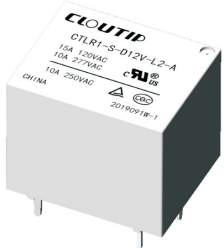



超小型磁保持继电器 / Subminiature Latching Relay



CTLR1系列
CTLR1 SERIES

- **特性 Features**
 - 尺寸 : (19.0x15.2x15.5mm)
Dimension: (19.0x15.2x15.5mm)
 - 触点切换能力达 15A
Contact Ability to switch up to 15A
 - 环保产品 (符合 ROHS)
Environmentally friendly products (ROHS)
 - 塑封型和防焊剂型可供选择
Sealed model and Flux model are available
- 阻燃等级 UL94 , V-0
Flame retardant grade UL94, V-0
- 超小型标准印制板引出脚
Miniature PCB leads
- 低线圈功耗 Low coil power :
单线圈 : 约 0.4W ; 双线圈 : 约 0.8W ;
1 coil : approx 0.4W ; 2 coil : approx 0.8W

● **安规认证 Safety Approval**



触点参数 / CONTACT DATA

触点形式 Contact Form	1A	1C
接触电阻 Contact Resistance	100mΩ Max (6VDC 1A)	
触点材料 Contact Material	银合金 Ag alloy	
触点负载 (阻性) Contact Rating (Resistive)	15A 120VAC 10A 277VAC	
最大切换电压 Max.Switching Voltage	277VAC/30VDC	
最大切换电流 Max.Switching Current	15A	
最大切换功率 Max.Switching Power	2770VA/300W	
机械寿命 Mechanical	1×10 ⁷ 次 1×10 ⁷ times	
电气寿命 Electrical Life	2×10 ⁴ 次 2×10 ⁴ times	

线圈参数 / COIL DATA

额定线圈功率 (W) Rated Coil Power(W)	1 coil 0.4W; 2 coil 0.8W
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性能参数 / GENERAL DATA

绝缘电阻 Insulation Resistance	100MΩ.500VDC	
介电耐压 Dielectric Strength	断开触点间 Between Open contacts	750VAC 1min
	线圈与触点间 Between Coil and contacts	2000VAC 1min
动作时间 (额定电压下) Operate time (Under rated voltage)	≤8ms	
释放时间 (额定电压下) Release time (Under rated voltage)	≤5ms	
冲击 Shock Resistance	强度 Endurance	980m/S ²
	稳定性 Misoperation	98m/S ²
振动 Vibration Resistance	10~55HZ, 1.5mm 双振幅 10~55HZ, 1.5mm double amplitude	
湿度 Humidity	35%~95%RH, +40°C	
温度范围 Temperature range	-40°C~+85°C	
重量 Weight	约9.0g about 9.0g	

安规认证 / SAFETY APPROVAL

认证类型 / 认证号 Certified/File No.	触点形式 Contact Form	额定线圈功率 (W) Rated Coil Power(W)	额定线圈电压 (VDC) Rated Coil Voltage(VDC)	认证负载 Safety Approval Rating	备注 Remark
UL	A	0.4W/0.8W	3-48VDC	15A 120VAC 10A 250VAC	环境温度 : 85°C Ambiet Temperature: 85°C
	C	0.4W/0.8W	3-48VDC	15A 120VAC 10A 250VAC	环境温度 : 85°C Ambiet Temperature: 85°C
TUV	A	0.4W/0.8W	3-48VDC	10A 250VAC	环境温度 : 85°C Ambiet Temperature: 85°C
	C	0.4W/0.8W	3-48VDC	NO:10A 250VAC	环境温度 : 85°C Ambiet Temperature: 85°C
CQC	A	0.4W/0.8W	3-48VDC	10A 250VAC	环境温度 : 85°C Ambiet Temperature: 85°C
	C	0.4W/0.8W	3-48VDC	NO:10A 250VAC	环境温度 : 85°C Ambiet Temperature: 85°C

线圈规格/COIL DATA

Coil Nominal Voltage 额定电压 (VDC)	Set Voltage 动作电压 (VDC)	Reset Voltage 复归电压 (VDC)	Pulse Width 脉冲宽度 ms	Max. Voltage 最大电压 (VDC)	Coil Resistance 线圈电阻 Ω	Rated power 额定功率
5	≤4.0	≤4.0	≥100	7.5	62.5 x (1±10%)	About 0.4W 约0.4W
6	≤4.8	≤4.8	≥100	9	90 x (1±10%)	
9	≤7.2	≤7.2	≥100	13.5	202.5 x (1±10%)	
12	≤9.6	≤9.6	≥100	18	360 x (1±10%)	
24	≤19.2	≤19.2	≥100	36	1440 x (1±10%)	
48	≤38.4	≤38.4	≥100	72	5760 x (1±10%)	
5	≤4.0	≤4.0	≥100	7.5	31.5 x (1±10%)	About 0.8W 约0.8W
6	≤4.8	≤4.8	≥100	9	45 x (1±10%)	
9	≤7.2	≤7.2	≥100	13.5	101.5 x (1±10%)	
12	≤9.6	≤9.6	≥100	18	180 x (1±10%)	
24	≤19.2	≤19.2	≥100	36	720 x (1±10%)	
48	≤38.4	≤38.4	≥100	72	2880 x (1±10%)	

