



AvP®

Catalog of Thermostat

Professional provider of overheating protection solutions

Catalogue

CA05&17AM(+PTC) Series 1

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Thermostat

CA05A/CA05B/17AM/17AM+PTC series

Thermostat is a kind of resettable thermal protection device, which has the characteristics of precise temperature control and high reliability. It is widely used in household appliances and industrial equipment for overheating protection.



Compact size, stable product performance, high reliability

Sensitive to current and temp, with synchronous response to overheating & overcurrent anomalies, enhancing equipment safety

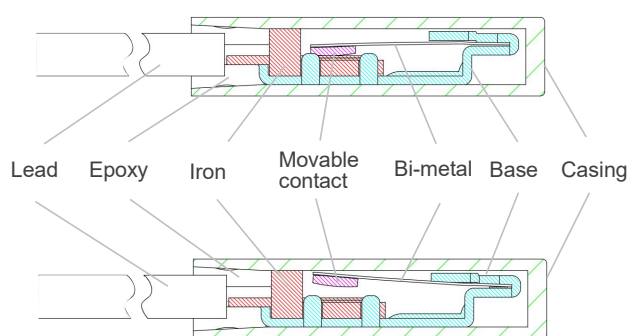
Excellent air tightness, compatible with solder dipping processes

Multiple types of wires and sleeves available for selection

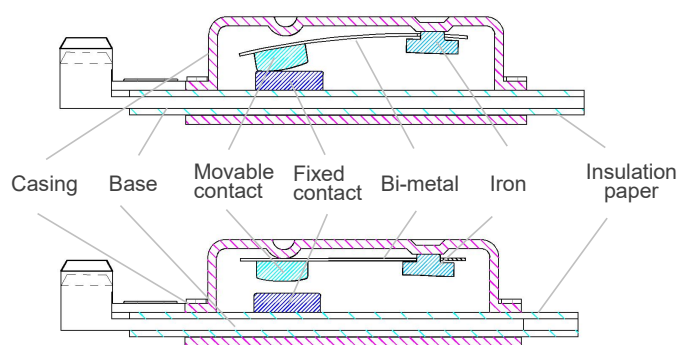
ROHS compliant

■ Principle of operation

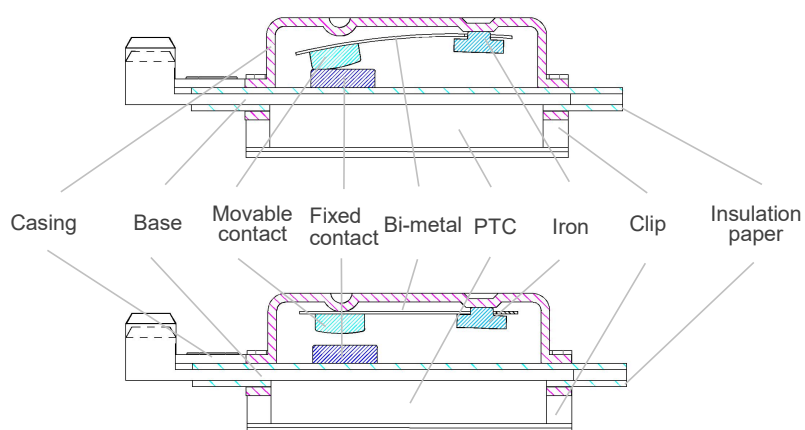
Thermostat reliably detects environmental temperature fluctuation. When the ambient temperature reaches its preset activation threshold, the bimetallic strip triggers a thermal switch, causing the movable contact to disengage from the stationary contact and interrupt the circuit, thereby providing over-temperature protection. When the temperature returns to the preset reset threshold, the bimetallic strip reactivates, restoring circuit continuity. For thermostat+PTC type, manual power disconnection is required before automatic reset.



CA05 series: before & after functioning



17AM series: before & after functioning



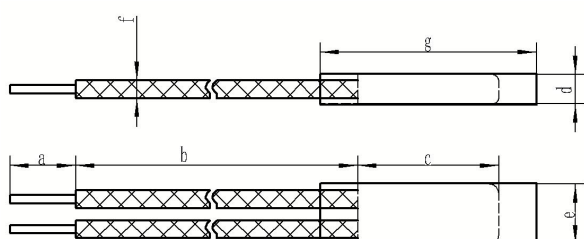
17AM+PTC series: before & after functioning

CA05 Series

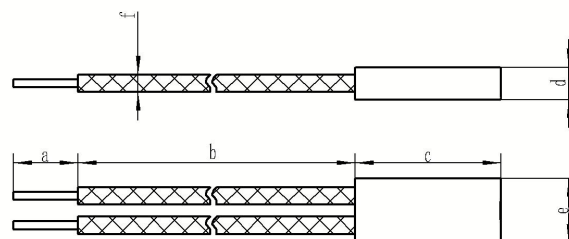
■ Dimension



■ CA05A (Metal casing)



■ CA05B (Plastic casing)

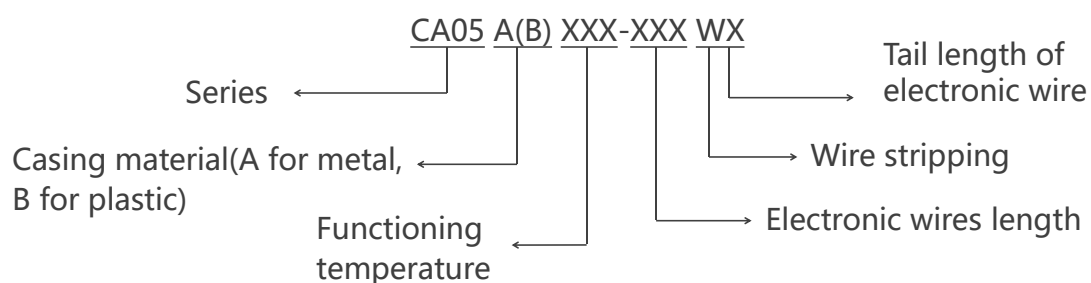


Unit: mm

Part No.	a	b	c	d	e	f	g
CA05A***	7±2.0	53±2.0	15±0.5	3±0.5	6.4±0.5	Φ1.9±0.2	23±1.0
CA05B***	7±2.0	53±2.0	15.8±0.5	3.5±0.5	7.0±0.5	Φ1.9±0.2	/

* Remark: standard product with electronic wire length of 60mm (a+b) with a 7mm tail length, and the wire length can be customized for customers requirement.

