MODEL FHC50-01
FUME HOOD CONTROLLER

Description

The Model FHC50-01 fume hood controller uses a sidewall sensor to maintain constant fume hood face velocity. The sidewall sensor can be used to monitor actual face velocity or to correct face velocity disturbances, providing the ultimate in safety and response.

The Model FHC50-01 easily integrates to the building management system, using digital communications, such as BACnet®, LonWorks® or Modbus®, and alarm relays.

Features

- Stand alone face velocity control provides system reliability.
- Field-configurable sequence of operations to best meet needs of specific installations.
- Audible and visual alarms warn staff of unsafe conditions.
- Network communications allow for building-wide control efficiencies.
- Convenient keypad and display support local programming.
- Password prevents unauthorized access to controller functions.

Selection Chart

	FHC50-01	FHC50-02	FHC50-03	FHC50-04
Constant face velocity control with sidewall sensor	•		•	
Constant face velocity control with sash position		•	•	
Constant flow control				•
BACnet® MS/TP communications	O	O	O	O
LonWorks® communications	O	O	O	O
Modbus® / N2 communications	O	O	O	O
Setback input	•	•	•	•
Emergency input	•	•	•	•
Low (velocity / flow) alarm contact	•	•	•	•
High (sash position / velocity / flow) alarm contact	•	•	•	•
Analog output	•	•	•	•
Venturi valve input and control	•	•	•	•
Flow station input with damper control	•			•

Items Included

Controller
Controller output cable, 25 ft (7.6 m)
Sidewall sensor with cable

Hardware Options

Electric actuator
Electric actuator/damper assembly
Electric actuator/venturi valve assembly
Vertical sash sensor
Flow station
Vent kit
Dual vent kit for 8-ft (2.4 m) and larger hoods
120:24V transformer, 50 VA
Flush-mount bracket
Slimline interface

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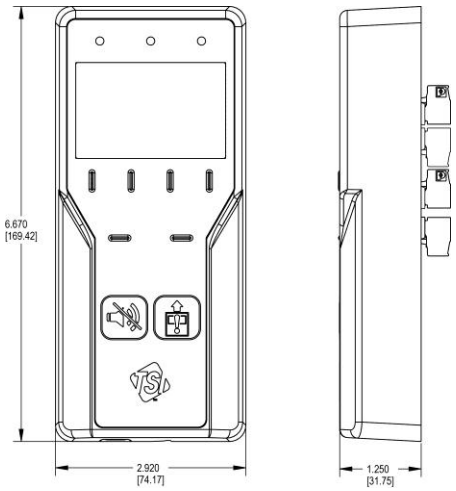
LonWorks is a registered trademark of Echelon Corporation.
BACnet is a registered trademark of ASHRAE

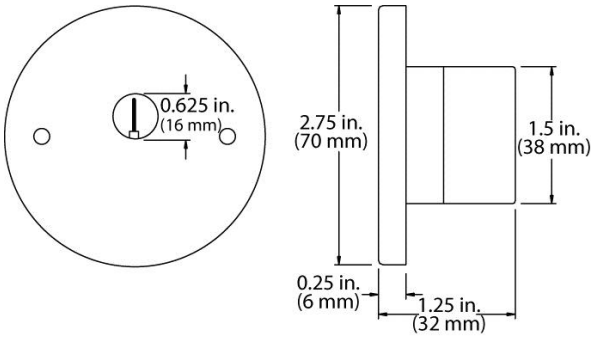
Digital Interface Module Specifications

Display Range	0 to 1000 fpm (0 to 5.08 m/s) 0 to 10,000 cfm (0 to 4720 l/s, 0 to 16,990 m^3/hr)
Low Alarm Range	5 to 960 fpm (0.03 to 4.88 m/s) 0 to 10,000 cfm (0 to 4720 l/s, 0 to 16,990 m^3/hr)
High Alarm Range	80 to 1000 fpm (0.41 to 5.08 m/s) 0 to 10,000 cfm (0 to 4720 l/s, 0 to 16,990 m^3/hr)
Control Output	0 to 10 VDC
Analog Output Inputs	0 to 10 VDC or 4 to 20 mA Represents Face Velocity, Flow Rate or % Sash Open Sash Position, Night Setback, Emergency, Flow
Communications	Modbus®, N2, BACnet® MS/TP, LONworks®
Alarm Contacts	SPST*, 60-W max 2A @ 30 VDC Nominal
Input Power	24 VAC, 50/60 Hz or 15-40 VDC 5 Watt Maximum (50 VA for system with TSI actuator)
Operating Temp.	32 to 120°F (0 to 48.9°C)
Size (HxWxD)	6.67 x 2.92 x 1.25 in (169 x 74 x 32 mm)
Weight	0.5 lb (0.2 kg)



Sidewall Sensor Specifications

Range	0 to 1000 fpm (0 to 5.08 m/s)
Resolution	1 ft/min
Temp. Comp Range	55 to 95°F (12 to 35°C)
Power Dissipation	0.09 W at 0 fpm (0 m/s) 0.14 W at 100 fpm (0.50 m/s)
Size (DxH)	2.75 x 1.25 in (70 x 32 mm)
Weight	0.2 lb (0.1 kg)
Range	0 to 1000 fpm (0 to 5.08 m/s)



*Relays close to indicate alarm or loss of power.
Specifications subject to change without notice.

UNDERSTANDING, ACCELERATED

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