Installation Guide

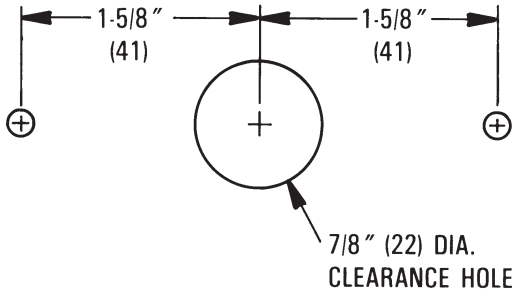
Mounting

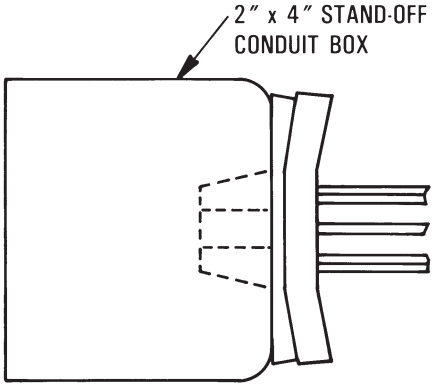
The SSE-1000 and SSE-2000 sensors are designed to mount to the VAV box's inlet collar. The sensor head's foam backing prevents conditioned air leakage.

1. Cut a 7/8" hole in the duct.
2. Insert the sensor.
3. Align the sensor horizontally to maintain calibration at zero airflow.
4. Fasten with two 3/16" sheet metal screws.
5. Add a 2" x 4" standoff type conduit box if wiring must be run through conduit.

⚠ CAUTION

To prevent damage to the SSE series sensors, do not touch or handle the interior wire windings.

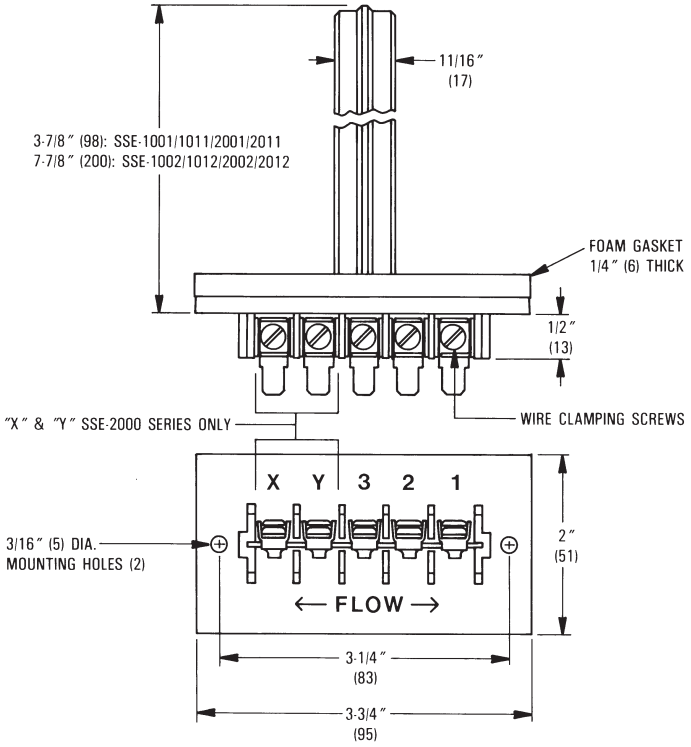


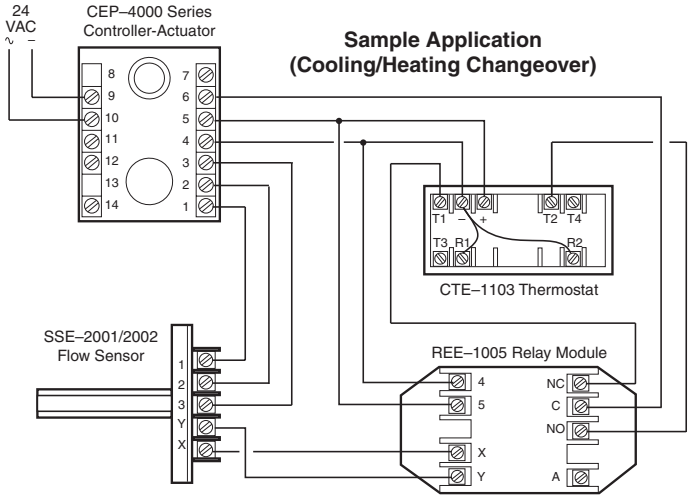


Connections and Wiring

See the diagrams below. See also the CEP-4000 illustration on the next page.

