

## 64T Series

### *Snap-Action Temperature Controls*



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The 64T line of temperature controls from Therm-O-Disc combines a double pole, single throw (DPST) switch mechanism with a 3/4" (19mm) bimetal disc to provide simultaneous operation of two separate electrical circuits. Available in calibrations from 80°F to 350°F (28°C to 177°C) and nominal differentials from 30°F to 80°F (16.5°C to 44.5°C), the 64T provides excellent life characteristics at electrical loads up to 25 amps at 240VAC. A wide variety of terminal and mounting configurations are available for design flexibility.

#### ***Features and Benefits***

The 64T series features include:

- Double pole, single throw switch configuration.
- Auto-reset switch action with nominal differentials from 30°F to 80°F (16.5°C to 44.5°C).
- Snap-action bimetal disc for high-speed contact separation.
- Available with an exposed or enclosed bimetal disc in either surface or airstream mounting configurations.
- Welded construction for integrity of current-carrying-components.

#### ***Switch Actions and Typical Applications***

The 64T is an automatic reset double pole, single throw (DPST) switch that can be built to either open or close two independent sets of contacts on temperature rise. Once the temperature falls to the specified reset calibration, the contacts automatically return to their original state. A "two stage" switch configuration allows simultaneous switching of two independent circuits with a single bimetal disc. The 64T is typically utilized to limit temperatures of heating elements in electric furnaces and clothes dryers.

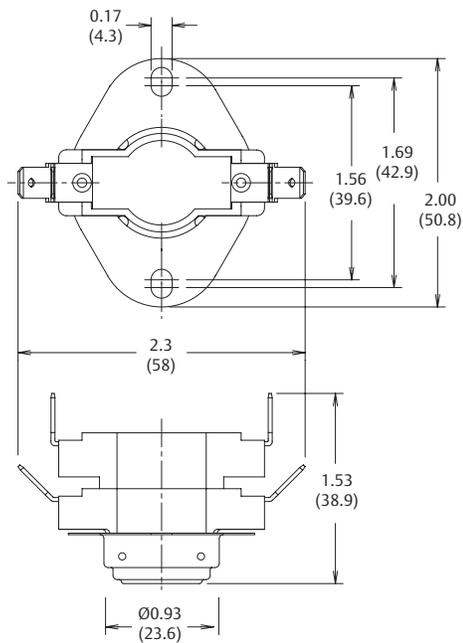
#### ***Electrical Spacings***

The 64T has electrical spacings of 1/8" (3.18mm) through air and 1/4" (6.3mm) over surface. Increased electrical spacings of 1/4" x 3/8" (6.3mm x 9.53mm) (64TX) and 3/8" x 1/2" (9.53mm x 12.70mm) (64TXX) are available.



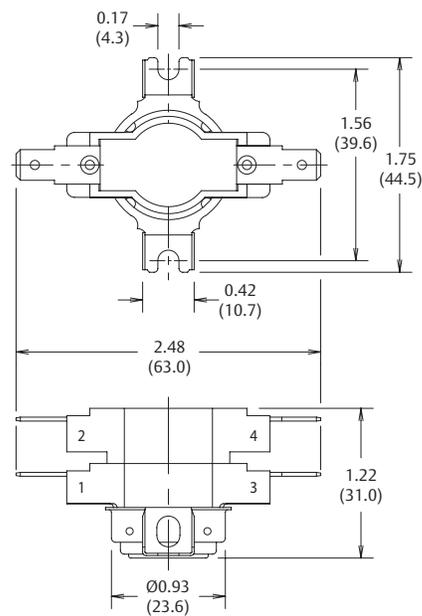
## Mounting Brackets

The 64T is available in either airstream (see figure 1) or surface (see figure 2) mount configurations. Exposed or enclosed bimetal disc versions may be specified with any of the mounting configurations.



**Airstream Mounting**

Figure 1



**Surface Mounting**

Figure 2

*Dimensions are shown in inches and (millimeters).*

## Terminal Configurations

Standard terminations for the 64T are .250" x .032" (6.3mm x .8mm) tin-plated brass blades. Terminal form angles of 0, 45 and 90 degrees are available.



