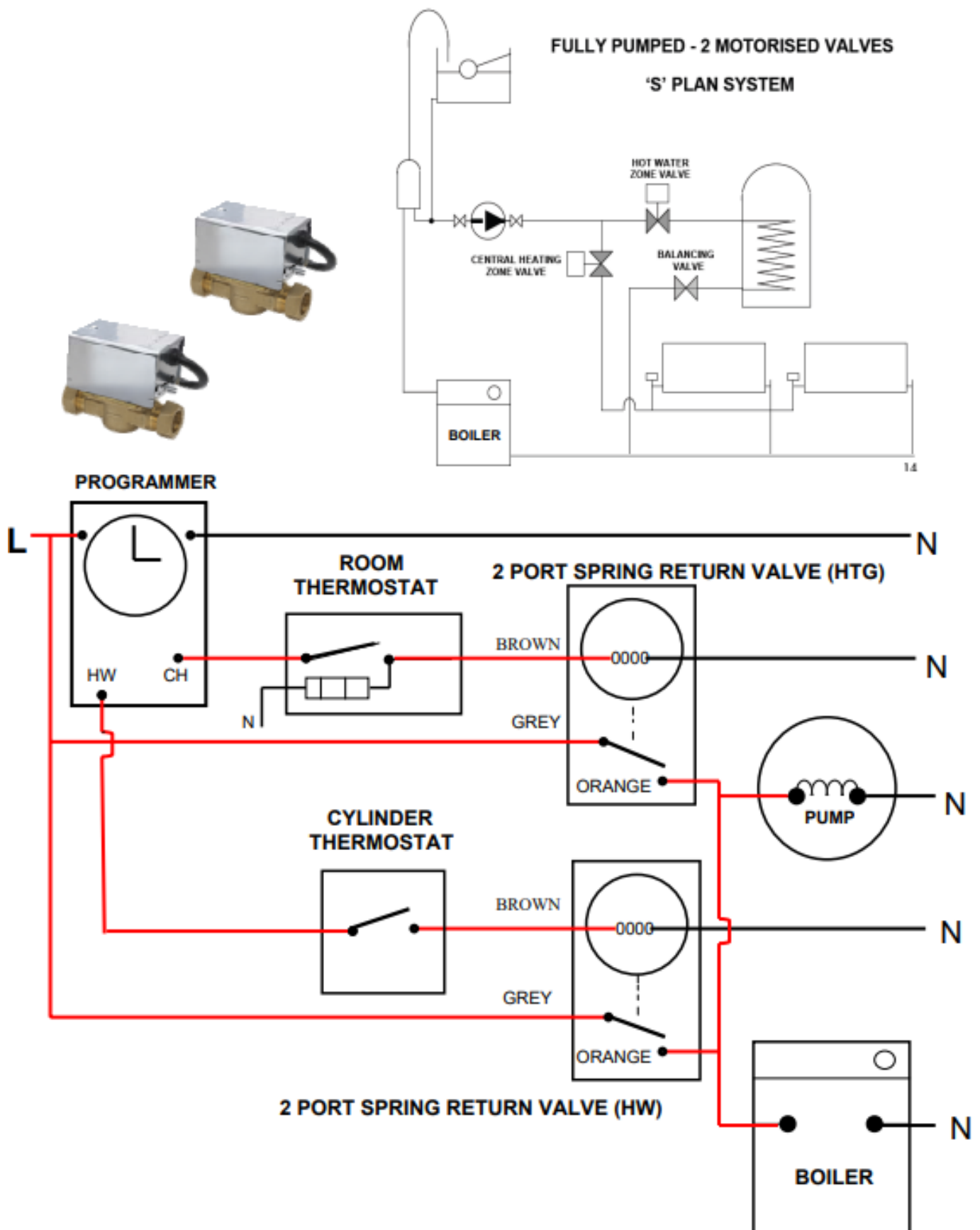


S Plan Support Guide



S PLAN Fully Pumped (2 spring return zone valves) cont..

System Description

Used to control fully pumped heating systems with the use of 2 Spring return Valves. With this type of system the customer can control demands having:- Water Only, Heating Only or both Heating and Hot Water together. Each demand having its own control / temperature device to maintain customer set timed and temperature requirements to achieve satisfactory heating conditions.

Valve Operation

With no voltage to the 2 Spring return valves (de-energised) the valves rest in the closed position, port (A) closed. When both demands are required with cylinder and room thermostats calling for heat the valves move to open port (B) allowing primary water to flow to both radiator and hot water circuits at the same time. On either demand with the programmer and room thermostat calling for heat, the valves move to open (B), the pump and boiler operate and circulate primary water to the heating and hot water circuits. The S-Plan system allows independent control of Heating or Hot Water via a two channel programmer.



Hot Water Demand.

230Vac demand from the programmer / or clock is sent to the "Common" on the Cylinder Thermostat. Cylinder thermostat calling for heat the Cylinder Thermostat "Call" connection will supply the Brown wire on the Hot Water zone valve which will energise the valve and move fully to open port (B) and supplying 230Vac to the Orange wire of the valve, which in turn feeds the Boiler and Pump causing them to operate giving primary heat to the hot water circuit only. 230Vac for Orange wire is supplied via a permanent 230Vac on the Grey wire.

Hot water Reaches temperature - When the demand or Cylinder thermostat temperature is satisfied, power is removed from the pump and boiler and also the valve which spring returns to its rest position awaiting new demand.

Heating Demand.

230Vac demand from the programmer / or clock is sent to the "Common" on the Room Thermostat. Providing there is a demand from the Room Thermostat the "calling" connection of the Room Thermostat will supply the Brown wire on the Central Heating zone valve which will energise the valve and move fully to open port (B) and supplying 230Vac to the Orange wire of the valve, which in turn feeds the boiler and Pump causing them to operate giving primary heat to the Central Heating circuit only. 230Vac for the Orange wire is supplied via a permanent 230Vac on the Grey wire.

Heating Reaches temperature - When the demand or room thermostat temperature is satisfied, power is removed from the pump and boiler and also the valve which spring returns to its rest position awaiting new demand.

Hot Water & Heating Demand.

As above with demand from programmer for Hot Water and Central Heating.