

# FlexTherm Eco Temperature sensors

ENG Installation and operating instruction



Scope: This is a quick reference guide to show how to remove and replace the 4 core temperature sensor string utilised in the Flamco FlexTherm Eco E3, E6 and E9 products as shown in Figure 1.

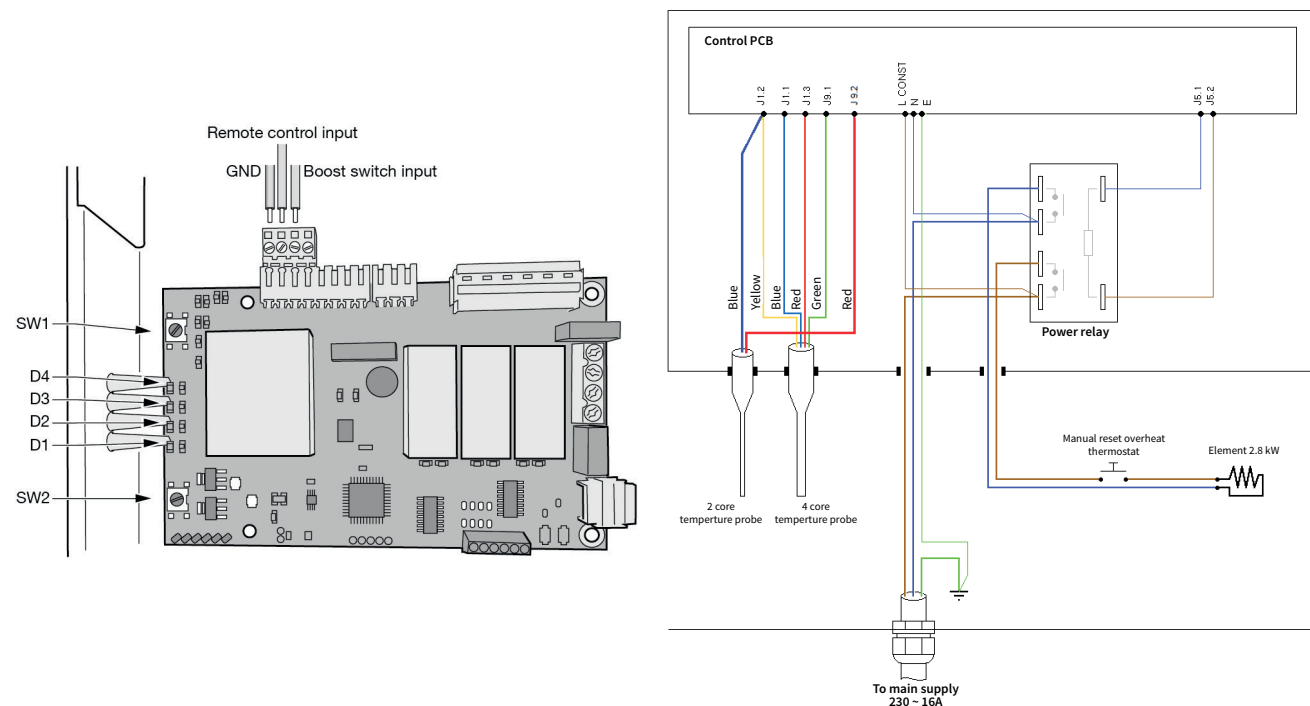


Figure 1: Flamco FlexTherm Eco Wiring schematic as found under the lid of the Electronic control box within the heat battery

## 1. Removing the old sensor

1.1

- Warning – Disconnect the mains power supply before working on the heat battery.

1.2



- Remove the OFF M8 Capscrews using a 5mm hexagonal key.

1.3



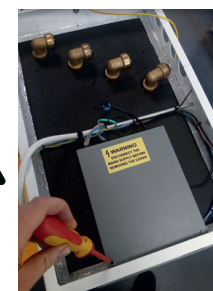
- Remove the lid

1.4



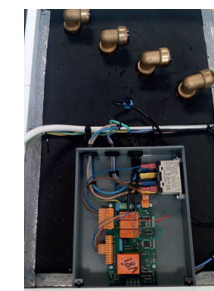
- Remove the top and 2nd layers of Insulation.

1.5



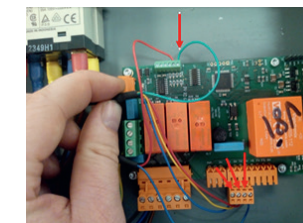
- Using a screwdriver remove the two pozi-drive screws from the control box.

1.6



- Remove the Lid

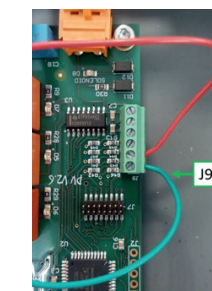
1.7



- Locate the 4 core temperature sensor cable

- Green – J9.1
- Blue – J1.1
- Yellow - J1.2
- Red - J1.3

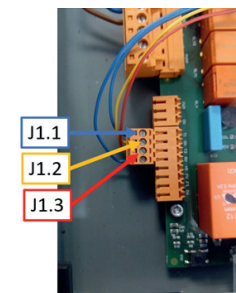
1.8



- Using a 2 mm flat head screwdriver remove the connections from the PCB.

