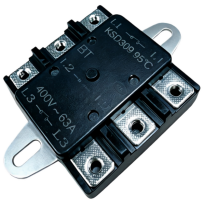
KSD309 Snap-Action Thermostat

Product Technical Datasheet | Configuration Options



Front View



Back View

Product overview
The KSD309 series thermostat is a fully enclosed bimetallic temperature controller designed for high-power appliances. When the preset temperature is reached, the bimetallic element actuates the contacts rapidly to provide temperature control and over-temperature protection.

Contact structure
3PST

Reset type
Manual Reset

Typical applications
Wall-hung boilers and other suitable high-power electrical heating equipment.

Key Technical Specifications

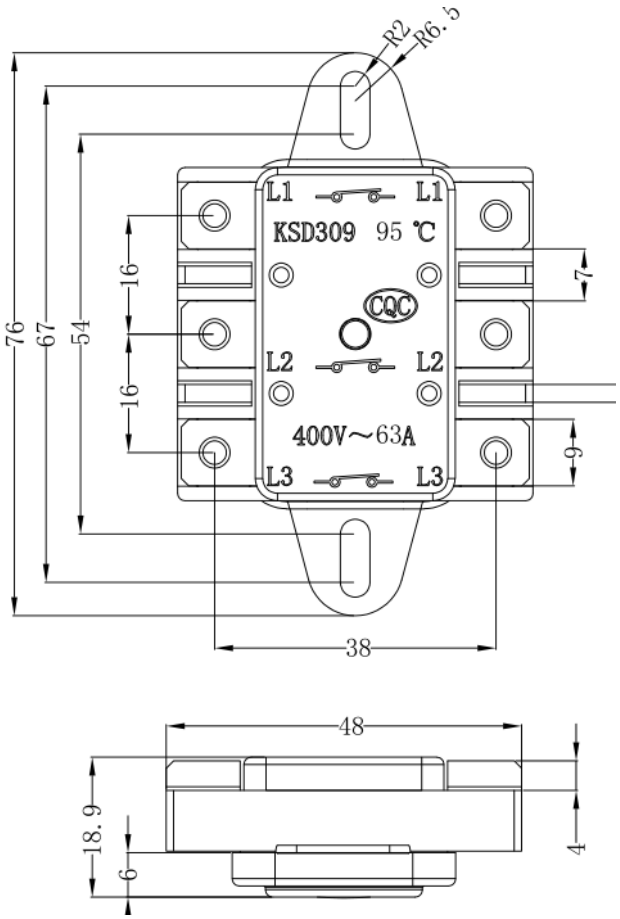
Parameter	Specification / Options
Rated voltage	AC 400 V
Rated current	CQC: 35 A / 45 A / 63 A TÜV: 35 A / 40 A / 45 A / 50 A / 55 A / 60 A / 63 A UL: 63 A
Contact structure	Three-Pole Single-Throw (3PST)
Contact form	Normally open (NO) / Normally closed (NC)
Reset type	Manual Reset
Temperature sensing element	Bimetallic strip
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	CQC: 6,000 cycles TÜV: 6,000 cycles UL: 6,000 cycles
Ambient temperature	160°C
Terminal type	M4 threaded terminals
Product certification	CQC: CQC19002223566 TÜV: R50516193 UL: UL-CA-2127943-0

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

Address: No. 5, Shengping North Road, Nantou Town, Zhongshan City, Guangdong Province, China
Email: info@boantai.com

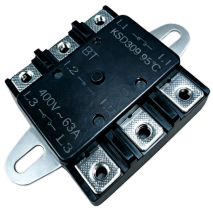
Mechanical Design & Configurations

Illustrated Mechanical Drawing

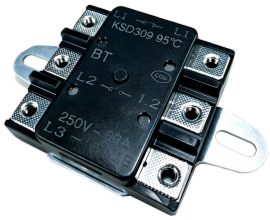


Drawing note: The supplied 95°C drawing is one configuration, not proof of every set point.

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	KSD309
Rated voltage	AC 400 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 UL: 63 A
Contact structure	3PST
Contact form	NO / NC
Temperature	50°C to 150°C
Temperature differential / tolerance	±3°C to ±5°C
Mounting bracket angle	0° fixed / 90° fixed

Certification & Electrical Life

Ratings and approvals are certification-specific; UL load-cycle conditions are shown separately.

Certification	Rated current / scope	Certificate No.	Electrical life
CQC	35 / 45 / 63 A	CQC19002223566	6,000 cycles
TÜV	35 / 40 / 45 / 50 / 55 / 60 / 63 A	R50516193	6,000 cycles
UL	63 A	UL-CA-2127943-0	6,000 cycles

Ordering Information

Please specify KSD309 + rated voltage (AC 400 V) + reset type + rated current and certification (CQC / TÜV / UL) + operating temperature + mounting bracket angle (0° / 90°) + terminal type (M4 threaded).

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