SUREFLOW™ Model 8682
Adaptive Offset Controller

Description

The Model 8682 SUREFLOW™ Offset Controller is an excellent laboratory room controller. A stand-alone device, the Model 8682 ensures that the exhaust volume is greater than the supply volume for negative spaces, and less than the supply volume for positive spaces.

The Model 8682 easily integrates to the building management system, using digital communications, such as LonWorks®, BACnet™, or Modbus®, or alarm relays and analog outputs.

Features

- Stand-alone room control provides system reliability
- Offset control ensures stability of 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

	8682	8682-LN	8682-BAC
Controls Supply and General Exhaust for Room Balance	•	•	•
Controls Reheat and Supply for Temperature	•	•	•
Unoccupied Mode Reduces Supply Volume	•	•	•
Controls Dampers	•	•	•
Controls Venturi Valves*	•	•	•
Analog and Relay Outputs for Flow	•	•	•
Analog and Relay Outputs for Pressure	•	•	•
LonWorks® Communications		•	
Modbus® & Johnson Controls' N2 Communications	•		
BACnet™ MSTP Communications			•

*Optional versions available.

Items Included

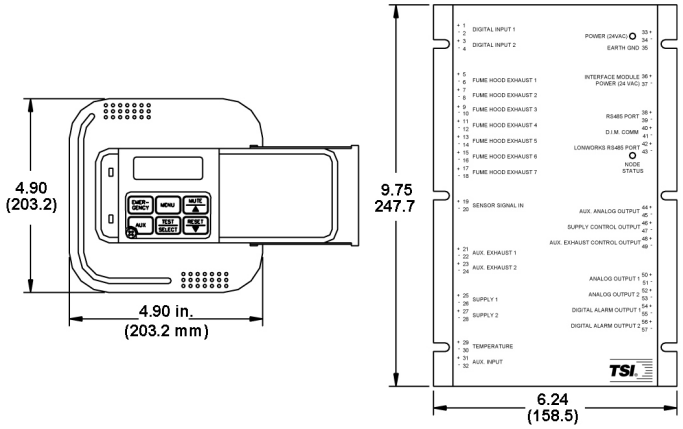
Digital interface module
Adaptive offset control module
Through-the-wall pressure sensor
Controller output cable, 25 ft (762 cm)
Transformer, 120:24 VAC, 50 VA
Transformer cable, 25 ft (762 cm)

Hardware Options

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

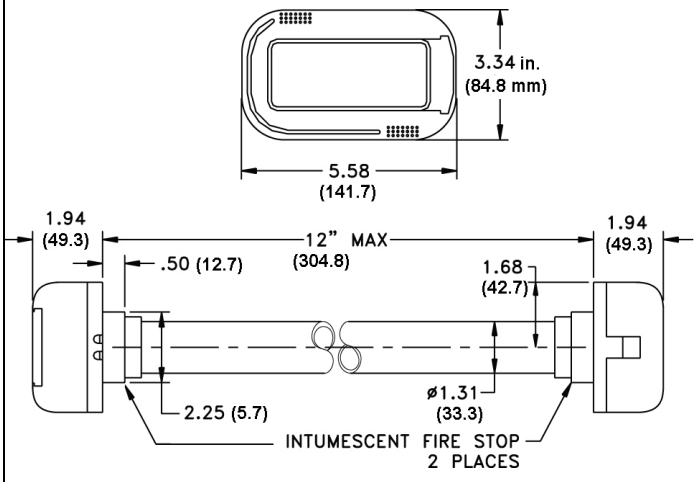
Digital Interface Module Specifications

Display Range	-0.20000 to +0.20000 in. H_2O (-50 to +50 Pa)
Low Alarm Range	-0.19500 to +0.19500 in. H_2O (-48.5 to +48.5 Pa)
High Alarm Range	-0.19500 to +0.19500 in. H_2O (-48.5 to +48.5 Pa)
Alarm Contacts	SPST (NO)* Max Current 5A Max voltage 150 VDC, 250 VAC Min switch load 10 mA, 5 DC
Flow Inputs	(4) Supply Flow (2) General Exhaust Flow (7) Fume Hood flow
Flow Station Type Accepted	0 to 5V or 0 to 10V Linear- or Pressure-Based Signal
Temperature Input	1000 Ω platinum RTD
Control Outputs	0 to 10 VDC Supply, General Exhaust, Reheat
Operating Tempertaure	32 to 120˚F (0 to 48.8˚C)
Input Power	24 VAC, 5 W max
Size (H x W x D)	4.90 in. x 4.90 in. x 1.35 in. (124.5 x124.5 x 34.3 mm)
Weight	0.7 lb (0.3 kg)



Sensor Specifications

Range	-0.20000 to +0.20000 in. H_2O (-50 to + 50 Pa)
Accuracy	±10% of reading ±0.00001 in. H_2O (±0.0025 Pa)
Resolution	5% of reading
Temp. Comp. Range	55 to 95˚F (12.7 to 35˚C)
Power Dissipation	0.16 W at 0 in. H_2O 0.20 W at 0.00100 in. H_2O (0.25 Pa)
Size (H x W x D)	3.34 in. x 5.58 in. x 1.94 in. (84.8 x 141.7 x 49.3 mm)
Weight	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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