

CI/SfB

(57.7)

1st edition

wholehouse ventilation



Sentinel Multivent

Wholehouse Ventilation Solutions



Vent-Axia

Vent-Axia Sentinel® Multivent

Wholehouse Mechanical Extract Ventilation System

Ventilation Lo-Carbon Energy saving solutions

Sentinel Multivent continuous mechanical extract ventilation, C-MEV is designed for the simultaneous ventilation of separate areas in the home or as a multi-point extraction system for a wide range of commercial applications such as stalls in lavatories, fitting rooms and kiosks. The units can be installed at any angle. Where the ambient air has a high humidity content condensate drains are provided.

Sentinel Multivent meets the latest requirements of the [Building Regulations Document F 2006](#) (System 3) for wholehouse system ventilation.

In support of Sentinel Multivent, Vent-Axia offers:

- Practical advice on product selection and installation
- Guidance on solutions to meet legislation requirements
- Project management and site deliveries
- After sales support and maintenance information

The need to save energy costs

Rising fuel prices are placing an increasing burden on organisations as they seek to reduce consumption.

- Energy efficient EC/DC motors - 1/3 less energy lost to heat than a conventional AC motor
- Low Specific Fan Power (SFP) making it one of the most efficient products on the market

The need to improve efficiency

Sentinel Multivent has been designed to meet the exacting demands of developers, installers and users offering advanced control options and easier installation and commissioning.

- Demand Control – enables precise ventilation rate to be set based on property size within 1° of PWM.
- Integral LCD display allows installer to select appropriate low, normal and boost speeds to meet demand

- Manual and automatic control options
- Integral adjustable overrun timer and delay on timer
- Plug-n-Play automatic sensor detection
- Switched live and SELV connections
- Dry Out setting – Option set at installation, Sentinel Multivent will run on boost for 1 week to assist in removing moisture
- Optional Wireless Control – up to 4 controllers on any one system

The need to meet legislation

Through the Code for Sustainable Homes Level 3 the UK is designed to deliver a 25% reduction in CO₂ levels compared to the 2006 Building Regulations.

- Meets Building Regulations Part F (System 3)
- SAP Appendix Q listed up to kitchen + 6 wet rooms
- Meets carbon footprint reduction targets
- Lowest SFP figures of any demand control MEV system

The need for better health

Removal of pollutants, such as moisture, carbon dioxide and external fumes are all important factors in maintaining indoor air quality, helping to create a better living environment.

- The integral humidity sensor increases fan speed in proportion to relative humidity levels, saving energy and reducing noise. The sensor also reacts to small but rapid increases in humidity, even if the normal trigger threshold is not reached. This unique feature ensures adequate ventilation, even for the smallest wetroom.
- Night time relative humidity increment setback feature suppresses nuisance tripping as humidity gradually increase with falling temperature
- Acoustically lined - low noise levels only 18.1 dB(A) @3m



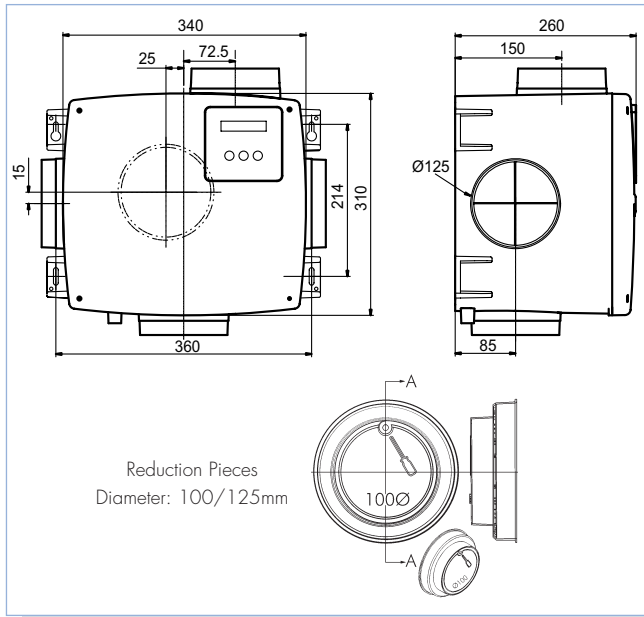
Features and Benefits

- Reduces your carbon footprint
- SAP Appendix Q Listed
- Specific fan power 0.19 W/l/s (K+1)
- Suitable for use with external sensors and controllers
- Optional integral humidity sensor and wireless control available
- Ultra quiet - acoustically lined for low noise levels
- Complies with Building Regulations Part F (System 3)
- Manufactured in the UK from recyclable materials

