

**Changeover Thermostats, Strap-On Type,
Summer/Winter
General Instructions**

Application

These thermostats are used primarily on combination heating and cooling air conditioning units to sense supply media temperature and reverse the control action of the room temperature sensing element.

Units are hermetically sealed. TC-2942 is enclosed type and has 1/2" conduit adapter. Fast responding bimetal element actuates snap-acting SPDT with silver contacts. Units are supplied with three color coded 16 gauge leads 3 ft. (914 mm) long.

Dimensions: 2 in. (51 mm) diameter x 1-1/2 in. (38 mm) high.

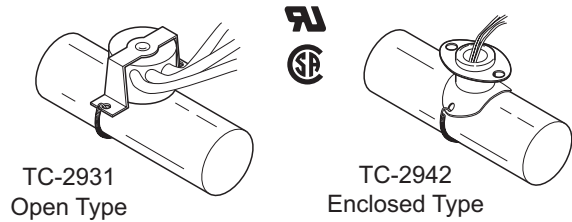


Table-1 Model Chart.

Part Number	Type	Setpoint °F (°C)	Differential °F (°C)	Min. Hot Water Temp. °F (°C)	Max. Chilled Water Temp. °F (°C)	Switch Ratings (AC Only)			
						Voltage (Vac)	FLA (Amps)	LRA (Amps)	Pilot Duty (VA)
TC-2931	Strap-On	Fixed 75 (24) Approx.	Fixed 15 (8) Approx.	90 (32)	60 (16)	120 240	5.8 2.9	34.8 17.4	125
TC-2942	Strap-On Enclosed ^a								

a. Has 1/2" conduit connector

Options

TC-2931-204 with 10 ft. (3 m) cable and plug (which cannot be extended) for unit ventilator.

TC-2931-205 with 3 ft. (914 mm) cable (which cannot be extended) for CP-5341.

Accessories

None.

Pre-Installation

The thermostats are shipped with an attached flange and two mounting springs for mounting on tubing or pipe up to 1-1/2" (38 mm).

Before installing the thermostat, inspect the unit for any signs of damage.

Requirements

The thermostat can be mounted in any position with one spring for pipe or tubing up to 1/2" (13 mm) or 2 springs hooked together for pipe or tubing up to 1-1/2" (38 mm).

CAUTION

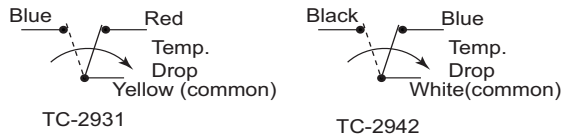
Do not attempt to disassemble the thermostat as it is hermetically sealed to prevent moisture condensation on the electrical contacts

Procedure

On a smooth clean section of the pipe or tubing, hook one end of the spring in the hole on the flange. Position the thermostat, pull the spring around under the pipe, and hook the other end in the hole on the opposite side of the flange. If installed on insulated pipe, build up the insulation around and over the thermostat only after it is installed.

Make all electrical connections in accordance with job diagrams and in compliance with national and local electrical codes.

Standard units are supplied with color coded leads for direct connection to other equipment or spliced connections in a nearby electrical enclosure.



Checkout

Expose the unit to a temperature below 62°F (17°C) and a circuit must be made between yellow and red (TC-2931) or between white and blue (TC-2942).

Expose the unit to a temperature above 88°F (31°C) and a circuit must be made between yellow and blue (TC-2931) or between white and black (TC-2942).

Maintenance

If excessive corrosion develops between the sensing elements and the pipe, remove unit, clean, and apply a silicone lubricant such as #6 compound from Dow Corning Company to prevent future corrosion.

Repair

Do not field repair the thermostat. If the system is not operating correctly and the reason is traced to the thermostat, it should be replaced.