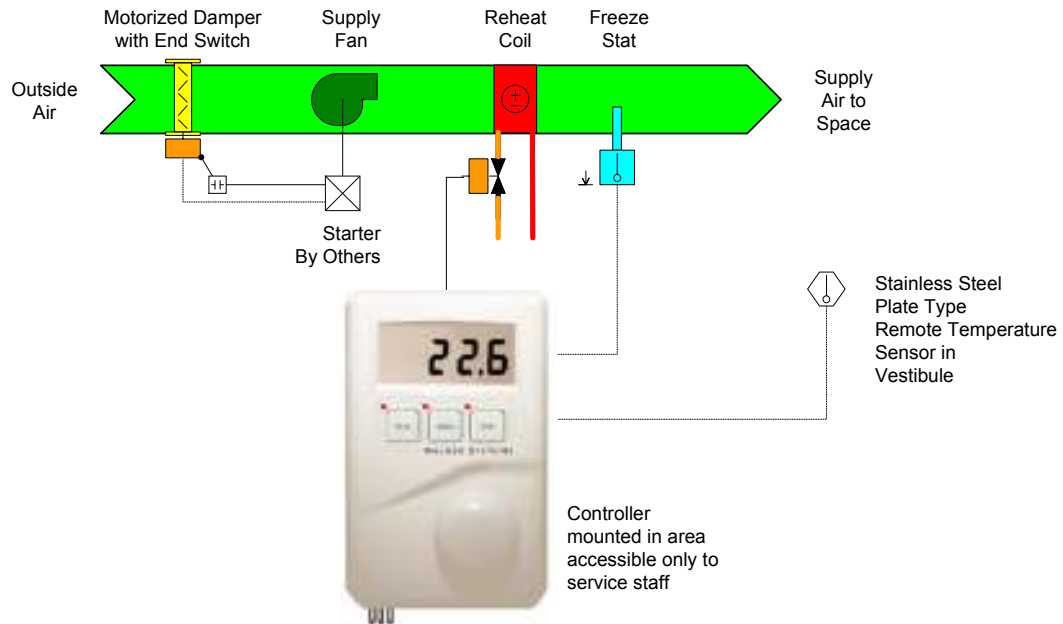


Vestibule Pressurization System Controller



Description

Tamperproof controller for controlling a vestibule pressurization system with modulating hydronic heating coil. Unlike ordinary stats the Empire stat can actually handle the modulating application and be incorporated into a future Building Automation System. Can be configured for operation in Celcius or Fahrenheit. Also available - economy model without LCD, and tamper proof model with blank plate and setpoint adjustment by technician only.

Guide Specification

Products

2.x Vestibule Pressurization System Controller Kit

Controller kit, Model BNR-VP for vestibule pressurization with hydronic heating coil complete with tamperproof remote plate type space temperature sensor and modulating spring return control valve assembly, spring return motorized damper, transformer and control fuse, knob setpoint adjustment and optional liquid crystal display as manufactured by Empire Controls Limited of Woodbridge, Ph 905-264-7282, Fax 905-850-8564, empire@empirecontrols.com. If hydronic coil is hot water or steam as opposed to glycol, also provide a supply air temperature sensor and manual reset freezestat. Stats without analogue output points and non communicating stats are not acceptable.

Execution - Sequence of Operations

3.4.x Vestibule Pressurization System Controller

Line voltage switch (by Div 16), drives motorized fresh air damper open continuously. When damper is fully open, as proven by end switch, supply fan starts. The Empire stat shall monitor space temperature, and shall modulate the heating valve as required to maintain space temperature at setpoint. Setpoint is adjustable by turning knob on controller.

As a default, the LCD displays the room temperature. Operator with password may log on to view the Space Temperature and adjust the Deadband.

If supply air temperature drops below 4 oC (39 oF), the electromagnetic freezestat shall interrupt power to the outside air damper and control valve, causing the damper to spring return closed and the valve to spring return open, allowing full flow through the heating coil. When damper end switch opens, fan stops. System remains in this "safe" state until freezestat is manually reset.

Mount thermostat, and connect to space temperature sensor and valve actuator. Interlock motorized damper with starter. Check operation of sensor(s) and valve(s).

Empire Controls Limited

80 Regina Road, Unit 19
Woodbridge, Ontario
L4L 8M5

Ph. 905-264-7282 Fax 905-850-8564
empire@empirecontrols.com