

特性 Features

- LED指示灯 LED indicator light
- TRIAC输出或SCR输出 TRIAC Output or SCR Output
- 负载电流 Load current : 15A~125A @24~660VAC
- 直流或者交流驱动 DC or AC Drive
- 介质耐压 Dielectric strength :4000Vrms
- 输出有交流过零型和交流随机型两种触发形式 There are two triggering forms for output: AC zero-cross type and AC random type



典型应用 Application

- 适用于高低温箱，塑料机械，孵化机，注油机，空调，照明，喷泉控制器等场合。Suitable for high and low temperature box, plastic machinery, hatching machine, oiler, air conditioning, lighting, fountain controller and other occasions.

输入参数 Input Specifications (Ta=25°C)

驱动电压范围 Drive Voltage Range	直流控制/DC Control	3-32VDC
	交流控制/AC Control	90-280VAC
确保导通电压 Must Turn-on Voltage	直流控制/DC Control	3VDC
	交流控制/AC Control	90VAC
确保关断电压 Must Turn-off Voltage	直流控制/DC Control	1VDC
	交流控制/AC Control	15VAC
最大输入电流 Max. Input Current	直流控制/DC Control	25mA(@32VDC)
	交流控制/AC Control	35mA(@280VAC/50Hz)

其他参数 General Specifications (Ta=25°C)

介质耐压 (输入/输出, 50Hz/60Hz) I/O Dielectric Strength (50Hz/60Hz)	输入/输出 Input/Output:4000Vrms 输入、输出/底板 Input、 Output/Base:4000Vrms(SCR Output) 输入、输出/底板 Input、 Output/Base:2500Vrms(TRIAC Output)
绝缘电阻(@500VDC) Min. Insulation Resistance @500VDC	100MΩ
功率因数 Power Factor	>0.5
最小负载电流 Min. Load Current	≥100mA
工作温度范围 Ambient Temperature Range(Operating)	-30°C~+80°C
储存温度范围 Ambient Temperature Range(Storage)	-30°C~+100°C
重量(典型值) Weight (Typical)	SCR Output: 80g TRIAC Output: 75g

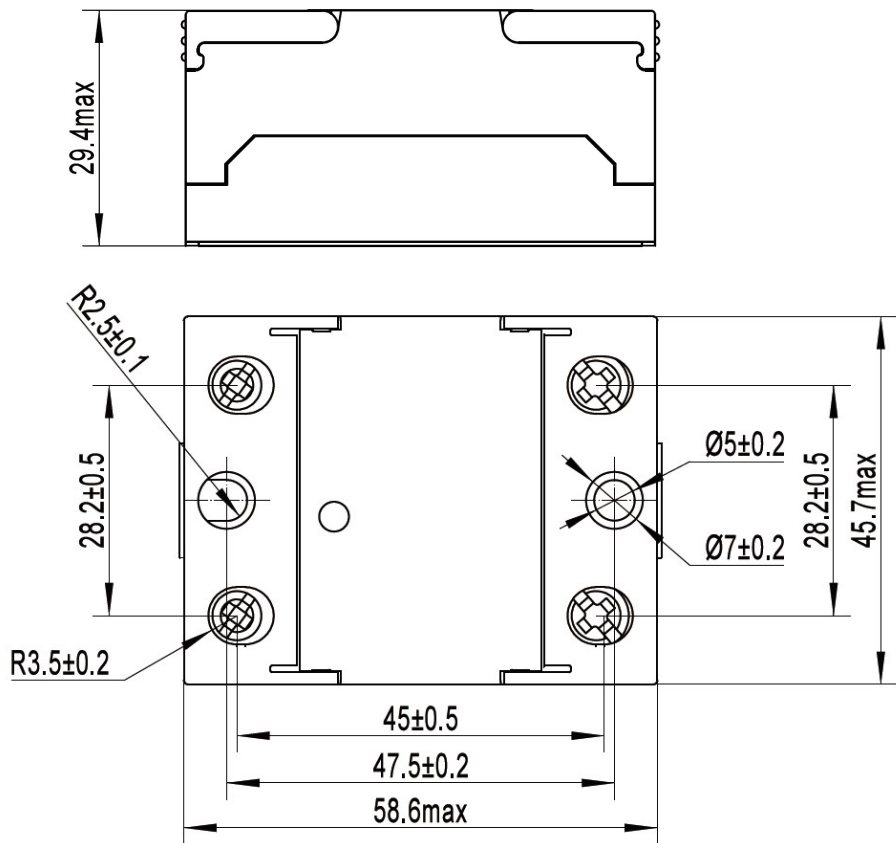
输出参数 Output Specifications (Ta=25°C)

