

ClimaVision Differential Pressure Sensor



Differential Pressure Sensor
Part # 7C-SE-C68X-X

- Measures pressure differential in variety of applications
- Enables alerts when AHU filters need to be changed
- VAV flow measurement based on ASHRAE Guideline 36

ClimaVision Differential Pressure Sensor

ClimaVision's suite of sensor offerings gives building owners the power of IoT-connected devices for optimal efficiency and comfort in spaces where it matters most. Measure airflow rates in VAV boxes for advanced DCV sequences, learn when AHU filters need to be changed, and more with the ClimaVision Differential Pressure Sensor.



Part # 7C-SE-C68X-X

OVERVIEW

The Differential Pressure Sensor (DPS) is a high-precision pressure sensor that enables energy-saving functions like advanced demand control ventilation sequences and VAV flow measurement based on ASHRAE Guideline 36, all right out of the box.

Our rugged sensor connects to the Smart Node digital sensor bus seamlessly with ClimaVision's suite of applications. Thoughtful design touches include large cutouts for easy installation when wearing thick gloves. The DPS dramatically cuts down installation time and commission applications.

ADDITIONAL FEATURES

- Can be daisy-chained with other sensors to provide extensible sensor network
- Communicates over a proprietary 3-wire sensor network with ClimaVision controllers like the Smart Node
- Large sensor cutouts make installing easy, even when wearing gloves

APPLICATIONS

- VAV box flow sensing
- Filter status in equipment

KEY FEATURES

- Measures airflow rates in VAV boxes for fast and easy compliance with advanced DCV sequences
- Significantly decreases the time of install
- Compact, rugged design means the sensor can be mounted on VAV boxes, hard supporters or rafters

Supports daisy-chaining on sensor network



ClimaVision Differential Pressure Sensor

SPECIFICATIONS

Pressure sensing	0-2" WC
Communication	Digital bus
Zero-point accuracy	0.1 Pa
Span shift due to temp variation	< 0.5% of reading per 50°F (10°C)
Flow step response time	< 3ms
Mounting	On the VAV box
Physical dimension	2.36" x 1.22" x 2.83" (60 mm x 31 mm x 72mm)
Storage temperature	14°F – 140°F (-10°C – 60°C)
Supply voltage	3.3V, max current limit of 10mA
Electrical connection	3-wire cable and connector
Accuracy	3% of measured value
Offset stability	< 0.05 Pa/year
Pressure medium	Air non-condensing
Housing material	Lexan 945GG (flame retardant)
Operating temperature	32°F to 122°F (0°C – 50°C)
Relative humidity	0% to 95% RH, non-condensing

