

Vent-Axia®

Improving Indoor Air Quality since 1936

Product Selector

Edition 18.5

www.vent-axia.com



Why choose Vent-Axia

Vent-Axia has been active for over 85 years in supplying ventilation solutions to countries around the world, whose Building Regulations demand the most effective, sustainable and energy efficient ventilation solutions.

We are with you all the way

- Unparalleled customer service
- Industry leading design support
- Providing support and solutions on-site

Availability

- With the widest distribution network of any manufacturer in the UK we pride ourselves on having products available when and where you need them

Product Solutions

- Whatever the product category, we have the most energy efficient systems available
- Unique solutions designed to fit into all your buildings
- With absolute focus on the end user we work hard to produce the quietest, most comfortable products for occupiers to live with



Made in Britain

Employing over 800 people across 3 manufacturing sites, we continue to invest in UK manufacturing.

Being in control of manufacture of the component parts including motors and mouldings all within the UK, we reduce our lead times as well as our carbon footprint.

Vent-Axia Group Ltd

Crawley - Unitary plastic fan manufacture

- Our largest total manufacturing and office space with over 230,000 sq. ft. housing the Vent-Axia Head Office
- Manufacturing and warehouse space totals 108,000 sq. ft.
- Manufacture of plastic ventilation ranges
- Design and test facilities for rigorous product testing including safety, airflow and climate chambers – BEAB approved
- Head Office functions including Sales Office, Customer Services, Technical Support and Marketing

Reading - Plastic Moulding and extrusion manufacture

- State of the art production facility
- Injection and extrusion factory running 24 hours a day
- Over 30 injection moulding machines
- 5 extrusion lines for rigid and flexible duct

Dudley - Systems and Industrial manufacture

- 120,000 sq footage of manufacturing and warehousing space
- Manufacturing base for our metal products including Sentinel Demand Ventilation and Sentinel Totus
- Also the home of our heat recovery (MVHR) and Multivent (MEV) products



Technical Advice

Free technical, installation and sales advice is available from the Vent-Axia Technical Support Centre.

Distribution

Vent-Axia products are available from all leading stockists. For further information, or in case of difficulty, please contact the Vent-Axia Sales Centre in Crawley.

Sound Levels

Vent-Axia has a state of the art sound testing facility at Crawley (UK) providing sound power levels for comparison purposes tested in accordance with ISO 13347-1:2004 and ISO 13347-2:2004. This is an international standard that describes methods for determining sound power levels of fans in one-third octave bandwidths to allow comparisons to be made between different products from different manufacturers in a fair and consistent manner.

The data is not intended to equal the sound power levels experienced in any specific installation but enable the customer to compare different products and make an informed decision on their requirements.

Each installation will use different building materials that can have an effect on how sound is absorbed and/or reflected. It is therefore very difficult to predict the exact sound power levels exhibited in any given installation.

Performance

Tested in Vent-Axia test laboratories, performance testing is carried out in a balanced chamber test duct to BS 848: Part 1. This has a booster fan to overcome the system resistance.

The volume flow is measured by a pressure drop across a calibrated orifice plate at the entry to the system.

An adjustable damper provides a variable resistance to the test fan enabling its performance characteristics to be measured. Unless stated otherwise, the rated figures given are at free air performance.

BS EN ISO 9001/14001

Vent-Axia limited is certified by the British Standards Institution to BS EN ISO 9001 Cert. No. FM1792 QAS No. 3284/37, and BS EN ISO 14001 Cert. No. EMS600403.

Intellectual Property

Products shown in this catalogue include aspects which are protected under patent, copyright, design copyright, registered design and trademark laws. Vent-Axia will take all necessary legal action in any part of the world against any party found to be manufacturing, distributing, selling or otherwise dealing with any article which infringes the Company's rights in its products.

Warranty

Applicable to units installed and used in the United Kingdom.

For details of warranty outside the United Kingdom, contact your local supplier.

Please visit our website www.vent-axia.com/help/product-warranties for details of warranty periods.

In the event of any part being found to be defective, the appliance will be repaired, or at the Company's option, replaced, without charge, provided that:

1. The product has been installed and used in accordance with the instructions given with each unit;
2. The product has not been connected to an unsuitable electrical supply (the correct electricity supply voltage is shown on the appliance rating label attached to the unit);
3. The product has not been subjected to misuse, neglect or damage;
4. The product has not been modified or repaired by any person not authorised by the Company;
5. The application is within the specification of the unit;
6. The product is connected to Vent-Axia switch gear;
7. Thermal overload protection has been correctly connected;
8. The product has been subject to regular maintenance appropriate to the installation;
9. When returning the product under warranty, evidence of purchase is provided.

Conditions of sale

All sales by Vent-Axia are made only upon the terms of the Company's Conditions of Sale (www.vent-axia.com/help/conditions-sale), a copy of which may be obtained upon request.

Online Ventilation & Heating Tools

Each tool has been designed with you in mind, making it simple to use and effective to apply, visit www.vent-axia.com/tools-services.

Online Product Selector

Our fully comprehensive online product selector tool. Choose from our complete specification range to best suit your project.

Online CPD

Vent-Axia offers a selection of CPD material online. With the addition of a questionnaire, you can independently complete your chosen module at your own convenience.

Online Trade Counter

Distributors with accounts can log in or register to check our livestock system for prices & stock availability & also review your previous trade orders.

Online Heating Calculators

By using the Vent-Axia Online Sizing Guides, you will be able to determine which product is suitable for you, helping you to achieve thermal comfort all year round.

Online Axial Fan Calculator

An interactive tool to help you calculate the installed performance of an axial fan when it's being tested with a vane anemometer.

Energy Related Products Directive (ErP)

The Eco-design for Energy-Related Products 2010 legislation regulates energy-consuming products.

The legislation sets minimum performance criteria across a range of fans, ventilation devices and heating products.

As of January 2016 ventilation devices over 30 Watts came under the scope of the Energy Related Products Directive under two sets of legislation; 'residential' ventilation and 'non-residential' ventilation, with levels further tightened in January 2018.

As of January 2018 the Directive came in to force for local space heating products, including storage heaters, electric radiators, radiant heaters and underfloor heating.

As a result of the legislation we reviewed our products and where required made updates to ensure they comply. The primary changes have meant that a number of products have had alternative motors specified or have been updated to enable speed control. In the case of heating, some products have been discontinued or updated to new models. Through the review we have also taken the opportunity to rationalise our range where needed. All relevant products in this literature have been updated as required by the ErP legislation. Please note that where a product changes due to ErP, there will be a transitional period as we move from the old to the new model, and any stock you currently hold will not be affected by this regulation and can be sold as normal.

Residential Fans

Residential Products has a secondary directive which requires some products to carry an energy label as described below:

Residential Ranges – Small fans

The majority of small residential fans are unaffected by the legislation as any device below 30 Watts is currently out of scope. The information on them is recorded however and can be found at www.vent-axia.com/erp

MVHR and MEV products

These products do come into the scope of the legislation and will carry an energy label. There are some minimum energy efficiency requirements as well as the requirement for a summer bypass on heat recovery models. A small number of our products have been updated to ensure they meet these requirements.

Energy Efficiency Class

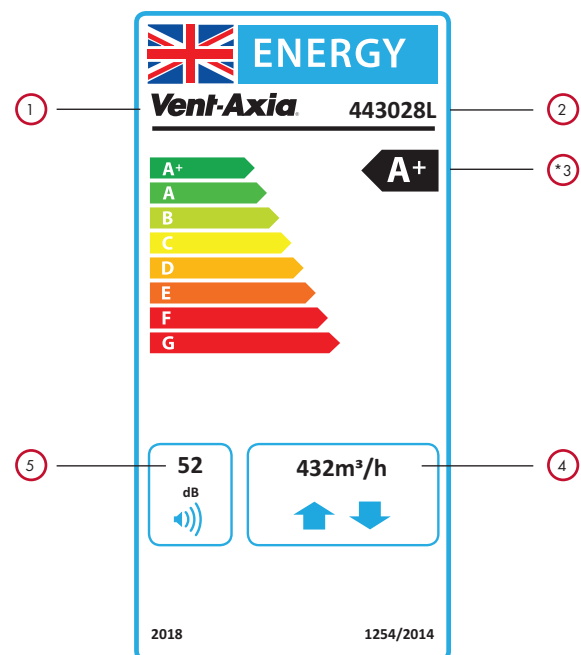
Products within the scope of ErP now carry a rating that shows their Energy Efficiency Class. This information is called a 'SEC Class' and is provided in all product literature and on the energy label.

A product's SEC class is affected by how the product is controlled. This is referred to as Local Demand Control (LDC) and indicates how many 'sensors' a fan should have. The regulations require that single room fans, such as a bathroom fan, should have at least 1 sensor. Units that are ducted, such as an MEV unit, need to have more than one sensor. Examples of these are a pull cord/light switch or humidistat.

In our literature, where appropriate we have shown the rating if an additional LDC was added to a product. In those cases, you will see a table similar to the one below which has a heading (incl LDC). This is so you can choose the most efficient option for your needs.

SEC Rating Example

| Model | SEC Class* | SEC Class (incl. LDC) |
|-------|------------|-----------------------|
| HR200 | C | B |



Non-Residential Ranges

Non-Residential products have had minimum performance and efficiency levels tightened, but there is no requirement to introduce energy labels. Some products have been updated with new motors and enabled for speed control.

Non-Residential ranges are split into a number of different categories dependent on their application and function. These can be described as follows:

1. Fans
2. Uni-directional Ventilation Units
3. Bi-directional Ventilation Units

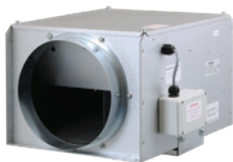
1. Fans

These are products where there is a simple single case that directs air on and off the impellor. Examples include axial plate and case fans. These examples are out of scope of this legislation.

2. Unidirectional ventilation units

This includes products that are one direction only, and where there is a secondary housing around a fan.

This is the product category which required the most changes. The impact of the efficiency legislation meant that it became virtually impossible to comply using a forward curved AC centrifugal fan. We therefore moved to backward curved centrifugal fans in all of our AC box fan ranges. This meant changes to the box sizes and adjustment to performances, the following ranges are particularly affected.



ACQ/ATQ



QP/QPTW

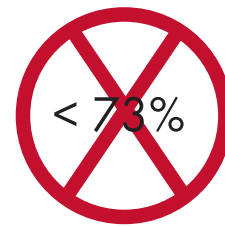
We had a number of product ranges that were reaching the end of their life cycle and we have taken the opportunity to rationalise these. See our latest Specification Brochure for specific details on our current ranges.

We have also increased our use of EC motors by replacing the old SLP and SLPT range with a new EC version with basic integral commissioning potentiometer allowing the installer to set the exact performance requirements without need for additional controls and wiring.

3. Bi-directional ventilation units

These are product ranges that both supply and extract such as heat recovery units.

There are now minimum energy requirements set for heat recovery efficiency. Any product with an efficiency of 72% or lower does not comply. The Sentinel Totus² Range of heat recovery units has efficiencies of up to 90% which comfortably exceed this minimum requirement. See our Specification Brochure for more details.



Heat recovery minimum efficiency

Electric Space Heating

From 1st January 2018, under 'Lot 20' all local electric space heaters must comply with a minimum efficiency standard. The aim of this legislation is to remove inefficient technologies and reduce the energy used by the products that heat our homes.

In order to comply with the Lot 20 regulations, all local space heaters have to meet a minimum efficiency.

As a result, the following products have been discontinued:

- Optimax Plus Combination storage Heater
- Portable Fan Heater
- Downflow heater
- Plinth heater

Replacements for these products may be introduced in the future.

The following products have been updated to a Lot 20 compliant model:

- Optimax Plus Panel Heater
- Optimax Plus Storage Heater

Contents

| | | | |
|--|---------|--|---------|
| AIR PURIFIERS | A1-A6 | Centrif Duo Centrifugal Kitchen & Utility Room Fan | C25-C26 |
| Vent-Axia PureAir Room 500 X with CodiKoot | A3-A4 | Centrif Duo Plus Centrifugal Kitchen & Utility Room Fan | C27-C28 |
| Vent-Axia PureAir Room | A5-A6 | Freshvent Natural Vent | C29-C30 |
| | | Basics Range | C31-C32 |
| | | Eclipse Bathroom & Kitchen Axial Fan | C33-C34 |
| LO-CARBON RESIDENTIAL FANS | B1-B27 | | |
| Vent-Axia Lo-Carbon iQ Bathroom/Toilet Fan | B3-B4 | dMEV, MEV & PIV SYSTEMS | D1-D20 |
| Vent-Axia PureAir Sense Bathroom/Toilet Fan | B5-B6 | NEW Lo-Carbon NBR dMEV C | D3-D4 |
| Lo-Carbon Svava Axial Bathroom/Toilet Fan | B7-B8 | Lo-Carbon Centra®/SELV dMEV Unit | D5-D6 |
| NEW LoCarbon Silent Fan Axial Bathroom/Toilet Fan | B9-B10 | Lo-Carbon Response 7/SELV dMEV Unit | D7-D8 |
| Lo-Carbon VA100®/SELV Axial Bathroom/Toilet Fan | B11-B12 | Lo-Carbon Sentinel® Multivent/Plus | D9-D12 |
| Lo-Carbon Silhouette® 100/SELV Bathroom/Toilet Fan | B13-B14 | Lo-Carbon MVDC-MS/MSH Multivent | D13-D14 |
| Lo-Carbon Centra®/SELV dMEV Unit | B15-B16 | Lo-Carbon NBR dMEV/dMEVe | D15-D16 |
| Lo-Carbon Revive/SELV Bathroom/Kitchen Filterless Fan | B17-B18 | Lo-Carbon PoziDry Pro Positive Input Ventilation | D17-D18 |
| Lo-Carbon Solo Plus/SELV Centrifugal Bathroom/Toilet Fan | B19-B20 | Lo-Carbon PoziDry Compact Pro Positive Input Ventilation | D19-D20 |
| Lo-Carbon Minivent Ducted Bath/Shower Fan Kit | B21 | | |
| Lo-Carbon LED Vent-A-light Ducted Bath/Shower Fan Kit | B22 | SINGLE ROOM dMVHR | E1-E8 |
| Lo-Carbon Quadra® Centrifugal Fan | B23-B24 | NEW Lo-Carbon Calido | E3-E4 |
| Lo-Carbon Silhouette® 125 Bathroom/Toilet Fan | B25 | Lo-Carbon Heat Save/Alternate Flow Heat Recovery | E5-E6 |
| Lo-Carbon VA150 Axial Kitchen & Utility Room Fan | B26 | Lo-Carbon Temptra/SELV Single Rm Heat Recovery | E7-E8 |
| Lo-Carbon Silhouette® 150 Axial Kitchen Fan | B27 | HR200WK/WJ Single Rm Heat Recovery | E9-E10 |
| | | | |
| RESIDENTIAL FANS | C1-C34 | MVHR FOR COMMERCIAL & RESIDENTIAL | F1-F60 |
| VA100/SELV 12 Axial Bathroom/Toilet Fan | C3-C4 | Lo-Carbon Sentinel Advance MVHR Unit | F3-F6 |
| Silhouette 100/SELV Axial Bathroom/Toilet Fan | C5-C6 | Lo-Carbon Sentinel Kinetic® Range Overview | F7-F10 |
| NEW Silent Fan Axial Bathroom/Toilet Fan | C7-C8 | Lo-Carbon Sentinel Kinetic® MVHR Unit | F11-F14 |
| Silhouette 125 Axial Bathroom/Toilet Fan | C9-C10 | Lo-Carbon Sentinel Kinetic® FH MVHR Unit | F2-F18 |
| LED LuminAir Fan & Light Combination Unit | C11-C12 | Lo-Carbon Sentinel Kinetic® Plus MVHR Unit | F19-F22 |
| LED LuminAir Fan & Light Ventilation Kit | C13-C14 | Lo-Carbon Sentinel Kinetic® High Flow MVHR Unit | F23-F26 |
| LED LuminAir Turbo Fan & Light Ventilation Kit | C15-C16 | Lo-Carbon Sentinel Kinetic® Cooker Hood MVHR Unit | F27-F30 |
| Solo Plus Centrifugal Bathroom/Toilet Fan | C17-C18 | Lo-Carbon Sentinel Kinetic® Horizontal MVHR Unit | F31-F36 |
| Solo Pro/SELV Centrifugal Bathroom/Toilet Fan | C19-C20 | Lo-Carbon Kinetic® Plus E MVHR Unit | F37-F40 |
| VA140/150 Axial Kitchen Fan | C21 | Integra Ducted MVHR Unit | F41-F42 |
| VA150 Window Mount Axial Kitchen Fan | C22 | Integra Plus EC Ducted MVHR Unit | F43-F44 |
| Silhouette 150 Axial Kitchen Fan | C23-C24 | | |

| | | | |
|---|---------|---|---------|
| HR100R/RS Ducted MVHR Unit | F45-F46 | ACCESSORIES & CONTROLLERS | L1-L18 |
| HR500 Single Room Heat Recovery Unit | F47-F48 | | |
| HR500D Ducted MVHR Unit | F49-F50 | ROOF UNITS INDUSTRIAL | M1-M57 |
| HR500EP/IP Passive HR Unit | F51-F52 | EuroSeries (SDX EC) In-Line Centrifugal Duct Fans | M3-M6 |
| HR500DP Passive HR Unit | F53-F54 | EuroSeries® (ESP) Plate Mounted Axial Fans | M7-M14 |
| | | EuroSeries® (ESC) Short Case Axial Fans | M15-M22 |
| | | EuroSeries® (ESR) Fan Assisted Roof Cowl | M23-M30 |
| DUCTING & FITTINGS | G1-G36 | Quiet Pack (QP) In-Line Centrifugal Duct Fans | M31-M34 |
| | | Quiet Pack (QPTW) In-Line Twin Fans | M35-M38 |
| COMMERCIAL RANGE | H1-H38 | Slimpak EC Box Fan (SLP EC) In-Line Centrifugal Duct Fans | M39-M44 |
| ACM 100-315 In-Line Mixed Flow Fan | H3-H6 | Slimpak EC Twin Fan (SLPT EC) In-Line Twin Duct Fans | M45-M50 |
| Powerflow In-Line Duct Fan | H7-H8 | EuroSeries® (SDX) In-Line Centrifugal Duct Fans | M51-M54 |
| Lo-Carbon T-Series | H9-H18 | Speed Controllers Single & Three Phase | M55-M56 |
| Traditional T-Series | H19-H32 | Starter & Overloads | M57 |
| Super T-Series Powerful Heavy Duty Wall Fan | H33-H34 | Sonex Circular Sound Attenuators | M58 |
| Traditional Standard Range | H35-H38 | Pyrocheck (CVT) Intumescent Fire Dampers | M59 |
| | | Unitex Roof Cowl System | M60 |
| HYGIENE | I1-I6 | Unitex Wall Terminal (SA & QSA) | M61 |
| Hand Dryers | I3-I5 | | |
| Insect Killers | I5 | | |
| Hand Sanitiser/ Soap Dispenser | I5 | | |
| | | | |
| COOLING | J1-J6 | | |
| Hi-Line Plus 35-55" Ceiling Sweep Fans | J3 | | |
| Stanza 48" Ceiling Sweep Fans | J4 | | |
| Jupiter De-Stratification Unit | J5 | | |
| 12" Wall Fan Portable Cooling | J6 | | |
| | | | |
| ELECTRIC HEATING | K1-K8 | | |
| Heated Towel Rails | K3-K4 | | |
| Radiant Heaters | K5-K6 | | |
| Lot 20 Panel Heater | K7 | | |
| Warm Air Curtains | K8 | | |

Air Purifiers



The Vent-Axia PureAir Room cleans the air that you breathe, protecting your health from the 900 chemicals, particulates and biological materials in the air inside your home.

The system provides an advanced multistage air cleaning system which removes these harmful particles, neutralises bad smells and removes pollen and pet allergens; purifying the air you and your family breathe for a fresher and healthier indoor environment.

Suitable for any internal habitable room, the purifier is portable so you can move it to where you need it most. It works automatically sensing the air quality and delivering increased filtration when it's needed.

Vent-Axia®



Air Purifiers



The Vent-Axia PureAir Room cleans the air that you breathe, protecting your health from the 900 chemicals, particulates and biological materials in the air inside your home.

The system provides an advanced multistage air cleaning system which removes these harmful particles, neutralises bad smells and removes pollen and pet allergens; purifying the air you and your family breathe for a fresher and healthier indoor environment.

Suitable for any internal habitable room, the purifier is portable so you can move it to where you need it most. It works automatically sensing the air quality and delivering increased filtration when it's needed.

Vent-Axia®





Vent-Axia PureAir Room 500 X with CodiKoat
Portable Air Purification Unit

A3-A4



Vent-Axia PureAir Room
Portable Air Purification Unit

A5-A6

Vent-Axia PureAir Room 500 X with CodiKoat

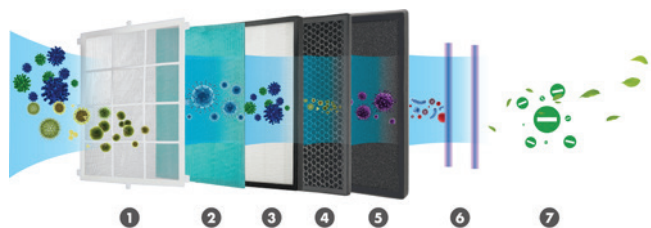
- Seven-stage air purifier including a medical grade H13 HEPA filter
- Removes 99.9% of airborne particles including COVID-19, viruses and bacteria
- UV sterilisation and Ionizer built in
- Quiet, multi speed operation
- Child safety lock
- Filter replacement indication
- Quality is assured with a two-year warranty
- Includes Type G British 3-pin electrical plug
- Includes WIFI control/ Remote control
- Odour and dust sensor
- Control via app



We spend more than 90% of our time indoors, breathing up to 50 times more polluted air than outdoors. The air can contain over 900 chemicals, particulates, biological materials, viruses and bacteria, all contributing to our health, concentration and well-being.

The Vent-Axia PureAir Room 500 X with CodiKoat is an advanced seven-stage air cleaning system, which removes harmful particles and neutralises bad smells. This air purifier reduces the effects poor indoor air quality can have on the health of everyone in your home.

Thanks to the three-speed settings to choose from, the Vent-Axia PureAir Room 500 X with CodiKoat is not only suitable for your home, but for all types of indoor environments such as hotels, offices, schools and public environments. The air purifier is ideal for rooms up to 65m² and has a maximum noise level of 45d(B)A, so you will not be disturbed by loud background noise. Additionally, at night, you have the option of a sleep mode, which reduces the sound of the purifier, ensuring a good night's sleep.



1. Washable Pre-Filter

The washable pre-filter removing large granule dust, dander, pollen, floating compound and other pollutants in the air.

2. Pre-Filter

This pre-filter is also a washable coarse particle filter, which collects the larger particles from the air flowing through it. This process additionally protects the HEPA PLUS[®] filter from these particles and thus increases the service life of the following filters elements.

3. Medical grade H13 HEPA PLUS[®] filter with CodiKoat treatment

This part of the filter is treated with a protective anti-bacterial coating, providing an extra layer of protection. It traps and kills virus and bacteria particles within seconds of contact. The HEPA PLUS[®] filter also removes 99.9% of particles in the air including PM2.5, pet allergens, pollen, by trapping them inside the filter material.

4. Activated Carbon Filter

Activated carbon filter has a huge surface area, which removes volatile organic compounds (VOCs), odours and other gaseous pollutants from the air by trapping the gas molecules in the charcoal.

5. Cold Catalyst Filter

The cold catalyst filter speeds up the decomposition of organic compounds in the air, breaking them into molecules such as H₂O and CO₂, which are harmless to the human body.

5. Ultraviolet Light

Ultraviolet light technology is used as a disinfection method using short-wavelength ultraviolet light to inactivate bacteria and viruses sanitising the air around you.

6. Ionizer

The ionizer is the last stage of the filtration process, generating negatively charged ions which adhere to small particulate materials statically charging them. This attracts other particles creating larger clusters, that can then be absorbed by the filter at the start of the cycle.

Unique CodiKoat Filter Treatment

CodiKoat have developed the fastest acting ISO certified antimicrobial and antiviral coating technology. This unique nano treatment on the third filter layer of the Vent-Axia PureAir Room 500 X removes and destroys viruses (including COVID-19), bacteria and fungi within seconds of contact from the air that we breathe, delivering healthier environments and improved indoor air quality.

Useful Features

Other features include a child safety lock to ensure that the unit is not tampered with. Auto mode that sets airflow based on the indoor air pollution, using a simple traffic light system to let you know the unit's progress. Air quality display and a timer to allow you to set the unit to run for periods up to eight hours. The unit uses a British 3-pin plug, so you can plug and go without the need for an installer. This also means that the unit is portable, so you can move it around, as you require.

Models

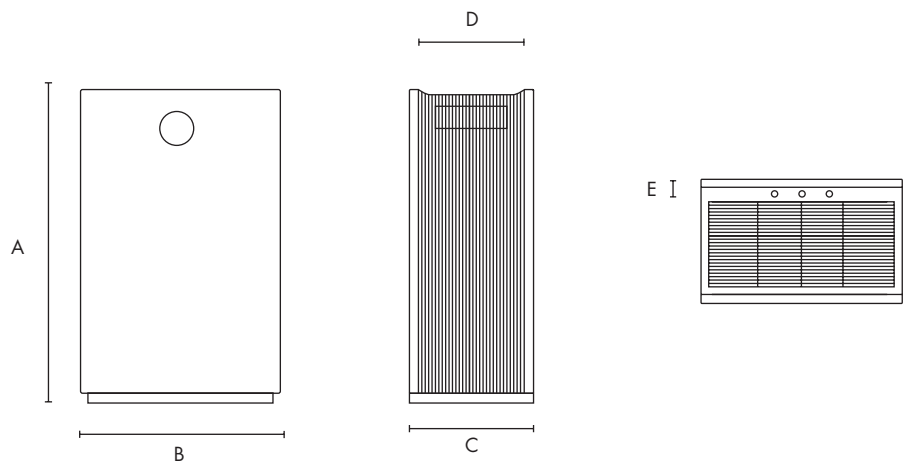
Air cleaner for indoor environments

| | |
|----------------------------------|-----------|
| Model | Stock Ref |
| PureAir Room 500 X with CodiKoat | 411370 |

Accessories

| | |
|-----------------------------|-----------|
| Model | Stock Ref |
| CodiKoat replacement filter | 411159 |

Dimensions (mm)



| A | B | C | D | E |
|-----|-----|-----|-----|----|
| 640 | 400 | 260 | 255 | 60 |

Net weight:10.04kg. Gross weight: 11.7kg

Performance

| | |
|---------------------------------|------------|
| Clean Air Delivery Rate (CADR): | 500m³/h |
| Coverage: | Up to 65m² |

App Control

The Vent-Axia PureAir Room 500 X with CodiKoat comes with the SmartLife app.

SmartLife is a mobile app to control smart home products through smartphones or tablets and also enables voice control via Amazon Echo and Google Home.

The SmartLife app is available for both iOS and Android operating systems and is available to download in the app stores for use with the Vent-Axia PureAir Room 500 X with CodiKoat.



Vent-Axia PureAir Room

- Six stage air purifier including a medical grade H13 HEPA filter
- Removes 99.9% of airborne particles including COVID-19, viruses and bacteria
- UV sterilisation and Ionizer built in
- Quiet, multi speed operation
- Child safety lock
- Filter replacement indication
- Quality is assured with a two-year warranty
- TÜV SÜD approved
- Includes Type G British 3-pin electrical plug

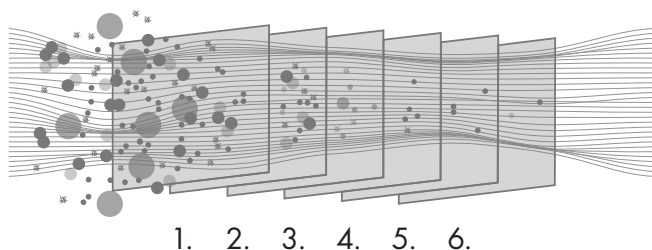


Vent-Axia PureAir Room

The Vent-Axia PureAir Room is an advanced six-stage air cleaning system, which removes harmful particles and neutralises bad smells. This air purifier reduces the effects poor indoor air quality can have on the health of everyone in your home.

The Vent-Axia PureAir Room is not only suitable for your home, but for all types of indoor environments such as hotels, offices, schools, public environments thanks to the three speed settings to choose from. The air purifier is ideal for rooms up to 30m² and has a maximum noise level of 45d(B)A, so you will not be disturbed by loud background noise. Additionally, at night, you have the option of sleep mode, which reduces the sound of the purifier, ensuring a good night's sleep.

We spend more than 90% of our time indoors, breathing up to 50 times more polluted air than outdoors. The air can contain over 900 chemicals, particulates, biological materials, viruses and bacteria, all contributing to our health, concentration and well-being. We breathe 9,000 litres of air each day, so it is important that the air is fresh and creates a healthy indoor environment. What sets the Vent-Axia air purifier apart from many competitors is the six-stage filtration system that purifies the air. The six stages are:



1. Washable Pre-Filter

The pre-filter is a washable coarse particle filter, which collects the larger particles from the air flowing through it. This process additionally protects the HEPA filter from these particles and thus increases the service life of the following filter elements.

2. H13 HEPA Filter

The H13 'High-Efficiency Particulate Air' medical-grade air filter removes 99.9% of particles in the air including PM2.5, pet allergens, pollen, viruses, mould and bacteria by trapping them inside the filter material.

3. Activated Carbon Filter

Activated carbon filter has a huge surface area, which removes volatile organic compounds (VOCs), odours and other gaseous pollutants from the air by trapping the gas molecules in the charcoal.

4. Cold Catalyst Filter

The cold catalyst filter speeds up the decomposition of organic compounds in the air, breaking them into molecules such as H₂O and CO₂, which are harmless to the human body.

5. Ultraviolet Light

Ultraviolet light technology is used as a disinfection method using short-wavelength ultraviolet light to inactivate bacteria and viruses sanitising the air around you.

6. Ionizer

The ionizer is the last stage of the filtration process, generating negatively charged ions which adhere to small particulate materials statically charging them. This attracts other particles creating larger clusters, that can then be absorbed by the filter at the start of the cycle.

Useful Features

Other features include a child safety lock to ensure that the unit is not tampered with. Auto mode that sets airflow based on the indoor air pollution, using a simple traffic light system to let you know the unit's progress. Air quality display and a timer to allow you to set the unit to run for periods up to eight hours. The unit uses a British three pin plug, so you can plug and go without the need for an installer. This also means that the unit is portable, so you can move it around, as you require.



Lo-Carbon Residential Fans



Continuing our commitment to energy efficiency in this section you will find Lo-Carbon solutions for intermittent and continuous fan applications.

In axial or centrifugal, wall, ceiling or window applications in bathrooms or kitchens we have a Lo-Carbon fan offering up to 90% energy saving over the equivalent traditional fan.

Vent-Axia®

| | | |
|---|---|---------|
|  | Vent-Axia Lo-Carbon iQ Bathroom/ Toilet Fan | B3-B4 |
|  | Vent-Axia PureAir Sense Bathroom/ Toilet Fan | B5-B6 |
|  | Lo-Carbon Svara Axial Bathroom/Toilet Fan | B7-B8 |
|  | Lo-Carbon Silent Fan Axial Bathroom/ Toilet Fan | B9-B:10 |
|  | Lo-Carbon VA100®/SELV Axial Bathroom/Toilet Fan | B11-B12 |
|  | Lo-Carbon Silhouette® 100/SELV Bathroom/Toilet Fan | B13-B14 |
|  | Lo-Carbon Centra®/SELV dMEV Unit | B15-B16 |
|  | Lo-Carbon Revive/SELV Bathroom/Kitchen Filterless Fan | B17-B18 |
|  | Lo-Carbon Solo Plus/SELV Centrifugal Bathroom/Toilet Fan | B19-B20 |
|  | Lo-Carbon Minivent Ducted Bath/Shower Fan Kit | B21 |
|  | Lo-Carbon LED Vent-A-light Ducted Bath/Shower Fan Kit | B22 |
|  | Lo-Carbon Quadra® Centrifugal Fan | B23-B24 |
|  | Lo-Carbon Silhouette® 125 Bathroom/Toilet Fan | B25 |
|  | Lo-Carbon VA150 Axial Kitchen & Utility Room Fan | B26 |
|  | Lo-Carbon Silhouette® 150 Axial Kitchen Fan | B27 |

Lo-Carbon iQ

Features & Benefits

- Minimal retro design to match bathroom décor
- Extremely quiet at only 21 dB(A)
- Truly surface mountable with removable spigots
- Intelligent controls and control panel for easy and flexible set up and commissioning
- Low power consumption - 2.1 - 5.5 Watts
- Easy cleaning and maintenance
- 5 year motor guarantee
- Intelligent humidistat control as standard
- Innovative airing function to ensure good air quality
- IP44 rated



Silent Operation

The open impellor and the unique method of operating the motor enables a greater array of operating options including silent continuous ventilation along with adaptable speed control and flexible timer functions.

Humidity Control

The iQ features an intelligent, fully automatic humidity sensor for moisture control. This means the fan learns to run only when it can make a difference to the indoor air quality. The fan continually monitors and records the moisture content to allow it to map the humidity profile throughout the year. This process enables the fan to ensure that it runs only when the fan can lower the moisture content in the air. This reduces nuisance running. The fan also has two modes for moisture control, silent or boost mode which can be selected via the touch pad control.

Control Panel

Our aim has been for the end user to be able to control and understand the basic fan functions, without the need of reading the manual. When the fan is connected to the power supply, it also performs a self-test where all the status lamps on the control panel are tested, as well as the function of the motor. Ideal for those installing to ensure that everything works. The simple controls, along with the LED feedback make the commissioning and any readjustment, quick and easy to complete.

LED Feedback

With many fans it is difficult to understand the exact mode that they are running in. We have now simplified this to provide a visual indicator to see what the fan is doing and which mode is currently active. The fan uses three different colours on the visible status lamp to communicate exactly what it is doing. A blue light signifies that the fan is working to evacuate moisture via the humidity sensor. A yellow light signifies that the timer is running. And a purple light signifies that the fully automatic airing function is active.

Choose How The Fan Works

The intelligent overrun timer can be operated in several different ways, either via the light switch, integral pull-cord or a separate switch either as a standard On/Off or as a momentary switch stopping automatically after the overrun on time. Use the control panel to easily set the required post-running time at 15 or 30 minutes, depending on the choice.

Full Surface Mounted Installation

With the impellor and motor assembly designed to be low profile and accessible for maintenance, spigots on the fan are completely removable. This design enables the fan to be mounted onto a wall without any spigot so that it can be truly surface mounted. This is an ideal function if there is a duct with a smaller dimension than 100 mm or a duct that bends directly off of the back of the fan not providing any depth in the wall for the spigot.

Cleaning and Maintenance

For a fan to ventilate effectively, it is vital that it is kept clean and that the ductwork and grilles are free from dust that can reduce the air flowing through them. This is the first fan to be introduced with the ability to simply remove the impellor and open the centre of the fan to gain free access to the duct. Using the 'swing-out' function the fan can easily be cleaned and cleared e.g. a clogged grille on the outside of the façade. Click the button to remove the impellor, then press the snap in catch and swing out the motor - that's it!

Automatic Airing Function

The airing function means when the fan has been inactive for 26 hours, it runs an airing programme for 60 minutes to exchange the air in the bathroom. No more worries about stuffy, musty odours in the bathroom when returning from holiday.

Lo-Carbon 5 Year Guarantee

As there is an integrated power adapter in the fan we have been able to use a low voltage motor that has a life span of approximately 60,000 hours. This is about 3-5 times longer than a standard fan. The motor features extremely quiet bearings. By using a low voltage motor we can significantly limit power consumption. The fan only consumes 5 Watts, about a third of a conventional AC bathroom fan.

Models

Lo-Carbon iQ

Multi control fan with option to run on intermittent or continuous setting. Adjustable timer and humidity options with integral pullcord included.

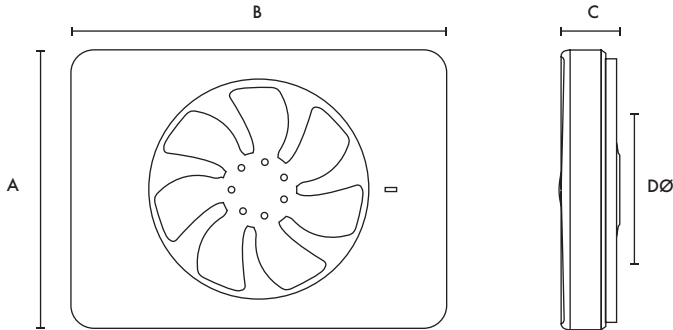
Model

Lo-Carbon iQ

Stock Ref

411409

Dimensions (mm)



| A | B | C | DØ |
|-----|-----|----|--------|
| 152 | 202 | 31 | 99/125 |

Product is supplied with a removable spigot 30mm deep in 99mmØ and 125mm Ø

Performance

| Duct Ø | Trickle/Boost | Extract Performance - FID | | Sound dB(A) |
|--------|---------------|---------------------------|--|-------------|
| | | m³/h | | @ 3m |
| 100mm | Max | 107 | | 28 |
| 100mm | Silent | 74 | | 21 |
| 100mm | Trickle | 42 | | 12 |
| 125mm | Max | 134 | | 29 |
| 125mm | Silent | 86 | | 21 |
| 125mm | Trickle | 55 | | 13 |

Vent-Axia PureAir Sense

- Automatic odour sensor
- 7 year warranty
- LED touch panel
- App connected
- Silent running, as low as 19dB(A)
- Low power consumption at 2.5W
- Interchangeable spigots for 100 or 125mm installations
- Easy clean with removable impeller
- Optional magnetic front cover
- IP44 Rated
- Suitable for ceiling and wall mounting



Odour Sensor

The Vent-Axia PureAir Sense is the UK's first bathroom fan with Odour Sense Technology. This technology works by detecting unwanted odours in the air and triggers a purge function to clear the air. This results in a fresh bathroom without the need to add any harmful air sprays into the atmosphere.

Silent Operation

Running from just 19dB(A), the PureAir Sense is whisper quiet. Its silent continuous operation enables the fan to keep the air quality in the room high, without disturbing the occupants.

Humidity Control

The Vent-Axia PureAir Sense features an intelligent, fully automatic humidity sensor for moisture control. The fan will boost when it senses an increase in the room's humidity, ensuring the humid air is extracted and the room remains free of condensation. The fan continually monitors the environment and records the moisture content to allow it to map the humidity profile throughout the year. This process enables the fan to ensure that it runs only when the fan can lower the moisture content in the air. This reduces nuisance running and stops the fan from boosting unnecessarily, keeping running costs down.

Touch Panel

The front of the fan includes an intuitive, easy to use LED touch panel. Users can see which fan function is active by viewing the multi-coloured LED indicator, as well as customising the fan's functions and boost speeds using the touch menu. For full description on the touch panel, please refer to the Instruction Manual provided with the fan.

Vent-Axia Connect App

All fan settings can be customised by downloading the Vent-Axia Connect App to Android and IOS devices.



Magnetic Front Cover

For the first time in any Vent-Axia product, a magnetic front cover is included with this fan. The cover is as simple as it sounds to put on with the use of four small magnets, and is designed to allow the fan to compliment any bathroom.



Adjustable Timer

The adjustable overrun timer operates automatically when installed, but can be customised using the Vent-Axia Connect App. The control panel can be used to easily set the required post-running time at 15 or 30 minutes, depending on your choice.

Cleaning and Maintenance

For a fan to ventilate effectively, it is vital that it is kept clean so that the ductwork and grilles are free from dust which can reduce the air flow. The removable impeller helps to simplify cleaning.

Automatic Airing Function

The airing function activates when the fan has been inactive for 26 hours. It runs an airing programme for 60 minutes to exchange the air in the bathroom. No more worries about stuffy, musty odours in the bathroom when returning home from time away.

Light Sensor

The Vent-Axia PureAir Sense is delivered factory set for continuous operation at low speed, with the fan featuring an adjustable timer that can be triggered via a switch live or light sensor. This intuitive light sensor recognises room occupancy through light movement and shadows, but can distinguish between car headlights flashes and people moving about to avoid nuisance running. A delay-on feature can also be set to avoid the fan being triggered in the night during quick bathroom visits. The light sensor also acts as an overrun timer, without having to be controlled through the light switch.

Models

Vent-Axia PureAir Sense

Odour Sensing fan with intelligent humidistat, adjustable timer, intermittent or continuous settings and Bluetooth app control.

Model
PureAir Sense

Stock Ref
479460



Wall Mounting Back Plate

Designed to cover up marks where a previous fan has a different foot print.
242mm x 190mm.

Model
Wall Mounting Back Plate

Stock Ref
406762

Accessories



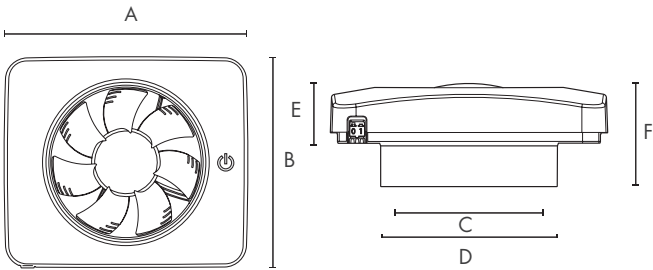
Internal Fit Wall Kit

Suitable for 100mm applications

Model
Internal Fit Wall Kit - White

Stock Ref
474779

Dimensions (mm)



| A | B | CØ | DØ | E | F |
|-----|-----|----|-----|----|----|
| 185 | 160 | 98 | 118 | 40 | 69 |

Product is supplied with a removable spigot 30mm deep for 100mmØ and 125mmØ applications. Weight 1.75kg

Performance Guide

| Duct Ø | Boost/Continuous | Extract Performance - FID | | Sound dB(A) | |
|--------|------------------|---------------------------|-----|-------------|-------|
| | | m³/h | l/s | @ 3m | Watts |
| 100mm | Max | 115 | 32 | 44 | 5 |
| 100mm | Continuous | 36 | 10 | 19 | 2 |
| 125mm | Max | 140 | 39 | 49 | 5 |
| 125mm | Continuous | 54 | 15 | 23 | 2 |

19dB(A) at 8l/s selectable via App

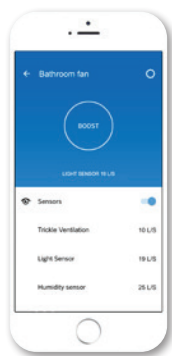
Lo-Carbon Svara

- Multiple installation and commissioning options
- Set up and control through the App via Bluetooth
- Continuous or intermittent
- Removable impeller for easier cleaning and replacement
- Silent hours scheduling and purge mode functions
- Intelligent light sensor with overrun timer - allows replacement of a basic model fan
- 3 Speed, IP44 Rated, DC motor with 5 year warranty
- Suitable for ceiling, panel or wall mounting
- Only 17dB(A)
- Low running costs



Fully flexible installation and control

The launch of Svara marks the next generation of unitary fans. Home owners have complete control of their indoor air through an intuitive App designed to give them flexible options on how to run the fan. Giving home owners this control has the added benefit of removing the need for multiple returns to the property post installation should the fan not be set up quite to the householders' liking. For example the humidity setting being too sensitive. The home owner can simply log on to the App and change the setting themselves.



For electricians, installation is made simple through the App allowing you to choose intermittent or continuous ventilation; whether you would like the humidistat to trigger operation or not; and whether the overrun timer is required. No more fiddly switches and jumpers!



Aesthetics and Silence

The name Svara takes its influence from the fan's Swedish heritage - a country well known for iconic and well thought out designs. Consumers will be attracted to Svara's good looks with its sleek modern design, plus with noise a key issue for consumers, households will also be impressed by Svara's quiet running, operating at just 17dB(A) on low trickle. It is also easy to clean as the central module disconnects the motor from the rest of the fan allowing it to be simply wiped with a soft cloth, and at only 4W the energy efficient Svara also boasts low power consumption.

Multi Room Multi Function

Vent-Axia Svara is programmed to cope with the vast majority of installations. Because of this, it can be fitted in either a bathroom or Kitchen and can be set to run either continuously or intermittently.

Light Sensor

When the light sensor is enabled Svara senses when someone is in the room and then activates. Its sophisticated light sensor is triggered by light movement and shadows. It is possible to set a delay-on so the fan is not triggered by the light during quick night time bathroom visits. The light sensor can also distinguish between headlight flashes from cars and room occupancy, so it is not triggered by passing cars, avoiding nuisance running. The sensitivity of the light sensor can be adjusted via the App.

Overrun Timer

The light sensor provides an overrun timer but only requires a live and neutral. In houses where there is only a basic fan installed, the home owner can upgrade to a timer fan without having to rewire.

Humidistat

Svara features a humidistat which reacts to sharp changes in humidity, for instance when someone is taking a shower. When set to continuous running, once the humidity sensor is activated the fan runs at 30l/s until humidity returns to normal levels then the fan powers down to 10l/s. Ambient humidity changes will not trigger the humidistat. It is possible to change the sensitivity of the humidity sensor via the App.

Silent Scheduling and Automatic cycles

The silent hours scheduling function allows you to deactivate the boost function on the Svara via the App, for example, this would prevent nuisance noise overnight. Additionally during a vacation you can set Svara to an airing mode which operates a purge function every 12 hours for either 30, 60 or 90 minutes depending on selection. However, Svara's sophisticated controls, will not purge if the light sensor detects that there is someone in the house.

Models

Svara kitchen and bathroom fan
100 mm Axial fan. Factory set at continuous running with Humidistat and Light Sensor/overrun timer On.

| Model | Stock Ref |
|-----------------------|-----------|
| Lo-Carbon Svara White | 409802 |
| Lo-Carbon Svara Black | 496711 |



| Model | Stock Ref |
|----------------------|-----------|
| Back Draught Shutter | 406605 |

Accessories

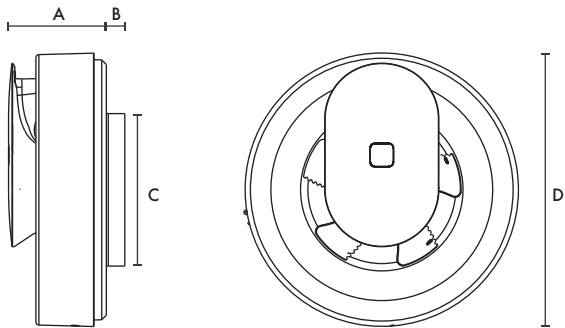


| Model | Stock Ref |
|----------|-----------|
| Wall Kit | 254102 |



| | |
|--|-----------|
| Cover plate | |
| For duct dimensions between Ø140-160mm | |
| Model | Stock Ref |
| Cover Plate White | 409820 |
| Cover Plate Black | 497117 |

Dimensions (mm)



| A | B | CØ | DØ |
|----|----|----|-----|
| 60 | 21 | 99 | 177 |

Performance Guide

| Extract Performance - FID (l/s) | | | | Sound dB(A) | SFP (W/l/s) |
|---------------------------------|--------------|-------|-----------|-------------|-------------|
| Low Trickle | High Trickle | Boost | Max Watts | @ 3m | @ 0Pa |
| 10 | 16 | 30 | 4 | 17-20 | 0.13 |

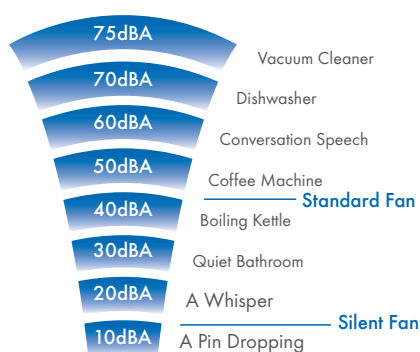
Lo-Carbon Silent Fan

- Stylish open front models
- From only 12dB(A)
- High efficiency long life motor rated up to 40,000 hours run time
- 5 year warranty
- IPX5 - Zone 1 rated
- Meets current Building Regulations Approved Document F and L
- Extra-long duct run? Variable speed adjustment at installation allows you to get the airflow you need
- Closed or open fronted models
- Silent bathroom fan with intermittent and continuous running options
- Back draught shutters included
- Suitable for wall, ceiling, window and panel mounting



Lo-Carbon Silent Fan Axial Bathroom/Toilet Fan

The Lo-Carbon Silent Fan Range from Vent-Axia not only delivers stylish and silent ventilation without compromise on performance, but now comes with even more features and more model options providing flexibility when choosing the right fan.



Models

Zone 1 Variable Speed, Intermittent

Remote or light switch operation. Variable speed options selectable at install. Intermittent operation.

| Model | Stock Ref |
|---------------------------|-----------|
| VASF100BV (closed grille) | 479085 |
| VASF100BV0 (open grille) | 495700 |

Zone 1 Variable Speed, Intermittent, Timer

Intermittent Operation. Fixed 15 min overrun timer. Variable speed options selectable at install.

| Model | Stock Ref |
|---------------------------|-----------|
| VASF100TV (closed grille) | 479086 |
| VASF100TV0 (open grille) | 495701 |

Zone 1 Variable Speed, Intermittent, Humidity Timer

Intermittent Operation. Humidity controlled with fixed 15 min timer overrun. Variable speed options selectable at install.

| Model | Stock Ref |
|----------------------------|-----------|
| VASF100HTV (closed grille) | 479087 |
| VASF100HTV0 (open grille) | 495702 |

Zone 1 Variable Speed, Continuous, Timer

Fixed 15 min overrun timer. Continuous running fan with variable speed selectable at install.

| Model | Stock Ref |
|---------------------------|-----------|
| VASF100TC (closed grille) | 479088 |
| VASF100TCO (open grille) | 495703 |

Zone 1 Variable Speed, Continuous, Humidity Timer

Humidity controlled with fixed 15 min timer overrun. Continuous running fan with variable speed selectable at install.

