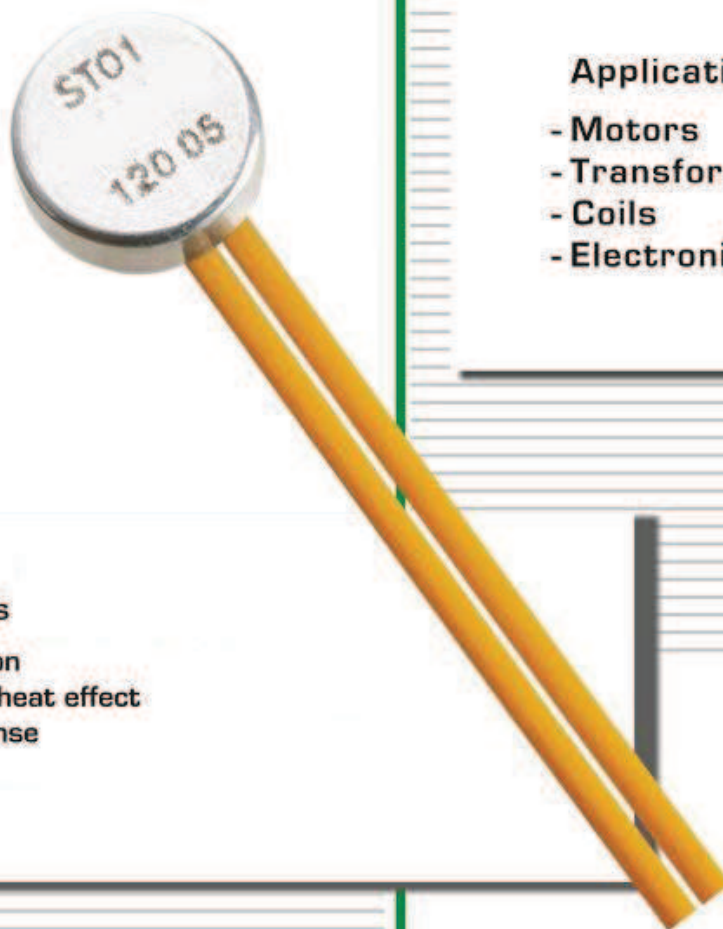


Thermal motor protector
Temperature limiter
Thermal cutout

ST01

ST01



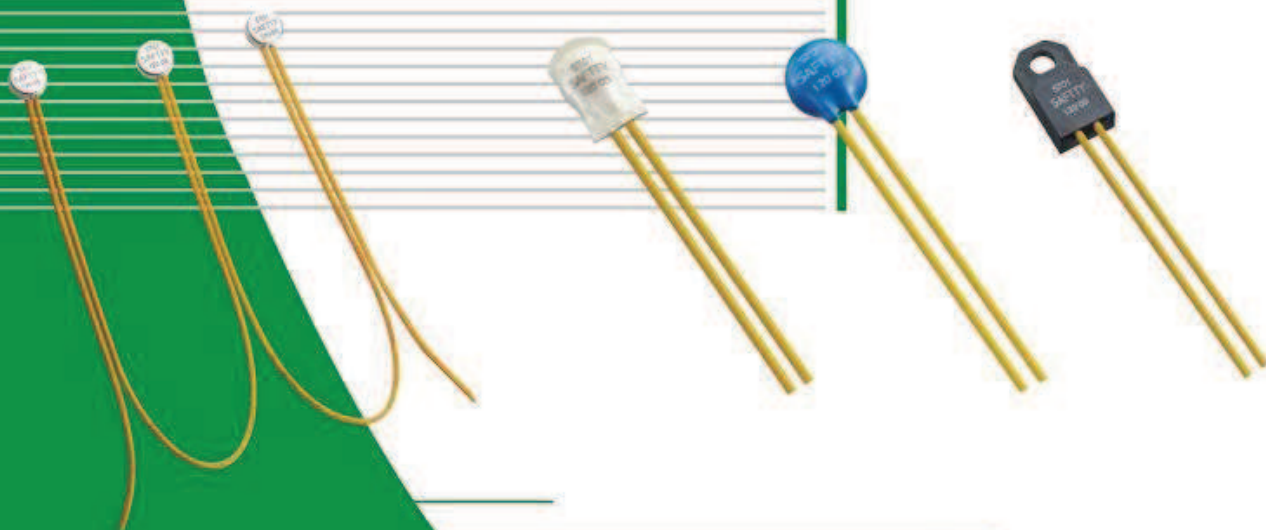
Applications

- Motors
- Transformers
- Coils
- Electronics, sensor

ST01

Advantage of ST01 series

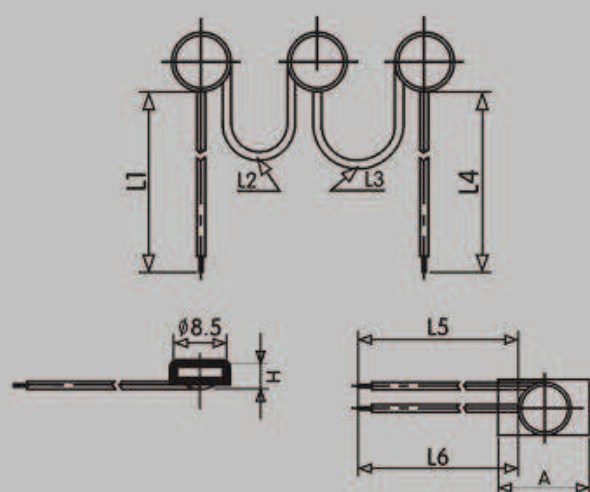
- ☐ Small size, easy for installation
- ☐ Bimetal-disc without current heat effect
- ☐ Accurate temperature response
- ☐ Temperature sensitive
- ☐ Compact & pressure stable



Technical Data

	Normally closed	Normally open
Nominal Switching Temperature,in 5K-step(Tk)	60~180°C	60~180°C
Tolerance-Standard	±5K	±5K
Reset temperature range	RESET TEMPERATURE=Switching temperature-30°C±15°C	
Max. operating voltage	500VAC 60VDC	500VAC 60VDC
Working current	250VAC 5A	250VAC 5A
Cycles at 250VAC/3.0A cos φ1.0	10000	○
Cycles at 250VAC/6.3A cos φ 1.0	3000	○
Cycles at 250VAC/4.0A cos φ 0.45:	1000	○
Cycles at 250VAC/1.0A cos φ 0.45	10000	○
Contact resistance	<50mΩ	○
Insulation voltage	2.5KV	2.5KV
Insulation sleeve length "a"	>16mm	>16mm
Diameter "d"	<9.2mm	<9.2mm
Height "h"	<5.0mm	<5.0mm
Lead wire-standard	UL10362 AWG22 600V 250°C	UL10362 AWG22 600V 250°C