■ Part No.



■ Temperature parameters

Unit: °C

Part No.	Functioning temperature	Resetting temperature
CA05A50/CA05B50	50±5	≥35
CA05A55/CA05B55	55±5	40±8
CA05A60/CA05B60	60±5	42±8
CA05A65/CA05B65	65±5	45±8
CA05A70/CA05B70	70±5	50±12
CA05A75/CA05B75	75±5	55±15
CA05A80/CA05B80	80±5	55±15
CA05A85/CA05B85	85±5	60±15
CA05A90/CA05B90	90±5	65±15
CA05A95/CA05B95	95±5	70±15
CA05A100/CA05B100	100±5	70±15
CA05A105/CA05B105	105±5	75±15
CA05A110/CA05B110	110±5	75±15
CA05A115/CA05B115	115±5	80±15
CA05A120/CA05B120	120±5	80±15
CA05A125/CA05B125	125±5	85±15
CA05A130/CA05B130	130±5	90±15
CA05A135/CA05B135	135±5	95±15
CA05A140/CA05B140	140±5	100±15
CA05A145/CA05B145	145±5	105±15
CA05A150/CA05B150	150±5	110±15

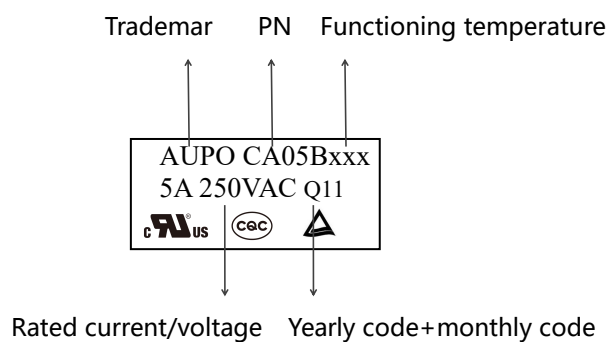
Remark: the reset temperature refers to the temperature at which the protector automatically resets in the absence of voltage. It is provided for customer reference only.

■ Electric parameters

Functioning temperature range	Current /Voltage	Dielectric Strength		Insulation resistance	Contact resistance
50~150°C	5A/250VAC 8A/125VAC	Between the two poles:500VAC*1min	Between poles & casing: 1500VAC, 1min	> 100MΩ	≤50mΩ

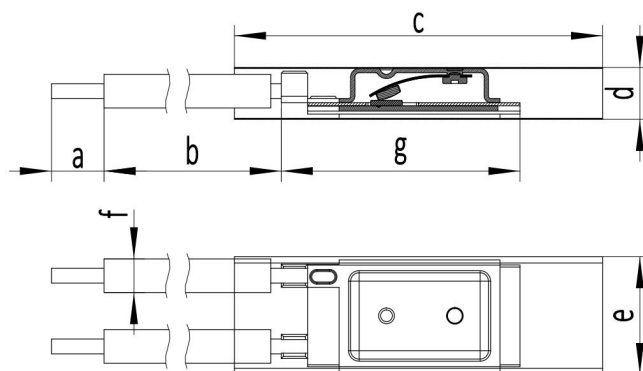
■ Product marks

▪ Printing



17AM Series

■ Dimension

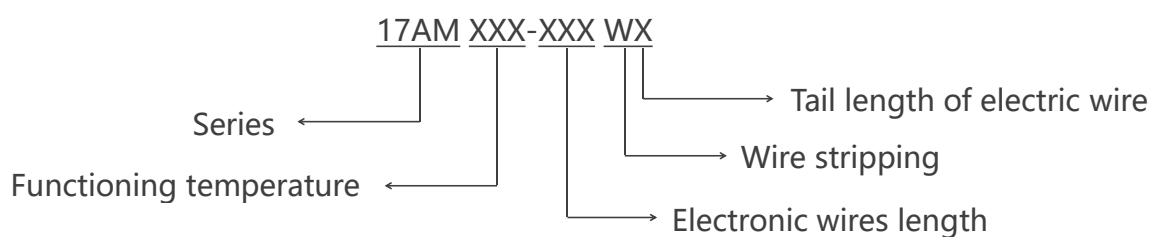


Unit: mm

Part No.	a	b	c	d	e	f	g
17AM***	7±2.0	53±2.0	35±2.0	5±0.5	10.8±0.5	Φ2.7±0.3	23±1.0

Remark: standard product with electronic wire length of 60mm (a+b) with a 7mm tail length, and the wire length can be customized for customers requirement.

■ Part No.



■ Temperature parameters

Unit: °C

Part No.	Functioning temperature	Resetting temperature
17AM60	60±5	42±12
17AM65	65±5	45±12
17AM70	70±5	50±12
17AM75	75±5	55±15
17AM80	80±5	55±15
17AM85	85±5	60±15
17AM90	90±5	60±15
17AM95	95±5	65±15
17AM100	100±5	65±15
17AM105	105±5	70±15
17AM110	110±5	70±15
17AM115	115±5	75±15
17AM120	120±5	75±15
17AM125	125±5	80±15
17AM130	130±5	90±15
17AM135	135±5	90±15
17AM140	140±5	90±15
17AM145	145±5	95±15
17AM150	150±5	95±15
17AM155	155±5	100±15
17AM160	160±5	105±15
17AM165	165±5	110±15
17AM170	170±5	115±15

Remark: the reset temperature refers to the temperature at which the protector automatically resets in the absence of voltage. It is provided for customer reference only.