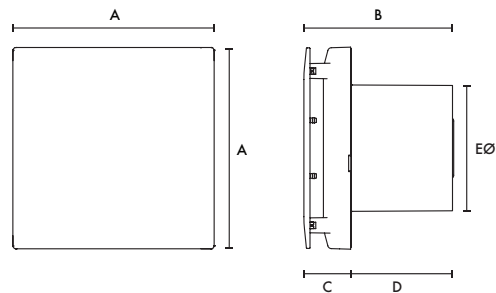
| Model | Stock Ref |
|----------------------------|-----------|
| VASF100HTC (closed grille) | 479089 |
| VASF100HTCO (open grille) | 495704 |

Accessories

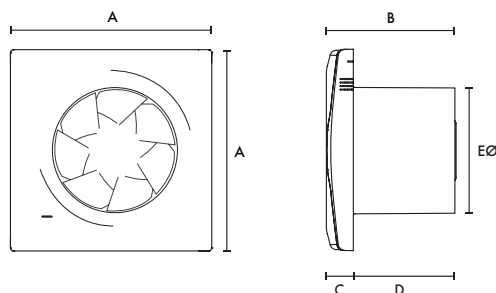
| Model | Stock Ref |
|---|-----------|
| Window Kit | 442947 |
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |
| Internal Fit Wall Kit White + Backdraught Shutter | 474779 |

Dimensions (mm)

Closed Grille



Open Grille

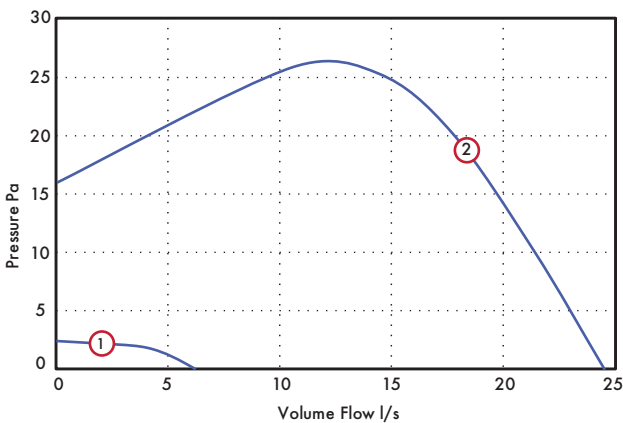


| Grille | A | B | C | D | EØ |
|--------|-----|-----|----|----|----|
| Closed | 160 | 117 | 37 | 80 | 99 |
| Open | 160 | 117 | 22 | 80 | 99 |

Weight 0.7kg

Performance Guide

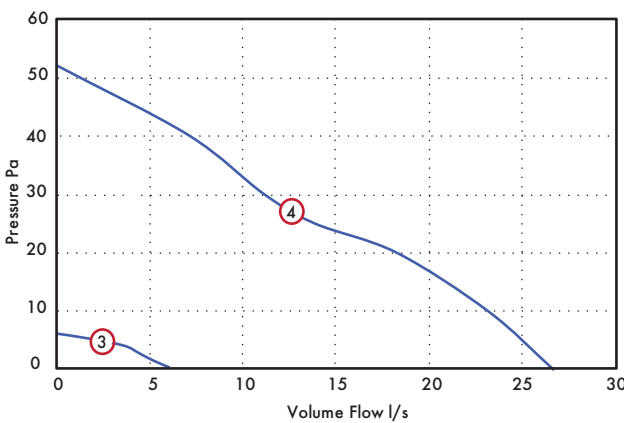
Closed Grille



| | Model | Speed | l/s | Watts | Warranty (years) |
|----------------|----------------------|------------|---|-----------|------------------|
| Variable Speed | VASF100BV/ TV/HTV | ① Min | 6 | 1.7 | 5 |
| | | ② Max | 24 | 7.5 | |
| | VASF100TC/ HTC | Adjustable | 6 - 15 | 1.7 - 7.5 | 5 |
| | | Trickle | Adjustable Trickle + 10 (Up to a max of 22 installed) | 7.5 | |

12dB(A) - Sound dB(A) @3m at low speed

Open Grille



| | Model | Speed | l/s | Watts | Warranty (years) |
|----------------|-------------------------|------------|---|-----------|------------------|
| Variable Speed | VASF100BVO/ TVO/HTVO | ③ Min | 6 | 1.7 | 5 |
| | | ④ Max | 27 | 7.5 | |
| | VASF100T- CO/HTCO | Adjustable | 6 - 19 | 1.7 - 7.5 | 5 |
| | | Trickle | Adjustable Trickle + 10 (Up to a max of 22 installed) | 7.5 | |

12dB(A) - Sound dB(A) @3m at low speed

Lo-Carbon VA100/SELV

- Meets current Building Regulations Approved Document F & L
- Suitable for wall, ceiling, panel and window mounting
- Fitted with a motorised shutter
- Protected against low energy lighting circuits
- IPX4 rated - IPX7 rated (SELV)
- Efficient long life DC motor with 5 year warranty
- Uses up to 87% less energy
- Low sound levels
- 1 of 2 speeds selectable at installation
- Low specific fan power



Long Life Ventilation VA100

The Vent-Axia Lo-Carbon VA100 range features Lo-Carbon long life DC motors that are more efficient than conventional motors delivering up to 87% energy savings.

Shutters

The Vent-Axia Lo-Carbon VA100 range is fitted with a motorised shutter mechanism that uses no extra power in operation or off.

Installation

Fitted with integral protection against low energy lighting circuits, the Lo-Carbon VA100 is a 100mm axial fan suitable for use in the bathroom or toilet. VA100 is quick and simple to fit with easy-wire in one line terminals. Suitable for installation in windows, walls or panels/ceilings using kits available. The 100mm telescopic wall kit fits walls 225 to 360mm thick. The range meets the requirements of the current Building Regulations for the ventilation of toilets 6l/s and bathrooms 15l/s with a 15 minute overrun timer for internal rooms on the LT, XT and HTP models.

Safety Extra Low Voltage (SELV) Fan

Safety Extra Low Voltage (SELV) is designed for areas where a fan has to be fitted within zone 1 in a room containing a fixed bath or shower according to IEE wiring regulations. The VA100 SELV can be safely installed within the spray area. The fan is rated IPX7, control is by the supplied mains safety isolating transformer with 12V DC SELV output, which is sited away from any source of spray and out of reach of a person using a fixed bath or shower.

Models

Lo-Carbon VA100 LP/SELV LP (Pullcord)

Ultra long life DC motor. Pullcord On/Off override switch with indication light. 2 speed options.

| Model | Stock Ref |
|---------|-----------|
| LP | 443159 |
| SELV LP | 441614 |

Lo-Carbon VA100 XP/SELV XP (Shutter/Pullcord)

Ultra long life DC motor. Pullcord and On/Off override switch with indication light. 2 speed options.

| Model | Stock Ref |
|---------|-----------|
| XP | 443160 |
| SELV XP | 459049 |

Lo-Carbon VA100 LT/SELV LT (Timer)

Electronic adjustable overrun timer (5-30 minutes). Indication light. 2 speed options.

| Model | Stock Ref |
|---------|-----------|
| LT | 443161 |
| SELV LT | 441615 |

Lo-Carbon VA100 XT/SELV XT (Shutter/Timer)

Integral electronic adjustable overrun timer (5-30 minutes). Indication light. 2 speed options.

| Model | Stock Ref |
|---------|-----------|
| XT | 443162 |
| SELV XT | 459050 |

Lo-Carbon VA100 LHTP/SELV LHTP (Integral Humidity Sensor/Pullcord/Timer)

Complete with integral humidity control with pullcord override. Indication light which operates on the manual override only. 2 speed options.

| Model | Stock Ref |
|-----------|-----------|
| LHTP | 443163 |
| SELV LHTP | 441616 |

Lo-Carbon VA100 XHTP/SELV XHTP (Shutter/Integral Humidity Sensor/Pullcord/Timer)

Complete with integral humidity control with pullcord override. Indication light which operates on the manual override only. IPX4 rated. 2 speed options.

| Model | Stock Ref |
|-----------|-----------|
| XHTP | 443164 |
| SELV XHTP | 436064 |

Accessories

Wall Kit

Fixing hole diameter 117mmØ

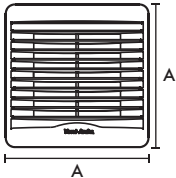
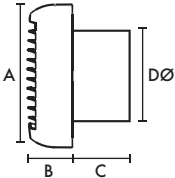
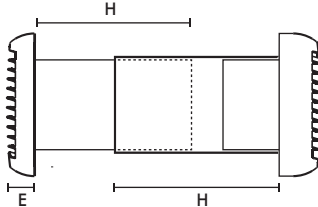
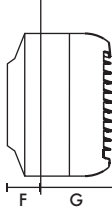
| Model | Stock Ref |
|----------------|-----------|
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |

Window Kit

Fixing hole diameter 105mmØ

| Model | Stock Ref |
|------------------------|-----------|
| Window Kit | 254101 |
| Anti-tamper Window Kit | 443234 |

Dimensions (mm)

| | Panel | | | Wall | | | Window | | |
|---|---|---|----|--|----|----|---|-----|--|
| |  |  | |  | | |  | | |
| Area | A | B | C | DØ | E | F | G | H | |
| Bathroom/Toilet | 146 | 47 | 53 | 98 | 31 | 31 | 74 | 200 | |
| SELV Transformer (W x H x D) 87 x 87 x 33 | | | | | | | | | |
| Weight 1kg | | | | | | | | | |

Performance

| Area | Models | Extract Performance - FID | | | Sound dB(A) | SFP (W/l/s) |
|----------|--|---------------------------|-----|-------|-------------|-------------|
| | | m³/h | l/s | Watts | @ 3m | @ 0Pa |
| Toilet | Lo-Carbon VA100/SELV LP/XP/LHTP/XHTP/LT/XT | 60 | 17 | 3.4 | 32 | 0.20 |
| Bathroom | Lo-Carbon VA100/SELV LP/XP/LHTP/XHTP/LT/XT | 74 | 21 | 7.0 | 36 | 0.33 |

Lo-Carbon Silhouette 100/SELV

- Models Basic/Timer/Humidity & Timer
- Low power consumption - Lower running costs
- Fully opening and closing non-transparent shutters - Improved insulation and privacy
- Meets current Building Regulations Approved Document F & L
- 1 of 2 speeds selectable at installation
- Blue power indication light (except B model) - Modern aesthetics
- Ball bearing motors for vertical or horizontal application
- Unique humidity sensor track - Improved response
- 5 year motor warranty
- IPX4 rated - IPX7 rated (SELV)
- Suitable for wall, ceiling, panel and window mounting



Slimline Bathroom Ventilation

With a slim profile of only 17mm, Lo-Carbon Silhouette blends in with the wall surface to provide an unobtrusive installation. Lo-Carbon Silhouette has an FID performance of up to 30l/s. It can be ceiling/panel mounted and connected to an appropriate duct run to the outside.

Safety Extra Low Voltage (SELV) Fan

Safety Extra Low Voltage (SELV) is designed for areas where a fan has to be fitted within zone 1 in a room containing a fixed bath or shower according to IEE wiring regulations. The Silhouette SELV can be safely installed within the spray area. The fan is rated IPX7, control is by the supplied mains safety isolating transformer with 12V DC SELV output, which is sited away from any source of spray and out of reach of a person using a fixed bath or shower. SELV transformer to BS EN 60742.

Models

Lo-Carbon Silhouette 100B/SELV 100SVB

100mm bathroom/toilet fan with back draught shutter.

| Model | Stock Ref |
|-------------|-----------|
| 100B | 441624 |
| SELV 100SVB | 441511 |

Lo-Carbon Silhouette 100T/ SELV 100SVT (Timer)

100mm bathroom/toilet fan with integral adjustable electronic overrun timer (5-30 minutes), indicator light which operates on manual override only, and back draught shutter.

| Model | Stock Ref |
|-------------|-----------|
| 100T | 441625 |
| SELV 100SVT | 441512 |

Lo-Carbon Silhouette 100HT (Humidistat/Timer)

100mm bathroom/toilet fan with adjustable auto humidity sensor from 60-90% RH and overrun timer, indicator light which operates on manual override only, and back draught shutter.

| Model | Stock Ref |
|-------|-----------|
| 100HT | 441626 |

Lo-Carbon Silhouette 100H SELV (Humidistat)

100mm bathroom/toilet fan with ambient response humidity sensor from 60-90% RH, indicator light which operates on manual override only, and back draught shutter.

Safety Extra Low Voltage version.

| Model | Stock Ref |
|-------------|-----------|
| SELV 100SVH | 441513 |

Accessories

Wall Kit

Fixing hole diameter 117mmØ

| Model | Stock Ref |
|----------------|-----------|
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |

Window Kit

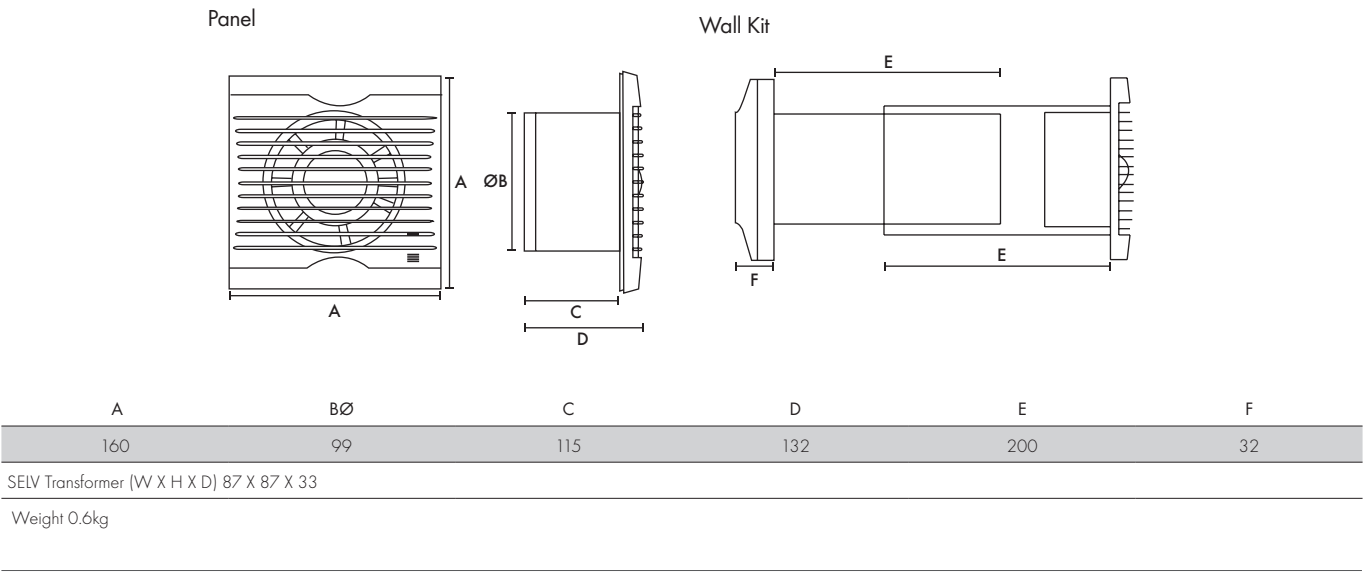
Fixing hole diameter 117mmØ

| Model | Stock Ref |
|------------|-----------|
| Window Kit | 442947 |

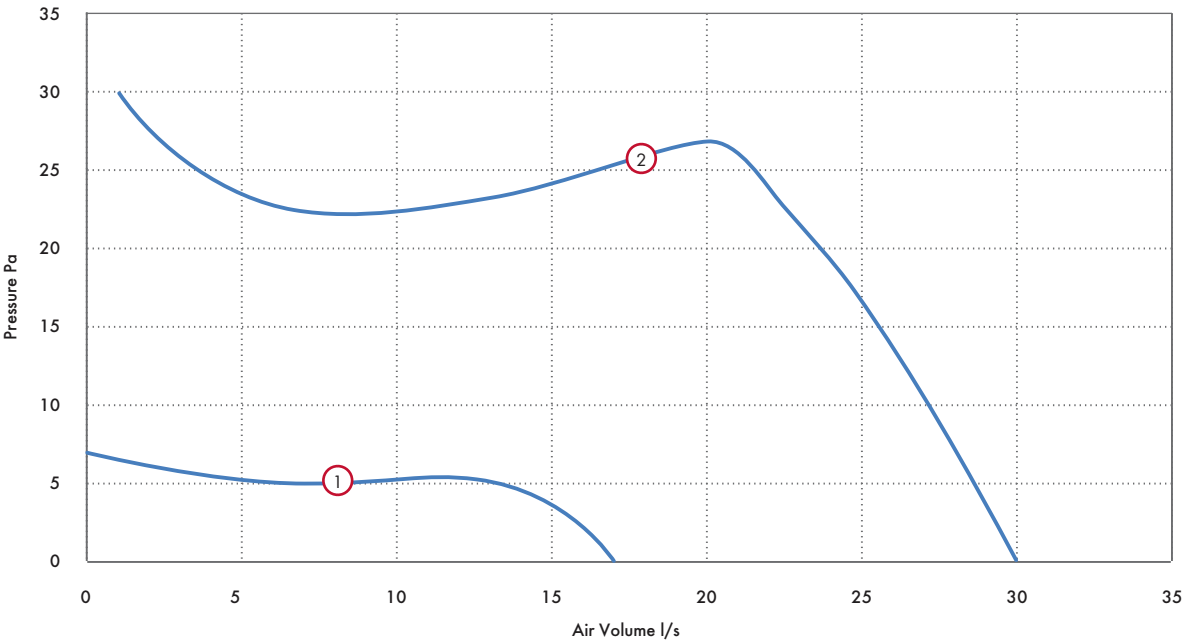


17mm actual profile

Dimensions (mm)



Performance Guide



| Area | Model | Curve Ref | Extract Performance - FID | | | Sound dB(A) | SFP (W/l/s) |
|-----------|---|-----------|---------------------------|-----|-------|-------------|-------------|
| | | | m³/h | l/s | Watts | @ 3m | @ 0Pa |
| Toilet | Lo-Carbon Silhouette 100 B/T/HT/SVB/SVT/SVH | 1 | 60 | 17 | 3.4 | 34 | 0.20 |
| Bathrooms | | 2 | 108 | 30 | 8.7 | 38 | 0.30 |

For window mounting: shutter cannot be used and must be removed

Lo-Carbon Centra/SELV

- Building Regulations Approved Documents F and L compliant
- Continuous mechanical extract
- Recognised in SAP PCDB - Low SFP
- Discreet, tasteful styling
- IPX4 rated - IPX7 rated (SELV)
- dMEV Pressure detection device
- 5 year motor warranty
- Suitable for wall, ceiling, panel and window mounting
- SELV models supplied with remote transformer and suitable for 'Zone 1'



the ELECTRICAL
industry awards
WINNER 2011

Winners of the Energy Efficiency Initiative 2011 Award
with our Lo-Carbon Continuous Ventilation Product Range

What is de-centralised MEV (dMEV)?

Building Regulations Approved Document F gives examples of three main methods of ventilation. Continuous mechanical extract ventilation, can be achieved using a single centralised extract unit such as the Sentinel Multivent ducted to 'wet' rooms (kitchen, bathroom, en-suite and WC) or by decentralised individual fans, such as the Lo-Carbon Centra in the 'wet' rooms. The fans run continuously at near silent levels providing a simple and effective form of ventilation.

SELV (Safety Extra Low Voltage) is designed for areas where a fan can be installed within Zone 1 in a room where there is a fixed bath or shower. Ingress Protected (IP) to IPX7 Lo-Carbon Centra SELV can be fitted safely within the spray area. The separate transformer can be mounted away from the spray zone and out of reach from the bath or shower.

The Lo-Carbon Centra meets the latest requirements of the Building Regulations Approved Document F for wholehouse system ventilation and all models come with a 5 year motor warranty.

Selection of the two trickle flow rates (6l/s or 9l/s) is via a simple 'jumper' on the control board. Different methods are available for operating the 15 l/s boost speed from a simple switched live to integral humidistat. See individual models for further details.

The attractive and discreet styling of the Vent-Axia Lo-Carbon Centra will complement the décor of any new home while virtually silent operation ensures optimum ventilation is achieved without intrusive noise.

Specific Fan Power

dMEV version recognised in SAP PCDB. Lo-Carbon Centra has a specific fan power of only 0.18 W/l/s in through-the-wall kitchen applications.

Models

Lo-Carbon Centra dMEV

Auto speed selection at installation and suitable for bathrooms or kitchens. The integral air pressure sensor checks the airflow when first installed and also helps the fan to compensate for external wind pressure.

Stock Ref

441782

Lo-Carbon Centra T/SELV T (Timer)

Ideal for bathroom and toilet applications, this unit runs continuously on trickle setting and may be boosted by the switched live input which activates the timer (fixed 15 min on T models, adjustable 5-30 minutes on SELV models).

Model

Stock Ref

T

473825

SELV T

443175

Lo-Carbon Centra TP/SELV TP (Timer/Pullcord)

For bathroom/toilet applications, the continuous running TP model is boosted by the pullcord which activates the timer (fixed 15 min on TP models, adjustable 5-30 minutes on SELV models).

Model

Stock Ref

TP

473826

SELV TP

447128

Lo-Carbon Centra HT/SELV HT (Humidistat/Timer)

For bathroom/toilet applications, the continuous running HT model is automatically boosted by the built-in humidistat or by a switched live input which activates the timer (fixed 15 min on HP models, adjustable 5-30 minutes on SELV models).

Model

Stock Ref

HT

473827

SELV HT

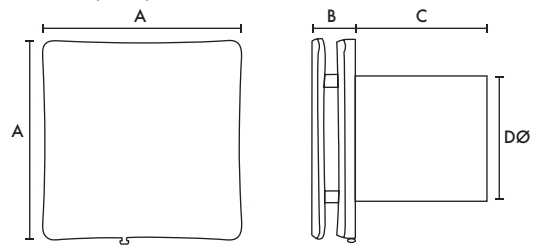
443176

Lo-Carbon Centra HTP/SELV HTP (Humidistat/Timer/Pullcord)

For bathroom/toilet applications, the continuous running HTP model is automatically boosted by the built-in humidistat or by the pullcord which activates the timer (fixed 15 min on HTP models, adjustable 5-30 minutes on SELV models).

| | |
|----------|-----------|
| Model | Stock Ref |
| HTP | 473828 |
| SELV HTP | 443177 |

Dimensions (mm)



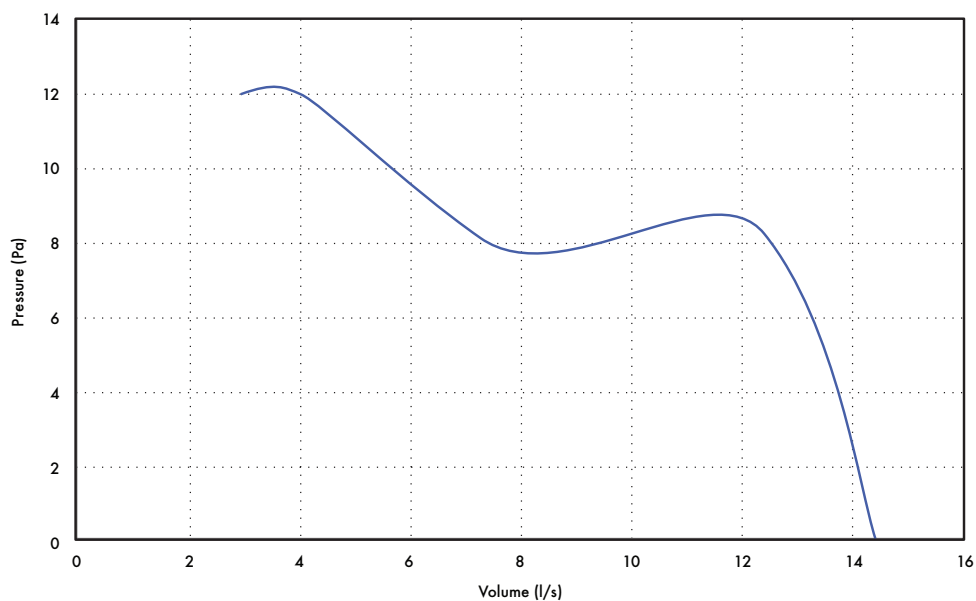
| Model | A | B | C | DØ |
|--------------------------------|-----|----|-----|----|
| Lo-Carbon Centra dMEV/All SELV | 160 | 35 | 115 | 99 |
| Lo-Carbon Centra T/TP/HT/HTP | 160 | 35 | 115 | 99 |

Transformer 87 x 87 x 33mm (W x H x D) (SELV models only)

Accessories

| | |
|----------------------|-----------|
| Model | Stock Ref |
| 150mm Conversion Kit | 443334 |
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |
| Window Kit | 442947 |
| Ceiling Kit | 443800 |

Performance Guide



| Model | Extract Performance (l/s) | | | Power Consumption (Watts) | | | Sound dB(A)@ 3m | | |
|--------------------------------|---------------------------|---------|-------|---------------------------|---------|-------|-----------------|---------|-------|
| | Trickle | Trickle | Boost | Trickle | Trickle | Boost | Trickle | Trickle | Boost |
| | Low | High | | Low | High | | Low | High | |
| Lo-Carbon Centra dMEV/All SELV | 6 | 9 | 15 | 1.4 | 1.6 | 2.4 | 10.8 | 15.5 | 25.2 |
| Lo-Carbon Centra T/TP/HT/HTP | 6 | 9 | 15 | 3.2 | 3.5 | 4.2 | 10.8 | 15.5 | 25.2 |

SAP PCDB Performance (dMEV model)

Systems With Rigid Ductwork Installation

| Unit Configuration | Location | Fan Speed Setting | Flow Rate (l/s) | SFP (W/l/s) |
|--------------------|----------|-------------------|-----------------|-------------|
| In Room (Ducted) | Kitchen | High | 13.2 | 0.32 |
| In Room (Ducted) | Wet Room | 9 l/s | 8.4 | 0.28 |
| Through Wall | Kitchen | High | 13.5 | 0.18 |
| Through Wall | Wet Room | 9 l/s | 8.6 | 0.20 |

Systems With Flexible Or Mixed Ductwork Installation

| Unit Configuration | Location | Fan Speed Setting | Flow Rate (l/s) | SFP (W/l/s) |
|--------------------|----------|-------------------|-----------------|-------------|
| In Room (Ducted) | Kitchen | High | 13.2 | 0.37 |
| In Room (Ducted) | Wet Room | 9 l/s | 8.6 | 0.31 |
| Through Wall | Kitchen | High | 13.5 | 0.18 |
| Through Wall | Wet Room | 9 l/s | 8.6 | 0.20 |

Lo-Carbon Revive/SELV

- Designed to exceed the needs of Social Housing
- Continuous running bathroom and kitchen fan
- 5 or 7 year warranty options
- High performance on trickle to avoid going to boost too often
- Intelligent Smart Sense™ data logging technology tells you days run, boost hours run, energy used
- Innovative Multi-Vortex technology ensures high performance but low sound and energy levels
- Small footprint with optional decoration frame
- Unique settings lock to prevent tampering



Designed for Social Housing

The award winning, intelligent Lo-Carbon Revive is a new filter-less unitary fan designed to meet the specific needs of social housing. Boasting powerful, quiet, efficient ventilation, Revive provides good indoor air quality and comfort for residents while being quick and easy to install, low maintenance and reliable.

Smart Sense™ Technology

Featuring Smart Sense™ intelligent technology Revive is quick and easy to install due to its simple alpha numeric LED display which is clear, easy to read and has a three-button menu for commissioning and data gathering. Smart Sense™ technology even tells the LED display which orientation to use depending on whether it is wall or ceiling mounted. All of which saves time on site and reduces installation complications. The Revive is the only fan in the market with a unique setting lock to prevent tampering with the unit giving the landlords peace of mind.

The display also shows real-time data so landlords can reassure residents of the low-running costs. This includes data such as days run, hours on trickle or boost, and even more specifically, hours run on boost triggered by the humidity sensor. Revive can also tell you how much energy the fan has used.

Multi-Vortex™ Technology

Revive is low maintenance since its market-leading Multi-Vortex™ technology does not require a filter, while the highly sculpted interior actively repels dust, avoiding clogging, thus helping to avoid call backs. In addition the Multi-Vortex™ technology has a high-pressure hybrid impeller that is powerful and efficient, yet quiet – everything you need for the Social Housing resident.

Multiple configuration options

Revive can extract up to 60l/s from a kitchen – just two fans can exceed Part F rates for a 4-bed house. Upon installation you have the choice to change the setting to allow for installation in a bathroom. The installer can also select a ducted mode or a through the wall mode. All selected via the intuitive LED display.

Intelligent Humidity Sensing and Controls

It is essential to capture moisture at the source before it can migrate to the rest of the property. However over-ventilating with crude humidity controls can cause excessive noise and discomfort to the resident. The Lo-Carbon Revive range utilises advanced humidity controls which boost in line with the detected humidity levels and whether they are rising or declining. This allows it to effectively deal with moisture, while minimising noise.

Models



Lo-Carbon Revive 7/SELV 7

A universal kitchen or bathroom HTP fan with options to be continuous running or intermittent. Adjustable trickle speed between 6-13l/s and boost speeds of 15, 30 and 60. Day logger and power run meter as standard. 7 year warranty. Built-in lock function. Adjustable dynamic ambient response humidity sensor. Timer adjustable between 1 and 30 minutes. In built boost activated by pullcord, humidity sensor, switched live or remote button. Tile front for discreet installation.

| Model | Stock Ref |
|-------------------------|-----------|
| Lo-Carbon Revive 7 | 473848 |
| Lo-Carbon Revive SELV 7 | 473849 |



Lo-Carbon Revive 5/SELV 5

A universal kitchen or bathroom HTP fan with options to be continuous running or intermittent. Adjustable trickle speed between 6-13l/s and boost speeds of 15, 30 and 60. Day logger and power run meter as standard. 5 year warranty. Built-in lock function. Adjustable dynamic ambient response humidity sensor. Timer adjustable between 1 and 30 minutes. In built boost activated by pullcord, humidity sensor, switched live or remote button. Open front grille.

| Model | Stock Ref |
|-------------------------|-----------|
| Lo-Carbon Revive 5 | 473850 |
| Lo-Carbon Revive SELV 5 | 473851 |



Lo-Carbon Revive/SELV

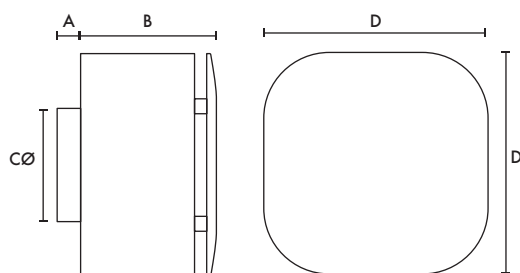
A universal kitchen or bathroom HTP fan with options to be continuous running or intermittent. Adjustable trickle speed between 6-13l/s and boost speeds of 15, 30 and 60. 5 year warranty. Adjustable dynamic ambient response humidity sensor. Timer adjustable between 1 and 30 minutes. In built boost activated by pullcord, humidity sensor, switched live or remote button. Open front grille.

| Model | Stock Ref |
|-----------------------|-----------|
| Lo-Carbon Revive | 473852 |
| Lo-Carbon Revive SELV | 473853 |

Accessories

| Model | Stock Ref |
|------------------|-----------|
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |
| Conversion Kit | 408680 |
| Ceiling Kit | 407928 |
| Window Kit | 407927 |
| Decoration Frame | 474041 |

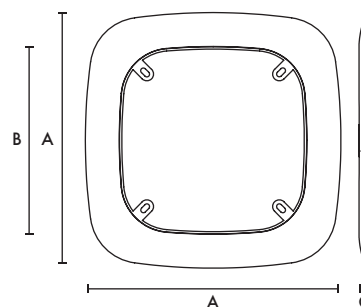
Dimensions (mm)



| A | B* | CØ | D |
|----|---------|----|-----|
| 30 | 132/102 | 99 | 193 |

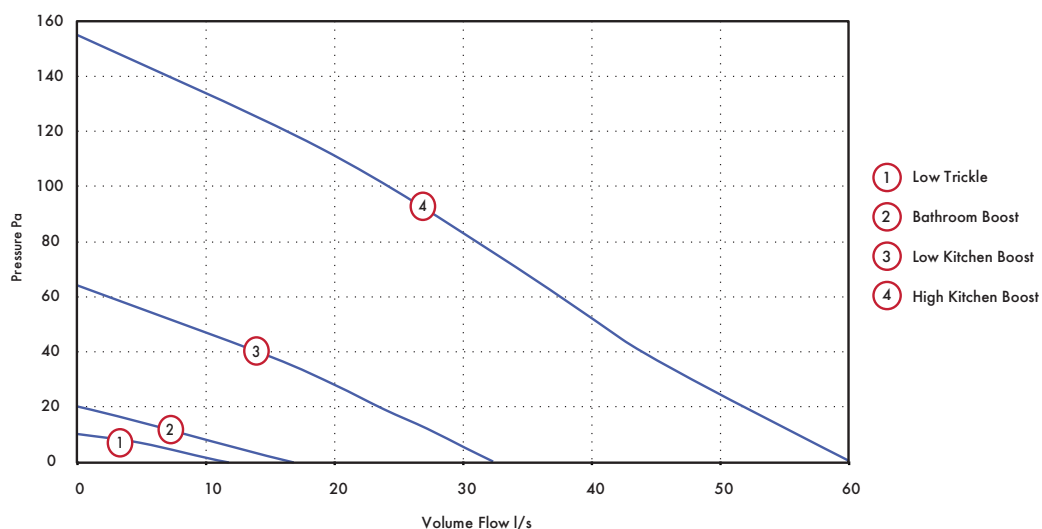
* Closed/Open Grille

Decoration Frame Dimensions (mm)



| A | B | C |
|-----|-----|----|
| 259 | 191 | 10 |

Performance Guide



| Model | Trickle Low | Extract Performance (l/s) | | | Trickle Low | Power Consumption (Watts) | | | Trickle Low | Sound Data (dB(A)) | | |
|--------|-------------|---------------------------|-------------------|--------------------|-------------|---------------------------|-------------------|--------------------|-------------|--------------------|-------------------|--------------------|
| | | Bathroom Boost | Low Kitchen Boost | High Kitchen Boost | | Bathroom Boost | Low Kitchen Boost | High Kitchen Boost | | Bathroom Boost | Low Kitchen Boost | High Kitchen Boost |
| Revive | 9 | 15 | 30 | 60 | 1.4 | 2 | 6 | 26 | 15 | 21 | 33 | 47 |

Lo-Carbon Solo Plus/SELV

- Up to 70% energy saving
- Filterless as standard - innovative impeller design means no need for a filter
- 5 year Lo-Carbon motor warranty
- Meets current Building Regulations Approved Documents F & L
- IPX4 rated - IPX7 rated (SELV)
- Flush or surface mountable with adjustable rear or side exit spigot
- SELV models suitable for installation over or within reach of a shower or bath
- Extremely low sound levels
- Suitable for wall, ceiling and panel mounting
- SELV Models - Supplied with a remote transformer



the ELECTRICAL
industry awards
WINNER 2013

Long Life Ventilation

The Lo-Carbon Solo Plus range from Vent-Axia has been specially designed for through the wall and ducted applications, suitable for internal bathrooms, toilets and other small rooms. Finished in white, the Lo-Carbon Solo Plus can be flush or surface mounted, with a 2 position 100mm circular spigot for rear entry or connecting to a vertical ducting system. The powerful centrifugal impeller allows installations using 100mm ducting in straight runs, whilst still achieving 15l/s as required by Building Regulations Approved Document F.

Continuous running products, such as the Lo-Carbon Solo Plus, installed in all wet areas of a dwelling are classed as a wholehouse ventilation system and therefore only need to move the amount of air as outlined in table 5.1a and 5.1b of Building Regulations Approved Document F.

The Lo-Carbon Solo Plus has an adjustable boost speed which is set at installation variable between a wall or duct setting for boost/override operation to meet Building Regulations thus ensuring minimum energy usage and low sound levels. All models have an optional speed for constant trickle ventilation (12l/s), selectable at installation. Depending on the model, the fan will switch from trickle (if selected) to boost via the pullcord/light switch/humidity sensor/PIR.

All models can be wall, panel or ceiling mounted and can be connected to either circular, rectangular or Vent-Axia's flat ducting. Enclosure of the electrical components is manufactured from flame retardant grade material.

Safety Extra Low Voltage Fan (SELV)

Designed for areas where a fan has to be fitted over or within Zone 1 in a room containing a fixed bath or shower according to IEE wiring regulations (BS 7671), the Lo-Carbon Solo Plus SELV fan can be safely installed within the spray area. The fan is rated IPX7. Control is by the supplied mains safety isolating transformer unit with 12V DC SELV output, which is sited away from any source of spray and out of reach of a person using a fixed bath or shower. Controller Supply voltage 220-240V/1/50Hz. Output to fan SELV 12V DC.

Models

Lo-Carbon Solo Plus P/SELV P (Pullcord)

Flush or surface mountable. Control by Pullcord. 2 Speed. Constant trickle option. Adjustable boost. In-built Lo-Carbon controller.

| Model | Stock Ref |
|--------|-----------|
| P | 427481 |
| SELV P | 427485 |

Lo-Carbon Solo Plus T/SELV T (Timer)

Flush or surface mountable. Control by room light or switch. 2 Speed. Constant trickle option. Adjustable boost. Adjustable timer overrun. Delay on timer. In-built Lo-Carbon controller.

| Model | Stock Ref |
|--------|-----------|
| T | 427482 |
| SELV T | 427486 |

Lo-Carbon Solo Plus HT/SELV HT (Humidistat/Timer)

Flush or surface mountable. Humidity controlled fan with override pullcord. Constant trickle option. Adjustable boost. Adjustable timer overrun. Delay on timer. Adjustable humidity sensor. In-built Lo-Carbon controller. Datalogger as standard on all Lo-Carbon humidity controlled Solo Plus fans.

| Model | Stock Ref |
|---------|-----------|
| HT | 427483 |
| SELV HT | 427487 |

Lo-Carbon Solo Plus TM/SELV TM (Timer/PIR)

Flush or surface mountable. Control by integral PIR detector. 2 Speed. Constant trickle option. Adjustable boost. In-built Lo-Carbon controller.

| Model | Stock Ref |
|---------|-----------|
| TM | 427484 |
| SELV TM | 427488 |

Accessories

Lo-Carbon Solo Plus Bezel

Used when flush mounting - reduces the need to make good.

| | |
|-------|-----------|
| Model | Stock Ref |
| Bezel | 404106 |

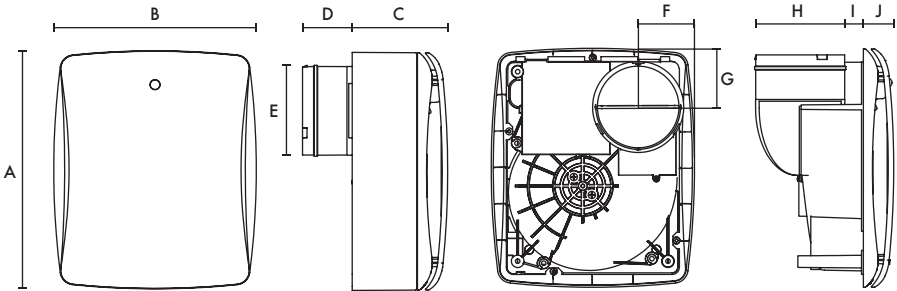
| | |
|----------------|-----------|
| Model | Stock Ref |
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |

Filter Pack (1 per pack)

The design of the Lo-Carbon Solo Plus means that it does not need a filter. However, if you are going to install the product in a heavily greasy environment, you may want to protect the product by fitting a filter.

| | |
|-------------|-----------|
| Model | Stock Ref |
| Filter Pack | 449265 |

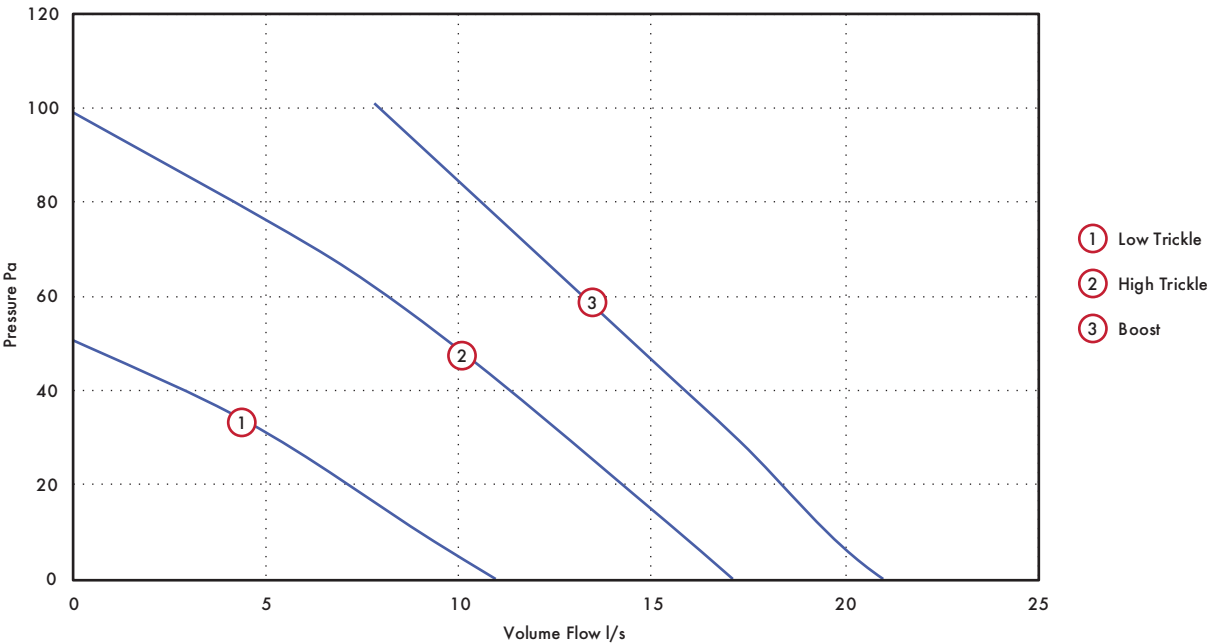
Dimensions (mm)



| | | | | | | | | | |
|-----|-----|-----|----|----|----|----|----|----|----|
| A | B | C | D | EØ | F | G | H | I | J |
| 263 | 224 | 106 | 55 | 98 | 62 | 65 | 98 | 21 | 34 |

Weight 2.2kg, SELV Weight 2.7kg. Dimensions: (W x H x D) 87x87x33mm.

Performance Guide (Duct Mode)



| Model | | Extract Performance l/s (m³/h) | | | Power consumption - Watts | | | dB(A) @ 3m | | | SFP (W/l/s) @ 0Pa |
|------------------------------------|-----------|--------------------------------|--------------|-------------|---------------------------|--------------|-------------|------------|--------------|-------------|----------------------|
| | | Boost | High trickle | Low Trickle | Boost | High trickle | Low Trickle | Boost | High trickle | Low Trickle | |
| Lo-Carbon Solo Plus/SELV P/T/HT/TM | Wall mode | 18 (64.8) | 12 (43.2) | 8 (28.8) | 6 | 2.9 | 2.3 | 33.5 | 27 | 23.5 | 0.28 |
| | Duct mode | 21 (75.6) | 17 (61.2) | 11 (39.6) | 8.4 | 5.3 | 3.2 | 35.5 | 33 | 26 | 0.29 |

Tested at 240VAC @ 50Hz

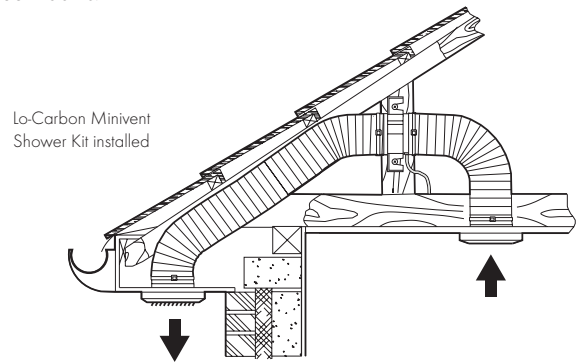
Lo-Carbon Minivent

- Complete kit supplied
- Meets Building Regulations Approved Document F & L requirements for toilets and bathrooms at max 1.5m of ducting and 1x 90° bend
- Adjustable timer version available
- 5 year Motor Warranty
- 1 of 2 speeds selectable at installation



Powerful Lo-Carbon In-Line Fan Kit

The Vent-Axia Lo-Carbon Minivent ducted bath/shower kit includes all the components necessary to install a ducted 100mm system. This simplifies fitting of an efficient ventilation system to small rooms including bathrooms, shower rooms and toilets. It is especially suitable for en-suite bathrooms.



When installed, the fan kit has ample performance to meet the Building Regulations requirements for toilets and bathrooms. The timer version should be used for internal rooms.

The kit consists of a Lo-Carbon Minivent In-Line fan, a white ceiling grille and spigot, 3 metres of flexible duct and an external louvre for soffit or wall mounting. The duct should be cut to the required length and the bend radius kept to a maximum to provide optimum fan performance.

Enclosed terminal compartment, Class 2 appliance. Supply voltage 220-240/1/50Hz.

Models

Lo-Carbon Minivent Shower Fan (Basic)

Comprises - high output tube fan, 3 metres of flexible duct, ceiling inlet grille and spigot, soffit/wall outlet grille.

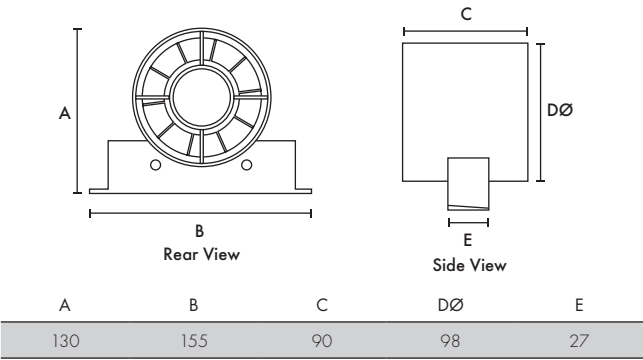
Model **Stock Ref**
Basic **441421**

Lo-Carbon Minivent Shower Fan (Timer)

Comprises high output tube fan, 3 metres of flexible duct, ceiling inlet grille and spigot, soffit/wall outlet grille.

Model **Stock Ref**
Timer **441422**

Dimensions (mm)



Internal/External Grille Dimensions 140x140mm

Transformer (W x H x D) 87 x 87 x 33

Performance Guide

| Model | Extract performance | | | Sound | SFP |
|------------------------|---------------------|-----|-------|-------|---------|
| | FID | | | dB(A) | (W/l/s) |
| | m³/h | l/s | Watts | @ 3m | @ 0Pa |
| Lo-Carbon Minivent B/T | 110 | 31 | 6.5 | 23 | 0.21 |

Lo-Carbon LED Vent-A-Light

- Suitable for shower enclosure and wet areas
- 3W LED Lamp
- Provides simultaneous fan and light operation
- Meets current Building Regulations Approved Documents F & L
- 1 of 2 speeds selectable at installation
- Double insulated fan
- Light assembly Class III
- 5 year Motor Warranty
- Supplied with white and chrome bezels



100mm Lo-Carbon axial in-line shower fan and light kit. Provides simultaneous fan and light operation. Suitable for shower enclosures and wet areas. Available with both a white and chrome bezel on light assembly. The light assembly can be held in place using fixing clips or screws.

Typical Specification

CE marked in accordance with all the relevant EEC Harmonised Directives.

Fan double insulated and the motor is fitted with Thermal Protection. Light assembly class III.

Electrical

12 volt DC 3W GU5.3 sealed lamp. Powered by an LED Driver.

LED lamp lumens output 180lm – 200lm

Input, AC. Output - 12 volt DC. 1A.

Models

Lo-Carbon Vent-A-Light Fan and LED Light Kit (Basic)

100mm axial in-line shower fan and light kit. Includes fan, 3m flexible ducting, white grille, LED lamp light transformer and light assembly with white and chrome bezels.

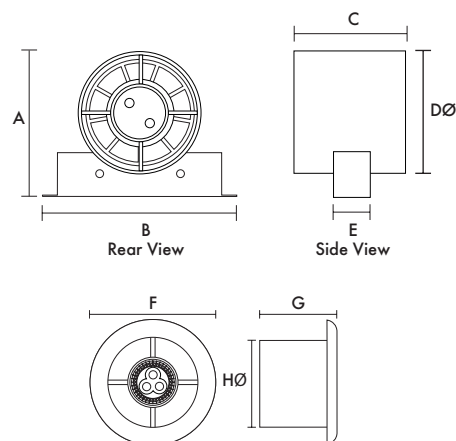
Model **Stock Ref**
Basic **441423**

Lo-Carbon Vent-A-Light Fan and LED Light Kit (Timer)

100mm axial in-line shower fan and light kit. Fan has electronic overrun timer adjustable from 5 to 30 minutes. The factory setting is 15 minutes. Includes fan, 3m flexible ducting, white grille, LED lamp light transformer and light assembly with white and chrome bezels.

Model **Stock Ref**
Timer **441424**

Dimensions (mm)



| A | B | C | DØ | E | FØ | G | HØ |
|-----|-----|----|----|----|-----|----|----|
| 130 | 155 | 90 | 98 | 27 | 140 | 74 | 98 |

Internal/External Grille Dimensions 140x140mm

Fan Transformer (W x H x D) 87 x 87 x 33

Performance Guide

| Model | Extract performance - FID | | Fan Watts | Light Watts | Sound dB(A) @ 3m | SFP (W/l/s) @ 0Pa |
|----------------------------|---------------------------|-----|-----------|-------------|------------------|-------------------|
| | m³/h | l/s | | | | |
| Lo-Carbon Vent-A-Light B/T | 110 | 31 | 6.5 | 3 | 23 | 0.21 |

Tested at 240V 50Hz

Lo-Carbon Quadra

- Meets current Building Regulations Approved Document F & L for intermittent or continuous use
- Recognised in SAP PCDB - Low SFP on PCDB 0.38 W/l/s
- 100mm circular spigot for easy installation and replacement of any existing fan - flush or surface mount
- Filterless technology and maintenance free
- Lo-Carbon motors offering 90% energy savings and long life
- Motor cassette cartridge for simple replacement
- 5 year Motor Warranty
- IPX4 rated
- Suitable for wall, ceiling and panel mounting



the ELECTRICAL
industry awards
WINNER 2011

Winners of the Energy Efficiency Initiative 2011 Award
with our Lo-Carbon Continuous Ventilation Product Range.

Ventilation for any room

The Lo-Carbon Quadra offers a single fan suitable for surface or flush mounting. Low speed selectable between 6, 9 and 12l/s and high between 15, 30 and 60l/s all with through the wall or two ducted selections to ensure installed performance is met.

Discrete

With discrete aesthetics and low noise levels due to an accurately balanced impeller, it is also one of the most unobtrusive centrifugal kitchen fans available. The front cover design also provides no area for dirt to build up so it stays looking better for longer.

