

特性 Features

- 1组最大20A负载开闭能力 1 Pole Max. 20A switching capability
- 磁保持继电器 Latching relay
- 5kV介电强度(线圈与触点之间) 5kV dielectric strength (between coil and contacts)
- 单线圈和双线圈可选 Both 1 coil and 2 coils available
- 环保产品(符合RoHS标准) Environmental friendly product (RoHS compliant)
- 尺寸 Dimensions: 29.0 x 12.7 x 15.7 mm



典型应用 Application

- 电能表/房屋设备/楼宇自动化/ UPS, FA设备/照明控制/智能家居应用等。 Electric Power Meter / Housing Equipment / Building Automation / UPS, FA Equipment / Illumination Control / Smart Home Application, etc.

触点参数 Contact Data

触点形式 Contact Arrangement	1A, 1C	2A, 2C
触点额定 Contact Rating	16A 277VAC/250VAC	8A 277VAC/250VAC
最大切换电压 Max. Switching Voltage	277VAC	
最大切换电流 Max. Switching Current	20A	10A
触点材质 Contact Material	银合金 Ag alloy	
接触电阻 Contact Resistance	Max.100mΩ (1A 5VDC)	
动作/释放时间 Operate Time/ Release Time	≤10ms/≤10ms	
电耐久性 Electrical Endurance	5*10 ⁴ ops (NO: 16A 250VAC, Resistive load, at 85°C, on : off=1s : 9s)	2A: 5*10 ⁴ ops (NO: 8A 250VAC, Resistive load, at 85°C, on : off=1s : 9s) 2C: 1*10 ⁴ ops (NO: 8A 250VAC, Resistive load, at 85°C, on : off=1s : 9s)
机械耐久性 Mechanical Endurance	2*10 ⁶ ops.	
最大切换功率 Max. Switching Power	4000VA	

线圈参数 Coil Data (标准品 Standard Type)

线圈类型 Coil Type	单线圈 1 Coil	双线圈 2 Coils
线圈电压范围 Coil Voltage Range	3~24VDC	
容许最大电压 Max. Continuous	额定电压的120% 120% of Rated Voltage	
线圈绝缘等级 Coil Insulation System	Class F	
额定线圈功率 Coil Rating Power	约Approx. 0.64W	约Approx. 1.28W
最小线圈脉冲宽度 Min. Coil Voltage Plus Width	200ms	

线圈参数 Coil Data (灵敏型 Sensitive Type)

线圈类型 Coil Type	单线圈 1 Coil	双线圈 2 Coils
线圈电压范围 Coil Voltage Range	3~24VDC	
容许最大电压 Max. Continuous	额定电压的150% 150% of Rated Voltage	
线圈绝缘等级 Coil Insulation System	Class F	
额定线圈功率 Coil Rating Power	约Approx. 0.4W	约Approx. 0.6W
最小线圈脉冲宽度 Min. Coil Voltage Plus Width	200ms	

注:

- a) 所有数值均为在环境温度+23°C下未预通电的线圈 All the performance data are for coils that are not pre energized at 23°C ambient temperature.

性能参数 Characteristics

绝缘电阻 Insulation Resistance	1000MΩ Min (at 500VDC)	
介质耐压 Dielectric Strength	断开触点间 Between Open Contacts	1000Vrms 1min
	触点组之间 Between Contact Sets	2500Vrms 1min
	线圈与触点间 Between Coil and Contact	5000Vrms 1min
浪涌电压 Surge Voltage (Between Contact and Coil)	10kV (1.2 / 50μs)	
温度范围 Temperature Range	-40~+85°C	
湿度 Ambient Operating Humidity	5% ~ 85%RH	
振动 Vibration Resistance	10~55Hz 双振幅 1.5mm double amplitude 1.5mm	
冲击 Shock	稳定性 Functional	10G
	强度 Destructive	100G
重量 Weight	Approx.13.5g	

线圈规格 Coil Voltage Specifications (标准品 Standard Type)

额定电压 Nominal Coil	动作电压 Must Operate	释放电压 Release Coil	线圈电阻 Coil Resistance	
			单线圈 1Coil	双线圈 2Coils
VDC	VDC	VDC	Ω(±10%)	
3	2.1	2.1	14.0	7/7
5	3.5	3.5	39.1	19.5/19.5
6	4.2	4.2	56.3	28.2/28.2
9	6.3	6.3	126.6	63.3/63.3
12	8.4	8.4	225.0	112.5/112.5
24	16.8	16.8	900.0	450/450

线圈规格 Coil Voltage Specifications (灵敏型 Sensitive Type)

额定电压 Nominal Coil	动作电压 Must Operate	释放电压 Release Coil	线圈电阻 Coil Resistance	
			单线圈 1Coil	双线圈 2Coils
VDC	VDC	VDC	Ω(±10%)	
3	2.1	2.1	22.5	15/15
5	3.5	3.5	62.5	39/39
6	4.2	4.2	90	56.25/56.25
9	6.3	6.3	202.5	126.6/126.6
12	8.4	8.4	360	225/225
24	16.8	16.8	1440	900/900

注:

- a) 以上值为初始值 All the performance data are initial values.
- b) 线圈电阻是在线圈温度23°C, 公差为±10% Coil resistance is tested at 23°C ambient temperature, ±10% tolerance.

