DAIKIN

Space Temperature/Humidity Sensor

Space Temperature/Humidity Sensor

LED Status Indicator   Override/Reset

Sensor 910152149
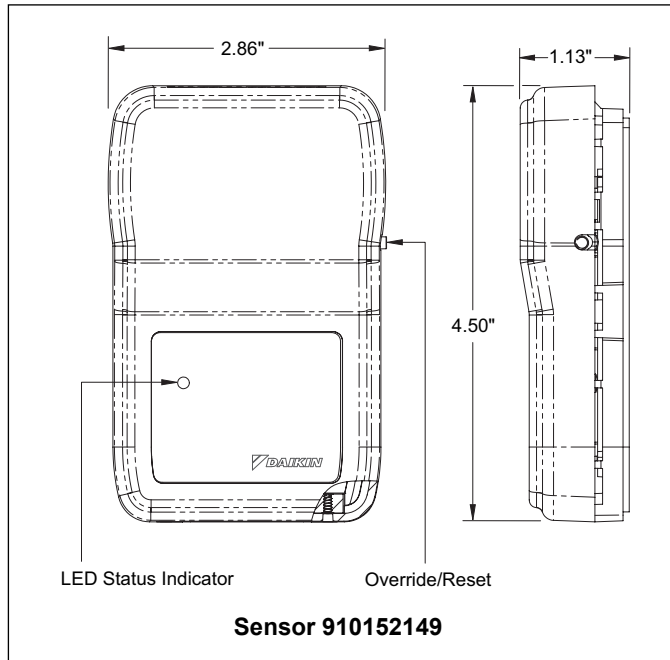
Included Parts:

- Space Temperature/Humidity Sensor
- 4-pin Male Molex plug with (2) 12" Black Wires
- 5-pin Make Molex plug with (1 each) 12" Red, Black, Green wires
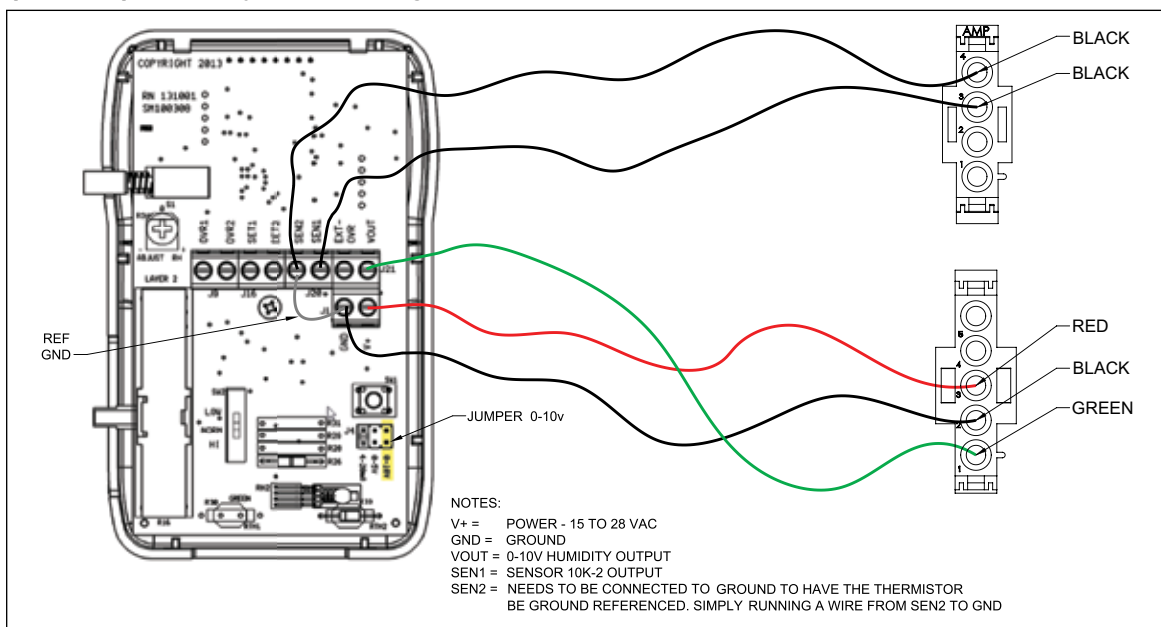
Installation

- Mount sensor in desired location. The location should be selected to provide a typical representation of the space temperature and humidity level. Do not place near heat generating equipment, operable windows, supply/return duct terminals or other features that could affect sensor measurement.
- Run a 2- conductor wire and a 3- conductor wire from the sensor location to the unit. Daikin Applied recommends using shielded 22AWG for all connections and a separate twisted pair for the power wire connections. The shield should be earth grounded only at the power source. Larger gauge wire may be required for runs greater than 250'.

