

Wiring and Power Supply Information:

Power

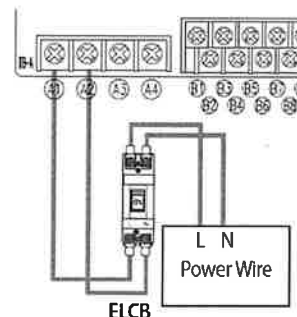
The EHS system needs 2 power supplies:

One connects into the outdoor unit, 20 Amp for the 9kW and 32 Amp for the size 16

The one for the control box is 16 Amp and wires into the top of the breaker (mcb) in the box

Immersion Heater

The immersion heater is connected into the control box terminals A3 Neutral and A4 Live, The control box controls the operation of the immersion heater. If a fused spur is used it must be labelled as switching it off will cause an error.



Communication cable

must be run from the outdoor unit to the control box. Use 2 core flex 0.5-1mm (its 16V ac)

Sensors

The **blue cylinder sensor** plugs into a socket T4 on the controller PCB and into the control sensor pocket in the cylinder in the top ½ of the cylinder. Must be above immersion. The cylinder sensor needs to go 115mm into the cylinder; it must be clipped so it can't pull out.



The **red safety sensor** is to avoid over temperature, If no backup boiler is used the sensor is not needed. It plugs into a red socket T3 on the controller PCB and must be fixed to the flow pipe of the heat pump.

Using two port valves

2 port valve for Hot water, wire brown wire to B9 and Blue to B7, the rest are not used.

2 port valve for heating zone 1 wire B14 live and B11 Neutral

Thermostats/ timers and under floor heating manifolds

We recommend in all cases the heating should be controlled by an external field supplied room stat / setback stat, time clock or a run signal from a boiler enable signal from under floor manifolds.

The heat pump needs a run signal by making a connection from B20 – B22, B20 is permanently live 240V ac.

When the stat is made the unit will run, when the stat opens the unit will stop. NOTE the pump will run on for 6 minutes after the unit is told to stop. Hot water production is not affected and will always take priority.

Pump

The circulation pump must be wired Live to B6 and neutral to B5, MAX pump power is 500 Watts. If two pumps are used wire them both to these terminals

Wiring diagram for heating and HW heat pump:

Standard System With Header Or Buffer and 2 Ports

