

ENGINEERING DATA



Model FAVC

Fresh Air Ventilation Control

Part No. 602600100



ITEMS INCLUDED IN KIT

- Fresh Air Ventilation Controller
- 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.
- Fresh Air Dampers (FAD) – Return air mounted fresh air dampers sizes 4" thru 20" compatible with FAVC Ventilation terminals. All are 24 VAC actuator powered units.
- 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.

DESCRIPTION

The Fresh Air Ventilation Control™ (FAVC) which is part of the Field Controls Healthy Home System™ product line interactively works with residential HVAC system thermostat, in conjunction with the central fan air handler system to periodically introduce controlled amounts of fresh air into the home. The FAVC is designed to provide fresh air ventilation all year long keeping energy conservation, indoor air quality and comfort in mind. The FAVC system meets the requirements of ASHRAE 62.2 standard for ventilation. The controller has several modes of operation: standard mode is designed to work in conjunction with your forced air HVAC fan system and an economy mode designed to function independent of your forced air HVAC fan system. The FAVC will continuously monitor indoor Relative Humidity and Temperature used to regulate R/A duct humidity in the winter months and to prevent humid conditions during the summer months by reducing the ventilation cycles during periods of high dew points. The FAVC will also monitor outdoor air temperature conditions using a sensor mounted to the duct in front of the Fresh Air Damper or Heat/Energy Recovery Ventilation products. The controller has built-in protection for furnace plenums during the heating months of winter and shoulder seasons that will prevent condensation and corrosion of the heat exchanger as well as preventing mold growth by habiting ventilation to control humidity levels in the controlled space. The FAVC can monitor multiple exhausting appliances with in your home to adjust ventilation needs based on total appliance operation along with the ability to cycle on/off multiple appliances (dampers, ERV/HRV, HVAC central blower and various exhausting device/fans) to evenly balance fresh air ventilation with in the home.

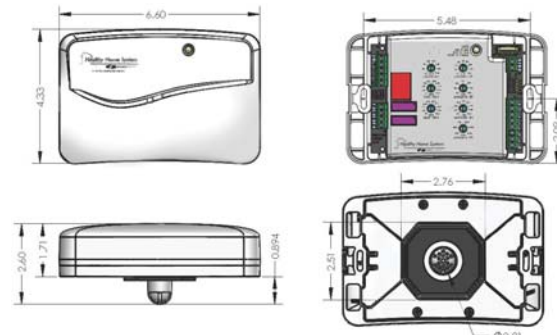
FEATURES

- Normal or Economy Mode of Operation
- Multiple Climate Application Mode: Normal, Hot, Cold or Disabled
- Simple Fresh Air Ventilation using Fresh Air Damper or HRV/ERV Devices
- 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
- Temperature 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

BENEFITS

- Smart Controller (adjusts ventilation time based on central fan and/or appliances in operation)
- Low power usage
- Simple Installation
- Complies with ASHRAE 62.2 2016
- Adjusts ventilation need based on 30-minute time periods
- Versatility (controls, monitors and CFM adjustable for appliances)
 - Controls three (3) appliances (including ventilation damper)
 - Monitors four (4) exhaust fan appliances
 - Adjustable air flow dial settings for each exhaust fan appliance
 - Individual Heat and Cool air flow settings for HVAC central fan
 - Ashrae 62.2 Continuous CFM dial setting
- Factory Pre-set settings
- New or existing single/multi-family operation
- Inhibits fresh air ventilation based on outside temperature levels and indoor relative humidity setting

DIMENSIONAL DATA



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Visit us at: www.fieldcontrols.com

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ENGINEERING DATA FAVC

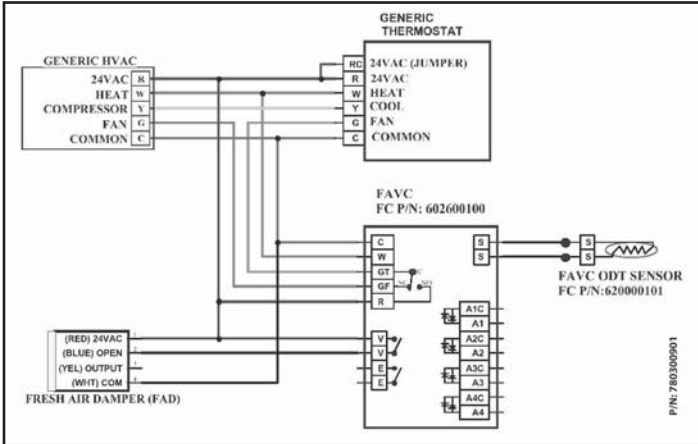
PRODUCT SPECIFICATIONS: Power Requirements (Class 2 Appliance)

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)

