DAIKIN

Installation and Maintenance Manual

Space CO₂ Sensor

Space CO$_2$ Sensor

Included Parts:
- Space CO2 Sensor
- 3-pin Make Molex plug with (1 each) 12" Blue, White and Green wires

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.
- Mount sensor in desired location. The location should be selected to provide a typical representation of the space CO2 level. Do no place near heat generating equipment, operable windows, supply/return duct terminals or other features that could affect sensor measurement.
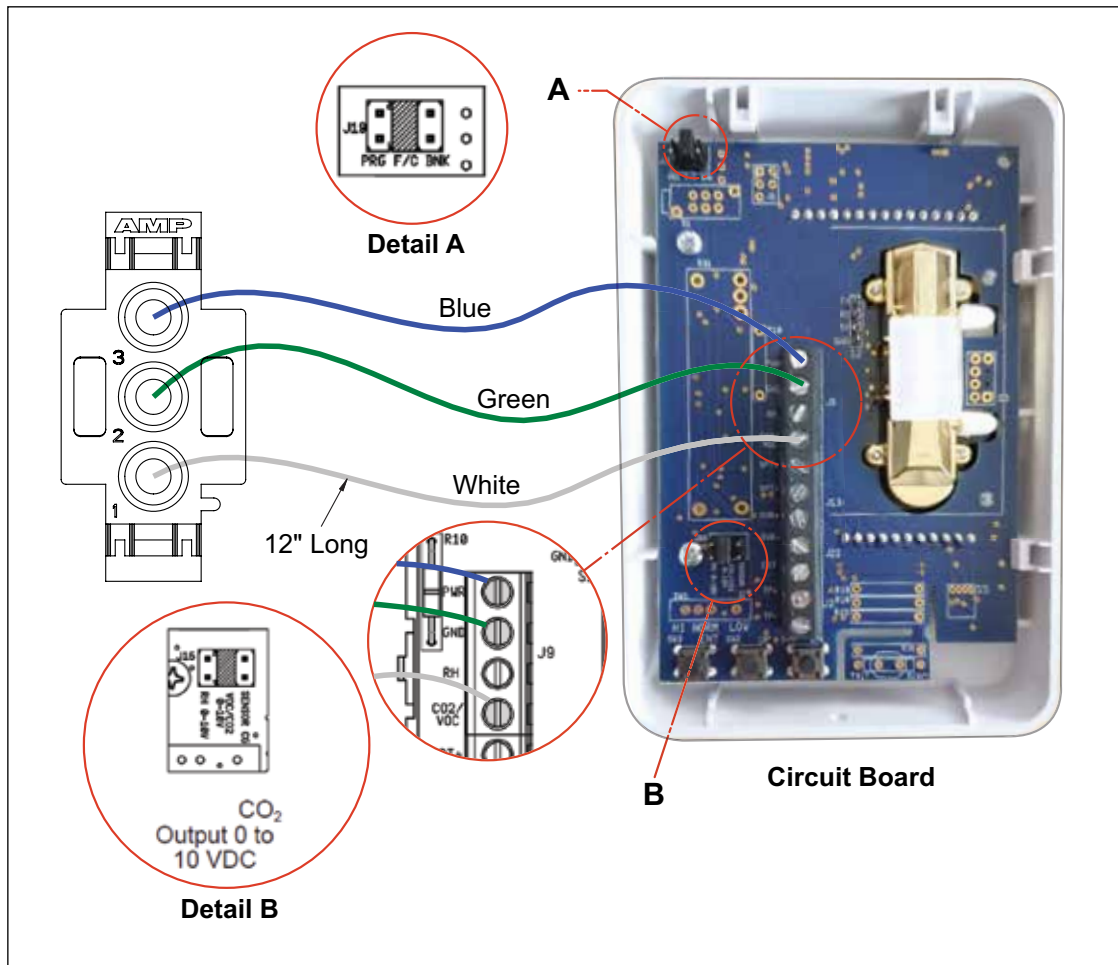
- Run (2) minimum 2- conductor wires from the sensor location to the unit. Daikin Applied recommends using shielded 22AWG for all connections and a separate twisted pair for the power wire connections. The shield should be earth grounded only at the power source. Larger gauge wire may be required for runs greater than 250'.
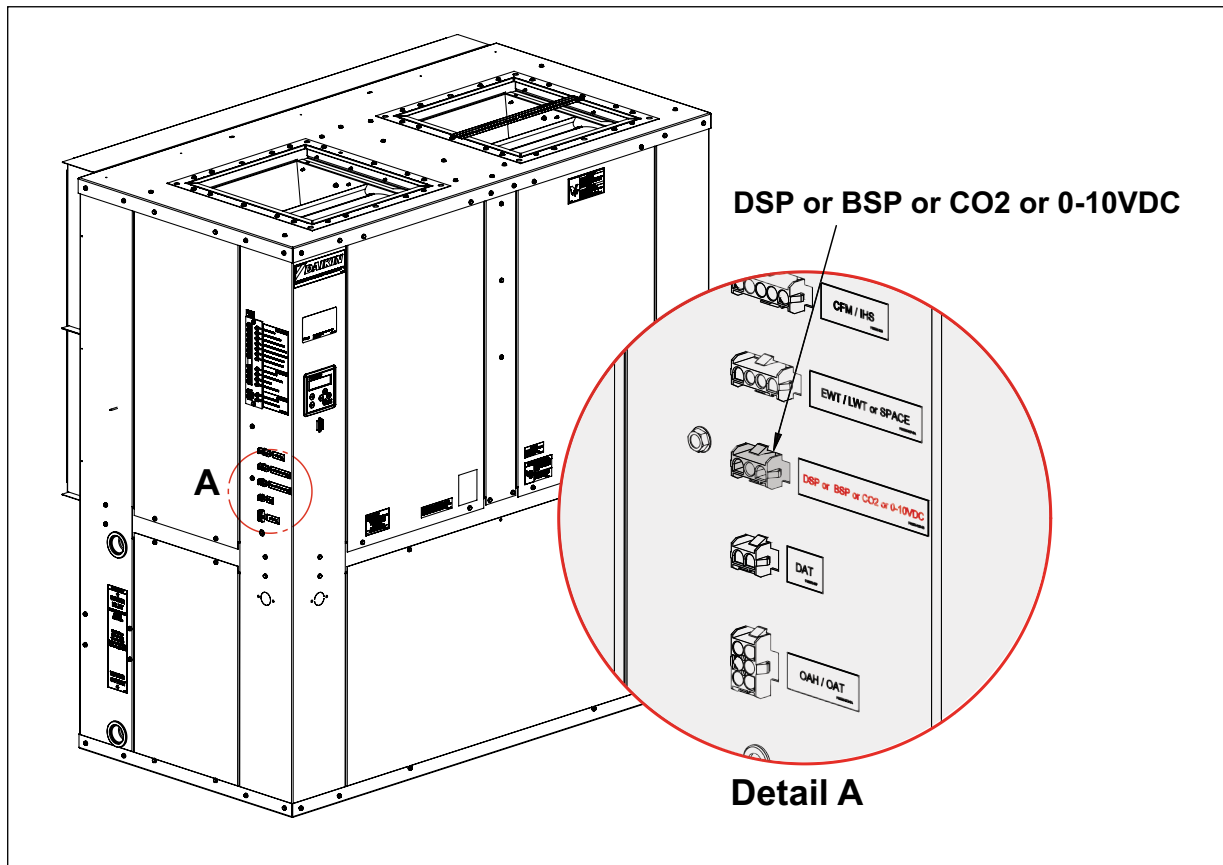
> ## ⚠ CAUTION
> The AC power wiring at terminals [PWR] & [GND] should be run in a separate twisted shielded pair to avoid fluctuating and inaccurate signal levels induced into the other sensor signal wires. This sensor AC power can be run in the same conduit with the sensor signal wire as long as it's run in twisted, shielded pair and terminated properly.

