

**Revision Date:** 1/17/2025

**Subject:** E220 Error Code

**Models:** DVM Heat Recovery, ECO Heat Recovery

**Title:** Subcooler Outlet Temperature Sensor in MCU Open or Short

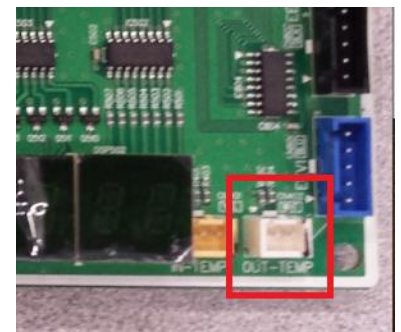
## Troubleshooting Steps

1. Locate MCU that is in error. (E220-C100 is MCU address 00)
2. Locate the Subcooler outlet sensor at CN402 on MCU PCB.
3. Inspect the sensor and make sure it's plugged in correctly.
4. OHM the sensor and compare it to the resistance chart below, if the sensor is out of range or open, replace the sensor
5. If the sensor tests within range, replace MCU PCB.

T (°C)	T (°F)	Rmin(kΩ)	Rcent(kΩ)	Rmax(kΩ)
-1	30	27.33	28.47	29.63
0	32	26.18	27.27	28.37
2	36	24.06	25.03	26.02
3	37	23.07	24.00	24.93
5	41	21.23	22.06	22.90
7	45	19.55	20.30	21.06
9	48	18.03	18.70	19.38
10	50	17.31	17.95	18.60
11	52	16.63	17.24	17.86
14	57	14.77	15.29	15.81
15	59	14.20	14.69	15.19
17	63	13.13	13.58	14.03
19	66	12.16	12.57	12.97
21	70	11.27	11.64	12.00
22	72	10.85	11.20	11.55
25	77	9.700	10.00	10.30
26	79	9.341	9.633	9.926
27	81	8.997	9.282	9.568
30	86	8.049	8.313	8.578
31	88	7.758	8.016	8.275
33	91	7.213	7.458	7.704
34	93	6.957	7.196	7.436
37	99	6.249	6.470	6.694
38	100	6.032	6.247	6.465



**Test with needlepoint leads on the 2 silver tabs**



**Always refer to wiring diagram for specific model.**

**Use the link below for a model search and see the technical data book for the wiring diagram.**

<https://www.samsunghvac.com/downloads>