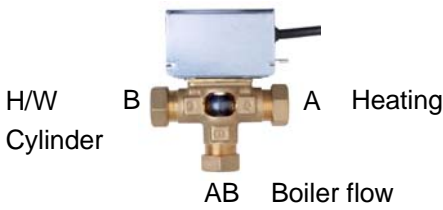


# FAQ Sheet

## V4073A Mid-position (Y Plan) Valve Operation

### Pipework Schematic

The valve must always be connected so that the flow of water goes into port AB and flows out through either ports A or B, or both A and B. The valve must be sited so that the head is not below the flow through the pipe.



### Mechanical Operation

| Electrical signal         | Valve position                           |
|---------------------------|--|
| No power to valve         | Hot Water only (open to Port B only)     |
| 240V on white wire        | Hot Water & Heating (open to Port A & B) |
| 240V on white & grey wire | Heating only (open to Port A only)       |
| 240V on grey wire only    | Valve is held in last port of call       |

Please Note:

The Manual Lever on the side of the valve, is to allow the system to be filled, it is NOT a position indicator.

If the system is powered the valve will remain in the last port of call, either open to Port A or open to Port B. It will only move when there is a further call for Heating or Hot Water.

### Electrical Operation

In the Y Plan system, when Hot Water is called for, power to the boiler is provided directly from the cylinder thermostat, the valve is not energised. When Heating is also called for, the Heating ON wire (white) is energised and the valve will motor to and stop in a mid-position.

If the Hot Water is then satisfied, (either by the programmer or cylinder thermostat) the Hot Water OFF wire (grey) is energised. Because there is still a demand for Heating the valve will then motor towards the Heating Only position and switch a 240V supply onto the boiler. The orange wire only has a 240V supply from the valve when there is a call for Heat in the Heating only position i.e. 240V on white & grey wires.

When this Heating demand is satisfied, during a Heating ON period, 50V to 150V (voltage can vary according to the supply) will remain on the orange wire and the valve will continue to be energised and warm to the touch. Switching Hot Water ON or turning OFF at the mains will de-energise the valve and it will spring return back to the Hot Water only position until the next demand.