**DESCRIPTION**

The Zonex Systems Stand Alone Modulating thermostat, SAMOD, is a microprocessor based, auto changeover touch screen thermostat, that includes a duct sensor and a fully modulating damper to control problem areas (with erratic temperatures) by controlling the existing air supply to the problem area or zone. The SAMOD is used in stand alone damper applications where independent sub control is required. The SAMOD does not control or cycle the HVAC equipment.

The space ambient temperature is continuously displayed on the SAMOD. An accurate duct sensor is included with the SAMOD and installed upstream of the damper. For Auto changeover operation the duct temperature is compared to the room ambient for changeover. If the supply air temperature is 3°F or less than room ambient, the SAMOD recognizes that cooling air is available for the zone. If the supply air temperature is 7°F or warmer than the room ambient, the SAMOD has warm air available for heating the zone. The damper will modulate to maintain room temperature based on variance from set point.

If no heating or cooling calls exist, and duct temperature is within 10°F dead band, (3°F below room temperature or 7°F above room temperature), SAMOD will modulate the damper to provide continuous ventilation.

The SAMOD's duct temperature is displayed at the top of thermostat providing current duct temperature information and set points. In the event of power loss, the set points are stored in a non-volatile memory, without need for battery backup.

The SAMOD can be field configured for baseboard and reheat operations, including Fan Powered Boxes. With an adjustable 2-4°F dead band for auxiliary heat operations.

**NOTE:** An air proving switch (field supplied) must be used for reheat applications. A field supplied relay may be required for VAV box applications.

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**TECHNICAL DATA**

**Electrical:**
- **Supply voltage:** 24vac
- **Power consumption:** 4va maximum
- **Input:**
  - 24vac
- **Outputs:**
  - RO RC Triacs - 24vac @ .3 amp max
  - AUX Heat Relay - 24vac @ 10 amp maximum

**Environmental:**
- **Operating Temperature:** 35°F to 130°F (2°C to 54°C)
- **Operating Humidity:** 5 to 95% non-condensing
- **Storage Temperature:** 0°F to 150°F (-18°C to 66°C)

**General:**
- **Dimensions:** 4 1/2” H x 3” W x 3/4” D
- **Temperature Display Range:** 55°F to 95°F
- **Accuracy:** +/- 0.8°F
- **Memory:** Non-volatile EEPROM
- **Display:** 320x480 3.5 TFT
- **Viewing Angle:** 140°

Rev 4/16/20
TERMINAL FUNCTIONS

SAMOD STAND ALONE MODULATING DAMPER CONTROL

FEASURES

- Full Color Touch Screen Display
- High Tech look and operation
- Auto Changeover
- Adjustable Aux or Reheat operation
- Control round, rectangular dampers or D-Fuser
- Diagnostic tool for thermostat operation
- Control fully modulating dampers
- Display Duct Temperature
- Set point lock
- Display lock out
- Auto / Off / Cool only / Heat only
- Non-volatile memory retains stored set points
- Slave capability – up to 3 dampers per stat
- Temperature Calibration
- F or C Temperature operation

ORDERING INFORMATION

Part No.   Description
SAMOD   Stand alone modulating damper thermostat with duct sensor

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