负载电压范围 Load Voltage Range	240VAC:24-280VAC 380VAC:24-440VAC 480VAC:24-530VAC 600VAC:24-660VAC
最大瞬态电压 Max. Peak Voltage	240VAC:600Vpk 380VAC:800Vpk 480VAC:1200Vpk 600VAC:1200Vpk
最大断态漏电流(@额定负载电压下) Max. Off-state Leakage Current @ Rated Load Voltage	3mA 不带RC Without RC: 0.1mA
最小断态电压指数上升率(dv/dt) Min. Off-State dv/dt @ Max. Rated Voltage	SCR Output: 500V/μs TRIAC Output: 200V/μs
最大浪涌电流(@10ms) Max. 1 Cycle Surge Current @10ms	15A:150A 25A(SCR Output):300A 25A(TRIAC Output):250A 40A(SCR Output):500A 40A(TRIAC Output):400A 60A:700A 80A:800A 100A:1500A 125A:2250A
最大I²t值(@10ms) Max. I²t for Fusing @10ms	15A:112A²s 25A(SCR Output):450A²s 25A(TRIAC Output):312A²s 40A(SCR Output):1250A²s 40A(TRIAC Output):880A²s 60A:2450A²s 80A:3200A²s 100A:11250A²s 125A:25000A²s
最大导通压降(@额定负载电流下) Max. On-state Voltage Drop @ Rated Load Current	典型值 Typical: 1.25Vrms 最大值 Max. :1.5Vrms
最大导通时间 Max. Turn-on Time	过零型 Zero-cross:10ms 随机型 Random-on: 1ms 交流控制 AC Control: 40ms
最大关断时间 Max. Turn-off Time	直流控制 DC Control: 10ms 交流控制 AC Control: 20ms
使用频率 Operational Frequency Range	47-63Hz

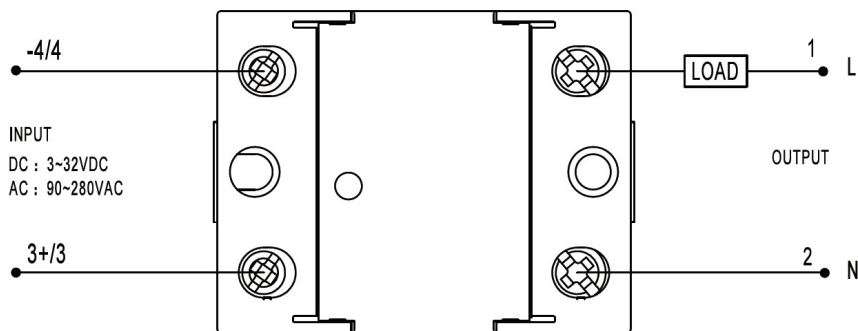
■ 型号命名标准 Model Number Legend

	STSN	240	D	80	T	R	N	-L	M	,XXX
基本型号 Basic Type:	STSN									
负载电压 Load Voltage:		240: 240VAC; 380: 380VAC; 480: 480VAC; 600: 600VAC								
驱动方式 Drive Type:			D: 直流控制 DC Control A: 交流控制 AC Control							
负载电流 Load Current:				15: 15A; 25: 25A; 40:40A; 60: 60A; 80: 80A; 100: 100A; 125: 125A						
输出类型 Output Type:					无 Blank: SCR Output; T: TRIAC Output					
触发形式 Trigger Type:						无 Blank: 过零导通 Zero-cross; R: 随机导通 Random				
RC 选项 RC Optional:						无 Blank: With RC; N: Without RC				
指示灯 LED Indicator:								L: LED Indicator		
TVS保护 TVS Protection :									无 Blank: 标准型 Standard; M: 带MOV保护 with MOV Protection; T: TVS保护 with TVS	
特殊特性 Special Characteristic:										Blank: 标准型 Standard; XXX: 客户特殊特性号 Customer Special Feature Number;