- Sensor terminals 1, 2, and 3 connect to CEP-4000 terminals 1, 2, and 3 respectively.
- SSE-2000 series terminals "X" and "Y" connect to a heat/cool relay module.

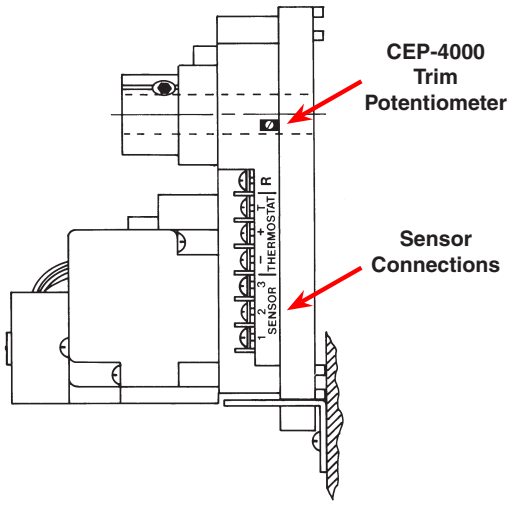




Adjustments and Calibration

Each CEP-4000 is calibrated to its SSE series sensor at the factory. No further calibration is needed. **If the units are replaced or become mismatched, complete the following steps to recalibrate the controller and sensor.**

1. Connect sensor terminals 1, 2, and 3 to CEP-4000 terminals 1, 2, and 3 respectively. (Connection of a thermostat to the CEP-4000 is not necessary.)
2. Connect the CEP-4000 to a 24 VAC, –15%/+20%, 50/60 Hz power source (disconnect the power to the transformer while wiring the CEP). Connect terminal 9 to the "–"common side of the transformer, and connect terminal 10 to the "~" phase side of the transformer.
3. Connect the voltmeter "+" to CEP terminal 2 and "–" to CEP terminal 4.
4. Ensure zero airflow in the duct or remove the sensor from the duct and place it in a horizontal position with **zero** airflow.
5. Wait 5 minutes for the CEP and SSE units to stabilize.
6. Access the trimpot through the slot in the CEP-4000's side. The slot is normally covered by a label and is on the sensor/thermostat connection side (see illustration below).
7. Adjust the trimpot until the voltmeter reads 9 volts. When the adjustment is made, the voltage will immediately overshoot and then stabilize. This establishes the baseline. (See the Voltage/ Velocity Correlation section in the CEP-4000 Application Guide for more information.)
8. Wait an additional 5 minutes for the CEP and SSE units to stabilize.
9. Readjust if necessary.



Testing

1. Disconnect ALL wiring from the SSE sensor.
2. Measure resistance between terminals 1 and 3 with an ohmmeter. Resistance should be between 100–400 ohms. If not, replace the sensor and recalibrate controller to the new sensor. See the Adjustments and Calibration section.
3. SSE-2000 series sensors have additional terminals marked "X" and "Y" for use with the heat/cool changeover relay module. Resistance between "X" and "Y" should be between 2,000 and 20,000 ohms.

Maintenance

Protect the element from excessive dust during installation and job construction. Careful installation will ensure long-term reliability and performance.

For periodic maintenance, check for dust on the elements. If present, carefully blow dust off the elements.

⚠ CAUTION

To prevent damage to the SSE series sensors, do not touch or handle the interior wire windings.

More Information

For specifications, see the SSE-1000/2000 Data Sheet.

For sample applications, see the CEP-4000 Applications Guide.

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