

Installation and Maintenance Manual

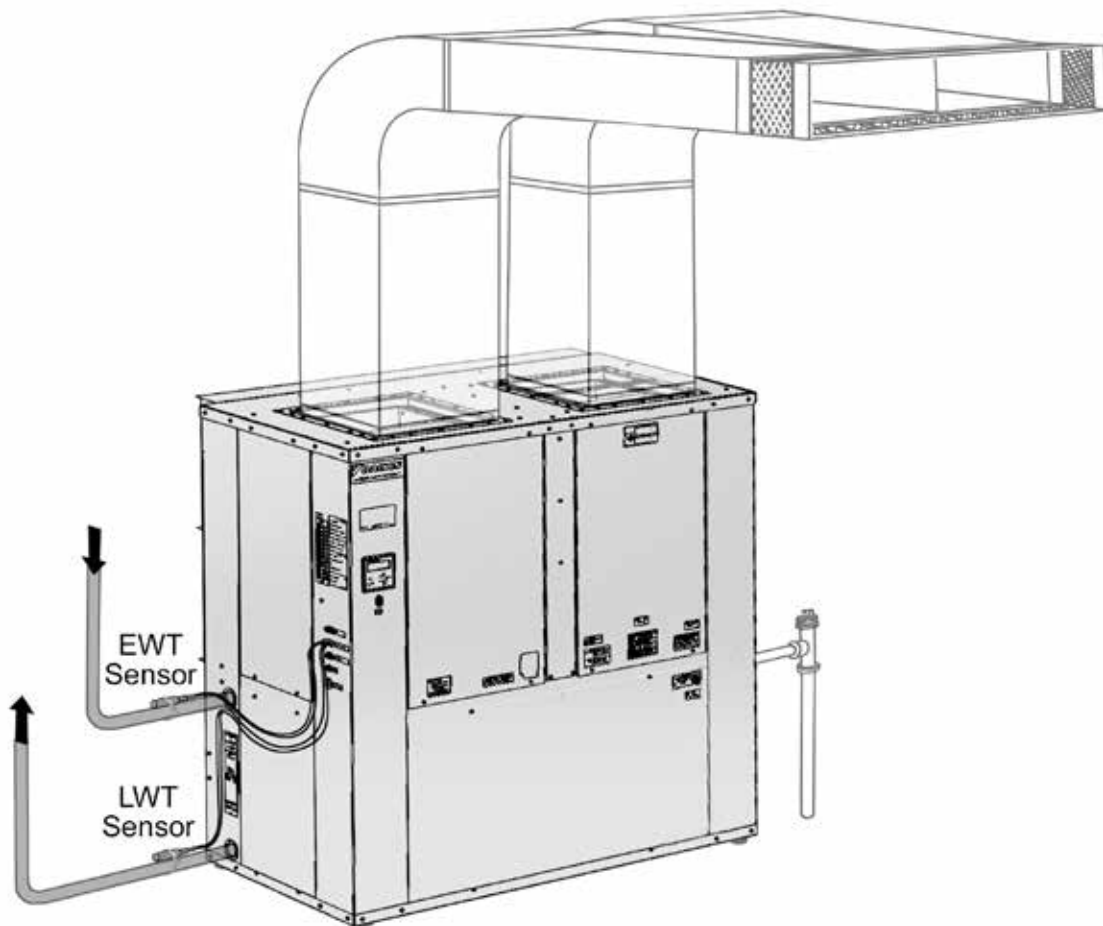
IM 1310

Group: **WSHP**

Part Number: **910338996**

Date: **January 2021**

Entering/Leaving Water & Space Temperature Sensors



Entering/Leaving Water and Space Temperature Sensors

Included Parts

- EWT and LWT sensors connected to 4-pin Male Molex plug (p/n 910287389 only). See [Figure 1](#).
- EWT sensor connected to 4-pin Male Molex plug. The plug will also have (2) 12" black wires for field connection to a space temperature sensor, (p/n 910287390 only). See [Figure 2](#).