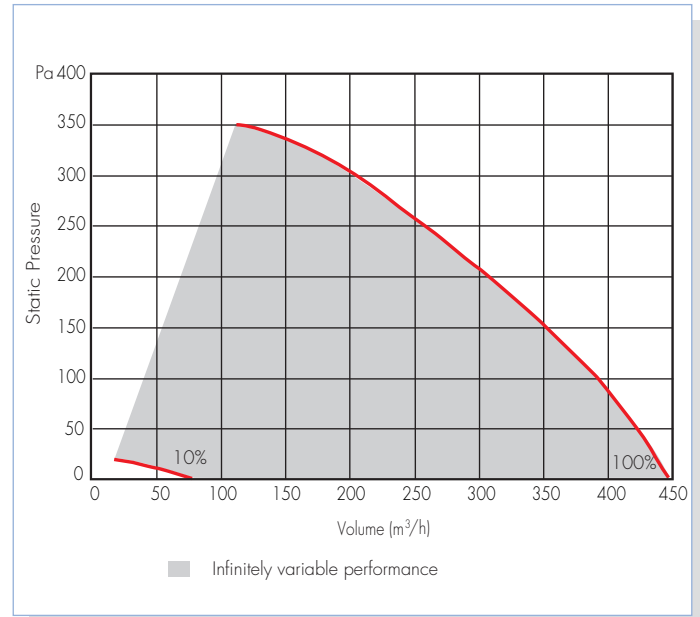


- allowing you to help the environment by reducing yo

Dimensions (mm)



Performance



Performance Guide

Sentinel Multivent Stock Ref. No.	MIN					MAX				
	Casing Breakout dB(A) @ 3m	Inlet Duct dB(A)	Speed (pwm)	FID l/s	Power Watts	Casing Breakout dB(A) @ 3m	Inlet Duct dB(A)	Speed (pwm)	FID l/s	Power Watts
437601	18.1	17	10%	17	4	36.8	35	100%	125	50

Sound levels are based on standard product with no additional acoustic materials @ 3m.

Sound Data

Speed (PWM)		Induct sound power levels dB								dB(A) @ 3m
		63	125	250	500	1K	2K	4K	8K	
10%	Breakout	43.6	37	36.9	30.6	26.2	22.8	23.6	30.4	18.1
	Extract	43.8	39.9	36.1	30.4	24.6	21.8	22	30.3	17.8
28%	Breakout	44	44.4	43.3	39	31.1	26.1	24.3	30.1	22
	Extract	42.2	40.1	42.2	40.5	32	23.3	23.4	30.5	22
46%	Breakout	45	42.8	46.7	44.1	38.8	35.6	26.7	30.6	25.8
	Extract	40.8	42.5	46.4	44.4	41	31.1	25.3	30.3	26
82%	Breakout	46.3	48.3	50	52.1	48.4	47.7	37.8	32.4	33.7
	Extract	46.7	49.6	48.9	54.3	51.8	42.7	38.1	34.2	36.1

Your Carbon Footprint

The Carbon Footprint is a measure of the amount of carbon dioxide (CO₂) emitted through the burning of fossil fuels. From a residential and commercial building perspective, it is the amount of carbon generated when you produce a kilowatt of electricity. Reducing a building's carbon footprint will ultimately reduce electricity bills and save money for every individual household or business. It will also help meet the UK target for the reduction of emissions, as well as allowing you to help the environment.



Your carbon footprint

Controllers and Sensors

Sentinel Multivent can be used with a wide range of Vent-Axia controllers and sensors. Ranging from integral humidistats, through wireless controllers to wired remote sensors.



