

SUBMITTAL

SAMOD II

Stand Alone Modulating Thermostat

DESCRIPTION

The Zonex Systems **Stand Alone Modulating** thermostat, SAMOD II, is a microprocessor based, auto changeover modulating thermostat. The SAMOD II is used in stand alone damper applications where independent sub control is required. The SAMOD II does not control or cycle the HVAC equipment.

The space ambient temperature is continuously displayed on the SAMOD II. An accurate duct sensor is installed upstream of the damper. For Auto changeover operation the duct temperature is compared to the room ambient for changeover. If the DAT is 3° F. or less than room ambient, the SAMOD II recognizes that cooling air is available for the zone. If the DAT is 7° F. or warmer than the room ambient, the SAMOD II 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, the Supply air temperatures between the changeover set points will be considered as a ventilation mode, and the damper will provide ventilation and continuous circulation to the space.

By holding the UP and DN buttons on the SAMOD II, duct temperature readings will be displayed at the thermostat providing current 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 II is equipped with a Auxiliary contact to control a supplemental heating source, such as baseboard, radiant, duct heater or VAV box. The second stage is activated from the thermostat when the room temperature falls 2° below the heat set point.

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

A Remote Sensor is available for the SAMOD II. The RS option allows a Remote Sensor to be located up to 200' from the thermostat, using standard 18 GA thermostat wire.

SAMOD II is very versatile and may be utilized in a communicating format with the ZonexCommander family of DDC products. The room temperature and set points may be remotely displayed and revised via the Zonex software. This software also provides 7-day scheduling, the ability to remotely lock the SAMOD II, review or modify set points, and trend log on site or remotely over the Internet.

TECHNICAL DATA***Electrical:***

Supply Voltage: 24vac

Power consumption: 4 VA maximum
(10 VA maximum w/ STMPD damper)

Inputs:

- 24vac
- NTC Thermistor
- Duct Thermistor

Outputs: 2- triac, 24vac @ 2.5 VA

Environmental:

Operating temperature: 35 to 130° F (2 to 54° C)

Operating humidity: 5-95% non-condensing

Storage temperature: 0 to 150° F (-18 to 66° C)

General:

Dimensions: 4 1/2" H x 2 7/8" W x 1" D

Range: 55 - 95° F.

Accuracy: +/- 0.8° F.

Memory: Non-volatile EEPROM

Display: Backlit Multi-icon LCD

Communication: RS 485

Twisted Pair – with Zonex DDC systems

Rev 3/10/10

SAMOD II

ORDERING INFORMATION

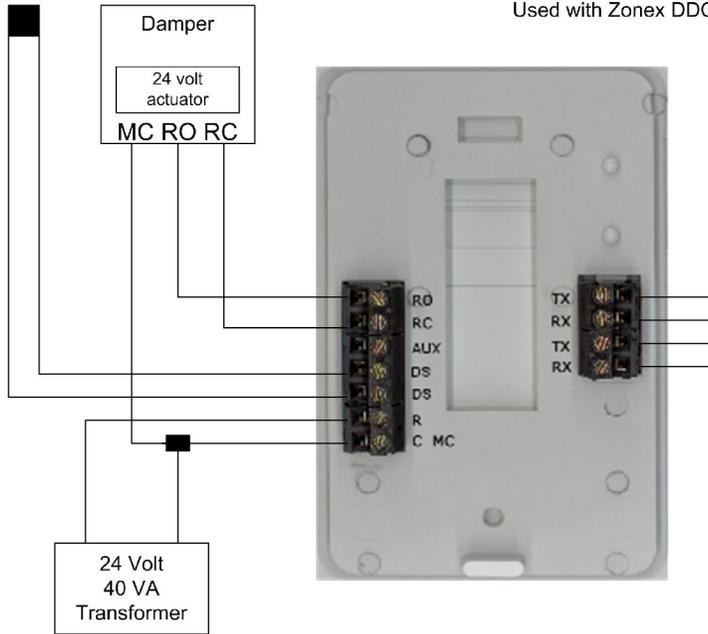
Part No.	Description
SAMOD	Stand alone modulating damper thermostat with duct sensor
SAMODRS	Stand alone modulating damper thermostat, with duct and remote sensor

TERMINAL FUNCTIONS

DS - Duct Sensor ¹

Communicating Option ²

Used with Zonex DDC systems



R - 24vac power input
C - 2vac power common
RO - damper run open signal
RC - damper run closed signal
MC - 24V motor common
DS - duct temperature sensor
DS - duct temperature sensor
AUX - Auxiliary Heat

Note: The SAMOD II is used with Zonex Systems modulating STMPD (round) and STCD (rectangular) dampers or D-Fuser.

NOTES:

1. DS - The Duct Sensor is to be mounted in the air duct prior to supply damper.
2. The SAMOD II can be configured for DDC communications. Daisy chain Belden 8740 twisted pair communications wire on the TX and RX terminals when used with the ZonexCommander or Zonex DDC systems.

FEATURES

- Auto changeover dual set point
- No batteries required
- Attractive, compact design
- Off white color
- Accurate temperature control
- Large LCD display
- Duct sensor included
- Easy to adjust or calibrate
- Ability to switch off
- Illuminated for night viewing
- Non-volatile memory: Retains stored set points
- Remote sensor capability
- Displays duct temperature
- Used in a communicating format with Zonex DDC systems