



**MICRO COMPUTER BASED
ELECTRONIC ZONE THERMOSTAT with DIGITAL DISPLAY
T-322-JS**

- One floating output
- Supply air temperature auto changeover

APPLICATIONS

The T-322-JS thermostat is designed for use with the Young Regulator 9100E series of motorized VAV diffuser or the 4075, 3085 series damper. It operates a modulating 90-second tri-state floating actuator.

This is a true multi position modulating output. Performances are equivalent to more expensive 0 to 10 Vdc type thermostats.

ADVANCED DESIGN AND P + I CONTROL

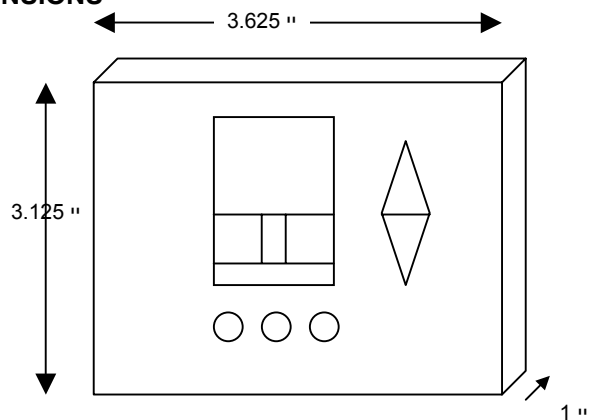
Advanced Proportional and Integral (P + I) control thermostats provide precise temperature control and eliminates wasted energy caused by the typical On / Off cycling in conventional thermostats. Thus the room occupant is able to reduce the thermostat set point to the lowest comfortable setting. The result is energy savings ranging from 5% to 10%.

Individual control of zones prevents over heating & over cooling of space temperature.

PUSH BUTTON FUNCTIONS

Press the ON button to activate the thermostat.
 Press the OFF button to deactivate the thermostat. This will also drive the zone damper closed.
 The C/F button switches the display from Fahrenheit and Celsius.
 Press the + or - button to raise or lower set point (set point temperature will be displayed).
 The thermostat continuously displays room temperature.

DIMENSIONS



MODULATING FLOATING OUTPUT

This output is designed to give true P + I modulation out of a floating actuator.

DISCHARGE AIR SENSOR

A discharge air sensor is supplied with each thermostat. The purpose of the discharge air sensor is to select the mode of operation of the damper. If the discharge air temperature is above 72 degrees F, the damper will open on a call for heating. If the discharge air temperature is below 72 degrees F, the damper will open on a call for cooling.

TESTING THE DISCHARGE AIR SENSOR

Disconnecting the discharge air sensor will put the thermostat in the cool mode. Shorting out the sensor will put the thermostat in the heat mode.

NOTE: UP TO 6 DAMPERS WITH HONEYWELL ML6161 MOTORS MAY BE WIRED OFF ONE THERMOSTAT

TERMINAL DESIGNATIONS

| TERMINAL NUMBER | TERMINAL DESCRIPTION |
|-----------------|-----------------------------|
| 1 | OPEN DAMPER (24 VOLTS OUT) |
| 2 | CLOSE DAMPER (24 VOLTS OUT) |
| 3 | NOT APPLICABLE |
| 4 | HOT (24 VOLTS IN) |
| 5 | COMMON (24 VOLTS IN) |
| 6 | DUCT SENSOR |
| 7 | DUCT SENSOR |
| 8 | NOT APPLICABLE |

THERMOSTAT INSTALLATION

Important.

Electronic controllers require special care for wiring and startup. To avoid problems, carefully follow the procedures below.

Be sure to have all the literature on hand for all components installed: controller, actuators, relay, etc...

Look at the wiring diagrams, and study them carefully. Be sure that you understand how the system is supposed to work.

Make the wiring according to the wiring diagrams. Respect polarity for power terminals # 4 & # 5 between multiple controllers if the same transformer is used.

Separate the thermostat from the back-plate by holding the front of the thermostat with right hand. Use the thumbnail of the left hand to hook the extremely small rounded tab located on the top edge of the thermostat back plate and pull them apart.

A) Location:

- 1- Should not be installed on outside wall.
- 2- Must be installed away from any heat source.
- 3- Should not be affected by direct sun radiation.
- 4- Nothing must restrain vertical air circulation to the thermostat.

B) Installation:

- 1- Pull out cables 6" out of the wall.
- 2- Wall surface must be flat and clean.
- 3- Separate the thermostat from the back-plate by holding the front of the thermostat with right hand. Use the thumbnail of the left hand to hook the extremely small rounded tab located on the top edge of the thermostat back plate and pull them apart.
- 4- Insert cable in the central hole of the base.
- 5- Align the base and mark the location of the three mounting holes on the wall. Install proper side of base up.
- 6- Install shields in the wall.
- 7- Insert screws in mounting holes on the topside of the base and the bottom. **DO NOT OVERTIGHTEN!**
- 8- Strip each wire 1/4 inch.
- 9- Insert each wire according to wiring diagram.
- 10- Reinstall the cover and gently push back extra wire length in the hole in the wall.

T322-JS TYPICAL WIRING

