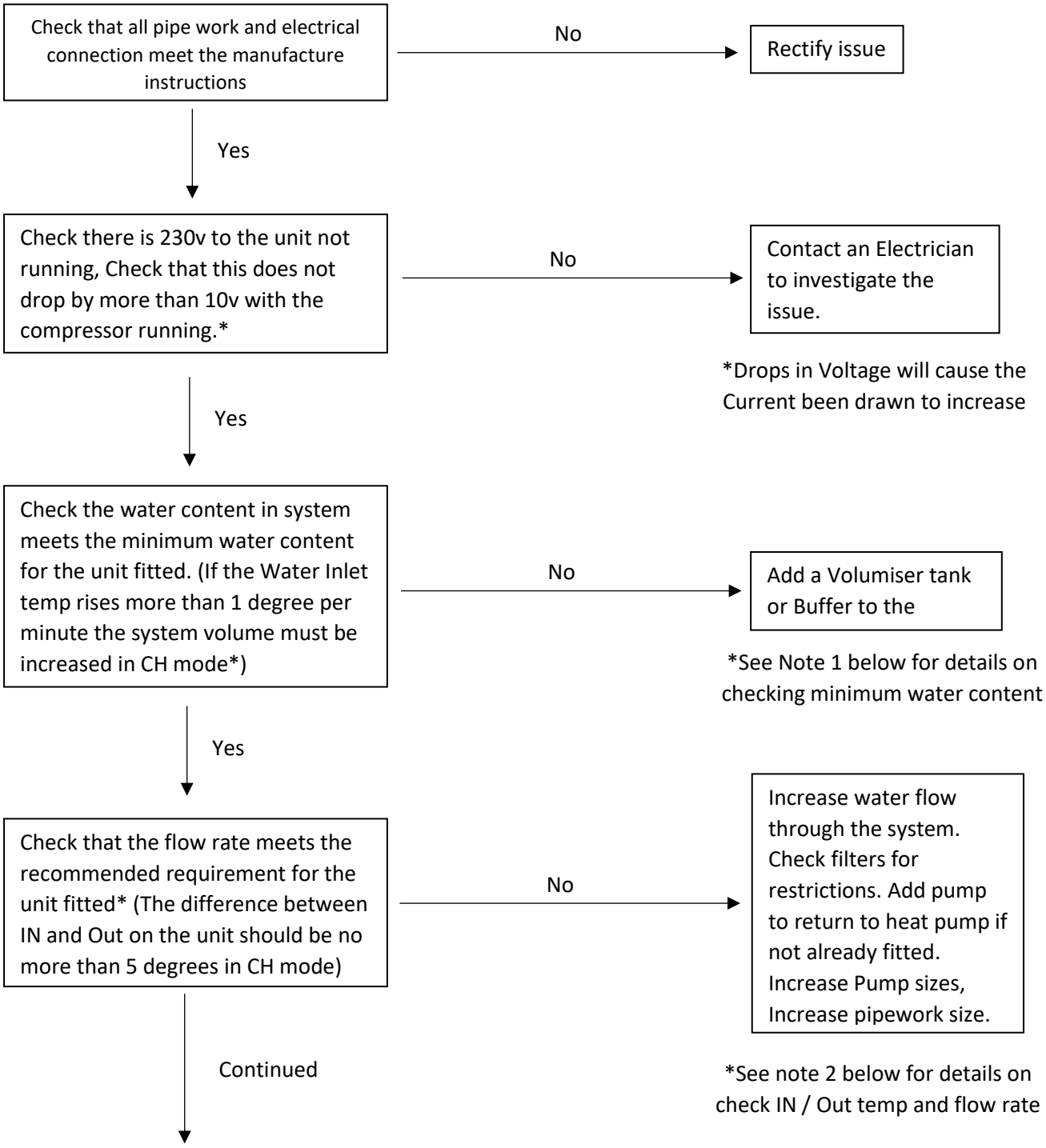
Samsung Gen 6 R32 E464 Fault Code

Rev 1.0 January 26th 2022

The E464 error on the Samsung Gen 6 R32 is one of the most common but however can be a complex error to rectify. The error code it self relates to the Compressor Drawing to much current via the sensing coil within inverter board.

Below we have a devised a simple flow chart to help diagnose the possible cause of the error all tests should be carried out CH mode.



Power off the unit and check IN/OUT/DHW thermistor resistances as per MI. check thermistor are secure add making good contact with pipe/pocket.

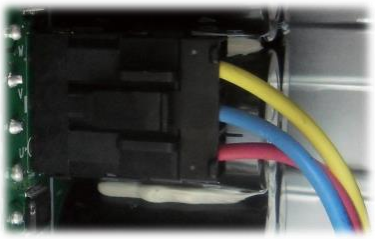
No → Refit Sensor correctly replace if defective

*See note 3 thermistor values

Yes

Turn off unit and wait for Inverter board to discharge. Check wiring.

