## CBTs - Commissioning the control system, Boiler system, Touch screen thermostats

# Electrical control checklist Zone heating controls The pipes below the flow valves on the Optiflo manifold should have been marked during installation of the plumbing with the zones to which they run. It is essential for the operation of the system that room thermostats, actuators and flow valves are correctly matched to each other. To check that the matching is correct: Check zone details and positions of the Optiflo manifolds. Take note of any split zones where room thermostats may be required to activate more than one valve actuator. Important: Turn off the heating system isolation switch. Important: Disconnect all manifold pumps – running a dry pump will result in 1. At every damage to the pump and possibly to control equipment. manifold Turn on the heating system isolation switch. 2. Go to manifold A Set all room thermostats to 5°C: Press the ▼arrow repeatedly & press A to accept All actuators should be off with the central button down. 3. Start at the first Set the zone room thermostat high to produce a call-for-heat, and press A to zone Check that the correct electrical actuator opens on the manifold. The central button will lift proud of the white cap after a delay of approximately two Label the actuator cable to match the pipe zone description. Set the zone room thermostat to 5°C using the ▼ button, press A to accept. 4. Repeat for other Repeat stage 3 for all other zones on the manifold. zones 5. Go to next Repeat steps 2 to 5 for each manifold in turn. manifold Important: Turn off the heating system isolation switch. 7. Finishing Reconnect all manifold pumps. Turn on the heating system isolation switch. Set all room thermostats to normal, press A to accept.

### System with a combination boiler



Turn ON any Supplementary Isolation Switches next to all the Optiflo manifolds, to enable signals to and from the boiler. If the boiler has an integral time clock it should be set to constant or 24 hours.



Check that the boiler and boiler pump are controlled by calls-for-heat from the underfloor heating room thermostats. Check at least one heating zone on each Optiflo manifold by turning up the room thermostat.

### System with a Nu-Heat EnergyPro cylinder or user-supplied cylinder



Turn ON any Supplementary Isolation Switches next to all the Optiflo manifolds, to enable signals to and from the boiler.

If the boiler has an integral time clock it should be set to constant or 24 hours.



Check that the boiler and boiler pump are controlled by calls-for-heat from the underfloor heating room thermostats. Check at least one heating zone on each Optiflo manifold by turning up the room thermostat.



One room thernostat (type 'HW') has an internal hot water timeclock. Set the hot water timeclock to ON.

Check that the boiler and boiler pump are now controlled by the cylinder zone valve, which is in turn controlled by the cylinder thermostat.

#### System with a Nu-Heat EnergyMaster cylinder



Turn ON any Supplementary Isolation Switches next to all the Optiflo manifolds, to enable signals to and from the boiler.

If the boiler has an integral time clock it should be set to constant or 24 hours.



Set the hot water timeclock to OFF.



Turn the cylinder thermostat up until it clicks on.



Check that the boiler and boiler pump are controlled by calls-for-heat from the underfloor heating room thermostats. Check at least one heating zone on each Optiflo manifold by turning up the room thermostat.



Set all room thermostats to minimum so there can be no call-for-heat.



One room thernostat (type 'HW') has an internal hot water timeclock. Set the hot water timeclock to ON.



Check that the boiler and boiler pump are now controlled by the cylinder zone valve, which is in turn controlled by the cylinder thermostat. Set the hot water timeclock to OFF.



Leave the cylinder thermostat set in the range 65°C to 70°C.

# Commissioning the under floor heating circulator(s)

**Grundfos UPS2** 

Pump model

Optimum

setting



the options until III is lit continuously

Press to cycle through

(fixed speed mode, speed III)

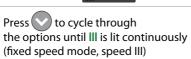














Press 4 times to cycle through the options until constant pressure mode 3 is lit:

This corresponds to 6m head

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