ENGINEERING DATA

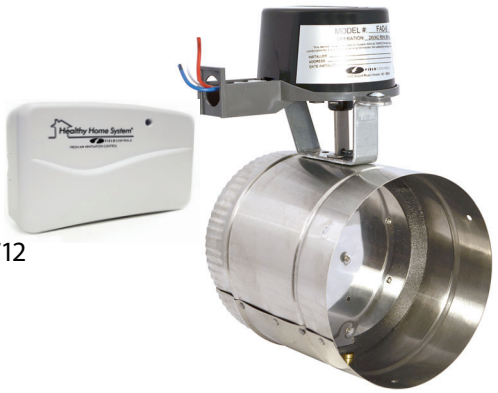
FIELD CONTROLS
Improving Indoor Environments

Model FAV

FAV Fresh Air Ventilation System
4" – 12" Models

Part No. 602600704, 602600705, 602600706, 602600707, 602600708, 602600710 and 602600712

*Patented



Healthy Home System®
FIELD CONTROLS

DESCRIPTION

The Fresh Air Ventilation (FAV) System is an intelligent, automatic, year-round ventilation system that integrates with an existing HVAC system and thermostat to meet ASHRAE 62.2 requirements.

ITEMS INCLUDED IN KIT

- FAD damper, 4" through 12" size
- Fresh Air Ventilation Control (FAVC)
- Mounting Hole Template
- Instruction Manual
- Mounting Packet containing two (2) Sheet Metal Screws
- ODT Sensor Packet containing temperature sensor, sheet metal screw and two (2) wire nuts

OPTIONAL ACCESSORIES

- C-Sensor: Current sensor compatible with E-Sensor and FAVC, used to provide makeup air by sensing operation of exhausting devices such as dryers, bath fans and range hoods. Passive device with no external power requirement.
- P-Sensor: Duct-mounted differential pressure switch compatible with FAVC inputs, similar use as C-Sensor, adjustable setpoint, may be installed on positive or negative pressure ducts.
- Heat/Energy Recovery Ventilators (HRV/ERV): The HRV/ERV products are designed to provide a balanced ventilation approach to a space to meet ventilation requirements while saving energy costs on heating or cooling fresh air from the outside. The HRV/ERV controls are compatible with FAVC exhaust terminals.
- Inlet Hood: Inlet hoods with screens are available to fit fresh air inlet diameters of 4, 5 and 6 inches from Field Controls.

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Field Controls
2630 Airport Road
Kinston, NC 28504

Customer Service: 252 522-3031
Tech Support: 800 742-8368

Visit us at: www.fieldcontrols.com

FAD FEATURES

- Power-Open, Power Close
- Very low power requirement
- Very low air flow resistance
- Stainless steel body and gate
- Tear-resistant closed-cell foam rubber seal tested 500K+ cycles
- Seal flammability meets FMVSS-302
- Gas Vent Damper motor and circuit board certified 100K+ cycles

FAVC FEATURES

- Normal or Economy Mode of Operation
- Multiple Climate Application Mode: Normal, Hot, Cold or Disabled
- Monitoring Capability (up to 4 appliances – multiple bath fans, exhaust fans, clothes dryer, range hood, draft assisted gas log fireplaces, and/or exhaust fan devices)
- Monitoring and Control Capability
- Built-in Selectable Enthalpy Control
- ODT sensor located in R/A ductwork
- Compatible with any HVAC system having accessible 24VAC R W Y G terminals:
  - Conventional Heat/Cool HVAC Systems
  - Heat Pump Systems
  - Hydronic Air Handlers
  - Stand-alone Configuration

FAD PRODUCT SPECIFICATIONS

Housing Material: 22 gage stainless steel

Seal Material: 1/16" cross-linked polyethylene

Voltage 18-30 VAC, 24VAC nominal

Maximum Operating Current 0.1 Amps

Power Draw Requirement 3W at 24 VAC when opening or closing

Timing: 15 seconds Power open, 15 seconds Power close

Operating Ambient Temperature Range -20°F to 150°F (0°C to 60°C)

Operating Humidity Range 5 to 90% RH (non-condensing)

Shipping Temperature Range -20°F to 160°F (-29°C to 71°C)

Recommended Max Velocity: 1000 ft/min

Recommended Max Pressure Differential: 1.0" wc

Leakage: under 0.5% at 0.5" wc

Mounting Restrictions: None, recommended motor at 12:00 if horizontal

FAVC PRODUCT SPECIFICATIONS

Power Requirements (Class 2 Appliance)

Power	
Input Voltage	20-30 VAC
Minimum VA Required	1.7 VA @ 24 VAC
Wiring Requirements	18-22 AWG, 24 VAC (Min)
Operating Temperature Range	10°F to 160°F
Operating Humidity Range	5 to 95% RH (non- condensing)

Outputs	
Fan Output GF (Maximum Load Current):	3A inductive @24VAC
Vent (V,V) (Maximum Load Current):	3A inductive @24VAC
Exhaust (E,E) (Maximum Load Current):	3A inductive @24VAC
Fan Intput GT (Monitor Circuit Current):	5mA @24VAC
Heat Input W (Monitor Circuit Current):	5mA @24VAC

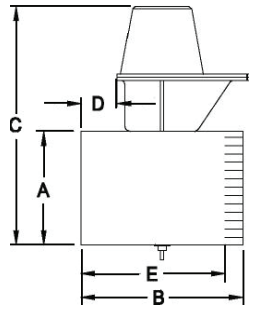
Isolated Inputs (Monitoring)	
Appliance #1 (A1, A1C)	5mA @24VAC, TVS protected
Appliance #2 (A2, A2C)	5mA @24VAC, TVS protected
Appliance #3 (A3, A3C)	5mA @24VAC, TVS protected
Appliance #4 (A4, A4C)	5mA @24VAC, TVS protected

