

August 2, 2019

Commercial Split System AHU w/ VFD

Common Issue:

The call comes in that the fan in a newly installed Commercial Split AHU will only run at 25% and sometimes there are coil/ freeze stat alarms.

The Cause:

Upon starting up a commercial split system, there is a setting in the SSE control board (located inside the condensing unit) that must be changed to allow for proper operation of the AHU fan speed. The SSE control boards leave the factory with the **fan control type** set to **Single Speed** and this will only allow the fan in the AHU to operate at 25 HZ; it needs to be set to **Fixed Variable**.

How to Change Setting:

1. At SSE board toggle the joystick down to **Commissioning** and press the enter button
2. Toggle to **Options** and press enter again.
3. The first line that you see will be **Fan Cntrl-Type**, press enter.
4. The screen will now say **Single Speed** so to adjust this you toggle the joystick to the right two times and the backlight will start to blink.
5. Toggle the joystick to the right one time and the screen will say not used; go right one more time and the screen will say **Fixed Variable**.
6. Press the enter button and now the fan will operate based on the call for cooling stages.

NOTE:

This information does not address any airflow issues you may have other than it sets the fan to operate at the proper speed based on a call for cooling. The factory settings are 50% fan only, 70% fan with a first stage cool call and 100% fan with both stages. Heating always runs at 100% no matter how many stages are calling. After these settings are changed; if you still get alarms, you need to measure the airflow and compare to the requirements of the space.