

Twin Coil Cylinder Installation Detail

When heating a 300L twin coil HWC with a heat pump, both coils are used to maximise system performance and reduce pressure drop. The element in the cylinder is then only required to be run once a day or once a week for anti-legionella protections as per the requirements of G12.

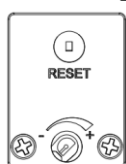
While the element is factory it installed in the upper housing, in most scenarios is best for this to be located in the lower housing. Please move the items as per diagram 1 & 2 along with the following instructions.




Please Note: The element should be installed in the downwards facing position as shown in diagram 2 to ensure complete heating of the tank.

1. 2.7kW Element = move to lower housing
2. Probe Pocket = move to upper housing
3. Indirect Thermostat = discard as not required
4. Solar Thermostat = discard as not required
5. Element Thermostat = move to lower housing

The element (now located in the lower housing) has a spare probe pocket for the heat pump's DHW sensor to be installed. The element should be wired through a local isolation point and a local or switch board mounted time clock (supplied by others).

Twin Coil Cylinder Thermostat Setting



-  = MINIMUM TEMP
-  = MAXIMUM TEMP
-  = APPROX 60 °C

Rotate Spindle Clockwise to Increase Temperature Set Point

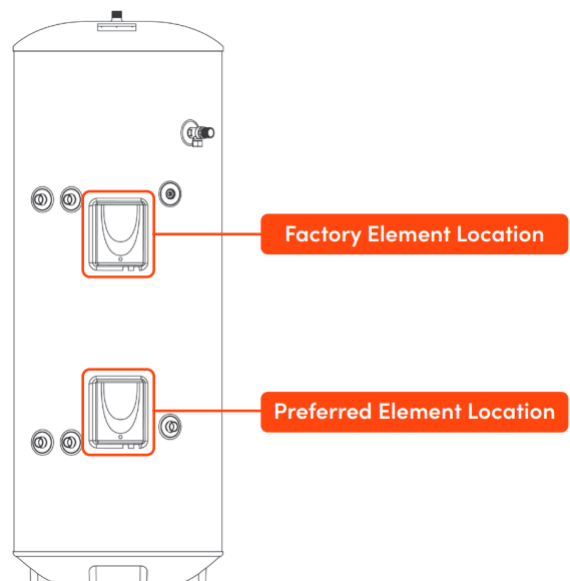


Diagram 1: Element Location

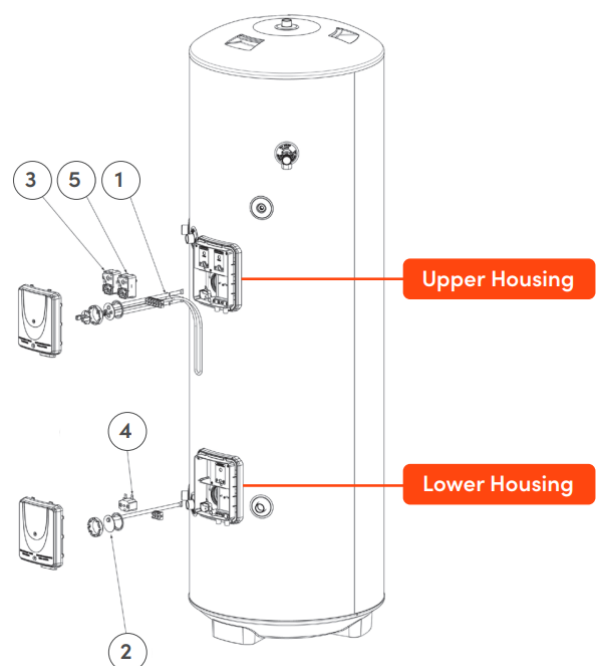


Diagram 2: Cylinder Overview

Twin Coil Cylinder Wiring Instructions

Heat Source with Probe

When installing a twin coil cylinder on a heat source that has the ability to wire a DHW sensor into it such as our Air to water heat pumps, the cylinder should be wired as per diagram 3 with the element control stat moved to the bottom port on the cylinder. As noted, the boiler control thermostat is not required. This along with its capillaries can be removed and discarded.

Where the heat source cannot heat the HWC above 60°C as required for legionella prevention, we recommend the element is wired through a time clock.

1. 10K NTC Sensor Wired to Heat Source
2. Power Supply
3. Dual Probe Pocket
4. Boiler Control Stat (Not Required)
5. Element Control Stat with Capillary

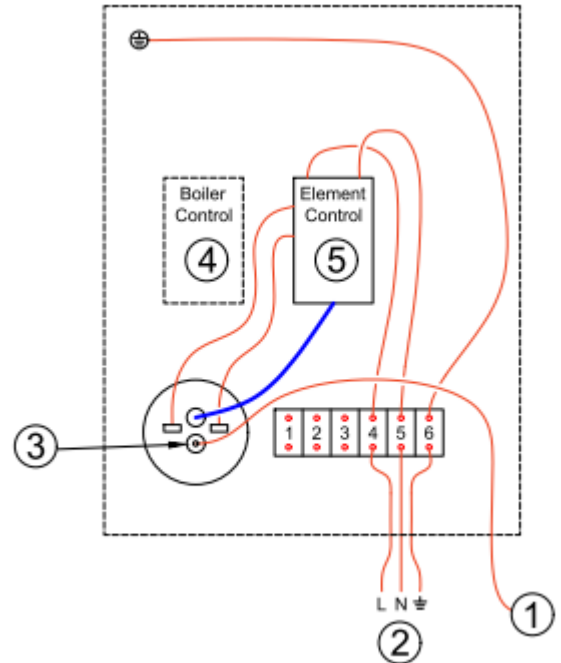


Diagram 3: Twin Coil Cylinder: Heat Source with Probe

Heat Source Without Probe

When installing a twin coil cylinder on a heat source that cannot be wired with a DHW sensor, the Signal from the HWC will need to be wired through the Indirect Thermal Cut Out and Indirect Thermostat as shown on diagram 4. Typically, this demand signal to turn the heat source on (and open a zone valve) would be wired through a time clock to schedule hot water production.

Where the heat source cannot heat the HWC above 60°C as required for legionella prevention, we recommend the element is wired through a time clock.

1. On/Off Signal from Time Clock
2. Power Supply
3. Dual Probe Pocket
4. Element Control Stat with Capillary
5. Boiler Control Stat with Capillary
6. Not Required

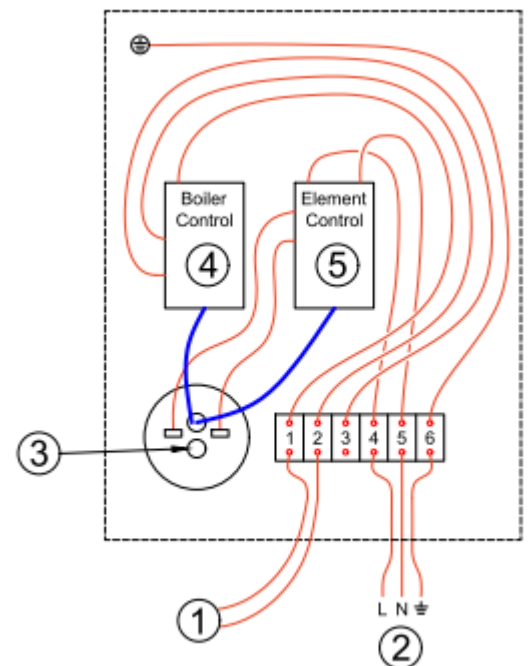


Diagram 4: Twin Coil Cylinder: Heat Source Without Probe