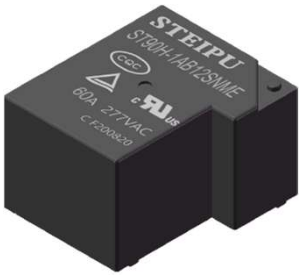
ST90H 小型大功率继电器 Miniature High Power Relay

特性 Features

- 外形尺寸 Outline dimensions : (32.2x27.5x20.4)mm
- 触点形式Contact arrangement : 1A 1AB
- 线圈功率Coil power : 0.9W 1.5W 2.25W
- 1.2mm, 2.35mm, 3.0mm触点间隙可选 1.2mm, 2.35mm, 3.0mm contact gap optional (compliant to IEC 62109-2-2011)
- 负载条件Load conditions : 50A/60A 277VAC/400VAC
- 满足IEC 62955:2018 9.11.2条款 Compliant to IEC 62955:2018 Clause 9.11.2
- 重量 Unit weight : ≈ 28g



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, 1AB,1C
额定电压 Rating Voltage	277VAC/400VAC
最大切换电压 Max. Switching Voltage	400VAC
最大切换电流 Max. Switching Current	50/60A
最大切换功耗 Max. Switching Power	13850VA/240000VA
触点材质 Contact Material	Silver Alloy
接触电阻 Contact Resistance	100mΩ(1A 6VDC)
动作/释放时间 Operate Time/ Release Time	15ms max /10ms max
电耐久性 Electrical Endurance	(Rating load, Resistance, on:off=1s:9s @85℃) NO: 60A 277VAC $6x10^3$OPS NO: 60A 400VAC $1x10^3$OPS NO:Making32A Carrying60A Breaking32A 400VAC $5x10^4$OPS NC: 1A $6x10^3$OPS(For 1AB Type) NC: 20A 277VAC $6x10^3$OPS(For 1C Type)
机械耐久性 Mechanical Endurance	$1x10^6$OPS (on:off=1s:1s)

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110% 110% 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/2.25W

注:

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

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

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	4000VAC 1min
温度范围 Temperature Range		-40℃ to +85℃
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		≈ 28g
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	VDC	0.9W	1.5W	2.25 W	0.9W	1.5W	2.25 W
5	≤ 3.75	≥ 0.5	6.5	6.5	5.5	27.7	16.6	11.1
6	≤ 4.5	≥ 0.6	7.8	7.8	6.6	40	24	16
9	≤ 6.75	≥ 0.9	11.7	11.7	9.9	90	54	36
12	≤ 9.0	≥ 1.2	15.6	15.6	13.2	160	96	64
18	≤ 13.5	≥ 1.8	23.4	23.4	19.8	360	216	144
24	≤ 18.0	≥ 2.4	31.2	31.2	26.4	640	384	256
48	≤ 36.0	≥ 4.8	62.4	62.4	52.8	2560	1536	1024

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℃，公差为±10% Coil resistance is tested at 23℃ ambient temperature, ±10% tolerance.

■ 型号命名标准 Model Number Legend

	ST90H	-1AB	12	S	N	XXX

基本型号 Basic Type：

ST90H

触点结构 Contact Arrangement:

1A: 1组常开 1 Form A;

1AB: 1组常开带辅助触点1 Form B With Auxiliary Contact

线圈电压 Coil Voltage:

5, 6, 9, 12, 24, 48VDC

防护构造 Protective Construction:

Blank: 耐助焊剂型 Flux Tight; S: 塑料密封型 Sealed

线圈功率 Coil Power:

Blank: 0.9W; N: 1.5W; L: 2.25W

特殊特性 Special Characteristic:

K: 触点间隙 Contact Gap 1.2mm(only 50A Type); M: 触点间隙 Contact Gap 2.35mm(only 1A); G: 触点间隙 Contact Gap 3.0mm(only 1A)

W: 宽脚 WideTerminal

D: 输出脚位间距 Output Terminal Spacing 18.75mm

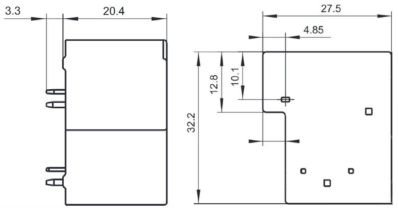
C: 1组转换型触点结构 1 Form C Contact Arrangement

XXX: 客户特殊特性号 Customer Special Feature Number

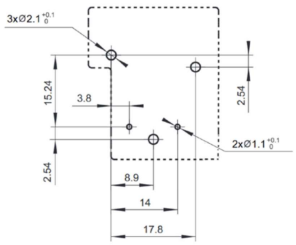
■ 外形尺寸、PCB 布局、接线图 Outline Dimensions, PCB Layout, Wiring Diagram (mm)