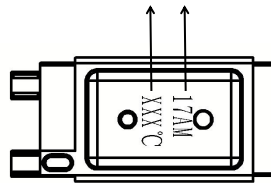
■ Electric parameters

Functioning temperature range	Current /Voltage	Dielectric Strength		Insulation resistance	Contact resistance
60~170°C	9A/250VAC 8A/250VAC	Between the two poles:500VAC*1min	Between the two poles:500VAC*1min	> 100MΩ	50mΩ

■ Product marks

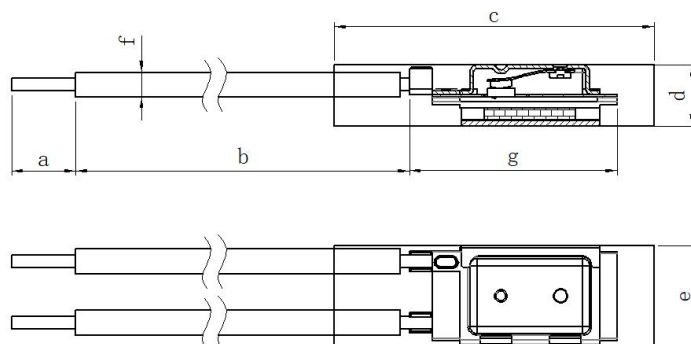
■ Printing on body

Functioning temperature Series



17AM+PTC Series

■ Dimension

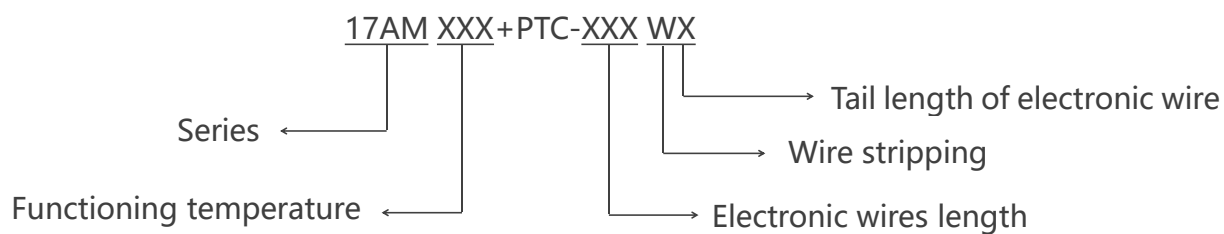


Unit: mm

Part No.	a	b	c	d	e	f	g
17AM***+PTC	7±2.0	53±2.0	35±2.0	6.7±0.5	11±0.5	Φ2.7±0.3	23±1.0

Remark: standard product with electronic wire length of 60mm (a+b) with a 7mm tail length, and the wire length can be customized for customers requirement.

■ Part No.



Remark: the standard length of the electronic wire is 60 mm (a+b), and the strip length is 7 mm, which can be omitted.

■ Temperature parameters

Unit: °C

Part No.	Functioning temperature	Resetting temperature
17AM60+PTC	60±5	42±12
17AM65+PTC	65±5	45±12
17AM70+PTC	70±5	50±12
17AM75+PTC	75±5	55±15
17AM80+PTC	80±5	55±15
17AM85+PTC	85±5	60±15
17AM90+PTC	90±5	60±15
17AM95+PTC	95±5	65±15
17AM100+PTC	100±5	65±15
17AM105+PTC	105±5	70±15
17AM110+PTC	110±5	70±15
17AM115+PTC	115±5	75±15
17AM120+PTC	120±5	75±15
17AM125+PTC	125±5	80±15°C
17AM130+PTC	130±5	90±15
17AM135+PTC	135±5	90±15
17AM140+PTC	140±5	90±15
17AM145+PTC	145±5	95±15
17AM150+PTC	150±5	95±15
17AM155+PTC	155±5	100±15
17AM160+PTC	160±5	105±15
17AM165+PTC	165±5	110±15
17AM170+PTC	170±5	115±15

Remark: the reset temperature refers to the temperature at which the protector automatically resets in the absence of voltage. It is provided for customer reference only.

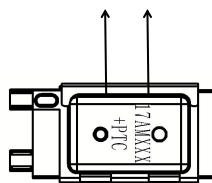
■ Electric parameters

Functioning temperature range	Current/Voltage	Dielectric Strength	Insulation resistance
60~170°C	9A/250VAC 8A/250VAC	Between poles & casing: 1500VAC 1min	≤50mΩ

■ Product marks

■ Printing on body

Functioning temperature Series



Application of thermostat

AUPO thermostat offers a range of standard products and customized ones, delivering reliable resettable overheating protection for various electrical appliances. The thermostat's performance is influenced by installation methods and locations. Given the critical role of operation and installation in the overall performance of thermostat, we provide the following guidelines for design, installation, and transportation/storage to ensure optimal thermostat performance.

▪ Storage conditions & time

Storage conditions for the thermostat: clean, well-ventilated environment free from corrosive gases, sulfur-containing gases, and direct sunlight; temperature: 5°C to 35°C; humidity: 25% RH to 75% RH; gas pressure: 86 KPa to 106 KPa. Storage time of thermostat: 6 months after entering warehouse of the customer.

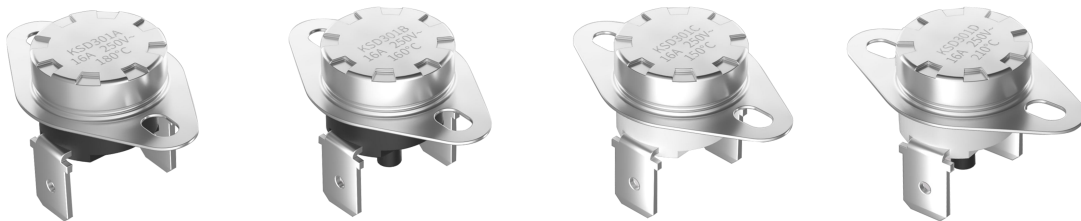
▪ Attention for use

The thermostat should be installed at temperature-sensitive points of the protected object to ensure effective heat conduction in between. When the temperature rise of the protected component reaches the preset activation temperature, the thermostat must accurately disconnect the circuit. During installation, protect the casing from strong impacts or compression. Avoid using sharp tools to squeeze the thermostat or applying heavy hammers. During welding, prevent welding current from passing through the thermostat, as direct current through its contacts may damage the device and reduce its lifespan. The thermostat should not be used in high-temperature environments exceeding 180°C to prevent plastic deformation and failure. Electronic wires must not endure excessive tension during operation; forces exceeding 30N may damage the thermostat. Long-term use in strong acids, alkalis, or corrosive environments is prohibited. Packaging and components must be protected from rain, snow, compression, and damage during transportation and storage, with relative humidity maintained below 90%.