> ## ⚠ CAUTION
>
> The AC power wiring at terminals [V+] & [GND] should be run in a separate twisted shielded pair to avoid fluctuating and inaccurate signal levels induced into the other sensor signal wires. This sensor AC power can be run in the same conduit with the sensor signal wire as long as it's run in twisted, shielded pair and terminated properly.

- All wiring must comply with the National Electric Code (NEC) and local codes. Do NOT run any of this device's wiring in the same conduit as other AC power wiring. Tests show that fluctuating and inaccurate signal levels are possible when AC power wiring is present in the same conduit as the signal lines. If you are experiencing any of these difficulties, please contact your Daikin representative.
- Connect the (2) black wires from the 4-pin molex to SENS1 and SENS2 on the sensor. The wire from pin 3 labelled SIG must be connected to SENS1. The wire from pin 4 labelled GND must be connected to SENS2.
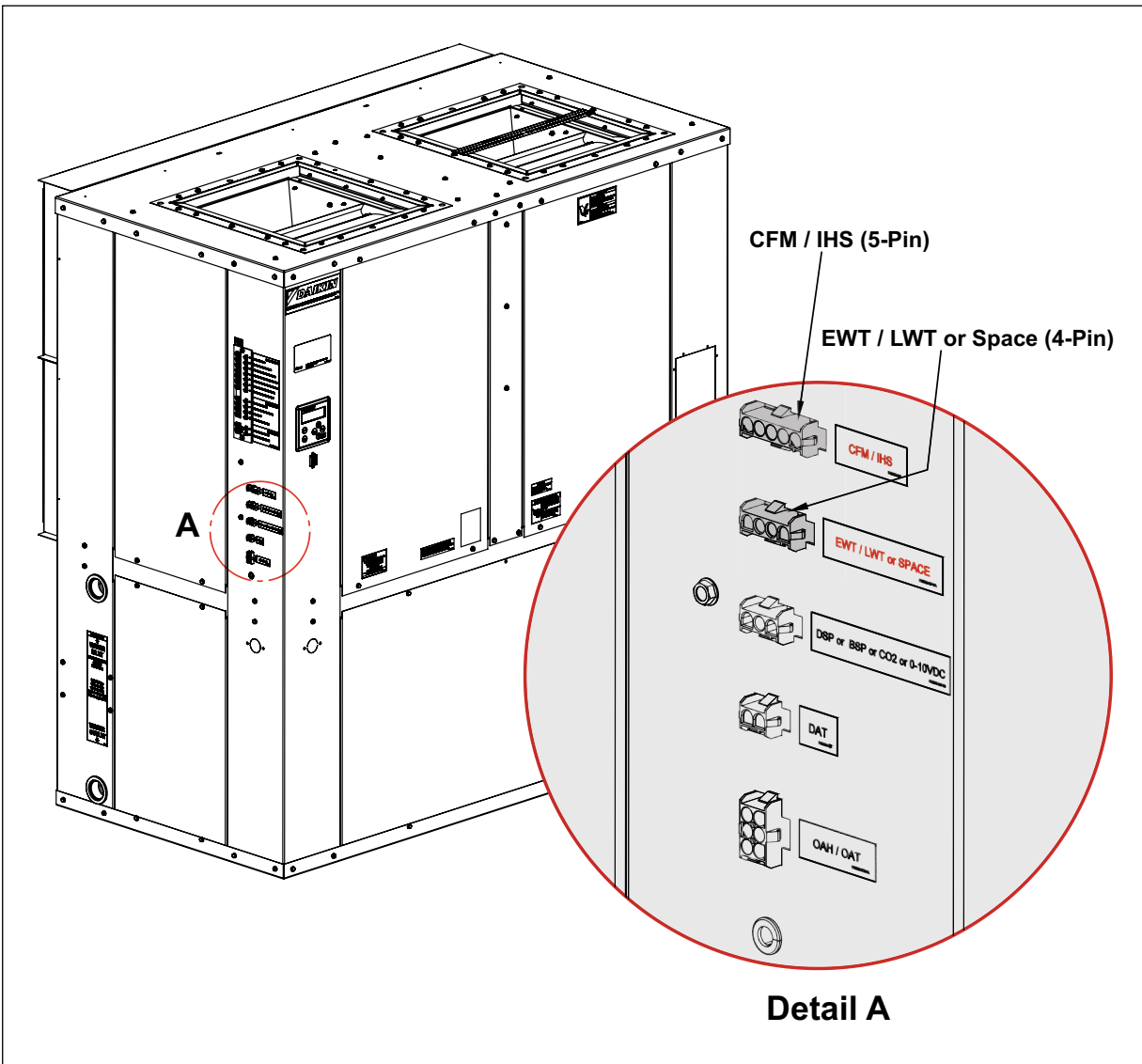
Figure 1: Space Temp / Humidity Sensor Wiring Terminals