Note: The space temperature sensor is not included in this accessory kit, and must be ordered separately (p/n 910152149).

- Zip ties and insulation for mounting of the water temperature sensors.

Installation

- 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.

Water Temperature Sensor(s)

- ▶ Mount sensor on water piping as shown in [Figure 3](#) using the zip ties provided. Wrap the sensor and pipe with the included insulation.

Figure 1: EWT and LWT sensors connected to 4-pin Male Molex plug (p/n 910287389 only)

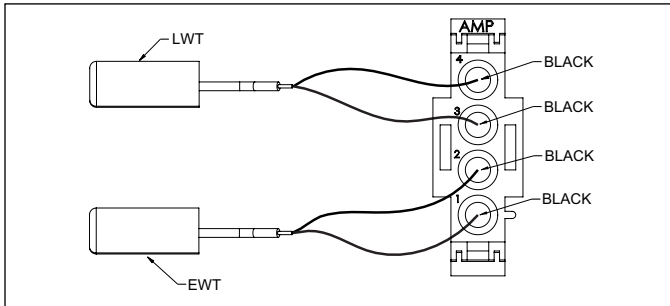


Figure 2: EWT sensor connected to 4-pin Male Molex plug with (2) 12" black wires for space temperature sensor (P/N 910287390)

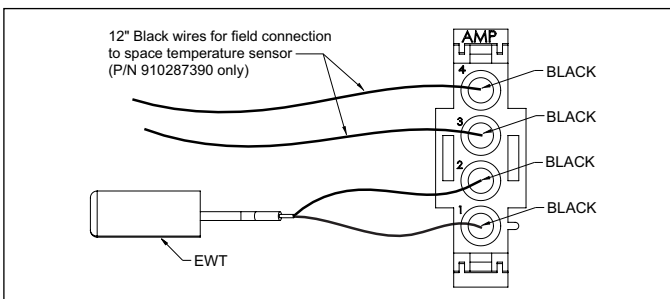
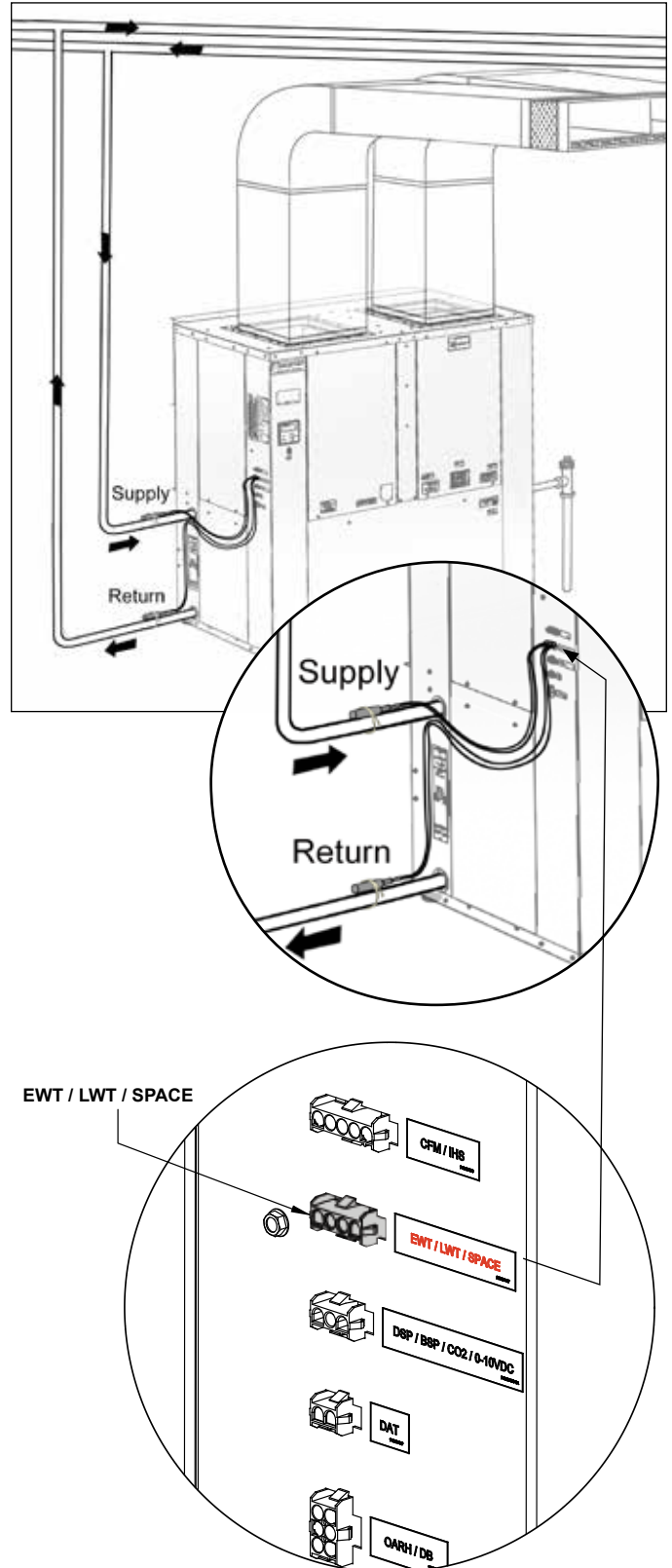
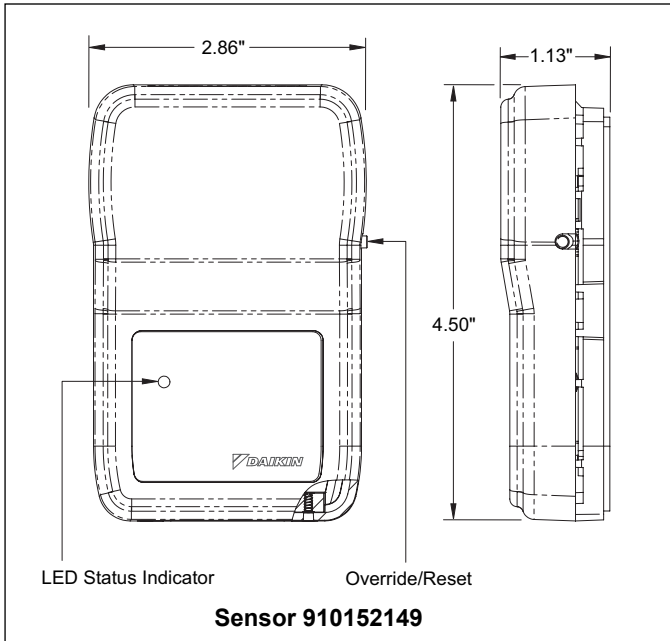


Figure 3: Sensor(s) Mounting Locations



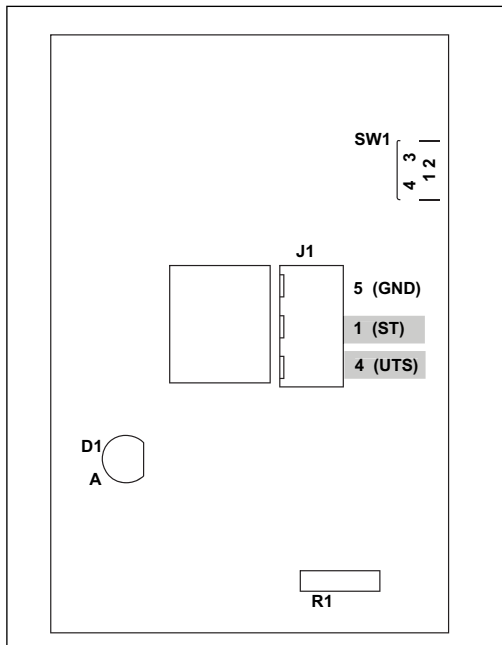
Space Temperature Sensor (Ordered Separately)

Figure 4: Basic Room Temperature Sensor Details



- ▶ The location should be selected to provide a typical representation of the space temperature level. Do not place near heat generating equipment, operable windows, supply/return duct terminals or other features that could affect sensor measurement.

