

# SUREFLOW™ Model 8636 Room Pressure Controller

## Description

The Model 8636 SUREFLOW™ room pressure controller is an excellent digital room controller for laboratories with hoods. A stand-alone device, the Model 8636 modulates the supply and general exhaust dampers in conjunction with the reheat valve to maintain pressurization, ventilation and comfort.

The Model 8636 easily integrates to the building management system, using digital communications, such as LonWorks® or Modbus®, and alarm relays.



## Features

- Stand-alone room control provides system reliability
- Direct pressure measurement provides continuous, closed-loop control
- Audible and visual alarms warn staff of potentially unsafe conditions
- Network communications allow for building-wide control efficiencies
- Convenient integral keypad and display support local programming
- Passwords protect unauthorized access to controller functions

## Selection Chart

|  | 8636 | 8636-N2 | 8636-LN | 8636-BAC |
|--|------|---------|---------|----------|
| Controls Supply and General Exhaust for Room Pressure Differential | •    | •       | •       | •        |
| Controls Reheat and Supply for Temperature                         | •    | •       | •       | •        |
| Unoccupied Mode Reduces Supply Volume                              | •    | •       | •       | •        |
| Open Door Mode   | •    | •       | •       | •        |
| Controls Dampers   | •    | •       | •       | •        |
| Controls Venturi Valves  | •    | •       | •       | •        |
| Relay Output for Pressure Alarm                                    | •    | •       | •       | •        |
| Modbus Communications  | •    |         |         |          |
| Johnson Controls' N2 Communications                                |      | •       |         |          |
| LonWorks® Communications   |      |         | •       |          |
| BACnet® MSTP Communications  |      |         |         | •        |

## Items Included

- Digital interface module
- Through-the-wall pressure sensor
- Controller output cable, 25 ft (762 cm)
- Transformer, 120:24 VAC, 50 VA
- Transformer cable, 25 ft (762 cm)

## Hardware Options

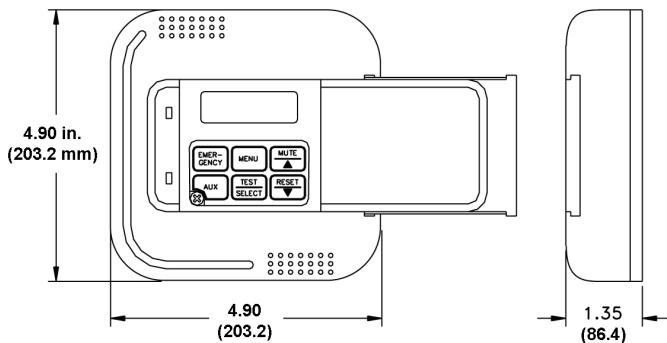
- Electric actuator
- Electric actuator/damper assembly
- Electric actuator/venturi valve assembly
- Flow station
- 1000 Ω platinum RTD temperature sensor
- Remote alarms

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 BACnet is a registered trademark of ASHRAE.  
 LonWorks is a registered trademark of Echelon® Corporation.  
 Modbus is a registered trademark of Modicon, Inc.



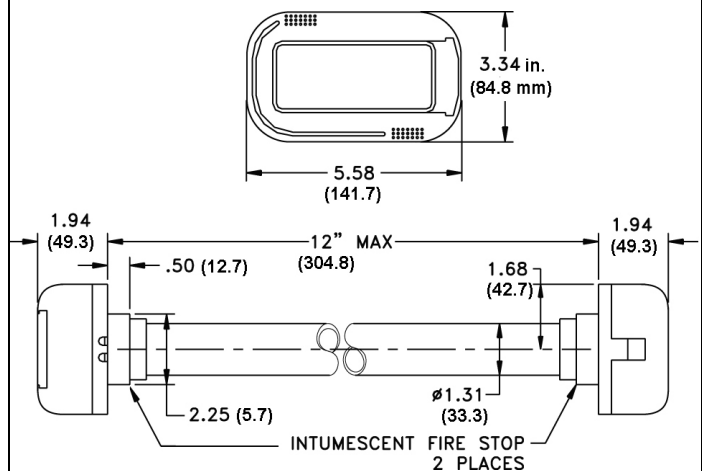
## Digital Interface Module Specifications

|                              |   |
|------------------------------|---|
| <b>Display Range</b>         | -0.20000 to +0.20000 in. H <sub>2</sub> O<br>(-50 to +50 Pa)                                |
| <b>Low Alarm Range</b>       | -0.19500 to +0.19500 in. H <sub>2</sub> O<br>(-48.5 to +48.5 Pa)                            |
| <b>High Alarm Range</b>      | -0.19500 to +0.19500 in. H <sub>2</sub> O<br>(-48.5 to +48.5 Pa)                            |
| <b>Alarm Contacts</b>        | SPST (NO)*<br>Max Current 5A<br>Max voltage 150 VDC, 250 VAC<br>Min switch load 10 mA, 5 DC |
| <b>Flow Inputs</b>           | (2) 0 to 10 VDC Supply Flow<br>(1) 0 to 10 VDC Supply Flow (8636-LN)                        |
| <b>Temperature Input</b>     | 1000 Ω platinum RTD   |
| <b>Control Outputs</b>       | 0 to 10 VDC Supply, General Exhaust, Reheat   |
| <b>Operating Temperature</b> | 32 to 120°F (0 to 48.8°C)   |
| <b>Input Power</b>           | 24 VAC, 5W max  |
| <b>Size (H x W x D)</b>      | 4.90 in. x 4.90 in. x 1.35 in.<br>(124.5 x 124.5 x 34.3 mm)                                 |
| <b>Weight</b>                | 0.7 lb (0.3 kg)   |



## Sensor Specifications

|                          |  |
|--------------------------|--|
| <b>Range</b>             | -0.20000 to +0.20000 in. H <sub>2</sub> O<br>(-50 to +50 Pa)                         |
| <b>Accuracy</b>          | ±10% of reading<br>±0.00001 in. H <sub>2</sub> O (±0.0025 Pa)                        |
| <b>Resolution</b>        | 5% of reading  |
| <b>Temp. Comp. Range</b> | 55 to 95°F (12.7 to 35°C)  |
| <b>Power Dissipation</b> | 0.16 W at 0 in. H <sub>2</sub> O<br>0.20 W at 0.00100 in. H <sub>2</sub> O (0.25 Pa) |
| <b>Size (H x W x D)</b>  | 3.34 in. x 5.58 in. x 1.94 in.<br>(84.8 x 141.7 x 49.3 mm)                           |
| <b>Weight</b>            | 0.2 lb (0.1 kg)  |



\*Relays close to indicate alarm or loss of power.

Specifications subject to change without notice.

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|                  |                       |  |   |
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