

# TC-2931-CS&S

**Changeover Thermostat** 

## Description

The TC-2931-CS&S Strap-On Type Changeover Thermostats are designed for sensing temperature of fluids in pipes in heating and cooling systems and reversing the control action of the room temperature sensing control. These Thermostats contain a bimetal that makes or breaks a SPDT switch. The switch is rated for 5.8 FLA, 34.8 LRA, or 125 VA ant 120 VAC. At 240 VAC, the switch is rated at 2.9 FLA, 17.4 LRA or 125 VA.

The units are mounted directly to a pipe with one or two springs. At higher temperatures, the Thermostat's Blue lead is connected to the Yellow (or Common) lead. At lower temperatures, the Red lead connects to the Yellow lead. The 16 Gage leads are 3 feet long.



The setpoint for these units is fixed at approximately 75 °F and they have an approximate 15 °F fixed differential. The minimum hot water temperature to be sensed is 90 °F and the maximum cold water is 60 °F.

Weights & Dimensions: Unit - 1" H X 2-1/8" W X 3/4" D (plus wires)

Package - .18#, 6" X 7" X 1"

\* Does not include packaging materials required for shipping

#### Replaces:

CS&S Part Number	Manufacturer/Supplier	Replaces
TC-2931-CS&S	Schneider Electric	TC-2931

#### Installation:

- These Thermostats are not position sensitive, but they
  must have a clean, bare section of pipe (typical of the
  temperature that is to be sensed), available for
  mounting.
- 2. Locate the Thermostat on the clean section of pipe such that the sensing surface is in contact with the pipe.
- 3. If the pipe is up to ½" in diameter hook the end of one spring into one of the Thermostat's flange holes.
- 4. Wrap the spring around the pipe and hook the other end of the spring in the other flange hole. See Figure 1.
- 5. For larger pipes (up to 1-1/2 inches in diameter) two springs will be required (and are provided).

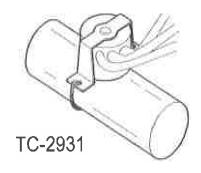


Figure 1

- Referring to figure 2, make the electrical connections perjob requirements and according to national and local electrical standards.
- 7. If the pipes are to be insulated, make sure Thermostat is in direct contact with pipe.
- 8. Verify the Thermostat is functioning properly by exposing it to a temperature below 60 °F and above 90 °F. At or below 60 °F, the yellow and red leads should be connected. At or above 90 °F, the yellow and blue leads should be connected.

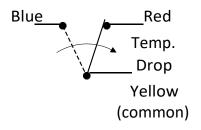


Figure 2

### **Calibration:**

The TC-2931-CS&S cannot be calibrated in the field and is not field repairable.

#### **Cautions:**

- Do not try to open this unit, as it is sealed to prevent moisture damage to the Thermostat.
- If corrosion exists on the pipe, clean it and apply a thermally conductive grease between the Thermostat's sensing surface and the pipe.
- Installer should be qualified and should follow all national and local electrical codes. Use copper conductors only.
- Before wiring this device, disconnect electrical power to minimize risk of electrical shock or damage to connected equipment.

These products are proudly manufactured by Crandall Stats and Sensors, Inc. in Machesney Park, Illinois, USA.