KSD301 Series

KSD301A/KSD301B/KSD301C/KSD301D Series

KSD301 series thermostat is a bimetallic temperature controller suitable for temperature regulation or overheating protection in household appliances and industrial equipment. Its main features include: high sensitivity to ambient temperature changes, accurate and stable operating temperature, simple & versatile installation method.



Suitable for various home appliances with temperature control requirements, offers long-term stable performance and high reliability

Fast on/off circuit, enhances equipment safety

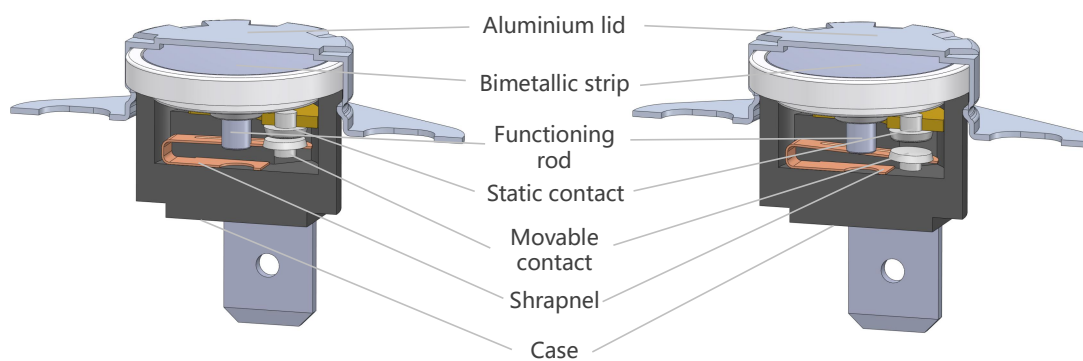
Implement automatic temperature control or overheating protection

Comprehensive range of temperature specifications, covering a wide temperature range from 0°C to 270°C

ROHS, REACH compliant

■ Principle of operation

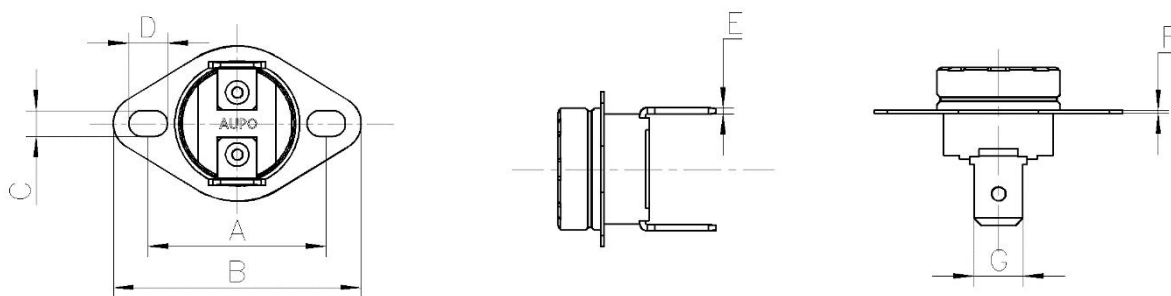
KSD301 series thermostat reliably detects changes in ambient temperature. When the ambient temperature reaches its functioning temperature, the bimetallic strip undergoes a deflection, causing the movable contact to displace relative to the static contact, thereby cutting off or closing the circuit to provide temperature control or over temperature protection. When the ambient temperature returns to the reset temperature, the bimetallic strip returns to its initial state, and the circuit is reconnected or disconnected (for the manual reset type, a manual reset is required). Below figure shows the thermostat in its state before and after functioning.



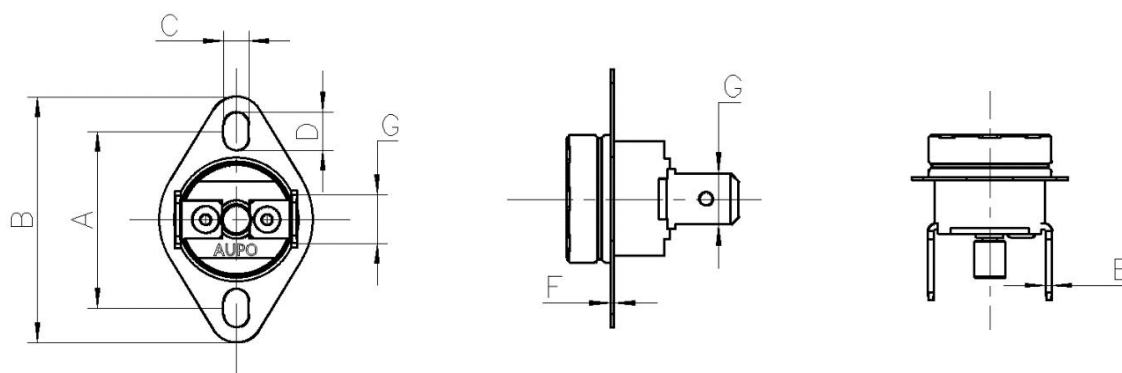
KSD301 series: before & after functioning

■ Dimension

■ KSD301A, KSD301C (Auto reset)



■ KSD301B, KSD301D (Manual reset)



