



Young Regulator Co.

7100 Krick Rd • Walton Hills, OH 44146

P: 440-232-9700 • F: 440-232-8266

www.youngregulator.com

Submit T-312 CE – 1-10

Model T-312 CE

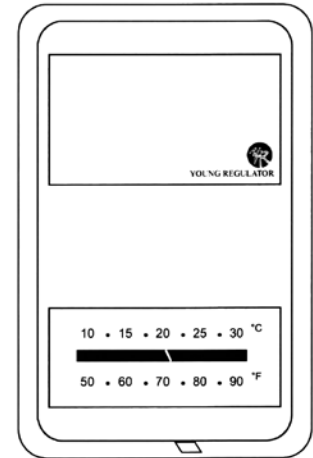
Floating Control Thermostat

Vertical, 24V

Application and Design

The Young Regulator model T-312-CE is a reed switch deadband-type thermostat for two position or modulating dampers. Other features include:

- Deadband type thermostat for two position damper control
- Reed switch
- Powered by 24 Vac (transformer required) with battery backup for display
- Accurate to ± 2 °F
- Easy temperature setting
- Temperature range of 50 – 90 °F
- Precise leveling not required
- Mercury free
- 1 year warranty from manufacturer



When used with the Young Regulator Automatic Changeover round damper models 2010 and 2100 or the rectangular damper models 2050 and 2500, you have an easy to use, easy to install stand-alone zone control kit.

SEQUENCE OF OPERATION FOR MODULATING DAMPERS

The control provided by the T-312-CE is conventionally termed as floating control. Floating control, a variation of two-position control, is where the thermostat provides a three-output control: Advance Motor, Reverse Motor, and Hold.

On a change in temperature, the T-312-CE drives the actuator to an intermediate position and then opens the circuit to the actuator. The actuator remains in this position until there is further temperature change at the T-312-CE. The actuator is said to float between the limits of the T-312-CE to satisfy various load requirements.

FOR SPRING RETURN DAMPERS

On a call for cooling, the circuit is made, the actuator is energized and the damper is driven open. When the thermostat is satisfied, the circuit is broken and the damper springs closed.

STANDARD SPECIFICATIONS

Electrical Rating	30 VAC Maximum
Heat Anticipator	.1 Amps to 1.0 Amps
Cool Anticipator	Fixed
Dimensions	4.5" x 2.75" x 1.25" (check dimensions)
Approvals	CSA (UL not required)
Differential	Heat 1°F Cool 2°F Dead Band 4°F

OPERATION

1. Set the temperature-adjusting lever to the desired temperature.
2. Additional adjustment, if necessary, can be made. If the heating system runs too long, adjust the heat anticipator to a slightly lower setting. If the heating system runs too short, adjust the heat anticipator slightly higher.



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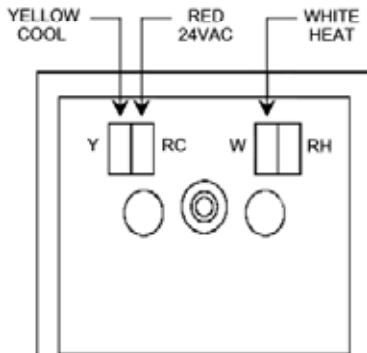
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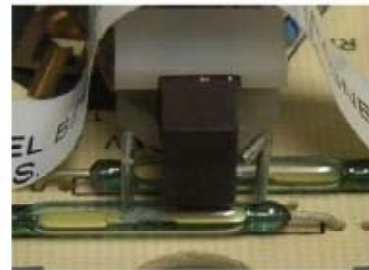
No Jumper Required between RH and RC



INSTALLATION INSTRUCTIONS

1. Determine the location where the thermostat is to be mounted. It should be installed about 54" above floor level where there is good air circulation. Avoid heat sources such as lamps, direct sunlight, fireplaces or walls containing air conditioning and heating ducts. Do not install where anything can obstruct free airflow such as drapes or doors.
2. Disconnect the power supply.
3. Gently remove the cover of the thermostat from the base by pulling the top or bottom away from the base. Remove any additional packing.
4. Feed electrical wires from the system through the two holes above the screw terminals. Wiring must not interfere with the operation of the thermostat. Use electrical material approved by applicable code.
5. Connect the wires to the proper terminals.
6. Install the thermostat on the wall with the mounting screws provided. Thermostat must be level.
7. Adjust the heat anticipator pointer (see diagram) adjacent to current draw of the heating system (listed in the specifications of the heating system). If this information is not available, check with an ammeter.
8. Move the temperature-adjusting lever back and forth to insure bimetal is free from restrictions.
9. Replace the cover onto the base.
10. Restore the power.
11. This thermostat has been electronically calibrated at the factory. No adjustment is necessary.

Ensure the magnet is between the stop pins
Ensure the stop pins are not angled in



WARNING:

IF THIS PRODUCT IS USED TO REPLACE A DEVICE CONTAINING MERCURY, THE PURCHASER OR CONSUMER MUST ENSURE THAT THE MERCURY IS PROPERLY MANAGED TO COMPLY WITH STATE AND FEDERAL REGULATIONS. THE MERCURY MUST NOT BECOME PART OF SOLID WASTE OR WASTE WATER. CONTACT YOUR LOCAL WASTE MANAGEMENT AUTHORITY FOR INSTRUCTIONS REGARDING RECYCLING AND PROPER DISPOSAL OF THE OLD THERMOSTAT.