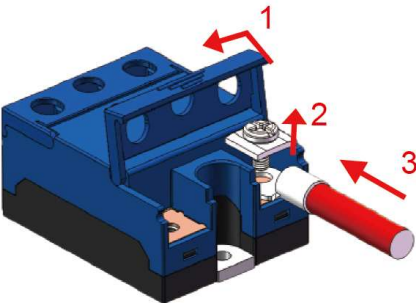
■ 安装尺寸 Installation Dimensions



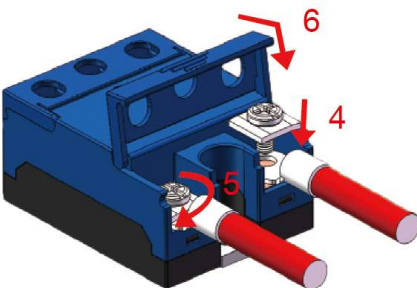
■ 接线图 Wiring Diagram



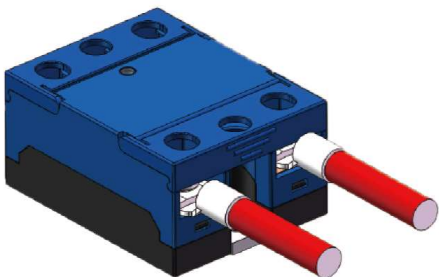
■ 接线说明 Wiring Instruction



第一步 Step 1



第二步 Step 2

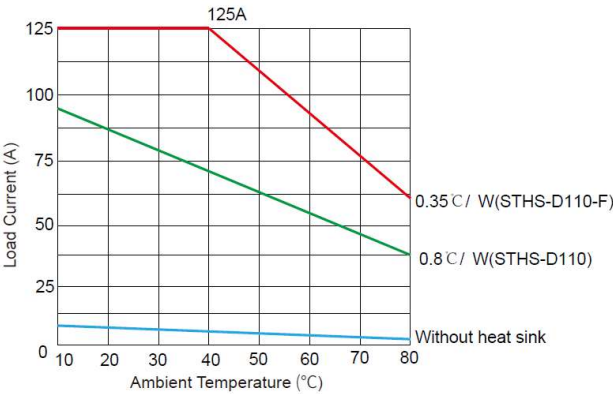
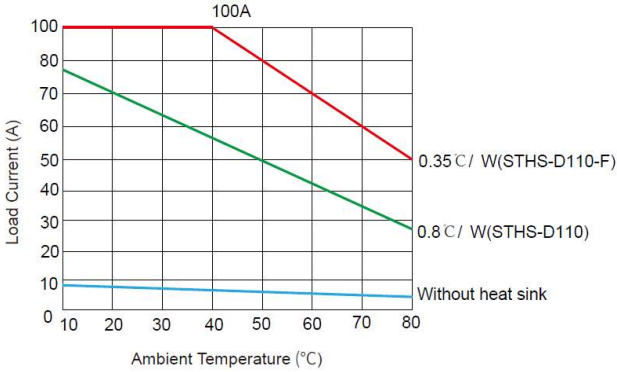
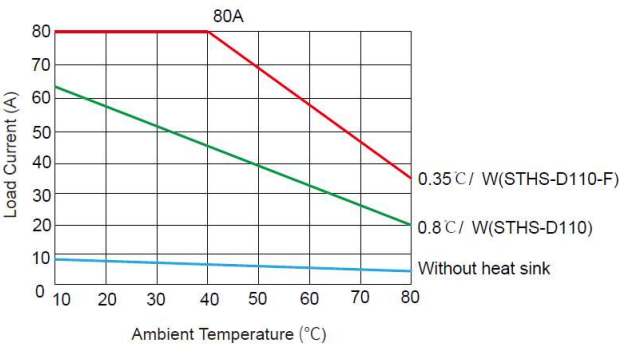
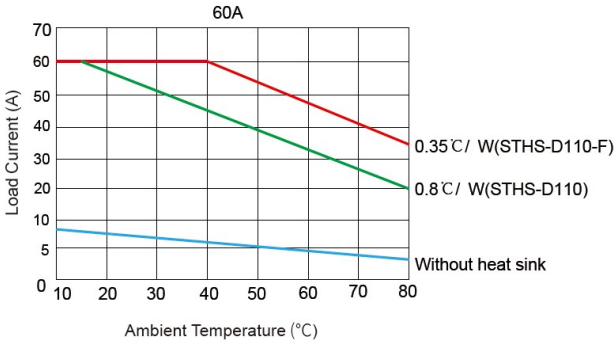
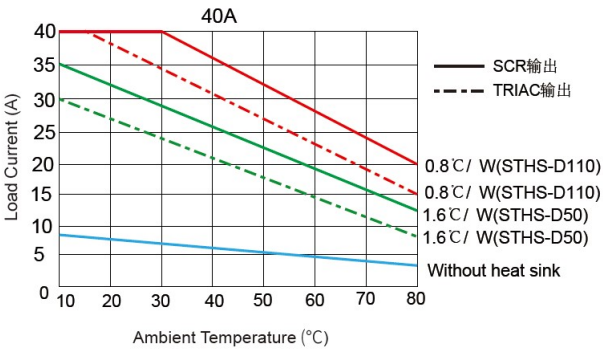
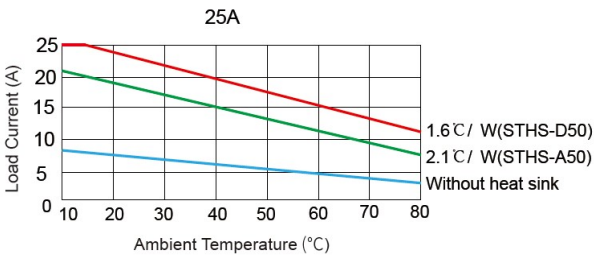
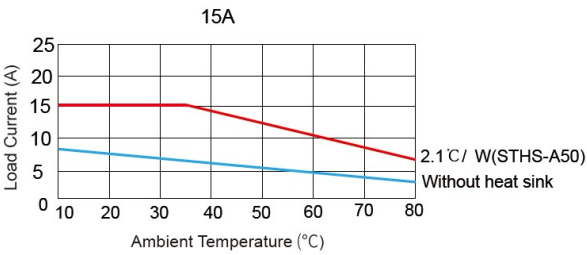