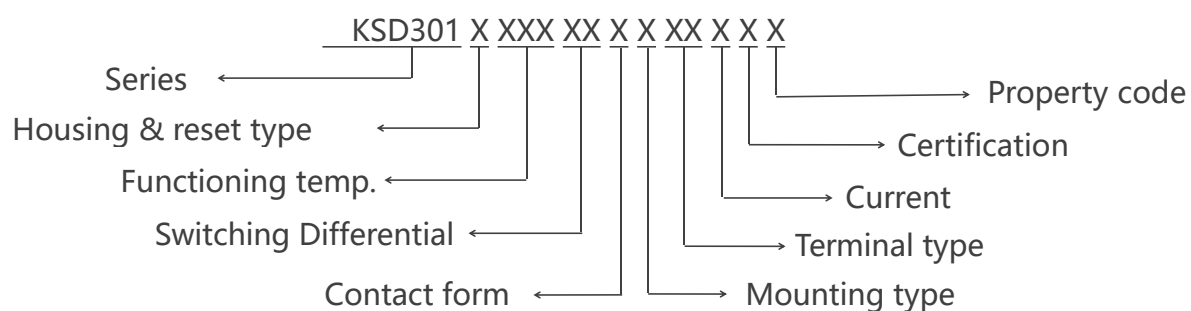
Unit: mm

Part No.	A	B	C	D	E	F	G
KSD301A (Auto reset bakelite case)	24±2.0*	32±2.0*	3.5±0.5*	5±0.5*	0.8±0.1	0.4±0.1	6.3/4.8±0.1
KSD301C (Auto reset ceramic case)	24±2.0*	32±2.0*	3.5±0.5*	5±0.5*	0.8±0.1	0.4±0.1	6.3/4.8±0.1
KSD301B (Manual reset bakelite case)	24±2.0*	32±2.0*	3.5±0.5*	5±0.5*	0.8±0.1	0.4±0.1	6.3/4.8±0.1
KSD301D (Manual reset ceramic case)	24±2.0*	32±2.0*	3.5±0.5*	5±0.5*	0.8±0.1	0.4±0.1	6.3/4.8±0.1

Remark:

1. * is for recommended dimension; customized dimension is also available.
2. Installation methods include fixed cover installation and movable ring installation which could be customized as per customer requirement.

■ Part No.



■ Temperature parameter

■ KSD301A (Auto reset bakelite case)

No.	Part No.	Rating	Functioning Temp.(°C)	Reset temp(°C)	Certification
1	KSD301A060	10A 250VAC/125VAC 16A 250VAC/125VAC	60±5	45±10	CQC TUV UL
2	KSD301A065	10A 250VAC/125VAC 16A 250VAC/125VAC	65±5	50±10	CQC TUV UL
3	KSD301A070	10A 250VAC/125VAC 16A 250VAC/125VAC	70±5	55±10	CQC TUV UL
4	KSD301A075	10A 250VAC/125VAC 16A 250VAC/125VAC	75±5	60±10	CQC TUV UL
5	KSD301A080	10A 250VAC/125VAC 16A 250VAC/125VAC	80±5	65±10	CQC TUV UL
6	KSD301A085	10A 250VAC/125VAC 16A 250VAC/125VAC	85±5	70±10	CQC TUV UL
7	KSD301A090	10A 250VAC/125VAC 16A 250VAC/125VAC	90±5	75±10	CQC TUV UL
8	KSD301A095	10A 250VAC/125VAC 16A 250VAC/125VAC	95±5	80±10	CQC TUV UL
9	KSD301A100	10A 250VAC/125VAC 16A 250VAC/125VAC	100±5	85±10	CQC TUV UL
10	KSD301A105	10A 250VAC/125VAC 16A 250VAC/125VAC	105±5	90±10	CQC TUV UL
11	KSD301A110	10A 250VAC/125VAC 16A 250VAC/125VAC	110±5	95±10	CQC TUV UL
12	KSD301A115	10A 250VAC/125VAC 16A 250VAC/125VAC	115±5	100±10	CQC TUV UL
13	KSD301A120	10A 250VAC/125VAC 16A 250VAC/125VAC	120±5	105±10	CQC TUV UL
14	KSD301A125	10A 250VAC/125VAC 16A 250VAC/125VAC	125±5	110±10	CQC TUV UL
15	KSD301A130	10A 250VAC/125VAC 16A 250VAC/125VAC	130±5	115±10	CQC TUV UL
16	KSD301A135	10A 250VAC/125VAC 16A 250VAC/125VAC	135±5	120±10	CQC TUV UL
17	KSD301A140	10A 250VAC/125VAC 16A 250VAC/125VAC	140±5	125±10	CQC TUV UL
18	KSD301A145	10A 250VAC/125VAC 16A 250VAC/125VAC	145±5	130±10	CQC TUV UL
19	KSD301A150	10A 250VAC/125VAC 16A 250VAC/125VAC	150±5	135±10	CQC TUV UL
20	KSD301A155	10A 250VAC/125VAC 16A 250VAC/125VAC	155±5	140±10	CQC TUV UL
21	KSD301A160	10A 250VAC/125VAC 16A 250VAC/125VAC	160±5	140±12	CQC TUV UL
22	KSD301A165	10A 250VAC/125VAC 16A 250VAC/125VAC	165±5	145±12	CQC TUV UL
23	KSD301A170	10A 250VAC/125VAC 16A 250VAC/125VAC	170±5	150±12	CQC TUV UL
24	KSD301A175	10A 250VAC/125VAC 16A 250VAC/125VAC	175±5	155±12	CQC TUV UL
25	KSD301A180	10A 250VAC/125VAC 16A 250VAC/125VAC	180±5	160±12	CQC TUV UL

▪ KSD301B (Manual reset bakelite case)