命名规则/OPDERING INFORMATION

CTLR1 -S -D12V -L1 -A -R (xxx)

客户特性号 :
Customer characteristic No:
极性特点: R-反极性 (如接线图); 无-标准极性 (如接线图)
Polarity Characteristics: R-Reverse Polarity (Such as wiring diagram); NO-Standard polarity (Such as wiring diagram)

触点转换形式: A- 一组常开 A- 一组转换
Contact Forms : A- 1 Form A C- 1 Form C

线圈类型: L1-单线圈磁保持; L2-双线圈磁保持
Coil Type: L1-Single coil latching; L2-Double coil latching

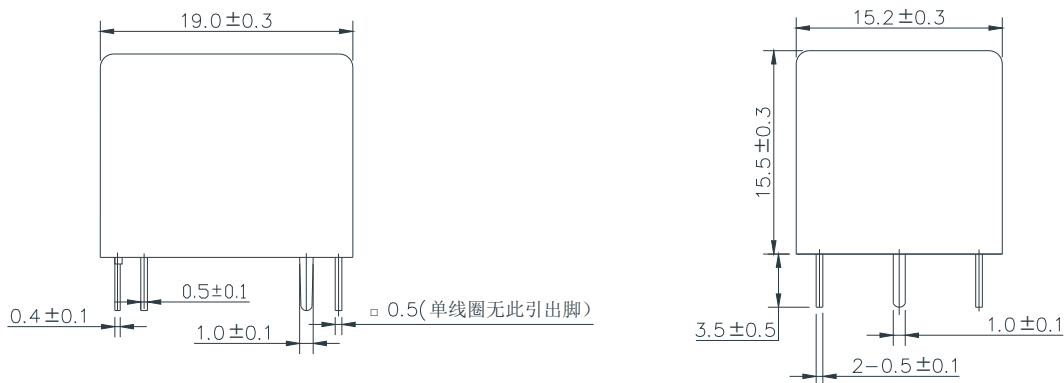
额定线圈电压 (VDC) : 03, 05, 06, 09, 12, 24, 48
Rated Coil Voltage (VDC) : 03, 05, 06, 09, 12, 24, 48

封装形式: S-塑封型 SH-防焊剂型
Packing Forms: S-Plastic Sealed Type SH-Flux Model

型号: CTLR1
Model: CTLR1

外形图, 接线图, 安装孔尺寸(单位:mm) / OUTLINE DIMENSIONS, WIRING DIAGRAM, PCB LAYOUT(Unit:mm)

外形图/Outline Dimensions

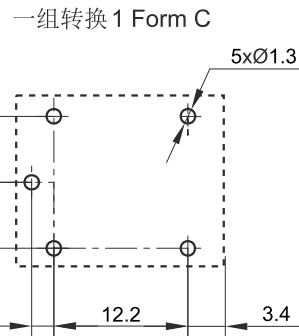
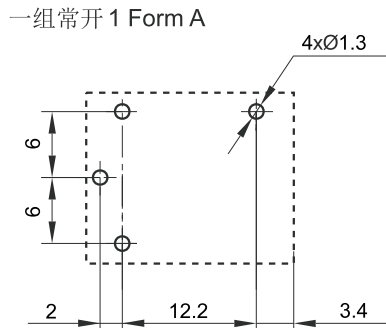


RELAY

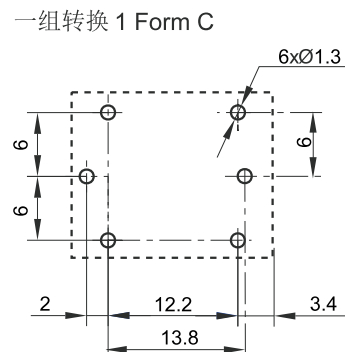
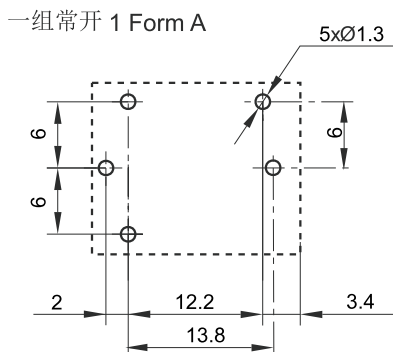
外形图 接线图, 安装孔尺寸(单位:mm) / OUTLINE DIMENSIONS, WIRING DIAGRAM, PCB LAYOUT(Unit:mm)

