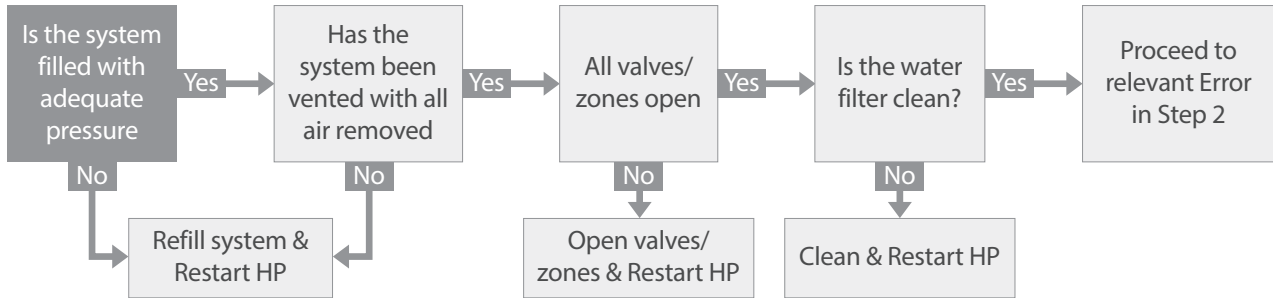


# HEAT PUMPS

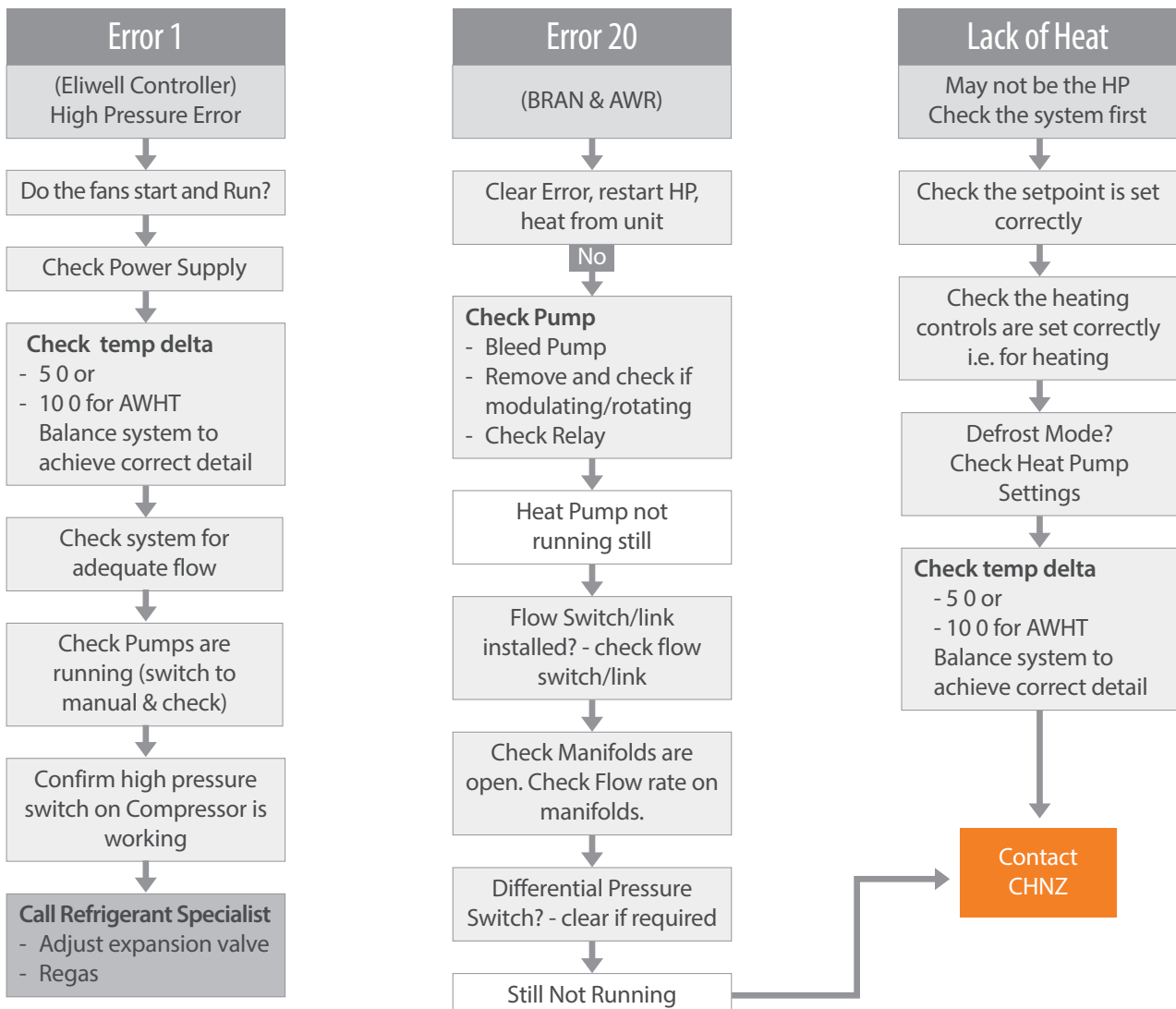
## TROUBLESHOOTING

This sheet covers the typical errors that occur on a heat pump and outlines the steps to overcome the issue. Please read this document from left to right ensuring you check and complete all the steps as you process through them.

