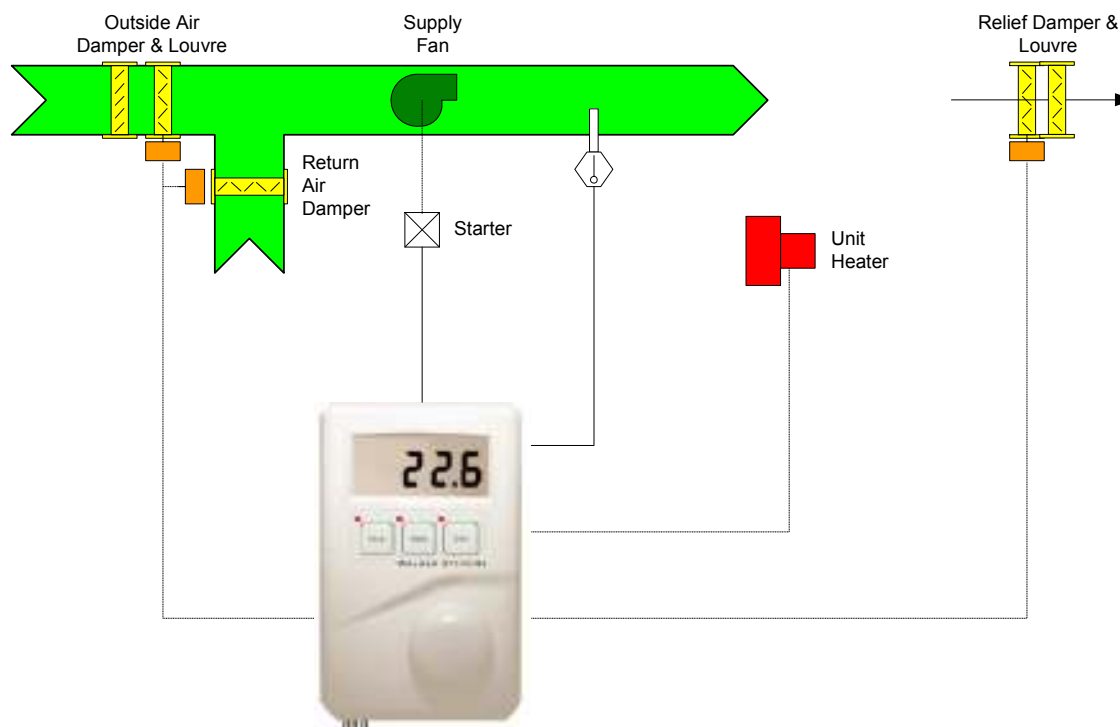


Boiler Room HVAC Controller



Description

Electronical controller provides affordable, but very stable and energy efficient control of positive pressure type HVAC of mechanical room. The use of supply fan instead of exhaust fan prevents negative pressure in the boiler room, which can interfere with proper gas appliance operation. Controller can be integrated into an Empire Controls DDC system, either at time of installation or at a later date. Can be configured for operation in Celcius or Fahrenheit. Also available is night setback feature, and economy model without LCD and tamper proof model with blank plate, technician adjustable only.

Guide Specification

Products

2.x Mechanical Room HVAC Controller Kit

Mechanical Room HVAC Controller complete with space and supply air temperature sensors, spring return motorized dampers, control relays, transformer and control fuse and liquid crystal display as manufactured by Empire Controls Limited of Woodbridge, Ph 905-264-7282, Fax 905-850-8564, empire@empirecontrols.com

Execution - Sequence of Operations

3.4.x Mechanical Room HVAC Controller Kit

When cooling is required, controller starts supply fan, and modulates the mixing dampers and exhaust dampers as required to prevent supply air temperature from dropping below 12 degrees Celcius. Controller cycles unit heater as required to maintain space temperature at heating setpoint. Controller maintains a zero energy deadband between the Heating Setpoint and Cooling Setpoint, and provides anti recycle timer protection of both fan and unit heater. Setpoint and deadband are operator adjustable within reasonable range.

As a default, the LCD displays the room temperature. Operator may log on to view the Supply Air Temperature and Deadband.

In the event of power failure, and when fan is turned off either manually or commanded off, Outside Air Damper and Relief Damper spring returns to fully closed position, and Return Air Damper spring returns to fully open position.

Mount controller enclosure on wall, and provide 120 volt power from nearest panel. Connect temperature sensors and damper actuators to controller. Check operation of sensors and dampers.

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