TME Series Automatic Setback Thermostats

Applications

The TME is a stand alone, non communicating, commercial, low voltage, setback thermostat used in retail stores, restaurants, convenience stores and other spaces for simple, single zone HVAC Control.

Description

The TME is a low voltage, solid state, automatic change over, heating/cooling thermostat with digital display showing setpoints and room temperature. Retrofit installations can utilize existing HVAC wiring.

The thermostat is field adjustable to allow for preconditioning of the building prior to occupancy by counting the hours of desired setback. The thermostat incorporates two stages of heat, two stages of cool, fan output.

Occupied temperatures are user adjustable; however, the thermostat incorporates factory set temperature limits to prevent overheating or over-cooling the space during occupancy.

Dependent on model, the thermostat provides automatic setback for heating, and setup for cooling based either on interior light levels or on outside signal coming across contact closure terminal. Setbacks are factory set.

Features

Standard Features Include:

- 1 amp relay switching of up to 6 HVAC loads.
- 5° F deadband between heating and cooling to prevent short cycling of equipment.
- Control up to two stages of heating and cooling.
- Proportional Plus Integral (PPI) control for accurate, even temperature control.
- Stages of heat and cool stagger ON.
- Minimum ON and OFF time delays for compressor protection.
- A1-A2 isolated dry contact outputs for shutdown of dampers or equipment during unoccupied mode.
- Pre-condition feature to pre-heat or precool the building prior to opening.

- One-piece design eases installation at each location.
- One model fits single or dual stage: gas, electric heat, or heat pumps.

Local Control Features:

- System ON/OFF switch to shut down HVAC equipment and thermostat.
- Temperature adjustment buttons.
- FAN control button to set fan for AUTO or ON operation when applicable.
- "Check" button to cancel time delays
- "Display" button toggles between room and supply air temps.
- Dip switch settings for equipment type, fan control, remote or on-board room sensor, and precondition settings.

Wiring Requirements

Installation Features:

- All wiring should be minimum #18 AWG. Shielding is not required.
- Wire-for-wire installation replacement of existing thermostat (common wire required).
- Remote room and supply air are optional. Remote sensor cables do not have polarity. Shielding is not required.
- Refer to the Lightstat Installation and Operation Manual for complete instructions prior to installing or using the Lightstat TME thermostat.

Factory Configuration

- Choose temperature limits; Heat Max and Cool Min in the range of 50° to 85° Deg F.
- Choose setback limits for energy savings during unoccupied times.
- These configurations are factory set and cannot be changed in the field.

Field Configuration

- Choose Heat Pump or Conventional equipment.
- Choose compressor time delays.
- Choose O/B output to be on with heating or cooling.
- Gas/Electric switch (refer to the HVAC equipment manufacturers instructions for details on how to set this switch).



Model TME Series

Specifications:

The TME may be able to use existing thermostat wiring for thermostatic control (requires common wire). The alarm model will require two additional conductors.

Dimensions....... 6.0"W x 4.25"H x 1.5"D Mounting...... Fits standard, horizontal, single gang electrical box.

Construction:

Electronic (solid state)

General:

Voltage Rating 24 to 30 VAC Switching Current..0.2 to 1.0 amp(max)

Intended for NEC Class 2 Circuit for Low Voltage (24VAC) systems only

The Lightstat must be installed on a single transformer system.

Do not attempt to use directly with Line Voltage (120 VAC or higher), DC (Direct Current), millivolt (thermopile) or proportional control systems.

Operation:

Operating Temp Differential.......1.0°F First to Second Stage Differential..1.0°F Heating-Cooling Deadband.......5.0°F