Lead wire-electric	UL3398 AWG22 300V 150°C	UL3398 AWG22 300V 150°C
Lead wire-silicone	UL3135 AWG24 600V 200°C	UL3135 AWG24 600V 200°C
Outgoing line length-standard	L1=L4=520±10mm L2=L3=200±5mm L5=L6=55±5mm	L1=L4=520±10mm L2=L3=200±5mm L5=L6=55±5mm

Structure



Standard lead-wire L1,L4:520mm ± 10mm; L2,L3:200mm ± 5mm
L5,L6:55mm ± 5mm

Advantages



Contact: Silver alloy, with long lifetime, over-current capability



Spring: Beryllium copper imported from Japan, with good elasticity






Case: Brass, better thermal conduction, precision control within 0.02mm, the thickness of silver plated on the surface up to 3um

Dimensional Drawing of different capsulation

Type	Code	Illustration	Drawing dimensions(mm)	Technical specification
ST01	U1			With shrink cap insulation
ST01	U2			Without cap insulation
ST01	U3			Without epoxy cover and lead wire
ST01	U4			With epoxy cover
ST01	U5			Transparent shrink cap insulation
ST01	U6			PBT insulating case
ST01	U7			With M4 threaded case
ST01	U8			Housing of PBT, leadframe leads, grid dimension 5.08 potted
ST01-S (super-thin)	U2			thickness 2.5mm
ST01-H (self-hold)	U2			with PTC self-hold

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