Figure 5: Space Sensor Circuit Board



Terminal Descriptions

- 1..... Status Indicator Input from the MicoTech Unit Controller (Not used for WSHP applications. (5VDC).
 - 4..... Output Signal, Room Temp Thermistor Sensor. (10K ATP Z curve, 10K-2).
 - 5..... Ground or Neutral* (AC requires separate shielded wire). Common Reference for All Signal Terminals.
 - ▶ Run a 2-conductor wire from the sensor location to the unit. Daikin Applied recommends using shielded 22AWG for all connections. Larger gauge wire may be required for runs of greater than 250'.
 - ▶ Connect the (2) black wires from the 4-pin Molex to Pins 4 & 5 on the sensor. The wire from pin 3 labelled SIG must be connected to Pin 4 (UTS). The wire from pin 4 labelled GND must be connected to Pin 5 (GND).
- Plug the Molex into the mating plug shown in bottom detail of [Figure 3 on page 2](#).

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 ServiceTools 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 Entering Water Temperature sensing go to Set > Set-SensorInstall > EWTTmpSens and change the value from NotInst to Inst.
- Entering Water Temperature will be used to disable compressor heating if the value gets too low. To adjust the Entering Water Temperature Lockout setpoint go to Setpoints > HtEWTLk and change the value. Then go to SET > Set-SensorInstall > EWTTmpSens and confirm that it is set to 'Inst'.
- To enable Leaving Water Temperature sensing go to Service > Serv_Analn > Serv_Analn_Config > CFgAnln4 and change the value from None to LWT. Then go to SET > Set-SensorInstall > LWTSens and confirm that it is set to 'Inst'.
- To enable Space Temperature sensing go to Service > Serv_Analn > Serv_Analn_Config > CFgAnln4 and change the value from None to SpcT. Then go to SET > Set-SensorInstall > SpcTmpSens and confirm that it is set to 'Inst'.
- 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.

Programming (Continued)

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

- To enable Entering Water Temperature sensing, go to the 'Configuration' menu and under the 'Sensor Installation' drop down, change 'Entering Water Temp' to 'Installed'.
 - To enable Leaving Water Temperature sensing, go to the 'Configuration' menu and under the 'Inputs' drop down change 'Analog Input 4' to 'LWT'. Confirm that under the 'Sensor Installation' drop down, 'Leaving Water Temp' is 'Installed'.
 - 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'.
- Leaving Water Temperature is provided as a read-only point. Entering Water Temperature will be used to disable compressor heating if the value gets too low. To adjust the Entering Water Temperature Lockout setpoint go to the 'Setpoints' menu and under the 'Water' dropdown change the 'Heating EWT Lockout' value.
 - 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 go to the 'Setpoints' menu, use the 'Resets' drop down, 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 Applied Training and Development

Now that you have made an investment in modern, efficient Daikin equipment, its care should be a high priority. For training information on all Daikin HVAC products, please visit us at www.DaikinApplied.com and click on Training, or call 540-248-9646 and ask for the Training Department.

Warranty

All Daikin equipment is sold pursuant to its standard terms and conditions of sale, including Limited Product Warranty. Consult your local Daikin Applied representative for warranty details. Refer to Form 933-430285Y. To find your local Daikin Applied representative, go to www.DaikinApplied.com.

Aftermarket Services

To find your local parts office, visit www.DaikinApplied.com or call 800-37PARTS (800-377-2787).

To find your local service office, visit www.DaikinApplied.com or call 800-432-1342.

This document contains the most current product information as of this printing. For the most up-to-date product information, please go to www.DaikinApplied.com.

Products manufactured in an ISO Certified Facility.