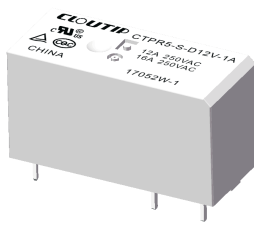



# RELAY

## 小型大功率直流继电器 / Miniature High Power DC Relay

<p><b>CTPR5系列</b> CTPR5 SERIES</p> 	<p>● <b>特性 Features</b></p> <ul style="list-style-type: none"> <li>● 外形尺寸 : (29.0x12.7x15.7mm) OUT Dimension: (29.0x12.7x15.7mm)</li> <li>● 触点切换能力达 16A Contact Ability to switch up to 16A</li> <li>● 环保产品 (符合 ROHS) Environmentally friendly products (in line with ROHS)</li> <li>● 低高度, 仅为 15.7mm Low altitude, only 15.7mm</li> </ul>	<ul style="list-style-type: none"> <li>● 线圈与触点间介质耐压 5kV Dielectric withstand voltage between coil and contact 5kV</li> <li>● 爬电距离为 10mm Creepage distance is 10mm</li> <li>● UL 绝缘等级 : F 级绝缘等级可供选择 UL insulation grade: F grade insulation grade is available.</li> <li>● 多种触点形式可供选择 Various contact forms are available.</li> </ul>
	<p>● <b>安规认证 Safety Approval</b></p> 	

触点参数 / CONTACT DATA		性能参数 / GENERAL DATA	
触点形式 Contact Form	1A,1B,1C 2A,2B,2C	绝缘电阻 Insulation Resistance	1000MΩ.500VDC
接触电阻 Contact Resistance	100mΩ Max (6VDC 1A)	介质耐压 Dielectric Strength	断开触点间 Between Open contacts 1000VAC 1min 线圈与触点间 Between Coil and contacts 5000VAC 1min
触点材料 Contact Material	银合金 Ag Alloy	浪涌电压 (线圈与触点间) Surge voltage (between coil and contact)	10kV(1.2/50)
触点负载 (阻性) Contact Rating (Resistive)	12A/16A 250VAC 8A 250VAC	动作时间 (额定电压下) Operate time (Under rated voltage)	≤15ms
最大切换电压 Max.Switching Voltage	440VAC/300VDC	释放时间 (额定电压下) Release time (Under rated voltage)	≤8ms
最大切换电流 Max.Switching Current	12A/16A 8A	线圈温升 (额定电压下) Coil temperature rise (Under rated voltage)	≤55K
最大切换功率 Max.Switching Power	3000VA/4000VA 2000VA	冲击 Shock Resistance	强度 Endurance 980m/S <sup>2</sup> 稳定性 Misoperation 98m/S <sup>2</sup>
机械寿命 Mechanical	1×10 <sup>7</sup> 次 1×10 <sup>7</sup> times	振动 Vibration Resistance	10HZ~150HZ,10g/5g
电气寿命 Electrical Life	1×10 <sup>5</sup> 次 1×10 <sup>5</sup> times	湿度 Humidity	5%~85%RH
<b>线圈参数 / COIL DATA</b>		温度范围 Temperature range	-40°C~+85°C
额定线圈功率 (W) Rated Coil Power(W)	约0.4W about 0.4W	重量 Weight	约13.5g about 13.5g

安规认证 / SAFETY APPROVAL					
认证类型 / 认证号 Certified/File No.	结构形式 Structure Forms	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	1; 2type	0.4W	5-110VDC	12A 277VAC	环境温度: 85°C Ambient Temperature: 85°C
	3 type	0.4W	5-110VDC	16A 277VAC	环境温度: 85°C Ambient Temperature: 85°C
	4 type	0.4W	5-110VDC	8A 277VAC	环境温度: 85°C Ambient Temperature: 85°C
TUV	1; 2type	0.4W	5-110VDC	12A 277VAC	环境温度: 85°C Ambient Temperature: 85°C
	3 type	0.4W	5-110VDC	16A 277VAC	环境温度: 85°C Ambient Temperature: 85°C
	4 type	0.4W	5-110VDC	8A 277VAC	环境温度: 85°C Ambient Temperature: 85°C
CQC	1; 2type	0.4W	5-110VDC	12A 277VAC	环境温度: 85°C Ambient Temperature: 85°C
	3 type	0.4W	5-110VDC	16A 277VAC	环境温度: 85°C Ambient Temperature: 85°C
	4 type	0.4W	5-110VDC	8A 277VAC	环境温度: 85°C Ambient Temperature: 85°C

