

Thermal motor protector
Temperature limiter
Thermal cutout

电机超温保护器
温度保护器
热保护器

STO1

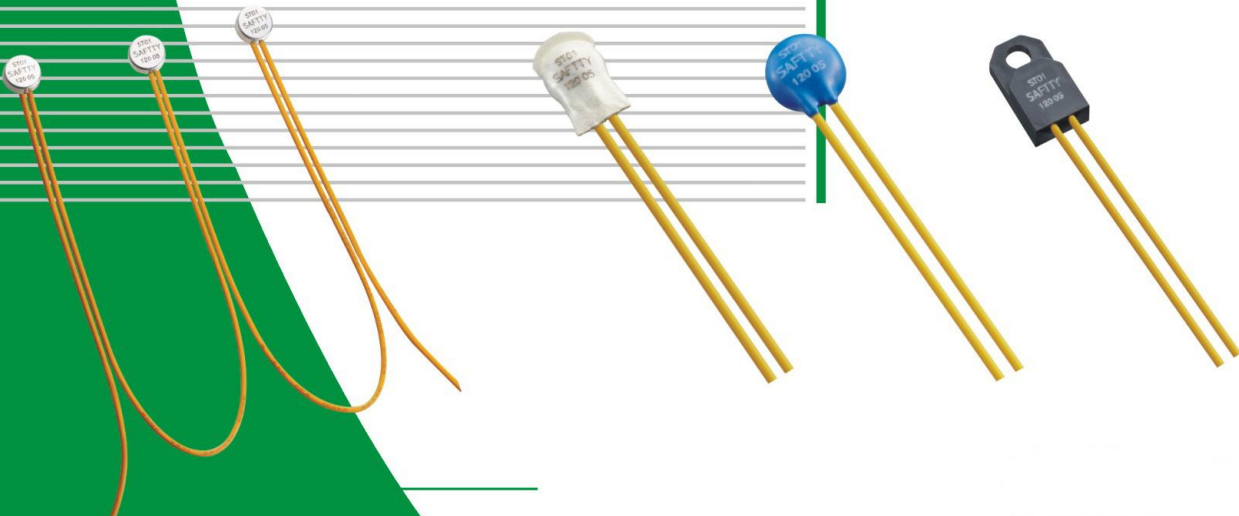
应用领域 Applications

- Motors 电机
- Transformers 变压器
- Coils 线圈
- Electronics, sensor 电子产品, 传感器



STO1系列的优势 Advantage of STO1 series

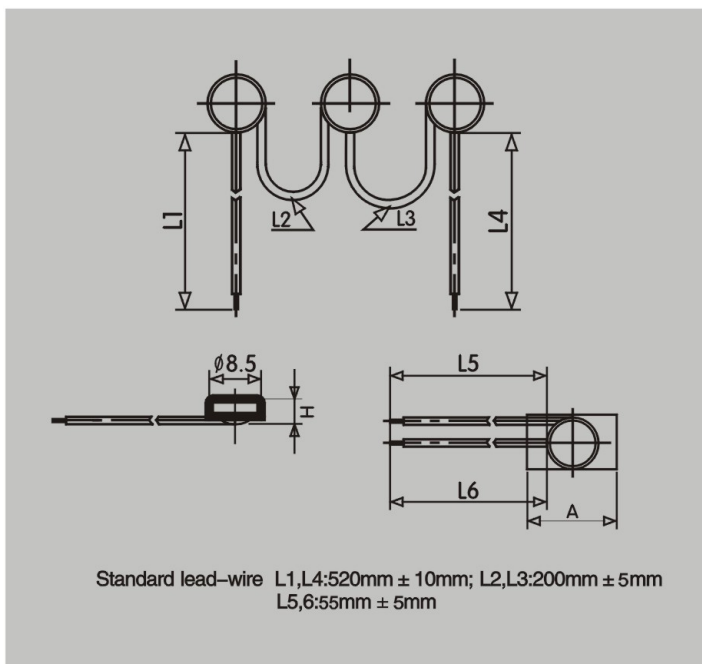
- Small size, easy for installation 体积小, 便于安装
- Bimetal-disc without current heat effect 电流不经过双片, 无电流热效应
- Accurate temperature response 控温精确
- Temperature sensitive 感温灵敏
- Compact & pressure stable 抗压强度高



