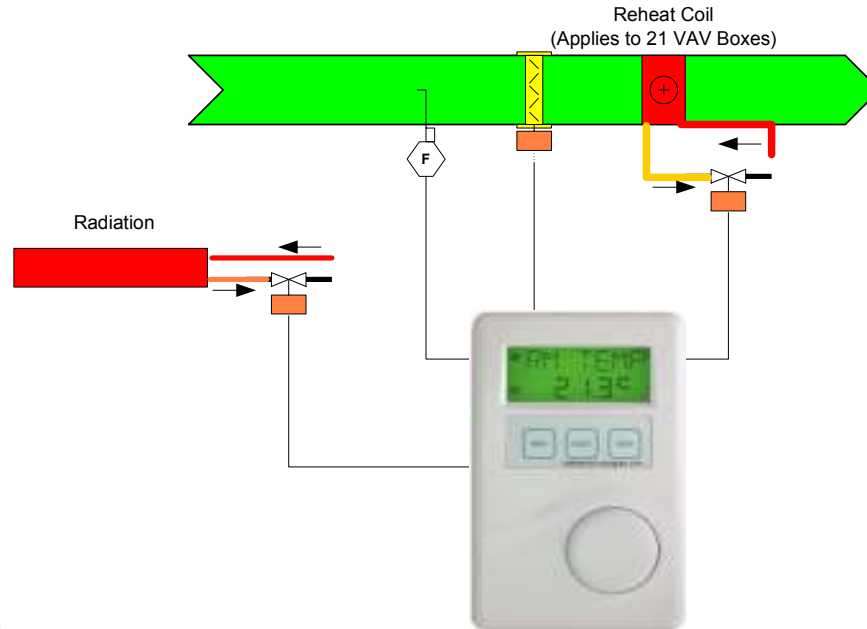


Variable Volume Reheat Controller



Description

Electronic controller provides affordable, but very stable and energy efficient control of variable air volume boxes

- with or without reheat or radiation (electric or modulating)
- with or without fan power (fan not shown in drawing above)
- pressure independent (recommended) or pressure dependent for those "budget jobs"
- with or without optional Liquid Crystal Display on room thermostat
- with or without Time of Day functionality
- with or without tamperproof plate type room temperature sensors
- heating/cooling changeover or conventional operation
- for conventional VAV, "VVT" or "CV" type applications

Guide Specification

Products

2.x VAV Controller Kit

VAV Controller, Model BNR-VAV complete with space sensor, optional setpoint adjustment knob, flow sensor, floating point modulation damper actuator, modulating control valve assemblies, transformer and without optional liquid crystal display as manufactured by Empire Controls Limited of Woodbridge, Ph 905-264-7282, Fax 905-850-8564, empire@empirecontrols.com. Stats incapable of controlling modulating valves or network communications are not acceptable.

Execution - Sequence of Operations

3.4.x VAV Controller Reheat Zones

The Empire VAV controller shall monitor volumetric air flow rate and space temperature and modulate the damper and heating valves as required to maintain the space temperature at setpoint. Radiation valve shall open fully before reheat valve starts to open. (Staging and overlap can be field configured by technician.) Modulation of damper shall be between Minimum Flow and Maximum Flow. (This is a pressure independent strategy.)

Minimum and Maximum Setpoints and zero energy Deadband shall be technician adjustable. Night setback and cooling setup shall be implemented, with mode override and mode override acknowledgement.

Mount stat on wall, and provide 24 volt power. Connect valves to controller. Check operation of valves.

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