

# FAVC Fresh Air Ventilation Control



The **Fresh Air Ventilation Control (FAVC)** efficiently manages the central fan to ensure adequate ventilation. This control system not only monitors enthalpy conditions but also interfaces seamlessly with multiple additional exhaust fans, intelligently adjusting and delivering ventilation as needed. It can even respond to appliances like the clothes dryer, kitchen exhaust fans, or fireplace, optimizing airflow throughout the home.

The FAVC provides continuous fresh air ventilation while prioritizing energy conservation and homeowner comfort. By monitoring indoor relative humidity and outside temperature, the FAVC utilizes the fresh air duct to regulate humidity during winter and prevent excess moisture in summer. This proactive approach not only prevents mold but also safeguards against condensation and corrosion of the heat exchanger, ensuring a healthy indoor environment and durable system.

## Features

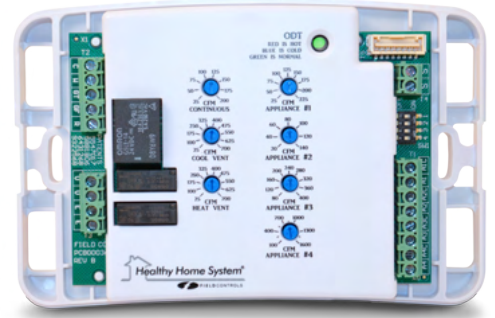
- Meets ASHRAE 62.2 ventilation standards for superior air quality
- Enhances ventilation control accuracy with a fresh air duct-mounted sensor
- Tailors ventilation inhibit parameters to three selectable climate zones
- Adjusts ventilation based on up to four exhaust appliances' operation
- Maintains balanced airflow by providing make-up air in response to exhaust
- Saves energy by using an independent exhaust fan for ventilation
- Ensures a comfortable indoor environment by constantly monitoring Relative Humidity levels

# How It Works

The Fresh Air Ventilation Control offers two modes. Standard mode works with your forced air HVAC fan system, while economy mode operates independently. It monitors indoor relative humidity and temperature to regulate R/A duct humidity in winter and prevent humidity in summer by adjusting ventilation cycles during high dew points. Outdoor air temperature is also monitored with a duct-mounted sensor. The FAVC protects furnace plenums from condensation, corrosion, and mold growth during heating months. It can monitor multiple home appliances to adjust ventilation and balance fresh air circulation effectively.

## Enhancing Indoor Air Quality

Today's energy-efficient homes, with improved insulation and tighter seals, often trap stale and unhealthy indoor air. The ASHRAE 62.2 fresh air ventilation standard aims to address this issue by ensuring sufficient air changes to enhance indoor air quality. Exhaust only fans, commonly found in bathrooms, can introduce air from potentially unhealthy sources like the garage, attic, or crawl space, creating negative pressure in the home.



### OPTIONAL APPLIANCE MONITORING CONTROLS

Appliance Dial	Appliance Type	Appliance CFM	Standard Configurations	Operating Humidity Range
#1	Bathroom Fan, HRV/ERV Unit	25 - 255	Offers balanced ventilation by monitoring the appliance and takes credit for ventilation requirements when appliance #1 fan runs, preset at 75 CFM	Energy Saving Mode <ul style="list-style-type: none"> <li>• Can drive appliance #1 in lieu of central fan</li> <li>• Takes credit for ventilation with damper when heating and cooling</li> <li>• Drive appliance #1 fan when additional ventilation is required within the heating/cooling cycle</li> <li>• Gets energy credit when the bathroom fan is used</li> </ul>
#2	Bathroom Fan	20 - 140	Monitors appliance #2, preset at 75 CFM	
#3	Clothes Dryer, Standard Rand Hood	80 - 400	Passive Make Up Air Mode opens when appliance #3 is on, preset at 200 CFM	Active Make Up Air Mode <ul style="list-style-type: none"> <li>• Turns on central fan and opens damper when appliance #3 runs</li> </ul>
#4	Fireplace, Commercial Range Hood	100 - 160	Monitors appliance #4, preset at 850 CFM	Active Make Up Air Mode <ul style="list-style-type: none"> <li>• Turns on central fan and opens damper when appliance #4 runs</li> </ul>

### FRESH AIR VENTILATION CONTROL SPECIFICATION

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