线圈规格/COIL DATA

额定电压 Rated Voltage (VDC)	线圈电阻 Coil Resistance ( $\Omega \pm 10\%$ )	吸合电压 Operate Voltage $\leq$ (VDC)	释放电压 Release Voltage $\geq$ (VDC)	最大电压 * Maximum voltage (VDC)
5	62	3.50	0.5	7.5
6	90	4.20	0.9	9.0
9	202	6.30	0.9	13.5
12	360	8.40	1.2	18
18	810	12.60	1.8	27
24	1440	16.80	2.4	36
48	5760	33.60	4.8	72
60	7500	42.00	6.0	90
110	25200	77.00	11.0	165

备注：\*最大电压是线圈过电后电压值，指的是继电器在极短作用时间内能够承受的瞬时最大电压值。

Note: \* The maximum voltage is the value of the voltage after the coil is overpowered, which refers to the instantaneous maximum voltage that the relay can withstand in a very short time.

命名规则/OPDERING INFORMATION

CTPR5 -S -D12V -1 -1A (xxx)

客户特性号：  
Customer characteristic No:

触点转换形式： 1A/2A: 一 / 二组常开；1B/2B: 一 / 二组常闭；1C/2C: 一 / 二组转换  
Contact Forms : 1A/2A: 1/2Pole Form A; 1B/2B: 1/2Pole Form B;1C/2C: 1/2Pole Form C

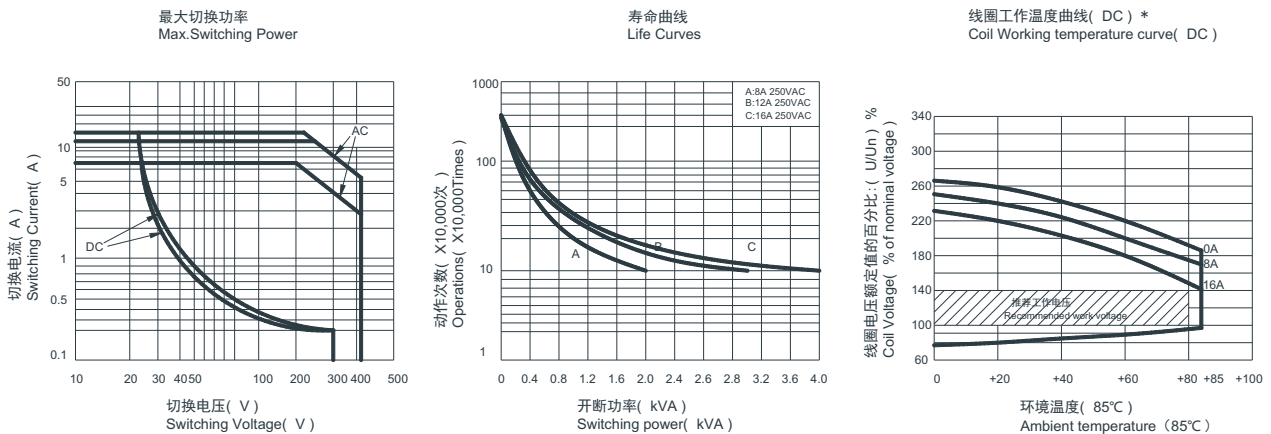
结构形式 :1:3.5mm 一组 12A; 2:5.0mm 一组 12A; 3:5.0mm 一组 16A; 4:5.0mm 两组 8A  
Structure Forms:1:3.5mm 1Pole12A; 2:5.0mm 1Pole12A; 3:5.0mm 1Pole16A; 4:5.0mm 2Pole8A