No.	Part No.	Rating	Functioning Temp.(°C)	Reset temp(°C)	Certification
1	KSD301B060	10A 250VAC/125VAC 16A 250VAC/125VAC	60±5	Manual reset	CQC TUV UL
2	KSD301B065	10A 250VAC/125VAC 16A 250VAC/125VAC	65±5	Manual reset	CQC TUV UL
3	KSD301B070	10A 250VAC/125VAC 16A 250VAC/125VAC	70±5	Manual reset	CQC TUV UL
4	KSD301B075	10A 250VAC/125VAC 16A 250VAC/125VAC	75±5	Manual reset	CQC TUV UL
5	KSD301B080	10A 250VAC/125VAC 16A 250VAC/125VAC	80±5	Manual reset	CQC TUV UL
6	KSD301B085	10A 250VAC/125VAC 16A 250VAC/125VAC	85±5	Manual reset	CQC TUV UL
7	KSD301B090	10A 250VAC/125VAC 16A 250VAC/125VAC	90±5	Manual reset	CQC TUV UL
8	KSD301B095	10A 250VAC/125VAC 16A 250VAC/125VAC	95±5	Manual reset	CQC TUV UL
9	KSD301B100	10A 250VAC/125VAC 16A 250VAC/125VAC	100±5	Manual reset	CQC TUV UL
10	KSD301B105	10A 250VAC/125VAC 16A 250VAC/125VAC	105±5	Manual reset	CQC TUV UL
11	KSD301B110	10A 250VAC/125VAC 16A 250VAC/125VAC	110±5	Manual reset	CQC TUV UL
12	KSD301B115	10A 250VAC/125VAC 16A 250VAC/125VAC	115±5	Manual reset	CQC TUV UL
13	KSD301B120	10A 250VAC/125VAC 16A 250VAC/125VAC	120±5	Manual reset	CQC TUV UL
14	KSD301B125	10A 250VAC/125VAC 16A 250VAC/125VAC	125±5	Manual reset	CQC TUV UL
15	KSD301B130	10A 250VAC/125VAC 16A 250VAC/125VAC	130±5	Manual reset	CQC TUV UL
16	KSD301B135	10A 250VAC/125VAC 16A 250VAC/125VAC	135±5	Manual reset	CQC TUV UL
17	KSD301B140	10A 250VAC/125VAC 16A 250VAC/125VAC	140±5	Manual reset	CQC TUV UL
18	KSD301B145	10A 250VAC/125VAC 16A 250VAC/125VAC	145±5	Manual reset	CQC TUV UL
19	KSD301B150	10A 250VAC/125VAC 16A 250VAC/125VAC	150±5	Manual reset	CQC TUV UL
20	KSD301B155	10A 250VAC/125VAC 16A 250VAC/125VAC	155±5	Manual reset	CQC TUV UL
21	KSD301B160	10A 250VAC/125VAC 16A 250VAC/125VAC	160±5	Manual reset	CQC TUV UL
22	KSD301B165	10A 250VAC/125VAC 16A 250VAC/125VAC	165±5	Manual reset	CQC TUV UL
23	KSD301B170	10A 250VAC/125VAC 16A 250VAC/125VAC	170±5	Manual reset	CQC TUV UL
24	KSD301B175	10A 250VAC/125VAC 16A 250VAC/125VAC	175±5	Manual reset	CQC TUV UL
25	KSD301B180	10A 250VAC/125VAC 16A 250VAC/125VAC	180±5	Manual reset	CQC TUV UL

▪ KSD301C (Auto reset ceramic case)

No.	Part No.	Rating	Functioning Temp.(°C)	Reset temp(°C)	Certification
1	KSD301C060	10A 250VAC/125VAC 16A 250VAC/125VAC	60±5	45±10	CQC TUV UL
2	KSD301C065	10A 250VAC/125VAC 16A 250VAC/125VAC	65±5	50±10	CQC TUV UL
3	KSD301C070	10A 250VAC/125VAC 16A 250VAC/125VAC	70±5	55±10	CQC TUV UL
4	KSD301C075	10A 250VAC/125VAC 16A 250VAC/125VAC	75±5	60±10	CQC TUV UL
5	KSD301C080	10A 250VAC/125VAC 16A 250VAC/125VAC	80±5	65±10	CQC TUV UL
6	KSD301C085	10A 250VAC/125VAC 16A 250VAC/125VAC	85±5	70±10	CQC TUV UL
7	KSD301C090	10A 250VAC/125VAC 16A 250VAC/125VAC	90±5	75±10	CQC TUV UL
8	KSD301C095	10A 250VAC/125VAC 16A 250VAC/125VAC	95±5	80±10	CQC TUV UL
9	KSD301C100	10A 250VAC/125VAC 16A 250VAC/125VAC	100±5	85±10	CQC TUV UL
10	KSD301C105	10A 250VAC/125VAC 16A 250VAC/125VAC	105±5	90±10	CQC TUV UL
11	KSD301C110	10A 250VAC/125VAC 16A 250VAC/125VAC	110±5	95±10	CQC TUV UL
12	KSD301C115	10A 250VAC/125VAC 16A 250VAC/125VAC	115±5	100±10	CQC TUV UL
13	KSD301C120	10A 250VAC/125VAC 16A 250VAC/125VAC	120±5	105±10	CQC TUV UL
14	KSD301C125	10A 250VAC/125VAC 16A 250VAC/125VAC	125±5	110±10	CQC TUV UL
15	KSD301C130	10A 250VAC/125VAC 16A 250VAC/125VAC	130±5	115±10	CQC TUV UL
16	KSD301C135	10A 250VAC/125VAC 16A 250VAC/125VAC	135±5	120±10	CQC TUV UL
17	KSD301C140	10A 250VAC/125VAC 16A 250VAC/125VAC	140±5	125±10	CQC TUV UL
18	KSD301C145	10A 250VAC/125VAC 16A 250VAC/125VAC	145±5	130±10	CQC TUV UL
19	KSD301C150	10A 250VAC/125VAC 16A 250VAC/125VAC	150±5	135±10	CQC TUV UL
20	KSD301C155	10A 250VAC/125VAC 16A 250VAC/125VAC	155±5	140±10	CQC TUV UL
21	KSD301C160	10A 250VAC/125VAC 16A 250VAC/125VAC	160±5	140±12	CQC TUV UL

22	KSD301C165	10A 250VAC/125VAC 16A 250VAC/125VAC	165±5	145±12	CQC TUV UL
23	KSD301C170	10A 250VAC/125VAC 16A 250VAC/125VAC	170±5	150±12	CQC TUV UL
24	KSD301C175	10A 250VAC/125VAC 16A 250VAC/125VAC	175±5	155±12	CQC TUV UL
25	KSD301C180	10A 250VAC/125VAC 16A 250VAC/125VAC	180±5	160±12	CQC TUV UL
26	KSD301C190	10A 250VAC/125VAC 16A 250VAC/125VAC	190±6	160±12	CQC TUV UL
27	KSD301C200	10A 250VAC/125VAC 16A 250VAC/125VAC	200±6	170±12	CQC TUV UL
28	KSD301C210	10A 250VAC/125VAC 16A 250VAC/125VAC	210±6	180±12	CQC TUV UL
29	KSD301C220	10A 250VAC/125VAC 16A 250VAC/125VAC	220±6	190±12	CQC TUV UL
30	KSD301C230	10A 250VAC/125VAC 16A 250VAC/125VAC	230±6	200±12	CQC TUV UL
31	KSD301C240	10A 250VAC/125VAC 16A 250VAC/125VAC	240±6	210±12	CQC TUV UL
32	KSD301C250	10A 250VAC/125VAC 16A 250VAC/125VAC	250±6°C	220±12°C	CQC TUV UL
33	KSD301C260	10A 250VAC/125VAC 16A 250VAC/125VAC	260±6	230±12	CQC TUV UL
34	KSD301C270	10A 250VAC/125VAC 16A 250VAC/125VAC	270±6	240±12	CQC TUV UL

