

SUREFLOW™ Model 8681 Offset Controller

Description

The Model 8681 SUREFLOW® room pressure controller is an excellent digital room controller for laboratories with hoods. A stand-alone device, the Model 8681 modulates the supply and general exhaust dampers in conjunction with the reheat valve to maintain laboratory balance, ventilation and comfort.

The Model 8681 easily integrates to the building management system, using digital communications, such as BACnet™ or Modbus®, and alarm relays.



Features

- Stand-alone room control provides system reliability
- Flow tracking control ensures stability in the HVAC system
- 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

	8681-NS	8681-N2-NS	8681-BAC-NS
Controls Supply and General Exhaust for Flow Offset	•	•	•
Controls Reheat and Supply for Temperature	•	•	•
Unoccupied Mode Reduces Supply Volume	•	•	•
Controls Dampers	•	•	•
Flow Alarm Contact	•	•	•
Modbus® Communications	•		
Johnson Controls' N2 Communications		•	
BACnet™ MSTP Communications			•

Items Included

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

Hardware Options

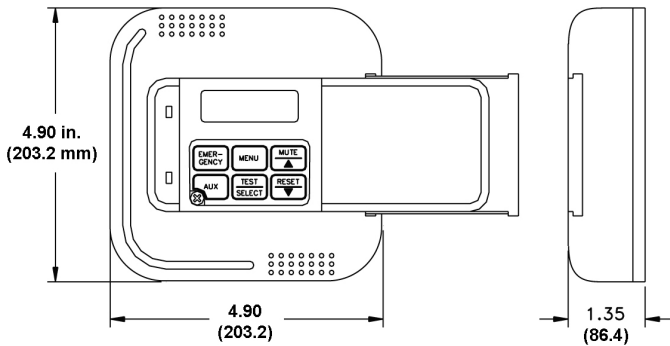
- Through-the-wall pressure sensor
- Electric actuator
- Electric actuator/damper assembly
- Electric actuator/venturi valve assembly
- Supply and Exhaust Flow stations
- 1000 Ω platinum RTD temperature sensor
- Remote alarms

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BACnet is a trademark of ASHRAE.
Modbus is a registered trademark of Modicon, Inc.



Digital Interface Module Specifications

Low Supply Alarm	0 to 30,000 cfm
High Exhaust Alarm	0 to 30,000 cfm
Alarm Contacts	SPST (NO)* Max Current 5A Max voltage 150 VDC, 250 VAC Min switch load 10 mA, 5DC
Flow Inputs	(1) 0 to 10 VDC Supply Flow (1) 0 to 10 VDC Exhaust Flow (2) 0 to 10 VDC Fume Hood Flow (1) Flow on 8681-BAC)
Temperature Input	1000 Ω platinum RTD
Control Outputs	0 to 10 VDC Supply, General Exhaust, Reheat
Operating Temperature	32 to 120°F (0 to 48.8°C)
Input Power	24 VAC, 5W max
Size (HxWxD)	4.90 in. x 4.90 in. x 1.35 in. (124.5 x 124.5 x 34.3 mm)
Weight	0.7 lb (0.3 kg)



*Relays close to indicate alarm or loss of power.

Specifications subject to change without notice.

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