

特性 Features

- 额定负载 Rate Current : 30A/40A 250VAC/30VDC
- 触点形式 Contact Arrangement : 1A 1B 1C
- 线圈功率 Coil Power : 0.9W 1.5W
- 满足105°C使用条件 Comply 105°C application
- 外形尺寸 Outline Dimensions : (32.3x27.1x20)mm
- 重量 Unit Weight : ≈ 25g



典型应用 Application

充电桩 Charging Station

功率电源 Power Supply

触点参数 Contact Data	
触点形式 Contact Arrangement	1A, 1B, 1C
额定电压 Rating Voltage	250VAC
最大切换电压 Max. Switching Voltage	277VAC
最大切换电流 Max. Switching Current	30/40A
触点材质 Contact Material	银合金 Silver Alloy
接触电阻 Contact Resistance	100mΩ(1A 6VDC)
动作/释放时间 Operate Time/ Release Time	≤15ms/≤10ms
电耐久性 Electrical Endurance	Rating load, Resistance, on:off=1s:9s @23°C 30A: 1x10 ⁵ ops 40A: 1x10 ⁴ ops
机械耐久性 Mechanical Endurance	on:off=1s:1s 1x10 ⁷ ops
最大切换功耗 Max. Switching Power	11080VA/1200W

线圈参数 Coil Data	
线圈电压范围 Coil Voltage Range	5~48 VDC
容许最大电压 Max. Continuous	额定电压的130% 120% of Rated Voltage*
线圈绝缘等级 Coil Insulation System	F Class
额定线圈功率 Coil Rating Power	0.9W/1.5W

* : 具体参考线圈规格一栏 Specific reference to the Coil Voltage Specifications sheet .

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		100MΩ 500VDC
介质耐压 Dielectric Strength	断开触点间 Open Load Contacts	1500VAC 1min
	线圈与触点间 Coil to Load Contacts	2500VAC 1min
温度范围 Temperature Range		-40°C to +105°C
湿度 Ambient Operating Humidity		5 ~ +95%RH
振动 Vibration Resistance		5HZ to 55HZ 1.5mm 双振幅 Double Amplitude
冲击 Shock	稳定性 Functional	10G
	强度 Destructive	30G
重量 Weight		≈ 30g
耐热焊接 Soldering (Max.)		10s, 265°C

线圈规格 Coil Voltage Specifications						
额定电压 Nominal Coil	动作电压 Must Operate	释放电压 Release Coil	最大过载电压 Max. Voltage (VDC)		线圈电阻 Coil Resistance Ω(±10%)	
	VDC	VDC	0.9W	1.5W	0.9W	1.5W
5	≤ 3.75	≥ 0.5	6.5	6.5	27.7	16.6
6	≤ 4.5	≥ 0.6	7.8	7.8	40	24
9	≤ 6.75	≥ 0.9	11.7	11.7	90	54
12	≤ 9.0	≥ 1.2	15.6	15.6	160	96
18	≤ 13.5	≥ 1.8	23.4	23.4	360	216
24	≤ 18.0	≥ 2.4	31.2	31.2	640	384
48	≤ 36.0	≥ 4.8	62.4	62.4	2560	1536

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.

ST91 小型大功率继电器 Miniature High Power Relay

型号命名标准 Model Number Legend

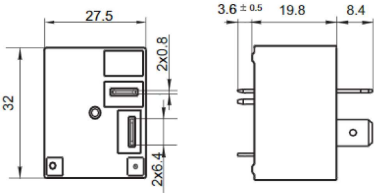
	ST91	-1A	-12	S	,XXX
基本型号 Basic Type:					
ST91P: 标准快插端子 Standard Q&C Type					
ST91K: 带端子外壳 With Terminal Cover					
触点结构 Contact Arrangement:					
1A: 1组常开 1 Form A; 1B: 1组常闭 1 Form B;					
1C: 1组转换 1 Form C					
线圈电压 Coil Voltage:					
5, 6, 9, 12, 18, 24, 48, 110VDC					
保持构造 Protective Construction:					
Blank: 耐助焊剂型 Flux Tight ; S: 塑料密封型 Sealed					
特殊特性 Special Characteristic:					
030: 0.9W线圈功耗 Coil Power, 30A负载 Rating Load; 130: 1.5W线圈功耗 Coil Power, 30A负载 Rating Load;					
040: 0.9W线圈功耗 Coil Power, 40A负载 Rating Load; 140: 1.5W线圈功耗 Coil Power, 40A负载 Rating Load;					
**D: 短快插端子 Low Q&C Type; **W: 宽脚位 Wide Pin;					