▪ KSD301D (Manual reset ceramic case)

No.	Part No.	Rating	Functioning Temp.(°C)	Reset temp(°C)	Certification
1	KSD301D060	10A 250VAC/125VAC 16A 250VAC/125VAC	60±5	Manual reset	CQC TUV UL
2	KSD301D065	10A 250VAC/125VAC 16A 250VAC/125VAC	65±5	Manual reset	CQC TUV UL
3	KSD301D070	10A 250VAC/125VAC 16A 250VAC/125VAC	70±5	Manual reset	CQC TUV UL
4	KSD301D075	10A 250VAC/125VAC 16A 250VAC/125VAC	75±5	Manual reset	CQC TUV UL
5	KSD301D080	10A 250VAC/125VAC 16A 250VAC/125VAC	80±5	Manual reset	CQC TUV UL
6	KSD301D085	10A 250VAC/125VAC 16A 250VAC/125VAC	85±5	Manual reset	CQC TUV UL
7	KSD301D090	10A 250VAC/125VAC 16A 250VAC/125VAC	90±5	Manual reset	CQC TUV UL
8	KSD301D095	10A 250VAC/125VAC 16A 250VAC/125VAC	95±5	Manual reset	CQC TUV UL

9	KSD301D100	10A 250VAC/125VAC 16A 250VAC/125VAC	100±5	Manual reset	CQC TUV UL
10	KSD301D105	10A 250VAC/125VAC 16A 250VAC/125VAC	105±5	Manual reset	CQC TUV UL
11	KSD301D110	10A 250VAC/125VAC 16A 250VAC/125VAC	110±5	Manual reset	CQC TUV UL
12	KSD301D115	10A 250VAC/125VAC 16A 250VAC/125VAC	115±5	Manual reset	CQC TUV UL
13	KSD301D120	10A 250VAC/125VAC 16A 250VAC/125VAC	120±5	Manual reset	CQC TUV UL
14	KSD301D125	10A 250VAC/125VAC 16A 250VAC/125VAC	125±5	Manual reset	CQC TUV UL
15	KSD301D130	10A 250VAC/125VAC 16A 250VAC/125VAC	130±5	Manual reset	CQC TUV UL
16	KSD301D135	10A 250VAC/125VAC 16A 250VAC/125VAC	135±5	Manual reset	CQC TUV UL
17	KSD301D140	10A 250VAC/125VAC 16A 250VAC/125VAC	140±5	Manual reset	CQC TUV UL
18	KSD301D145	10A 250VAC/125VAC 16A 250VAC/125VAC	145±5	Manual reset	CQC TUV UL
19	KSD301D150	10A 250VAC/125VAC 16A 250VAC/125VAC	150±5	Manual reset	CQC TUV UL
20	KSD301D155	10A 250VAC/125VAC 16A 250VAC/125VAC	155±5	Manual reset	CQC TUV UL
21	KSD301D160	10A 250VAC/125VAC 16A 250VAC/125VAC	160±5	Manual reset	CQC TUV UL
22	KSD301D165	10A 250VAC/125VAC 16A 250VAC/125VAC	165±5	Manual reset	CQC TUV UL
23	KSD301D170	10A 250VAC/125VAC 16A 250VAC/125VAC	170±5	Manual reset	CQC TUV UL
24	KSD301D175	10A 250VAC/125VAC 16A 250VAC/125VAC	175±5	Manual reset	CQC TUV UL
25	KSD301D180	10A 250VAC/125VAC 16A 250VAC/125VAC	180±5	Manual reset	CQC TUV UL
26	KSD301D190	10A 250VAC/125VAC 16A 250VAC/125VAC	190±6	Manual reset	CQC TUV UL
27	KSD301D200	10A 250VAC/125VAC 16A 250VAC/125VAC	200±6	Manual reset	CQC TUV UL
28	KSD301D210	10A 250VAC/125VAC 16A 250VAC/125VAC	210±6	Manual reset	CQC TUV UL
29	KSD301D220	10A 250VAC/125VAC 16A 250VAC/125VAC	220±6	Manual reset	CQC TUV UL
30	KSD301D230	10A 250VAC/125VAC 16A 250VAC/125VAC	230±6	Manual reset	CQC TUV UL