ST115L PCB 磁保持继电器 PCB Latching Relay

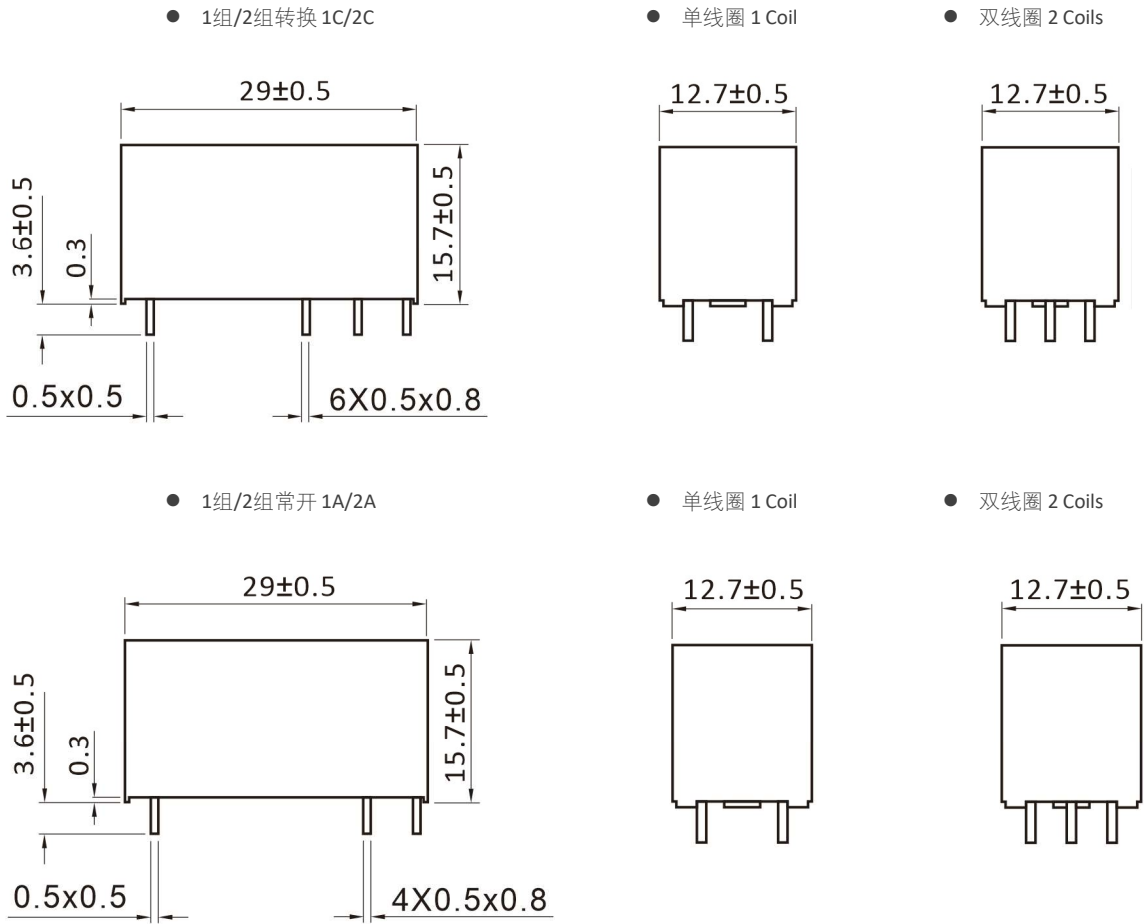
型号命名标准 Model Number Legend

	ST115L	-16	-1A	-12	2	L	S	T	F	,XXX
基本型号Basic Type:										
ST115L: 磁保持型 Latching Type										
触点负载 Contact Rating:										
8: 8A (Only For 2A or 2C)										
16: 16A (Only For 1A or 1C)										
触点结构 Contact Arrangement:										
1A: 1组常开 1 Form A 1C: 1组转换 1 Form C										
2A: 2组常开 2 Form A 2C: 2组转换 2 Form C										
线圈电压 Coil Voltage:										
3, 5, 6, 9, 12, 24VDC										
线圈排序 Coil Sort:										
Blank: 单线圈磁保持 1 Coil Latching; 2: 双线圈磁保持 2 Coils Latching										
线圈功耗 Coil Power:										
Blank: 0.64W 单线圈磁保持/1.28W双线圈磁保持 0.64W 1 Coil Latching/1.28W 2 Coils Latching										
L: 0.4W 单线圈磁保持/0.6W双线圈磁保持 0.4W 1 Coil Latching/0.6W 2 Coils Latching										
防护构造 Protective construction:										
Blank: Flux tight 耐助焊剂型; S: Sealed 塑料密封型										
耐温等级 Temperature Resistance Class:										
Blank: 85°C; T: 105°C										
绝缘等级 Insulation Class:										
Blank/F: F级 Class F										
特殊特性 Special Characteristic:										
Blank: 标准型 Standard; 5*: TV-5认证; 8*: TV-8认证; R*: 加强绝缘 Reinforce; XXX: 客户特殊特性号 Customer Special Feature Number										

*有关特殊产品详情, 请与我司联系。 For special product's detail, please contact STEIPU.

外形尺寸、PCB 布局、接线图 Outline Dimensions, PCB Layout, Wiring Diagram (mm)