Integral Humidistat

- ✓ Simple Plug-n-Play installation
 - ✓ Eliminates the need for additional controllers or sensors
 - ✓ Reacts to any rapid increases in relative humidity or relative humidity above 60%
 - ✓ Future proof – can be fitted after installation
 - ✓ Self programming
- Stock Ref. No. 437598



Wireless Transmitter Controller Receiver Kit

- ✓ Manual boost
- ✓ Adjustable overrun timer
- ✓ Easy wire-less installation
- ✓ Reduces installation time
- ✓ Future proof - add more controllers at any time

Stock Ref. No. 439352



Wireless Transmitter Controller

- ✓ Additional controller for 439352
- ✓ A maximum of 4 controllers can be used per system
- ✓ Can be connected to other accessories (eg Humidistat) to send a boost signal wirelessly

Stock Ref. No. 437827



Ambient Response Humidity Sensor

- ✓ Pullcord override and neon indicator
- ✓ Changeover relay switch
- ✓ Operating range: 30% - 90%RH
- ✓ Ambient operating temp. 5°C to 40°C
- ✓ 220-240V AC
- ✓ Will fit single gang box for surface mounting

Stock Ref. No. 563550A



Ecotronic Humidity Sensor

- ✓ Set Point adjustable
 - ✓ Maximum switching load 1 amp inductive
 - ✓ Pullcord override indicator
 - ✓ Ambient operating temp. 0°C to 40°C
 - ✓ Supply voltage 220-240V
- Stock Ref. No. 563532A



Air Quality Sensor

- ✓ Ambient operating temp. 0°C to 50°
- ✓ Min - Max mode or direct damper control
- ✓ Surface mounted
- ✓ 1 - 25 min O/R timer
- ✓ Supply voltage 220-240V

Stock Ref. No. 563506B



Visonex PIR Sensor

- ✓ Fits any UK single gang mounting box
- ✓ Adjustable timer overrun (5-25 mins)
- ✓ Range of detection up to 10 metres
- ✓ Designed to meet IP43
- ✓ Ambient operating temp. range 0°C to 50°C

Stock Ref. No. 459623A



CO₂ + Temp Room Sensor

- ✓ 240V DC
- ✓ 0 - 2000ppm CO₂ working range.
- ✓ 0 - 50°C working range
- ✓ Auto-calibrating NDIR CO₂ absorption sensor
- ✓ Thin film platinum temperature sensor for high accuracy

Stock Ref. No. 433257



Ventwise

- ✓ Automatically boosts fan when temperature of the supply pipe to a shower or bath increases
- ✓ Automatically boosts fan when electric hob is switched on
- ✓ Can be used in conjunction with manual override input
- ✓ Adjustable overrun timer
- ✓ Two sensor options available.

Stock Ref. No. 435960

For sensor options please contact Vent-Axia Sales.

* Savings are based on an annual usage of 24 hours per day

Vent-Axia Sentinel® Multivent

SAP Appendix Q

- allowing you to help the environment

SAP Appendix Q

In order to make the right choice, developers and contractors should refer to Building Regulations Part L1a SAP 2005 and Appendix Q.



SAP Appendix Q was launched in June 2006 to reward innovative ventilation manufacturers by testing and listing energy efficient products that assist in helping developers meet their Target Emission Rates (TER).

SAP is the underpinning methodology behind the Energy Performance Certificates and is used to demonstrate compliance with Building Regulations for Dwellings - Part L (England and Wales), Section 6 (Scotland) and Part F (Northern Ireland). Appendix Q specifically relates to wholehouse ventilation systems and lists a number of Vent-Axia Mechanical Ventilation solutions which offer an improved SAP rating over and above the default for these product types.

SAP Appendix Q Test Results

Exhaust Terminal Configuration	Total Flow Rate (l/s)	Specific Fan Power (W/l/s)
Kitchen + 1 additional wet room	21.0	0.19
Kitchen + 2 additional wet rooms	29.0	0.20
Kitchen + 3 additional wet room	37.0	0.24
Kitchen + 4 additional wet room	45.0	0.27
Kitchen + 5 additional wet rooms	53.0	0.32
Kitchen + 6 additional wet rooms	61.0	0.38

To assist developers and contractors Vent-Axia can provide detailed scheme designs together with installation guidance and training.

