

Thermostat Tech Tip

December 9th, 2013

Environmental and Combustion Controls

Subject: Wi-Fi VisionPRO TH8320WF1029 operation when set to control a heat pump with Electric backup heat.

Description: Electric back up heat not coming on even when the thermostat temperature is set way above the indoor current temperature.

We have received questions about when the auxiliary heat would turn on when a thermostat is setup to control a heat pump with Electric backup.

The Wi-Fi VisionPRO offers many Installer Setup options to control the use of auxiliary heat – for Electric and Fossil Fuel backup heat. Options include the use of an outdoor sensor, upstage timer and droop setting. The default settings for the thermostat are listed in the table shown below.

When the thermostat is setup to control a heat pump with auxiliary heat (Electric or Fossil Fuel) the default settings for the upstage timer is 60 minutes and the droop setting is 2 degrees F.

Installer Setup	ISU Settings	Default Settings	Change settings**
0170 Select System Type	7 or 12 (Heat Pump with Aux heat)	-	
0200 Back-up Heat Source	0 or 1 (Electric or Fossil Fuel)	-	
0346 Upstage Timer	Adjustable Off, to 16 hours	60 minutes	0
0347 Droop Temperature	Adjustable Off, 2 - 15 degrees F	2 degrees F	0

When controlling a heat pump with Electric backup heat with the above default Upstage Timer and Droop Temperature settings, if the customer raises the temperature 2 or 3 degrees, the auxiliary heat will not turn on until either the house falls 2 degrees below the current temperature setting or the heat pump has been running for 1 hour.

Suggestion:

*** If you have a customer that is concerned about the electric back-up heat not coming on or on soon enough, consider turning the Upstage Timer (ISU 0346) and Droop Temperature (ISU 0347) to option 0, which is off for both these settings. This will allow the thermostat to call for auxiliary heat when the temperature is raised by the customer 2 or 3 degrees.*

If you have questions, please contact Product Management.