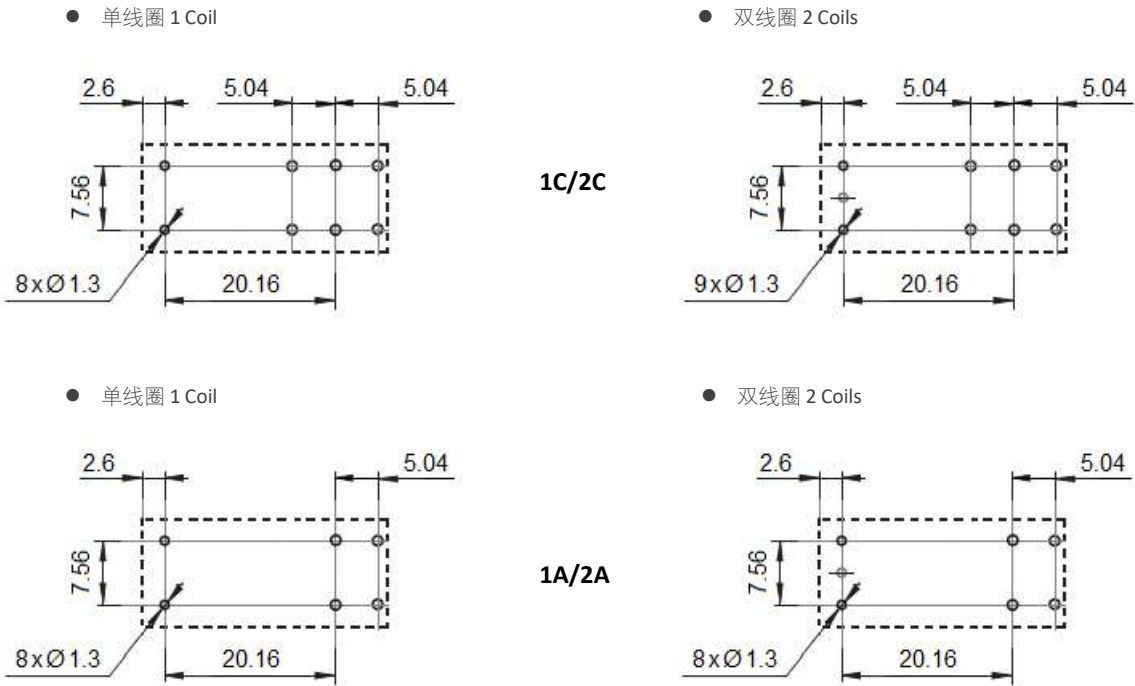
外形尺寸 Outline Dimensions



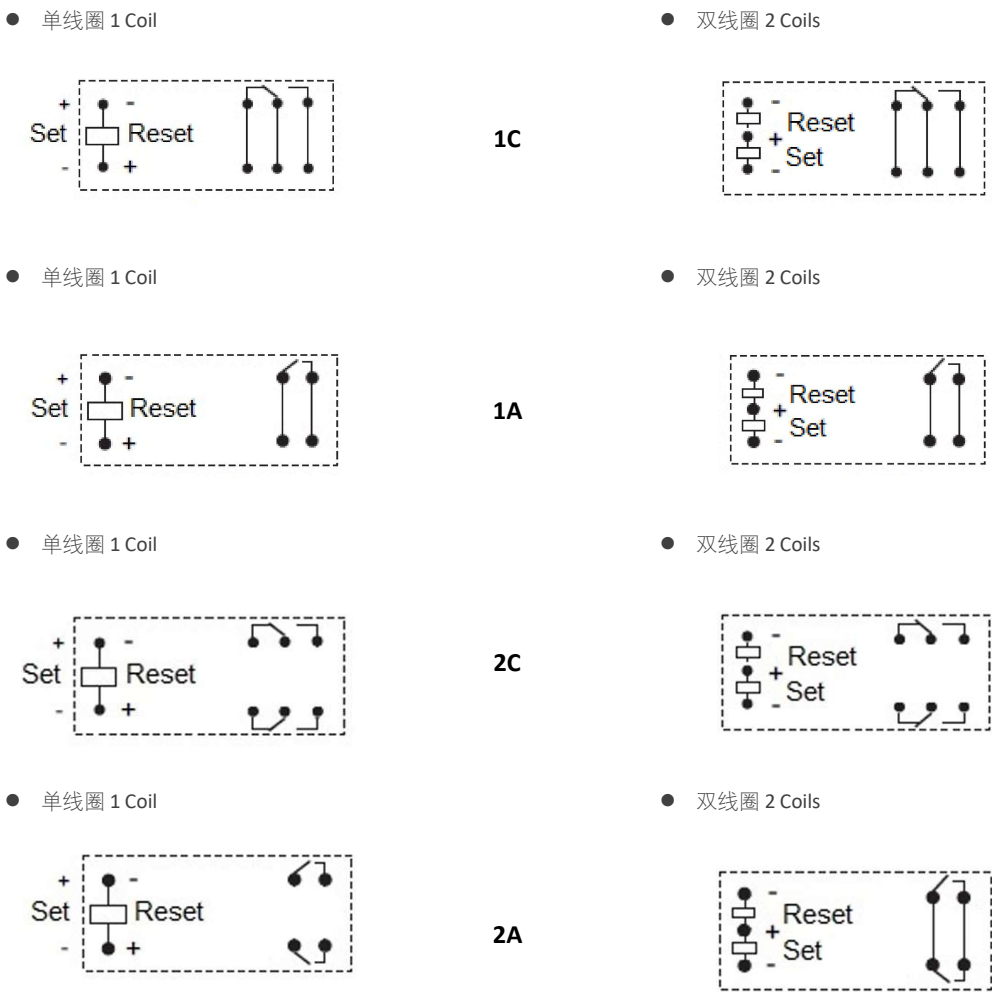
ST115L PCB 磁保持继电器 PCB Latching Relay

外形尺寸、PCB 布局、接线图 Outline Dimensions, PCB Layout, Wiring Diagram (mm)

印刷线路板加工尺寸 PCB Outline Dimension Bottom View



接线图 Wiring Diagram Bottom View



ST115L PCB 磁保持继电器 PCB Latching Relay

注 Note:
未注尺寸公差 Unspecified tolerance : <1mm: ±0.2 mm, 1~5 mm: ±0.3mm, >5mm: ±0.5mm ;
安装孔尺寸中未注尺寸公差为± 0.1 mm PC board layout dimensions hadn't specified tolerance is ±0.1mm.

- 请注意:
1. 上面显示的数据是初始值。
 2. 继电器在出库时处于“复位”或“设定”状态，考虑中转冲击上升和继电器安装时，继电器将变为“设置”或“复位”状态，因此，在应用（连接电源）时，请根据要求将继电器复位到“设置”或“复位”状态。
 3. 在运输、储存和操作产品过程中。请将产品置于远离磁场的地方避免操作电压和释放电压的变化。
 4. 不要同时给“设定”线圈和“复位”线圈通电。同时长时间通电（1分钟以上）应该避免。
 5. 用于计量测量应用的继电器通常采用防尘结构，但大多数继电器可以根据客户的具体要求特制。这类继电器建议存放时间不超过6个月，并且请注意存放环境。如果客户无特殊要求，为确保接触可靠性，在交货时我们将保持继电器触点闭合状态。

- Notice:
1. The data shown above are initial values.
 2. 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.
 3. During transportation, storage and operation the product. Please keep the product away from magnetic fields to avoid changes of operate and release voltage.
 4. Do not energize voltage to “set” coil and “reset” coil simultaneously. And also long energized time (more than 1 min) should be avoided.
 5. Relays used for metering measuring applications are usually made with dust proof structure, while most relays could be made specially per customer’s specific requirements. No longer than 6 months’ storage time is recommended for this kind of relay, and please pay attention to the storage environment. To ensure contact reliability, we will keep contact status be closed when delivery if no special required by customer.

免责声明:
本说明书仅供参考。
有关更多信息，请参阅“术语和指南”。规格如有更改，恕不另行通知。我们无法评估每个可能应用的所有性能和所有参数。因此，用户应该在一个正确的位置选择适合自己的产品。如有任何疑问或者需要技术服务，请联系STEIPU。

Disclaimer:
This manual is for reference only . For more information, see Terms and Guidelines. Specifications are subject to change without notice. We cannot evaluate all performance and all parameters for every possible application. Therefore, users should choose the right product for them in the right place. If you have any questions or need technical services, please contact STEIPU.