Models

Lo-Carbon Quadra TP (Timer/Pullcord)

Dual speed: continuous running or intermittent to high speed. High speed via pullcord (On/Off) or switch live (with overrun timer).

| Model | Stock Ref |
|-------|-----------|
| TP | 439251 |

Lo-Carbon Quadra HTP (Humidistat/Timer/Pullcord)

Dual speed: continuous running or intermittent to high speed. High speed via integral pullcord (On/Off), integral adjustable humidity sensor or switch live (with overrun timer). When humidity sensor is triggered the flow rate increases proportionally with %RH to 50% of the set Boost speed.

| Model | Stock Ref |
|-------|-----------|
| HTP | 439181 |

Lo-Carbon Quadra TM (Timer/PIR)

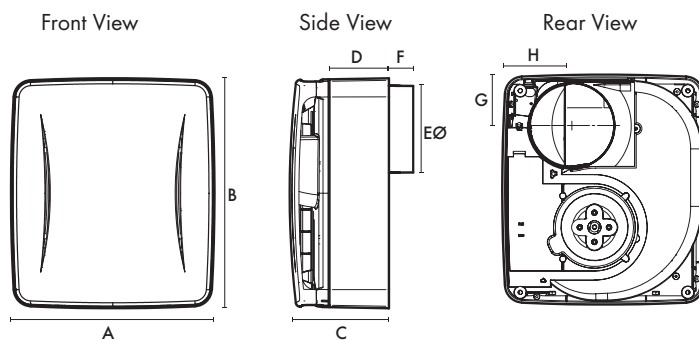
Dual speed: continuous running or intermittent to high speed. High speed via integral PIR sensor or switch live (both with overrun timer).

| Model | Stock Ref |
|-------|-----------|
| TM | 439253 |

Accessories

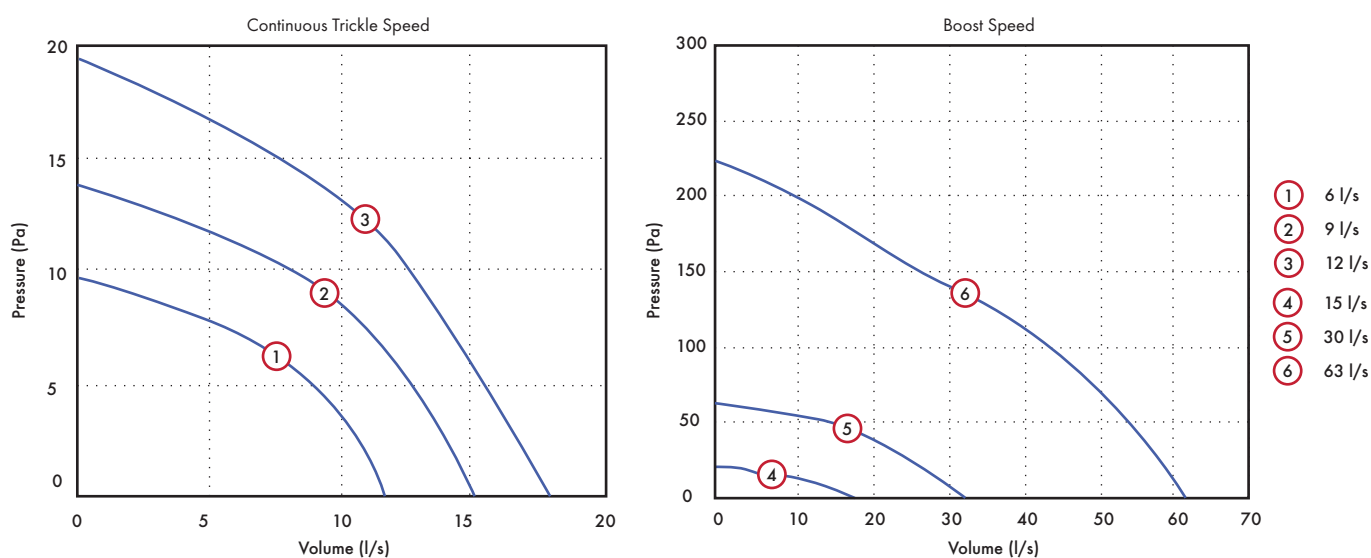
| Model | Stock Ref |
|--------------------|-----------|
| Flush Mounting Kit | 439256 |
| Filter (optional) | 439927 |
| Decoration Frame | 442551 |
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |

Dimensions (mm)



| A | B | C | D | EØ | F | G | H |
|-----|-----|-----|----|----|----|----|----|
| 230 | 260 | 112 | 67 | 98 | 27 | 58 | 79 |

Performance Guide*



| Model | Extract Performance | | | | Power | | Sound | | SEC Class |
|------------------------------|---------------------|-----|------|-----|-------|-------|------------|-----|-----------|
| | High | | Low | | High | Low | dB(A) @ 3m | | |
| | m³/h | l/s | m³/h | l/s | Watts | Watts | High | Low | |
| Lo-Carbon Quadra TP/ HTP/ TM | 227 | 63 | 22 | 6 | 38 | 3.8 | 50 | 20 | D |

*FID Performance. Tested in through the wall installation

SAP PCDB Performance

Systems With Rigid Ductwork Installation Only

| Unit Configuration | Location | Fan Speed Setting | Flow Rate (l/s) | SFP (W/l/s) |
|--------------------|-----------|-------------------|-----------------|-------------|
| In Room | Kitchen | 15 l/s | 15.8 | 0.41 |
| In Room | Wet Room* | 9 l/s | 14.6 | 0.61 |
| Through Wall | Kitchen | 15 l/s | 21.4 | 0.38 |
| Through Wall | Wet Room* | 9 l/s | 19.5 | 0.50 |

Systems With Flexible Or Mixed Ductwork Installation Only

| Unit Configuration | Location | Fan Speed Setting | Flow Rate (l/s) | SFP (W/l/s) |
|--------------------|-----------|-------------------|-----------------|-------------|
| In Room | Kitchen | 15 l/s | 13.7 | 0.41 |
| In Room | Wet Room* | 9 l/s | 12.9 | 0.63 |
| Through Wall | Kitchen | 15 l/s | 21.4 | 0.38 |
| Through Wall | Wet Room* | 9 l/s | 19.5 | 0.50 |

*Not suitable for Zone 1 installation

Lo-Carbon Silhouette 125

- Models Basic/Timer/Humidity & Timer
- Low power consumption - Lower running costs
- Quiet running
- Fully opening and closing non transparent shutters - Improved insulation and privacy
- 1 of 2 speeds selectable at installation
- IPX4 rated
- Ball bearing motors for vertical or horizontal application
- Unique humidity sensor track - Improved response
- 5 year motor warranty
- Suitable for wall, ceiling and panel mounting



Slimline Bathroom Ventilation

With a slim profile of only 18mm, Lo-Carbon Silhouette blends in with the wall surface to provide an unobtrusive installation. Lo-Carbon Silhouette has a FID performance up to 160m³/h. It can be ceiling/panel mounted and connected to an appropriate duct run to the outside.

Models

Lo-Carbon Silhouette 125B

125mm bathroom/toilet fan with indicator light and back draught shutter.

Model 125B Stock Ref 446483

Lo-Carbon Silhouette 125T (Timer)

125mm bathroom/toilet fan with integral adjustable electronic overrun timer (5-30 minutes), indicator light which operates on manual override only, and back draught shutter.

Model 125T Stock Ref 446484

Lo-Carbon Silhouette 125HT (Humidistat/Timer)

125mm bathroom/toilet fan with integral adjustable auto humidity sensor from 60-90% RH and overrun timer, indicator light which operates on manual override only, and back draught shutter. Datalogger as standard on all Lo-Carbon humidity controlled Silhouette fans.

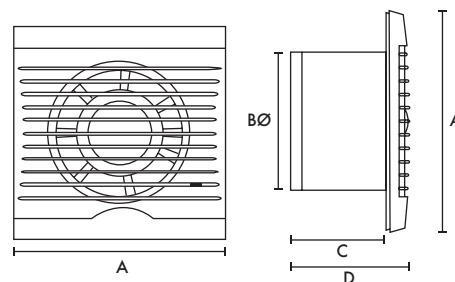
Model 125HT Stock Ref 446485

Accessories

Model Wall Kit White Stock Ref 455226

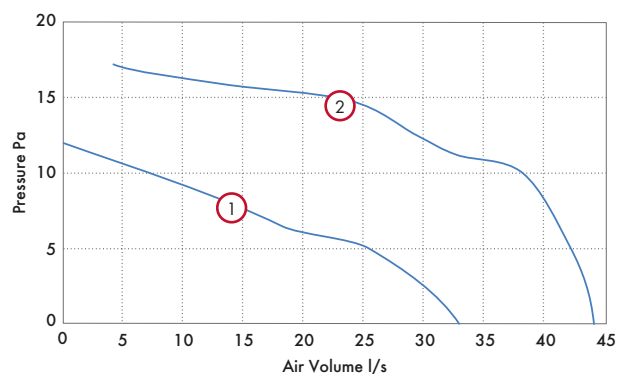
Dimensions (mm)

Panel



| A | BØ | C | D |
|-----|-----|-----|-----|
| 187 | 125 | 131 | 149 |

Performance Guide



| Model | Curve Ref | Extract Performance | | | Sound dB(A) @ 3m | SFP (W/l/s) @ 0Pa |
|--------------------------------|-----------|---------------------|-----|-------|------------------|-------------------|
| | | m ³ /h | l/s | Watts | | |
| Lo-Carbon Silhouette 125B/T/HT | Low ① | 120 | 33 | 4.5 | 33 | 0.14 |
| | High ② | 160 | 44 | 8 | 37 | 0.18 |

Lo-Carbon VA150

- Reduces the home's carbon footprint
- Long life Lo-Carbon motor lasts up to 5 times longer than conventional motors
- Up to 60% energy saving
- Meets current Building Regulations Approved Document F & L when installed
- IP44 rated
- Low sound levels
- 5 year Motor Warranty
- Suitable for wall, ceiling, window and panel mounting
- Fitted with a motorised shutter
- 1 of 2 speeds selectable at installation



Long Life Ventilation

Vent-Axia Lo-Carbon VA150 fans feature Lo-Carbon long life DC energy saving motors that last up to 5 times longer than conventional motors, whilst delivering up to 60% energy savings. The extended life of Lo-Carbon fans is due to the use of a new generation of high quality electronically controlled ball-bearing motors especially developed for this range. The motors are perfectly designed for the wet conditions of utility rooms and kitchens, extracting stale, moisture-laden air quietly and efficiently.

Shutters

The Vent-Axia Lo-Carbon VA150 range is fitted with a motorised shutter mechanism that uses no extra power in operation or off.

Installation

The Lo-Carbon VA150 range is suitable for installation in panels, walls or windows using the kits available. Lo-Carbon fans are quick and simple to fit using reversible grommets and easy-wire terminals, and are suitable for wall or ceiling mounting at any angle.

150mm telescopic wall kits are available with a white or brown outside grille. The kit is supplied with a telescopic wall sleeve to fit walls 225-360mm thick. Hole diameter 152mm.

Window fitting kits are available for use with all Lo-Carbon 150mm models through single or double glazed windows up to 40mm thick. Hole diameter 152mm.

Models

Lo-Carbon VA150P (Shutter/Pullcord)

Ultra long life DC energy saving motor. Fitted with a motorised shutter. Controlled via pullcord On/Off switch.

Model Stock Ref
VA150P 459123

Lo-Carbon VA150T (Shutter/Timer)

Ultra long life DC energy saving motor. Fitted with a motorised shutter.

Controlled via integral power supply with electronic adjustable overrun timer (5-30 minutes).

Model Stock Ref
VA150T 459124

Lo-Carbon VA150HP (Shutter/Humidistat)

Ultra long life DC energy saving motor. Fitted with a motorised shutter. Controlled via integral power supply with pullcord override switch and adjustable humidity sensor (60-95% RH).

Model Stock Ref
VA150HP 459125

Accessories

Model Stock Ref
Wall Kit White 140902
Wall Kit Brown 140903
Window Kit 140901

Dimensions (mm)

| Panel | | | | Wall | | | | Window | |
|-------|-----|----|-----|------|-----|----|----|--------|--|
| | | | | | | | | | |
| A | B | C | DØ | E | F | G | H | I | |
| 216 | 224 | 80 | 146 | 60 | 220 | 37 | 55 | 104 | |

Weight 1.2kg

Performance Guide

| Model | Setting | Extract Performance | | Sound | | SFP | |
|-----------------------|---------|---------------------|-----|-------|-------|---------|-------|
| | | m³/h | l/s | @ 3m | Watts | (W/l/s) | @ 0Pa |
| Lo-Carbon VA150P/T/HP | Utility | 160 | 46 | 33 | 7.5 | | 0.16 |
| | Kitchen | 230 | 64 | 36 | 11.5 | | 0.18 |

Lo-Carbon Silhouette 150

- Stylish ultra low profile grille
- Downstream airflow guide vanes for improved pressure development
- Ball bearing motors for vertical or horizontal application
- Wall kit design meets Building Regulations Approved Document F requirements
- 5 year Motor Warranty
- 1 of 2 speeds selectable at installation
- IPX4 rated
- Low Specific Fan Power
- Suitable for wall, ceiling and panel mounting



Slimline Lo-Carbon Kitchen Ventilation

The Lo-Carbon Silhouette 150 range is designed for modern living. With a profile of only 19mm on the kitchen models, Lo-Carbon Silhouette blends in with the wall surface to provide an unobtrusive installation.

Mounted in the centre of the fan, beneath the ultra slim profile grille, are the electronics, incorporating a humidistat (HT model) for detecting a change in internal humidity or an overrun timer option that is adjustable between 5 and 30 minutes. FID performance of 65l/s, double insulated. Power consumption only 9 Watts.

Models

Lo-Carbon Silhouette 150B

150mm kitchen fan with indicator light and back draught shutter.

Model 150B Stock Ref 441628

Lo-Carbon Silhouette 150T (Timer)

150mm kitchen fan with integral adjustable electronic overrun timer (5-30 minutes), indicator light which operates on manual override only and spring back draught shutter.

Model 150T Stock Ref 441629

Lo-Carbon Silhouette 150HT (Humidistat/Timer)

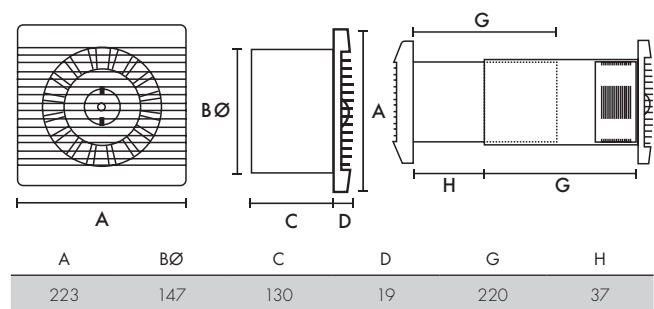
150mm with integral adjustable auto humidity sensor from 60-90% RH and overrun timer, indicator light which operates on manual override only and back draught shutter. Datalogger as standard on all Lo-Carbon humidity controlled Silhouette fans.

Model 150HT Stock Ref 441630

Accessories

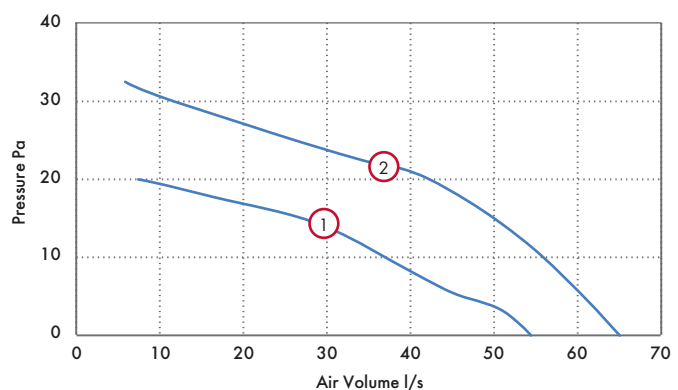
Model 140902
Wall Kit White
Model 140903
Wall Kit Brown

Dimensions (mm)



Weight 1.75kg

Performance Guide



| Model | Setting | Curve Ref | Extract Performance | | | Sound | SFP |
|-----------|-----------------|-----------|---------------------|-----|-------|------------|---------------|
| | | | m³/h | l/s | Watts | dB(A) @ 3m | (W/l/s) @ 0Pa |
| 150B/T/HT | Utility Setting | 1 | 200 | 55 | 6 | 35 | 0.11 |
| | Kitchen Setting | 2 | 234 | 65 | 9 | 43 | 0.14 |

Fixing hole diameter 152mmØ (when wall kit used)

Vent-Axia®

VENTILATION EXCELLENCE

Smart, Stylish, Silent Bathroom Fans



PUREAIR SENSE

Bathroom Fan with Odour Sense Technology



SVARA

Stylish and Versatile Bathroom Fan



SILENT FAN

Silently Improving Indoor Air Quality

Please visit your local wholesaler for more information

Residential Fans



The UK's most comprehensive range of traditional fans for toilets, bathrooms, utility rooms and kitchens.

IPX5 Silent Fan

Now even more discrete than before at only 12dB(A)! The Vent-Axia Silent Fan, the quietest bathroom extract fan on the market.

The Silent Fan Range from Vent-Axia not only delivers stylish and silent ventilation without compromise on performance, but now comes with even more features and more model options providing flexibility when choosing the right fan. Need to hear it to believe it? Email demo@vent-axia.com to arrange a demonstration and hear for yourself just how quiet it is!

Vent-Axia®



| | | |
|---|--|---------|
|  | VA100/SELV 12 Axial Bathroom/Toilet Fan | C3-C4 |
|  | Silhouette 100/SELV Axial Bathroom/Toilet Fan | C5-C6 |
|  | Silent Fan Axial Bathroom/Toilet Fan | C7-C8 |
|  | Silhouette 125 Axial Bathroom/Toilet Fan | C9-C10 |
|  | LED LuminAir Fan & Light Combination Unit | C11-C12 |
|  | LED LuminAir Fan & Light Ventilation Kit | C13-C14 |
|  | LED LuminAir Turbo Fan & Light Ventilation Kit | C15-C16 |
|  | Solo Plus Centrifugal Bathroom/Toilet Fan | C17-C18 |
|  | Solo Pro/SELV Centrifugal Bathroom/Toilet Fan | C19-C20 |
|  | VA140/150 Axial Kitchen Fan | C21 |
|  | VA150 Window Mount Axial Kitchen Fan | C22 |
|  | Silhouette 150 Axial Kitchen Fan | C23-C24 |
|  | Centrif Duo Centrifugal Kitchen & Utility Room Fan | C25-C26 |
|  | Centrif Duo Plus Centrifugal Kitchen & Utility Room Fan | C27-C28 |
|  | Freshvent Natural Vent | C29-C30 |
|  | Basics Range Basic, Simple, Solutions | C31-C32 |
|  | Eclipse Bathroom & Kitchen Axial Fan | C33-C34 |

VA100/SELV

- Indication light
- Panel, ceiling, window or wall mounting
- Available with electric shutter
- Sensors and auto mode controllers save energy by switching the ventilation units on only when needed and when the room is occupied
- Adjustable overrun timer option available (5-30 minutes)
- Meets current Building Regulations Approved Document F
- IPX4 rated - IPX7 rated (SELV)
- SELV Transformer to BS EN 60 742



Bathroom & Toilet Ventilation

The VA100 range from Vent-Axia is designed for domestic bathrooms and toilets. Available as window, wall or panel mounted and with options of shutter, timer or humidity controlled versions.

Designed in a clean white finish and suitable for ambient temperatures up to +40°C the unit is fitted with Standard Thermal Overload Protection (S.T.O.P.).

Safety Extra Low Voltage Fans (SELV)

Designed for areas where a fan has to be fitted over or within Zone 1 in a room containing a fixed bath or shower according to IEE wiring regulations (BS 7671), SELV models can be safely installed within the spray area. SELV models are rated IPX7. Control is by mains safety isolating transformer unit with SELV output, which is sited away from any source of spray and out of reach of a person using a fixed bath or shower.

Models

VA100LP (Pullcord)

Bathroom extract fan pullcord and indication light.

| Model | Stock Ref |
|-------|-----------|
| LP | 251110 |

VA100 SELV

IPX7 rated fan with indication light, complete with remote wall mounted transformer.

| Model | Stock Ref |
|---------------|-----------|
| SVL 12 (SELV) | 258110 |

VA100LT (Timer)

Bathroom and toilet fan with adjustable electronic overrun timer and indication light which operates on the override only.

| Model | Stock Ref |
|-------|-----------|
| LT | 251210 |

VA100 SELV (Shutter)

IPX7 rated fan with thermoelectric shutter and indication light, complete with remote wall mounted transformer.

| Model | Stock Ref |
|---------------|-----------|
| SVX 12 (SELV) | 258310 |

VA100XP/SELV XP (Shutter/Pullcord)

Bathroom fan with thermoelectric shutter, pullcord and indication light. SELV model IPX7 rated and complete with wall mounted transformer.

| Model | Stock Ref |
|----------------|-------------|
| XP | 251310 |
| SVXP 12 (SELV) | 258310BD025 |

VA100XT/SELV XT (Timer/Shutter)

Bathroom fan with integral adjustable overrun timer, thermoelectric shutter and indication light which operates on override only. SELV model IPX7 rated and complete with wall mounted transformer.

| Model | Stock Ref |
|----------------|-----------|
| XT | 251410 |
| SVXT 12 (SELV) | 258410 |

VA100LHP/SELV LHP (Humidity)

Bathroom fan with integral humidity sensor, pullcord override, and indication light which operates on manual override only. SELV model IPX7 rated and complete with wall mounted transformer.

| Model | Stock Ref |
|-----------------|-----------|
| LHP | 251610 |
| SVLHP 12 (SELV) | 258112 |

VA100XHP/SELV XHP (Shutter/Humidity)

Bathroom fan with integral humidity sensor, thermoelectric shutter, pullcord override, and indication light which operates on manual override only. SELV model IPX7 rated and complete with wall mounted transformer.

| Model | Stock Ref |
|-----------------|-----------|
| XHP | 251710 |
| SVXHP 12 (SELV) | 258312 |

VA100XHT/SELV XHT (Shutter/Humidity/Timer)

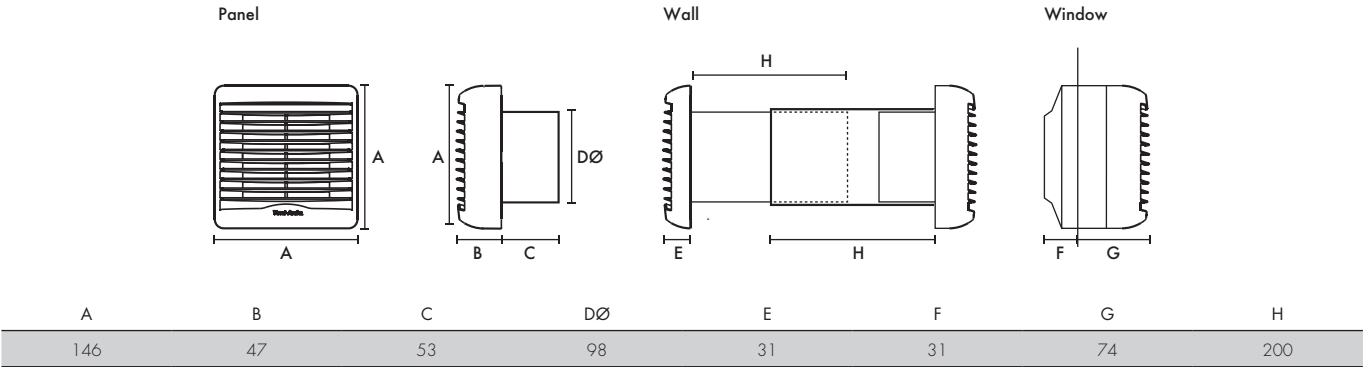
Bathroom fan with integral humidity sensor and adjustable overrun timer, thermoelectric shutter and indication light which operates on manual override only. SELV model IPX7 rated and complete with wall mounted transformer.

| | |
|-------|-----------|
| Model | Stock Ref |
| XHT | 251510 |
| SVXHT | 258512 |

Accessories

| | |
|------------------------|-----------|
| Model | Stock Ref |
| Window Kit | 254101 |
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |
| Anti-Tamper Window Kit | 443234 |

Dimensions (mm)



Weight 0.55kg
Fixing hole diameter 105mmØ (Panel & Window), 117mmØ (Wall). Transformer (WxHxD) 86 x 65 x 147mm

Performance Guide - Panel Models

| Extract performance | | | | |
|----------------------|------|-----|-------|------------------|
| Model | m³/h | l/s | Watts | Sound dB(A) @ 3m |
| VA100LP | 107 | 30 | 13 | 36 |
| VA100LT | 107 | 30 | 15 | 36 |
| VA100XP | 107 | 30 | 15 | 36 |
| VA100XT | 107 | 30 | 18 | 36 |
| VA100LHP | 107 | 30 | 16 | 36 |
| VA100XHP | 107 | 30 | 18 | 36 |
| VA100XHT | 107 | 30 | 18 | 36 |
| VA100SVL | 83 | 23 | 16 | 36 |
| VA100SVX | 83 | 23 | 18 | 36 |
| VA100SVXT/XHP/XHT/XP | 83 | 23 | 20 | 36 |
| VA100SVLHP | 83 | 23 | 18 | 36 |

Silhouette 100/SELV

- 17mm stylish ultra low profile grille
- Downstream airflow guide vanes for improved pressure development
- Designed for vertical or horizontal application
- Indication light (except B model)
- Fan IPX4 rated - IPX7 rated (SELV)
- Suitable for wall, ceiling, panel and window mounting
- Meets current Building Regulations Approved Document F
- SELV transformer to BS EN 60742
- Improved humidistat function



Slimline Bathroom Ventilation

With a slim profile of only 17mm, Silhouette blends in with the wall surface to provide an unobtrusive installation. Silhouette has a FID performance of 21 l/s. Silhouette can be ceiling/panel mounted and connected to an appropriate duct run to the outside.



Safety Extra Low Voltage (SELV) Fans

Safety Extra Low Voltage (SELV) is designed for areas where a fan has to be fitted within zone 1 in a room containing a fixed bath or shower according to IEE wiring regulations. The Silhouette SELV model can be safely installed within the spray area. SELV models are rated IPX7, control is by a mains safety isolating transformer with 12V AC SELV output, which is sited away from any source of spray and out of reach of a person using a fixed bath or shower.

Models

Silhouette 100B/SELV B

Single speed 100mm bathroom/toilet fan with back draught shutter. Indication light on SELV model only.

| Model | Stock Ref |
|------------|-----------|
| B | 454055 |
| SVB (SELV) | 439974 |

Silhouette 100T/SELV T (Timer)

Single speed 100mm bathroom/toilet fan with integral adjustable electronic overrun timer (5-30 minutes), indication light and back draught shutter.

| Model | Stock Ref |
|-----------|-----------|
| T | 454056 |
| ST (SELV) | 439975 |

Silhouette 100HT (Humidity/Timer)

Single speed 100mm bathroom/toilet fan with integral adjustable auto humidity sensor from 60-90% RH, fixed 15 minute overrun timer option via jump switch, indication light and back draught shutter.

| Model | Stock Ref |
|-------|-----------|
| HT | 454057 |

Silhouette 100 SELV SVH (Humidity)

Single speed 100mm bathroom/toilet fan with integral adjustable auto humidity sensor from 60-90% RH, indication light and back draught shutter.

| Model | Stock Ref |
|------------|-----------|
| SVH (SELV) | 439976 |

Silhouette 100TM (PIR/Timer)

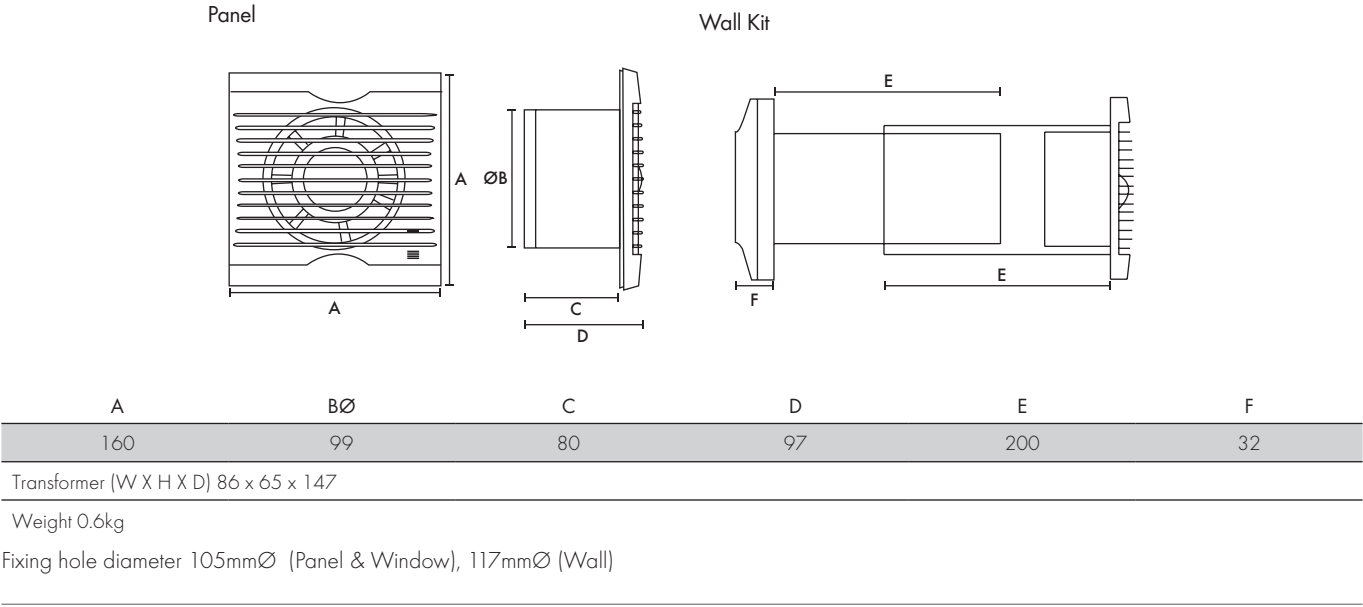
Single speed 100mm bathroom/toilet fan. Integral PIR operated model, (presence detector) with adjustable electronic overrun timer (5-30 minutes) indication light and back draught shutter.

| Model | Stock Ref |
|-------|-----------|
| TM | 454058 |

Accessories

| Model | Stock Ref |
|----------------|-----------|
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |
| Window kit | 442947 |

Dimensions (mm)



Performance Guide

| Model | Extract Performance - FID | | | Sound dB(A) |
|---------------------------|---------------------------|-----|-------|-------------|
| | m³/h | l/s | Watts | @ 3m |
| Silhouette 100B/T/H/TM | 75 | 21 | 16 | 30 |
| Silhouette 100SVB/SVT/SVH | 75 | 21 | 15 | 30 |

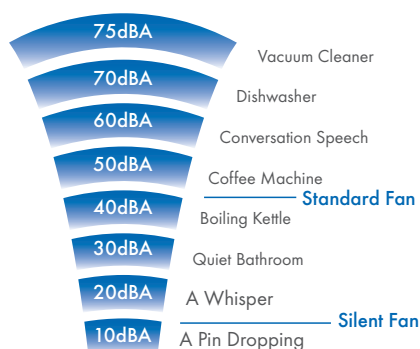
Silent Fan

- Stylish open front models
- From only 12dB(A)
- IPX5 - Zone 1 rated
- Meets current Building Regulations Approved Document F and L
- 2 speeds to choose from at installation
- Back draught shutters included
- High efficiency motor
- 2 year warranty
- Suitable for wall, ceiling, window and panel mounting



Silent Fan Axial Bathroom/Toilet Fan

The Silent Fan Range from Vent-Axia not only delivers stylish and silent ventilation without compromise on performance, but now comes with even more features and more model options providing flexibility when choosing the right fan.



Models

Zone 1 Fixed Speed, Intermittent

Remote or light switch operation. 2 speed options selectable at install. Intermittent operation.

| Model | Stock Ref |
|--------------------------|-----------|
| VASF100B (closed grille) | 446658B |
| VASF100BO (open grille) | 495697 |

Zone 1 Fixed Speed, Intermittent, Timer

Overrun timer adjustable 5-30 min. 2 speed options selectable at install. Intermittent operation.

| Model | Stock Ref |
|--------------------------|-----------|
| VASF100T (closed grille) | 446659B |
| VASF100TO (open grille) | 495698 |

Zone 1 Fixed Speed, Intermittent, Humidity Timer

Humidity controlled with fixed 15 min timer overrun. 2 speed options selectable at install. Intermittent operation.

| Model | Stock Ref |
|---------------------------|-----------|
| VASF100HT (closed grille) | 477436B |
| VASF100HTO (open grille) | 495699 |

PIR Model

Zone 1 Fixed Speed, Intermittent, PIR

Motion detection, presence infrared motion control with overrun timer adjustable 5-30min. Single speed.

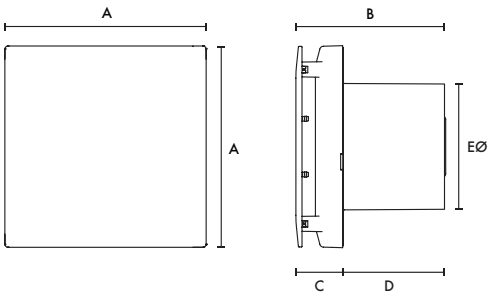
| Model | Stock Ref |
|---------------------------|-----------|
| VASF100PIRO (open grille) | 495705 |

Accessories

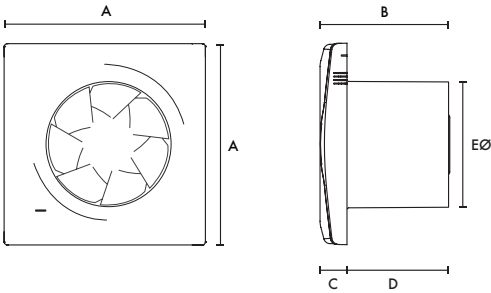
| Model | Stock Ref |
|---|-----------|
| Window Kit | 442947 |
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |
| Internal Fit Wall Kit White + Backdraught Shutter | 474779 |

Dimensions (mm)

Closed Grille



Open Grille

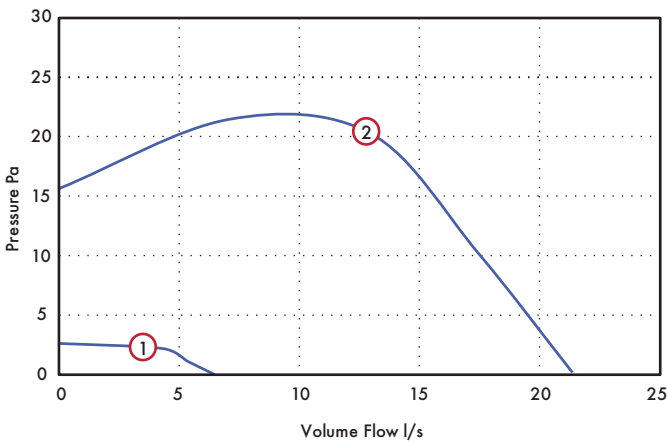


| Grille | A | B | C | D | EØ |
|--------|-----|-----|----|----|----|
| Closed | 160 | 117 | 37 | 80 | 99 |
| Open | 160 | 117 | 22 | 80 | 99 |

Weight 0.7kg

Performance Guide

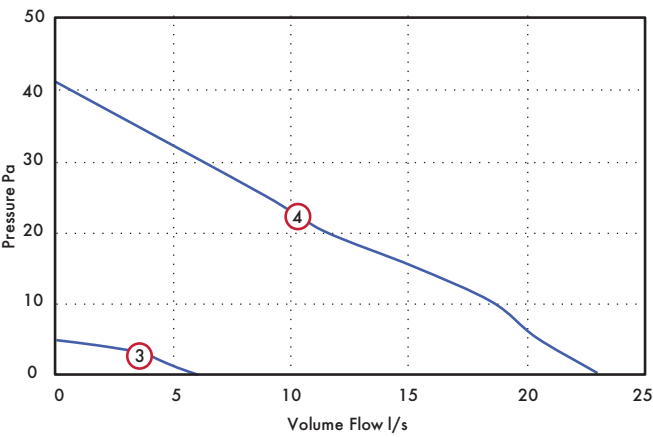
Closed Grille



| | Model | Speed | l/s | Watts | Warranty (years) |
|---------|---------------|--------|-----|-------|------------------|
| 2 Speed | VASF100B/T/HT | ① Low | 6 | 2.7 | 2 |
| | | ② High | 21 | 4.8 | |

12dB(A) - Sound dB(A) @3m at low speed

Open Grille



| | Model | Speed | l/s | Watts | Warranty (years) |
|---------|------------------------|--------|-----|-------|------------------|
| 2 Speed | VASF100BO/TO/HTO/PIRVO | ③ Low | 6 | 2.7 | 2 |
| | | ④ High | 23 | 4.8 | |

12dB(A) - Sound dB(A) @3m at low speed

Silhouette 125

- 18mm stylish ultra low profile grille
- Downstream airflow guide vanes for improved pressure development
- Designed for vertical or horizontal application
- Modern aesthetic with indication light
- IPX4 rated
- Suitable for wall, ceiling and panel mounting



Slimline Bathroom Ventilation

With a slim profile of only 18mm, Silhouette blends in with the wall surface to provide an unobtrusive installation. Silhouette has a FID performance of 160m³/h. Silhouette can be wall, ceiling or panel mounted and connected to an appropriate duct run to the outside.



Accessories



Model
Wall Kit

Stock Ref
455226

Models

Silhouette 125B

Single speed 125mm, bathroom/toilet fan with indication light and back draught shutter.

| Model | Stock Ref |
|-------|---------------|
| B | 445161 |

Silhouette 125T (Timer)

Single speed 125mm bathroom/toilet fan with integral adjustable electronic overrun timer (5-30 minutes), indication light and back draught shutter.

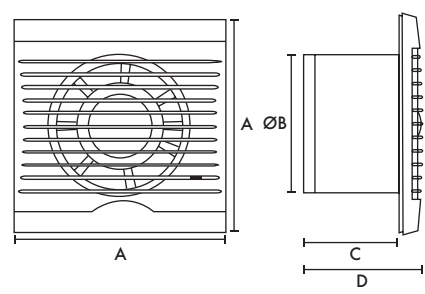
| Model | Stock Ref |
|-------|---------------|
| T | 445162 |

Silhouette 125H (Humidistat)

Single speed 125mm bathroom/toilet fan with integral adjustable auto humidity sensor from 60-90% RH, indication light and back draught shutter.

| Model | Stock Ref |
|-------|---------------|
| H | 445163 |

Dimensions (mm)



| A | BØ | C | D |
|-----|-----|-----|-----|
| 187 | 125 | 131 | 149 |

Performance Guide

| Model | Extract Performance - FID | | | Sound dB(A) |
|---------------------|---------------------------|-----|-------|-------------|
| | m³/h | l/s | Watts | @ 3m |
| Silhouette 125B/T/H | 160 | 45 | 20 | 40 |

LED LuminAir Fan & Light Combination Unit

- The original fan and light combination
- IPX7 rated
- Suitable for shower enclosures and wet areas - can be used within reach of a person using a bath or shower
- Safety extra low voltage (SELV)
- Easy installation
- White and Chrome bezels available
- LED Lamp



Safety Extra Low Voltage

The revolutionary Vent-Axia LuminAir Safety Extra Low Voltage fan and light in a single ceiling mounted fitting.

The IPX7 unit is installed directly over a shower in complete safety. Vent-Axia LuminAir extracts moisture and humidity at source, preventing damaging condensation from spreading. At the same time it bathes the shower enclosure in a rich soft light - bringing any dark shower to life. Ideal for all types of bathroom and shower applications, and is particularly suitable for bedsit and en-suite shower installations.

Designed for mounting in a wide variety of ceiling thicknesses. The safety isolating transformer to BS EN 60742 is mounted in a purpose made enclosure that can be wall mounted or sited in the loft, and is designed to accept mini trunking (LuminAir L transformer - IP20 - loft mounted).

LuminAir has a LED MR16 3W DC 12V lamp to give a pool of soft warm light. The lamp has a long life and is simple to change.

Separate LED Driver also included.

Models

LuminAir L (Switch Live)

Provides simultaneous fan and light operation from the bathroom light switch.

| Model | Stock Ref |
|-------|-----------|
| L | 188110 |

LuminAir T (Timer)

Switches the fan On with the light. When the light is switched Off, the fan continues to run for an adjustable set period to meet the Building Regulations for internal bathrooms.

| Model | Stock Ref |
|-------|-----------|
| T | 188210 |

LuminAir H (Humidistat)

Combines a light activated by the bathroom light switch and an Ecotronic Humidity Sensor which will switch the fan On whenever the humidity level warrants.

| Model | Stock Ref |
|-------|-----------|
| H | 188610 |

Supply to the LuminAir LED Driver Input: AC100-240V, 50/60Hz, Output: DC12V 500mA, LED Power - 3-5W.

Output to LuminAir 12V SELV/1/50Hz. Safety isolating transformers conform to BS EN 60742.

Accessories

| Model | Stock Ref |
|-----------------------|-----------|
| Optional Bezel Chrome | 452044 |

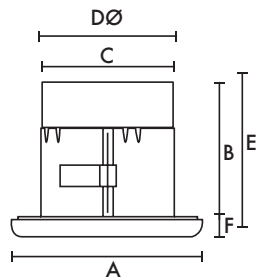
LuminAir Vent Light Safety Extra Low Voltage Duct Air Inlet

LuminAir Vent Light is for upgrading existing extract systems or to provide multiple extract points to a central fan. The Vent Light consists of a LuminAir Safety Extra Low Voltage (SELV) light with white ceiling bezel and 90° bend suitable for use with remote extract fan using 100mm duct. On/Off operation is via the bathroom light switch. Gold and chrome bezels are available as accessories.

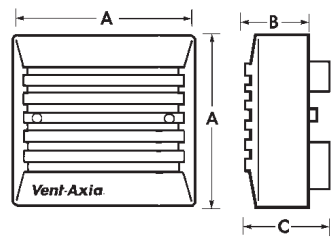
| Model | Stock Ref |
|-------|-----------|
| White | 453395 |

Dimensions (mm)

Vent Light



Humidity Sensor



| Model | A | B | C | DØ | E | F | G |
|-----------------|-----|-----|----|-----|-----|----|-----|
| LuminAir | 150 | 140 | 98 | 103 | 150 | 10 | 180 |
| Humidity Sensor | 87 | 33 | 47 | | | | |

Fixing hole diameter 110mm

Performance

| Model | Extract performance - FID | | Max Watts | | Sound dB(A) | Amps |
|------------|---------------------------|-----|-----------|------|-------------|--------|
| | m³/h | l/s | Fan | Lamp | @ 3m | @ 240V |
| LuminAir L | 110 | 31 | 20 | 3 | 35 | 0.2 |
| LuminAir T | 110 | 31 | 22 | 3 | 35 | 0.2 |
| LuminAir H | 110 | 31 | 24 | 3 | 35 | 0.2 |

LED LuminAir Fan & Light Ventilation Kit

- Unique fan and light combination
- IPX7 rated inlet assembly
- Suitable for shower enclosures and wet areas - can be used within reach of a person using a bath or shower
- Safety extra low voltage (SELV) fan and lamp
- Easy installation
- White and Chrome bezels available
- LED Lamp



SELV Fan & Light Combination

LuminAir is also available in the form of a ventilation kit which, in addition to the fan and light combination, comes with a 90° bend, 3M of flexible ducting, wall grille and cable ties. The IPX7 unit is installed directly over a shower in complete safety.

Vent-Axia LuminAir extracts moisture and humidity at source, preventing damaging condensation from spreading. At the same time it bathes the shower enclosure in a rich soft light - bringing any dark shower to life. Ideal for all types of bathroom and shower applications, and is particularly suitable for bedsit and en-suite shower installations. LuminAir has a LED MR16 3W DC 12V lamp, to give a pool of soft warm light. The lamp has a long life and is simple to change.

Separate LED Driver also supplied, Input: AC100-240V, 50/60Hz, Output: DC12V 500mA, LED Power - 3-5W.

Models

LuminAir L, T or H SELV fan and light, choice of bezel, 90° bend, 3m of flex-duct, wall grille and cable ties.

LuminAir Shower Ventilation Kit L (Switch Live)

Provides simultaneous fan and light operation from the bathroom light switch.

Stock Ref

453410 (White)

LuminAir Shower Ventilation Kit T (Timer)

Switches the fan On with the light. When the light is switched Off, the fan continues to run for an adjustable set period.

Stock Ref

453413 (White)

LuminAir Shower Ventilation Kit H (Humidistat)

Combines a light activated by the bathroom light switch and an Ecotronic Humidistat Sensor which will switch the fan On whenever the humidity level warrants.

Stock Ref

453416 (White)

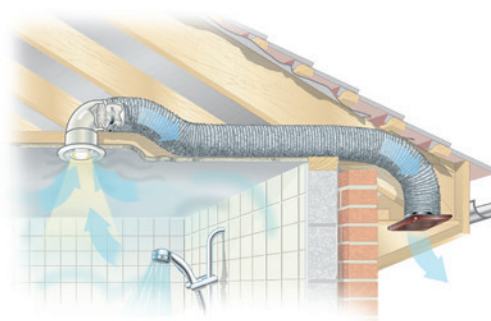
Accessories

Optional Bezels

Stock Ref

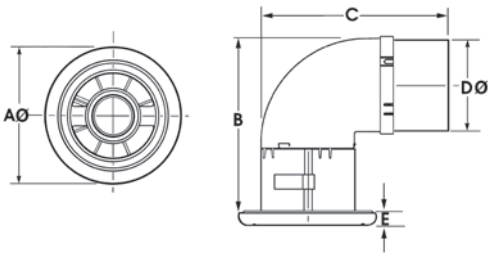
452044 (Chrome)

Installation Example

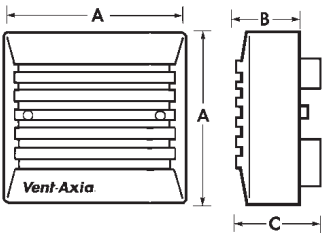


Dimensions (mm)

Vent Light



Humidity Sensor



| Model | AØ | B | C | DØ | E |
|-----------------|-----|-----|-----|----|----|
| Vent Light | 150 | 180 | 139 | 98 | 10 |
| Humidity Sensor | 87 | 33 | 47 | | |

Fixing hole diameter 110mm

Performance

| Model | Extract Performance - FID | | Watts | | Sound dB(A) | Amps |
|--------------------------------|---------------------------|-----|-------|------|-------------|--------|
| | m³/h | l/s | Fan | Lamp | @ 3m | @ 240V |
| LuminAir Ventilation Kit L/T/H | 110 | 31 | 20 | 3 | 35 | 0.2 |

LED LuminAir Turbo Fan & Light Ventilation Kit

- Unique fan and light combination
- IPX7 rated inlet assembly
- Suitable for shower enclosures and wet areas - can be used within reach of a person using a bath or shower
- Safety extra low voltage (SELV) lamp
- Easy installation
- White and Chrome bezels available
- LED Driver



High Performance Fan & Light Combination

LuminAir is also available in the form of a ventilation kit. The IPX7 unit is installed directly over a shower in complete safety.

Vent-Axia LuminAir extracts moisture and humidity at source, preventing damaging condensation from spreading. At the same time it bathes the shower enclosure in a rich soft light - bringing any dark shower to life. Ideal for all types of bathroom and shower applications, and is particularly suitable for bedsit and en-suite shower installations. LuminAir has a LED MR16 3W DC 12V Lamp, to give a pool of soft warm light. The lamp has a long life and is simple to change. Comes with a LED Driver, Input: AC100-240V, 50/60Hz, Output: DC12V 500mA, LED Power - 3-5W

Models

For applications where a more powerful system is required, the kit comprises a luminair turbo L or T mains fan and SELV light, choice of bezel, 90° bend, 6 metres of flexible duct, quick fix wall grille and four cable ties. Meets Building Regulations approved Document F performance assuming ductwork provided is fully extended and one 90° bend.

LuminAir Turbo SKL (Switch Live)

Provides simultaneous On and Off operation of the fan and light switch from the bathroom light switch.

| | |
|-----------|-----------|
| Model | Stock Ref |
| SKL White | 453419 |

LuminAir Turbo SKT (Timer)

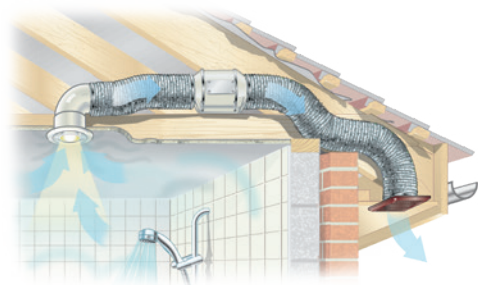
Switches the fan On with the light switch. When the light is switched Off, the fan continues to run for an adjustable fixed period to meet the Building Regulations for internal bathrooms.

| | |
|-----------|-----------|
| Model | Stock Ref |
| SKT White | 453422 |

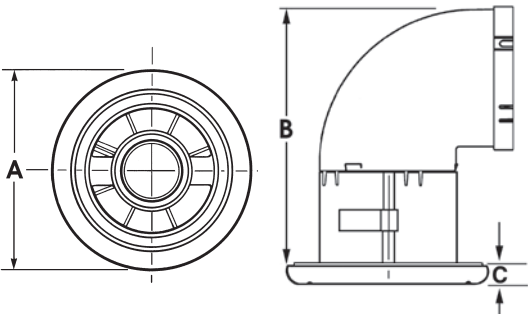
Accessories

| | |
|-----------------------|-----------|
| Model | Stock Ref |
| Optional Bezel Chrome | 452044 |

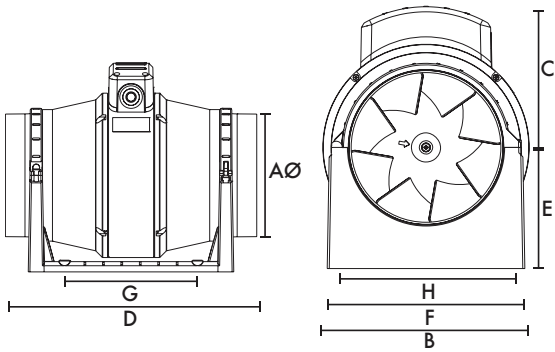
Installation Example



Dimensions (mm)
Vent Light and Bend



Turbo Fan



| Model | AØ | B | C | D | E | F | G | H |
|------------|-----|-----|-----|-----|----|-----|-----|-------|
| Vent Light | 150 | 180 | 10 | | | | | |
| Turbo Fan | 97 | 178 | 124 | 298 | 96 | 168 | 120 | 153.5 |

Ceiling Fixing hole diameter 110mm

Performance

| Model | Extract Performance - FID | | Watts | | Sound dB(A) | Amps |
|---------|---------------------------|-----|-------|------|-------------|--------|
| | m³/h | l/s | Fan | Lamp | @ 3m | @ 240V |
| SKL/SKT | 160 | 52 | 8 | 3 | 23 | 0.3 |

Solo Plus

- Filterless as standard - innovative impeller design means no need for a filter
- Meets current Building Regulations Approved Documents F & L requirements for domestic bathrooms and toilets
- IPX4 rated
- Flush or surface mountable
- Adjustable rear or side exit spigot
- Extremely low sound levels
- Suitable for wall, ceiling and panel mounting



Bathroom & Toilet Ventilation

The Solo Plus range from Vent-Axia has been specially designed for through the wall and ducted applications, suitable for internal bathrooms, toilets and other small rooms. Finished in white, the Solo Plus can be flush or surface mounted, with a 100mm circular spigot for rear entry or connecting to a vertical ducting system. The spigot can also be adjusted for sideways exhaust enabling recessed ceiling installations within limited ceiling voids. The powerful centrifugal impeller allows for installations with longer duct runs using 100mm ducting, whilst still achieving 15 l/s as required by Document F of the current Building Regulations.

Continuous running products, such as the Solo Plus installed in all wet areas of a dwelling are classed as a wholehouse ventilation system and therefore, only needs to move the amount of air as laid down in table 1.1b of Document F.

The Solo Plus has a choice of two boost/override motor speeds set at installation, medium (17l/s) or high (22l/s), with an optional constant trickle speed (9l/s), also selectable at installation except in the P model. Depending on the model, the fan will switch from trickle (if selected) to boost (medium or high) via the pullcord/light switch/humidity sensor/PIR.

All models can be wall, panel or ceiling mounted and can be connected to either circular, rectangular or Vent-Axia's flat ducting. Enclosure of the electrical components is manufactured from flame retardant grade material.

Supply voltage 220-240V/1/50Hz.