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

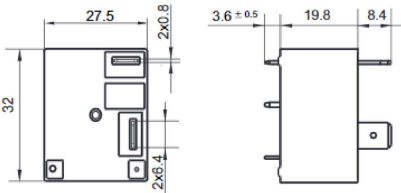
外形尺寸 Outline dimensions

ST91P产品 ST91P Type

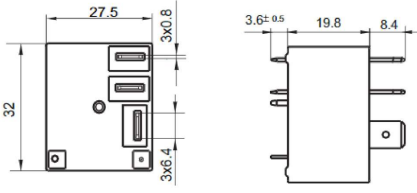
1组常开 1 Form A



1组常闭 1 Form B

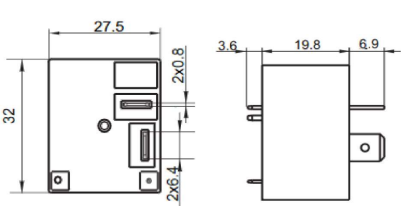


1组转换 1 Form C

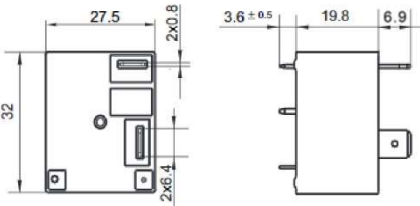


ST91P**D产品 ST91P**D Type

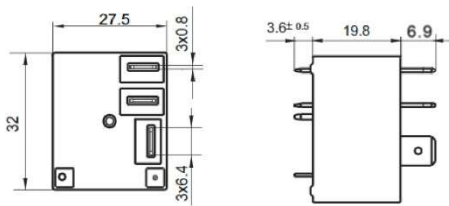
1组常开 1 Form A



1组常闭 1 Form B



1组转换 1 Form C



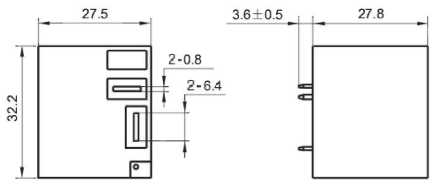
ST91 小型大功率继电器 Miniature High Power Relay

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

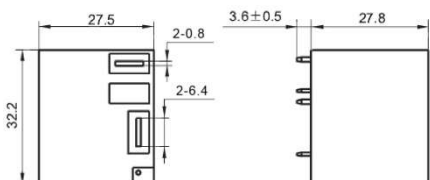
外形尺寸 Outline dimensions

ST91K产品 ST91K Type

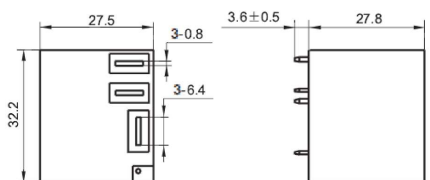
1组常开 1 Form A



1组常闭 1 Form B

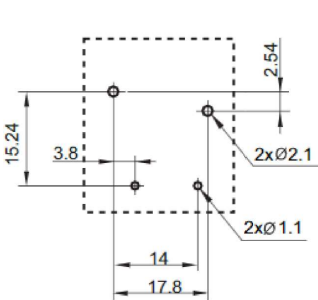


1组转换 1 Form C

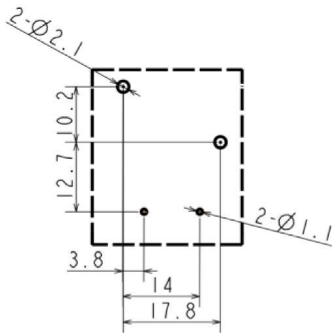


印刷线路板加工尺寸 PCB Outline Dimension Bottom View

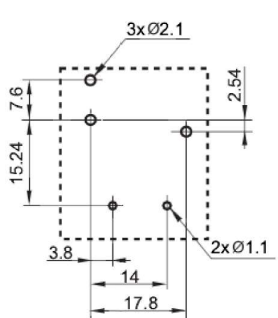
1组常开 1 Form A



1组常闭 1 Form B

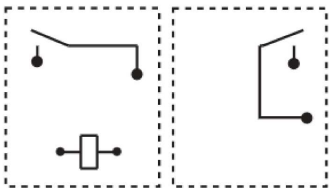


1组转换 1 Form C

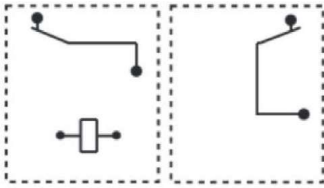


接线图 Wiring Diagram Bottom View

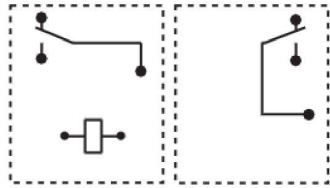
1组常开 1 Form A



1组常闭 1 Form B



1组转换 1 Form C



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.

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。

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