安装孔尺寸 (底视图)
PCB Layout (Bottom view)

单线圈磁保持
1 coil latching



双线圈磁保持
2 coils latching



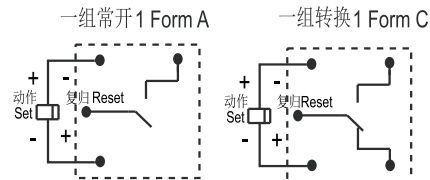
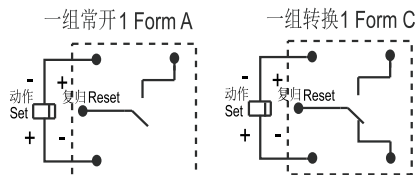
备注: (1)产品部分外形尺寸未注尺寸公差, 当外形尺寸 ≤ 1 mm, 公差为 ± 0.2 mm; 当外形尺寸在(1~5)mm之间时, 公差为 ± 0.3 mm; 当外形尺寸 > 5 mm, 公差为 ± 0.4 mm;
(2)安装孔尺寸中央未注尺寸公差为 ± 0.1 mm;
Remarks: (1)The dimension tolerance of part of the product is uninhabited, when the dimension of the product is less than 1 mm, the tolerance is (± 0.2 mm); when the dimension of the product is between (1~5) mm, the tolerance is (± 0.3 mm); when the dimension of the product is different, the tolerance is (± 0.3 mm). > 5 mm, tolerance is < 0.4 mm;
(2) The dimension tolerance of the installation hole without central injection is (± 0.1 mm);

接线图 (底视图)
Wiring Diagram (Bottom view)

标准极性 Standard Polarity

反极性 Reverse Polarity

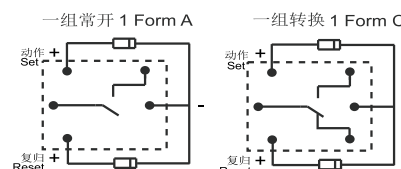
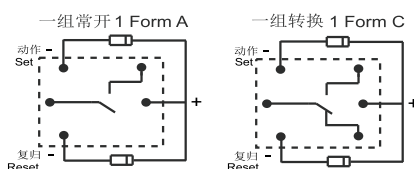
单线圈磁保持
1 coil latching



双线圈磁保持
2 coils latching

标准极性 Standard Polarity

反极性 Reverse Polarity



注意事项：NOTICE

- 备注：(1) 磁保持继电器出厂状态为复归状态，但因运输或继电器安装时受到冲击等因素的影响，可能会变为动作状态，因而使用时（电源接入时）请根据需要重新将其设置为动作状态或复归状态
 (2) 为确保磁保持继电器动作或复归，施加到线圈上的激励电压须达到额定电压，脉冲宽度须大于100ms；不要同时向动作线圈和复归线圈施加电压；不要长时间（大于1分钟）向线圈施加电压。
 (3) 在产品运输、存储和应用的过程中，请使产品远离强磁场以避免动作电压和复归电压的改变。
 (4) 在洁净环境（不含H₂S、SO₂、NO₂粉尘等污染物）下使用推荐使用防焊剂型产品；反之我们推荐使用塑封型产品。

- Remarks: (1) Relay is on the "reset" or "set" status when being released from stock, with the consideration of shock risen from transit and relay mounting, relay would be changed to "set" or "reset" status, therefore, when application (connecting the power supply), please reset the relay to "set" or "reset" status on request.
 (2) In order to maintain "set" or "reset" status, energized voltage to coil should reach the rated voltage, impulse width should be more than 100ms. Do not energize voltage to "set" coil and "reset" coil simultaneously. And also long energized time (more than 1 min) should be avoided.
 (3) Keep the product away from strong magnetic field during transportation, storage and application, to avoid change of set/reset voltage.
 (4) We recommend flux proofed types for a clean environment (free from contaminations like H₂S, SO₂, NO₂, dust etc.). We suggest to choose plastic sealed types and validate it in real application for an unclean environment (with contaminations like H₂S, SO₂, NO₂, dust etc.)

声明：

本产品的规格书仅供客户使用时参考，若有更改，恕不另行通知，对本公司而言，不可能评定继电器在每一个具体领域的性能参数要求，因而客户应根据具体的使用条件选择与之相配的产品，若疑问，请与云尖联系以便获取更多的技术支持，但选型责任仅由客户负责。

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 "Cloutip" for the technical service. However, it is the use's responsibility to determine which product should be used only.