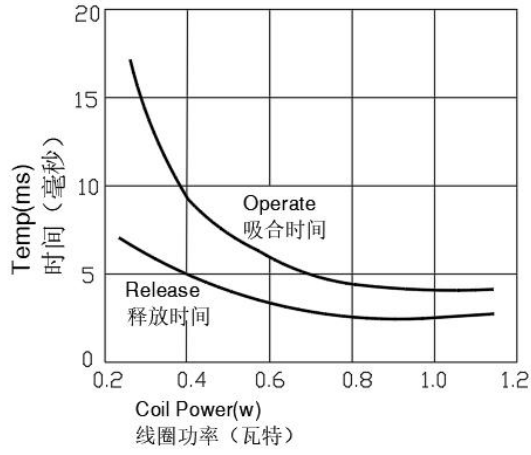
Model(型号)	Coiling rating (线圈电压)	Safety Standard (安全标准)	Contact rating (触点负载)
TRA3	3 to 48VDC	TÜV	5A 240VAC 5A 30VDC
		UL/cUL	5A 240VAC 5A 30VDC
		CQC	5A 240VAC

■ ORDERING INFORMATION 订货标记示例

	TRA3	D	-12VDC	-S	-2Z	XX
Type 型号						
Coil Power 线圈功率	D:0.72W L:0.54W M:0.24W					
Coil Voltage 线圈电压	03, 05, 06, 09, 12, 18, 24, 48VDC					
Construction 封装方式	Plastic sealed or flux proofed 塑封型或防焊剂型					
Contact Arrangement 触点形式	2H: 2 Form A 2Z: 2 Form C 2D: 2 Form B 2H: 两组常开 2Z: 两组转换 2D: 两组常闭					
Special Code 特性号	XX: Customer Special Requirement 客户特殊要求 (2) : Transparent Casing Nil: Standard Type (2) :透明外壳 无: 标准型 IT: Compliant with IEC 60335-1 (GWT) IT: 满足 IEC 60335-1 (GWT)					

■ CHARACTERISTIC CURVES 性能曲线图

Timing
时间曲线

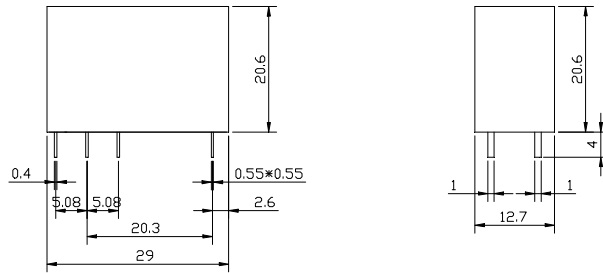


1.DC resistive 直流阻性
2.AC inductive 交流感性
3.AC resistive 交流阻性

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

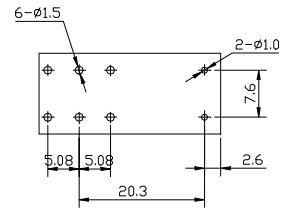
OUTLINE DIMENSIONS

外形尺寸



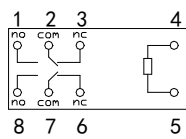
PC BOARD LAYOUT

安装图

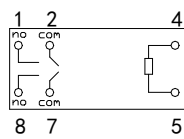


WIRING DIAGRAM²¹

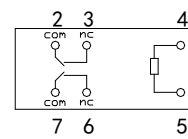
接线图



2 Form C



2 Form A



2 Form B

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.