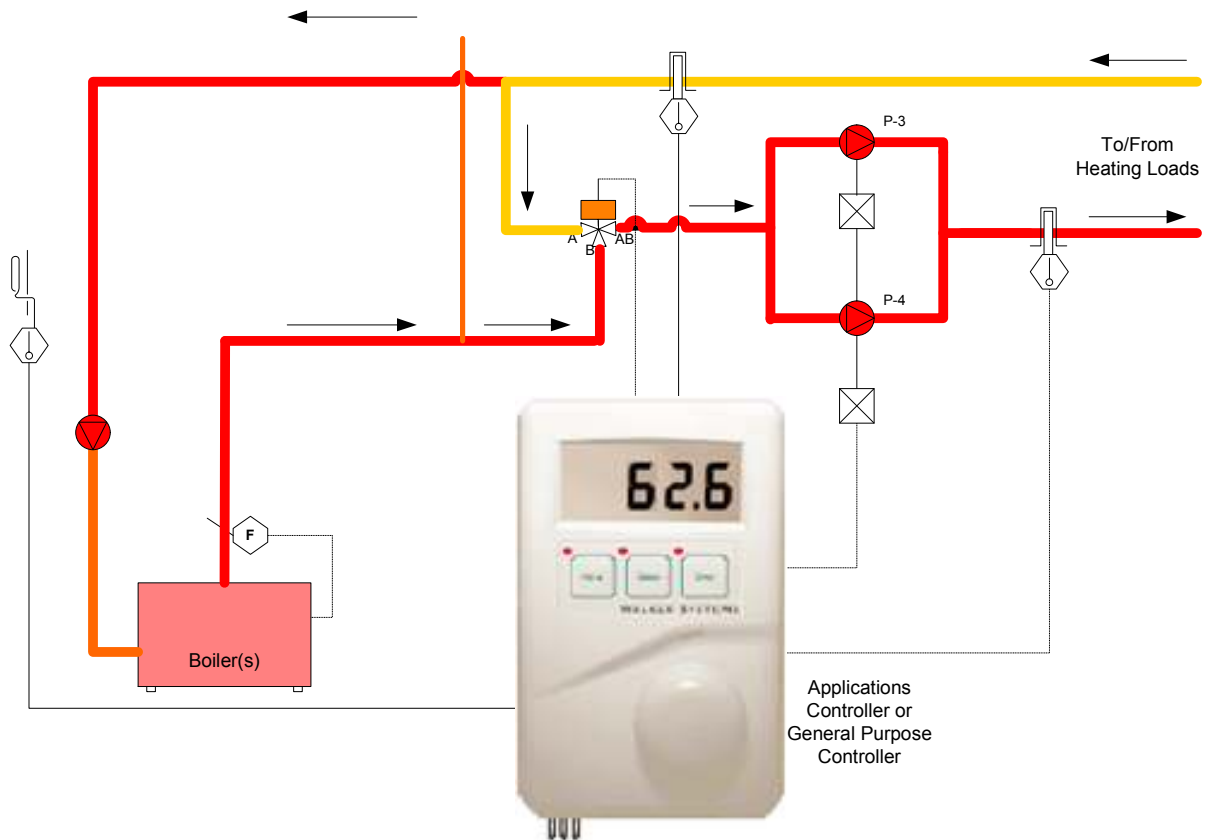


Secondary Heating Loop Controller



Description

Electronic controller provides affordable, but very stable and accurate control of Secondary Water Loop with outside air reset. Unlike competitive controllers, the Empire Secondary Water controller also provides seasonal shut down and lead/lag rotation of secondary heating pumps. Controller can be integrated into an Empire Controls DDC system, either at time of installation or at a later date.

Guide Specification

Products

2.x Secondary Water Loop Controller Kit

Secondary Water Loop Controller, Model BNR-SW complete with Outside Air Temperature and HWST & HWRT sensors, modulating 3 way valve, control relays, current relays and liquid crystal display as manufactured by Empire Controls Limited of Woodbridge, Ph 905-264-7282, Fax 905-850-8564, empire@empirecontrols.com. Valves 2" and smaller shall be complete with spring return actuators.

Execution - Sequence of Operations

3.4.x Secondary Water Loop

Controller modulates three way mixing valve as required to maintain Secondary HWST at setpoint. Secondary HWST Setpoint is reset as a function of OAT. As a default, LCD continuously displays Secondary HWST in degrees Celcius. Maximum Secondary HWST Setpoint and Reset Ratio are operator adjustable with password protection.

Controller provides lead/lag rotation of Secondary Heating pumps, and disables pumps when OAT is above Heating Lockout Setpoint..

Mount controller enclosure on wall, and provide 120 volt power from nearest panel. Connect temperature sensors and Secondary Water Valve Actuator to terminal strip in controller enclosure. Check operation of sensors and valve, and tune controller loop.

Empire Controls Limited

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

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