

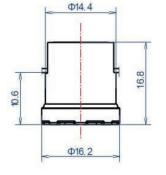


The KSD307-T series of $\frac{1}{2}$ " (13mm) self-hold bimetal disc thermostat from Calco Electric Corp offers proven reliability in a wide range of applications. The self-hold construction is integrated with a PTC heater which is electrically located across the contacts. When the contacts are closed, the PTC heater is shunted and therefore not energized. When the contacts are open, the PTC heater is placed in series with the load and is energized to keep the temperature sensitive bimetal in an actuated state. To reset the temperature sensing control, power to the device must be cycled off for sufficient time to allow the assembly to cool to a temperature below the reset point of the bimetal switch. Based on the operational sequence, the KSD307-T is considered having a "manual reset-like" feature although no user actuating mechanism is present.

Features and Benefits

The KSD307-T features include:

- Easy mounting
- Rapid heat transmission
- High durability
- High precision



Dimension of the Main Body

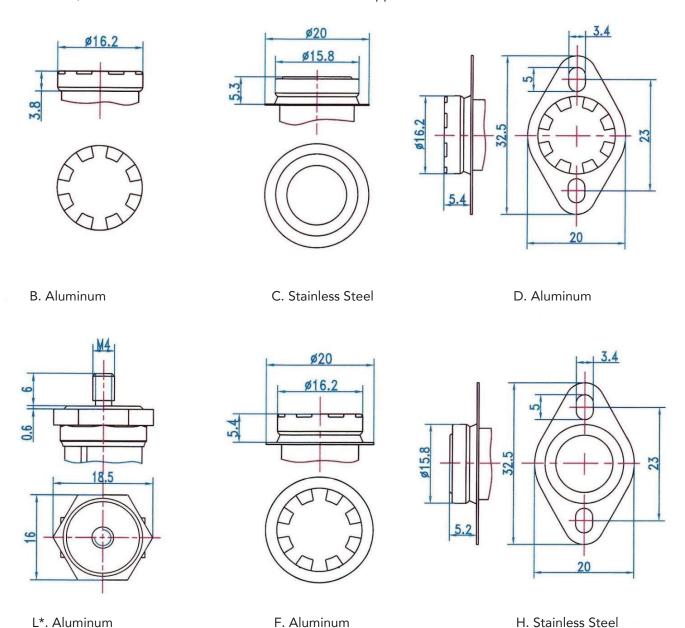
General Electrical Ratings

The KSD301-M series of controls has been rated by major agencies throughout the world. The agency ratings can be used as a guide when evaluating specific applications. However, the mechanical, electrical, thermal and environmental conditions to which a control may be exposed in an application may differ significantly from agency test conditions. Therefore, the user must not rely solely agency ratings, but must perform adequate testing of the product to confirm that the control selected will operate as intended in the user's application.



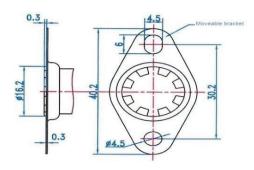
Type and Dimension of Cover

The materials of cover include aluminium and stainless steel. If the thermostat is used to sense the temperature of liquids or steam, the stainless steel unit should be used with this application.

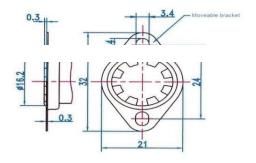




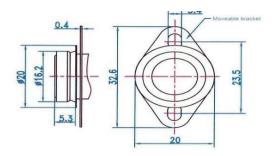
BF. Al Cover with Long Bracket



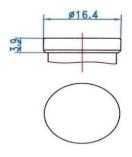
BL. Al Cover with Bracket



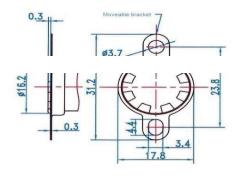
CE. Stainless Steel Cover with Bracket



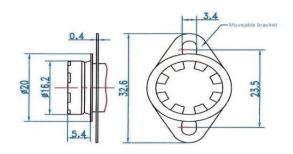
M. Al Cover



BC. Al Cover with Small Bracket



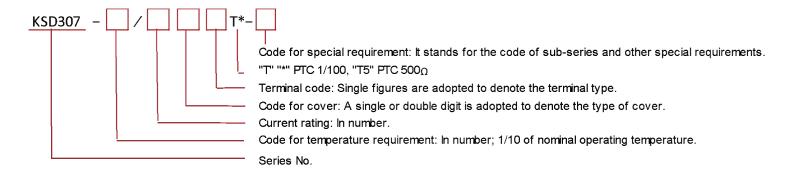
GE. Al Cover with Bracket





Contact	SPST, normally closed
Rated voltage/rated current	125V/16 Amps 250V/10 Amps
Number of sw itching cycles at rating loading	10,000 cycles
Range of rated switching temperatures	50°C ~ 170°C
Sw itching temperature tolerance	±5C
Sw itching differential	Manual reset, voltage maintained
Speed of temperature changes to determine switching temperature	0.5°C/minute
Thermal resistanace	Max 210°C/1 minute
Temperature limit of the switch head	190°C
Temperature of the mounting face	190°C
Degree of protection	IP 30, UL open type device
PTI of material used for insulation	250V
Rated impulse voltage	2500V
Contact resistance	≤20mΩ
Construction	For incorporation in Class I equipment

Nomenclature



Installation and Direction

- Method of grounding: By means of the metal cup of the thermostat connected in the grounding metal part.
- The thermostat should work in an environment with humidity not higher than 90%, free of caustic, flammable gas and conducting dust.
- When the thermostat is used to sense the temperature of solid items, its cover should be clung to the heating part of such items. Meanwhile, heat-conducting silicone grease, or other heat media of similar nature, should be applied to the cover's surface.
- If the thermostat is used to sense the temperature of liquids or steam, it is highly recommended to use the stainless steel cup version. Take precautions to prevent liquids from getting into the thermostats insulated parts.
- The top of the cup must not be pressed or dented. This will cause an adverse effect on the thermostats temperature sensitivity and will not allow it to function properly.