第三步 Step 3

◆ 线缆推荐 Recommendation for wiring:

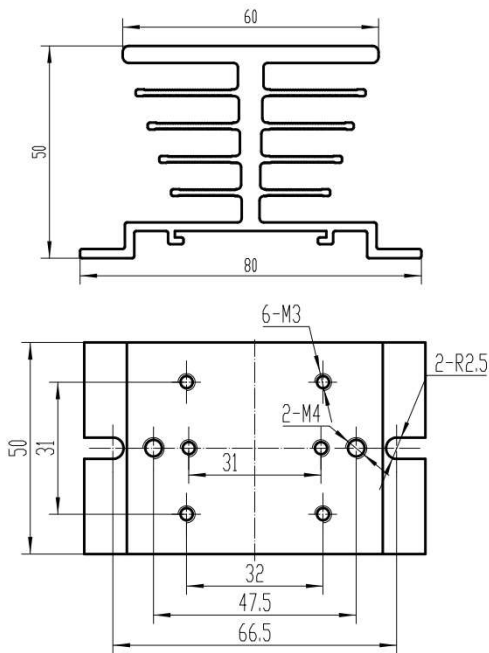
负载电流Load current (A)	电线横截面积 Cross section area of wire(mm2)	电线尺寸Wire size (AWG)	DIN 46234 铜皮端子 Terminal model	铜皮端子开孔尺寸Terminal mounting hole size D (mm)	铜皮端子宽度 Terminal width W(mm)
15-20	2.5	12	4-6	4.3	8
			5-6	5.3	10
20-35	4	10	4-6	4.3	8
			5-6	5.3	10
25-32	6	10	4-6	4.3	8
			5-6	5.3	10
32-50	10	8	5-10	5.3	10
50-65	16	6	5-16	5.3	11
65-85	25	4	5-25	5.3	12

■ 温度曲线 Thermal Derating Curve

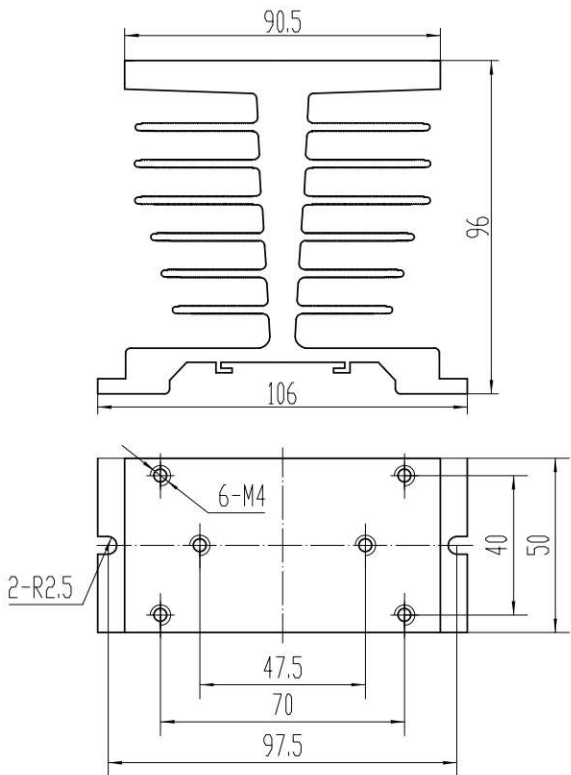


■ 以上温度曲线配置散热器型号如下 The Above Temperature Curve Is Configured With The Following Radiator Models

