



## SUBMITTAL



## **ModStat** *Communicating / Modulating Zone Thermostat*

### DESCRIPTION

The **ModStat** is a microprocessor based, auto changeover, communicating zone thermostat. The ModStat controls modulating medium pressure and heavy duty dampers. The ModStat zone thermostat is used with the **GEN II-VVT** zoning system.

The ModStat controls and modulates zone dampers based on variance from set point to a position that will match the supply load to the demand requirement. When the HVAC unit is running, if a zone thermostat is not calling or is calling for the opposite mode, its corresponding damper fully closes. When the HVAC unit is not running, the thermostats open to the Vent mode to provide ventilation, if the indoor blower fan is running continuously.

The ModStat is easy to configure and adjust manually with the function buttons located on the front cover.

The space ambient temperature is continuously displayed with a range of 55° to 95° F. Programmed setpoints can be manually adjusted or electronically locked through the program to provide limited manual setpoint adjustment. Two-hour override is provided for after hour's operation, with a touch of a button. The thermostat can be easily field calibrated, if required.

The ModStat can be field configured for baseboard and reheat operations, including Fan Powered Boxes.

**NOTE:** An air proving switch must be used for this application; field supplied.

### TECHNICAL DATA

#### **Electrical:**

**Supply voltage:** 24vac

**Power consumption:** 4va maximum

#### **Input:**

- 24vac
- Platinum Thermistor

#### **Outputs:**

- RO RC Triacs - 24vac @ .3 amp max
- W1 Relay - 24vac @ 1.0 amp maximum

#### **Environmental:**

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

**Operating Humidity:** 5 to 95% non-condensing

**Storage Temperature:** 0° to 150° (-18° to 66° C)

#### **General:**

**Dimensions:** 3 1/2" H x 4 1/2" W x 3/4" D

**Temperature Display Range:** 55° to 95° F

**Accuracy:** +/- 0.8° F

**Memory:** Non-volatile EEPROM

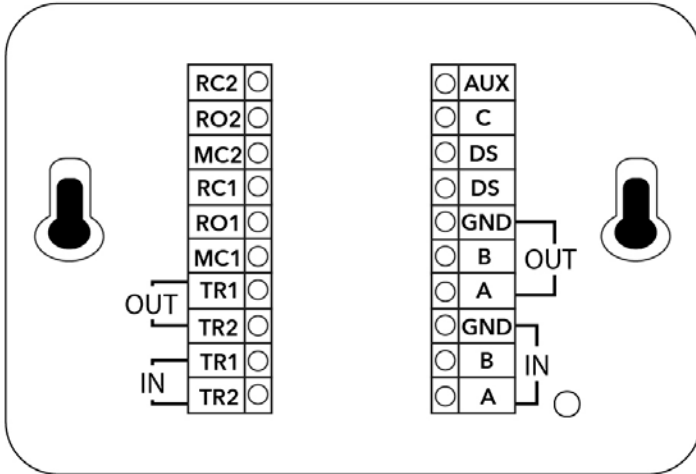
**Display:** 128x64 Graphic LCD

**Communication:** RS485

Twisted pair wire

# ModStat

## TERMINAL FUNCTIONS



### 24V Terminal Block

RO2 – Slave Damper – Run Open  
RC2 – Slave Damper - Run Close  
MC2 – Slave Damper - Damper common  
RO – Run Open, damper  
RC – Run Close, damper  
MC- Damper common  
AUX – Reheat/AUX Heat Fan  
C- AUX common  
TR1- 24vac power In and Out  
TR2- 24vac common In and Out  
(18 ga. Minimum wire size)

### Communication Terminal Block

A – Data Transmit  
B – Data Receive  
A – Data Transmit  
B – Data Receive  
(Twisted pair)

## FEATURES

- Auto Changeover
- Control Fully Modulating Dampers
- Adjustable Aux or Reheat Operation
- F or C Temperature Operation
- Control round, rectangular dampers or D-Fuser
- Diagnostic tool for thermostat communication
- Temperature Calibration
- Set point lock
- Auto / Off switch
- Non volatile memory retains stored set points.
- Slave capability – up to 3 dampers per stat
- Minimum or Maximum position adjustment

## ACCESSORIES

### Part No.

### Description

ModStatRS

ModStat thermostat with remote sensor

RZKIT

Thermostat and actuator as a package for VVT, and other, upgrade.