P/N 780501400 10/18 Rev A

ENGINEERING DATA FAV

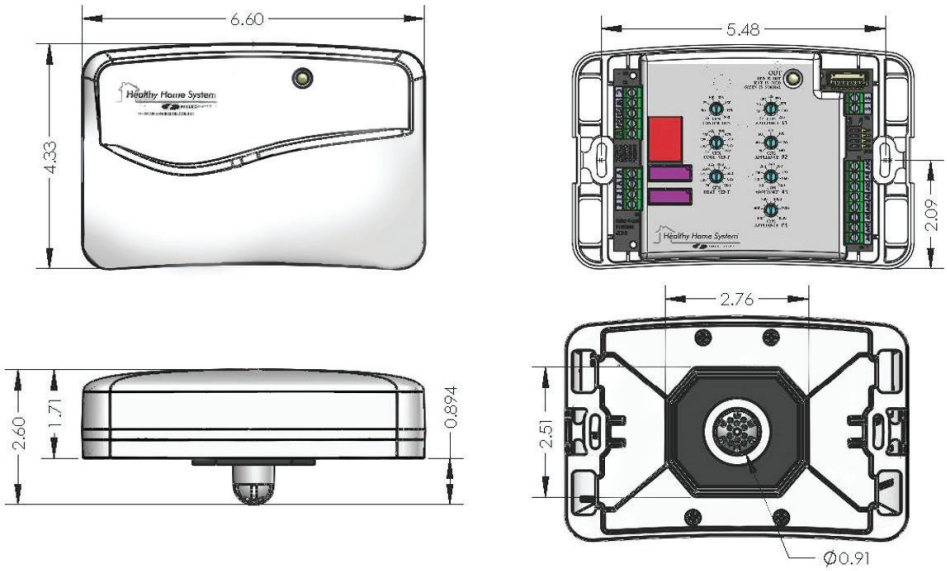
DIMENSIONAL DATA

FAD

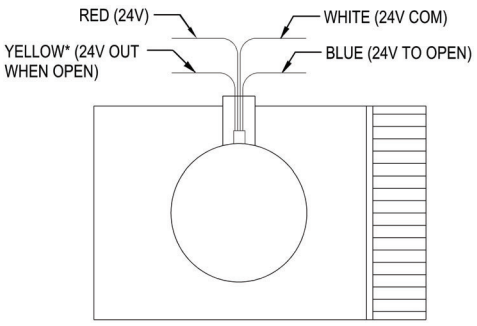


A Tube Size (Inches)	B Length (Inches)	C Total Height (Inches)	D (Inches)	E (Inches)	Weight (lbs.)
4	6	$9\frac{5}{8}$	$\frac{5}{16}$	5	2.5
5	6	$10\frac{5}{8}$	$\frac{5}{16}$	5	2.70
6	6 ½	$11\frac{5}{8}$	$1\frac{1}{8}$	5 ½	3.10
7	$7\frac{1}{16}$	$12\frac{5}{8}$	$1\frac{3}{8}$	$6\frac{1}{16}$	3.55
8	$8\frac{1}{16}$	$13\frac{5}{8}$	$1\frac{7}{8}$	$7\frac{1}{16}$	4.40
10	$12\frac{1}{8}$	$15\frac{5}{8}$	$3\frac{7}{8}$	$11\frac{1}{8}$	6.95
12	$12\frac{1}{8}$	$17\frac{5}{8}$	$3\frac{7}{8}$	$11\frac{1}{8}$	9

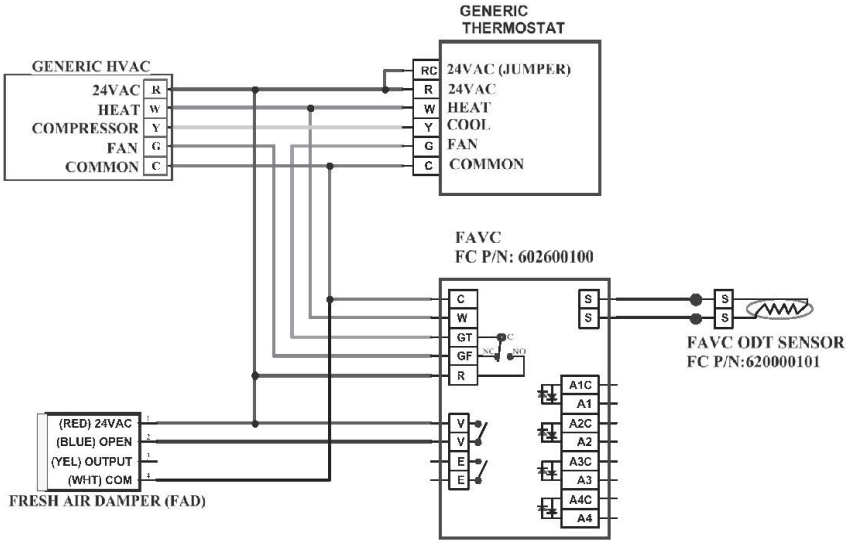
FAVC



FAD DAMPER CONTROL WIRING



WIRING DIAGRAM OF TYPICAL INSTALLATION



PROJECT INFORMATION

Quoted by:	Date:
Project:	Remarks:
Quantity:	
Model:	
Site:	
Architect:	
Engineer:	
Contractor:	

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