额定线圈电压 (VDC) : 05, 06, 09, 12, 18, 24, 48, 60, 110  
Rated Coil Voltage (VDC) : 05, 06, 09, 12, 18, 24, 48, 60, 110

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

型号: CTPR5  
Model: CTPR5

特性曲线图/CHARACTERISTIC CHART DATA



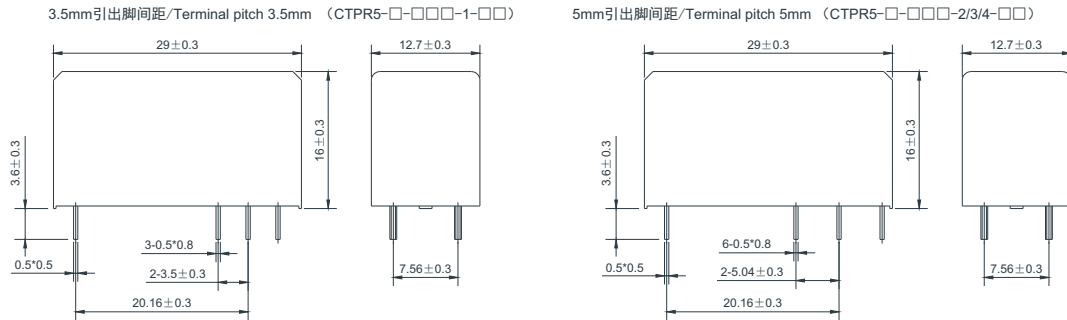
备注：\*继电器使用过程中，如果激励电压超过额定电压将会导致继电器电耐久性降低。在推荐电压范围内，对电耐久性的影响会小一些。超过图中曲线规定的上限值，继电器线圈的绝缘有可能会被破坏。

\* The use of a relay with an energising voltage other than the rated coil voltage may lead to reduced electrical life. An energising voltage over the abver range may damage the insulation of relay coil. .

RELAY

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

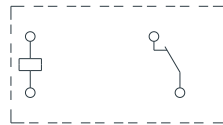


接线图 / Wiring Diagram  
(底视图) / (Bottom View)

3.5/5mm, 1组/1Pole, 12A, CTPR5-□-□□□-1/2-1□



1组常开/1-formA



1组常闭/1-formB



1组转换/1-formC

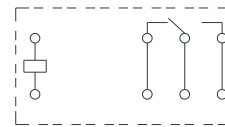
5mm, 1组/1Pole, 16A, CTPR5-□-□□□-3-1□



1组常开/1-formA



1组常闭/1-formB



1组转换/1-formC

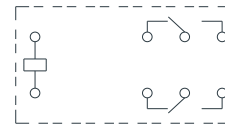
5mm, 2组/2Pole, 8A, CTPR5-□-□□□-4-2□



2组常开/2-formA



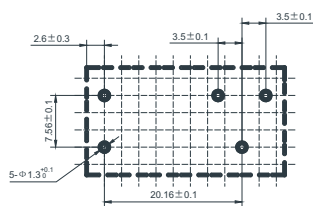
2组常闭/2-formB



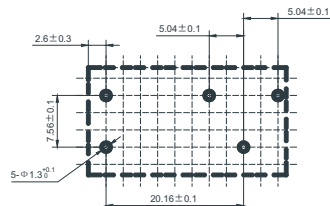
2组转换/2-formC

安装孔尺寸 / PCB Layout  
(底视图) / (Bottom View)

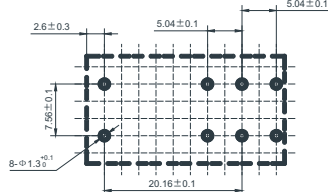
3.5mm 1组 / 1Pole 12A



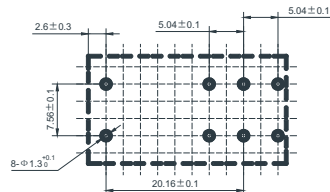
5mm 1组 / 1Pole 12A



5mm 1组 / 1Pole 16A



5mm 2组 / 2Pole 8A



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所有性能参数要求,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.