1）ST90H-1A (一组常开 1 Form A)

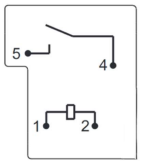
外形尺寸 Outline dimensions



底部试图 Bottom View

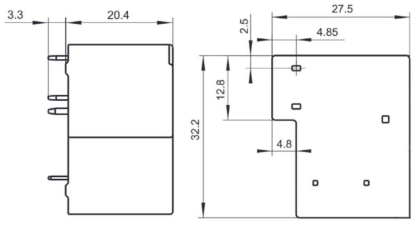


接线图 Wiring Diagram

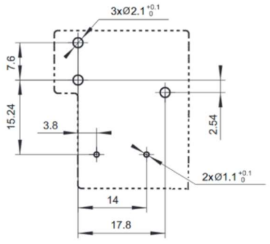


2）ST90H-1AB/1C (1组常开带辅助触点/1组转换触点 1 Form A With Auxiliary Contact/ 1 Form C)

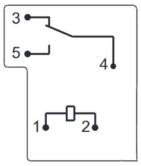
外形尺寸 Outline dimensions



底部试图 Bottom View

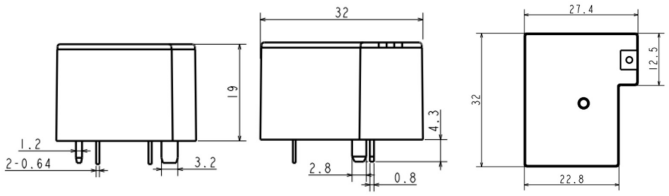


接线图 Wiring Diagram

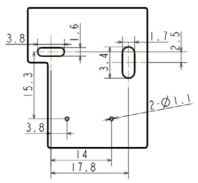


3）ST90H-1A-W (宽脚 WideTerminal)

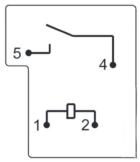
外形尺寸 Outline dimensions



底部试图 Bottom View

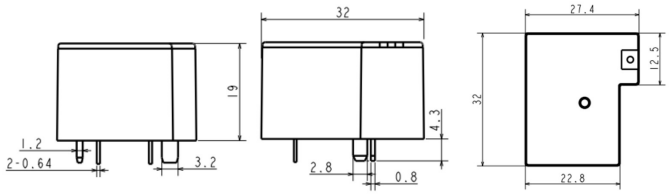


接线图 Wiring Diagram

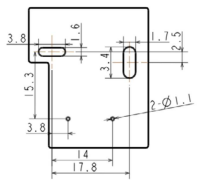


4）ST9H-1AB-W (宽脚 WideTerminal, 1组常开带辅助触点1 Form A With Auxiliary Contact)

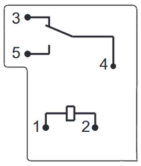
外形尺寸 Outline dimensions



底部试图 Bottom View

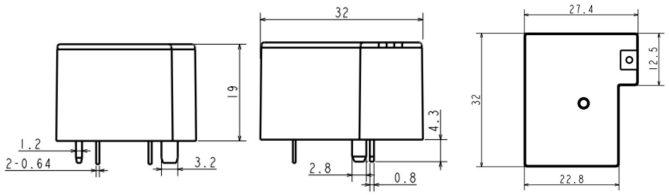


接线图 Wiring Diagram

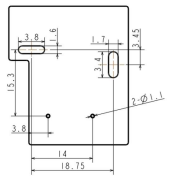


5）ST90H-1A-D (输出脚位间距 Output Terminal Spacing 18.75mm)

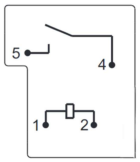
外形尺寸 Outline dimensions



底部试图 Bottom View

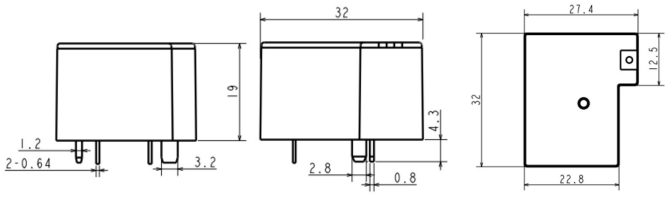


接线图 Wiring Diagram

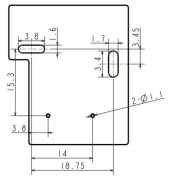


6）ST90H-1AB-D (一组常开 1 Form A)

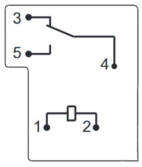
外形尺寸 Outline dimensions



底部试图 Bottom View



接线图 Wiring Diagram



注 Note:

未注尺寸公差 Unspecified tolerance : <1mm: +0.2 mm, 1~5 mm: ±0.3mm, >5mm: ±0. 4mm ;

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。

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.