

Date: 12/10/2024

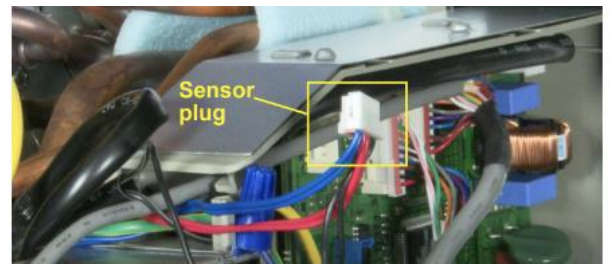
Subject: E221 Error Code

Models: RAC, CAC, DVM

Title: Outdoor Unit Ambient Sensor Open or Short

Troubleshooting Steps

1. Locate the ambient sensor on the outdoor unit
2. Ohm the sensor and compare it to the resistance chart below. If the sensor is out of range, replace the sensor.
3. If the sensor is in range, replace the board on which the sensor is connected.



Unplug the sensor connection



Test with needlepoint leads on the 2 silver tabs

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



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>