Models

Solo Plus P (Pullcord)

Flush or surface mountable. Control by pullcord single speed; 1 of the 3 speeds selectable at installation.

| Model | Stock Ref |
|-------|-----------|
| P | 427477 |

Solo Plus T (Timer)

Flush or surface mountable. Constant trickle option. 2 Speed. Adjustable timer overrun. Delay on timer option.

| Model | Stock Ref |
|-------|-----------|
| T | 427478 |

Solo Plus HT (Humidistat/Timer)

Flush or surface mountable. Humidity controlled fan with override pullcord. Constant trickle option. Adjustable timer overrun. Delay on timer option. Adjustable humidity sensor.

| Model | Stock Ref |
|-------|-----------|
| HT | 427479 |

Solo Plus TM (Timer/PIR)

Flush or surface mountable. Control by integral PIR detector. Constant trickle option. 2 Speed.

| Model | Stock Ref |
|-------|-----------|
| TM | 427480 |

Accessories

Solo Plus Bezel

Used when flush mounting, reduces the need to make good.

| Model | Stock Ref |
|-------|-----------|
| Bezel | 404106 |

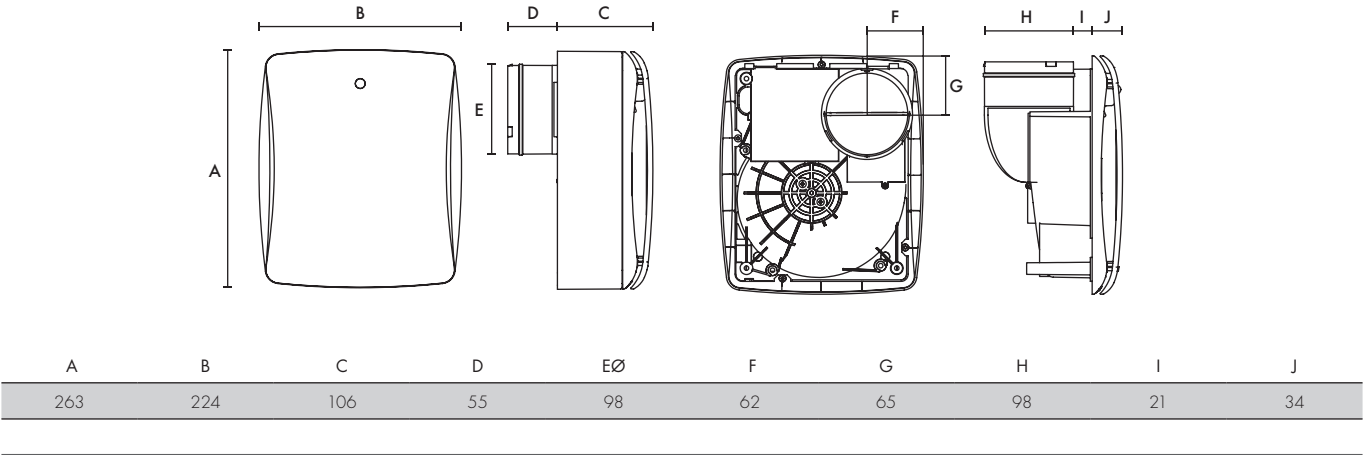
| Model | Stock Ref |
|----------------|-----------|
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |

Filter pack (1 per pack)

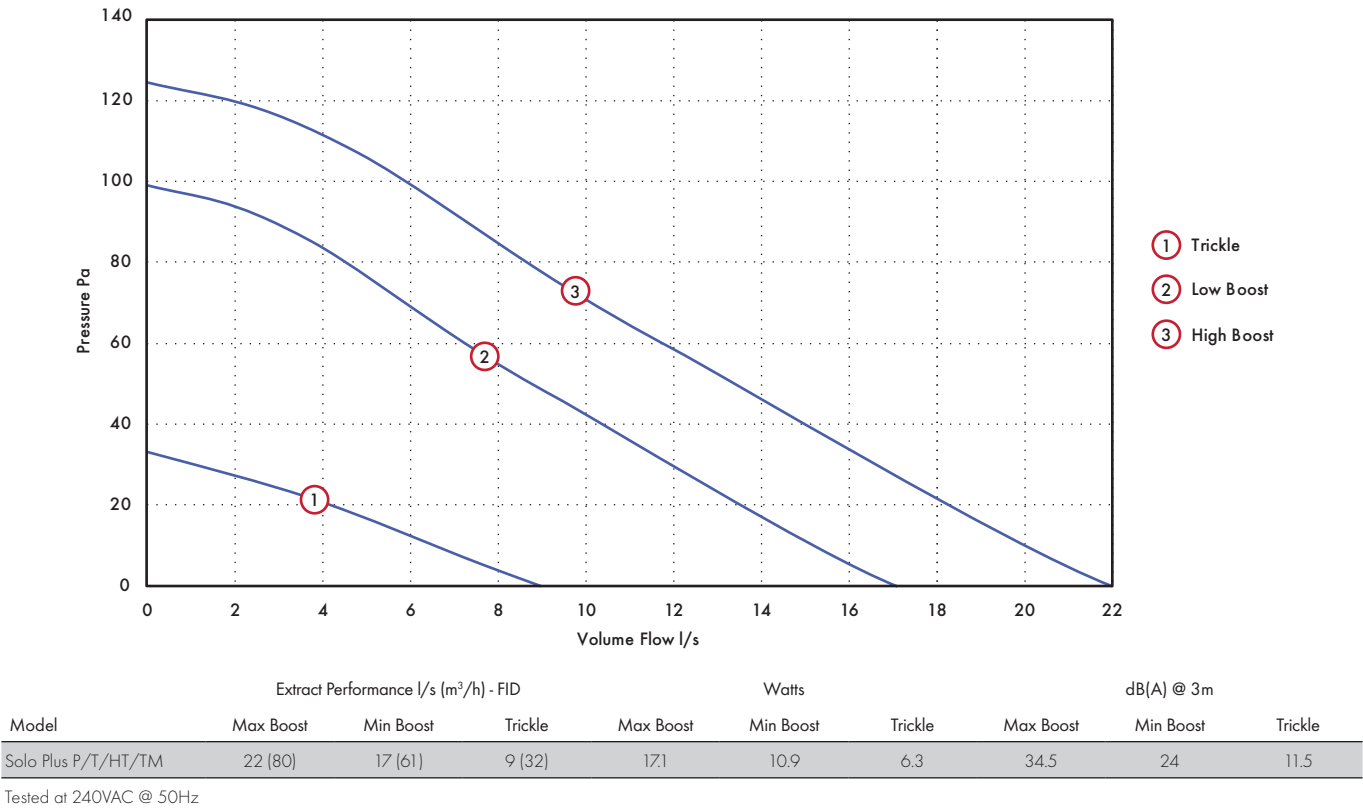
The design of the Solo Plus means that it does not need a filter. However, if you are going to install the product in a heavily greasy environment, you may want to protect the product by fitting a filter.

| Model | Stock Ref |
|-------------|-----------|
| Filter pack | 449265 |

Dimensions (mm)



Performance Guide



Solo Pro/SELV

- 100mm high performance centrifugal extract fan for internal bathrooms, toilets and other small rooms
- Extract performance 22l/s
- Single speed and overrun timer models
- Suitable for wall, ceiling, panel and window mounting
- SELV models suitable for installation over or within reach of a shower or bath
- Suitable for use with flat ducting
- IPX4 rated - IPX7 rated (SELV)
- Transformer complies with BS EN 60742



High Performance Ventilation

The new Solo Pro is a new and improved version of our trusted Solo model. With improved aesthetics, sound and installation it has been specifically designed for effective ducted ventilation of internal bathrooms, toilets and other small rooms. Finished in White, the new Solo Pro range can be used with 100mm diameter smooth bore duct in straight runs equal to 50m, yet still meets the minimum 15l/s required by the current Building Regulations Document F for ventilation of bathrooms. Solo Pro can also be used with flat ducting for shorter concealed runs.

Models are available for surface or recessed mounting directly into standard 100mm diameter ducting. Suitable for panel, wall and ceiling installations and windows up to 25mm thick. For high rise or coastal applications, install through the wall with a Vent Cowl (Stock Ref 561403).

Safety Extra Low Voltage

SELV models are designed for areas where a fan has to be fitted within zone 1 in a room containing a fixed bath or shower according to IEE wiring regulations. The Solo SELV models can be safely installed within the spray area. The SELV models are rated IPX7, control is by a mains safety isolating transformer with 12V AC SELV output, which is sited away from any source of spray and out of reach of a person using a fixed bath or shower.

The safety isolating transformer, to BS EN 60742, is mounted in a purpose made enclosure. The enclosure can be wall mounted or sited in the loft. The enclosure will accept mini trunking.

Electrical

Rear 20mm conduit entry for recessed wiring and side entry grommet for surface wiring.

Supply voltage to transformer/controller 220-240V/1/50Hz. Output to fan 12V SELV/ 1/50Hz.

To meet IEE Regulations, timer models should be isolated using a 3 pole isolator.

| Model | Stock Ref |
|-----------------|-----------|
| 3 pole isolator | 563518 |

Models

Solo Pro P/SELV SVP (Pullcord)

Control by pullcord or from light/remote switch or sensor. Back draught shutter. SELV model comes with mains transformer with 12V SELV output.

| Model | Stock Ref |
|------------|-----------|
| P | 409159 |
| SVP (SELV) | 409163 |

Solo Pro T/SELV T (Timer)

Control by light/remote switch. Overrun timer variable from 5 to 30 minutes. Back draught shutter. SELV model comes with mains transformer with 12V SELV output.

| Model | Stock Ref |
|------------|-----------|
| T | 409160 |
| SVT (SELV) | 409164 |

Solo Pro HTP/SELV SVHTP (Humidity/Timer)

Humidity controlled with pullcord override. 17 min overrun timer. Back draught shutter. SELV model comes with mains transformer with 12V SELV output.

| Model | Stock Ref |
|--------------|-----------|
| HTP | 409161 |
| SVHTP (SELV) | 409165 |

Solo Pro TM (Timer/PIR)

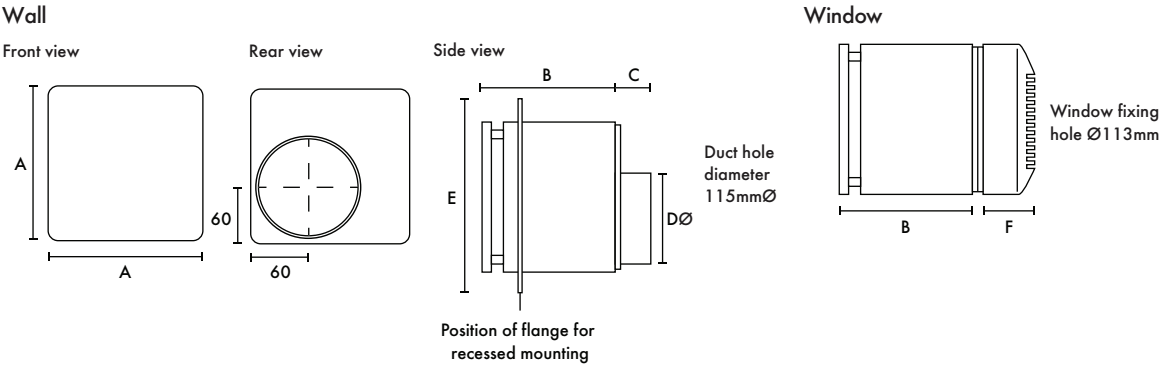
Controlled by separate PIR sensor supplied with fan. Built in overrun timer, variable from 5 to 30 minutes, switches fan Off.

| Model | Stock Ref |
|-------|-----------|
| TM | 409162 |

Accessories

| | |
|----------------|-----------|
| Model | Stock Ref |
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |
| Window Kit | 11461685 |

Dimensions (mm)



| Model | A | B | C | DØ | E | F |
|----------------------------|-----|-----|----|-----|-----|------|
| Solo Pro/SELV12 P/T/HTP/TM | 154 | 119 | 25 | 100 | 195 | 57.5 |

Transformer (W x H x D) 86 x 65 x 147mm

Performance Guide

| Model | Extract Performance | | Max | dB(A) | Amps @ |
|----------------------|---------------------|-----|-------|-------|--------|
| | m³/h | l/s | Watts | @ 3m | 240V |
| Solo Pro SELV12/T/HP | 80 | 22 | 19 | 30 | 0.26 |
| Solo Pro P/T/HTP/TM | 80 | 22 | 17 | 30 | 0.15 |

VA140/150

- VA140/150 Panel models
- 2 Year Warranty
- Thermo electric shutters to prevent back draughts
- Meets current Building Regulations Approved Document F
- IP44 rated
- Suitable for wall, ceiling, panel and window mounting



Kitchen Ventilation

VA140/150 Panel models are designed to alleviate the everyday problems that condensation and household odours may cause. Effectively extracts odours and moisture laden air from kitchens giving a healthy and fresh environment.

Building Regulations

Specifically sized to meet the current Building Regulation requirements for powered extract ventilation in domestic kitchens. Control facility fitted as standard. The VA140/150 range is fitted with internal louvers conforming to the latest international safety standards.

Please contact our Customer Service Department for exposed site application.

Models

VA140/150KP (Pullcord)

Single speed kitchen extract fan with On/Off pullcord.

Model Stock Ref
KP 140120

VA140/150KT (Timer)

Single speed kitchen extract fan with adjustable overrun timer (3-30 minutes).

Model Stock Ref
KT 140220

VA140/150KHP (Humidistat)

Single speed humidity-controlled kitchen extract fan with full speed pullcord override. Humidity adjustment 62-82%RH.

Model Stock Ref
KHP 140320

VA140/150KHT (Timer/Humidistat)

Humidity controlled kitchen extract fan with adjustable overrun timer (3-30 minutes). Humidity adjustment 62-82% RH.

Model Stock Ref
KHT 140420

VA140/150VS (Variable Speed)

Variable speed kitchen extract with a built in adjustable speed controller, which can reduce the speed to 40% of its maximum performance.

Model Stock Ref
VS 458915

Accessories

Model Stock Ref
Wall Kit White 140902
Wall Kit Brown 140903
Window Kit 140901

Dimensions (mm)

| Panel | | | | Wall | | | Window | |
|-------|-----|----|-----|------|-----|----|--------|-----|
| | | | | | | | | |
| A | B | C | DØ | E | F | G | H | I |
| 216 | 224 | 80 | 146 | 60 | 220 | 37 | 55 | 104 |

Weight 1.75kg

Fixing hole Ø 152mm (Panel), Ø 160mm (Window), Ø 152mm (Wall)

Performance Guide

| Model | Shutter Actuator | Extract Performance FID | | Sound | |
|---------------------|------------------|-------------------------|---------|-------|------------|
| | | m³/h | l/s | Watts | dB(A) @ 3m |
| VA140/150KP | Pullcord | 245 | 68 | 18.8 | 36 |
| VA140/150KT/KHP/KHT | Instant | 245 | 68 | 18.8 | 36 |
| VA140/150VS | Pullcord | 100 - 245 | 28 - 68 | 18.8 | 36 |

VA150

- Complete with window kit
- 2 Year Warranty
- Meets current Building Regulations Approved Document F
- Integrated, concealed shutter
- Natural trickle vent facility when unpowered



Kitchen Ventilation

VA150 Window models are designed to alleviate the everyday problems that condensation and household odours may cause. Effectively extracts odours and moisture laden air from kitchens giving a healthy and fresh environment.

Shutter

The louvre shutter on the VA150 is concealed behind the interior grille. Operates automatically when the fan is switched On. Natural trickle vent facility (unpowered) available on all models.

Building Regulations

The VA150 Range is specifically sized to meet the current Building Regulation requirements for powered extract ventilation in domestic kitchens. The VA150 range is fitted with internal and external louvres conforming to the latest international safety standards.

Motor

Maintenance free, sealed for life ball bearings in the purpose made electric motor, economical and quiet running. Double insulated appliance. Supply voltage 220-240V/1/50Hz.

Models

VA150P (Pullcord)

Specifically designed for domestic use in kitchens and utility rooms, the VA150P is a single speed 150mm (6") extract ventilation unit for windows. Fan and shutter operated by integral pullcord. (window kit supplied). IP24 Rated. Colour: white.

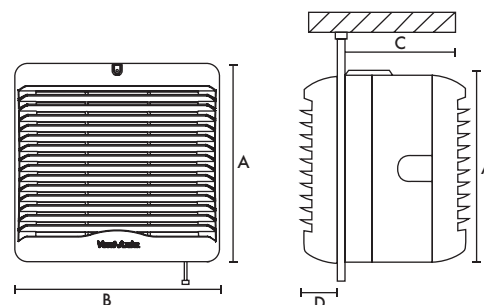
Model **Stock Ref**
P 152110

VA150A

A single speed 150mm (6") extract fan with instant opening/closing shutter operated by remote switch. Suitable for installation in bathroom or kitchen. (Window kit supplied). IP44 Rated. Colour: white.

Model **Stock Ref**
A 153110

Dimensions (mm)



| A | B | C | D |
|-----|-----|-----|----|
| 216 | 224 | 130 | 55 |

Weight 2.5kg

Window fixing hole Ø 184mm

Performance Guide

| Model | Shutter | Extract Performance FID | | Sound dB(A) | |
|----------|------------------|-------------------------|-----|-------------|------|
| | Attenuator | m³/h | l/s | Watts | @ 3m |
| VA150P/A | Pullcord/Instant | 220 | 60 | 19 | 37 |

Silhouette 150

- Stylish ultra low profile grille
- Downstream airflow guide vanes for improved pressure development
- Modern aesthetics
- Electric back draught shutters
- IPX4 rated
- Suitable for wall, ceiling and panel mounting
- Meets current Building Regulations Approved Document F



Slimline Kitchen Ventilation

The Vent-Axia Silhouette range is designed for modern living. With a profile of only 19mm on the kitchen models, Silhouette blends in with the wall surface to provide an unobtrusive installation.

Mounted in the centre of the fan, beneath the ultra slim profile grille, are the electronics, incorporating a humidistat for detecting a change in internal humidity or an overrun timer option that is adjustable between 5 and 30 minutes.

Accessories

| Model | Stock Ref |
|----------------|-----------|
| Wall Kit White | 140902 |
| Wall Kit Brown | 140903 |

Models

Slim profile only 19mm. FID performance of 241 m³/h, double insulated.

Silhouette 150X

Single speed 150mm kitchen fan with electric back draught shutter.

| Model | Stock Ref |
|-------|-----------|
| X | 454059 |

Silhouette 150XT

Single speed 150mm kitchen fan with integral adjustable electronic overrun timer (5-30 minutes), indication light and electric back draught shutter.

| Model | Stock Ref |
|-------|-----------|
| XT | 454060 |

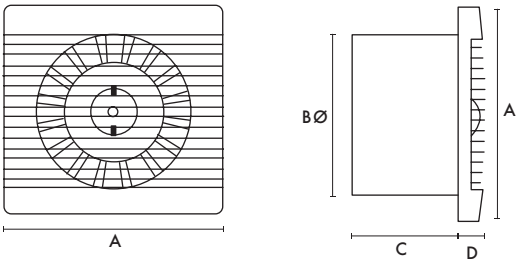
Silhouette 150XH

Single speed 150mm with integral adjustable auto humidity sensor from 60-90% RH, indication light and electric back draught shutter. Switch live for override by remote switch/light switch.

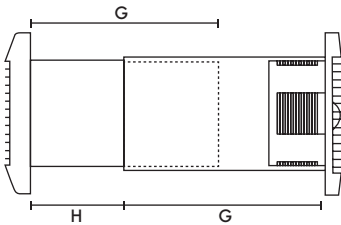
| Model | Stock Ref |
|-------|-----------|
| XH | 454061 |

Dimensions (mm)

Panel



Wall



Fixing hole diameter 1.52mmø (when wall kit used)

| A | B | C | D | G | H |
|-----|-----|-----|----|-----|----|
| 223 | 147 | 111 | 19 | 220 | 37 |

Weight 1.75kg

Performance

| Model | Extract Performance - FID | | | Sound dB(A) |
|-----------------------|---------------------------|-----|-------|-------------|
| | m³/h | l/s | Watts | @ 3m |
| Silhouette 150X/XT/XH | 241 | 67 | 20 | 43 |

Centrif Duo

- 100mm circular spigot for speedy installation
- Humidity sensing model for automatic operation
- Suitable for both kitchen and utility rooms
- Includes washable grease filter and removable grille assembly for easy cleaning
- Speed set at installation
- Meets current Building Regulations Approved Document F
- Timer model for internal rooms
- Surface mounted



Kitchen & Utility Ventilation

The Centrif Duo range is a series of 100mm centrifugal extract fans for the domestic environment. The range is designed to provide extraction levels that comply with Building Regulation requirements, with special humidity sensing variants for local authority use.

Motor

The motor features greased-for-life ball bearings which allow the fan to be installed at any angle. Insulation is Class E. Double insulated appliance. Supply voltage 220-240V/1/50Hz.

Fast Installation

The Centrif Duo has a 100mm circular spigot. The Flush mounting kit enables the spigot to be converted to a side outlet. The spigot also encloses a built-in, spring operated back draught shutter. The Centrif Duo Range can be wall mounted using a telescopic wall fitting kit available as an accessory (requires a 115mm diameter hole).

Humidistat Control

Humidistat is selectable for either kitchen or utility speed separate to any other control to reduce nuisance noise. Boost operation by pullcord or switch live.

Models

Centrif Duo P (Pullcord)

Two speed kitchen extract fan with pullcord. Choice of two speeds for boost, set at installation.

| Model | Stock Ref |
|-------|-----------|
| P | 256120 |

Centrif Duo T (Timer)

Two speed kitchen extract fan with adjustable timer between 5-30 minutes. Choice of two speeds for boost, set at installation.

| Model | Stock Ref |
|-------|-----------|
| T | 256220 |

Centrif Duo DP (Two Speed)

Two speed and Off with pullcord or remote switch. Switches between Off, Low and one of the 2 Boost speeds.

| Model | Stock Ref |
|-------|-----------|
| DP | 256320 |

Centrif Duo HTP (Humidity)

Intermittent on 1 of 2 speeds (Utility or Kitchen selectable at installation). Operation by integral humidity sensor or pullcord. Separate speeds selectable for humidistat and pullcord. Optional continuous trickle speed available at installation.

| Model | Stock Ref |
|-------|-----------|
| HTP | 256420 |

Accessories

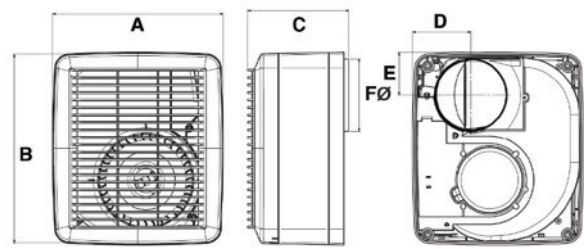
Flush Mounting Kit

Bezel, clips and 90° duct elbow reduces the need to make good.

| Model | Stock Ref |
|--------------------|-----------|
| Flush Mounting Kit | 439256 |

| Model | Stock Ref |
|------------------|-----------|
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |
| Decoration Frame | 442551 |

Dimensions (mm)



| A | B | C | D | E | FØ |
|-----|-----|-----|----|----|----|
| 231 | 261 | 137 | 79 | 58 | 98 |

Weight 1.75kg

Performance

| Model | Performance @ 0 pa | | | | | | Power (W) | | | Sound dB(A) @ 3m | | | SEC Class |
|--------------------|--------------------|-----|-----------|-----|-----------|-----|-----------|---------|---------|------------------|---------|---------|-----------|
| | High speed | | Med speed | | Low speed | | | | | | | | |
| | m³/h | l/s | m³/h | l/s | m³/h | l/s | Kitchen | Utility | Trickle | Kitchen | Utility | Trickle | |
| Centrif Duo P/T | 220 | 61 | 130 | 36 | - | - | 60 | 41 | N/A | 51.8 | 38 | N/A | D |
| Centrif Duo DP/HTP | 220 | 61 | 130 | 36 | 90 | 25 | 60 | 41 | 9 | 51.8 | 38 | 21.5 | D |

Centrif Duo Plus

- Meets current Building Regulations Approved Document F
- Optional filter available
- Easy installation
- Fan can be wall or ceiling mounted
- Suitable for both kitchen and utility rooms
- Constant trickle boost speed available on DP & HTP models
- IPX4 Rated



Ultra Quick Ventilation

Centrif Duo Plus is designed to provide extraction levels that comply with Building Regulations Approved Document requirements, with special humidity sensing variants for local authority use.

The Centrif Duo Plus is for kitchens and utility rooms and large bathrooms. Surface mounting directly into standard 100mm diameter ducting, through the wall or ceiling installation.

Fast Installation

The Centrif Duo Plus has a 100mm circular spigot. The Flush mounting kit enables the spigot to be converted to a side outlet.

The spigot also encloses a built-in, spring operated back draught shutter. The Centrif Duo Plus Range can be wall mounted using a telescopic wall fitting kit available as an accessory (requires a 115mm diameter hole). For ceiling applications the range is ducted either through a soffit outlet or roof cowl assembly. There is convenient access for wiring which accommodates surface or recessed installation.

Improved Humidistat Control

Humidistat is selectable for either kitchen or utility speed separate to any other control to reduce nuisance noise. Boost operation by pullcord or switch live.

Models

Centrif Duo Plus P (Pullcord)

Two speed kitchen extract fan with pullcord. Choice of two speeds for boost, set at installation.

| Model | Stock Ref |
|-------|-----------|
| P | 431613 |

Centrif Duo Plus T (Timer)

Two speed with adjustable timer between 2-30 minutes. Choice of two speeds for boost, set at installation.

| Model | Stock Ref |
|-------|-----------|
| T | 431614 |

Centrif Duo Plus DP (Two speed)

Two speed and Off with pullcord or remote switch. Switches between Off, low and one of the 2 boost speeds.

| Model | Stock Ref |
|-------|-----------|
| DP | 431615 |

Centrif Duo Plus HTP (Humidity/ Timer/ Pullcord)

Intermittent on 1 of 2 speeds (Utility or Kitchen selectable at installation). Operation by integral humidity sensor or pullcord. Separate speeds selectable for humidistat and pullcord. Optional continuous trickle speed available at installation.

| Model | Stock Ref |
|-------|-----------|
| HTP | 431616 |

Accessories

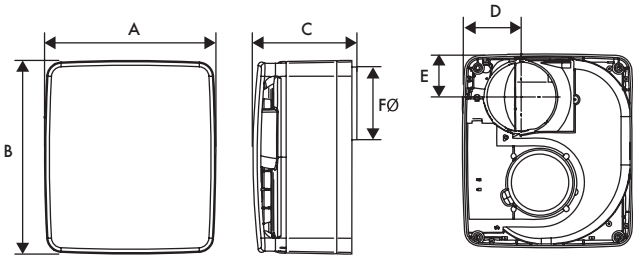
Flush Mounting Kit

Bezel, clips and 90° duct elbow reduces the need to make good.

| Model | Stock Ref |
|--------------------|-----------|
| Flush Mounting Kit | 439256 |

| Model | Stock Ref |
|-------------------------|-----------|
| Centrif Duo Plus Filter | 439927 |
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |
| Decoration Frame | 442551 |

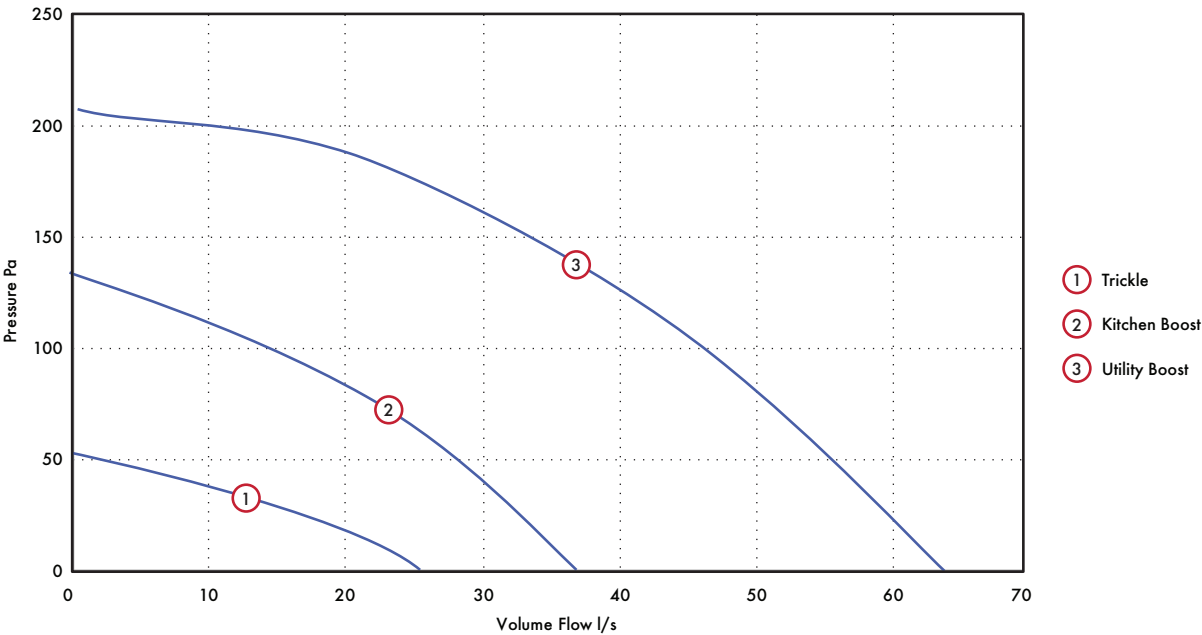
Dimensions (mm)



| A | B | C | D | E | FØ |
|-----|-----|-----|----|----|----|
| 231 | 261 | 140 | 79 | 58 | 98 |

Weight 1.75kg

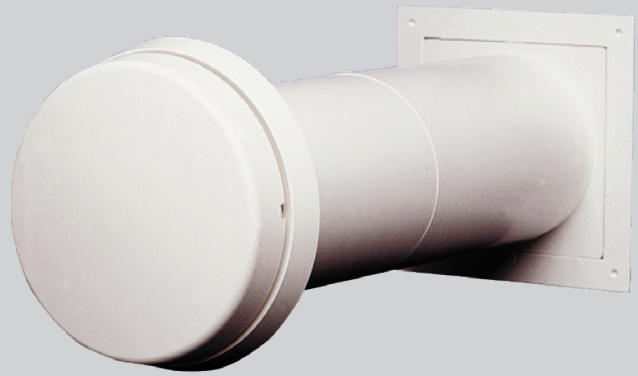
Performance Guide



| Model | Performance @ 0 Pa | | | | | | Power (W) | | | Sound dB(A) @3m | | | SEC |
|-------------------------|--------------------|-----|-----------|-----|-----------|-----|-----------|---------|---------|-----------------|---------|---------|-----|
| | High speed | | Med speed | | Low speed | | | | | | | | |
| | m³/h | l/s | m³/h | l/s | m³/h | l/s | Kitchen | Utility | Trickle | Kitchen | Utility | Trickle | |
| Centrif Duo Plus P/T | 220 | 61 | 130 | 36 | - | - | 60 | 41 | N/A | 51.8 | 38 | N/A | D |
| Centrif Duo Plus DP/HTP | 220 | 61 | 130 | 36 | 90 | 25 | 60 | 41 | 9 | 51.8 | 38 | 21.5 | D |

Freshvent

- Completely silent, all year round ventilation
- Complements existing ventilating fans
- Filtered, natural air without draughts
- Control of the indoor environment
- Helps prevent damaging condensation
- No energy consumption, no running costs



Natural Ventilation

Freshvent 100 is a range of passive ventilators that simply and naturally provide the effective ventilation needed by everyone working and living in an indoor environment. When used with positive pressure ventilation, Freshvent 100 provides an important outlet for air circulating around the house. Stale air is expelled through the unit to the outside without letting in noise and draughts.

This makes Freshvent 100 particularly suited to the 'tight' construction of new homes - and provides a stylish alternative to traditional slot/airbrick ventilators. In addition, Freshvent 100 is ideal for older properties that have been refurbished with double glazing and loft insulation. They require ventilation to combat the problems associated with condensation.

Kitchens, utility rooms, bathrooms and toilets are rooms where conventional domestic extract fans are normally found. The natural ventilation principle of Freshvent 100 is particularly suitable for 'clean' living spaces such as bedrooms, lounges and work rooms.

There are four Vent-Axia Freshvent 100 models and an extensive range of accessories available to customise the units to your exact requirements. All units are easily dismantled allowing quick access to the filter for cleaning or replacement. The high capacity of the filter results in fewer filter changes. The damper plate is insulated against condensation and noise penetration.

Acoustic Duct Versions

Acoustically damped pipe fitted around unit to reduce external sources of noise such as traffic. Suitable for bedrooms and other rooms where low noise levels are a priority. Comes complete with Freshvent 100 dB and Freshvent 100 Thermo dB versions.

Free Area

| Product | Equivalent free area mm ² |
|---------------------|--------------------------------------|
| Fresh 100 | 3200 |
| Fresh 100 dB | 3200 |
| Fresh 100 Thermo | 2640 |
| Fresh 100 Thermo dB | 2640 |

Models

Freshvent 100

Pullcord operated. Designed to provide filtered air from outdoors while mixing it efficiently with the air in the room. Adjustable to increase or reduce the free area and airflow to suit a particular environment.

| Model | Stock Ref |
|-------|-----------|
| 100 | 453200 |

Freshvent 100 dB

Pullcord operated. Adjustable to increase or reduce the free area and airflow to suit a particular environment. Supplied with acoustically damped pipe for applications requiring low noise levels.

| Model | Stock Ref |
|--------|-----------|
| 100 dB | 453208 |

Freshvent 100 Thermo

Thermostatically regulated, with the vent size automatically adjusting according to the temperature outside. As the temperature decreases the damper closes, opening again as the temperature rises. The built-in thermostat regulates the size of the damper opening so that it starts to close at 10°C and is completely closed at -5°C.

| Model | Stock Ref |
|------------|-----------|
| 100 Thermo | 453182 |

Freshvent 100 Thermo dB

Thermostatically regulated, with the vent size automatically adjusting according to the temperature outside. As the temperature decreases the damper closes, opening again as the temperature rises. The built-in thermostat regulates the size of the damper opening so that it starts to close at 10°C and is completely closed at -5°C. Supplied with acoustically damped pipe for applications requiring low noise levels.

| Model | Stock Ref |
|---------------|-----------|
| 100 Thermo dB | 453253 |

All versions come with a standard general duty filter. Replacement filters are available.

Accessories

| Model | Stock Ref |
|---------------------------------|-----------|
| Filter for Freshvent 100 | 453188 |
| Filter for Freshvent 100 Thermo | 453197 |
| Extension Bushing | 453275 |

Storm Shield

May be fitted to the Freshvent range to prevent ingress of water and eliminate the risk of draughts and cold air surges. Closes entirely during storms. Particularly suitable for high-rise/coastal applications or anywhere exposed to high winds.

Not suitable for dB models.

| Model | Stock Ref |
|--------------|-----------|
| Storm Shield | 453206 |

Dimensions (mm)

| Model | Wall fixing hole dia Ømm | Max wall thickness mm |
|-------------------------|--------------------------------|-----------------------------|
| Freshvent 100 | 100 | 360 |
| Freshvent 100 dB | 150 | 400 |
| Freshvent 100 Thermo | 100 | 320 |
| Freshvent 100 Thermo dB | 150 | 400 |

Basics Range



Bathroom/Toilet

BAS100B

Unshuttered axial fan for remote or light switch operation.

Stock Ref

436519

BAS100P

Unshuttered axial fan with integral pullcord.

Stock Ref

436520

BAS100T

Unshuttered axial fan with adjustable overrun timer.

Stock Ref

436521



Kitchen

BAS150B

Unshuttered axial fan designed for remote or light switch operation.

Stock Ref

436525

BAS150P

Unshuttered axial fan with integral pullcord.

Stock Ref

436526

BAS150T

Unshuttered axial fan with adjustable overrun timer.

Stock Ref

436527



Shower Fan & Kit

The kit consists of a IP44 In-Line fan, a white ceiling grille and spigot, 3 meters of flexible duct and an external louvre for soffit or wall mounting.

Minivent SK

Single speed 100mm in-line axial fan.

Stock Ref

248710

Minivent SKT

Single speed 100mm in-line axial fan with integral adjustable overrun timer - 5-30 minutes.

Stock Ref

248810

**BAS100SLB**

Single speed axial fan with integral back draught shutter for remote or light switch operation.

Stock Ref

436530

BAS100SLT

Single speed axial fan with electronic overrun timer (5-30 minutes) and integral back draught shutter.

Stock Ref

436532

**BAS150SLB**

Single speed axial fan with integral back draught shutter for remote or light switch operation.

Stock Ref

436533

BAS150SLT

Single speed axial fan with electronic overrun timer (5-30 minutes) and integral back draught shutter.

Stock Ref

436535

Eclipse 100 & 150

- Wall or ceiling mountable
- Integral back draft shutter mechanism
- Meets current Building Regulations Approved Document F
- 100mm and 150mm size options
- Fixing kits available
- Fan IP44 rated -100mm
- Fan IPX4 rated -150mm



Bathroom Ventilation

The Eclipse range of circular axial fans is designed to be installed in kitchens and bathrooms. Its simple design provides an unobtrusive fitting that is sympathetic with most interiors.

Models

ECLIPSE 100X

Single speed 100mm bathroom/toilet fan with back draught shutter.

| Model | Stock Ref |
|-------|-----------|
| 100X | 427310 |

ECLIPSE 100XP

Single speed 100mm bathroom/toilet fan with pullcord and back draught shutter.

| Model | Stock Ref |
|-------|-----------|
| 100XP | 427281 |

ECLIPSE 100XT

Single speed 100mm bathroom toilet fan with integral adjustable overrun timer (5-30 minutes) and back draught shutter.

| Model | Stock Ref |
|-------|-----------|
| 100XT | 427282 |

ECLIPSE 150X

Single speed 150mm kitchen fan with back draught shutter.

| Model | Stock Ref |
|-------|-----------|
| 150X | 427283 |

ECLIPSE 150XP

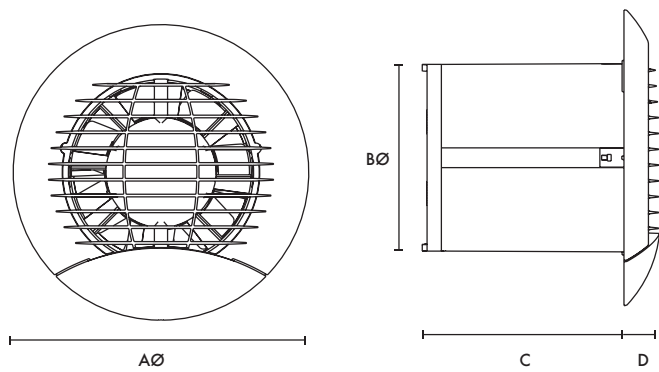
Single speed 150mm Kitchen fan with pullcord and shutter.

| Model | Stock Ref |
|-------|-----------|
| 150XP | 427313 |

Accessories

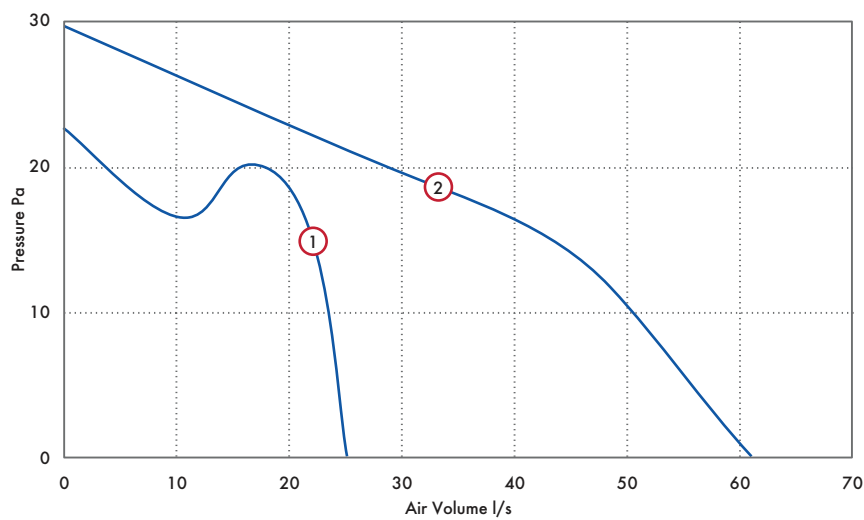
| Model | Stock Ref |
|----------------------|-----------|
| Bezel Chrome 100mm | 436480 |
| Bezel Silver 150mm | 436483 |
| Wall Kit White 150mm | 140902 |
| Wall Kit Brown 150mm | 140903 |
| Wall Kit White 100mm | 254102 |
| Wall Kit Brown 100mm | 254100 |

Dimensions (mm)



| Model | AØ | BØ | C | D |
|-------------|-----|-----|-----|----|
| Eclipse 100 | 157 | 99 | 107 | 19 |
| Eclipse 150 | 201 | 144 | 123 | 19 |

Performance



| Model | Curve Ref | Extract Performance | | | dB(A) @ 3m | SFP (W/l/s) @ 0Pa |
|-------------|-----------|---------------------|-----|-------|---------------|----------------------|
| | | m³/h | l/s | Watts | | |
| Eclipse 100 | 1 | 90 | 25 | 14 | 38 | 0.49 |
| Eclipse 150 | 2 | 220 | 61 | 16 | 45 | 0.25 |

Tested at 240V 50Hz

dMEV, MEV & PIV Systems



What is dMEV & MEV?

The latest Building Regulations Approved Document F gives examples of three main methods of ventilation. Continuous mechanical extract ventilation, can be achieved using a single centralised extract unit such as the Sentinel Multivent ducted from 'wet' rooms (kitchen, bathroom, en-suite and WC) or by decentralised individual fans (dMEV) in the 'wet' rooms. The fans run continuously at near silent levels providing a simple and effective form of ventilation.

NEW Lo-Carbon Response 7

The intelligent Lo-Carbon Response 7 is a NEW filterless unitary fan designed to meet the specific needs of social housing. Boasting powerful, quiet, efficient ventilation, the Response 7 provides good indoor air quality and comfort for residents while being quick and easy to install, low maintenance and reliable.

Smart Sense™ Technology

Featuring Smart Sense™ intelligent technology Response 7 is quick and easy to install due to its simple alpha numeric LED display which is clear, easy to read and has a three-button menu for commissioning and data gathering.

Vent-Axia®





NEW Lo-Carbon NBR dMEV C

D:3-D:4



Lo-Carbon Centra®/SELV
dMEV Unit

D:5-D:6



Lo-Carbon Response 7/SELV
dMEV Unit

D:7-D:8



Lo-Carbon Sentinel® Multivent/Plus
MEV Unit

D:9-D:12



Lo-Carbon MVDC-MS/MSH Multivent
MEV Unit

D:13-D:14



Lo-Carbon NBR dMEV/dMEVe

D:15-D:16



Lo-Carbon PoziDry Pro™
Positive Input Ventilation

D:17-D:18

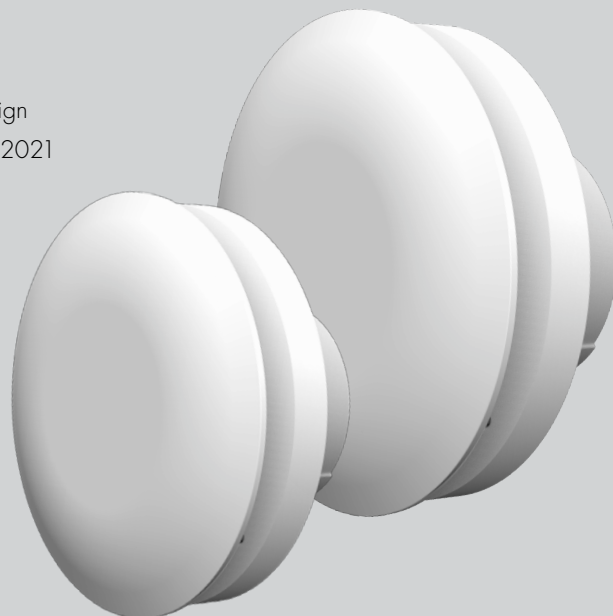


Lo-Carbon PoziDry Compact
Positive Input Ventilation

D:19-D:20

Lo-Carbon NBR dMEV C

- Continuously running 100mm and 125mm dMEV with sleek circular design
- Designed to comply with the latest Building Regulations Parts L1A and F 2021
- SAP PCDB listed with SFP's down to 0.08 W/l/s
- Near silent operation independently tested
- IPX5 rated, wall and ceiling mounted Zones 1, 2 and 3
- Low ceiling void - 56mm (100mm spigot) and 66mm (125mm spigot)
- Easy to commission, fully adjustable variable control platform
- Intelligent humidistat option with proportional speed increase and timer
- Comfort control option
- 7- year warranty



Lo-Carbon NBR dMEV C

Increased whole ventilation rates, should not mean increased noise levels. The Vent-Axia Lo-Carbon NBR dMEV C fan, available in 100mm and 125mm, provides adequate ventilation whilst minimising noise.

The fan is designed in line with the Approved Document F 2021 Building Regulations, meeting the increased whole house ventilation rates.

Table 1.3 - Minimum whole dwelling ventilation rates determined by the numbers of bedrooms.

| No. of bedrooms | 2013 Edition | 2021 Edition | Increase |
|-----------------|--------------|--------------|----------|
| 1 | 13l/s | 19l/s | 46% |
| 2 | 17l/s | 25l/s | 47% |
| 3 | 21l/s | 31l/s | 47% |
| 4 | 25l/s | 37l/s | 48% |
| 5 | 43l/s | 43l/s | 48% |

The minimum whole dwelling ventilation rate for the supply air should meet the higher of the two following result:

- A minimum rate of 0.3l/s per m² of internal floors area
- A minimum rate determined by the number of bedroom, as per Table 1.3

Nuisance tripping has also been minimised within the fan logic. The integral humidity sensor versions have functionality that allows for proportional speed increase up to 85% relative humidity (RH) before enabling Boost.

The Lo-Carbon NBR dMEV C is complete with IPX5 rating, allowing flexible installation within Zone 1, 2 and 3.

A back pressure detection system option is available, to Boost if the system pressure increase momentarily due to external wind conditions. A silent mixed flow impeller means the Lo-Carbon NBR dMEV C can meet the requirements of many domestic installations without the need to use a traditional centrifugal fan.

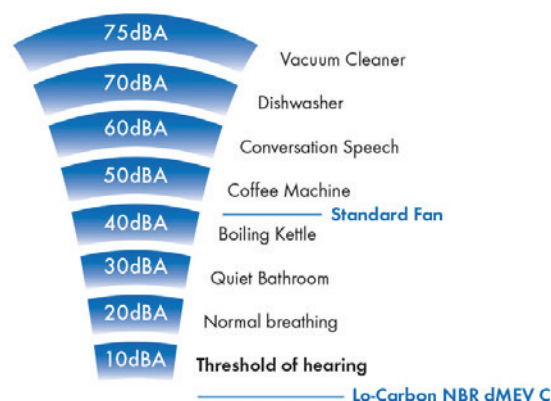
A brand new control platform also provides fully adjustable airflow, meaning wholehouse rates can be achieved easily using fewer fans.

Comfort Control Option

Designed to offer a more relaxing environment to the homeowner, the Lo-Carbon NBR dMEV C features a delayed start. This patented comfort control option allows the homeowner to enjoy a quiet, peaceful bathroom for up to 20 minutes before the Boost activates. Furthermore, if the light switch turns On and Off within three minutes, the Boost will not activate. No more disturbing the family if the bathroom light is turned on during the night.

Near Silent Operation

The fan has been designed to be as discreet as possible for homeowners, with independently tested sound levels as low as 7.4dB(A).



Model

Lo-Carbon NBR dMEV C

For kitchen, utility and bathroom/toilet applications, the continuous running dMEV C fan is available as standard or as a humidistat model which incorporates an ambient response humidistat. The fan will increase the extract rate if the humidity rises above the point set at installation. Both fans will have optional Comfort Control, which includes a timer function.

Variable speed setting

| Model | Stock Ref |
|----------------------------|-----------|
| Lo-Carbon NBR dMEV C 100 | 498095 |
| Lo-Carbon NBR dMEV C 100 H | 498096 |

Variable speed setting

| Model | Stock Ref |
|----------------------------|-----------|
| Lo-Carbon NBR dMEV C 125 | 498097 |
| Lo-Carbon NBR dMEV C 125 H | 498098 |

Accessories

| Model | Stock Ref |
|---------------------------|-----------|
| Wall Kit White 100mm | 254102 |
| Wall Kit Brown 100mm | 254100 |
| Wall Kit White 125mm | 455226 |
| Wall Kit Brown 125mm | 497434 |
| Wall Kit Terracotta 125mm | 497432 |

Consultant Specification

The de-centralised mechanical extract ventilation unit shall be the Lo-Carbon NBR dMEV C as manufactured by Vent-Axia, exact unit sizing and specification shall be in accordance with the particular specification.

The range should consist of IPX5 rated 100mm and 125mm sizes to meet the Building Regulations compliant design, extracting air from wet rooms (including kitchen and utility) via rigid, flexible ducting or through-wall applications with the fewest fans possible, supplied with a 7 - year warranty.

The 100mm Lo-Carbon NBR dMEV C should have variable speed settings of 5-26 l/s achieving a minimum noise level of 7.4dB(A) at 3 metres. The 125mm Lo-Carbon NBR dMEV C should have variable speed settings of 5-35 l/s achieving a minimum noise level of 8.5dB(A) at 3 metres. All sound pressure levels are quoted at hemispherical measurements. All units shall be and independently third-party tested at the Sound Research Laboratory (SRL), tested to BS EN 13141-6.

The unit shall comprise a single high efficiency EC/DC motor to deliver specific fan powers as low as 0.08 W/l/s, as measured in accordance with the SAP PCDB test method and listed on the PCDB database.

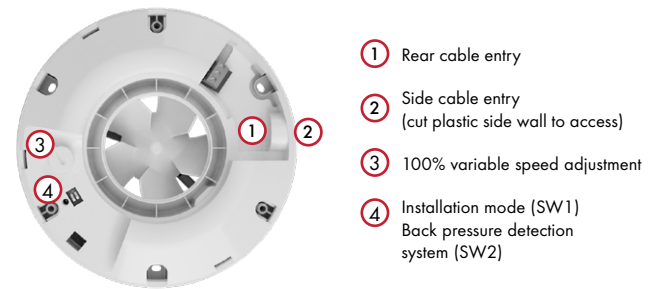
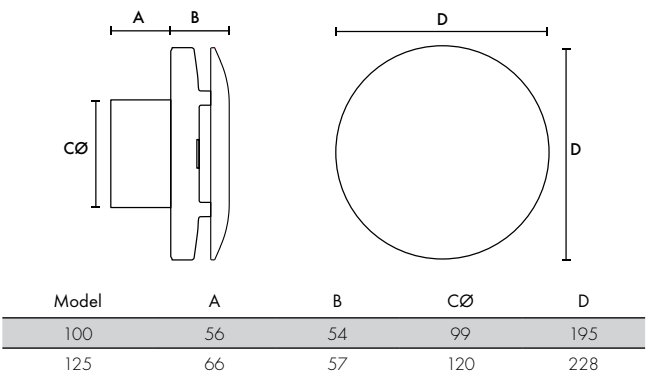
The controls for the Lo-Carbon NBR dMEV C unit shall provide fully adjustable, continuous whole house ventilation rates. The Boost speed shall be activated via an integral humidistat or via LS Input.

The fan shall be compatible with low ceiling voids and have a spigot length of 56mm (100mm) and 66mm (125mm).

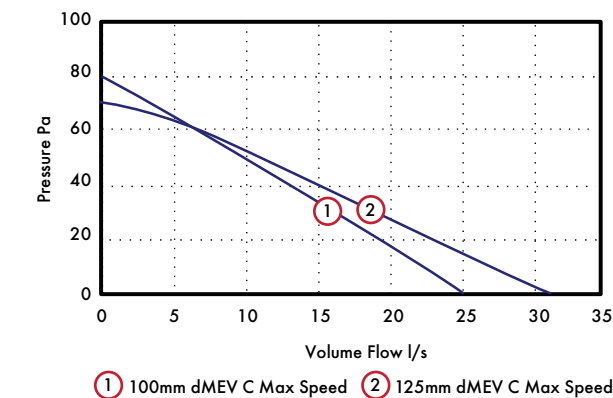
The fan shall have the nuisance tripping prevention option called Comfort Control, which stops the fan from engaging Boost when the LS input is engaged for less than three minutes.

The unit shall be able to be commissioned as a continuous running fan according to the Building Regulations compliant design.