No → Check Wiring to compressor

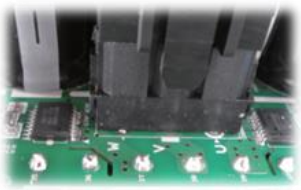


Yes

Turn off the unit wait for the inverter board to discharge. Check the resistance between each Phase* for the compressor is smaller than 2Ω

No → Contact Samsung for further Advise

*U↔V, V↔W, W↔U



Yes

Check Resistance between Winding to outdoor unit Body is OL

No → Contact Samsung for further Advise

Contact Samsung for further Advise

***Note 1**

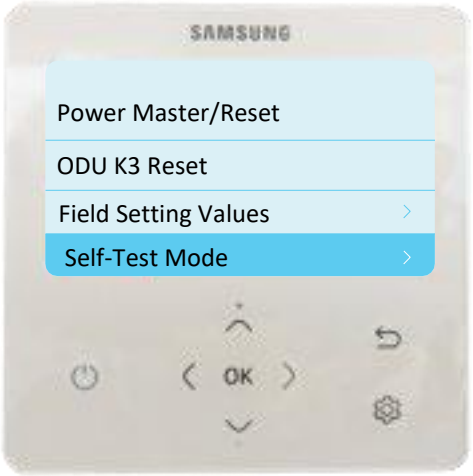
Check the minimum water content Meets the MI. This can also be checked by observing the Water inlet Temperature, by the following the steps below.

Enter Service Mode

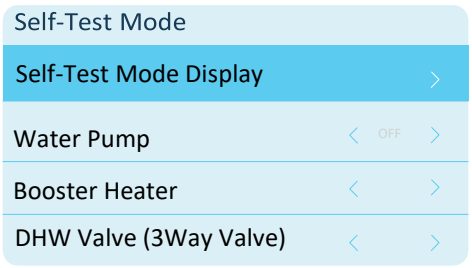
1. Using two hands, push and hold the upand down arrows for 10 seconds
2. Password will appear, the password is 0202
3. Use arrows to enter password
4. Push OK
5. You are now in the service Menu

Self-Test Mode

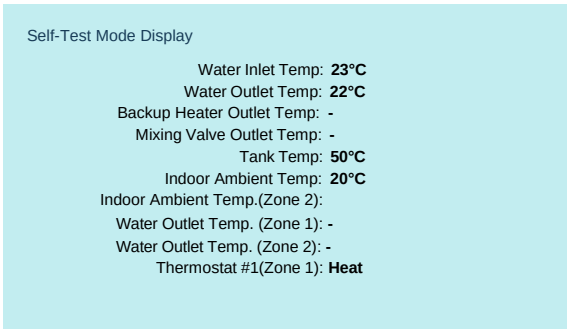
1. To access the Self-test mode, you mustenter the Service Menu.



2. Once in the Service mode, scroll down self-test mode.



3. Select Self-Test Mode Display



4. From here the Inlet temp can be monitored, you want the temperature to raise by less than 1 degree a minute whilst the unit is running in CH mode. For correct operation. If the temperature raises to quicker a volumiser is required.

***Note 2**

Follow the procedure described in Note 1, From here you can see within the Self-Test Mode Display the inlet and outlet temperature of the heat pump. Whilst the unit is running in CH mode, monitor the Delta between the two. If this exceeds 5 degrees, the flow rate will need to be increased.

- This can be done by adding an additional pump to the return to the heat pump*
- Increasing the Pump sizes*
- Increasing the Pipe size*

*These Should be calculated to deliver the right Flow rate for the unit as per the manufactures instructions

The Actual flow rate can be monitored by selecting Indoor Zone Option > Indoor Zone Status Information > Flow sensor: LPM

The Flow rates for the units are as listed below

Model	Min Flow Rate to Operate	Recommended Flow rate	Maximum Flow Rate	Minimum Water Content
HHSM-G00005-1	7 lpm*	14 lpm	48 lpm	50lt
HHSM-G00008-1	7 lpm*	26 lpm	48 lpm	50lt
HHSM-G00012-1	12 lpm*	35 lpm	58 lpm	50lt
HHSM-G00016-1	12 lpm*	46 lpm	58 lpm	50lt

*Achieving the Minimum flow rate will result in unit working at a reduced output

***Note 3**

Thermistor Value Table

Current temperature (°C)	Resistance (kΩ)
60	3.03
55	3.59
50	4.17
45	4.93
40	5.84
35	6.95
30	8.32
25	10
20	12.08
15	14.68
10	17.94