- Connect the blue, white and green wires to the sensor as follows: Also refer to Figure 1.
  - o Blue to PWR
  - o Green to GND
  - o White to CO2/VOC
- For proper operation the jumper on the PRG connector of J19 must not be installed on both legs.

Figure 1: CO2 Sensors Wire Connections

Figure 2: Plug 3-Pin Molex Plug to Unit Control Connection, DSP or BSP or CO2 or 0-10VDC

DSP or BSP or CO2 or 0-10VDC

A

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 CO2 sensing go to Service > Serv_AnaIn > Serv_AnaIn_Config > CFgAnIn16 and change the value from None to CO2. Then go to SET > Set-SensorInstall > FanRstSens and confirm that it is set to 'Inst'.

• To enable fan control based on CO2 levels go to Set > Set-Unit > FanCntMth and change the value from CONSTANT to CO2.

• The min/max space CO2 set-points can be adjusted under Set > Set-Fan > RstMnCO2 & RstMxCO2.

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

• To enable CO2 sensing, go to the 'Configuration' menu and under the 'Inputs' drop down change 'Analog Input 16' to 'CO2'. Confirm that under the 'Sensor Installation' drop down, 'DSP/BSP/CO2/AI Reset' is 'Installed'.

• To enable fan control based on Duct Static pressure go to the 'Configuration' menu and under the 'Fan' dropdown set 'Fan Control Method' to 'CO2'.

• The CO2 setpoints go to the 'Setpoints' menu and under the 'Fan' dropdown adjust the 'Reset Min CO2' and 'Reset Max CO2' values.

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.

Refer to OM 1308 for additional information on space CO2 level control.

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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.

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