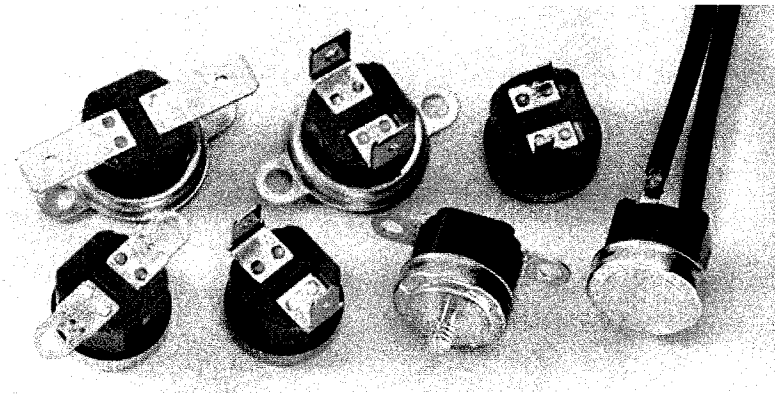
TEXAS INSTRUMENTS

KLIXON®

Precision Thermostats
7BT2 Series

High Capacity, Environmentally Sealed 1/2" Thermostat



Features

- ***High Current Capacity***
- ***Normally Open or Closed***
- ***Pre-set, Non-adjustable Temperature Calibration***
- ***UL Recognized, file #36418***
- ***CSA Recognized, file #LR24458***
- ***VDE Recognized, file #4464.4-451/A1***

Overview

Description

The Klixon 7BT2 thermostat is a snap-acting disc type control designed to provide crisp, positive switching action. The bimetal disc and electrical contacts are enclosed in a stainless steel cup to provide protection from dust and other foreign particles. The 7BT2 is available in a variety of configurations, making it a versatile candidate for your thermal protection needs.

Switching Action

All 7BT2 thermostats are supplied with single pole, single throw switching that can be constructed as either ***Open on Temperature Rise*** or ***Close on Temperature Rise.***

Temperature Ratings

The standard operating temperatures, differentials and tolerances are shown in the table below, but can be customized to meet you specific requirements.

Operating Temperature Range °F	Operating Temperature Range °C	Differential °F	Differential °C	Tolerance °F	Tolerance °C
30.0 to 204.0	-1.1 to 95.6	20.0	11.1	5.0	2.8
205.0 to 304.0	96.1 to 151.1	30.0	16.7	8.0	4.4
305.0 to 400.0	151.7 to 204.4	40.0	22.2	12.0	6.7

The standard operating temperatures, differentials and tolerances are shown in the table below, but can be customized to meet you specific requirements.

Ambient Temperature Range
-40°F to +464°F, (-40°C to +240°C)

Operating Temperature Range
+30°F to +400°F, (-1.1°C to +204.4°C)

Operating Temperature : Temperature at which normally closed contacts open or normally open contacts close.

Differential: Subtract the differential from the nominal operating temperature to determine the temperature at which the contacts will return to the normal position (reset temperature).

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Performance Characteristics

Contact ratings (Amperes)

120 VAC	240VAC	Life Cycles
15	10	100,000

Based on standard Differential

Dielectric Strength

2000 VAC, rms, 60 cycles for 1 minute

UL/CSA/VDE Ratings

Agency	Max. Voltage	Max. Current (non-inductive)	Max. Temperature
UL	120 VAC	15 amps	400°F
UL	240VAC	10 amps	400°F
CSA	120 VAC	15 amps	400°F
CSA	240 VAC	10 amps	400°F
CSA	277 VAC	7.2 amps	400°F
VDE	250 VAC	10 amps	347°F

Configurations

7BT2 L 3 D - 36 2

Part Series	Contact Action	Mounting Style	Terminal Style	Operating Index	Wire Lead
	L = Open on Rise F = Close on Rise			(Consult Factory for specific operating temperature index)	(Omit if Leads are not required)

Mounting Style

2 = No Mounting
3 = Loose Bottom Bracket
4 = Fixed Top Flange
6 = 6-32 X .187 stud
9 = 6-32 X .375 stud
15 = Pipe Mount

Terminal Style

A = Solder Type, Flat
B = 3/16 QC, outset at 90°
C = Weld Type, Flat
D = Weld Type, outset at 90°
F = 1/4 QC, outset at 90°
G = 1/4 QC, Flat

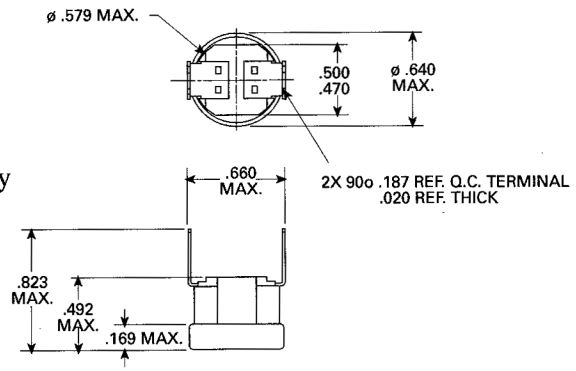
Wire Leads

Standard wire is 18 gauge stranded, tinned copper wire with black 0.31" PVC insulation (600V, 105°C). Standard lengths are shown below, but other lengths are available upon request.

1 = 6", 2 = 12", 3 = 18", 4 = 24"

Basic Dimensions (inches)

Our most common configuration is depicted below, but many other styles are available. The 7BT2 can also be custom packaged to meet your specific design requirements.



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