## General Electrical Ratings

The 64T 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 on 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.

Inductive FLA	LRA	Pilot Duty VA	Resistive Amperes	Volts AC	Cycles of Operation	Agency Recognition
10	60	480	25	120	100,000	UL
5	30	480	25	240	100,000	File MH-5304
2.5	15	480	12.5	300	100,000	CSA
—	—	480	10	600*	100,000	File LR62036

NOTE For complete and current ratings, please consult a Therm-O-Disc sales engineer.  
At thermostat end-of-life, the contacts may remain permanently open or closed.

\*600VAC rating at CSA only.

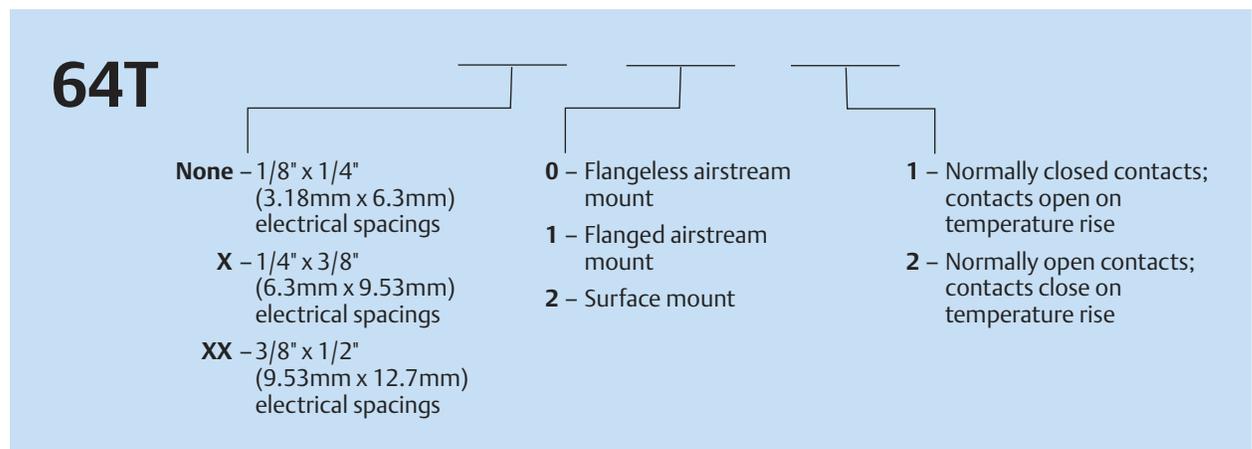
## Calibration Temperatures, Differentials and Standard Tolerances

Highest Calibration Point (Open or Close)	Standard Tolerances	
	Open	Close
0°-79°F (-18°-26°C)	±6°F (±3.3°C)	±8°F (±4.4°C)
80°-200°F (28°-93°C)	±5°F (±2.8°C)	±9°F (±5.0°C)
201°-250°F (94°-121°C)	±6°F (±3.3°C)	±11°F (±6.1°C)
251°-300°F (122°-149°C)	±7°F (±3.9°C)	±12°F (±6.7°C)
301°-350°F (150°-177°C)	±10°F (±5.6°C)	±16°F (±8.9°C)

NOTE: 30°-80°F (16.7°-44.4°C) nominal differential standard.



## Part Numbering System



### **Important Notice**

Users must determine the suitability of the control for their application, including the level of reliability required, and are solely responsible for the function of the end-use product.

These controls contain exposed electrical components and are not intended to withstand exposure to water or other environmental contaminants which can compromise insulating components. Such exposure may result in insulation breakdown and accompanying localized electrical heating.

A control may remain permanently closed or open as a result of exposure to excessive mechanical, electrical, thermal or environmental conditions or at normal end-of-life. If failure of the control to operate could result in personal injury or property damage, the user should incorporate supplemental system control features to achieve the desired level of reliability and safety. For example, backup controls have been incorporated in a number of applications for this reason.