Dimensions (mm)



Performance Guide



Sound

| Model | Speed | dB(A) |
|-------|-------|-------|
| 100 | Min | 7.4 |
| | Max | 34.3 |
| 125 | Min | 8.5 |
| | Max | 37.9 |

SAP PCDB Performance 2021

| Unit configuration | Location | 100 Model | 125 Model |
|----------------------|-------------------------|-----------|-----------|
| In room (Rigid duct) | Kitchen (13l/s) | 0.14 | 0.14 |
| | Kitchen/wet room (8l/s) | 0.11 | 0.12 |
| Through wall | Kitchen (13l/s) | 0.08 | 0.09 |
| | Kitchen/wet room (8l/s) | 0.08 | 0.10 |

Lo-Carbon Centra/SELV

- Building Regulations Approved Documents F and L compliant
- Continuous mechanical extract
- Recognised in SAP PCDB - Low SFP
- Discreet, tasteful styling
- IPX4 rated - IPX7 rated (SELV)
- dMEV Pressure detection device
- 5 year motor warranty
- Suitable for wall, ceiling, panel and window mounting
- SELV models supplied with remote transformer and suitable for 'Zone 1'



the ELECTRICAL
industry awards
WINNER 2011

Winners of the Energy Efficiency Initiative 2011 Award
with our Lo-Carbon Continuous Ventilation Product Range

What is de-centralised MEV (dMEV)?

Building Regulations Approved Document F gives examples of three main methods of ventilation. Continuous mechanical extract ventilation, can be achieved using a single centralised extract unit such as the Sentinel Multivent ducted to 'wet' rooms (kitchen, bathroom, en-suite and WC) or by decentralised individual fans, such as the Lo-Carbon Centra in the 'wet' rooms. The fans run continuously at near silent levels providing a simple and effective form of ventilation.

SELV (Safety Extra Low Voltage) is designed for areas where a fan can be installed within Zone 1 in a room where there is a fixed bath or shower. Ingress Protected (IP) to IPX7 Lo-Carbon Centra SELV can be fitted safely within the spray area. The separate transformer can be mounted away from the spray zone and out of reach from the bath or shower.

The Lo-Carbon Centra meets the latest requirements of the Building Regulations Approved Document F for wholehouse system ventilation and all models come with a 5 year motor warranty.

Selection of the two trickle flow rates (6l/s or 9l/s) is via a simple 'jumper' on the control board. Different methods are available for operating the 15 l/s boost speed from a simple switched live to integral humidistat. See individual models for further details.

The attractive and discreet styling of the Vent-Axia Lo-Carbon Centra will complement the décor of any new home while virtually silent operation ensures optimum ventilation is achieved without intrusive noise.

Specific Fan Power

dMEV version recognised in SAP PCDB. Lo-Carbon Centra has a specific fan power of only 0.18 W/l/s in through-the-wall kitchen applications.

Models

Lo-Carbon Centra dMEV

Auto speed selection at installation and suitable for bathrooms or kitchens. The integral air pressure sensor checks the airflow when first installed and also helps the fan to compensate for external wind pressure.

Stock Ref

441782

Lo-Carbon Centra T/SELV T (Timer)

Ideal for bathroom and toilet applications, this unit runs continuously on trickle setting and may be boosted by the switched live input which activates the timer (fixed 15 min on T models, adjustable 5-30 minutes on SELV models).

Model

Stock Ref

T

473825

SELV T

443175

Lo-Carbon Centra TP/SELV TP (Timer/Pullcord)

For bathroom/toilet applications, the continuous running TP model is boosted by the pullcord which activates the timer (fixed 15 min on TP models, adjustable 5-30 minutes on SELV models).

Model

Stock Ref

TP

473826

SELV TP

447128

Lo-Carbon Centra HT/SELV HT (Humidistat/Timer)

For bathroom/toilet applications, the continuous running HT model is automatically boosted by the built-in humidistat or by a switched live input which activates the timer (fixed 15 min on HP models, adjustable 5-30 minutes on SELV models).

Model

Stock Ref

HT

473827

SELV HT

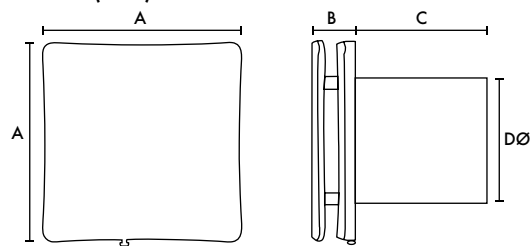
443176

Lo-Carbon Centra HTP/SELV HTP (Humidistat/Timer/Pullcord)

For bathroom/toilet applications, the continuous running HTP model is automatically boosted by the built-in humidistat or by the pullcord which activates the timer (fixed 15 min on HTP models, adjustable 5-30 minutes on SELV models).

| | |
|----------|-----------|
| Model | Stock Ref |
| HTP | 473828 |
| SELV HTP | 443177 |

Dimensions (mm)



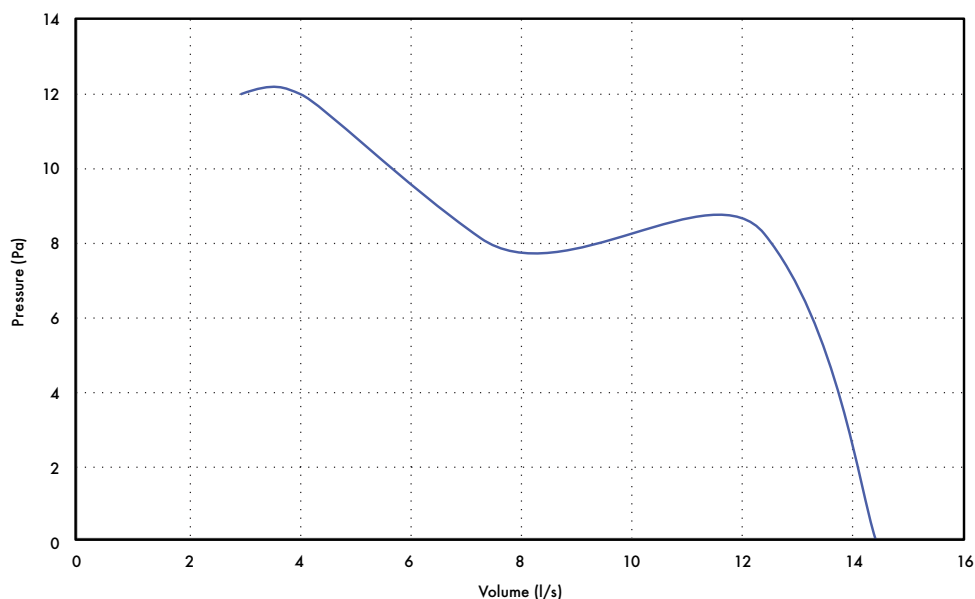
| Model | A | B | C | DØ |
|--------------------------------|-----|----|-----|----|
| Lo-Carbon Centra dMEV/All SELV | 160 | 35 | 115 | 99 |
| Lo-Carbon Centra T/TP/HT/HTP | 160 | 35 | 115 | 99 |

Transformer 87 x 87 x 33mm (W x H x D) (SELV models only)

Accessories

| | |
|----------------------|-----------|
| Model | Stock Ref |
| 150mm Conversion Kit | 443334 |
| Wall Kit White | 254102 |
| Wall Kit Brown | 254100 |
| Window Kit | 442947 |
| Ceiling Kit | 443800 |

Performance Guide



| Model | Extract Performance (l/s) | | | Power Consumption (Watts) | | | Sound dB(A)@ 3m | | |
|--------------------------------|---------------------------|---------|-------|---------------------------|---------|-------|-----------------|---------|-------|
| | Trickle | Trickle | Boost | Trickle | Trickle | Boost | Trickle | Trickle | Boost |
| | Low | High | | Low | High | | Low | High | |
| Lo-Carbon Centra dMEV/All SELV | 6 | 9 | 15 | 1.4 | 1.6 | 2.4 | 10.8 | 15.5 | 25.2 |
| Lo-Carbon Centra T/TP/HT/HTP | 6 | 9 | 15 | 3.2 | 3.5 | 4.2 | 10.8 | 15.5 | 25.2 |

SAP PCDB Performance (dMEV model)

Systems With Rigid Ductwork Installation

| Unit Configuration | Location | Fan Speed Setting | Flow Rate (l/s) | SFP (W/l/s) |
|--------------------|----------|-------------------|-----------------|-------------|
| In Room (Ducted) | Kitchen | High | 13.2 | 0.32 |
| In Room (Ducted) | Wet Room | 9 l/s | 8.4 | 0.28 |
| Through Wall | Kitchen | High | 13.5 | 0.18 |
| Through Wall | Wet Room | 9 l/s | 8.6 | 0.20 |

Systems With Flexible Or Mixed Ductwork Installation

| Unit Configuration | Location | Fan Speed Setting | Flow Rate (l/s) | SFP (W/l/s) |
|--------------------|----------|-------------------|-----------------|-------------|
| In Room (Ducted) | Kitchen | High | 13.2 | 0.37 |
| In Room (Ducted) | Wet Room | 9 l/s | 8.6 | 0.31 |
| Through Wall | Kitchen | High | 13.5 | 0.18 |
| Through Wall | Wet Room | 9 l/s | 8.6 | 0.20 |

NEW Lo-Carbon Response 7/SELV

- Designed especially for Social Housing
- Ultra low profile for discreet installation
- Continuous running fan
- 7 year warranty
- High performance on trickle to avoid going to boost too often
- Intelligent Smart Sense™ technology tells you days run, boost hours run, energy used
- IP45 Rated - IPX7 on SELV models
- Small footprint with optional decoration frame
- Unique settings lock to prevent tampering
- 100 & 125mm models



Designed for Social Housing

The intelligent Lo-Carbon Response 7 is a NEW filterless unitary fan designed to meet the specific needs of social housing. Boasting powerful, quiet, efficient ventilation, the Response 7 provides good indoor air quality and comfort for residents while being quick and easy to install, low maintenance and reliable.

Smart Sense™ Technology

Featuring Smart Sense™ intelligent technology Response 7 is quick and easy to install due to its simple alpha numeric LED display which is clear, easy to read and has a three-button menu for commissioning and data gathering. Smart Sense™ technology even tells the LED display which orientation to use depending on whether it is wall or ceiling mounted. All of which saves time on site and reduces installation complications. The Response benefits from a unique settings lock to prevent tampering with the unit; giving the landlords peace of mind.

The display also shows real-time data so landlords can reassure residents of the low-running costs. This includes data such as days run, hours on trickle or boost, and even more specifically, hours run on boost triggered by the humidity sensor. Response can also tell you how much energy the fan has used.

Side View of Airflow Display

Be confident that the Response 7 is delivering the right performance with our innovative digital display showing the airflow and system pressure of the installed product.



Comfort Control Option

Designed to offer a more relaxing environment to the homeowner, the Lo-Carbon Response 7 features a delayed start option. This new, patented, comfort control option is selectable at installation and allows the resident to enjoy a quiet, peaceful bathroom for up to 20 minutes before the Boost activates, drastically improving resident acceptability. Furthermore, if the light switch turns On and Off within 3 minutes, the Boost will not

activate. No more disturbing the family if the bathroom light is turned on during the night.

Model

Lo-Carbon Response 7/SELV

A discreet and intelligent HTP bathroom specifically designed for social housing. Day logger and power run meter as standard. 7 year warranty. Built-in lock function. Adjustable dynamic ambient response humidity sensor. Timer adjustable between 1 and 30 minutes. In built boost activated by pullcord, humidity sensor, switched live or remote button. Tile front for discreet installation.

Variable Speed Settings (5-30 l/s trickle, 6-35 l/s boost).

Model

Response 7 100

Response 7 100 SELV

Stock Ref

494143

494150

Variable Speed Settings (9-30 l/s trickle, 10-35 l/s boost).

Model

Response 7 125

Stock Ref

496738

Lo-Carbon Response 7 Pro/SELV

A discreet and intelligent HTP bathroom specifically designed for social housing. Day logger and power run meter as standard. 7 year warranty. Built-in lock function. Adjustable dynamic ambient response humidity sensor. Timer adjustable between 1 and 30 minutes. In built boost activated by pullcord, humidity sensor, switched live or remote button. Tile front for discreet installation. Constant volume for accurate installed performance.

Variable Speed Settings (5-30 l/s trickle, 6-35 l/s boost).

Model

Response 7 100 Pro

Response 7 100 Pro SELV

Stock Ref

494144

494149

Variable Speed Settings (9-30 l/s trickle, 10-35 l/s boost).

Model

Response 7 125 Pro

Stock Ref

496689

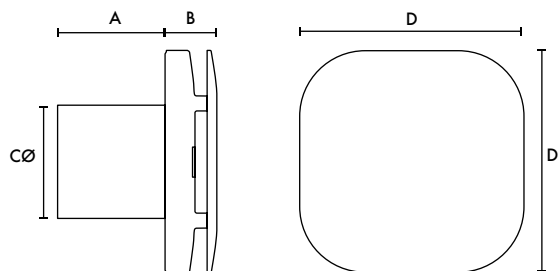
Accessories

| Model | Stock Ref |
|-----------------------------------|-----------|
| 100mm Internal Fit Wall Kit White | 472318 |
| 100mm Internal Fit Wall Kit Brown | 472319 |
| 100mm to 150mm Conversion Kit | 408680 |
| 100mm Ceiling Kit | 407928 |
| 100mm Window Kit | 407927 |
| 100mm Decoration Frame | 474041 |
| 125mm Wall Kit White | 455226 |

SAP PCDB Performance

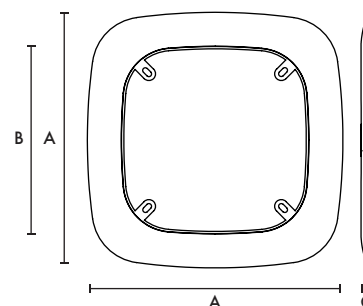
| Unit | Configuration | Location | 100 Model | 125 Model |
|----------------------|---------------|----------|-----------|-----------|
| In room (rigid duct) | | Kitchen | 0.17 | 0.16 |
| | | Wet room | 0.17 | 0.20 |
| In room (flex-duct) | | Kitchen | 0.16 | 0.15 |
| | | Wet room | 0.16 | 0.20 |
| Through wall | | Kitchen | 0.12 | 0.12 |
| | | Wet room | 0.14 | 0.16 |

Dimensions (mm)



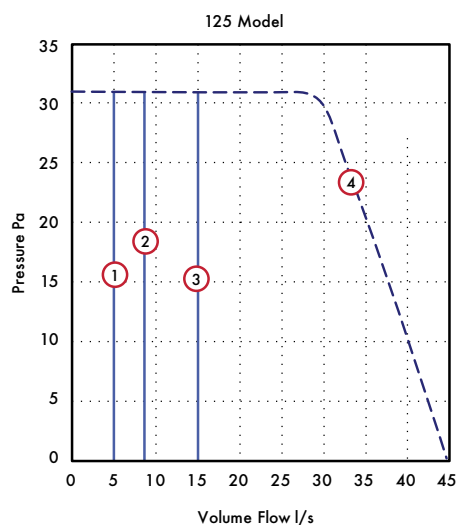
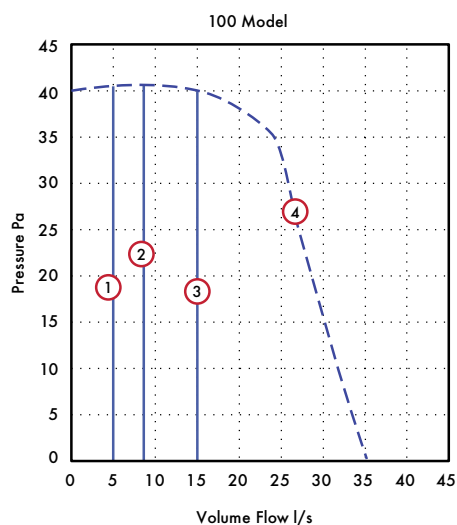
| Model | A | B* | CØ | D |
|-------|-----|----|-----|-----|
| 100 | 81 | 43 | 99 | 190 |
| 125 | 100 | 46 | 115 | 213 |

100mm Decoration Frame Dimensions (mm)



| A | B | C |
|-----|-----|----|
| 259 | 191 | 10 |

Performance Guide



- ① 5l/s Constant Volume
- ② 9l/s Constant Volume
- ③ 15l/s Constant Volume
- ④ Maximum pressure available to deliver airflow

Extract Performance - FID

| Model | Air Performance (l/s) | m ³ /h | Watts | Sound dB(A) @ 3m |
|-------|-----------------------|-------------------|-------|---------------------|
| 100 | 5 | 18 | 1 | 13.2 |
| | 9 | 32 | 1.2 | 17.3 |
| | 15 | 54 | 1.6 | 23.9 |
| | 35 | 126 | 8.3 | 41.2 |
| 125 | 5 | 18 | 1 | 12 |
| | 41 | 148 | 10.7 | 36 |

Lo-Carbon Sentinel Multivent/Plus

- Reduces your carbon footprint
- Recognised in SAP PCDB
- Specific fan power as low as 0.16 W/l/s
- Suitable for use with external sensors and controllers
- Wireless control option for "X" models
- Complies with Building Regulations ADF and ADL
- Manufactured in the UK



Sentinel Multivent continuous mechanical extract ventilation, MEV is designed for the simultaneous ventilation of separate areas in the home or as a multipoint extraction system for a wide range of commercial applications. The units can be wall, ceiling or loft mounted. Where the ambient air has a high humidity content condensate drains are provided.

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 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, is set in 1% increments based on property size
- Comfort mode allows homeowners to control when the unit runs and for how long to avoid disturbance
- Integral digital display allows the installer to select appropriate low, normal, boost and purge speeds to meet demand
- Manual and automatic control options
- Integral adjustable overrun timer and delay on timer
- Switched live and SELV connections
- Optional Wireless Control on "X" units
- 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

Legislation

- Meets Building Regulations Approved Document F (System 3)
- Recognised in SAP PCDB up to kitchen + 6 wet rooms
- Meets carbon footprint reduction targets
- 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 healthier living environment

- The integral humidity sensor (Sentinel Multivent H) 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 wet room
- Night time relative humidity increment setback feature suppresses nuisance tripping as humidity gradually increases with falling temperature

SAP PCDB

In order to make the right choice, developers and contractors should refer to Building Regulations ADL1a, SAP 2012 and SAP PCDB.

SAP PCDB 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 - Approved Document L (England and Wales), Section 6 (Scotland) and Approved Document F (Northern Ireland). SAP PCDB 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.

SEC Class

| Model | SEC Class (inc. LDC) |
|-------------------------|----------------------|
| Sentinel Multivent/Plus | B |

SAP PCDB Test Results (Sentinel Multivent and Multivent Plus)

| Exhaust Terminal | Total | |
|------------------|-----------------|-------------|
| Configuration | Flow Rate (l/s) | SFP (W/l/s) |
| K+1 | 21 | 0.17 |
| K+2 | 29 | 0.16 |
| K+3 | 37 | 0.17 |
| K+4 | 45 | 0.18 |
| K+5 | 53 | 0.21 |
| K+6 | 61 | 0.24 |

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

Your Carbon Footprint

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 consume a kiloWatt (kW) 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.

Model

| | Stock Ref |
|--|-----------|
| Sentinel Multivent H | 445655 |
| Sentinel Multivent HX | 495360 |
| Sentinel Multivent HX CO ₂ | 495361 |
| Sentinel Multivent Plus H | 407849 |
| Sentinel Multivent Plus HX | 495362 |
| Sentinel Multivent Plus HX CO ₂ | 495363 |

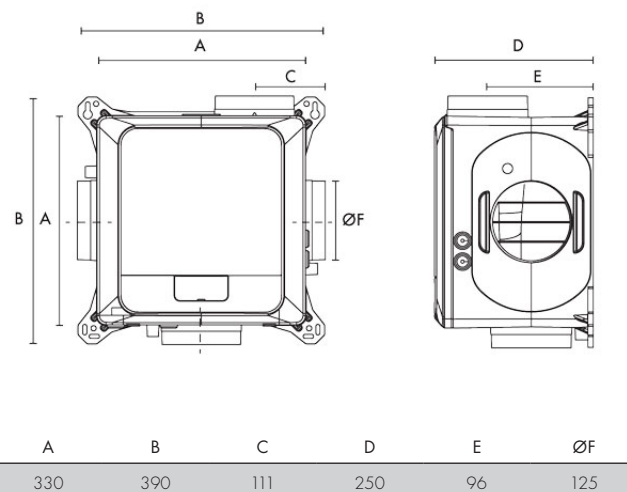
Accessories



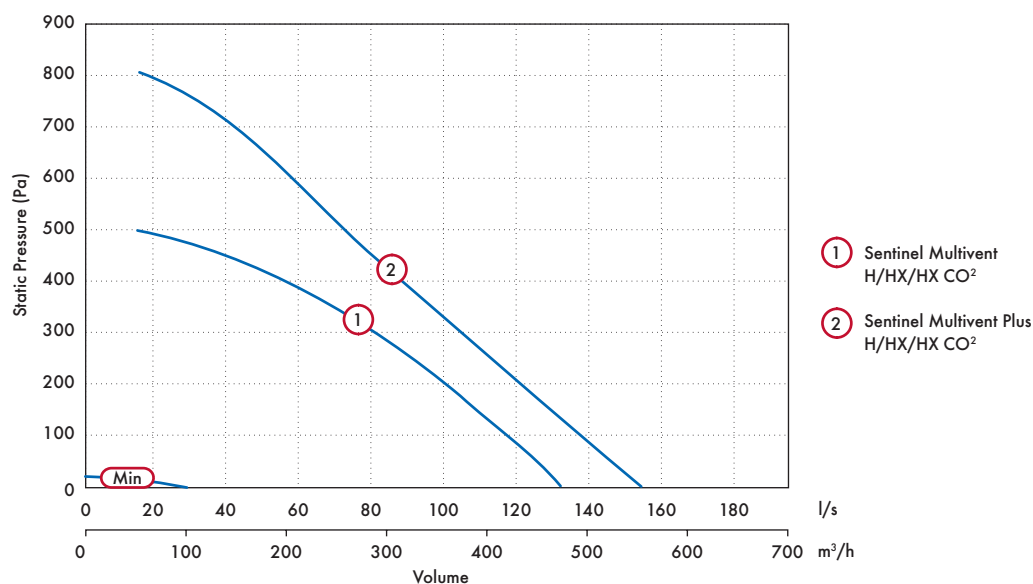
| | Stock Ref |
|-----------------------------------|-----------|
| Anti Vibration Mounts (Pack of 4) | 68MP033G |

See page D:10 for control options.

Dimensions (mm)



Performance Guide



| Stock Ref | Model | Curve Ref | FID (l/s) | Power Watts | IP Rating |
|--------------------------|----------------|-----------|-----------|-------------|-----------|
| 445655 / 495360 / 495361 | Multivent | 1 (max) | 128 | 52 | IPX2 |
| 407849 / 495362 / 495363 | Multivent Plus | 2 (max) | 159 | 85 | IPX2 |

Sound Data

| Model | Speed | Test Mode | Octave Band (Hz) Sound Power Levels, dB | | | | | | | | LwA | SpL @ 3m |
|--------------------|-------|-----------|---|------|------|------|------|------|------|------|------|----------|
| | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | | |
| Sentinel Multivent | 20% | Extract | 32.5 | 50.7 | 41.9 | 37.5 | 28.4 | 19.4 | 17.8 | 22.3 | 38.0 | 20.5 |
| | | Breakout | 28.7 | 37.6 | 32.5 | 29.6 | 20.9 | 14.8 | 17.9 | 22.7 | 30.5 | 10.0 |
| | 40% | Extract | 33.4 | 51.3 | 52.7 | 48.2 | 41.8 | 38.0 | 24.0 | 22.8 | 49.2 | 31.7 |
| | | Breakout | 34.1 | 52.7 | 42.6 | 38.9 | 30.3 | 24.8 | 18.5 | 22.6 | 42.0 | 21.5 |
| | 60% | Extract | 38.2 | 53.3 | 70.5 | 58.9 | 49.5 | 46.0 | 35.8 | 27.2 | 61.5 | 44.0 |
| | | Breakout | 44.8 | 48.4 | 54.4 | 45.4 | 37.6 | 32.6 | 23.6 | 22.8 | 47.4 | 26.9 |
| | 80% | Extract | 41.7 | 55.5 | 70.3 | 60.6 | 55.3 | 52.7 | 43.5 | 35.9 | 64.2 | 46.7 |
| | | Breakout | 41.8 | 51.6 | 61.9 | 50.9 | 43.5 | 39.5 | 30.3 | 23.9 | 55.1 | 34.6 |
| | 100% | Extract | 46.3 | 58.1 | 75.1 | 66.7 | 60.1 | 58.0 | 49.1 | 43.3 | 70.2 | 52.7 |
| | | Breakout | 46.0 | 54.0 | 63.2 | 55.3 | 47.8 | 44.6 | 35.7 | 27.0 | 58.3 | 37.8 |

Tested according to BS EN 13141-6:2010. Breakout quoted spherical. Extract quoted hemispherical.

| Model | Speed | Test Mode | Octave Band (Hz) Sound Power Levels, dB | | | | | | | | LwA | SpL @ 3m |
|-------------------------|-------|-----------|---|------|------|------|------|------|------|------|------|----------|
| | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | | |
| Sentinel Multivent Plus | 20% | Extract | 30.3 | 49.6 | 43.5 | 40.4 | 33.2 | 25.2 | 18.2 | 22.4 | 40.3 | 22.8 |
| | | Breakout | 30.5 | 39.8 | 35.3 | 31.3 | 22.3 | 16.5 | 17.9 | 22.8 | 32.5 | 12.0 |
| | 40% | Extract | 43.5 | 54.7 | 60.8 | 54.5 | 46.2 | 42.5 | 31.0 | 24.5 | 54.5 | 37.0 |
| | | Breakout | 47.0 | 49.3 | 54.0 | 42.1 | 33.9 | 29.1 | 20.6 | 22.6 | 45.7 | 25.2 |
| | 60% | Extract | 40.8 | 55.2 | 67.0 | 61.0 | 54.0 | 50.9 | 41.3 | 33.3 | 62.1 | 44.6 |
| | | Breakout | 40.1 | 51.2 | 58.7 | 48.2 | 41.3 | 37.4 | 28.4 | 23.5 | 52.0 | 31.5 |
| | 80% | Extract | 45.5 | 57.6 | 79.1 | 66.3 | 59.7 | 57.5 | 48.5 | 42.7 | 73.2 | 55.7 |
| | | Breakout | 45.6 | 54.6 | 64.5 | 54.7 | 46.5 | 44.2 | 35.2 | 26.5 | 59.1 | 38.6 |
| | 100% | Extract | 52.7 | 61.8 | 71.6 | 81.8 | 66.1 | 62.7 | 54.0 | 49.2 | 77.8 | 60.3 |
| | | Breakout | 56.0 | 56.6 | 61.2 | 63.1 | 51.3 | 49.0 | 40.4 | 31.4 | 60.9 | 40.4 |

Tested according to BS EN 13141-6:2010. Breakout quoted spherical. Extract quoted hemispherical.

Controllers and Sensors

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

Ambient Response Humidity Sensor

- Pullcord override and indication light
- 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

563550



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

563532



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

459623



Air Quality Sensor

- Ambient operating temp. 0°C to 50°C
- DEMKO approved
- Surface mounted
- 1 - 25 min O/R timer
- Supply voltage 220-240V

Stock Ref

563506



Lo-Carbon MVDC-MS/MSH Multivent

- Recognised in SAP PCDB with best in class Specific Fan Power
- Reduces your carbon footprint
- Fitted with three 125mm or nine 90mm diameter extract spigots allowing quick connection to ducts
- Complies with Building Regulations ADF
- Option of wall, ceiling and loft mounting
- Improved controllability
- Two Switched Live connections
- Fully variable normal, purge and boost speeds
- Ultra quiet
- Integral humidistat (H version)



With growing concerns about accurate ventilation of properties, the Lo-Carbon Multivent MVDC range offers the option of 'Close Control' both in the residential and the commercial sectors. With a DC motor the multi speed Lo-Carbon Multivent is one of the most efficient central extract units available.

The units have 3 fully variable speeds: normal, boost and purge. The digital display allows accurate setting of airflow, ensuring exactly the right ventilation rate. Accurate speed control helps minimise noise and energy consumption.

The Multivent H version incorporates a built-in humidity sensor to boost the unit when humidity reaches a certain threshold.

Models

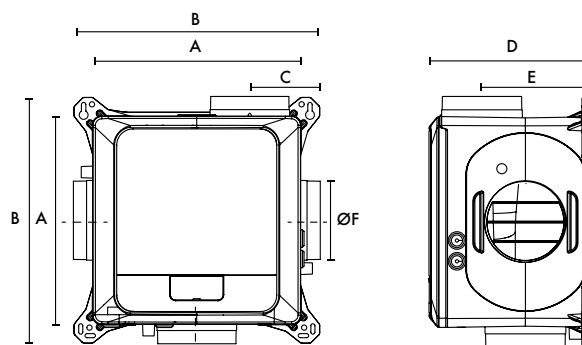
| Model | Stock Ref |
|------------------|-----------|
| MVDC-MS | 437634 |
| MVDC-MSH | 443298 |
| MVDC-MSH Uniflex | 498502 |

SAP PCDB Test Results

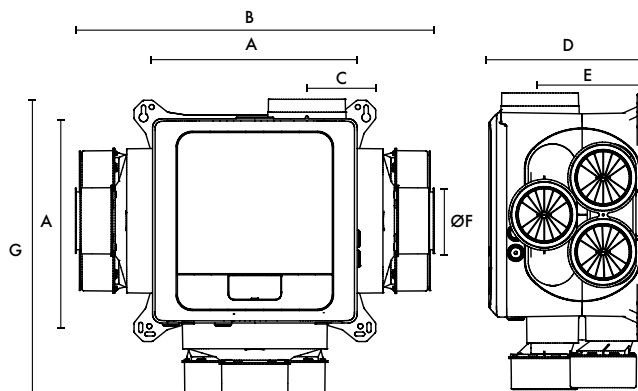
| Exhaust Terminal Configuration | Total Flow Rate (l/s) | SFP (W/l/s) |
|--------------------------------|-----------------------|-------------|
| K + 1 | 21 | 0.15 |
| K + 2 | 29 | 0.14 |
| K + 3 | 37 | 0.16 |
| K + 4 | 45 | 0.18 |
| K + 5 | 53 | 0.21 |
| K + 6 | 61 | 0.26 |

Dimensions (mm)

MVDC-MS/H



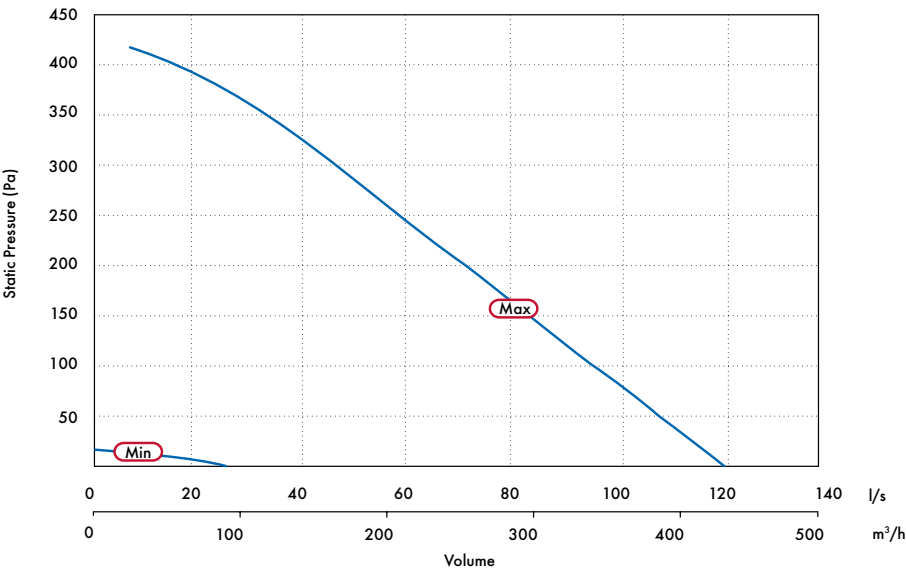
MVDC-MSH Uniflex



| Model | A | B | C | D | E | ØF | G | kg | No. Extract Spigots |
|------------------|-----|-----|-----|-----|-----|-----|-----|-----|---------------------|
| MVDC-MS/H | 330 | 391 | 111 | 248 | 165 | 125 | - | 4.1 | 3 |
| MVDC-MSH Uniflex | 330 | 567 | 111 | 248 | 165 | 90 | 479 | 7 | 9 |

Performance Guide

MVDC-MSH features an integral humidistat which triggers the unit to boost when humidity levels in the duct system exceed 70%.



| Min | | | | Max | | | | |
|-------------------------------|---------------------|------------|----------------|-------------------------------|---------------------|------------|----------------|-------------------------|
| Casing Breakout dB(A) @ 3m | Inlet Duct dB(A) | FID l/s | Power Watts | Casing Breakout dB(A) @ 3m | Inlet Duct dB(A) | FID l/s | Power Watts | SEC Class (inc. LDC) |
| 13 | 18 | 24 | 2 | 37 | 40 | 118 | 44 | B |
| 13 | 18 | 24 | 2 | 37 | 40 | 118 | 44 | B |

Sound Data

| | | Octave Band (Hz) Sound Power Levels, dB | | | | | | | | | LwA | SpL @ 3m |
|-------|-----------|---|------|------|------|------|------|------|------|------|------|----------|
| Speed | Test Mode | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | | | |
| 20% | Extract | 50.3 | 40.4 | 40.0 | 33.7 | 28.1 | 21.6 | 18.0 | 23.0 | 36.2 | 18.7 | |
| | Breakout | 40.2 | 38.7 | 32.8 | 26.9 | 17.1 | 14.5 | 17.8 | 22.4 | 29.9 | 9.4 | |
| 40% | Extract | 58.4 | 52.9 | 52.4 | 46.2 | 41.5 | 30.4 | 20.8 | 23.1 | 48.2 | 30.7 | |
| | Breakout | 42.7 | 44.7 | 45.3 | 33.0 | 24.3 | 19.7 | 17.9 | 22.4 | 37.5 | 17.0 | |
| 60% | Extract | 56.4 | 58.2 | 62.5 | 53.9 | 41.3 | 40.0 | 32.0 | 25.9 | 56.2 | 38.7 | |
| | Breakout | 40.1 | 52.1 | 50.2 | 39.2 | 30.6 | 32.2 | 20.0 | 22.4 | 43.9 | 23.4 | |
| 80% | Extract | 60.1 | 63.9 | 67.2 | 63.8 | 48.4 | 46.2 | 41.6 | 35.0 | 63.1 | 45.6 | |
| | Breakout | 33.6 | 60.1 | 47.4 | 49.6 | 36.1 | 32.7 | 24.2 | 22.7 | 49.2 | 28.7 | |
| 100% | Extract | 76.2 | 79.3 | 71.9 | 69.7 | 53.6 | 51.4 | 47.9 | 42.2 | 69.7 | 52.2 | |
| | Breakout | 47.3 | 56.6 | 52.5 | 52.7 | 40.7 | 37.7 | 29.7 | 23.7 | 51.7 | 31.2 | |

Lo-Carbon NBR dMEV/dMEVe

- Market leading efficiency
- Digital controls with display
- Fully adjustable trickle & boost airflow settings
- 100mm & 125mm model
- Recognised in SAP PCDB
- Constant volume
- Display showing airflow and system pressure
- Switched live connection for external switches/sensors
- IPX5 rated
- Multi-orientation grille
- NHBC Approved
- STAS Approved (Scotland)
- Airflow sensor models UKAS calibrated



Lo-Carbon NBR dMEV

Continuous running, constant volume dMEV range with switched live (LS) and innovative digital display and harmonised control platform. Quiet running and with high pressure development, the dMEV is best in class.

The unique patented display provides the calibrated installed airflow and pressure meaning that there is no need to test the installation with an airflow measuring device.

The constant volume technology automatically adjusts the speed of the fan to ensure the desired airflow is delivered. A silent high pressure axial impeller means Lo-Carbon dMEV can meet the requirements of many domestic installations without the need to use a traditional centrifugal fan.

A brand new control platform also provides fully adjustable airflow in 1l/s increments, meaning wholehouse rates can be achieved easily using fewer fans than is currently possible with any other dMEV product on the market.

Longer Duct Runs

A new 125mm dMEV fan is also available to further improve Dwelling Emission Rates (DER) by improving efficiency and lowering noise. The larger 125mm spigot also means there are almost no restrictions in terms of duct lengths and bends used in the system, when compared to a traditional 100mm axial fan. This means fewer fans are required to achieve wholehouse ventilation rates.

As can be seen below, an axial dMEV fan consumes a fraction of the energy of the equivalent centrifugal fan - drastically reducing DER.

| Configuration | Location | Alternative Centrifugal Fan SFP | Vent-Axia dMEV 125mm SFP |
|---------------|----------|---------------------------------|--------------------------|
| In room | Kitchen | 0.38 | 0.16 |
| | Wet Room | 0.29 | 0.20 |
| Through Wall | Kitchen | 0.36 | 0.12 |
| | Wet Room | 0.28 | 0.16 |

Side View of Airflow Display

Be confident that the dMEV is delivering the right performance with our innovative digital display showing the airflow and system pressure of the installed product.



Comfort Control Option

Designed to offer a more relaxing environment to the homeowner, the Lo-Carbon dMEV features a delayed start option. This patented comfort control option is selectable at installation and allows the homeowner to enjoy a quiet, peaceful bathroom for up to 20 minutes before the Boost activates. Furthermore, if the light switch turns On and Off within 3 minutes, the Boost will not activate. No more disturbing the family if the bathroom light is turned on during the night.

Model

Lo-Carbon NBR dMEVe & dMEVe HT

For kitchen, utility and bathroom/toilet applications, the continuous running H model incorporates an adjustable (40% - 90%) ambient response humidistat. The fan will increase the extract rate if the humidity rises above the point set at installation.

Fixed Speed Settings (3 boost speeds, 2 trickle speeds)

| Model | Stock Ref |
|----------------------------|-----------|
| 100e (Switch Live) | 474496 |
| 100e HT (Humidity Control) | 474497 |

Fixed Speed Settings (2 boost speeds, 3 trickle speeds)

| Model | Stock Ref |
|----------------------------|-----------|
| 125e (Switch Live) | 495364 |
| 125e HT (Humidity Control) | 495365 |

Lo-Carbon NBR dMEV & dMEV HT

Continuous running dMEV available in two sizes. Humidity control models incorporate an adjustable (40% - 90%) ambient response humidistat. The fan will increase the extract rate if the humidity rises above the point set at installation. Variable speed options for trickle and boost, dependant on size for maximum control. Features a display prism, to allow users to see airflow being achieved without having to remove a grille.

Variable Speed Settings (5-30 l/s trickle, 6-35 l/s boost)

| Model | Stock Ref |
|---------------------------|-----------|
| 100 (Switch Live) | 475142 |
| 100 HT (Humidity Control) | 473809 |

Variable Speed Settings (9-30 l/s trickle, 10-35 l/s boost)

| Model | Stock Ref |
|---------------------------|-----------|
| 125 (Switch Live) | 494147 |
| 125 HT (Humidity Control) | 494148 |

Accessories

| Model | Stock Ref |
|------------------------|-----------|
| Wall Kit White 100mm | 254102 |
| Wall Kit Brown 100mm | 254100 |
| Ceiling Kit 100mm | 407928 |
| Window Kit 100mm | 407927 |
| Decoration Frame 100mm | 474041 |
| Wall Kit White 125mm | 455226 |
| Conversion Kit 150mm | 408680 |

Consultant Specification

The de-centralised mechanical extract ventilation unit shall be the NBR DMEV as manufactured by Vent-Axia, exact unit sizing and specification shall be in accordance with the particular specification.

The range should consist of IPX5 rated 100mm and 125mm sizes to meet the Building Regulations compliant design, extracting air from wet rooms (including kitchen and utility) via rigid, flexible ducting or through-wall applications with the fewest fans possible, supplied with a 7 year warranty.

The 100mm DMEV should have variable speed settings of 5-30 l/s on trickle and 6-35 l/s on boost, achieving a minimum noise level of 13 dB(A) at 3 metres. The 125mm DMEV should have variable speed settings of 9-30 l/s on trickle and 10-35 l/s on boost, achieving a minimum noise level of 12.9 dB(A) at 3 metres. All units shall be and independently 3rd party tested at the Sound Research Laboratory (SRL), tested to BS EN 13141-6.

The unit shall comprise a single high efficiency EC/DC motor to deliver specific fan powers as low as 0.12 w/l/s, as measured in accordance with the SAP PCDB test method and listed on the PCDB database.

The controls for the DMEV unit shall provide fully adjustable, continuous trickle and boost speeds, with the airflow being controlled in 1 l/s increments. The boost speed shall be activated via a switch live input or integral humidistat.

The unit shall include an integral humidity sensor with ambient and rapid response capability, which increases fan speed in proportion to the level of humidity detected. The unit shall also automatically raise the humidity threshold set point as temperature decreases in order to prevent unnecessary boosting due to background humidity levels.

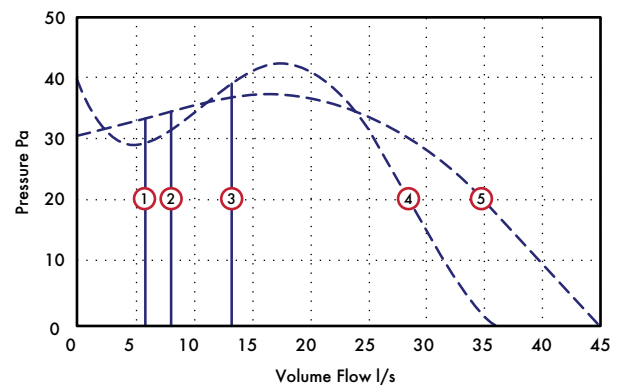
The unit shall be able to be commissioned as a continuous running or intermittent fan according to the Building Regulations compliant design. The fan will have an in-built spirit level for ease of installation.

Commissioning of the fan in accordance with the Building regulations shall be achieved without the use of an airflow measuring device. The fan shall be provided with a UKAS calibrated, constant volume function with the flow rates displayed on the unit without having to remove the cover via the display prism.

Dimensions (mm)

| | A | B | CØ | D |
|-----------|-----|----|-----|-----|
| Model 100 | 81 | 43 | 99 | 190 |
| Model 125 | 100 | 46 | 115 | 213 |

Performance Guide



- ① 6l/s Constant Volume
- ② 8l/s Constant Volume
- ③ 13l/s Constant Volume
- ④ Maximum pressure available to deliver airflow - 100mm model
- ⑤ Maximum pressure available to deliver airflow - 125mm model

Sound

| 100mm | | | | | | 125mm | | | | | |
|----------|-----|----|----|----|-----|----------|-----|----|----|----|-----|
| Flow l/s | Min | 6 | 8 | 13 | Max | Flow l/s | Min | 9 | 13 | 15 | Max |
| Pa | - | 5 | 7 | 17 | - | Pa | - | 4 | 7 | 9 | - |
| dB(A) | 13 | 14 | 17 | 24 | 41 | dB(A) | 12 | 14 | 17 | 19 | 36 |

SAP PCDB Performance

| Unit Configuration | Location | 100 Model | 125 Model |
|----------------------|----------|-----------|-----------|
| In room (rigid duct) | Kitchen | 0.17 | 0.16 |
| | Wet room | 0.17 | 0.20 |
| In room (flex-duct) | Kitchen | 0.16 | 0.15 |
| | Wet room | 0.16 | 0.20 |
| Through wall | Kitchen | 0.12 | 0.12 |
| | Wet room | 0.14 | 0.16 |

Lo-Carbon PoziDry Pro™

- Anti-vibration joist mounting legs as standard
- Fully adjustable between 19l/s - 49l/s
- Smart Sense™ Technology offers simple control and data logging
- Uses latest Lo-Carbon motor technology for low running costs
- Ultra low sound level
- Complete with ceiling diffuser, flexible duct and G4 filters with F7 upgrade option
- IPX2 rated
- BBA Approved



Some parts of this product are made using recycled material therefore the colour of the plastic may vary from white to black. To find out more please visit www.vent-axia.com/sustainable

Positive Input Ventilation

Designed to prevent and treat condensation and mould quickly. The BBA approved PoziDry Pro™ is the perfect solution for general refurbishment, as its discreet, easy to install and almost silent running.

Lo-Carbon PoziDry Pro™ offers a quick and simple solution. A loft mounted positive input fan draws fresh air from the loft, filters it and gently feeds it into the dwelling via a ceiling mounted diffuser. Clean, fresh filtered air with a lower moisture content dilutes, displaces and replaces, contaminated and moisture laden air.

Installation

The Lo-Carbon PoziDry Pro™ is uniquely flexible in its installation methods, high sided anti-vibration legs and a hanging kit both come as standard, allowing the PoziDry Pro™ to be installed quickly in any sized loft. The easy carry handle incorporated into the body makes carrying the unit easy and safe; especially useful when lifting the unit through loft hatches.

The unit is supplied with a purpose designed diffuser to be located over the stairwell of a conventional dwelling, in the main hall of a bungalow, in the landing or hallway. The 4-point contact easy fit technology allows fast and repeatable 'drill free' installation.

Using Smart Sense™ Technology the unit is easily set to the appropriate speed at installation based on the size of the dwelling. Natural leakage points that are present in all dwellings, as well as purpose provided exhaust points enhances the air change. En-suites and utility areas should be serviced by continuous mechanical extract ventilation.

The PoziDry Pro™ can also be set to 'Radon' mode in properties that are affected by high radon gas levels. The unit will run continuously to ensure the constant supply of good indoor air to protect residents from harmful gases.

Performance

With a lightweight construction, the Lo-Carbon PoziDry Pro™ features a specially developed Lo-Carbon DC fan/motor arrangement which runs quietly and delivers incredibly low running costs. The Lo-Carbon PoziDry Pro™ uses a sensor to monitor the temperature in the loft, automatically adjusting the air volume when necessary. Additionally, resident comfort can be assured through an option to change the temperature at which the unit increases or decreases airflow. The unit will continuously ventilate silently in the background whilst in 'Trickle' mode. Once the unit automatically senses excess heat being lost into the loft the airflow will increase to 'Energy Recovery' mode to recover heat that would otherwise be lost through the roof. During summer months should the loft exceed 27°C (adjustable) the unit will enter 'Stand-by' mode in order stop the circulation of warm air allowing for a more comfortable living environment. PoziDry Pro™ Heater models automatically turn on the 500W heater to help take the chill off the incoming air.

Filter

Standard filters supplied with the PoziDry Pro™ are G4 (PM10 filtration) which filter out many every day pollutants such as pollen and dust. Optional F7 filters are available (PM2.5 filtration) removing tobacco smoke, diesel particulates, spores and a number of bacteria.

Data Logger

Smart Sense™ Technology allows the unit to record how long it has been running in each of its speeds. It also measures the number of days the product has been switched on to provide precise running information. Smart Sense™ Technology can also record the duration of heater activity and energy used.

Speed Control

Smart Sense™ Technology makes speed selection easy. Once house size is selected based on number of bedrooms, PoziDry Pro™ automatically selects the correct 'Trickle' and 'Energy Recovery' speeds. Should you need to adjust speed manually this can be done easily. The Smart Sense™ interface can also be locked ensuring that settings are not tampered with.

Heater

The heater model comes with a 500W heater attached to the unit. Smart Sense™ controls allow the PoziDry Pro™ to be adjusted fully when the heater is activated making it adaptable for all lifestyles.

Air Replacement Grille Set*

This set is for air replacement through doors. Consists of a two-piece telescopic set, which fits unobtrusively on either side of the door panel. Minimum fixing thickness 30mm. Plastic. Dimensions: 454 x 90mm.

*Only required if there is not a 10mm undercut on the internal doors.

Mounting Options

PoziDry Pro™ comes as standard with both high sided anti-vibration legs and a hanging kit. The legs are designed to mount between standard joist widths between 300-650mm. Clip and fit connections allow for easy installation.

Motor

The electronically controlled DC motor is manufactured with long life ball bearings and is fitted with Standard Thermal Overload Protection (S.T.O.P.). Suitable for ambient operating temperatures of -25°C to +40°C. For complete peace of mind, the Vent-Axia Lo-Carbon PoziDry Pro™ is backed by a 5 year warranty.

Discreet Diffuser

The discreet circular diffuser** is easily installed, fitted and maintained. Easy fix features it can be installed against uneven ceiling surfaces with no gaps. Its low profile and aesthetically pleasing design has been developed with tenant acceptability in mind. The Smart Air™ Technology reduces air supply noise while increasing performance by 10%. The easy clip blanking plates help to control airflow into the property.

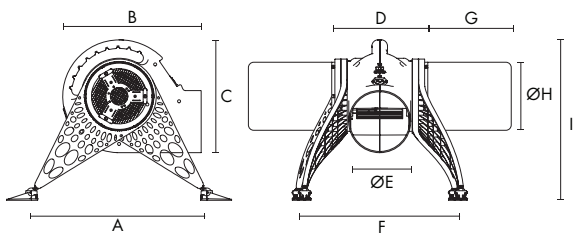
**Diffuser will always be supplied using white plastic.

Models

Dimensions (mm)

| A* | B | C | D | ØE | F | G | ØH | I** |
|---------|-----|-----|-----|-----|---------|-----|-----|---------|
| 300-650 | 425 | 365 | 330 | 200 | 530-570 | 300 | 220 | 400-600 |

*Variable to adapt to differing joist widths. ** Variable to allow for adapting product height



Performance Guide

| Bedroom | Trickle | | Energy Recovery | |
|------------|-----------------|-----------|-----------------|-----------|
| | Flow Rate (l/s) | Power (W) | Flow Rate (l/s) | Power (W) |
| 1 | 19 | 3.1 | 29 | 5.1 |
| 2 | 25 | 4.3 | 37 | 7.6 |
| 3 | 31 | 6.0 | 46 | 12.0 |
| 4 | 37 | 8.0 | 49 | 13.1 |
| Adjustable | 19-48 | - | 20-49 | - |

All models come with G4 filter, 2m of flexi duct and Ø200mm Diffuser. The Pozi Dry Pro™ FD model diffuser is fire rated but does not include Smart Air™ Technology.

PoziDry Pro™

Stock Ref

476310

PoziDry Pro™ with Heater

Stock Ref

476311

PoziDry Pro FD with Heater (Multi-storey Compliant)

Stock Ref

476312

Accessories

Model

Stock Ref

Twin Spigot Kit

449071

An additional kit to allow an extra circular diffuser to be installed near the PoziDry unit. The kit includes 1 x Ø200mm 6m Duct, 2 x Worm Clips, 1 x Ø200mm Equal Y Piece and 1 x Diffuser.

Diffuser

478228

F7 Filter Set

477957

G4 Filter Set

477629

Air replacement grille set - Brown

561400

Air replacement grille set - Ivory

561401

Lo-Carbon PoziDry Compact Pro

- Ultra small unit can fit in the smallest of spaces
- Removable inner cartridge for easy repairs and maintenance
- Flow rates adjustable in 1l/s increments, up to 30l/s
- Extremely low energy consumption
- Washable, high capacity G4 or F7 filter
- Advanced data logger and 3 digit settings lock for peace of mind
- 7 year warranty
- Ideal solution for flats with mould in a habitable room
- BBA Approved



Positive Input Ventilation

For those properties that do not have a loft, the Lo-Carbon PoziDry Compact Pro provides an easy to install solution. The unit has been designed to be as small as possible with multiple inlet and outlet positions allowing it to be installed in the best place every time.

Air is drawn into the Lo-Carbon PoziDry Compact Pro unit via an external inlet and through a short length of duct. The specially developed power pack cartridge assembly draws the air through an integral, high capacity, washable filter. The precision engineered scroll/impeller assembly and anti-vibration EPP body guarantees ultra low sound levels and increased energy efficiency.