◆ STHS-A50

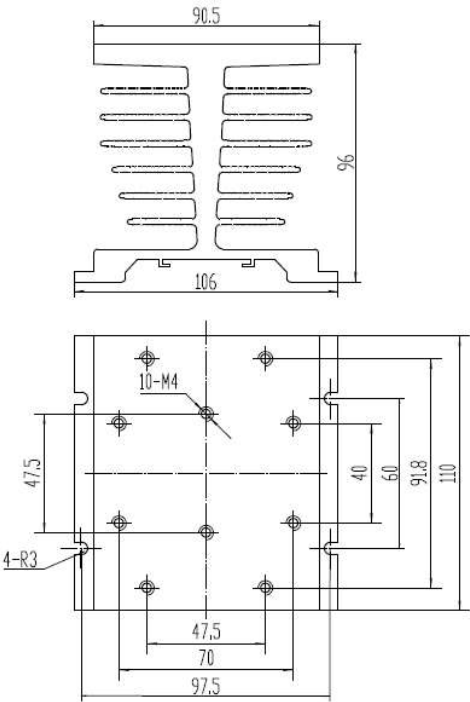


◆ STHS-D50

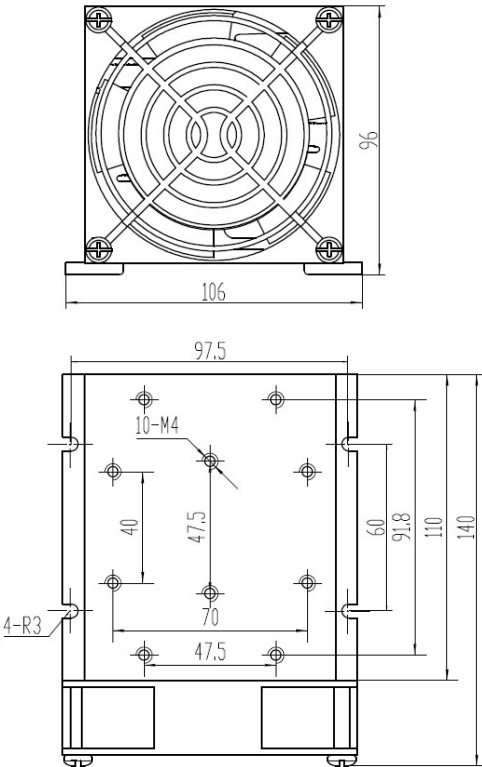


■ 以上温度曲线配置散热器型号如下 The Above Temperature Curve Is Configured With The Following Radiator Models

◆ STHS-D110



◆ STHS-D110-F



■ **使用注意事项 Precautions for Use**

1. 继电器工作产生的热量需通过底板散出，需确保继电器底板与散热器接触紧密、安装牢靠，且接触面需加导热垫片或涂覆导热硅脂。The heat generated by the relay needs to be dissipated through the bottom plate. Ensure that the relay bottom plate is in close contact with the heat sink and installed securely, and the contact surface needs to be coated with thermal shims or thermal grease
2. 继电器端子应确保接线牢固，接线松弛会导致产品异常发热，损坏产品。M3端子的推荐安装扭矩为（0.58 ~ 0.98）N·m，M4端子的 推荐安装扭矩为（0.98 ~ 1.37）N·m。The relay terminal should ensure that the wiring is firm, and the loose wiring will cause abnormal heat and damage the product. The recommended installation torque for M3 terminals is (0.58 ~ 0.98) N·m, and that for M4 terminalsThe recommended installation torque is (0.98 ~ 1.37) N·m
3. 产品工作的环境温度较高时，请参照温度曲线降额使用。 When ambient temperature is above 25°C, the maximum load current decreases. See thermal derating curve.

■ **安全警告 Safety warning**

1. 使用过程中产品的侧面及底板会发热，请在冷却后再触摸。The side and bottom plate of the product will heat up during use, please touch it after cooling.
2. 安装或使用本产品前，请确保断开所有电源。 Before installing or using this product, ensure that all power supplies are disconnected.
3. 请检查所有连接是否妥当后再打开电源。 Please check that all connections are correct before turning on the power.