

**HONEYWELL**

# TRADELINE

**CONTROLS**

## T6031A REFRIGERATION CONTROLS

### APPLICATION

These controllers are used in a refrigeration or cooling system such as controlling the temperature in a duct, tank, freezer or cooler. The sensing element can be directly immersed in the medium to be controlled. The T6031A has spdt switching. Its temperature control range is -30 to 90 F. Maximum ambient operating temperature is 125 F.

Electrical Rating is as follows:

	Close on Rise		Close on Fall	
	120v ac	240v ac	120v ac	240v ac
AFL	16	8	8	5.1
ALR	80	40	48	30.6

### INSTALLATION

The controllers may be mounted in any convenient position. Be sure to consider the 8 foot length of the capillary before mounting. Install the sensing element where it is in a position to sense the average temperature. Sharp bends or kinks in the capillary tubing affect the accuracy of the controller and must be avoided. Excess capillary should be carefully coiled and left directly beneath the controller.

Rev. 11-72  
S. K.

Form Number  
**95-6756-1**  
Residential Div.



## TANK INSTALLATION

The sensing bulb may be inserted directly into a tank by using a No. 104484A (1/2-inch NPT) or 104484B (3/4-inch NPT) Compression Fitting (order separately); or the bulb may be inserted into a No. 112622AA (1/2-inch NPT) or 112630AA (3/4-inch NPT) Immersion Well (order separately) which is screwed into tank or boiler.

Select a location where liquid of average temperature can circulate freely around the sensing bulb.

### Using Compression Fitting:

1. Drain System. Screw boiler plug into properly sized and threaded boiler or pipe tapping.
2. Place packing nut on capillary tube.
3. Slide sensing bulb completely through boiler plug.
4. Place composition disc and the 4 slotted brass washers on tubing.
5. Slide the assembly into the boiler plug and tighten the packing nut.
6. Refill the system and check for leaks. Neatly coil excess capillary tubing at T6031A case.

### Using Immersion Well:

1. Drain system. Screw the well into the threaded fitting.
2. Refill the system and check for leaks.
3. Insert sensing bulb into well until it bottoms.
4. Fit bulb retaining clamp over immersion well flange and capillary tubing, and tighten screw.

Neatly coil excess capillary tubing at T6031A case.

## FOR COLD ROOM INSTALLATION:

Mount the controller case as described above. Locate the bulb in freely circulating air in the controlled area or on the suction side of a refrigerant line, and secure the bulb in position.

## WIRING

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All wiring must comply with local electrical codes.

### CAUTION

Disconnect power supply.

Two knockouts are provided, one at the top and one at the bottom of case for 1/2-inch conduit. Follow the wiring instructions furnished with the heating or cooling system. For replacement, make certain the T6031A is wired in the system to operate the same way as old control.

## SETTING AND ADJUSTMENTS

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Use the system manufacturer's recommended settings, if available.

**Temperature Set Point**—Turn the knob on the front of the case until the pointer indicates the temperature to be maintained in the controlled medium.

**Differential:** Models with fixed differential; 3.5 F midscale.

Models with adjustable differential;

With the cover off, turn the differential adjustment wheel (marked 3—6—9—12 F) until the desired degree of differential is aligned with the notch in the frame.

## CHECKOUT

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After mounting and wiring have been completed, turn on the power supply and let the system operate through at least one cycle to be sure the controller operates properly.

**HONEYWELL**  
MINNEAPOLIS MINN 55408

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