





Building Technologies & Solutions – York Johnson Controls Plc.

SSE Factory Fan Default Setting Explained

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We get calls from dealers as well as end users complaining that the fan in their RTU runs all the time no matter what and they believe that there is something wrong with the control board and are asking if there is a board issue, or if they can turn the fan off so that it only operates with the thermostat. The answer to the questions are: no there is nothing wrong with the board and yes we can turn the fan off but that may create some issues

The Fan On Occupied setting in the SSE is set at the factory to On and the speed is set to 50% and there is a reason for this:

- Commercial buildings are required to have fresh air introduced into the building for ventilation purposes and the most efficient way to do this is by using an economizer/fresh air hood on an RTU. The Outside air is introduced into the RTU and mixes with the Return air before going through the evaporator coil /heat exchanger and into the space.
- Obviously when there is no call for heating or cooling there is still a need for fresh air and that is where the Fan On Occ setting comes into play.
- When there is a call for cooling the fan speed may be at 60% for one stage and 100% for all stages and while in heating the fan will be calling to run at 100%. Therefore more fresh air will be pulled into the space based on the motor speed.
- When the call for heating or cooling goes away there is still a need for fresh air and by using the Fan On Occ setting the fan speed is decreased so that the unit is not pulling in too much outside air.

Obviously if the RTU doesn't have an economizer or outside air damper the Fan on Occ setting could be set to off but it still may be desirous to keep it set to on so that any fresh air that is introduced by other means gets circulated throughout the space.

Due to the factory not knowing the desired OAT requirements the default setting of 50% is just a starting point. The fan speed may need to be adjusted to meet the desired airflow requirements so please do not confuse the 50% set point to be the answer for all situations







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With the Corona Virus, the need for fresh air being introduced into buildings is going to become more and more important and there may well come a time existing code requirements are enforced more thoroughly and may change to require even more outside air than current codes call for.

So the bottom line is, if at all possible keep the setting of the Fan On Occ setting to on and the speed to 50% and make adjustments to the speed based on needs

If the desire is to shut the fan off anyway here is the pathway:

- 1. Details, Enter
- 2. Scroll to Fan and push Enter
- 3. Scroll to Setup and push Enter
- 4. Scroll down to Fan On Occ and push Enter
- 5. The screen will say On, double click the Joystick to the right and the screen will blink and change to NO, push Enter and at this point the fan will only run on a call from the thermostat/control