- Green – J9.1

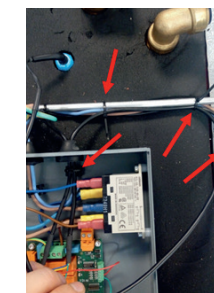
1.9



- Using a 2 mm flat head screwdriver remove the connections from the PCB.

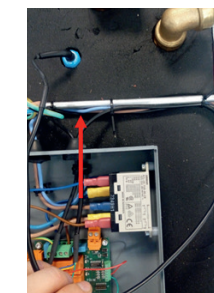
- Blue – J1.1
- Yellow – J1.2
- Red – J1.3

1.10



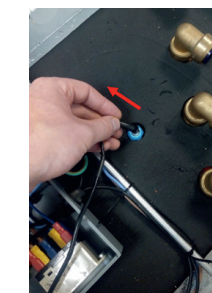
- Carefully remove the cable ties using snips.
- DO NOT damage the cables.

1.11



- Feed the temperature sensor cable back through the rubber grommet in the control box housing.

1.12



- Carefully remove the rubber grommet from the temperature pocket.
- Slowly slide out the temperature sensor.
- Note sensor may be slightly stuck, carefully pull to remove
- Remove the rubber grommet
- Label the sensor faulty, noting the Heat battery Serial number and return faulty sensor to manufacturer.

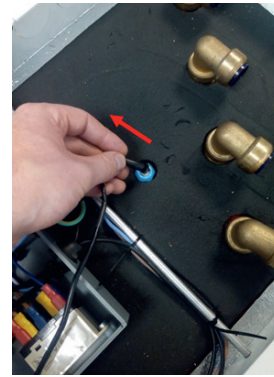
# FlexTherm Eco Temperature sensors



QSG\_Temp\_Sensors\_V1.0

## 2. Installing New Sensors

2.1



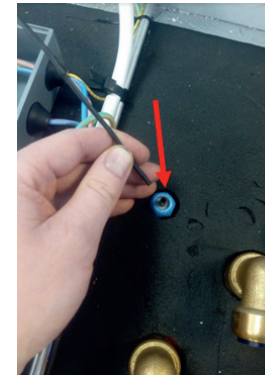
- Check the Part No of the new sensor and description matches the unit you are replacing.
  - C2218 - TEMPERATURE SENSOR STRING, OEM 3, INT ECB - Eco 3
  - C2219 - TEMPERATURE SENSOR STRING, OEM 6, INT ECB - Eco 6
  - C2220 - TEMPERATURE SENSOR STRING, OEM 9, INT ECB - Eco 9

2.2



- Pass the rubber grommet over the end of the new sensor.

2.3

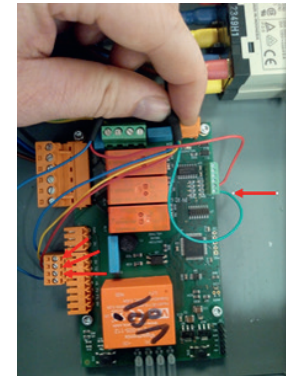


- Feed the temperature sensor string down the pocket until you feel it reach the bottom.
- Insertion depths are as follows:
  - Eco 3 = 284mm
  - Eco 6 = 484mm
  - Eco 9 = 710 mm
- Secure the black grommet over the copper temp pocket.

2.4

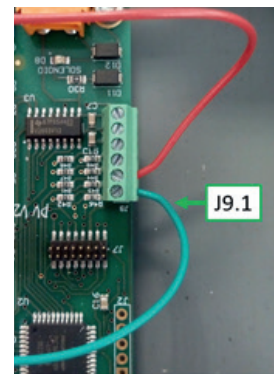
- Feed the wire through the rubber grommet in the control box housing.

2.5



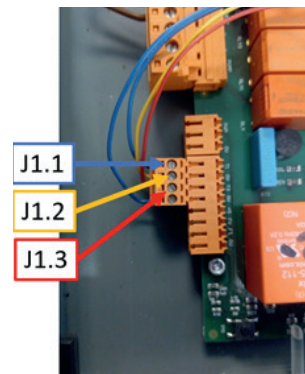
- Wire up as before following the schematic on the lid.
  - Green - J9.1
  - Blue - J1.1
  - Yellow - J1.2
  - Red - J1.3

2.6



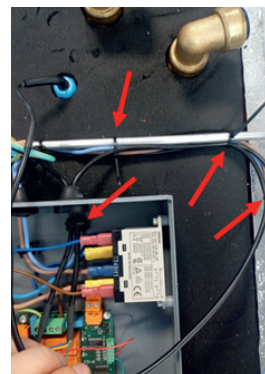
- Using a 2 mm flat head screwdriver to fix the connections from the PCB.
- Green - J9.1

2.7



- Using a 2 mm flat head screwdriver to fix the connections from the PCB.
  - Blue - J1.1
  - Yellow - J1.2
  - Red - J1.3

2.8



- Secure the temperature sensor to the cross bar as before using Cable ties.

2.9

- Replace the control box lid
- Replace the insulation
- Replace the white lid
- Replace the M8 fasteners

2.10

- Re-connect the mains water to the heat battery
- Re-connect the mains power to the heat battery
- Once power is supplied to the unit the lights should turn on as per the charge status.
- Refer to the main manual.

