KSD307 Snap-Action Thermostat

Product Technical Datasheet | Configuration Options



Product overview
The KSD307 series thermostat is a fully enclosed bimetallic strip temperature controller designed specifically for high-power devices such as electric water heaters. Utilizing the principle of thermal expansion and contraction of a bimetallic strip, when the preset temperature is reached, the disc-shaped element momentarily jumps, causing the contacts to actuate rapidly through a mechanism, thus connecting or disconnecting the circuit and providing safety protection for the appliance.

Contact structure
DPST

Reset type
Manual Reset / Automatic Reset

Typical applications
Electric water heater, Commercial water dispensers, Boilers, Heater, etc.

Key Technical Specifications

Parameter	Specification / Options
Rated voltage	AC 250 V
Rated current	CQC: 35 A / 45 A / 63 A TÜV: 35 A / 40 A / 45 A / 50 A / 55 A / 60 A / 63 A (Manual Reset only) UL: 63 A (Manual Reset only)
Contact structure	Double-Pole Single-Throw (DPST)
Contact form	Normally open (NO) / Normally closed (NC)
Reset type	Manual Reset / Automatic Reset
Temperature sensing element	Bimetallic disc
Housing material	Phenolic
Operating temperature range	50°C to 150°C
Temperature tolerance	±3°C to ±5°C
Contact resistance	≤ 50 mΩ
Insulation resistance	≥ 100 MΩ
Dielectric strength	1500 V AC / 5 mA / 1 min
Electrical life	Automatic Reset — CQC: 3,000 cycles Manual Reset — CQC: 6,000 cycles; TÜV: 6,000 cycles; UL: 6,000 cycles
Ambient temperature	160°C
Terminal type	M4 threaded terminals
Product certification	Automatic Reset — CQC: CQC16002156155 Manual Reset — CQC: CQC21002298895; TÜV: R50516193; UL: UL-CA-2127943-0

Zhongshan Boantai Electric Technology Co., Ltd.
A high-tech enterprise specializing in flow sensors, flow switchs, water pumps, solenoid valves, safety insulation valves, and thermostats R&D, manufacturing & sales.

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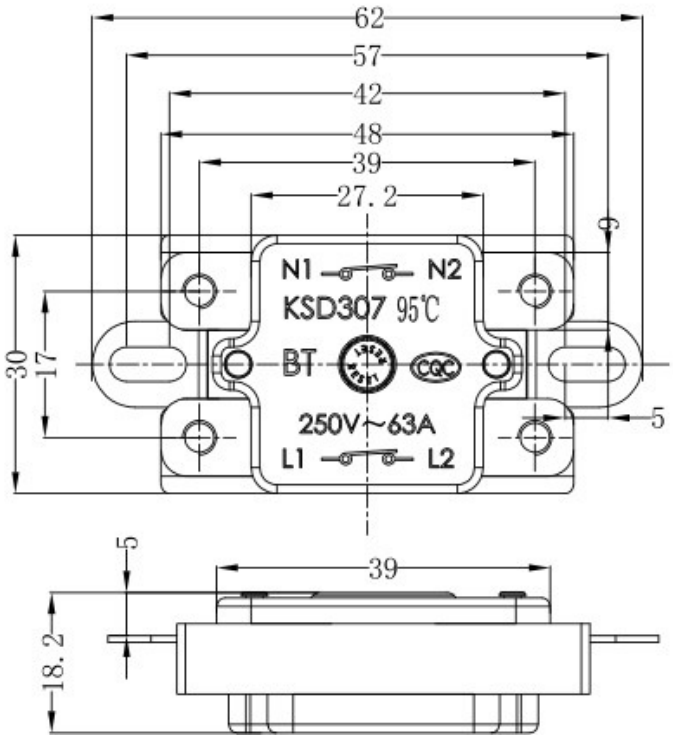
Email: info@boantai.com

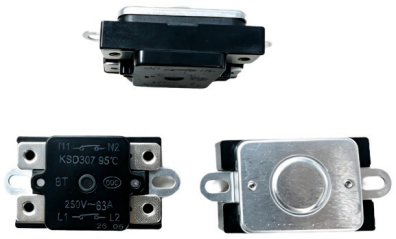
Mechanical Design & Configurations

Illustrated Mechanical Drawing



Drawing note: The supplied 95 ± 5°C drawing is one configuration, not proof of every set point.

Available Configuration Options



0° Fixed Bracket



90° Fixed Bracket

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Selection & Ordering Information

Configuration Selection

Selection item	Available options / details to confirm
Model	KSD307
Rated voltage	AC 250 V
Rated current	CQC: 35 A / 45 A / 63 A TÜV: 35 A / 40 A / 45 A / 50 A / 55 A / 60 A / 63 A (Manual Reset only) UL: 63 A (Manual Reset only)
Contact form	NO / NC
Reset type	Manual Reset / Automatic Reset
Temperature	50°C to 150°C
Temperature differential / tolerance	±3°C to ±5°C
Mounting bracket angle	0° fixed / 90° fixed

Reset Configuration: Certification & Electrical Life

Ratings and approvals below are configuration-specific and must not be transferred between reset types.

Reset type	Rated current / scope	Certifications	Electrical life
Automatic Reset	CQC: 35 A / 45 A / 63 A	CQC: CQC16002156155	CQC: 3,000 cycles
Manual Reset	CQC: 35 A / 45 A / 63 A TÜV: 35 / 40 / 45 / 50 / 55 / 60 / 63 A UL: 63 A	CQC: CQC21002298895 TÜV: R50516193 UL: UL-CA-2127943-0	CQC: 6,000 cycles TÜV: 6,000 cycles UL: 6,000 cycles

Ordering Information

Please specify KSD307 + rated voltage/current + contact form (NO / NC) + reset type + operating temperature + mounting bracket (0° / 90°) .

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