The fresh, filtered airflow passes along the ducting and enters the room through a discreet grille. The rotatable integrated grille can be turned to one of 8 positions ensuring that the airflow is always directed upwards, reducing cold draughts.

The system provides fresh, tempered air into the home and creates an indoor environment where the damaging effects of condensation find it hard to exist, benefiting both the occupants and the structure of the building.

Performance

If the ambient temperature exceeds 27°C, the Lo-Carbon PoziDry Compact Pro will automatically switch off to prevent over-heating. This temperature threshold can be adjusted at installation.

In the case of the integral 300W heater version, the heater element is automatically activated when necessary and tempers the supply air to a chosen temperature.

Peace of Mind

Smart Sense™ technology records usage, energy consumption and filter life to ensure the unit has been used as intended. This is secured by an installer enabled 3 digit settings lock to make the PoziDry Compact Pro tamper free.

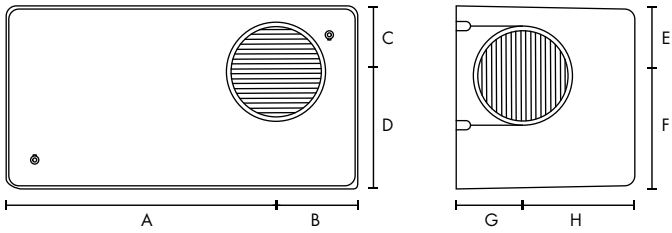
Model

With integral heater
Stock Ref
479188

Accessories

| Model | Stock Ref |
|--------------------------------------|---------------|
| ABS Spare Cover | 479843 |
| Spare Boxing Cover | 479849 |
| Spare Boxing Cover with Grille right | 479850 |
| Spare Boxing Cover with Grille left | 479851 |
| Boxing 200mm x 200mm x 2m | 479852 |
| Boxing End Stop | 479853 |
| Boxing End Stop with Grille | 479854 |
| Boxing Inner Bend | 479855 |
| Boxing Outer Bend | 479856 |
| Silencer Kit | 479857 |
| Acoustic Flexi Duct | 443273 |
| Spare Scroll Cartridge | 479859 |
| Spare PM10 Filter | 479860 |
| Spare PM2.5 filter | 479861 |

Dimensions (mm)



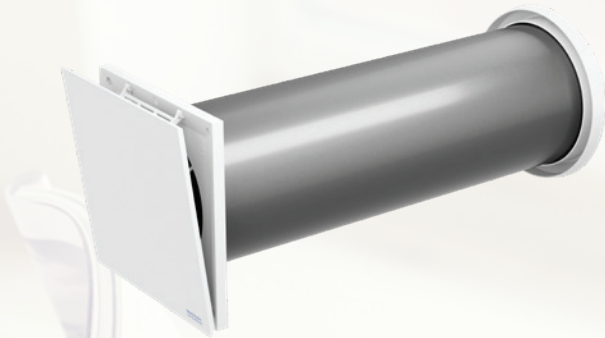
| A | B | C | D | E | F | G | H | Spigot Ø | Unit Weight |
|-----|----|----|-----|----|-----|----|-----|----------|-------------|
| 302 | 91 | 74 | 132 | 79 | 127 | 75 | 125 | 100 | 3kg |

Performance Guide

| Speed | FID (l/s) | Power (W)* | No. Bedrooms | Breakout dB(A) @ 3m* |
|-------|-----------|------------|--------------|----------------------|
| 1 | 13 | 3.5 | 1 | 11.6 |
| 2 | 17 | 6.0 | 2 | 13.6 |
| 3 | 21 | 9.0 | 3 | 17.2 |

* Sound data is measured as breakout @ 3m assuming inlet and outlet is ducted.

Residential & Commercial dMVHR



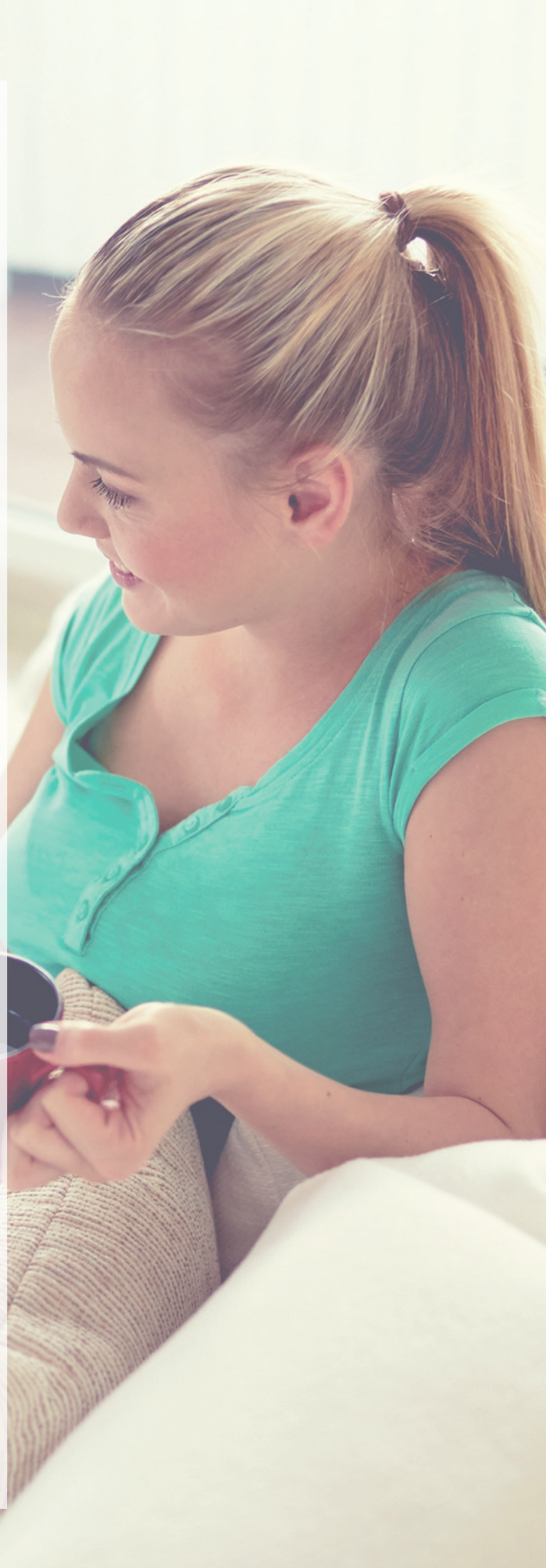
Improving air quality on a room-by-room basis, the Vent-Axia through-the-wall mounted range of heat recovery ventilation units simultaneously extract stale air and introduce fresh air – warming the incoming airflow with heat recovered from the exhaust stream.

Vent-Axia Lo-Carbon Heat Save

A reversible fan which extracts dirty air from the room and replace it with outside air 70 seconds later. This air passes through a filter to ensure that clean air enters the room. These systems work best in pairs as when one unit is extracting, the other can be supplying air to provide a balanced ventilation system. They are controlled by a SENWZP Sentinel wired zone controller which can operate up to 8 units in synchronization. This provides a single room or whole house balanced ventilation system with heat recovery.

As well as filtering the air, the Vent-Axia Lo-Carbon Heat Save uses a thermal accumulator to extract warmth from the outgoing air and uses it to temper the incoming air to avoid the feeling of cold drafts and recover heat that would otherwise be lost to the outside.

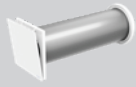
Vent-Axia®





NEW Lo-Carbon Calido

E3-E4



Lo-Carbon Heat Save/Alternate Flow Heat Recovery

E5-E6



Lo-Carbon Tempra/SELV

E7-E8



HR200WK/WJ

E9-E10

Vent-Axia Lo-Carbon Calido

- Up to 80% heat recovery to reduce energy bills
- Reduce the home's carbon footprint and save money on energy bills
- Ideal for retrofit applications
- Intelligent controls to eliminate condensation within the unit
- Adjustable airflows
- Filter replacement indicator ensures continuous good indoor air quality
- Incredibly reliable due to EC motor
- CE and S Mark - independently tested and certified for safety
- IP24 rated
- 5 year warranty



Discrete Whole House Heat Recovery

The Vent-Axia Lo-Carbon Calido is designed to remove stale air from any habitable room and replace it with fresh air. This unit is designed to be ducted therefore it can benefit more than one room at a time i.e. if installed in a bathroom, stale and moist air will be extracted and fresh air will be supplied to other habitable rooms via installed ducting.

The Vent-Axia Lo-Carbon Calido offers up to 80% heat recovery which helps reduce the amount of heat lost from the property. This helps save money by reducing energy costs as well as reducing carbon emissions. The unit cleverly recovers heat from heat lost through extraction and reuses it to warm the air re-entering the property.

One unit can help improve the air quality of a whole house and with changeable filters it can help provide clean air all year round. With three air flow options available, the Vent-Axia Lo-Carbon Calido can be installed in many types of properties and its compact design means it will ventilate and recover heat quietly in the background. It can also be wall or ceiling mounted depending on space availability, making it perfect for many retrofit applications.

Models

Vent-Axia Lo-Carbon Calido

The Vent-Axia Lo-Carbon Calido is a robust unit with an IP24 rating and is double insulated for extra protection. It uses an EC motor, which is incredibly reliable and comes with a five year warranty.

Stock Ref

411133

Accessories

Model

Filter kit standard G4 2pcs

External wall kit 100mm

Exhaust air adaptor

Calido Controller

Stock Ref

411156

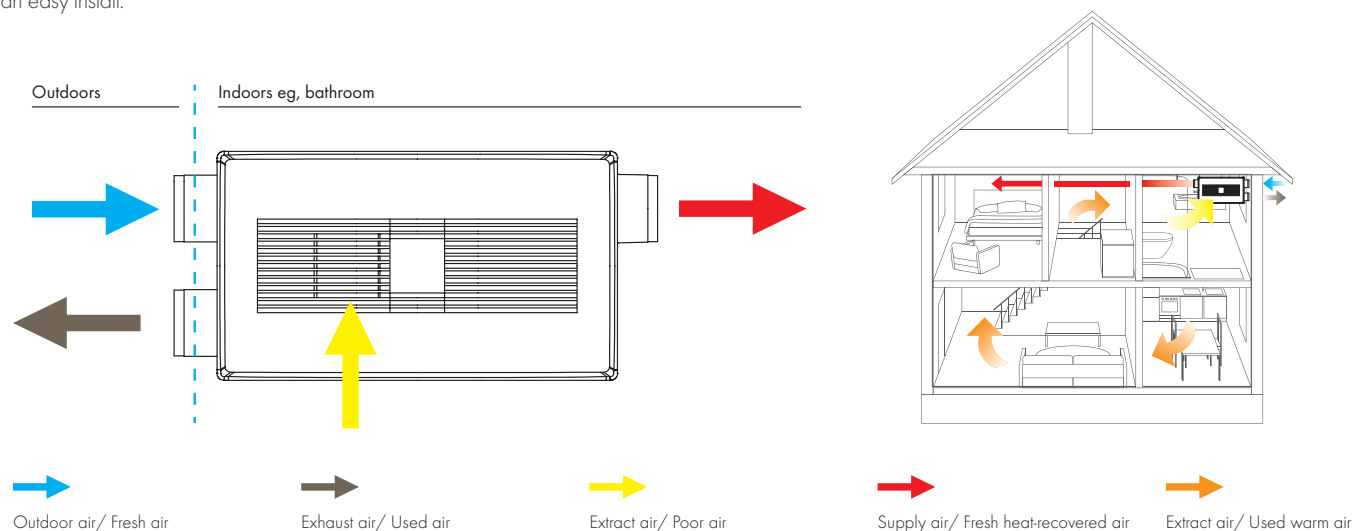
411163

411164

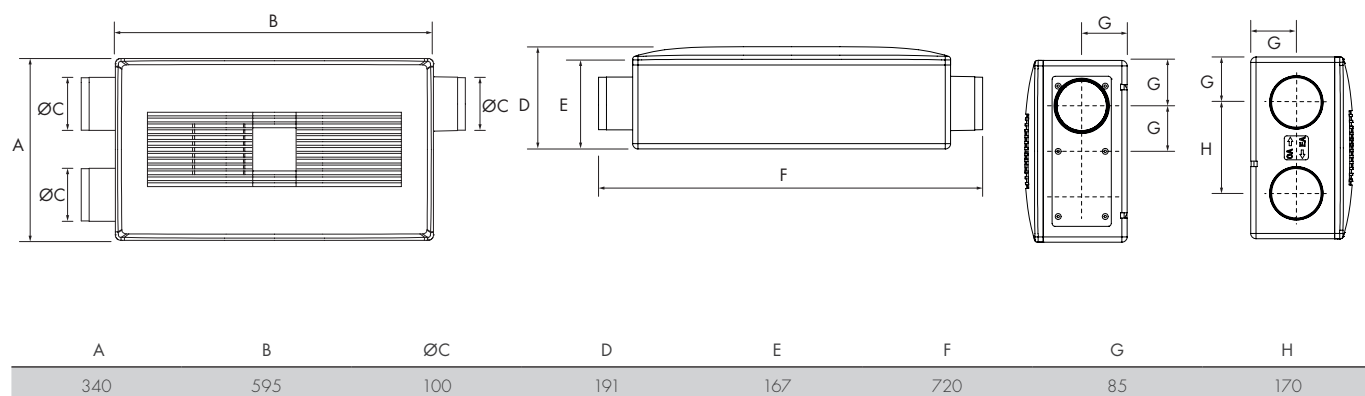
411331

Typical Installation

The Vent-Axia Lo-Carbon Calido requires two 100mm diameter holes - one to extract stale air and one to intake fresh air. It also comes with a drilling template for an easy install.



Dimensions (mm)



Performance

| | |
|--------------------|---------------|
| Wall opening: | 100 mm |
| Balanced Air flow: | 8.3 - 25 l/s |
| Power consumption: | 3.5 - 25W |
| Sound emission: | 19 - 35 dB(A) |
| Heat Recovery: | 80% |
| Temperature range: | -30 - 35 °C |

Vent-Axia Lo-Carbon Heat Save

- Suitable for improving indoor air quality in habitable rooms
- Fully customisable ventilation via a control panel
- Easy to install, no need for ducting, wall sleeve included
- Easily maintained with cleanable filter and ceramic heat exchanger
- 5 year warranty for peace of mind
- Up to 84% heat recovery to reduce energy bills
- Anti-frost protection built in
- Replace extracted air with filtered air
- Reduce the home's carbon footprint and save money on energy bills



Through-The-Wall Heat Recovery Unit

The Vent-Axia Lo-Carbon Heat Save is a ventilation unit designed for living rooms and bedrooms in single and multi-family buildings. The unit is usually located in an exterior wall to provide new air to the room.

The Vent-Axia Lo-Carbon Heat Save uses a reversible fan to extract dirty air from the room and replace it with outside air 70 seconds later. This air passes through a filter to ensure that clean air enters the room. These systems work best in pairs as when one unit is extracting, the other can be supplying air to provide a balanced ventilation system. They are controlled by a SENWZP Sentinel wired zone controller which can operate up to 8 units in synchronization. This provides a single room or whole house balanced ventilation system with heat recovery.

As well as filtering the air, the Vent-Axia Lo-Carbon Heat Save uses a thermal accumulator to extract warmth from the outgoing air and uses it to temper the incoming air to avoid the feeling of cold drafts and recover heat that would otherwise be lost to the outside.

Models

Vent-Axia Lo-Carbon Heat Save

Decentralised ventilation system with up to 84% heat recovery. Compact design for apartments or houses with 180mm diameter, ideal for refurbishment. Includes reversible fan with a thermal accumulator, external wall grille, wall sleeve, dust filter. Requires 1 x SENWZP (496037) wired zone controller per installation of 8 units.

Stock Ref

496036

Accessories

Model

Sentinel Wired Zone Control Panel (SENWZP)
Spare Inner Cover 220x220
Heat Save PM10 ISO Coarse 60% (formerly G4) filter
External Wall Sleeve 160x745
Spare Wall Sleeve 160x495
Spare Reversible Fan
Spare Thermal Accumulator
Spare Weather Protection Grille
Sound Absorbing Insert

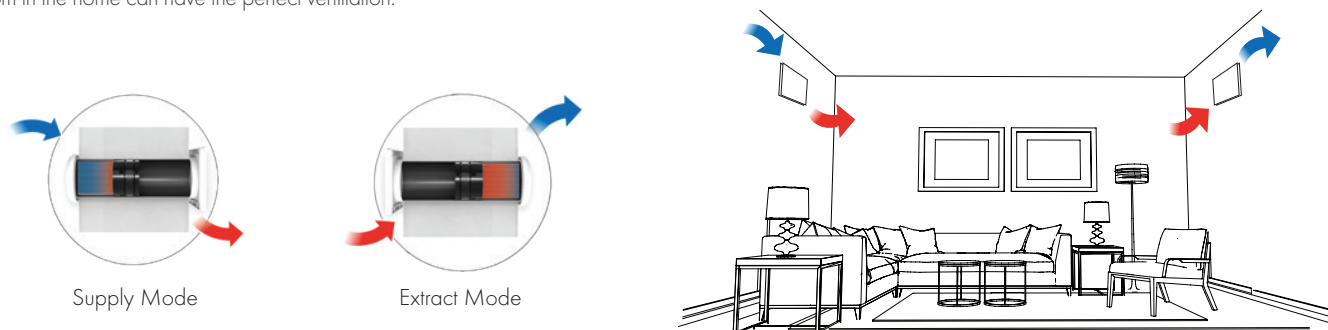
Stock Ref

496037
496108
496038
495328
496105
496110
496111
496107
496109

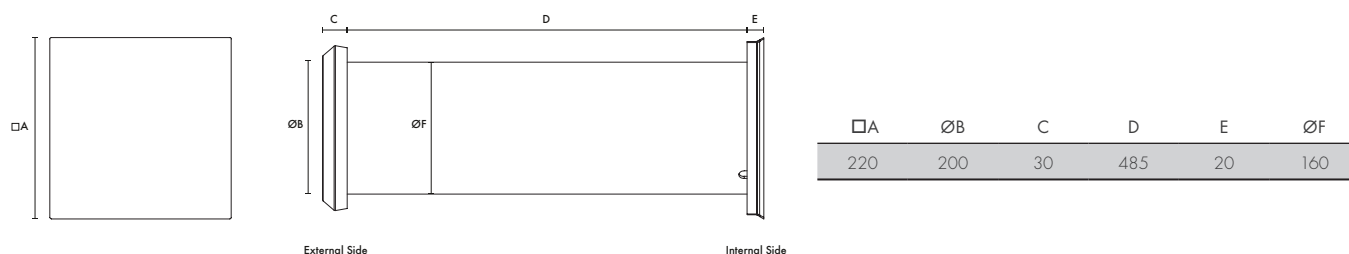
Typical Installation

The Vent-Axia Lo-Carbon Heat Save can be fitted in a 167mm - 180mm diameter hole. Maximum wall thickness is 460mm or 745mm with optional wall tube (see accessories). The wall sleeve length (included up to 460mm) can be cut down to size to fit any wall thickness.

Vent-Axia Lo-Carbon Heat Save units work best in pairs. When one unit is extracting, the other can be supplying air to provide a balanced ventilation system. They alternate direction every 70 seconds when the thermal accumulator on the extract unit has warmed up allowing the supply air to benefit from these thermal gains. They are controlled by a SENWZP Sentinel wired zone controller. This is fully modular and controllable with customised ventilation profiles available so that every room in the home can have the perfect ventilation.



Dimensions (mm)



Performance

| | |
|-------------------------------------|----------------|
| Wall opening: | 167 - 180 mm |
| Wall thickness with plaster/render: | >290 mm |
| Supply Air flow: | 2.8 - 12.0 l/s |
| Extract Air flow: | 2.8 - 12.0 l/s |
| Average Air flow: | 1.4 - 6.0 l/s |
| Power consumption: | 1 - 3W |
| Sound emission: | 18 - 36 dB(A) |
| Heat Recovery: | 84% |
| Temperature range: | -20 - 50 °C |

Lo-Carbon Tempra/SELV

- Fits in 100mm diameter hole – ideal for refurbishments
- Up to 78% heat recovery
- Available in 2 wall depths: 320mm and 460mm
- Reduces the home's carbon footprint
- IPX4 rated
- Summer setting (extract only)
- Helps prevent noise ingress
- Continuous running or intermittent extract
- Meets current Building Regulations Approved Documents F and L
- Low power consumption - only 3.2 W



Through-The-Wall Heat Recovery Unit

The Vent-Axia Lo-Carbon Tempra is designed to fit in 100mm diameter hole and is suitable for refurbished properties in kitchens, bathrooms, toilets or utility rooms. The unit meets the performance requirements for continuous extract fans under the current Building Regulations Approved Document F.

The Tempra is available in three models, a P version with pullcord control, a T version with overrun timer and an HTP version with built-in pullcord, overrun timer and humidistat. Two spigot lengths are available; 320mm and 460mm.

The manual summer setting allows the unit to be set to extract only, helping to prevent a dwelling becoming too warm in hot summer conditions.

Performance

The Tempra can be set to run continuously at 6 l/s or 9 l/s, boosting up to 15 l/s, recovering heat from extracted air and returning it to the dwelling. The unique, compact heat exchanger has a temperature efficiency up to 78%, saving energy and reducing your carbon footprint. For intermittent extract the Tempra is set to 15 l/s.

Tempra is also designed so that the replacement air being introduced is at a reduced rate ensuring that the room being ventilated is still under a slight negative pressure. This ensures that fresh air is brought into the room from the rest of the house preventing humid air migrating.

The Lo-Carbon EC/DC motor with twin impellers consumes as little as 3.2 Watts on trickle rate and runs almost silently at only 20dB(A).

Typical Installation

The unique heat exchanger design allows the Tempra to be fitted in a 100mm diameter hole, allowing it to replace standard 100mm extract fans while giving all the benefits of heat recovery. Maximum wall thickness is 460mm.

A longer version of the Tempra is available, designed for installations where the wall thickness is between 321mm and 460mm. 460mm models are identified by an 'L'.

Models

Lo-Carbon Tempra P (Pullcord)

Constant trickle speed with pullcord to boost or intermittent operation by pullcord.

| Model | Stock Ref |
|---------------|-----------|
| 320mm P | 443312 |
| 320mm SELV P | 444368 |
| 460mm LP | 403832 |
| 460mm SELV LP | 403833 |

Lo-Carbon Tempra T (Timer)

Constant trickle speed with switch live to boost or intermittent operation by switch live.

| Model | Stock Ref |
|---------------|-----------|
| 320mm T | 443310 |
| 320mm SELV T | 444369 |
| 460mm SELV LT | 403835 |

Lo-Carbon Tempra HTP (Humidistat/Timer/Pullcord)

Constant trickle speed with humidistat and linked overrun timer to boost or intermittent operation by switch live.

| Model | Stock Ref |
|-----------------|-----------|
| 320mm HTP | 443311 |
| 320mm SELV HTP | 444370 |
| 460mm LHTP | 403836 |
| 460mm SELV LHTP | 403837 |

Accessories

100mm High Rise Kit

320mm white duct with black seal.

| Model | Stock Ref |
|---------------------|-----------|
| 100mm High Rise Kit | 449011 |

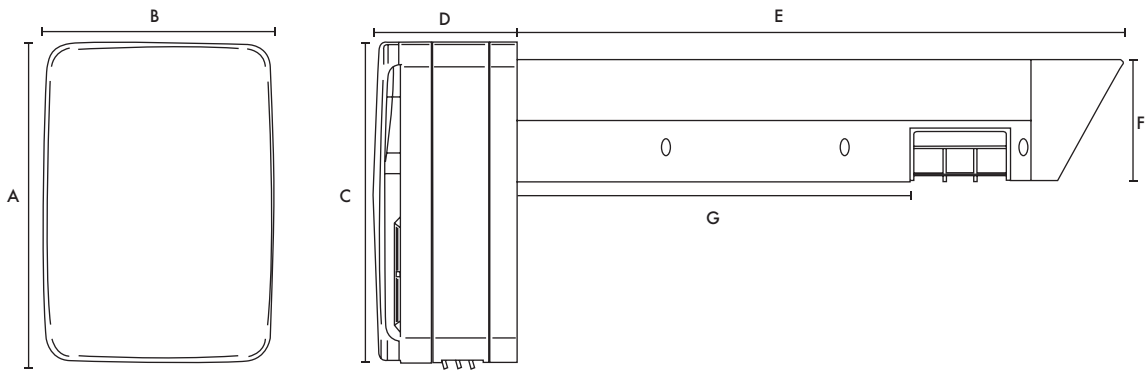
Wall Kit

Extendable Wall Tube suitable for both spigot lengths.

| Model | Stock Ref |
|----------|-----------|
| Wall kit | 445529 |

150mm Conversion Kit
For replacement of 150 diameter fan.
Stock Ref
403847

Dimensions (mm)



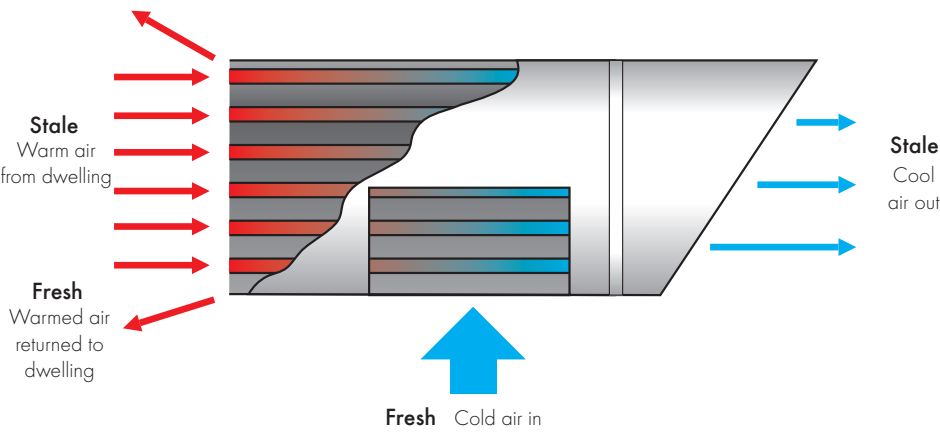
| | A | B | C | D | E | F | G |
|----------|-----|-----|-----|-----|-----|----|-----|
| Standard | 266 | 190 | 262 | 117 | 496 | 99 | 321 |
| Long | 266 | 190 | 262 | 117 | 636 | 99 | 461 |

Performance

| Model | Extract Performance l/s | | | Power Consumption Watts | | | Sound @dB(A)* | | |
|--------------------------------|-------------------------|--------------|-------|-------------------------|--------------|-------|---------------|--------------|-------|
| | Trickle Low | Trickle High | Boost | Trickle Low | Trickle High | Boost | Trickle Low | Trickle High | Boost |
| Lo-Carbon Temptra (All Models) | 6 | 9 | 15 | 3.2 | 5.7 | 26.6 | 20 | 22 | 36 |

*Octave band frequency range of 250Hz to 4KHz at 3m. Unit mounted on a reflective surface.

Heat Exchange - what is heat recovery?



HR200WK/WJ

- Single room domestic heat recovery ventilation unit
- 3 speed motor
- Integral washable filter
- Up to 75% heat recovery
- Saves energy - controls condensation
- Low noise



Heat Recovery Ventilation

HR200WK

The Vent-Axia HR200WK is a heat recovery ventilation unit specifically designed for use in domestic kitchens and utility rooms to meet the Building Regulations. The unit is also suitable for light commercial applications up to 61l/s (220m³/h).

HR200WJ

Developed for lower flows and lower noise, the HR200WJ is ideal for single living accommodation, for example student accommodation or care homes.

The three speed, external rotor motor has two matched impellers to ensure a controlled airflow through the unit, with exceptionally economical 25 Watt low speed power consumption.

The compact, self-contained unit is designed for through-the-wall mounting.

Easy Installation

The units fit through walls up to 335mm thick requiring a fixing hole 250mm square. The internal grille has washable, polymeric foam supply and extract filters. Only the neat internal twin grille is visible from the room. A wall extension sleeve is available for walls up to 550mm thick.

Heat Exchanger

The highly efficient, polymeric heat exchanger cube is washable. The compact cube interleaves outgoing moist warm air with incoming fresh air and allows the heat from one to warm the other without the two air streams mixing. Up to 75% of the heat, which would otherwise be lost, is transferred to the intake air, ensuring energy saving ventilation.

Electrical

HR200WK/WJ 220-240V/1/50Hz Class 1 earthed appliance. The 3 speed motor, can be wired to operate On/Off for any one of the three speeds. Alternatively, an Ambient Response Humidity Sensor or simple

changeover switch can be used to provide switching between any two speeds, giving permanent trickle ventilation and automatic changeover to a higher speed during periods of high moisture generation. Also the 3 speed controller enables the unit to be switched from permanent trickle to either medium or boost speed.

Models

HR200WK

A heat recovery unit specifically designed for use in domestic kitchens and utility rooms to meet the latest Building Regulations. Main body colour; Dark Brown.

Stock Ref
14120020

HR200WJ

Lower air-flows mean this unit is ideally suitable for residential applications such as care homes and student accommodation. Main body colour; Dark Grey. 3 speed motor, trickle ventilation mode, optional range of switches available.

Stock Ref
479118

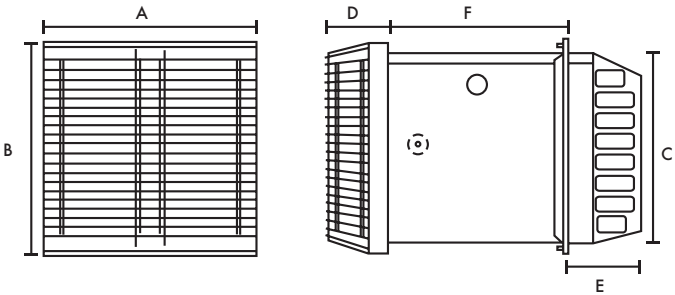
Accessories

| Model | Stock Ref |
|-----------------------|----------------|
| Extension Wall Sleeve | 370421 |
| Electronic Controller | W300310 |

SEC Class

| Model | SEC Class | SEC Class (inc. LDC) |
|---------|-----------|----------------------|
| HR200WK | C | A |
| HR200WJ | C | A |

Dimensions (mm)



Wall fixing hole 250mm x 250mm sq.

| A | B | C | D | E | F |
|-----|-----|-----|----|-------|--------|
| 270 | 270 | 245 | 85 | 68min | 335max |

Weight 9.7kg

Performance

| Model | | Performance l/s (m³/h) | | Watts | % Heat Recovery | Sound dB(A) @ 3m |
|---------|---------|------------------------|----------|-------|-----------------|------------------|
| | | Extract | Intake | | | |
| HR200WK | Speed 1 | 16 (60) | 13 (50) | 25 | 75 | 19 |
| | Speed 2 | 30 (110) | 27 (100) | 60 | 70 | 33 |
| | Speed 3 | 61 (220) | 55 (200) | 140 | 65 | 46 |
| HR200WJ | Speed 1 | 8 (28) | 5 (19) | 9 | 75 | 18 |
| | Speed 2 | 14 (52) | 9 (34) | 18 | 75 | 18 |
| | Speed 3 | 28 (100) | 18 (64) | 51 | 70 | 31 |

MVHR for Residential & Commercial Applications







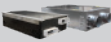


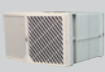



Vent-Axia offers a complete range of Mechanical Ventilation with Heat Recovery (MVHR) units for residential and commercial applications, including many that are recognised in the SAP Product Characteristics Database.

Lo-Carbon Sentinel Kinetic® Advance

Our multi award winning MVHR system incorporates a range of unique features. Offering flexible commissioning through our Wi-Fi or App control options, along with integrated digital controls for easy installation the range is designed with developers, specifiers and installers in mind. With over 93% efficiency and low specific fan powers down to 0.38 W/l/s; designers will see a reduction in their dwelling emission rate.

Vent-Axia®



| | | |
|---|--|---------|
|  | Lo-Carbon Sentinel Kinetic® Advance MVHR Unit | F3-F6 |
|  | Lo-Carbon Sentinel Kinetic® Range Overview | F7-F10 |
|  | Lo-Carbon Sentinel Kinetic® MVHR Unit | F11-F14 |
|  | Lo-Carbon Sentinel Kinetic® FH MVHR Unit | F2-F18 |
|  | Lo-Carbon Sentinel Kinetic® Plus MVHR Unit | F19-F22 |
|  | Lo-Carbon Sentinel Kinetic® High Flow MVHR Unit | F23-F26 |
|  | Lo-Carbon Sentinel Kinetic® Cooker Hood MVHR Unit | F27-F30 |
|  | Lo-Carbon Sentinel Kinetic® Horizontal MVHR Unit | F31-F36 |
|  | Lo-Carbon Kinetic® Plus E MVHR Unit | F37-F40 |
|  | Integra Ducted MVHR Unit | F41-F42 |
|  | Integra Plus EC Ducted MVHR Unit | F43-F44 |
|  | HR100R/RS Ducted MVHR Unit | F2-F46 |
|  | HR500 Single Room Heat Recovery Unit | F47-F48 |
|  | HR500D Ducted MVHR Unit | F49-F50 |
|  | HR500EP/IP Passive HR Unit | F51-F52 |
|  | HR500DP Passive HR Unit | F53-F54 |

Lo-Carbon Sentinel Kinetic Advance

- Backlit user interface
- Lightweight for easier installation
- Full summer bypass
- Approved Document F aligned commissioning wizard
- Smartphone connectivity as standard
- Left/Right handing through the controller
- Pre-heater option for cold climates
- Post-heater control option
- Developed and manufactured in the UK
- ISO ePM10 and ePM2.5 filter options
- Acoustic Enclosure option for reduced breakout noise
- Acoustic Top Box option for reduced in-duct noise



The award winning Sentinel Kinetic® Advance from Vent-Axia is the next generation of heat recovery ventilation systems. It is designed to offer the highest level of comfort and control available ensuring the best possible customer experience.

A whole new experience

The highly sculpted interior surfaces, designed using the latest CFD techniques, ensures airflows are maximised through the unit, minimising noise and energy use. This feature alone provides an experience which we are confident will delight home owners and fulfil our ambition of providing the most discrete and efficient ventilation available.

With the widest range of options available, installers can now order a system that is tailored to their client's needs.

Air Quality and Health

We have strived to make the Advance system the most flexible solution available on the market. Optimisation has been targeted in every aspect of the design to ensure that it really does improve quality of life. Whatever the outside environment, we have a method to help reduce air pollution from entering the living space. Our range of filter options, up to and including ePM2.5 (F7), ensures that even homes in heavily urbanised areas have the opportunity to filter out the impurities and help protect their family from respiratory issues.

Low noise levels

The most common concern with home owners is that ventilation devices create noise. With Advance, absolute optimisation of every element does everything possible to minimise generation and transmission of both motor and airflow noise. We believe that we have one of the quietest units available. The Sentinel Kinetic Advance Acoustic Solution is also available for scenarios where noise is critical; an Acoustic Enclosure will reduce breakout noise and the Top Box will reduce in-duct noise at key frequencies.

Ventilation how you want it

The Vent-Axia Connect smartphone application, available on iOS and Android, allows the multitude of functions to be adjusted from the comfort of your sofa.

We have spent our time considering every element of the ventilation control. Should you want to run the system at certain times and a various speed, all the options are available. With smartphone compatible controls, you are in full control of your ventilation all year round, for example increasing the ventilation rate during hot periods in the summer or reducing the speed while away to minimise running costs.

Simultaneously, the smart logic built within our controls also ensures that your system operates optimally, with automated functions such as frost protection and summer bypass, ensuring your comfort is the number one priority.



Airtight Buildings

Low energy buildings typically have very low leakage rates (below 3m³/(h.m²) at 50Pa). This reduces the effectiveness of the standard frost protection strategy which imbalances the airflows. For airtight buildings in cold climates it is advisable to use the Sp models with built-in pre-heater.

SEC Class

| Model | SEC Class |
|--------------|-----------|
| Advance S/SX | A+ |

Model

| Model | Stock Ref |
|--|-----------|
| Advance S | 405215 |
| Advance S with Acoustic Top Box & Enclosure | 479550 |
| Advance S with Acoustic Top Box | 479549 |
| Advance S with Acoustic Enclosure | 479548 |
| Advance SX | 405216 |
| Advance SX with Acoustic Top Box & Enclosure | 479553 |
| Advance SX with Acoustic Top Box | 479552 |
| Advance SX with Acoustic Enclosure | 479551 |
| Advance Sp LH | 476808 |
| Advance Sp RH | 476809 |

Accessories

| Model | Stock Ref |
|---|-----------|
| Volt-free Expansion (Four additional inputs) | 472697 |
| Switched Live Expansion (Two additional inputs) | 472699 |
| 0V - 10V Input Board (Two inputs) | 472701 |
| Acoustic Purge Fan | 477988 |
| Acoustic Purge Fan XL | 479829 |

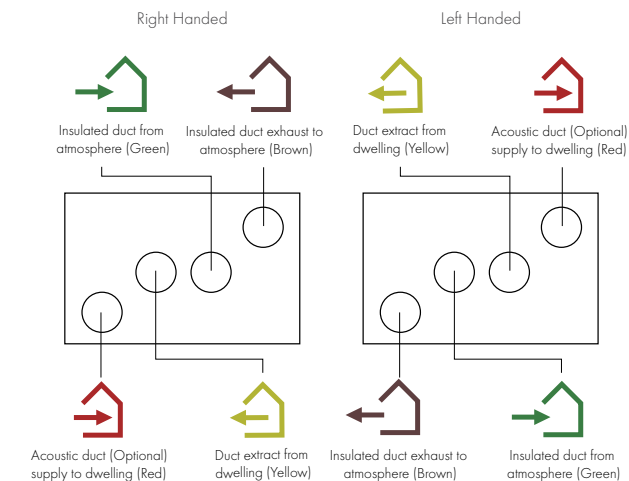
Spare Filters

| Model | Stock Ref |
|-------------------------------------|-----------|
| ISO 45% Coarse (G3) 2x Filter | 472667 |
| ISO ePM10 50% Pollen (M5) 1x Filter | 472669 |
| ISO ePM2.5 70% Fine (F7) 1x Filter | 472671 |

SAP PCDB Test Results

| SAP 2009 | | | SAP 2012 | |
|----------|-------------------------|-------------|-------------------------|-------------|
| | Thermal Efficiency % | SFP (W/l/s) | Thermal Efficiency % | SFP (W/l/s) |
| K+1 | 93 | 0.38 | 93 | 0.39 |
| K+2 | 93 | 0.38 | 92 | 0.46 |
| K+3 | 92 | 0.42 | 91 | 0.55 |
| K+4 | 92 | 0.50 | 91 | 0.70 |
| K+5 | 91 | 0.58 | 90 | 0.85 |
| K+6 | 91 | 0.68 | 89 | 1.07 |
| K+7 | 90 | 0.82 | 89 | 1.31 |

Spigot Configuration

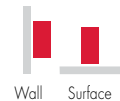


Hand-able through controller (except if pre-heater fitted)

Model Range Overview

| Models | Advance S | Advance SX | Advance Sp |
|--|-----------|------------|------------|
| Acoustic Enclosure | ○ | ○ | X |
| Acoustic Top Box | ○ | ○ | X |
| App Control | ✓ | ✓ | ✓ |
| App Commissioning | ✓ | ✓ | ✓ |
| Auto Summer Bypass | ✓ | ✓ | ✓ |
| Easy Access Filters | ✓ | ✓ | ✓ |
| ISO 45% Coarse (G3) Filter | ✓ | ✓ | ✓ |
| ISO ePM10 50%, ePM2.5 70% Filter Options | ✓ | ✓ | ✓ |
| Very Low Noise Levels | ✓ | ✓ | ✓ |
| Built-In Humidistat | ✓ | ✓ | ✓ |
| Active Frost Protection to -20°C | ✓ | ✓ | ✓ |
| Delay-On | ✓ | ✓ | ✓ |
| Clean Filter Indicator (Time) | ✓ | ✓ | ✓ |
| Clean Filter Indicator (Pressure) | X | ✓ | X |
| Fault Code Indicator | ✓ | ✓ | ✓ |
| Switched Live | ✓ | ✓ | ✓ |
| Volt Free | ✓ | ✓ | ✓ |
| 0V - 10V Proportional Control | ○ | ○ | ○ |
| Lightweight | ✓ | ✓ | ✓ |
| 22mm or 32mm Condensate Connection | ✓ | ✓ | ✓ |
| Left/Right Orientation Through Control | ✓ | ✓ | ✓ |
| PIN Number Lock | ✓ | ✓ | ✓ |
| Running Time Indicator | ✓ | ✓ | ✓ |
| External Pre-Heater Controller | ○ | ○ | ○ |
| External Post-Heater Controller | ○ | ○ | ○ |
| Built-in Pre-Heater | X | X | ✓ |
| Enthalpy Heater Exchanger | ○ | ○ | ○ |
| Fan Curve Flow | ✓ | ✓ | ✓ |
| Constant Volume | X | ✓ | X |
| Soft-Start Boost | ✓ | ✓ | ✓ |

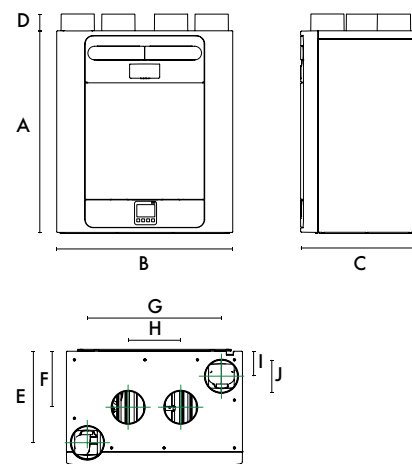
Mounting Options



○ - Optional extra. Contact us for more information.

Dimensions (mm)

Unit

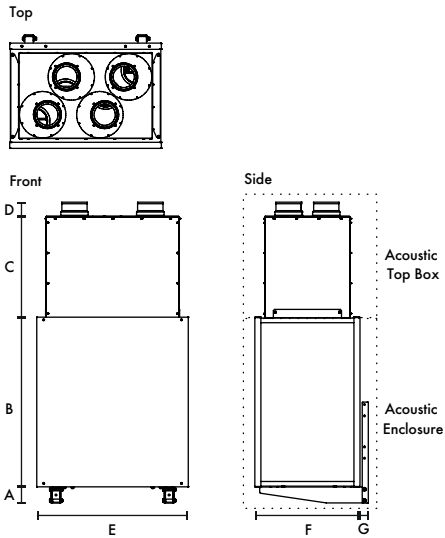


| A | B | C | D | E | F | G | H | I | J | kg |
|-----|-----|-----|----|-----|-----|-----|-----|----|-----|----|
| 760 | 660 | 443 | 63 | 343 | 210 | 503 | 197 | 93 | 125 | 27 |

Packed weight: 32kg

Dimensions (mm) Cont.

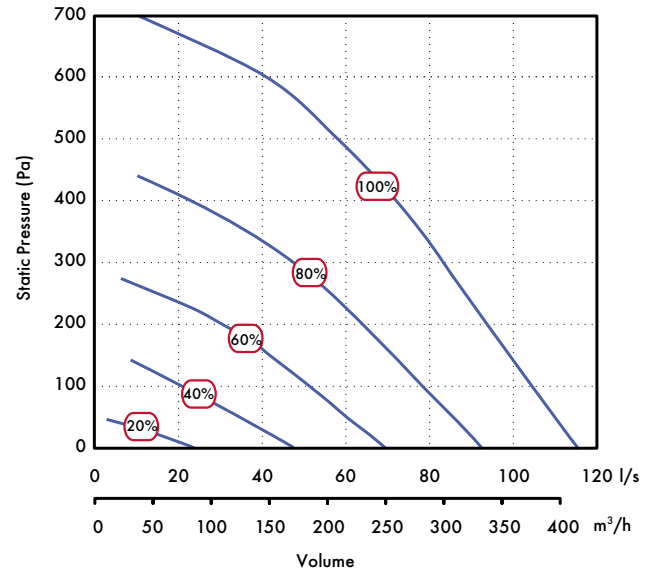
Acoustic Solution



Acoustic Top Box
Acoustic Enclosure

| A | B | C | D | E | F | G | kg | kg | Spigot |
|----|-----|-----|----|-----|-----|----|----|----|--------|
| 80 | 840 | 501 | 68 | 750 | 520 | 40 | 14 | 27 | 125 |

Performance



Sound Spectrum (Unit only)

| Speed | Test mode | Octave Band (Hz) Sound Power Levels, dB | | | | | | | | | SPL dB(A) @ 3m |
|-------|-----------|---|------|------|------|------|------|------|------|------|-------------------|
| | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | LwA | |
| 20% | Supply | 52.9 | 50.9 | 46.8 | 43.0 | 34.6 | 27.1 | 19.2 | 25.4 | 43.9 | 26.4 |
| | Extract | 50.3 | 49.0 | 36.0 | 31.5 | 23.6 | 16.1 | 18.9 | 25.3 | 36.4 | 18.9 |
| | Breakout | 34.6 | 34.8 | 35.7 | 34.9 | 29.6 | 25.1 | 21.0 | 25.3 | 36.0 | 15.5 |
| 40% | Supply | 59.5 | 56.5 | 59.4 | 55.0 | 48.2 | 42.6 | 31.8 | 26.1 | 55.9 | 38.4 |
| | Extract | 51.9 | 51.3 | 50.4 | 41.2 | 35.0 | 25.3 | 19.8 | 25.4 | 44.8 | 27.3 |
| | Breakout | 40.2 | 42.6 | 46.5 | 45.4 | 41.0 | 36.2 | 25.5 | 25.3 | 46.5 | 26.0 |
| 60% | Supply | 66.9 | 62.4 | 63.3 | 62.0 | 57.9 | 53.5 | 43.4 | 34.2 | 63.2 | 45.7 |
| | Extract | 60.6 | 60.3 | 54.2 | 49.5 | 44.4 | 36.2 | 27.9 | 26.3 | 51.7 | 34.2 |
| | Breakout | 45.5 | 49.8 | 52.5 | 53.1 | 49.7 | 46.7 | 36.2 | 26.9 | 54.5 | 34.0 |
| 80% | Supply | 82.4 | 67.6 | 65.2 | 67.6 | 64.2 | 60.8 | 50.8 | 43.2 | 69.2 | 51.7 |
| | Extract | 75.5 | 68.6 | 59.3 | 56.0 | 48.3 | 44.2 | 36.9 | 31.3 | 58.6 | 41.1 |
| | Breakout | 59.2 | 55.0 | 56.8 | 60.0 | 55.4 | 53.9 | 44.1 | 33.4 | 61.0 | 40.5 |
| 100% | Supply | 79.4 | 69.6 | 66.6 | 75.1 | 64.9 | 63.6 | 53.4 | 45.7 | 73.7 | 56.2 |
| | Extract | 72.4 | 70.5 | 60.5 | 56.4 | 49.8 | 46.3 | 39.0 | 33.4 | 59.5 | 42.0 |
| | Breakout | 63.0 | 57.1 | 58.5 | 63.7 | 56.8 | 55.9 | 46.4 | 36.2 | 63.5 | 43.0 |

Sound Spectrum (Unit with Acoustic Solution)

| Speed | Test mode | Octave Band (Hz) Sound Power Levels, dB | | | | | | | | | SPL dB(A) @ 3m |
|-------|-----------|---|------|------|------|------|------|------|------|------|-------------------|
| | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | LwA | |
| 20% | Supply | 54.7 | 50.5 | 41.5 | 30.8 | 18.6 | 14.7 | 18.2 | 24.0 | 38.0 | 20.5 |
| | Extract | 54.8 | 41.7 | 31.4 | 20.2 | 15.2 | 13.8 | 18.3 | 24.3 | 31.9 | 14.4 |
| | Breakout | 36.6 | 47.3 | 38.0 | 24.7 | 19.3 | 16.6 | 19.1 | 23.6 | 34.0 | 13.5 |
| 40% | Supply | 61.0 | 57.7 | 56.0 | 39.0 | 27.5 | 16.6 | 18.4 | 24.1 | 48.9 | 31.4 |
| | Extract | 55.7 | 50.8 | 44.6 | 26.8 | 19.1 | 15.0 | 18.2 | 24.0 | 39.2 | 21.7 |
| | Breakout | 55.9 | 55.2 | 48.2 | 35.5 | 29.9 | 20.9 | 20.4 | 25.3 | 42.6 | 22.1 |
| 60% | Supply | 64.5 | 64.3 | 56.2 | 48.6 | 36.0 | 22.8 | 19.0 | 24.2 | 52.3 | 34.8 |
| | Extract | 59.4 | 57.3 | 46.6 | 36.0 | 25.6 | 17.4 | 18.6 | 24.5 | 43.9 | 26.4 |
| | Breakout | 43.5 | 60.5 | 49.5 | 43.5 | 39.0 | 32.0 | 23.8 | 23.7 | 47.6 | 27.1 |
| 80% | Supply | 68.9 | 65.9 | 59.9 | 53.9 | 41.4 | 29.3 | 21.6 | 24.7 | 55.9 | 38.4 |
| | Extract | 63.1 | 69.3 | 52.6 | 43.0 | 33.4 | 23.7 | 20.2 | 24.6 | 54.5 | 37.0 |
| | Breakout | 48.3 | 69.8 | 52.7 | 48.3 | 44.7 | 39.8 | 33.2 | 25.9 | 57.1 | 36.6 |
| 100% | Supply | 72.5 | 70.5 | 63.1 | 56.1 | 43.9 | 33.0 | 23.7 | 25.2 | 59.3 | 41.8 |
| | Extract | 70.3 | 61.9 | 56.2 | 45.4 | 36.6 | 28.0 | 22.9 | 24.6 | 51.5 | 34.0 |
| | Breakout | 54.3 | 67.1 | 63.3 | 51.3 | 47.9 | 43.9 | 38.5 | 28.7 | 57.7 | 37.2 |

Tested according to BS EN 13141-7:2010. Breakout quoted spherical. Supply and Extract quoted hemispherical. For in-duct data, end reflections are added based on the spigot size of the unit.

Consultant's Specification

Specification

The supply and extract ventilation unit shall be the Sentinel Kinetic Advance as manufactured by Vent-Axia and shall be sized as indicated on the drawings and shall be in accordance with the particular specification.

The unit shall be fully insulated for thermal and acoustic performance and shall incorporate a counterflow multiplate heat exchanger with independently verified thermal efficiency up to 93%. The heat exchanger shall be protected by ISO 455 Coarse (G3) Grade filters on intake and extract air-flows. The unit shall have the facility to accommodate ISO ePM10 (M5) and ePM2.5 (F7) filters. The filters shall be accessible via tool-free access doors. The heat exchanger, motors, summer bypass and all other serviceable parts shall be accessible through the front of the unit.

Supply air to the room shall be pre-heated by the extract air via the integrated composite plastic counter-flow heat recovery cell. The Sentinel Kinetic shall automatically vary the ventilation rate via EC/DC motors, as it receives signals from optional or in-built sensor inputs. When a signal is received, the fans shall either vary their speed proportionally or on a trickle/boost principle.

The unit shall have the facility to commission the supply and extract fans individually via in-built minimum and maximum speed adjustment, or alternative wired remote control unit. The fans themselves shall have independent, infinitely variable speed control.

Unit Specification

The unit shall be manufactured with an ABS Outer case construction, with the ability to alter the spigot configuration via the on-board controller. The unit shall have a high efficiency composite plastic counter-flow heat exchanger, supply and extract filters (up to ISO ePM2.5 (F7)), automatic 100% summer bypass, integral minimum and maximum infinitely variable speed controls with fascia mounted failure indication.