NOTES:
V+ = POWER - 15 TO 28 VAC
GND = GROUND
VOUT = 0-10V HUMIDITY OUTPUT
SEN1 = SENSOR 10K-2 OUTPUT
SEN2 = NEEDS TO BE CONNECTED TO GROUND TO HAVE THE THERMISTOR
             BE GROUND REFERENCED. SIMPLY RUNNING A WIRE FROM SEN2 TO GND

Note: If the Entering Water Temperature accessory is also provided it will include the 4-pin molex connector. Connect SENS1 & SENS2 to the black wires included with the molex included with the EWT sensor.

• Connect the red, black and green wires to the 5-pin molex. Take care to connect the red wire to V+, the black wire to GND and the green wire to VOUT on the sensor.

• Plug the molex into the mating plug(s) shown in Figure 2.

Figure 2: Basic Sensor Molex to 5-pin Mating Plug (CFM / IHS)

CFM / IHS (5-Pin)

EWT / LWT or Space (4-Pin)

CFM / IHS

EWT / LWT or SPACE

DSP or BSP or CO2 or 0-10VDC

DAT

OAH / OAT

Detail A

Programming

To enable use of this sensor the following configuration points must be changed. Changes can be made through the local user interface or through the Service-Tools software for Microtech® Unit Controllers program on a connected PC. For information on how to use the ServiceTools software, refer to OM 732. The local user interface menu path is shown below.

- To enable Space Temperature sensing go to Service > Serv_AnaIn > Serv_AnaIn_Config > CFgAnIn4 and change the value from None to SpcT. Then go to SET > Set-SensorInstall > SpcTmpSens and confirm that it is set to 'Inst'.
- To enable Space Humidity sensing go to Service > Serv_AnaIn > Serv_AnaIn_Config > CFgAnIn16 and change the value from None to IAH. Then go to SET > Set-SensorInstall > InHumSens and confirm that it is set to 'Inst'.
- Space humidity is provided as a read-only point. Space temperature can be used as information only or as the control point for the Discharge Air Reset function. To enable Discharge Air Reset refer to OM 1308.

If using the ServiceTools software, change the unit configuration as follows:

- To enable Space Temperature sensing, go to the 'Configuration' menu and under the 'Inputs' drop down change 'Analog Input 4' to 'Space Temp'. Confirm that under the 'Sensor Installation' drop down, 'Space Temp' is 'Installed'
- To enable Space Humidity sensing, go to the 'Configuration' menu and under the 'Inputs' drop down change 'Analog Input 16' to 'Indoor Humidity'. Confirm that under the 'Sensor Installation' drop down, 'Indoor Humidity' is 'Installed'
- Space Humidity is provided as a read-only point. Space Temperature can be used as information only or as the control point for the Discharge Air Reset function. To enable Discharge Air Reset use the 'Resets' drop down in the 'Setpoints' menu, and refer to OM 1308.

Click the Save button after making changes so they take effect. ServiceTools prompts you to save if you are switching to another screen without saving.

DAIKIN