ELECTRONIC THERMOSTAT: C1110
FOR ANALOG ZONE VALVES

- Modulating 0 to 10 Vdc analog output
- For N.O. or N.C. valves
- For heating or cooling applications

DESCRIPTION

The C1110 series thermostats are microcomputer-based, proportional and integral (PI) devices with one analog 0 to 10 Vdc output. The thermostat are designed to be used with analog valve actuators. The action of the output (direct or reverse acting) can be adjusted with an internal dip switch.

HOW TO ORDER

C1110 - ☐

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01 = °C & °F scale with blind cover
Internal setpoint adjustment

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02 = 10 to 30 °C scale

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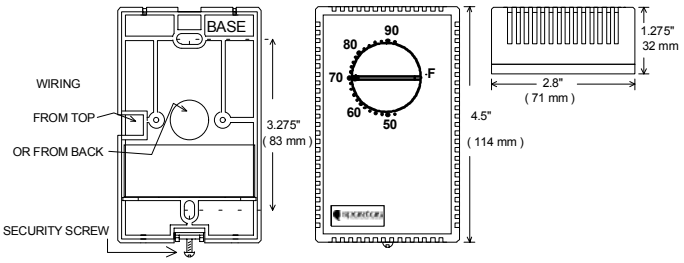
03 = 50 to 90 °F scale

DIMENSIONS



SPECIFICATIONS

Operating Conditions:	0 °C to 50 °C (32 °F to 122 °F) 0% to 95% R.H. non-condensing
Sensor:	Local 47 K NTC thermistor
Resolution:	± 0.1 °C (± 0.2 °F)
Control accuracy:	± 0.2 ° C (± 0.4 °F) (calibrated)
Ranges:	10 °C to 32 °C (50 °F to 90 °F)
Proportional band for room temperature control:	1.8°C (3.2°F)
Analog output:	0 to 10 Vdc into 2KΩ resistance min.
Power:	24 Vac -15%, +10% 50/60 Hz; 2 VA

THERMOSTAT INSTALLATION

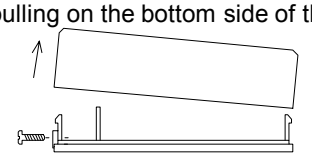
Important.
Electronic controllers require special care for wiring and startup. To avoid problems, carefully follow the procedures below.

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 # 3 & # 4 between multiple controllers if the same transformer is used.

- Remove security screw on left side of thermostat cover.
- Open up by pulling on the bottom side of thermostat.



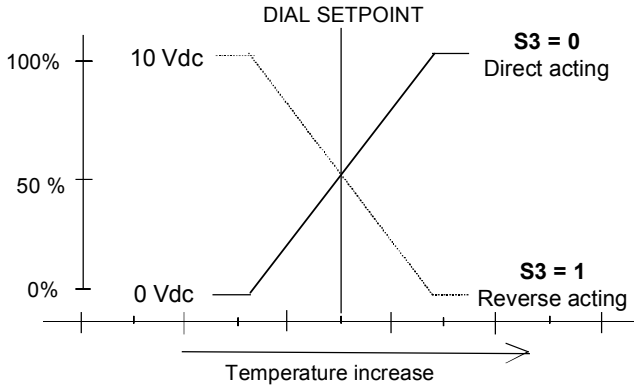
A) **Location:**
1- Shouldn't be installed on outside wall.
2- Must be installed away from any heat source.
3- Shouldn't be affected by direct sun radiation.
4- Nothing must restrain vertical air circulation to the thermostat.

B) **Installation:**
1- Pull out cables 6" out of the wall.
2- Wall surface must be flat and clean.
3- Separate the thermostat and the base by pulling the cover by the bottom (same as the security screw.)
4- Insert cable in the central hole of the base.
5- Align the base and mark the location of the two mounting holes on the wall. Install proper side of base up.
6- Install shields in the wall.
7- Insert screws in mounting holes on each side of the base. **DO NOT OVERTIGHTEN!**
8- Strip each wire 1/4 inch.
9- Insert each wire according to wiring diagram.
10- Reinstall the cover (top side first) and gently push back extra wire length in the hole in the wall.
11- Install security screw.

DIP SWITCH ADJUSTMENT PER APPLICATIONS

S3	APPLICATION SWITCH
0	Direct acting control signal
1	Reverse acting control signal

CONTROL CURVES AND SEQUENCE



TYPICAL APPLICATIONS

Room Temperature Control With: Analog 0 to 10 Vdc Valve Actuators

Dip switch position	S3
Direct acting control signal	0
Reverse acting control signal	1