Modulating Condensing Boilers

When there is a call for heat, the A terminal on boiler controls calls on modulating (modcons) boilers. The Climate Cŏntrol - Multifunction unit cannot override the boiler settings through the A terminals. However, most modcons allow a second input for domestic hot water (DHW) or other high-temperature requirements. In these types of installations, the B terminals on the boiler control provide that function. (See **Figure 4-9**.)

Note: Consult the boiler manufacturer's installation and wiring instructions to verify the high-temperature override.

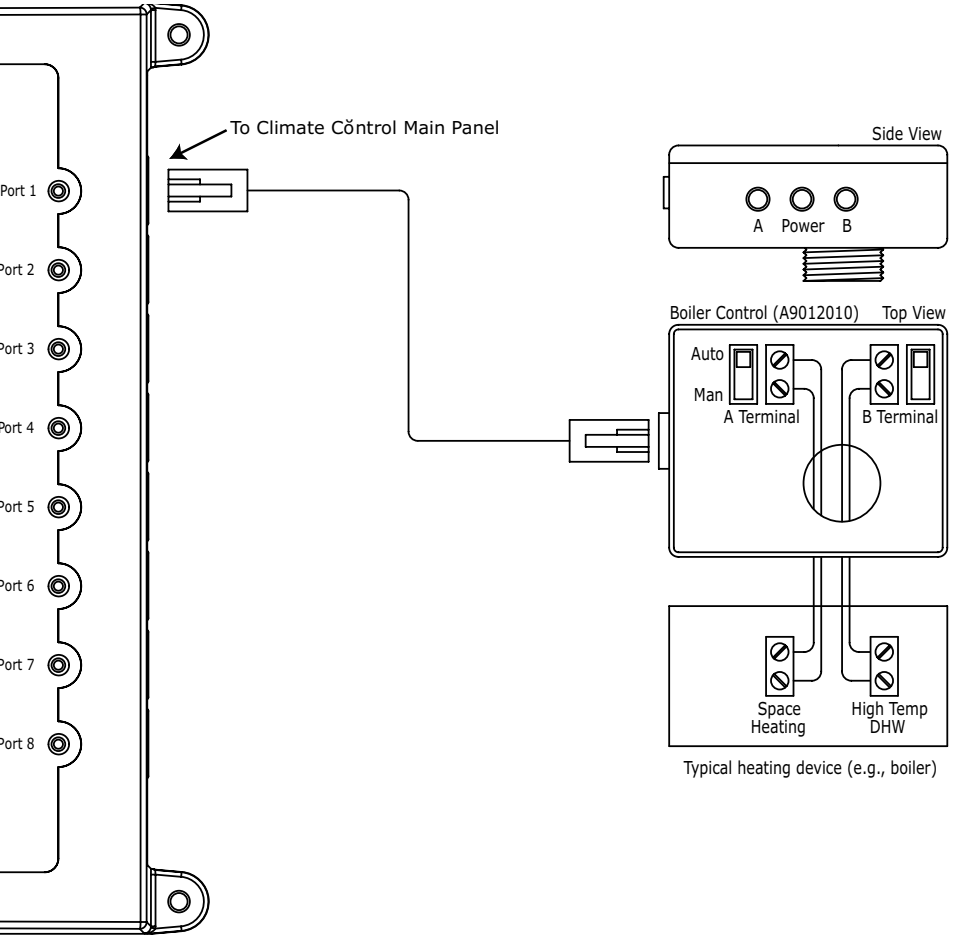

Figure 4-9: Typical wiring of a heating device using boiler control for space heating

Modulating Valves and Mixing

The Climate Cŏntrol - Multifunction controller provides mixing and water temperature control in secondary piping for lower temperature applications, such as radiant floor heating and snow melting. The Climate Cŏntrol hydronic controller can connect to any 0-10VAC motor and valve using the Uponor Modulating Valve Control (A9063020).

Note: The motor must be 75 milliamps or less from a 24VAC supply or it must be externally powered.

The Climate Cŏntrol - Multifunction unit supports up to three separate water temperatures, any combination of three for space heating and up to two maximum for snow melting. Supply-and-return Dual Sensors (A9013001) are plugged into the valve box using a Cat5 cable. (See **Figure 4-10**.) The ports are not dedicated so any connection port can be used for connecting sensors and cable to the Climate Cŏntrol - Multifunction unit. These 10K sensors are strapped or mounted to the secondary piping for temperature data to set the proper position of the valve, based on outdoor temperature, load requirements, etc.

Note: Uponor stocks pre-assembled ¾" - 1½" valves.

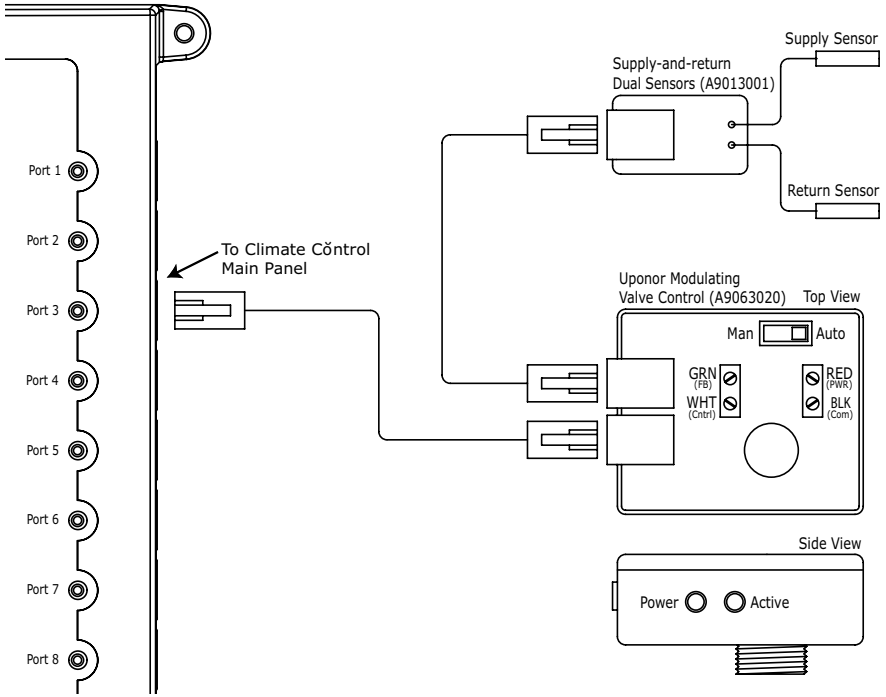

Figure 4-10: Typical wiring of a modulating valve in a mixing application using Uponor Modulating Valve Control (A9063020)