

KSD301: Ceramic Thermal Break Temperature Control Series

- **Product use:**

- The KSD301/302 series is a bimetallic strip-based thermal switch. Under normal operation, the bimetallic strip maintains its original function with contacts in either closed or open states. When the temperature reaches the set point, the bimetallic strip heats up, generating internal stress that triggers rapid contact movement to cut or connect the circuit, thereby regulating temperature. Upon cooling to the reset temperature, the contacts automatically close or open, returning to normal operation.

- **Applied range:**

Widely used in: water dispensers, water heaters, sandwich toasters, dishwashers, dryers, sterilizers, microwave ovens, electric coffee makers, electric cookers, refrigerators, air conditioners, adhesive dispensers, office equipment, car seat heaters, and other electric heating appliances.

- **Technical parameter:**

rated voltage/current	250V/16A, 125V/20A
contact resistance	$\leq 50\text{m}\Omega$
insulation resistance	$\geq 100\text{m}\Omega$
withstand voltage	$\geq 1250\text{V}/1\text{min}$
IP+ levels of protection	IP00 level
ambient temperature	$-40^{\circ}\text{C}-200^{\circ}\text{C}$
working life	AC: $\leq 10000\text{s}$ times ; DC: $\leq 20000\text{s}$ times
temperature range	$25^{\circ}\text{C}-250^{\circ}\text{C}$
electrodeless	One power cord in
attestation	ROHS CQC SGS

- **Material Function:**

Formal materials	metal, high temperature resistant bakelite
double pin	Parallel installation or 90-degree elbow installation
temperature controlled contact	The aluminum shoulder of the housing rests against the heating element.
way to install	Hat screw, movable ring or fixed ring

- Specification packaging:

model	KSD301 10A 250V 100℃		
package quantity	100PCS/box	200PCS/box	2000pcs/box
bulkfactor	8g		

- schematic diagram:

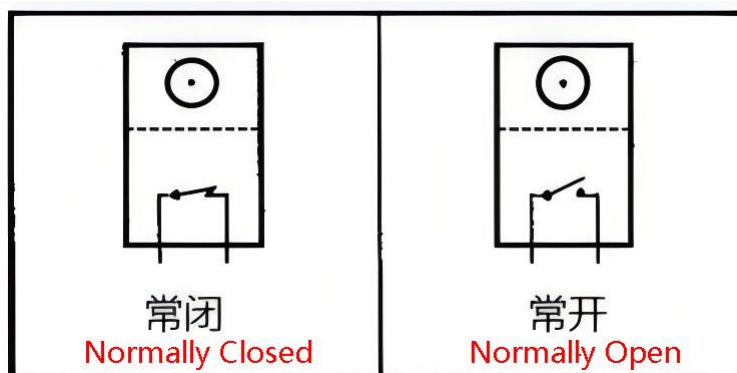
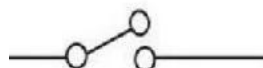


Diagram of closed circuit:



The original state of the temperature switch is closed, and the contact is opened when the temperature exceeds the rated temperature.

Diagram of normally open type:



The original state of the temperature switch is open, and the contact closes when the temperature exceeds the rated temperature.

- Matters need attention :

1. When installing contact temperature-sensing devices, ensure the metal cover tightly adheres to the controlled appliance's mounting surface. To guarantee thermal sensing accuracy, apply thermal grease or similar conductive materials to the sensing surface.
2. During installation, avoid pressing, loosening, or deforming the cover's top to prevent performance degradation.
3. Prevent liquid infiltration into the thermostat's interior, avoid casing cracks, and do not alter external terminal shapes arbitrarily.
4. For circuits with currents $\leq 5A$, use copper conductors with $0.5-1mm^2$ cross-sections; for $\leq 10A$ circuits, use $0.75-1.5mm^2$ cross-sections.
5. Store in a warehouse with 90% relative humidity, below $40^\circ C$, and in a well-ventilated, clean, dry environment free from corrosive gases.

● Temperature specification:

(°C)	operating temperature	reversion temperature	(°C)	operating temperature	reversion temperature
30°C	30±5°C	≥18°C	95°C	95±5°C	70±15°C
35°C	35±5°C	≥25°C	100°C	100±5°C	70±15°C
40°C	40±5°C	≥30°C	105°C	105±5°C	75±15°C
45°C	45±5°C	≥33°C	110°C	110±5°C	75±15°C
50°C	50±5°C	≥35°C	115°C	115±5°C	80±15°C
55°C	55±5°C	42±6°C	120°C	120±5°C	85±15°C
60°C	60±5°C	45±8°C	130°C	130±5°C	95±15°C
65°C	65±5°C	48±10°C	140°C	140±5°C	105±15°C
70°C	70±5°C	50±12°C	150°C	150±5°C	110±15°C
75°C	75±5°C	53±14°C	160°C	120±5°C	120±15°C
80°C	80±5°C	55±15°C	170°C	130±5°C	130±15°C
85°C	85±5°C	60±15°C	180°C	140±5°C	140±15°C
90°C	90±5°C	65±15°C	200°C	160±5°C	160±15°C
Customizable for temperatures below 30°C or above 250°C					

- Volume of the movable ring and fixed ring of KSD301 :



陶瓷平脚固定环

单位: mm