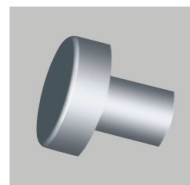
技术参数表 Technical Data

	Normally closed 常闭型	Normally open 常开型
Nominal Switching Temperature, in 5K-step (Tk) 动作温度	60~180°C	60~180°C
Tolerance-Standard 公差	±5K	±5K
Reset temperature range 复位温度范围	Generally two-thirds of the operating temp±15K	Generally two-thirds of the operating temp±15K
Max. operating voltage 最高电压	500VAC 60VDC	500VAC 60VDC
Working current 电流	250VAC 5A	250VAC 5A
Cycles at 250VAC/3.0A cos φ 1.0 寿命	10000	○
Cycles at 250VAC/6.3A cos φ 1.0 寿命	3000	○
Cycles at 250VAC/4.0A cos φ 0.45 寿命	1000	○
Cycles at 250VAC/1.0A cos φ 0.45 寿命	10000	○
Contact resistance 接触电阻	<50mΩ	○
Insulation voltage 绝缘电压	2.5KV	2.5KV
Insulation sleeve length "a" 绝缘套管长度	>16mm	>16mm
Diameter "d" 直径	<9.2mm	<9.2mm
Height "h" 高	<5.0mm	<5.0mm
Lead wire-standard 标准线	UL10362 AWG22 600V 250°C	UL10362 AWG22 600V 250°C
Lead wire-electric 电子线	UL3398 AWG22 300V 150°C	UL3398 AWG22 300V 150°C
Lead wire-silicone 硅胶线	UL3135 AWG24 600V 200°C	UL3135 AWG24 600V 200°C
Outgoing line length-standard 标准线的长度	L1=L4=520±10mm L2=L3=200±5mm L5=L6=55±5mm	L1=L4=520±10mm L2=L3=200±5mm L5=L6=55±5mm

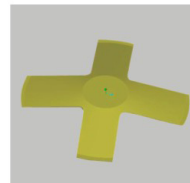
结构图 Structure



优势 Advantages



Contact: Silver alloy, with long lifetime, over-current capability
触点：全银合金，寿命长，过流能力强



Spring: Beryllium copper imported from Japan, with good elasticity
簧片：日本进口铍铜，弹性好



Case: Brass, better thermal conduction, precision control within 0.02mm, the thickness of silver plated on the surface up to 3um
外壳：黄铜材质，导热更好，精度控制 0.02mm，表面镀银层厚达3um

不同封装形式的尺寸图

Dimensional Drawing of different capsulation

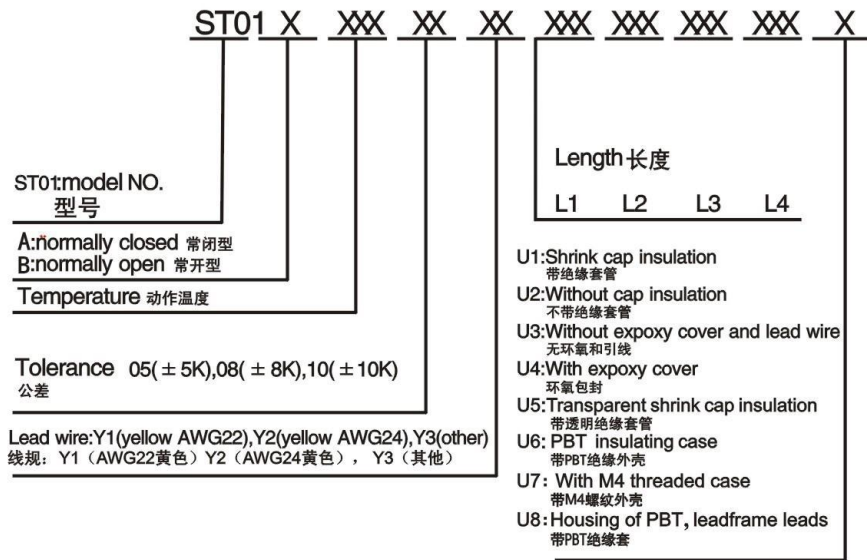
Type	Code	Illustration	Drawing dimensions(mm)	Technical specification
ST01	U1			With shrink cap insulation 带绝缘套管
ST01	U2			Without cap insulation 不带绝缘套管
ST01	U3			Without epoxy cover and lead wire 无环氧与引线
ST01	U4			With epoxy cover 环氧包封
ST01	U5			Transparent shrink cap insulation 带透明绝缘套管
ST01	U6			PBT insulating case 带PBT绝缘外壳
ST01	U7			With M4 threaded case 带M4螺纹外壳
ST01	U8			Housing of PBT, leadframe leads, grid dimension 5.08 potted 带PBT绝缘套, 引脚间距5.08
ST01-S (super-thin 超薄型)	U2			thickness 2.5mm 厚度仅2.5mm
ST01-H (self-hold 延时保护)	U2			with PTC self-hold 加PTC延时保护

认证 Certification

	Agency	Standard No.	File No.	Application
	CQC	GB14536.3	CQC12002072538	Motor protector
	TUV	IEC 60730-2-3	R 50231356	Lighting ballast
	TUV	IEC 60730-2-9	R 50230650	Thermostat
	UL	2111	E 336150	Motor protector

命名规则 Code System

标识 Marking



ST01: Model No. 产品型号
120: response temperature (120°C)
动作温度
05: tolerance (±5K) 公差

产品应用 Application

