

INSTALLATION INSTRUCTIONS

CO2D-VAL, Duct Mount Duct CO2 Value sensor



IMPORTANT WARNINGS

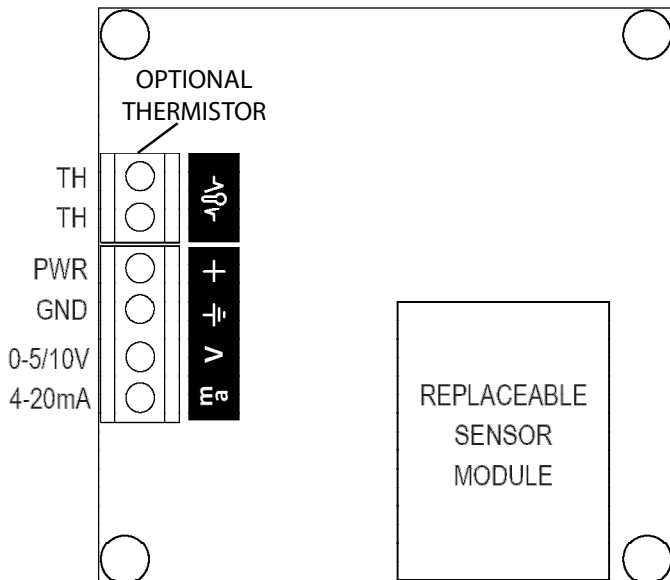
- Only qualified trade installers should install this product
- This product is not intended for life-safety applications
- Do not install in hazardous or classified locations
- The installer is responsible for all applicable codes
- De-energize power supply prior to installation or service

PRODUCT APPLICATION LIMITATION:

Senva products are not designed for life or safety applications. Senva products are not intended for use in critical applications such as nuclear facilities, human implantable device or life support. Senva is not liable, in whole or in part, for any claims or damages arising from such uses.

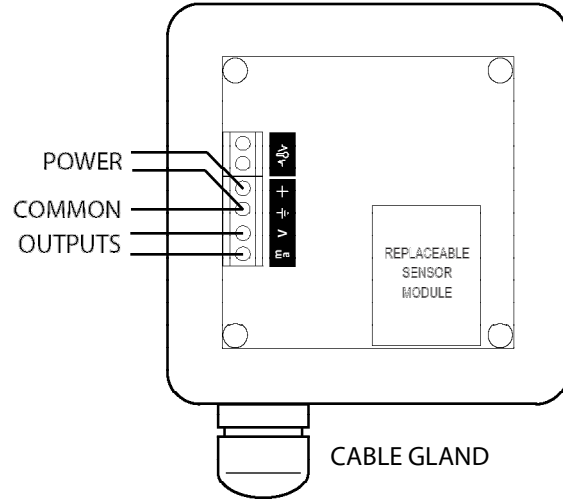
INSTALLATION

- ① Drill a 3/4" hole in the duct. Install sensor using gasket and screws provided. The specially designed pickup tube will ensure adequate air flow regardless of air flow direction.
- ② Wire sensor according to the product labeling:



INSTALLATION (CONTINUED)

Tighten the cable gland around the field wiring to prevent air from entering the enclosure and affecting the CO2 reading. For conduit connection, remove cable gland and replace with 1/2" NPT conduit adapter (not provided). Minimize air flow where wires enter the enclosure to prevent outside air from affecting the CO2 reading.



- ③ For voltage output operation, move jumper to 5v or 10v.



- ④ Apply power to sensor.
- ⑤ Close lid so that both clasps are secure. Install and tighten provided screw. Make sure cover is securely installed to prevent unwanted air flow from entering the enclosure.

SPECIFICATIONS

Power supply		12-30vdc/24vac ⁽¹⁾ , 100mA max.
Outputs	Dual analog	3-wire 4-20mA and 0-5v/0-10v ⁽²⁾ (jumper)
Output scaling	Selectable	0-2000ppm
Sensor Performance	Type	Non-dispersive Infrared (NDIR)
	Accuracy	±30ppm ±3% of reading(0-2000ppm)0-50°C, 0-85%RH
	Pressure Dependence	+1% reading per 1kPa(0.146PSI) deviation from nominal (101kPa, 14.7PSI)
	Response time	60 seconds to 90% reading
	Sample rate	1 second
Operating Environment	Temperature	32 to 122°F (0-50°C)
	Humidity	0-95%RH, non-condensing

(1) One side of transformer secondary is connected to signal common. Dedicated transformer is recommended.

(2) 15-30vdc/24vac power supply voltage required for 10 volt output.

TROUBLESHOOTING

Symptom	Solution
No output	Check wiring. Ensure power supply meets requirements.
CO2 reading error	Verify control panel software is configured for correct output scaling.
	Verify accuracy of test instrument. Observe installation and calibration guidelines
	Verify no air is leaking from housing, duct, or wire entry.

CALIBRATION

Senva CO2D-VAL model sensors are factory calibrated to controlled test gasses. No field calibration is possible.

Automatic Calibration feature:

The sensor will automatically track low ambient CO2 levels and gradually make adjustments to compensate for sensor drift due to long-term aging of the IR light source.