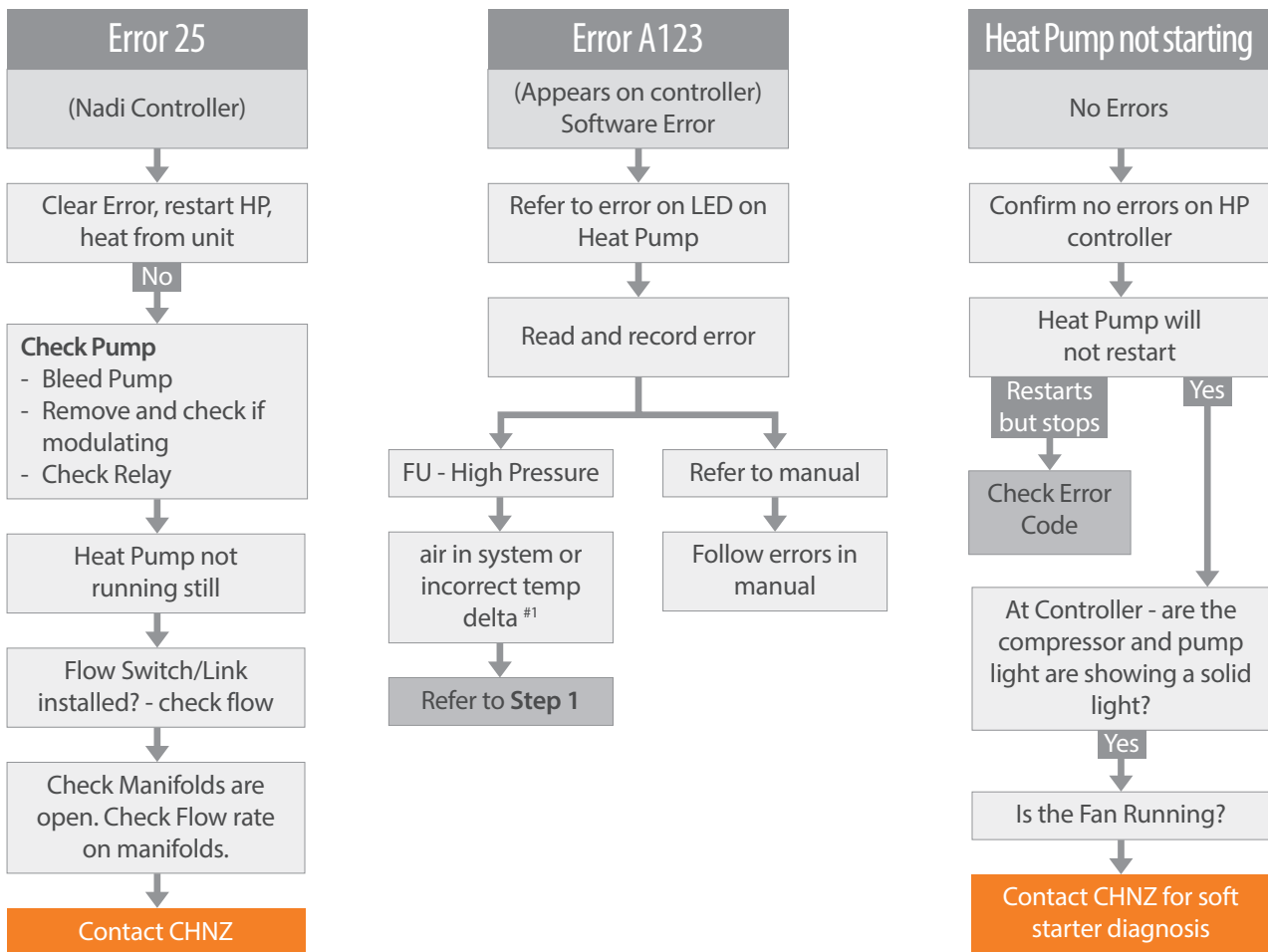
### STEP 1: Check the following before proceeding to step 2



### STEP 2: Choose your relevant error below or on the next page



## STEP 2: (Continued)



#1 - Delta T - Temperature difference between flow & return when the heat pump is running steadily.

### Delta T - temperature difference indicator

- Less than 5°C - Common if going straight into a buffer tank. If very low may indicate low heat output which is normal in inverter heat pumps that can reduce their heat output.
- 5°C - Correct delta.
- More than 5°C - Indicates flow is reduced.

- Possible causes:**
1. Blocked filter or some other blockage
  2. Inadequate Pipe size.
  3. Pump not running at correct speed (increase speed).

If the Delta T is significantly greater than 5°C this indicates lower than specified flow rate which can lead to high pressure errors. These may not occur at lower operating temperatures but still lead to less efficient operation.