

**FAILURE TO READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLING OR OPERATING THIS CONTROL COULD CAUSE PERSONAL INJURY AND/OR PROPERTY DAMAGE.**

**DESCRIPTION**

The F67-8535 Integrated Thermostat Sensor can be used as the temperature sensor for Integrated Thermostat Functionality on the White-Rodgers All-Spark 50D50U-843 24V spark ignition module from Emerson. The sensor should be plugged directly into the AirT connector on All-Spark, shown in the diagram below. It is important to note that **Integrated Thermostat Functionality is only designed for radiant, infrared and tube heat applications. Refer to diagram below to properly wire all safety switches in the system.**

**INCLUDED IN THE BOX**

- 1 – F67-8535 Integrated Thermostat Sensor
- 1 – Installation Instructions

**ELECTRICAL SPECIFICATIONS**

**OPERATING TEMPERATURE RANGE**

-40° to 176°F (-40° to 80°C)

**LEAD WIRE LENGTH**

48 inches





**TOLERANCE**

+/- 5% at 77 °F (25 °C)

**INSTALLATION**

*For radiant, infrared and tube heater applications only*

1. Disconnect electric power to the unit.
2. Plug the F67-8535 Sensor into AirT connector on All-Spark, shown in the diagram below.
3. Connect the W OUT terminal to the input side of the safety circuit.
4. Connect the output side of the safety circuit to the 11-pin harness lead on All-Spark 50D50U-843 labeled TH-W.
5. Configure Integrated Thermostat through White-Rodgers Connect App or 7-segment LED Display (see 50D50U-843 instructions for more).
6. Power up system and test to verify proper heating operation.

 <b>WARNING</b>			
<b>Failure to comply with the following warnings could result in personal injury or property damage</b>			
<ul style="list-style-type: none"> <li>• Installation should be done by a qualified heating and air conditioning contractor or licensed electrician.</li> <li>• All wiring must conform to local and national electrical codes and ordinances.</li> <li>• Following installation or replacement, follow manufacturer's recommended installation/service instructions to ensure proper operation.</li> </ul>			
<b>FIRE HAZARD</b>			
<ul style="list-style-type: none"> <li>• Do not exceed the specified voltage.</li> <li>• Protect control from direct contact with water (dripping, spraying, rain, etc.).</li> <li>• If the control has been in direct contact with water, replace the control.</li> <li>• Label all wires before disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.</li> <li>• Route and secure wiring away from flame.</li> </ul>			
<b>SHOCK HAZARD</b>			
<ul style="list-style-type: none"> <li>• Disconnect electric power before servicing.</li> <li>• Ensure proper earth grounding of appliance.</li> <li>• Ensure proper connection of line neutral and line hot wires.</li> <li>• Ensure control has 1/4" clearance between all sides of control and grounded metal.</li> </ul>			
<b>EXPLOSION HAZARD</b>			
<ul style="list-style-type: none"> <li>• Shut off main gas to appliance until installation is complete.</li> </ul>			