The unit shall have low energy, high efficiency EC/DC fan/motor assemblies with sealed for life bearings. The impellers shall be high efficiency backward curved centrifugal type, achieving an SFP as low as 0.38W/l/s (EN 308).

The unit shall have a heat exchanger cell with a thermal efficiency of up to 93% when tested to EN 308. This shall be protected by ISO 45% Coarse (G3) grade synthetic filters on supply and extract, with the option of ISO ePM10 (M5), ISO ePM2.5 (F7) or external carbon activated filters. The unit shall come with both a 22mm and 32mm connection for draining condensation.

The unit shall have wireless control capabilities as standard, using RF858 connectivity, 802.11b/g/n Wi-Fi and Bluetooth low energy 4.2. The unit shall use RF858 to connect to a wide ecosystem of wireless sensors including but not limited to CO2, temperature, and relative humidity. The unit shall be able to engage Wi-Fi to connect to local devices and create a local area network to allow for a larger network to be created for commissioning. The unit shall have Bluetooth low energy 4.2 to allow connectivity onto compatible smart phone devices.

The unit shall be constructed with a removable tool-free front panel which gives access to the removable on-board controller and other accessories. The EPS panel can then be removed with 4 screws allowing full maintenance access. This shall provide access to the following:

- ✓ Supply or extract fan
- ✓ Heat exchanger
- ✓ Access to the electrical connections

To reduce breakout noise, the MVHR unit shall be provided with an Acoustic Enclosure of steel construction lined with class 'O' acoustic foam. To reduce in-duct noise, the top of the MVHR shall be fitted with an Acoustic Top Box to provide attenuation to the 4 ducts of the unit. This Acoustic Top Box shall be of steel construction lined with acoustic class 'O' foam with the MVHR spigots linked to the Top Box via 4 separate attenuated ducts. The acoustic enclosure and top box shall each be independently tested for noise to BS EN 13141-7.

Access shall be provided for wiring termination and setup/commissioning. The unit can be supplied with either a backlit user interface or a blank plate, both of which shall be removable for remote mounting if required. Filters shall be accessed via the two pull out drawers near the top of the unit.

Units shall be as manufactured by Vent-Axia Ltd.

Standard Controls

The Sentinel Kinetic Advance shall incorporate the following functions through a user interface fitted by the manufacturer or a paired smartphone with the Vent-Axia Connect application: -

- ✓ Integral infinitely variable fan speed control on supply and extract.
- ✓ 6 speeds; 4 adjustable
- ✓ Left or Right hand spigot configuration, programmable by the on board controller
- ✓ Filter change wizard which stops the motors during filter replacement
- ✓ 0-10V proportional speed adjustment
- ✓ Volt free contacts
- ✓ 24V external sensor supply, eg PIR sensor

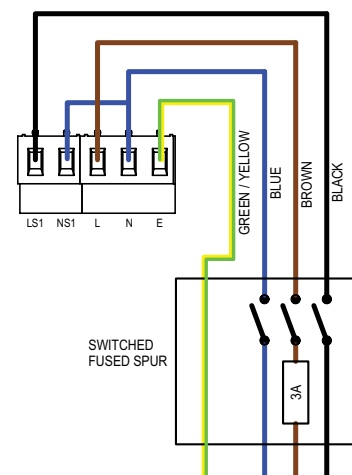
- ✓ Filter check facility
- ✓ Tool free filter access
- ✓ Integral BMS interfaces – control and status indication
- ✓ Heating interlocks
- ✓ 0-10V proportional speed adjustment
- ✓ Fully automatic summer bypass
- ✓ Control panel pin number lock

The unit shall incorporate:

- ✓ An integral humidity sensor with the following features:
Ambient Response; Raises the humidity trigger point as dwelling temperature reduces.
- ✓ Rapid Response: Monitors the rate of change in humidity and triggers increased airflow even if the humidity trigger threshold is not reached.
- ✓ Proportional Response; incrementally increases the fan speed to reduce noise and reduce energy consumption.
- ✓ RS485 connectivity – Long distance cabling to support multiple sensor connection.
- ✓ RF858 connectivity – Radio reference 868 MHZ for multiple wireless sensors pairing Bluetooth low energy 4.2 – Enable pairing within compatible smartphone device
- ✓ 802.11b/g/n Wi-Fi – Enable localised access point or connecting onto local area network using the Vent-Axia Connect application, via compatible smartphone device
- ✓ The unit shall incorporate an automatic 100% summer bypass damper which monitors internal and external temperatures to maintain the user comfort temperature (default 21°C):
- 'Evening Fresh' turns the unit to maximum speed with the bypass operational for 2 hours or until the user comfort temperature is reached (default 21°C).
- 'Night Time Fresh' will run the unit on maximum speed with the bypass operational throughout the night or until the dwelling reaches minimum temperature (default 14°C).

Independently acoustically tested to BS EN 13141-7:2010

Electrical Connection



Lo-Carbon Sentinel Kinetic Range Overview

- Manufactured in the UK
- Building Regulations ADF and ADL compliant
- Recognised in SAP PCDB
- Specific Fan Power down to 0.4 W/l/s
- Up to 94% heat recovery
- Fully automatic Summer bypass
- Horizontal and/or vertical duct outlets
- Integrated digital controller for simple and accurate commissioning
- Lightweight for easy installation
- External condensate connection
- Plug and play controls; Humidistat
- Acoustic Enclosure option for reduced breakout noise
- Acoustic Top Box option for reduced in-duct noise

The Sentinel Kinetic Range Incorporates:

- A wholehouse heat recovery system with up to 94% energy efficiency
- An easily accessible heat recovery cell protected by two removable ISO 45% Coarse (G3) filters
- Two Lo-Carbon energy saving EC/DC fans which ensure long life (typically over double the life of AC motors) and lowest possible energy use
- Fully insulated construction with built-in condensation drain
- Specifically designed for new build constructions with a high level of insulation

The Lo-Carbon Sentinel Kinetic meets the latest requirements of the Building Regulations ADF and ADL for wholehouse system ventilation: Continuous mechanical supply and extract with heat recovery. The Lo-Carbon Sentinel Kinetic models have 3 fully adjustable speeds and a purge setting (maximum flow). Provided with the unit is a digital controller that can be used to preset the speeds to any required airflow within the performance range.

Integral Humidity Sensor

The integral humidity sensor (models with H suffix) increases 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 wet room. The night time relative humidity setback feature suppresses nuisance tripping as humidity gradually increases with falling temperature.

Acoustic Solution

For scenarios where noise is a critical issue, The Sentinel Kinetic Acoustic Solution is also available for all Sentinel Kinetic units. An Acoustic Enclosure will reduce breakout noise and the Acoustic Top Box will reduce in-duct noise at key frequencies. The acoustic solution sound data for each product can be found on the relevant product page.



Filtration

A new ISO filtration standard has come into force. The test method has changed so direct comparisons between EN779 2012 and ISO 16890 cannot be drawn. Below is a guide to the filter efficiencies:

| ISO 16890 | EN779 |
|------------|-------|
| 45% Coarse | G3 |
| 65% Coarse | G4 |
| ePM10 50% | M5 |
| ePM2.5 70% | F7 |

For sensors see Accessories & Controllers section.

Sentinel Control

The Sentinel controller is the most advanced system available, providing Demand Control Ventilation (DCV), minimising energy consumption and noise levels, and optimising ventilation performance. Sentinel controlled units may be set to operate fully automatically or with varying levels of manual intervention.

Building Management System (BMS) Options

There are two levels of BMS available: Basic Output and full Electronic BMS.

Basic Output provides a 5 volt output from the LED terminals on the controller. This output occurs whenever a message appears in the digital display, for example; 'Check Filters' or a fault code. The output can also be converted to volt-free with the addition of an optional Opto-Coupler.

Electronic BMS: A full range of two-way digital signals are available through the RJ11 connector on the control board. The BMS system provider will translate this signal to extract the desired data. Contact Vent-Axia to discuss your specific requirements.

LED Alarm

MVHR units are often installed in lofts or other locations where they are difficult to monitor. The optional remote LED alarm illuminates when any message is visible in the MVHR unit display panel. The LED alarm can be installed in a convenient location within the dwelling allowing end users to see that the unit requires attention.

Control Inputs

Five volt-free pairs of switch terminals for sensor inputs allow boosting from a full range of Vent-Axia controllers – humidistats, PIR, timers.

Two terminals with 0-24V outputs allow 0V to 10V proportional control by sophisticated controllers such as CO₂ sensors and proportional humidistats.

Switched-live for boosting via light switches (220-240V AC) or manual Normal/Boost switches. This connection has the advantage of Delay-On and Delay-Off facility. Delay-On enables you to prevent the Boost airflow between 0 and 10 minutes, after a light switch has been activated. Delay-Off allows the Boost airflow to continue after a light switch is turned off to ensure effective clearance of humidity. This timer is adjustable between 0 and 25 minutes.

The units can be boosted incrementally via the on-board controller or the Wired Remote Controller: One press = 30 minutes, two presses = 60 minutes, three presses = continuous.

Frost Protection

In order to prevent frost forming inside the unit in winter conditions, the Kinetic range employs a sophisticated frost protection strategy that modifies the airflows ensuring heat recovery continues down to -20°C. Below this temperature, the units will operate as 'extract only' fans. If balanced ventilation is required at low temperatures, a duct pre-heater should be used.

Optional Controls

| Model | Stock Ref |
|---|-----------|
| LED Alarm with 15 metre cable | 448356 |
| Wired Remote Controller with 15 metre cable | 443283 |

Purge Options

The unit can be set to maximum flow (100%) by pressing and holding the Boost button on the unit itself or optional wired controller for 5 seconds. Purge will continue for two hours unless cancelled by pressing the Boost button again.



In addition, the Acoustic Purge Fan can be used in conjunction with a Sentinel Kinetic MVHR unit or independently via a separate switched live connection or 0-10V external sensor input.

| Model | Stock ref |
|-----------------------|-----------|
| Acoustic Purge Fan | 477988 |
| Acoustic Purge Fan XL | 479829 |

Summer Bypass

An internal damper operates when the external temperature is below the internal temperature, and the internal temperature is too high.

The bypass opens and allows the cooler outside air to help cool the dwelling.

Normal mode: Fans run on Normal speed with bypass open until the internal dwelling temperature falls below the set 'Indoor' (maximum desired) temperature.

Evening Purge mode: The fans run on Boost speed until the internal temperature falls below the set 'Indoor' temperature. If, after five hours the internal temperature is still above the set 'Indoor' temperature, the unit will switch down to normal speed for the remainder of the 'bypass open' period.

Night-time Purge mode: As Evening Purge, except that the unit will continue on Boost speed until the internal air temperature reaches the 'Outdoor' temperature set point (Default 14°C). This mode gives pre-cooling of the dwelling for the following day.

In Evening and Night Time Purge modes, the user can turn off the boost function by pressing the Boost button.

A Summer Bypass can make a contribution to reducing internal temperatures but is not a substitute for appropriate design and construction.













System Cooker Hood Range

System canopy hoods are a motorless hood with extract being provided by the MVHR unit. When the Boost button on the canopy is activated, the MVHR unit goes to boost setting and the summer bypass opens preventing cooking by-products entering the heat exchanger cell. SELV hoods allow the distance between the hood and an electric hob to be reduced from 650mm to 550mm.



| Model | Stock ref |
|----------------|-----------|
| White | 407509 |
| Aluminium | 407206 |
| White SELV | 474790 |
| Aluminium SELV | 474791 |

Model Range Overview

| | Sentinel Kinetic Range | | | | | Kinetic E Range |
|--------------------------------|---|---|---|--|---|---|
| |  |  |  |  |  |  |
| Model Ranges | Lo-Carbon Sentinel Kinetic | Lo-Carbon Sentinel Kinetic FH | Lo-Carbon Sentinel Kinetic Plus | Lo-Carbon Sentinel Kinetic High Flow | Lo-Carbon Sentinel Kinetic Cooker Hood | Lo-Carbon Kinetic Plus E |
| Models | BH | FH | Plus | High Flow | CH | Plus E |
| Acoustic Enclosure | ○ | ○ | ○ | ○ | | ○ |
| Acoustic Top Box | ○ | ○ | ○ | ○ | | ○ |
| Auto Summer Bypass | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Easy Access Filters | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Very Low Noise Levels | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Integral Cooker Hood | | | | | ✓ | |
| Built-In Humidistat | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Kitchen Cupboard Installation | ✓ | | | | ✓ | |
| Max Airflow @ 100Pa | 68 | 79 | 117 | 185 | 68 | 117 |
| Frost Protection | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Delay-On | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Wired Remote Control | ○ | ○ | ○ | ○ | ○ | |
| Wireless Boost | ○ | ○ | ○ | ○ | ○ | |
| Clean Filter Indicator (Time) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Fault Code Indicator | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Potentiometer Adjustment | | | | | | ✓ |
| Sentinel Control | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Switched Live | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Volt Free Contact | ✓ | ✓ | ✓ | ✓ | ✓ | |
| OV - 10V Proportional Control | ✓ | ✓ | ✓ | ✓ | ✓ | |
| BMS Input/Output | ✓1 | ✓1 | ✓1 | ✓1 | ✓1 | |
| Lightweight | ✓ | ✓ | ✓ | ✓ | | ✓ |
| External Condensate | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Horizontal Duct Option | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Horizontal (Slab) Installation | | | | | | |
| Left/Right Orientation | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| PIN Number Lock | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Running Time Indicator | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Enthalpy Heater Exchanger | ○ | ○ | ○ | ○ | | |
| Mounting Options |  Wall Surface |  Wall Surface |  Wall Surface |  Wall Surface |  Wall |  Wall Surface |

○ - Denote Optional, 1- Seek technical advice from Vent-Axia. *ZMH rectangular spigot model.

Sentinel Demand Control

The Lo-Carbon Sentinel Kinetic Range can be used with a wide range of optional Vent-Axia controllers and sensors. Ranging from integral humidistats, through wireless controllers to wired remote sensors.

Wired Remote Controller

- Standard with horizontal units, optional extra with vertical units
- Supplied with 15 metres of cable (max length), the Wired Remote Controller duplicates all the features of the on-board control panel, allowing commissioning, diagnosis and user control
- Flush mounting, suitable for a single gang pattress box 16mm deep

Stock Ref

443283



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

563550



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

563532



Air Quality Sensor

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

Stock Ref

563506



Normal Boost Switch

- A single gang switch to boost from low to high speeds on heat recovery systems
- 85 x 85 x 10mm (H x W x D)

Stock Ref

455213



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

459623



Momentary Push Switch

- Compatible with Sentinel Kinetic range, the momentary switch boosts the unit for 30 minutes
- 85 x 85 x 10mm (H x W x D)

Stock Ref

448929



Normal Boost Switch with Light Indicator

- Single gang switch with LED illumination when in the Boost condition
- 85 x 85 x 10mm (H x W x D)

Stock Ref

449060



Normal Boost Switch - Stainless Steel

- A single gang switch to operate normal/boost functions on MVHR systems
- Brushed stainless steel finish
- 90 x 90 x 18 (H x W x D)

Stock Ref

437320



Isolator Relay Controller

- Allows fan unit to be isolated from other mains circuit when used with trickle/boost switch or light switch control

Stock Ref

442030



Lo-Carbon Sentinel Kinetic BH

- Recognised in SAP PCDB
- Lightweight for easier installation
- Horizontal duct option for space-saving installations
- Fits within a 290mm deep kitchen cupboard
- Integrated digital controller for simple and accurate commissioning
- Plug and play controls; Humidistat
- BMS connectivity
- LS inputs (Light Switch)
- Horizontal duct options
- Acoustic Enclosure option for reduced breakout noise
- Acoustic Top Box option for reduced in-duct noise



Easy Installation

The Sentinel Kinetic models can be mounted vertically in a roof space, hallway cupboard or kitchen or within a kitchen cupboard. When mounted in an unheated area ducting and MVHR unit should be insulated. Ducting can be attached to the unit horizontally, vertically or both. Minimum internal depth of kitchen cupboard 290mm.

For scenarios where noise is a critical issue, an Acoustic Enclosure is available to reduce breakout noise and the Acoustic Top Box will reduce in-duct noise at key frequencies.

Left (L) or right (R) hand installation. The unit is supplied with duct spigots to outside on the right hand side. These can be reversed on site by simply removing the control panel, rotating the unit 180 degrees and re-attaching the control panel.

Spigot Options

The combination of spigot options allows installation in confined locations. If vertical and horizontal connection is required on the same outlet/inlet, additional spigots can be supplied.

The condensate drain can be taken out through the back, side or bottom of the unit. Using the fittings supplied, the final condensate connection is made outside the unit and can be completed after installation.

Integral Humidity Sensor (BH Models)

The integral humidity sensor increases 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 wet room. The night time relative humidity setback feature suppresses nuisance tripping as humidity gradually increases with falling temperature.

Models

| Model | Stock Ref |
|--|-----------|
| Kinetic VS Right | 438342 |
| Kinetic BH Right | 443319 |
| Kinetic BH Right with Acoustic Enclosure & Top Box | 479526 |
| Kinetic BH Right with Acoustic Top Box | 479525 |
| Kinetic BH Right with Acoustic Enclosure | 479524 |
| Kinetic BH Left | 443319L |
| Kinetic BH Left with Acoustic Enclosure & Top Box | 479529 |
| Kinetic BH Left with Acoustic Top Box | 479528 |
| Kinetic BH Left with Acoustic Enclosure | 479527 |
| (BH with summer bypass & humidity sensor) | |

Accessories

| Model | Stock Ref |
|-------------------------------------|-----------|
| Wired Remote Controller | 443283 |
| LED alarm with 15m cable | 448356 |
| Acoustic Purge Fan | 477988 |
| Acoustic Purge Fan XL | 479829 |
| ISO 45° Coarse (G3) 2x Filter | 442356 |
| ISO ePM10 50% Pollen (M5) 1x Filter | 444199 |
| Anti Vibration Mounts | 68MP033G |

SAP PCDB performance (Kinetic VS)

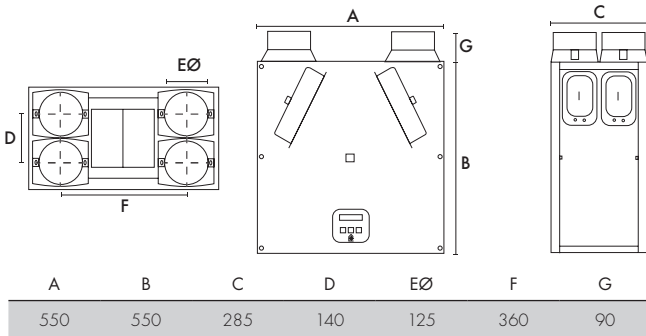
| | SAP 2009 | | SAP 2012 | |
|-----|--------------|-------------|--------------|-------------|
| | Thermal | | Thermal | |
| | Efficiency % | SFP (W/l/s) | Efficiency % | SFP (W/l/s) |
| K+1 | 90 | 0.60 | 90 | 0.61 |
| K+2 | 90 | 0.59 | 90 | 0.74 |
| K+3 | 90 | 0.68 | 90 | 0.95 |
| K+4 | 89 | 0.79 | 90 | 1.19 |
| K+5 | 90 | 0.97 | - | - |

SEC Class

| Model | SEC Class |
|-----------------|-----------|
| Kinetic VS & BH | A |

Dimensions (mm)

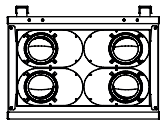
Unit



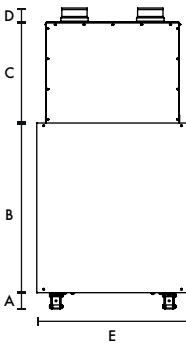
Weight: 15kg

Acoustic Solution

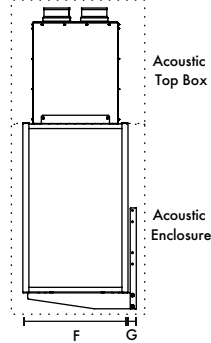
Top



Front



Side



Acoustic Acoustic
Top Box Enclosure

| A | B | C | D | E | F | G | kg | kg | Spigot |
|----|-----|-----|----|-----|-----|----|----|----|--------|
| 80 | 633 | 501 | 75 | 626 | 447 | 45 | 11 | 19 | 125 |

Sound Data (Kinetic VS & BH)

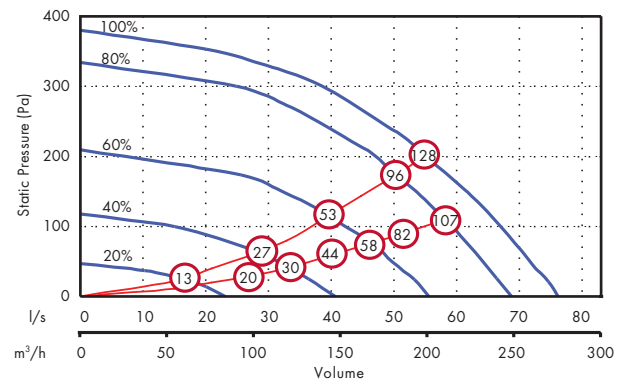
| | | Octave band, Hz, dB SWL | | | | | | | | SPL dB(A) | |
|-------|-----------|-------------------------|------|------|------|------|------|------|------|-----------|------|
| Speed | Test mode | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | LwA | @ 3m |
| 20% | Supply | 52.9 | 52.9 | 46.5 | 41.7 | 39.3 | 29.3 | 19.3 | 22.8 | 44.4 | 26.9 |
| | Extract | 50.7 | 41.9 | 37.4 | 34.5 | 29.8 | 17.7 | 17.4 | 22.7 | 35.7 | 18.2 |
| | Breakout | 36 | 34.5 | 33.6 | 34.3 | 33.8 | 27.2 | 22.2 | 25.3 | 37.2 | 16.7 |
| 40% | Supply | 57.1 | 64.1 | 56.8 | 50.6 | 49.7 | 41.1 | 32.8 | 26.4 | 54.7 | 37.2 |
| | Extract | 55.2 | 50.3 | 44.9 | 43 | 38.3 | 27.7 | 19.8 | 22.9 | 43.8 | 26.3 |
| | Breakout | 43.5 | 41.7 | 40.4 | 41.3 | 41.7 | 36.1 | 27.8 | 26.2 | 44.7 | 24.2 |
| 60% | Supply | 71.3 | 72.5 | 68.5 | 57.6 | 56.4 | 51.1 | 42.7 | 38.1 | 63.6 | 46.1 |
| | Extract | 60.2 | 56.3 | 52 | 48.8 | 44.8 | 35.5 | 26.9 | 24.4 | 50.2 | 32.7 |
| | Breakout | 50.7 | 47.8 | 47.7 | 47.7 | 48.3 | 44.9 | 36.7 | 30 | 51.8 | 31.3 |
| 80% | Supply | 66.3 | 74.8 | 71.2 | 62.8 | 61 | 56.3 | 49.8 | 46.7 | 67.3 | 49.8 |
| | Extract | 63.8 | 59.4 | 57.6 | 53.8 | 49.2 | 41.2 | 33.5 | 29 | 55.0 | 37.5 |
| | Breakout | 54.4 | 52.7 | 54 | 52.7 | 53.5 | 50.3 | 43.6 | 37.7 | 57.2 | 36.7 |
| 100% | Supply | 70.3 | 75.7 | 73.9 | 66.3 | 63.5 | 59.7 | 53.2 | 50.6 | 70.0 | 52.5 |
| | Extract | 66.6 | 63.9 | 60.9 | 56.5 | 51.2 | 44.2 | 36.8 | 32.6 | 57.9 | 40.4 |
| | Breakout | 59.1 | 55.2 | 56.8 | 55.6 | 56.1 | 53.5 | 47.1 | 41.6 | 60.1 | 39.6 |

Tested according to BS EN 13141-7:2010. Breakout quoted spherical. Supply and Extract quoted hemispherical. For in-duct data, end reflections are added based on the spigot size of the unit.

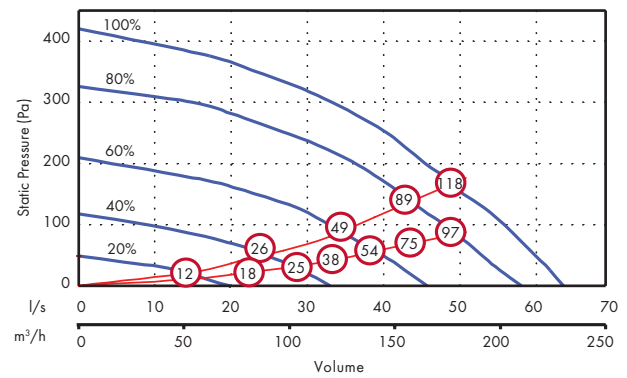
Performance

Fan speeds are fully adjustable within the performance range.

Vertical Spigots



Horizontal Spigots



(x) figure relates to Wattage (both motors)

Sound Data (Kinetic VS & BH with Acoustic Solution)

| | | Octave band, Hz, dB SWL | | | | | | | | SPL dB(A) | |
|-------|-----------|-------------------------|------|------|------|------|------|------|------|-----------|------|
| Speed | Test mode | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | LwA | @ 3m |
| 20% | Supply | 57.1 | 44.6 | 36.4 | 27.9 | 20.6 | 14.8 | 18.1 | 23.8 | 35.2 | 17.7 |
| | Extract | 54.4 | 40.1 | 29.6 | 22.2 | 17.5 | 14.5 | 17.8 | 23.5 | 31.1 | 13.6 |
| | Breakout | 37.5 | 33.8 | 29.1 | 22.9 | 17.0 | 14.0 | 17.8 | 23.6 | 27.7 | 7.2 |
| 40% | Supply | 64.9 | 56.3 | 46.4 | 36.1 | 28.2 | 15.4 | 18.1 | 23.8 | 44.6 | 27.1 |
| | Extract | 60.2 | 46.8 | 35.7 | 28.2 | 21.9 | 14.8 | 18.1 | 23.7 | 36.6 | 19.1 |
| | Breakout | 46.0 | 43.6 | 36.3 | 30.4 | 23.9 | 15.9 | 18.1 | 23.6 | 33.5 | 13.0 |
| 60% | Supply | 72.3 | 63.0 | 55.6 | 43.1 | 34.1 | 19.5 | 18.6 | 24.0 | 51.9 | 34.4 |
| | Extract | 61.4 | 53.3 | 43.4 | 34.7 | 27.2 | 15.5 | 18.1 | 23.8 | 41.4 | 23.9 |
| | Breakout | 52.2 | 50.5 | 44.4 | 38.2 | 33.5 | 23.8 | 19.3 | 23.8 | 41.0 | 20.5 |
| 80% | Supply | 73.8 | 67.9 | 61.6 | 50.0 | 38.6 | 23.4 | 20.2 | 25.2 | 56.8 | 39.3 |
| | Extract | 68.6 | 58.2 | 50.5 | 40.5 | 31.1 | 17.2 | 18.2 | 23.9 | 47.5 | 30.0 |
| | Breakout | 65.6 | 55.5 | 50.5 | 43.8 | 39.7 | 32.7 | 24.9 | 24.0 | 47.4 | 26.9 |
| 100% | Supply | 77.3 | 70.8 | 64.9 | 53.8 | 41.4 | 26.3 | 21.9 | 26.8 | 60.1 | 42.6 |
| | Extract | 71.5 | 60.6 | 53.5 | 43.9 | 33.4 | 19.1 | 18.5 | 24.0 | 50.5 | 33.0 |
| | Breakout | 69.0 | 58.4 | 53.4 | 47.1 | 43.0 | 37.5 | 29.9 | 24.9 | 51.1 | 30.6 |

Consultant's Specification

Operation

The supply and extract ventilation unit shall be a Sentinel Kinetic as manufactured by Vent-Axia and shall be sized as indicated on the drawings and shall be in accordance with the particular specification.

Supply air to the room shall be pre-heated by the extract air via the integrated composite plastic counterflow heat recovery cell. The Sentinel Kinetic shall automatically vary the ventilation rate via EC/DC motors, as it receives signals from one of the optional interconnected sensors. When a signal is received, the fans shall either vary their speed proportionally or on a trickle and boost principle.

The unit shall have the facility to commission the supply and extract fans individually via in-built minimum and maximum speed adjustment, or alternative wired remote control unit. The fans themselves shall have independent, infinitely variable speed control.

Unit Specification

The unit shall be manufactured with an ABS outer case construction, and incorporate a reversible core to allow for left or right hand mounting.

The unit shall have a high efficiency composite plastic counterflow heat exchanger, supply and extract filters, automatic summer bypass, integral minimum and maximum infinitely variable speed controls with fascia mounted failure indication. The unit shall have low energy, high efficiency EC/DC fan/motor assemblies with sealed for life bearings. The impellers shall be high efficiency forward curved centrifugal type.

The unit shall have a heat exchanger cell with a thermal efficiency of up to 92% when tested to EN 308. This shall be protected by ISO 45% Coarse (G3) grade synthetic filters on supply and extract. Complete with a condensate drip tray and drain connection.

The unit shall be constructed with a removable Core allowing full maintenance access. The removable Core shall provide access to the following:

- ✓ Supply and extract filter
- ✓ Heat exchanger
- ✓ Access to the electrical connections

To reduce breakout noise, the MVHR unit shall be provided with an Acoustic Enclosure of steel construction lined with class 'O' acoustic foam. To reduce in-duct noise, the top of the MVHR shall be fitted with an Acoustic Top Box to provide attenuation to the 4 ducts of the unit. This Acoustic Top Box shall be of steel construction lined with acoustic class 'O' foam with the MVHR spigots linked to the Top Box via 4 separate attenuated ducts. The acoustic enclosure and top box shall each be independently tested for noise to BS EN 13141-7.

The MVHR unit shall incorporate an Expanded Polystyrene (EPS) inner chassis with custom motor and impeller mounting features. The inner chassis will assist in reducing noise and act as a large anti-vibration mount avoiding transmission through to the back mounting plate or the base of the unit.

The MVHR unit shall be tested to ensure it meets the maximum allowable vibration of no more than 1 mm/s, measured on the unit wall fixing points.

Access shall be provided for wiring termination and setup/commissioning. The backlit LCD user interface therein shall be removable for remote mounting if required.

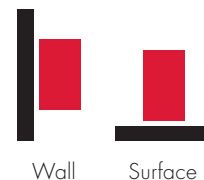
Units shall be as manufactured by Vent-Axia Ltd.

Standard Controls

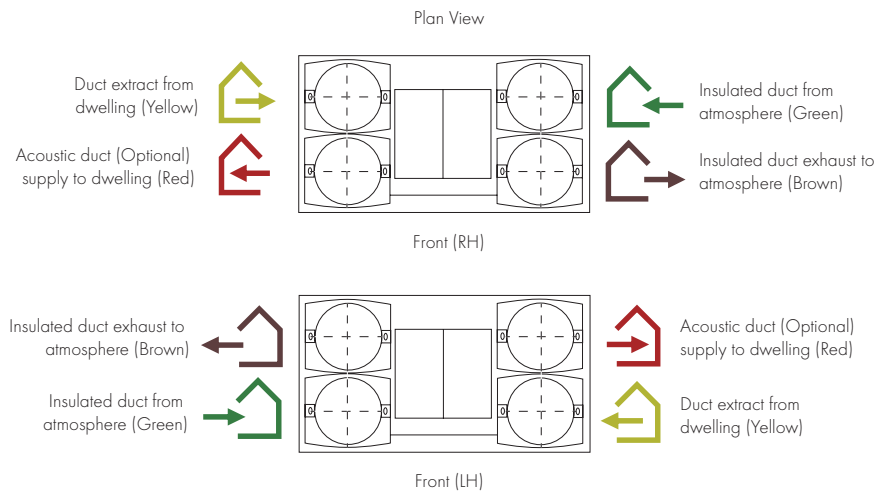
All Sentinel Kinetic units shall incorporate the following functions integrally mounted, pre-wired and factory fitted by the manufacturer:

- ✓ Integral infinitely variable fan speed control on supply and extract
- ✓ Integral min/max ventilation control/set point
- ✓ Integral BMS interfaces – control and status indication
- ✓ Heating interlocks
- ✓ 0-10V proportional speed adjustment
- ✓ Volt free contacts
- ✓ 24V sensor supply
- ✓ Integral on/off or trickle boost function from remote switch e.g. PIR occupancy detector
- ✓ The unit shall be controlled by the 'Sentinel' control devices (enablers and sensors) as detailed in the schedule or on the drawings
- ✓ Fully automatic summer bypass
- ✓ Switched Live input with adjustable 'delay-on' feature
- ✓ Fan failure or component failure indicated via individual fault code display
- ✓ Running time counter
- ✓ Control panel PIN number lock
- ✓ Automatic frost protection effective to -20°C
- ✓ Tool free filter access
- ✓ The unit shall incorporate ('H' models) an integral humidity sensor with the following features:
 - Ambient Response; Raises the humidity trigger point as dwelling temperature reduces
 - Rapid Response; Monitors the rate of change in humidity and triggers increased airflow even if the humidity trigger threshold is not reached
 - Proportional Response; Incrementally increases the fan speed to reduce noise and reduce energy consumption

Mounting Option

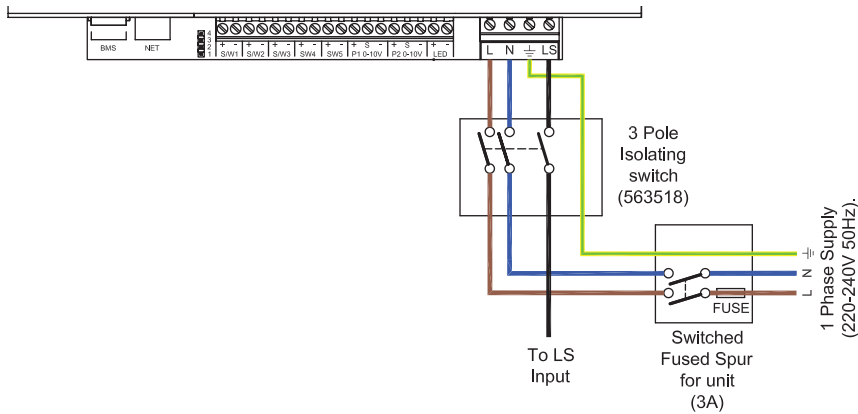


Airflow Direction

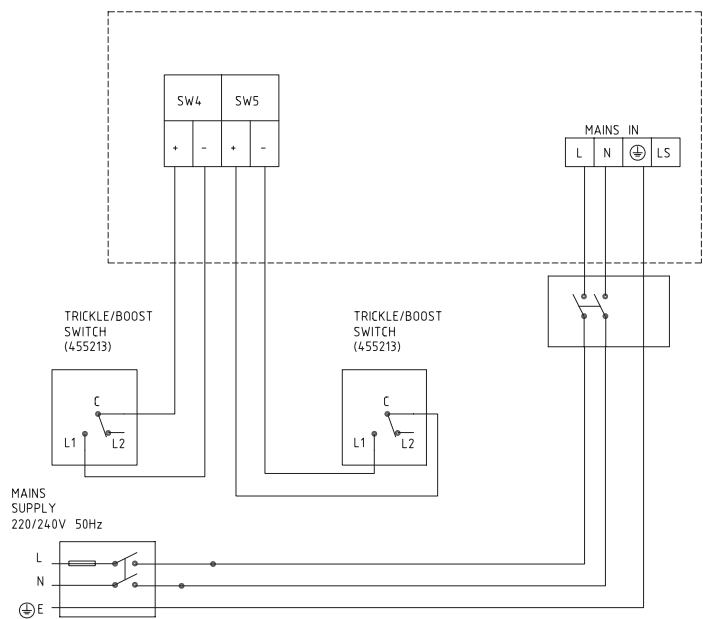


Electrical Connection

Please note: Electrical connection should be carried out by an appropriately qualified person and in accordance with current wiring regulations.



Trickle to Boost by Trickle/Boost Switch



Lo-Carbon Sentinel Kinetic FH

- Acoustic Enclosure option for reduced breakout noise
- Acoustic Top Box option for reduced in-duct noise
- Lightweight for easier installation
- Horizontal duct option for space-saving installations
- Integrated digital controller for simple and accurate commissioning
- Plug and play controls; Humidistat
- BMS connectivity
- LS inputs (Light Switch)
- Volt-free inputs
- Self diagnosis for simplified fault finding
- Adjustable delay On/delay Off timer



Easy Installation

The Sentinel Kinetic models can be mounted vertically in a roof space or in an appropriate cupboard within the dwelling. When mounted in an unheated area the ducting and unit must be insulated in accordance with the Domestic Ventilation Compliance Guide. Ducting can be attached to the unit horizontally, vertically or both.

For scenarios where noise is a critical issue, an Acoustic Enclosure is available to reduce breakout noise and the Acoustic Top Box will reduce in-duct noise at key frequencies.

Left (L) or right (R) hand installation. Left hand and right hand units are available.

Spigot Options

The combination of spigot options allows installation in confined locations. If vertical and horizontal connection is required on the same outlet/inlet, additional spigots can be supplied.

The condensate drain can be taken out through the back, side or bottom of the unit. Using the fittings supplied, the final condensate connection is made outside the unit and can be completed after installation.

Integral Humidity Sensor

The integral humidity sensor increases 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 wet room. The night time relative humidity setback feature suppresses nuisance tripping as humidity gradually increases with falling temperature.

Model

| Model | Stock Ref |
|---|-----------|
| Sentinel Kinetic FH Right | 408167 |
| Sentinel Kinetic FH Right with Acoustic Top Box & Enclosure | 479532 |
| Sentinel Kinetic FH Right with Acoustic Top Box | 479531 |
| Sentinel Kinetic FH Right with Acoustic Enclosure | 479530 |
| Sentinel Kinetic FH Left | 408169 |
| Sentinel Kinetic FH Left with Acoustic Top Box & Enclosure | 479535 |
| Sentinel Kinetic FH Left with Acoustic Top Box | 479534 |
| Sentinel Kinetic FH Left with Acoustic Enclosure | 479533 |

(FH comes with summer bypass & humidity sensor)

Accessories

| Model | Stock Ref |
|-------------------------------------|-----------|
| Wired Remote Controller | 443283 |
| LED alarm with 15m cable | 448356 |
| ISO 45% Coarse (G3) 2x Filter | 409764 |
| ISO ePM10 50% Pollen (M5) 2x Filter | 472153 |
| Anti Vibration Mounts | 68MP033G |
| Acoustic Purge Fan | 477988 |
| Acoustic Purge Fan XL | 479829 |

SAP PCDB performance

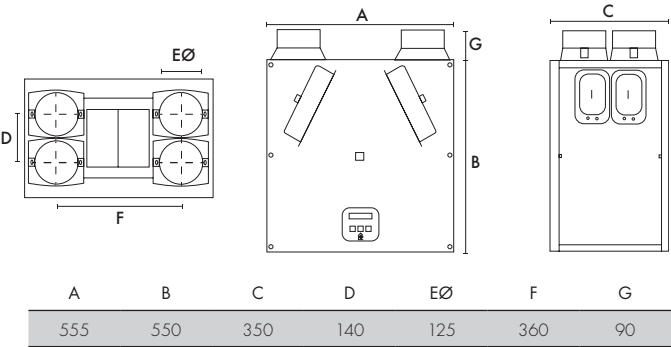
| | SAP 2009 | | SAP 2012 | |
|-----|--------------|-------------|--------------|-------------|
| | Thermal | | Thermal | |
| | Efficiency % | SFP (W/l/s) | Efficiency % | SFP (W/l/s) |
| K+1 | 90 | 0.46 | 89 | 0.47 |
| K+2 | 89 | 0.45 | 88 | 0.54 |
| K+3 | 88 | 0.50 | 86 | 0.65 |
| K+4 | 87 | 0.60 | 84 | 0.84 |
| K+5 | 85 | 0.70 | 84 | 1.01 |

SEC Class

| Model | SEC Class |
|----------------|-----------|
| Kinetic FH/FHL | A+ |

Dimensions (mm)

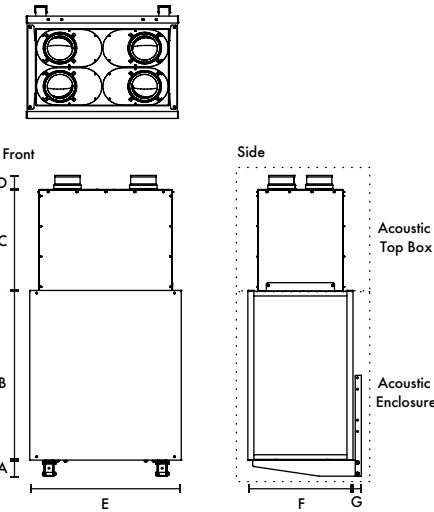
Unit



Weight: 18kg

Acoustic Solution

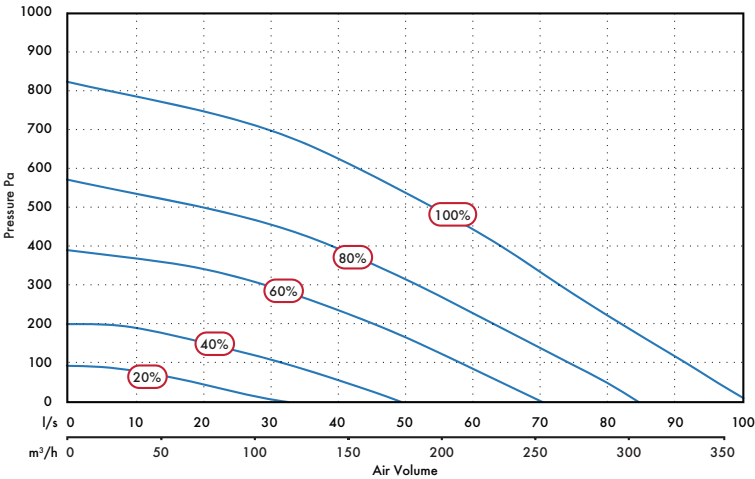
Top



| A | B | C | D | E | F | G | kg | kg | Spigot |
|----|-----|-----|----|-----|-----|----|----|----|--------|
| 80 | 633 | 501 | 75 | 626 | 447 | 45 | 11 | 19 | 125 |

Performance

Fan speeds are fully adjustable within the performance range.



Sound Data (Unit only)

| Speed | Test mode | Octave band, Hz, dB SWL | | | | | | | | SPL dB(A) | |
|-------|-----------|-------------------------|------|------|------|------|------|------|------|-----------|------|
| | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | LwA | @ 3m |
| 20% | Supply | 66.2 | 67.2 | 54.3 | 48.0 | 42.1 | 33.3 | 22.5 | 25.6 | 53.9 | 36.4 |
| | Extract | 57.7 | 56.6 | 47.2 | 43.5 | 35.3 | 24.1 | 19.6 | 25.7 | 45.7 | 28.2 |
| | Breakout | 41.2 | 47.0 | 41.7 | 39.5 | 34.6 | 30.4 | 22.5 | 25.7 | 41.0 | 20.5 |
| 40% | Supply | 68.9 | 66.4 | 68.8 | 57.8 | 52.1 | 44.9 | 35.3 | 28.8 | 62.4 | 44.9 |
| | Extract | 66.8 | 56.1 | 56.9 | 52.1 | 44.7 | 34.6 | 23.8 | 25.8 | 53.2 | 35.7 |
| | Breakout | 47.3 | 47.5 | 56.4 | 48.0 | 44.0 | 39.6 | 32.8 | 29.1 | 51.0 | 30.5 |
| 60% | Supply | 72.8 | 72.5 | 82.2 | 64.4 | 59.9 | 53.8 | 46.2 | 40.3 | 74.4 | 56.9 |
| | Extract | 67.3 | 61.9 | 66.5 | 58.9 | 52.2 | 42.7 | 32.6 | 27.6 | 61.1 | 43.6 |
| | Breakout | 53.9 | 53.2 | 65.9 | 55.8 | 52.2 | 48.2 | 42.5 | 39.3 | 61.0 | 40.5 |
| 80% | Supply | 85.0 | 75.3 | 72.5 | 77.9 | 65.3 | 58.8 | 52.1 | 47.4 | 76.0 | 58.5 |
| | Extract | 83.5 | 65.2 | 65.0 | 65.5 | 57.0 | 47.7 | 37.9 | 31.3 | 65.5 | 48.0 |
| | Breakout | 56.4 | 56.4 | 60.4 | 69.8 | 56.7 | 53.2 | 47.8 | 42.0 | 66.5 | 46.0 |
| 100% | Supply | 95.5 | 77.7 | 74.0 | 80.4 | 68.7 | 62.9 | 56.9 | 52.4 | 79.1 | 61.6 |
| | Extract | 83.3 | 68.3 | 66.9 | 71.2 | 60.7 | 51.4 | 42.4 | 36.1 | 69.7 | 52.2 |
| | Breakout | 62.1 | 59.7 | 62.9 | 70.0 | 61.0 | 57.3 | 52.3 | 46.9 | 68.0 | 47.5 |

Sound Data (Unit with Acoustic Solution)

| Speed | Test mode | Octave band, Hz, dB SWL | | | | | | | | SPL dB(A) | |
|-------|-----------|-------------------------|------|------|------|------|------|------|------|-----------|------|
| | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | LwA | @ 3m |
| 20% | Supply | 58.2 | 62.1 | 46.8 | 33.7 | 21.1 | 14.1 | 18.2 | 24.1 | 47.5 | 30.0 |
| | Extract | 55.9 | 48.3 | 37.1 | 26.8 | 17.7 | 14.5 | 18.0 | 23.7 | 36.2 | 18.7 |
| | Breakout | 41.8 | 45.1 | 38.7 | 29.1 | 18.4 | 13.7 | 17.8 | 23.5 | 34.7 | 14.2 |
| 40% | Supply | 66.5 | 59.3 | 59.3 | 43.5 | 30.5 | 15.9 | 17.9 | 23.5 | 52.1 | 34.6 |
| | Extract | 57.4 | 49.7 | 50.9 | 36.2 | 23.5 | 15.0 | 18.1 | 23.7 | 43.5 | 26.0 |
| | Breakout | 47.1 | 47.6 | 49.8 | 38.4 | 30.2 | 21.0 | 18.5 | 23.6 | 42.6 | 22.1 |
| 60% | Supply | 69.5 | 66.0 | 66.5 | 50.7 | 40.2 | 20.6 | 18.8 | 24.2 | 59.3 | 41.8 |
| | Extract | 62.4 | 57.1 | 53.7 | 43.2 | 32.5 | 19.5 | 18.5 | 23.8 | 48.0 | 30.5 |
| | Breakout | 51.8 | 54.5 | 54.4 | 45.2 | 38.9 | 32.1 | 24.4 | 24.0 | 49.0 | 28.5 |
| 80% | Supply | 78.5 | 68.9 | 63.3 | 61.3 | 45.1 | 25.7 | 20.7 | 25.8 | 61.0 | 43.5 |
| | Extract | 74.2 | 59.8 | 55.8 | 49.9 | 37.8 | 24.4 | 20.5 | 23.9 | 52.4 | 34.9 |
| | Breakout | 57.6 | 57.6 | 56.4 | 52.0 | 43.7 | 38.0 | 31.6 | 25.6 | 52.2 | 31.7 |
| 100% | Supply | 75.7 | 70.8 | 67.1 | 65.7 | 48.2 | 30.4 | 23.6 | 27.8 | 64.6 | 47.1 |
| | Extract | 75.6 | 62.9 | 59.5 | 53.1 | 42.2 | 29.4 | 24.3 | 24.7 | 55.7 | 38.2 |
| | Breakout | 64.3 | 59.8 | 60.3 | 56.8 | 47.1 | 42.2 | 36.9 | 28.8 | 56.4 | 35.9 |

Tested according to BS EN 13141-7:2010. Breakout quoted spherical. Supply and Extract quoted hemispherical. For induct data, end reflections are added based on the spigot size of the unit.

Consultant's Specification

Operation

The supply and extract ventilation unit shall be a Sentinel Kinetic as manufactured by Vent-Axia and shall be sized as indicated on the drawings and shall be in accordance with the particular specification.

Supply air to the room shall be pre-heated by the extract air via the integrated composite plastic counterflow heat recovery cell. The Sentinel Kinetic shall automatically vary the ventilation rate via EC/DC motors, as it receives signals from one of the optional interconnected sensors. When a signal is received, the fans shall either vary their speed proportionally or on a trickle and boost principle.

The unit shall have the facility to commission the supply and extract fans individually via in-built minimum and maximum speed adjustment, or alternative wired remote control unit. The fans themselves shall have independent, infinitely variable speed control.

Unit Specification

The unit shall be manufactured with an ABS outer case construction, and incorporate a reversible core to allow for left or right hand mounting.

The unit shall have a high efficiency composite plastic counterflow heat exchanger, supply and extract filters, automatic summer bypass, integral minimum and maximum infinitely variable speed controls with fascia mounted failure indication. The unit shall have low energy, high efficiency EC/DC fan/motor assemblies with sealed for life bearings. The impellers shall be high efficiency backward curved centrifugal type.

The unit shall have a heat exchanger cell with a thermal efficiency of up to 90% when tested to EN 308. This shall be protected by ISO 45% Coarse (G3) grade synthetic filters on supply and extract. Complete with a condensate drip tray and drain connection.

To reduce breakout noise, the MVHR unit shall be provided with an Acoustic Enclosure of steel construction lined with class 'O' acoustic foam. To reduce in-duct noise, the top of the MVHR shall be fitted with an Acoustic Top Box to provide attenuation to the 4 ducts of the unit. This Acoustic Top Box shall be of steel construction lined with acoustic class 'O' foam with the MVHR spigots linked to the Top Box via 4 separate attenuated ducts. The acoustic enclosure and top box shall each be independently tested for noise to BS EN 13141-7.

The MVHR unit shall incorporate an Expanded Polystyrene (EPS) inner chassis with custom motor and impeller mounting features. The inner chassis will assist in reducing noise and act as a large anti-vibration mount avoiding transmission through to the back mounting plate or base of the unit.

The MVHR unit will be tested to ensure it meets the maximum allowable vibration of no more than 1 mm/s, measured on the unit wall fixing points.

The unit shall be constructed with a removable Core allowing full maintenance access. The removable Core shall provide access to the following:

- ✓ Supply and extract filter
- ✓ Heat exchanger
- ✓ Access to the electrical connections

Access shall be provided for wiring termination and setup/commissioning. The backlit LCD user interface therein shall be removable for remote mounting if required.

Units shall be as manufactured by Vent-Axia Ltd.