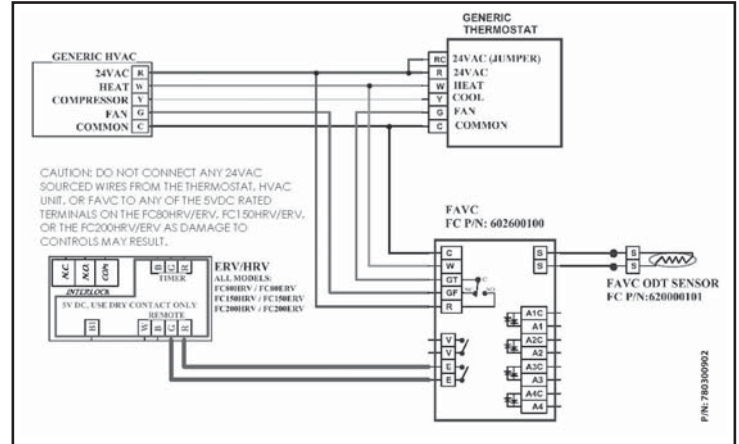
Outputs	
Fan Output GF (Maximum Load Current):	3A inductive @24VAC
Vent (V,V) (Maximum Load Current):	3A inductive @24VAC
Exhaust (E,E) (Maximum Load Current):	3A inductive @24VAC
Fan Input GT (Monitor Circuit Current):	5mA @24VAC
Heat Input W (Monitor Circuit Current):	5mA @24VAC

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

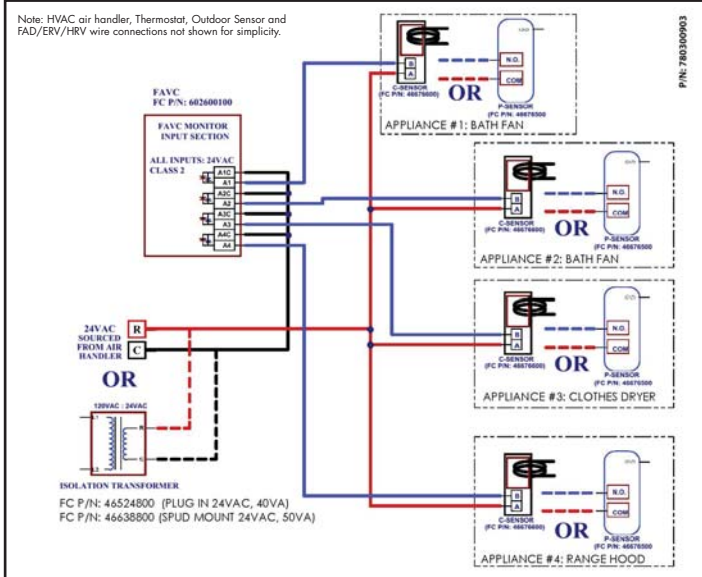
WIRING DIAGRAM FOR TYPICAL INSTALLATION (Fresh Air Damper Ventilation Only)



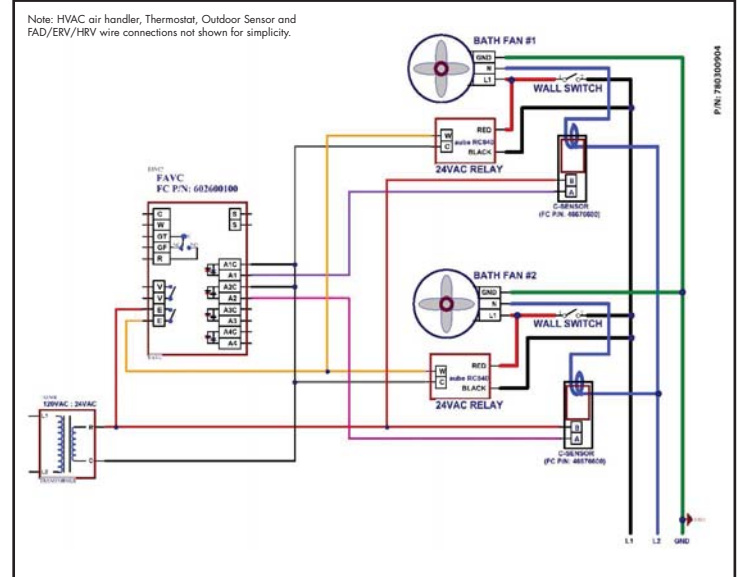
WIRING DIAGRAM FOR TYPICAL INSTALLATION (HRV/ERV Device Ventilation Only)



WIRING DIAGRAM FOR OPTIONAL MONITORING OF APPLIANCES 1 THRU 4



WIRING DIAGRAM FOR OPTIONAL MONITORING & CONTROLLING OF APPLIANCES 1 & 2



PROJECT INFORMATION

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



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