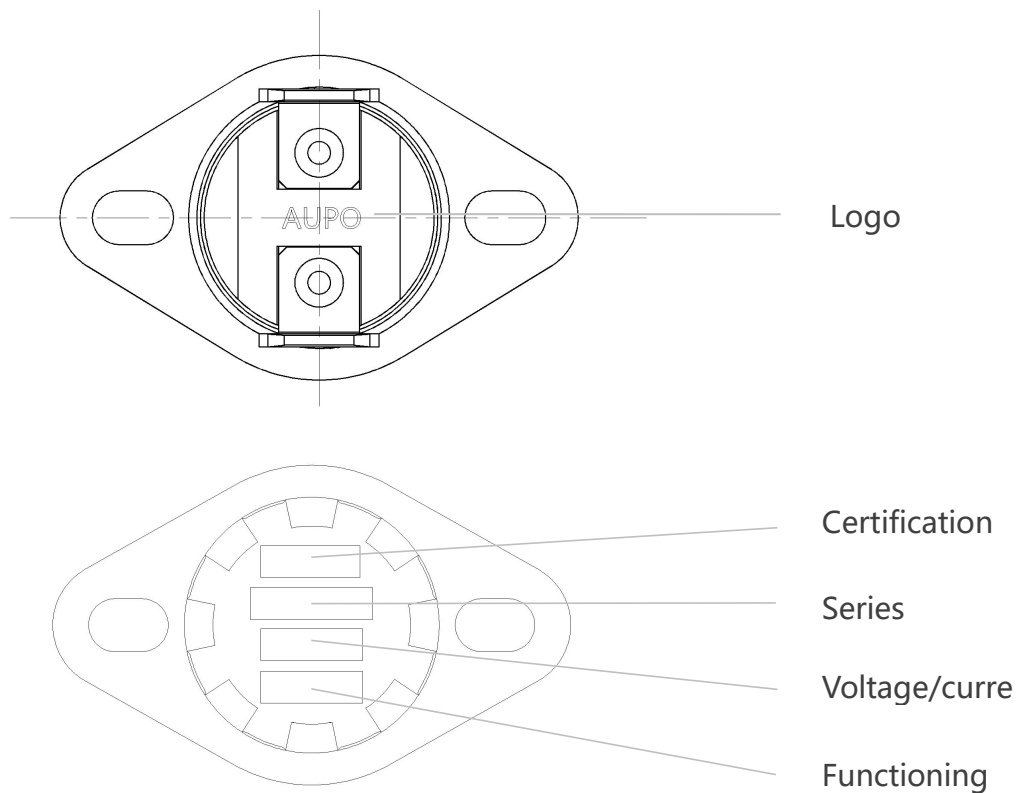
Remark: the aforementioned functioning temperature, reset temperature and tolerances are reference values which could be customized as per customer requirements. The listed certifications are all the certifications obtained for our existing products; please contact with our sales engineers regarding the specific certification required.

■ Electric parameter

Part No.	Temperature range	Rating	Switching Differential (temp. difference btw open and close)	Insulation resistance	Contact resistance
KSD301A	0~180℃	10A 250VAC/125VAC 12A 250VAC/125VAC 16A 250VAC/125VAC	8.5~55.5 °C (optional)	> 100MΩ	≤50mΩ
KSD301B	0~180℃	10A 250VAC/125VAC 12A 250VAC/125VAC 16A 250VAC/125VAC	manual reset type	> 100MΩ	≤50mΩ
KSD301C	0~270℃	10A 250VAC/125VAC 12A 250VAC/125VAC 16A 250VAC/125VAC	8.5~55.5 °C (optional)	> 100MΩ	≤50mΩ
KSD301D	0~230℃	10A 250VAC/125VAC 12A 250VAC/125VAC 16A 250VAC/125VAC	manual reset type	> 100MΩ	≤50mΩ

■ Product marks

▪ Printing on body



Application of thermostat

KSD301 series thermostats are available in a range of standard and customized specifications, providing reliable temperature control as well as resettable or non-resettable overheating protection for various electrical appliances. The installation method and the installation location can both affect the performance of the thermostat. Given the critical role of operation and installation in the overall performance of the thermostat, we provide the following guidance regarding design, installation, transportation, and storage – all designed to help ensure optimal thermostat performance.

▪ Storage conditions & time

1、Storage conditions:

Storage temperature: -10°C to +40°C, relative humidity: ≤80% RH.

The thermostat should be kept away from corrosion and direct sunlight, it should be stored in an environment that is clean, well-ventilated, free from corrosive gases, and free from sulfur-containing gases.

2、Storage time: recommended not to exceed 1 year.

▪ Attention for use

Grounding method: connect the metal case of the thermostat to the metal grounding component of the equipment.

The thermostat shall be working in a general indoor environment where the relative air humidity does not exceed 90% and where there are no flammable gases or conductive dusts.

When using a thermostat with a contact-type temperature sensing mechanism, ensure that its cover is tightly fitted against the heating surface of the device being controlled to enhance the temperature sensing effectiveness; thermal grease or any other similarly effective thermal conductive medium may be applied to the temperature-sensing surface of the cover.

For thermostats that detect temperature by contact with liquid or steam, it is recommended to use products equipped with stainless steel sealing lid and to implement reliable leak-proofing measures to prevent liquid from seeping onto the insulating components of the thermostat.

Do not compress or deform the seal, as this may alter the operating temperature or affect other performance characteristics.

Prevent liquid from entering the thermostat.

Avoid excessive force on the case to prevent cracks.

Keep the case clean and free from conductive contamination to prevent short-circuit breakdown due to reduced insulation.

Do not bend terminals during use; otherwise electrical connection reliability may be impaired.
Do not use long-term in strong acid, strong alkali, or other highly corrosive environments.

■ Explanation of term

• **Bimetal Thermostat**

A temperature-sensitive controller that uses bimetal material as the temperature-sensing element. During normal operation, it opens or closes an electrical circuit through its electrical contacts, thereby keeping the temperature of the controlled object within a certain range.

• **Functioning temperature (T_f)**

The actual temperature value at which the contacts open or close when the temperature rises, or open or close when the temperature falls, with the thermostat set to a certain temperature value.

Remark: corresponding to contact opening and contact closing, the functioning temperature includes the opening temperature and the closing temperature.

• **Reset temperature**

The temperature threshold at which the thermostat automatically resets to its initial state (e.g., the contacts reclose or reopen) when the temperature drops or rises to this critical value after an action has been triggered (contacts open or close the circuit).

Remark: this parameter is not applicable to manual reset thermostats, which require manual external force to reset.

• **Switching Differential**

The absolute value of the difference between functioning temperature and reset temperature when the thermostat is set to a certain temperature value.

Remark: for a manual reset thermostat, it refers to the difference between the automatic contact opening temperature and the maximum manual reset temperature value.

• **Rated voltage(U_r)**

The maximum rated operating voltage specified by the manufacturer for normal operation of the thermostat.

• **Rated current(I_r)**

The maximum resistive load current that the thermostat can reliably close and open under rated voltage conditions.

■ Certifications for thermostats

AUPO thermostat has received certifications from the following major authorities



UL/CUL



CQC



TUV

■ Statement

Before selecting a model, please obtain the complete specification document. Please follow the product manual's instructions during operation. For assistance during the selection process, contact the company's product manager. Users should determine the applicability of the thermostat based on their needs and are solely responsible for the intended use of the final product they choose.