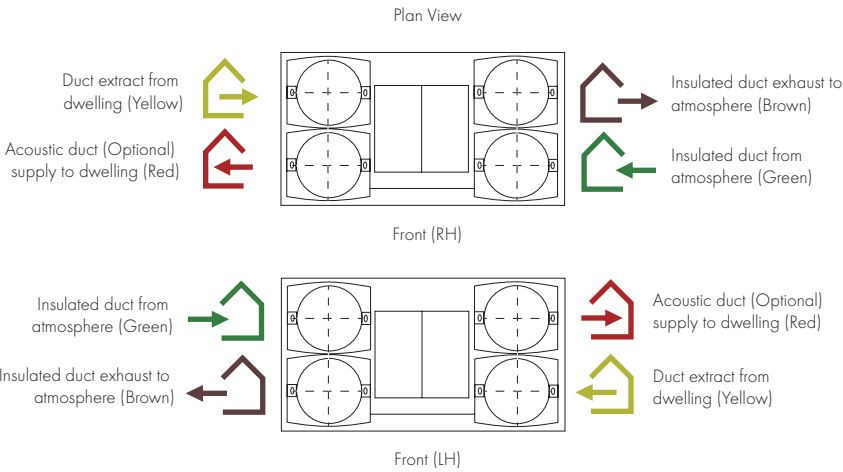
Acoustically tested to BS EN 13141-7

Standard Controls

All Sentinel Kinetic units shall incorporate the following functions integrally mounted, pre-wired and factory fitted by the manufacturer:

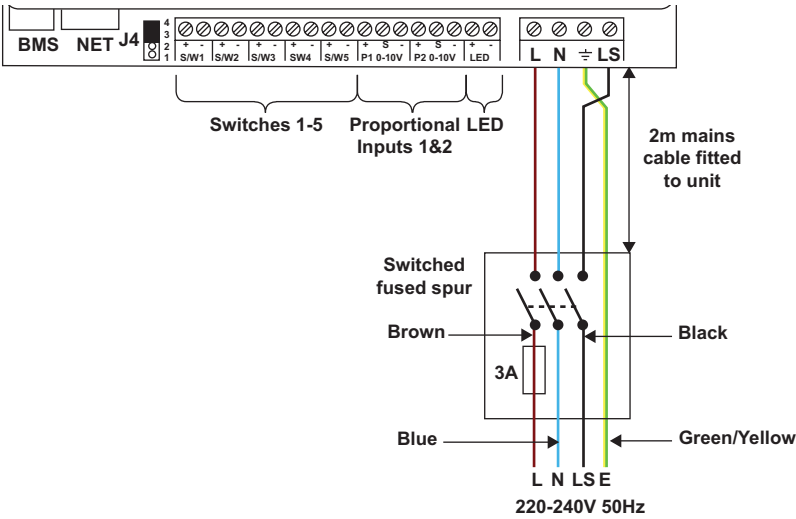
- ✓ Integral infinitely variable fan speed control on supply and extract
- ✓ Integral min/max ventilation control/set point
- ✓ Integral BMS interfaces – control and status indication
- ✓ Heating interlocks
- ✓ 0-10V proportional speed adjustment
- ✓ Volt free contacts
- ✓ 24V sensor supply
- ✓ Integral on/off or trickle boost function from remote switch e.g. PIR occupancy detector
- ✓ The unit shall be controlled by the 'Sentinel' control devices (enablers and sensors) as detailed in the schedule or on the drawings
- ✓ Fully automatic summer bypass
- ✓ Switched Live input with adjustable 'delay-on' feature
- ✓ Fan failure or component failure indicated via individual fault code display
- ✓ Running time counter
- ✓ Control panel PIN number lock
- ✓ Automatic frost protection effective to -20°C
- ✓ Tool free filter access
- ✓ The unit shall incorporate ('H' models) an integral humidity sensor with the following features:
 - Ambient Response; Raises the humidity trigger point as dwelling temperature reduces
 - Rapid Response; Monitors the rate of change in humidity and triggers increased airflow even if the humidity trigger threshold is not reached
 - Proportional Response; Incrementally increases the fan speed to reduce noise and reduce energy consumption

Airflow Direction

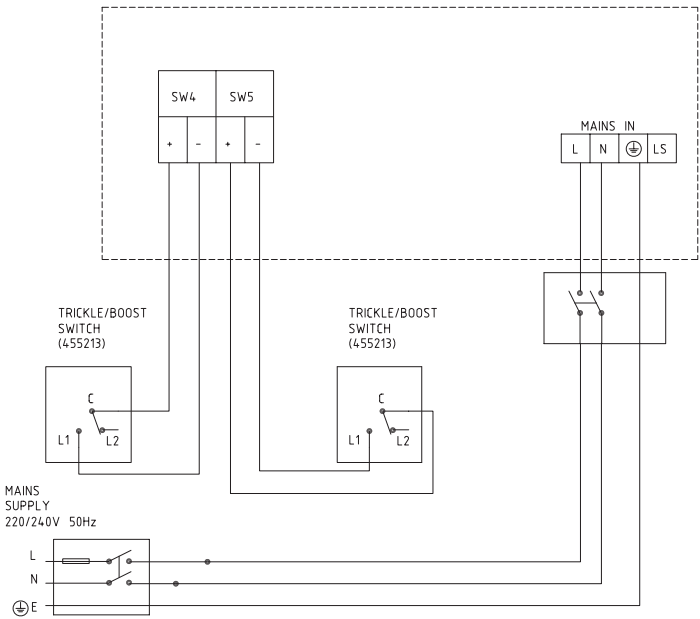


Electrical Connection

Please note: Electrical connection should be carried out by an appropriately qualified person and in accordance with current wiring regulations.



Trickle to Boost by Trickle/Boost Switch



Lo-Carbon Sentinel Kinetic Plus

- Acoustic Enclosure option for reduced breakout noise
- Acoustic Top Box option for reduced in-duct noise
- Recognised in SAP PCDB
- Horizontal duct option for space-saving installations
- High airflow, ideal for student accommodation clusters
- Unique folding filter for removal when access is restricted
- Integrated digital controller for simple and accurate commissioning
- Plug and play controls; Humidistat
- BMS connectivity
- LS inputs (Light Switch)
- Volt-free inputs
- Self diagnosis for simplified fault finding
- Adjustable delay On/delay Off timer
- 4 fully adjustable speeds and a purge setting



Increased Performance

The Sentinel Kinetic Plus benefits from the latest high efficiency, backward curved impeller design, ensuring the lowest possible energy consumption, ultra quiet operation and an exceptional performance range covering small one bed apartments to the largest of houses.

For scenarios where noise is a critical issue, an Acoustic Enclosure is available to reduce breakout noise and the Acoustic Top Box will reduce in-duct noise at key frequencies.

Care Homes & Student Accommodation

The Sentinel Kinetic Plus is ideal for larger homes and multiple occupancy units such as care homes and student accommodation. Capable of 400m³/hr at 150Pa, the unit can extract from up to ten bathrooms and a communal kitchen while still achieving almost 90% heat recovery. The fully automatic capability of the Kinetic range means that adequate ventilation is always achieved.

The Kinetic's BMS capability is also ideal for those commercial applications where landlords or property managers want to monitor and optimise building performance and maintenance. The Kinetic BMS can provide status information and its self diagnostics can report if any fault is found.

Spigot Options

Spigots may be re-positioned to give horizontal connection or a combination of vertical and horizontal connection.

Optional 180mm/200mm spigots can simplify connection in commercial installations where larger diameter duct work has been used.

Quick Change Filter

As many systems are placed within cupboards the unique filter design folds as you remove it to ensure easy access in restricted spaces.

Integral Humidity Sensor

The integral humidity sensor increases 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 wet room. The night time relative humidity setback feature suppresses nuisance tripping as humidity gradually increases with falling temperature.

Models

| Model | Stock Ref |
|---|-----------|
| Sentinel Kinetic Plus BS | 447938 |
| Sentinel Kinetic Plus Right | 443028 |
| Sentinel Kinetic Plus Right with Acoustic Top Box & Enclosure | 479538 |
| Sentinel Kinetic Plus Right with Acoustic Top Box | 479537 |
| Sentinel Kinetic Plus Right with Acoustic Enclosure | 479536 |
| Sentinel Kinetic Plus Left | 443028L |
| Sentinel Kinetic Plus Left with Acoustic Top Box & Enclosure | 479541 |
| Sentinel Kinetic Plus Left with Acoustic Top Box | 479540 |
| Sentinel Kinetic Plus Left with Acoustic Enclosure | 479539 |

Accessories

| Model | Stock Ref |
|---|-----------|
| Wired Remote Controller | 443283 |
| LED Alarm with 15m cable | 448356 |
| Opto-coupler for volt-free BMS connection | 447340 |
| ISO 45% Coarse (G3) 2x Filter | 403702 |
| ISO ePM10 50% Pollen (M5) 1x Filter | 444201 |
| 180mm/200mm Spigot Kit (One per pack) | 446523 |
| Anti Vibration Mounts | 68MP033G |
| Acoustic Purge Fan | 477988 |
| Acoustic Purge Fan XL | 479829 |

SAP PCDB Test Results (Kinetic Plus BS)

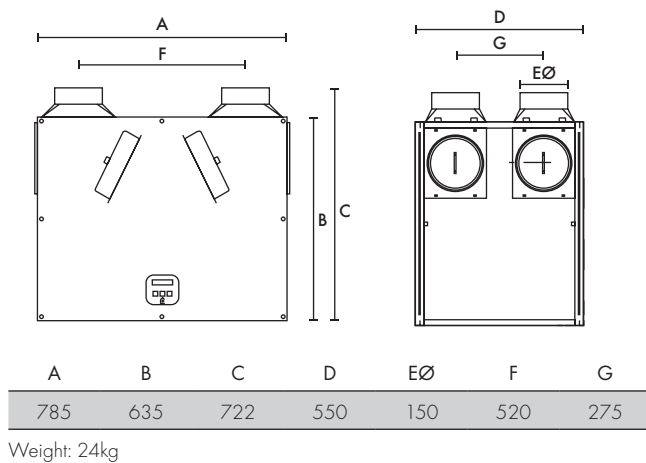
| | SAP 2009 | | SAP 2012 | |
|-----|----------------------|-------------|----------------------|-------------|
| | Thermal Efficiency % | SFP (W/l/s) | Thermal Efficiency % | SFP (W/l/s) |
| K+1 | 91 | 0.51 | 91 | 0.42 |
| K+2 | 91 | 0.40 | 91 | 0.44 |
| K+3 | 90 | 0.41 | 90 | 0.52 |
| K+4 | 90 | 0.45 | 90 | 0.63 |
| K+5 | 90 | 0.53 | 90 | 0.76 |
| K+6 | 90 | 0.60 | 91 | 0.90 |
| K+7 | 90 | 0.70 | 91 | 1.05 |

SEC Class

| Model | SEC Class |
|--------------|-----------|
| Kinetic Plus | A+ |

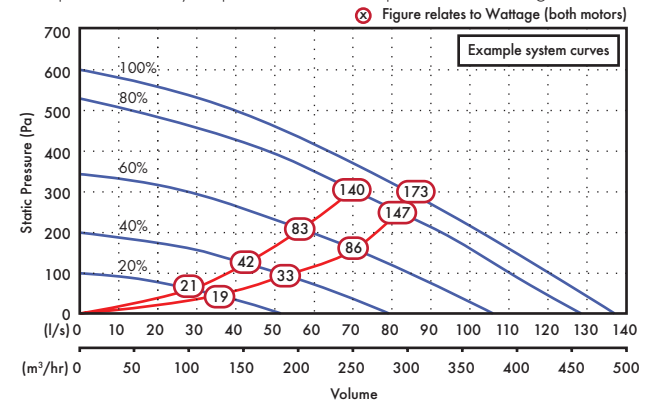
Dimensions (mm)

Unit

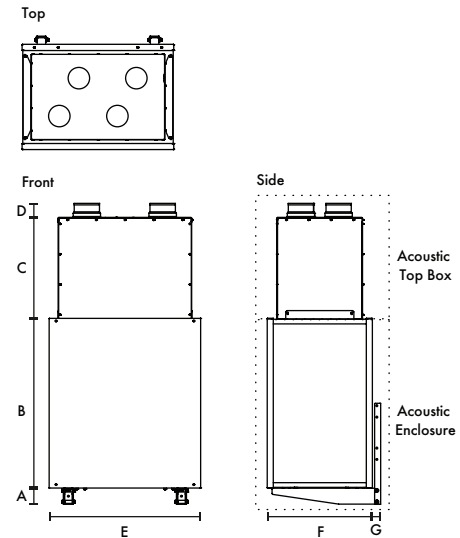


Performance

Fan speeds are fully adjustable within the performance range.



Acoustic Solution



| | | Acoustic Top Box | | Acoustic Enclosure | | | | | |
|----|-----|------------------|----|--------------------|-----|----|----|----|--------|
| A | B | C | D | E | F | G | kg | kg | Spigot |
| 80 | 733 | 501 | 71 | 855 | 583 | 40 | 17 | 33 | 150 |

Sound Data (Unit only)

| Unit setting | Test mode | Octave band, Hz, dB SWL | | | | | | | | | | SPL dB(A) | |
|--------------|-----------|-------------------------|------|------|------|------|------|------|------|------|-------|-----------|--|
| | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | LwA | at 3m | | |
| 20% | Supply | 54.4 | 60.9 | 50.6 | 45.9 | 34.3 | 23.6 | 19.1 | 24.5 | 51.3 | 30.8 | | |
| | Extract | 48.4 | 56.7 | 43.7 | 35.9 | 21.4 | 16 | 18.7 | 24.5 | 42.3 | 24.8 | | |
| | Breakout | 42.6 | 40.2 | 39.6 | 38 | 31.1 | 24.3 | 19.4 | 24.6 | 35.1 | 17.6 | | |
| 40% | Supply | 61.6 | 64.6 | 58.4 | 55.5 | 45.9 | 37.2 | 24.7 | 25.1 | 58.8 | 38.3 | | |
| | Extract | 54.9 | 62.2 | 51.5 | 44.8 | 32.1 | 24.1 | 19.7 | 24.6 | 48.8 | 31.3 | | |
| | Breakout | 51.1 | 49.3 | 48.9 | 45.9 | 41.3 | 35.7 | 26.7 | 25.6 | 44.0 | 26.5 | | |
| 60% | Supply | 67.5 | 67.5 | 73.2 | 62.4 | 53.4 | 47.5 | 33.5 | 28.3 | 69.2 | 48.7 | | |
| | Extract | 62.5 | 61.7 | 60.1 | 51.1 | 39.2 | 32.1 | 23.2 | 24.8 | 54.0 | 36.5 | | |
| | Breakout | 54.9 | 53 | 58.4 | 55.1 | 49.7 | 43.9 | 35.4 | 31.9 | 52.8 | 35.3 | | |
| 80% | Supply | 70.5 | 71.1 | 73.8 | 66.5 | 58.3 | 53.2 | 39.7 | 33.3 | 71.3 | 50.8 | | |
| | Extract | 68.4 | 65.9 | 71.8 | 55.6 | 43.6 | 37.1 | 27.3 | 25.5 | 63.8 | 46.3 | | |
| | Breakout | 59.2 | 56.8 | 63.6 | 57.3 | 54.2 | 49 | 41 | 37.5 | 56.8 | 39.3 | | |
| 100% | Supply | 72.8 | 73.1 | 75.2 | 70.4 | 61.6 | 56.6 | 44.2 | 37.6 | 73.9 | 53.4 | | |
| | Extract | 71.7 | 69 | 71.8 | 57.4 | 45.7 | 39.9 | 30.9 | 26.6 | 64.1 | 46.6 | | |
| | Breakout | 61.2 | 58.8 | 67.9 | 59.6 | 56.7 | 52.2 | 44.4 | 41.2 | 60.1 | 42.6 | | |

Sound Data (Unit with Acoustic Solution)

| Unit setting | Test mode | Octave band, Hz, dB SWL | | | | | | | | | | SPL dB(A) | |
|--------------|-----------|-------------------------|------|------|------|------|------|------|------|------|-------|-----------|--|
| | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | LwA | at 3m | | |
| 20% | Supply | 55.7 | 49.2 | 36.6 | 23.6 | 17.4 | 14.9 | 17.8 | 23.3 | 36.1 | 18.6 | | |
| | Extract | 51.4 | 42.4 | 30.3 | 20.9 | 16.8 | 14.9 | 17.8 | 23.3 | 30.8 | 13.3 | | |
| | Breakout | 37.4 | 39.7 | 30.0 | 22.7 | 15.6 | 14.0 | 17.9 | 23.3 | 28.4 | 7.9 | | |
| 40% | Supply | 59.7 | 59.7 | 45.5 | 32.2 | 22.2 | 15.2 | 17.9 | 23.3 | 45.1 | 27.6 | | |
| | Extract | 54.8 | 55.0 | 38.0 | 26.8 | 18.1 | 14.9 | 17.8 | 23.3 | 40.2 | 22.7 | | |
| | Breakout | 45.7 | 48.5 | 39.9 | 32.8 | 24.2 | 17.5 | 18.0 | 23.4 | 36.8 | 16.3 | | |
| 60% | Supply | 66.1 | 61.9 | 53.6 | 41.0 | 29.8 | 18.3 | 18.0 | 23.3 | 49.5 | 32.0 | | |
| | Extract | 60.6 | 55.9 | 48.4 | 34.9 | 23.8 | 16.3 | 17.9 | 23.3 | 43.8 | 26.3 | | |
| | Breakout | 51.1 | 51.0 | 52.4 | 40.9 | 33.2 | 26.1 | 19.7 | 23.4 | 44.5 | 24.0 | | |
| 80% | Supply | 70.0 | 67.6 | 68.5 | 48.1 | 37.9 | 25.3 | 19.4 | 23.6 | 60.7 | 43.2 | | |
| | Extract | 65.4 | 59.7 | 57.2 | 41.6 | 31.3 | 21.8 | 19.2 | 23.4 | 50.4 | 32.9 | | |
| | Breakout | 55.6 | 55.6 | 57.9 | 47.9 | 40.4 | 34.3 | 26.1 | 23.7 | 51.3 | 30.8 | | |
| 100% | Supply | 72.1 | 70.1 | 66.4 | 51.6 | 41.9 | 29.7 | 21.7 | 24.0 | 60.0 | 42.5 | | |
| | Extract | 68.2 | 62.4 | 60.6 | 45.5 | 36.0 | 26.6 | 21.7 | 23.6 | 53.8 | 36.3 | | |
| | Breakout | 57.6 | 58.8 | 63.3 | 51.0 | 44.2 | 38.5 | 31.0 | 24.9 | 56.3 | 35.8 | | |

Tested according to BS EN 13141-7:2010. Breakout quoted spherical. Supply and Extract quoted hemispherical. For in-duct data, end reflections are added based on the spigot size of the unit.

Consultant's Specification

Operation

The supply and extract ventilation unit shall be as Sentinel Kinetic Plus as manufactured by Vent-Axia and shall be sized as indicated on the drawings and shall be in accordance with the particular specification.

Supply air to the room shall be pre-heated by the extract air via the integrated composite plastic counterflow heat recovery cell. The Sentinel Kinetic Plus shall automatically vary the ventilation rate via EC/DC motors, as it receives signals from one of the optional interconnected sensors.

When a signal is received, the fans shall either vary their speed proportionally or on a trickle and boost principle.

The unit shall have the facility to commission the supply and extract fans individually via in-built minimum and maximum speed adjustment, or alternative wired remote control unit. The fans themselves shall have independent, infinitely variable speed control.

Unit Specification

The unit shall be manufactured with an ABS outer case construction, and incorporate a reversible core to allow for left or right hand mounting.

The unit shall have a high efficiency composite plastic counterflow heat exchanger, supply and extract filters, automatic summer bypass, integral minimum and maximum infinitely variable speed controls with fascia mounted failure indication.

The unit shall have low energy, high efficiency EC/DC fan/motor assemblies with sealed for life bearings. The impellers shall be high efficiency backward curved centrifugal type.

The unit shall have a heat exchanger cell with a thermal efficiency of up to 92% when tested to EN 308. This shall be protected by ISO 45% Coarse (G3) grade synthetic filters on supply and extract. Complete with a condensate drip tray and drain connection.

To reduce breakout noise, the MVHR unit shall be provided with an Acoustic Enclosure of steel construction lined with class 'O' acoustic foam. To reduce in-duct noise, the top of the MVHR shall be fitted with an Acoustic Top Box to provide attenuation to the 4 ducts of the unit. This Acoustic Top Box shall be of steel construction lined with acoustic class 'O' foam with the MVHR spigots linked to the Top Box via 4 separate attenuated ducts. The acoustic enclosure and top box shall each be independently tested for noise to BS EN 13141-7.

The unit shall be constructed with a removable Core allowing full maintenance access. The removable Core shall provide access to the following:

- ✓ Supply and extract filter
- ✓ Heat exchanger
- ✓ Access to the electrical connections

Access shall be provided for wiring termination and setup/commissioning. The backlit LCD user interface therein may be duplicated for remote mounting if required.

Units shall be as manufactured by Vent-Axia Ltd.

The MVHR unit shall incorporate an Expanded Polystyrene (EPS) inner chassis with custom motor and impeller mounting features. The inner chassis will assist in reducing noise and act as a large anti-vibration mount to avoid transmission through to the back mounting plate or the base of the unit.

The MVHR unit shall be tested to ensure it meets the maximum allowable vibration of no more than 1 mm/s, measured on the unit wall fixing points.

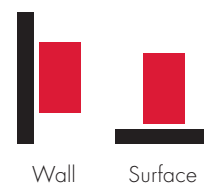
Sound tested to BS EN 13141-7:2010

Standard Controls

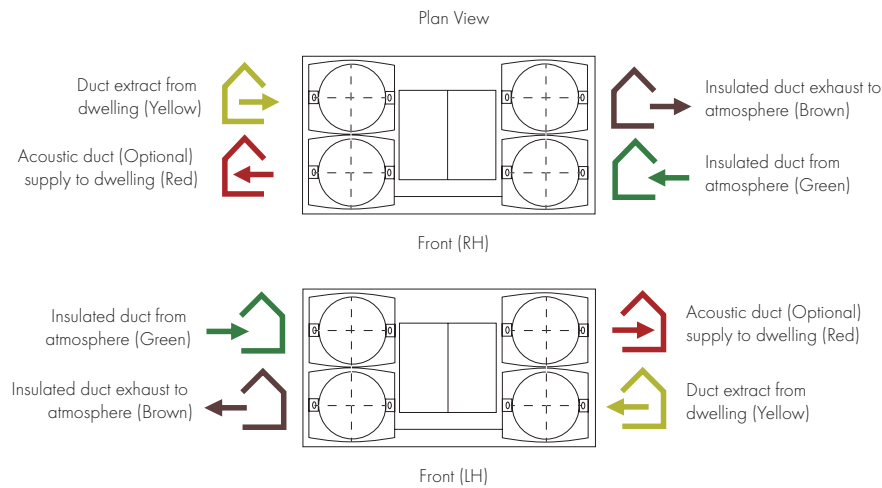
All Sentinel Kinetic units shall incorporate the following functions integrally mounted, pre-wired and factory fitted by the manufacturer:

- ✓ Integral infinitely variable fan speed control on supply and extract
- ✓ Integral min/max ventilation control/set point
- ✓ Integral BMS input/output interfaces – control and status indication
- ✓ Heating interlocks
- ✓ 0-10V proportional speed adjustment
- ✓ Volt free contacts
- ✓ 24V sensor supply
- ✓ Integral on/off or trickle boost function from remote switch, e.g. PIR occupancy detector
- ✓ Fully automatic summer bypass
- ✓ Switched Live input with adjustable 'delay-on' feature
- ✓ Fan failure or component failure indicated via individual fault code display
- ✓ Running time counter
- ✓ Control panel PIN number lock
- ✓ Automatic frost protection effective to -20°C
- ✓ The unit shall incorporate an integral humidity sensor with the following features:
 - Ambient Response; Raises the humidity trigger point as dwelling temperature reduces
 - Rapid Response: Monitors the rate of change in humidity and triggers increased airflow even if the humidity trigger threshold is not reached
 - Proportional Response; Incrementally increases the fan speed to reduce noise and reduce energy consumption
- ✓ The unit shall be controlled by the 'Sentinel' control devices (enablers and sensors) as detailed in the schedule or on the drawings.
- ✓ Tool free filter access

Mounting Option

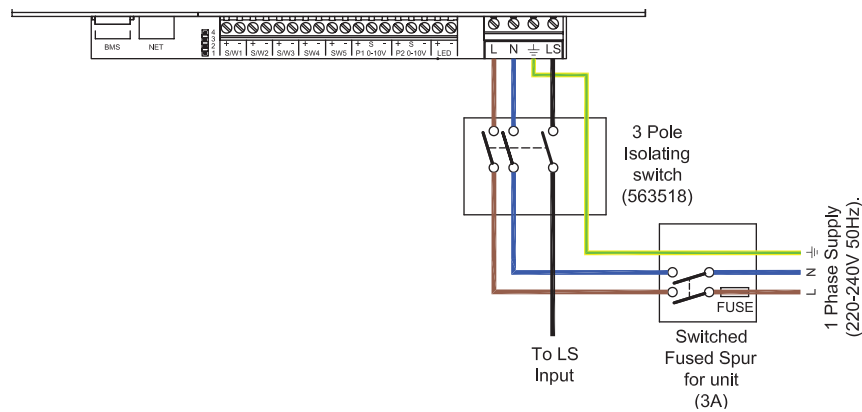


Airflow Direction

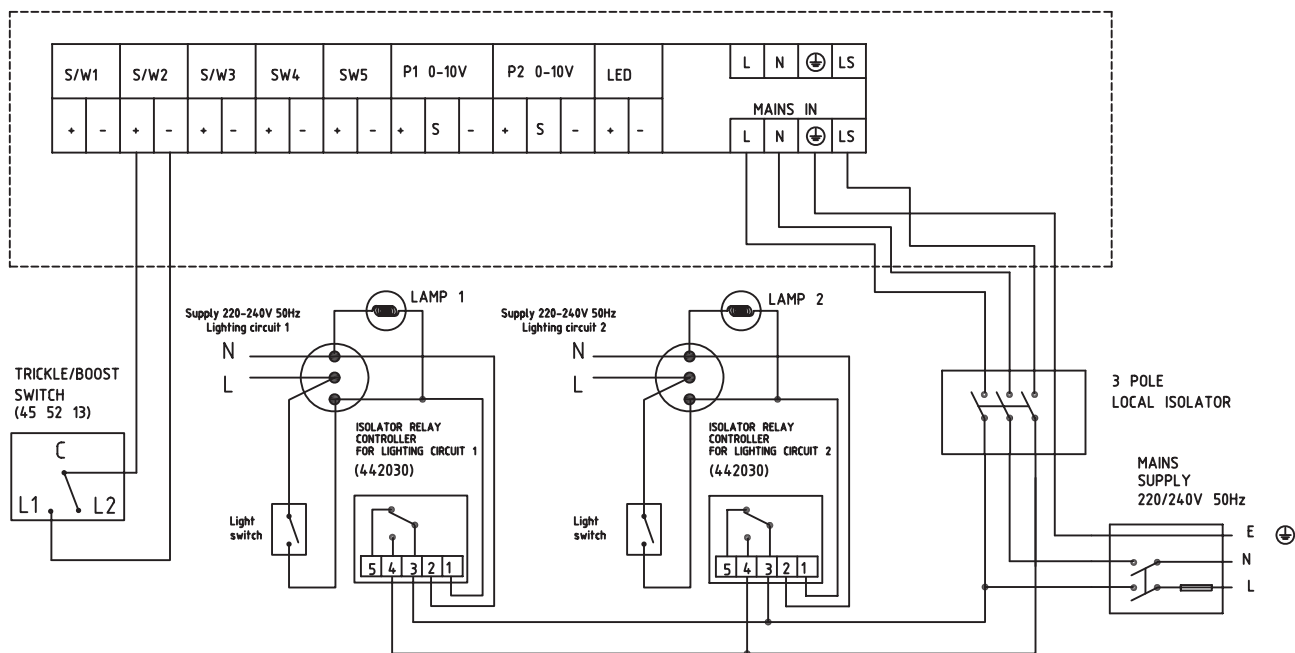


Electrical Connection

Please note: Electrical connection should be carried out by an appropriately qualified person and in accordance with current wiring regulations.



Trickle to Boost by two lighting circuits or Trickle/Boost Switch



Lo-Carbon Sentinel Kinetic High Flow

- Acoustic Enclosure option for reduced breakout noise
- Acoustic Top Box option for reduced in-duct noise
- Recognised in SAP PCDB
- 180mm/200mm spigots
- Horizontal duct option for space-saving installations
- High airflow, ideal for student accommodation clusters
- Unique folding filter for removal when access is restricted
- Integrated digital controller for simple and accurate commissioning
- Plug and play controls; Humidistat
- BMS connectivity
- LS inputs (Light Switch)
- Volt-free inputs



Increased Performance

The Sentinel Kinetic High Flow benefits from the latest high efficiency, backward curved impeller design, ensuring the lowest possible energy consumption, and an exceptional performance range covering small one bed apartments to the largest of houses.

For scenarios where noise is a critical issue, an Acoustic Enclosure is available to reduce breakout noise and the Acoustic Top Box will reduce in-duct noise at key frequencies.

Care Homes & Student Accommodation

The Sentinel Kinetic High Flow is ideal for larger homes and multiple occupancy units such as care homes and student accommodation. Capable of 175l/s at 150Pa, the unit can extract from up to fourteen bathrooms and a communal kitchen while still achieving almost 90% heat recovery. The fully automatic capability of the Kinetic range means that adequate ventilation is always achieved.

The Kinetic's BMS capability is also ideal for those commercial applications where landlords or property managers want to monitor and optimise building performance and maintenance. The Kinetic BMS can provide status information and its self diagnostics can report if any fault is found.

Spigot Options

180mm/200mm Spigots may be re-positioned to give horizontal connection or a combination of vertical and horizontal connection.

Quick Change Filter

As many systems are placed within cupboards the unique filter design folds as you remove it to ensure easy access in restricted spaces.

Integral Humidity Sensor

The integral humidity sensor increases 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 wet room. The night time relative humidity setback feature suppresses nuisance tripping as humidity gradually increases with falling temperature.

Models

| Model | Stock Ref |
|---|-----------|
| Kinetic High Flow Right | 408449 |
| Kinetic High Flow Right with Acoustic Top Box & Enclosure | 479544 |
| Kinetic High Flow Right with Acoustic Top Box | 479543 |
| Kinetic High Flow Right with Acoustic Enclosure | 479542 |
| Kinetic High Flow Left | 408451 |
| Kinetic High Flow Left with Acoustic Top Box & Enclosure | 479547 |
| Kinetic High Flow Left with Acoustic Top Box | 479546 |
| Kinetic High Flow Left with Acoustic Enclosure | 479545 |

For further details, see Sentinel Kinetic Plus.

Accessories

| Model | Stock Ref |
|---|-----------|
| Wired Remote Controller | 443283 |
| LED Alarm with 15m cable | 448356 |
| Opto-coupler for volt-free bms connection | 447340 |
| ISO 45% Coarse (G3) 2x Filter | 403702 |
| ISO ePM10 50% Pollen (M5) 1x Filter | 444201 |
| Anti Vibration Mounts | 68MP033G |
| Acoustic Purge Fan | 477988 |
| Acoustic Purge Fan XL | 479829 |

SAP PCDB Test Results

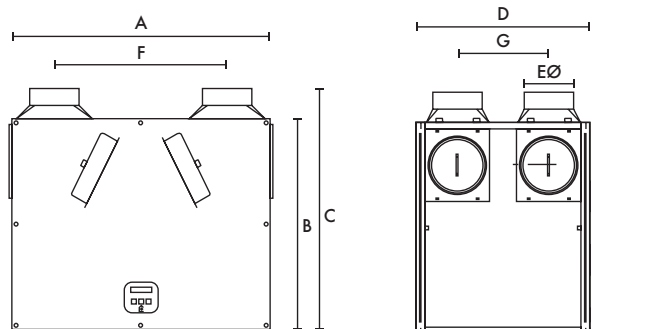
| | SAP 2009 | | SAP 2012 | |
|-------|----------------------|-------------|----------------------|-------------|
| | Thermal Efficiency % | SFP (W/l/s) | Thermal Efficiency % | SFP (W/l/s) |
| K + 1 | 88 | 0.65 | 88 | 0.58 |
| K + 2 | 88 | 0.54 | 90 | 0.55 |
| K + 3 | 90 | 0.52 | 91 | 0.60 |
| K + 4 | 90 | 0.55 | 91 | 0.69 |
| K + 5 | 91 | 0.6 | 90 | 0.78 |
| K + 6 | 91 | 0.66 | 90 | 0.92 |
| K + 7 | 90 | 0.74 | 90 | 1.09 |

SEC Rating

| Model | SEC Class |
|-------------------|-----------|
| Kinetic High Flow | A |

Dimensions (mm)

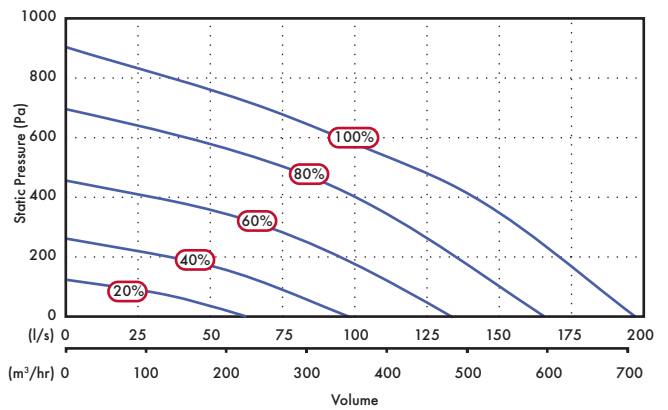
Unit



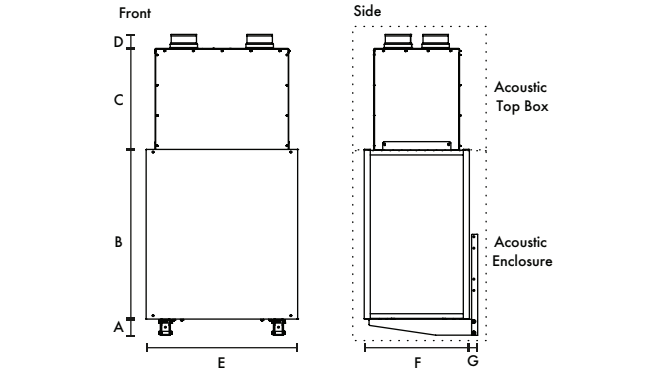
| A | B | C | D | EØ | F | G |
|-----|-----|-----|-----|---------|-----|-----|
| 785 | 635 | 722 | 550 | 180/200 | 520 | 275 |

Weight: 31kg

Performance



Acoustic Solution



| A | B | C | D | E | F | G | kg | kg | Spigot |
|----|-----|-----|----|-----|-----|----|----|----|--------|
| 80 | 733 | 501 | 71 | 855 | 583 | 40 | 17 | 33 | 180 |

Sound Data (Unit only)

| Flow % | Test Mode | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | LwA | @ 3m |
|--------|-----------|------|------|------|------|------|------|------|------|------|------|
| 20 | Supply | 55.1 | 65.9 | 55.2 | 53.8 | 44.4 | 37.4 | 25.3 | 24.9 | 66.8 | 34.1 |
| | Extract | 58.2 | 57.4 | 48.0 | 45.6 | 43.8 | 34.5 | 20.0 | 24.5 | 61.3 | 27.9 |
| | Breakout | 43.3 | 46.6 | 44.9 | 44.7 | 41.8 | 30.4 | 21.6 | 22.5 | 51.6 | 25.1 |
| 40 | Supply | 63.1 | 69.0 | 67.1 | 64.0 | 55.0 | 51.6 | 39.7 | 32.4 | 64.2 | 43.7 |
| | Extract | 58.6 | 58.4 | 60.0 | 53.7 | 41.9 | 41.5 | 31.7 | 25.1 | 54.9 | 34.3 |
| | Breakout | 55.4 | 49.6 | 60.6 | 53.8 | 46.5 | 41.5 | 33.2 | 27.4 | 55.4 | 34.8 |
| 60 | Supply | 70.3 | 74.3 | 81.4 | 71.5 | 63.6 | 59.9 | 49.6 | 43.1 | 74.8 | 54.3 |
| | Extract | 64.4 | 64.2 | 72.6 | 59.1 | 48.7 | 45.7 | 37.8 | 29.3 | 64.9 | 44.4 |
| | Breakout | 62.8 | 54.6 | 65.7 | 57.2 | 55.5 | 49.2 | 41.4 | 36.4 | 61.0 | 40.5 |
| 80 | Supply | 75.3 | 77.9 | 88.1 | 78.7 | 68.4 | 65.1 | 56.0 | 50.1 | 81.4 | 60.9 |
| | Extract | 71.1 | 68.2 | 73.6 | 61.8 | 51.9 | 49.5 | 42.7 | 37.6 | 66.4 | 45.9 |
| | Breakout | 66.2 | 59.0 | 73.4 | 61.8 | 57.0 | 54.6 | 47.3 | 43.1 | 66.8 | 46.2 |
| 100 | Supply | 90.9 | 80.9 | 84.4 | 80.1 | 71.5 | 68.0 | 59.3 | 54.5 | 80.7 | 60.1 |
| | Extract | 92.4 | 71.8 | 78.1 | 67.4 | 54.9 | 51.5 | 44.6 | 41.4 | 72.2 | 51.7 |
| | Breakout | 69.3 | 62.9 | 74.9 | 67.5 | 59.2 | 56.6 | 49.1 | 44.7 | 69.3 | 48.8 |

Tested according to BS EN 13141-7:2010. Breakout quoted spherical. Supply and Extract quoted hemispherical.

Sound Data (Unit with Acoustic Enclosure)

| Flow % | Test Mode | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | LwA | @ 3m |
|--------|-----------|------|------|------|------|------|------|------|------|------|------|
| 20 | Supply | 55.2 | 57.0 | 46.1 | 38.8 | 24.0 | 15.4 | 18.0 | 23.2 | 43.6 | 26.1 |
| | Extract | 50.4 | 53.6 | 37.0 | 32.3 | 18.2 | 15.1 | 18.0 | 23.2 | 38.7 | 21.2 |
| | Breakout | 41.3 | 51.8 | 39.2 | 32.3 | 20.5 | 15.8 | 18.1 | 23.2 | 37.7 | 17.2 |
| 40 | Supply | 64.1 | 59.6 | 59.7 | 51.9 | 35.5 | 22.8 | 19.9 | 23.5 | 53.3 | 35.8 |
| | Extract | 56.6 | 50.7 | 49.0 | 41.9 | 24.5 | 17.7 | 18.1 | 23.2 | 43.3 | 25.8 |
| | Breakout | 46.7 | 50.5 | 53.0 | 44.8 | 32.2 | 22.2 | 18.5 | 23.3 | 45.6 | 25.1 |
| 60 | Supply | 67.3 | 64.0 | 67.7 | 58.6 | 43.2 | 30.6 | 26.5 | 25.9 | 61.0 | 43.5 |
| | Extract | 61.6 | 56.7 | 55.5 | 49.0 | 32.2 | 25.3 | 19.7 | 23.4 | 50.2 | 32.7 |
| | Breakout | 53.0 | 54.4 | 60.2 | 48.8 | 40.6 | 33.2 | 23.4 | 23.4 | 53.0 | 32.5 |
| 80 | Supply | 70.3 | 67.7 | 74.6 | 61.8 | 48.5 | 36.2 | 33.0 | 31.4 | 67.5 | 50.0 |
| | Extract | 66.7 | 60.0 | 67.2 | 50.9 | 38.1 | 32.8 | 24.0 | 24.1 | 59.7 | 42.2 |
| | Breakout | 58.0 | 58.0 | 64.7 | 52.4 | 45.7 | 39.9 | 31.2 | 24.3 | 58.7 | 38.2 |
| 100 | Supply | 73.0 | 70.1 | 77.1 | 65.1 | 51.4 | 39.5 | 37.0 | 36.4 | 70.1 | 52.6 |
| | Extract | 69.6 | 62.5 | 67.3 | 56.2 | 41.7 | 37.0 | 28.1 | 25.3 | 60.5 | 43.0 |
| | Breakout | 61.0 | 61.2 | 65.9 | 57.7 | 48.5 | 43.8 | 36.3 | 26.3 | 60.7 | 40.2 |

Consultant's Specification

Operation

The supply and extract ventilation unit shall be as Sentinel Kinetic High Flow as manufactured by Vent-Axia and shall be sized as indicated on the drawings and shall be in accordance with the particular specification.

Supply air to the room shall be pre-heated by the extract air via the integrated composite plastic counterflow heat recovery cell. The Sentinel Kinetic High Flow shall automatically vary the ventilation rate via EC/DC motors, as it receives signals from one of the optional interconnected sensors.

When a signal is received, the fans shall either vary their speed proportionally or on a trickle and boost principle.

The unit shall have the facility to commission the supply and extract fans individually via in-built minimum and maximum speed adjustment, or alternative wired remote control unit. The fans themselves shall have independent, infinitely variable speed control.

Unit Specification

The unit shall be manufactured with an ABS outer case construction, and incorporate a reversible core to allow for left or right hand mounting.

The unit shall have a high efficiency composite plastic counterflow heat exchanger, supply and extract filters, automatic summer bypass, integral minimum and maximum infinitely variable speed controls with fascia mounted failure indication.

The unit shall have low energy, high efficiency EC/DC fan/motor assemblies with sealed for life bearings. The impellers shall be high efficiency backward curved centrifugal type.

The unit shall have a heat exchanger cell with a thermal efficiency of up to 92% when tested to EN 308. This shall be protected by ISO 45% Coarse (G3) grade synthetic filters on supply and extract. Complete with a condensate drip tray and drain connection.

To reduce breakout noise, the MVHR unit shall be provided with an Acoustic Enclosure of steel construction lined with class 'O' acoustic foam. To reduce in-duct noise, the top of the MVHR shall be fitted with an Acoustic Top Box to provide attenuation to the 4 ducts of the unit. This Acoustic Top Box shall be of steel construction lined with acoustic class 'O' foam with the MVHR spigots linked to the Top Box via 4 separate attenuated ducts. The acoustic enclosure and top box shall each be independently tested for noise to BS EN 13141-7.

The unit shall be constructed with a removable Core allowing full maintenance access. The removable Core shall provide access to the following:

- ✓ Supply and extract filter
- ✓ Heat exchanger
- ✓ Access to the electrical connections

Access shall be provided for wiring termination and setup/commissioning. The backlit LCD user interface therein may be duplicated for remote mounting if required.

Units shall be as manufactured by Vent-Axia Ltd.

The MVHR unit shall incorporate an Expanded Polystyrene (EPS) inner chassis with custom motor and impeller mounting features. The inner chassis will assist in reducing noise and act as a large anti-vibration mount to avoid transmission through to the back mounting plate or the base of the unit.

The MVHR unit shall be tested to ensure it meets the maximum allowable vibration of no more than 1 mm/s, measured on the unit wall fixing points.

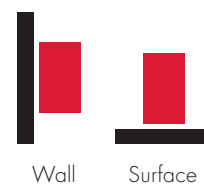
Sound tested to BS EN 13141-7:2010

Standard Controls

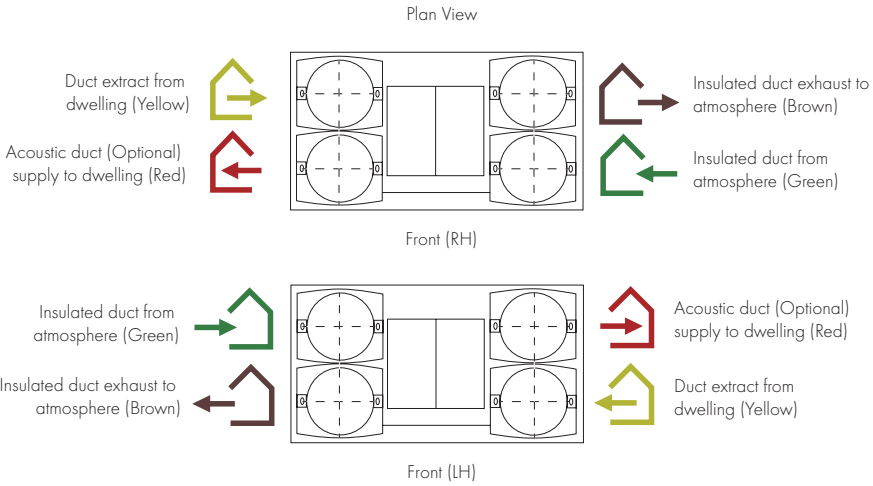
All Sentinel Kinetic units shall incorporate the following functions integrally mounted, pre-wired and factory fitted by the manufacturer:

- ✓ Integral infinitely variable fan speed control on supply and extract
- ✓ Integral min/max ventilation control/set point
- ✓ Integral BMS input/output interfaces – control and status indication
- ✓ Heating interlocks
- ✓ 0-10V proportional speed adjustment
- ✓ Volt free contacts
- ✓ 24V sensor supply
- ✓ Integral on/off or trickle boost function from remote switch, e.g. PIR occupancy detector
- ✓ Fully automatic summer bypass
- ✓ Switched Live input with adjustable 'delay-on' feature
- ✓ Fan failure or component failure indicated via individual fault code display
- ✓ Running time counter
- ✓ Control panel PIN number lock
- ✓ Automatic frost protection effective to -20°C
- ✓ The unit shall incorporate an integral humidity sensor with the following features:
 - Ambient Response; Raises the humidity trigger point as dwelling temperature reduces
 - Rapid Response: Monitors the rate of change in humidity and triggers increased airflow even if the humidity trigger threshold is not reached
 - Proportional Response; Incrementally increases the fan speed to reduce noise and reduce energy consumption
- ✓ The unit shall be controlled by the 'Sentinel' control devices (enablers and sensors) as detailed in the schedule or on the drawings.
- ✓ Tool free filter access

Mounting Option

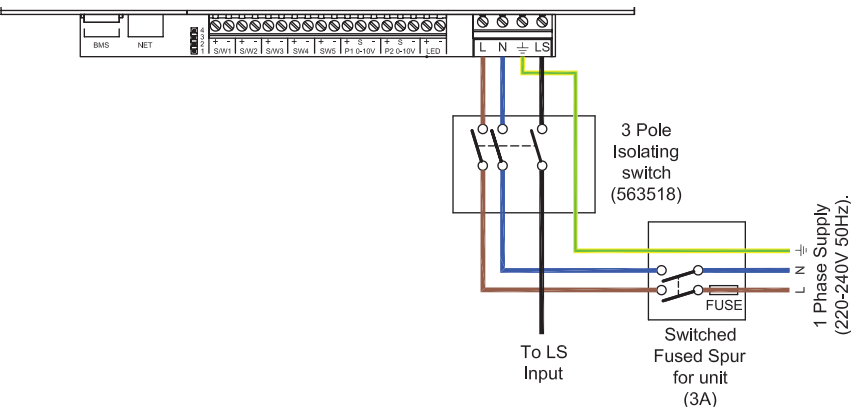


Airflow Direction

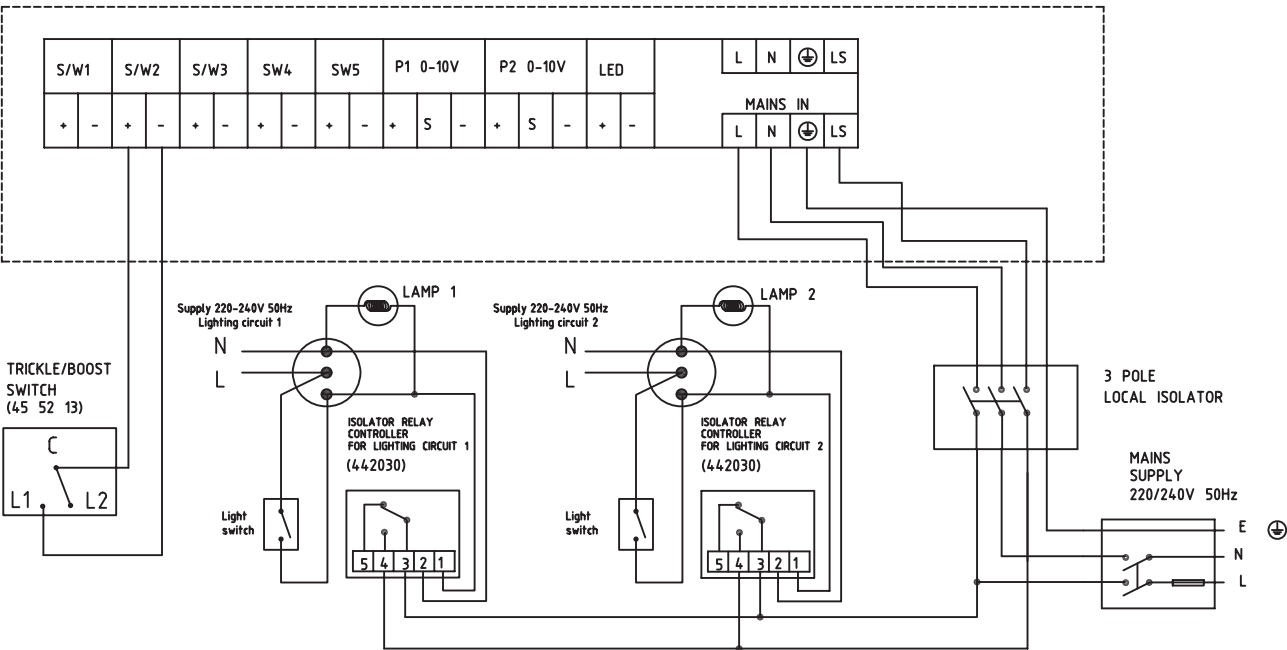


Electrical Connection

Please note: Electrical connection should be carried out by an appropriately qualified person and in accordance with current wiring regulations.



Trickle to Boost by two lighting circuits or Trickle/Boost Switch



Lo-Carbon Sentinel Kinetic Cooker Hood

- Acoustic Top Box option for reduced in-duct noise
- Recognised in SAP PCDB
- Includes Cooker Hood Canopy
- Horizontal duct option for space-saving installations
- Fits within a 600mm wide aperture (300mm deep)
- Integrated digital controller for simple and accurate commissioning
- Plug and play controls; Humidistat
- BMS connectivity
- LS inputs (Light Switch)
- Volt-free inputs
- Self diagnosis for simplified fault finding
- Adjustable delay On/delay Off timer



Easy Installation

Ducting can be attached to the unit horizontally, vertically or both. Minimum internal depth of kitchen cupboard: 300mm.

Horizontal and Vertical Spigots: The combination of spigot options allows installation in confined locations. If vertical and horizontal connection are required on the same outlet/inlet, additional spigots can be supplied.

The condensate connection can be taken through the rear of the unit or through the side of the unit into an adjacent cupboard prior to connection into pre-installed domestic waste water system.

Cooker Hood Unit

The Sentinel Kinetic Cooker Hood is designed to fit in a 600mm wide aperture above a hob. The telescopic hood incorporates two flat removable metal grease filters, low energy light bulbs and is available with a White or Brushed Aluminium front trim.

The hood contains an integral fire damper in accordance with BRE Digest 398 and is connected to the heat recovery unit by a galvanised steel duct with access for cleaning. When the hood is opened, the heat recovery unit goes to boost speed and the summer bypass automatically opens to prevent cooking by-products entering the heat recovery cell. As an additional safety feature, the duct also contains a thermal cut-out fuse which turns off the MVHR unit in the event of excessive temperature in the airway. Cooker Hood units cannot be handed on-site and must be purchased as left hand (L) or right hand (R) models.

SELV Models

SELV cooker hoods allow the distance between the hood and an electric hob to be reduced from 650mm to 550mm.

Integral Humidity Sensor

The integral humidity (models with H suffix) sensor increases 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 wet room. The night time relative humidity setback feature suppresses nuisance tripping as humidity gradually increases with falling temperature.

Models

Lo-Carbon Sentinel Kinetic with summer bypass and humidity sensor.

| Model | Stock Ref |
|--|-----------|
| Kinetic CWH L (White Left) | 446756 |
| Kinetic CSH L (Brushed Aluminium Left) | 446757 |
| Kinetic CWH R (White Right) | 446758 |
| Kinetic CSH R (Brushed Aluminium Right) | 446759 |
| Kinetic CWH L SELV (White Left) | 477003 |
| Kinetic CSH L SELV (Brushed Aluminium Left) | 477004 |
| Kinetic CWH R SELV (White Right) | 477005 |
| Kinetic CSH R SELV (Brushed Aluminium Right) | 477006 |

Accessories

| Model | Stock Ref |
|---|-----------|
| Wired Remote Controller | 443283 |
| LED Alarm with 15m cable | 448356 |
| Opto-coupler for volt-free bms connection | 447340 |
| ISO 45% Coarse (G3) 2x Filter | 442356 |
| ISO ePM10 50% Pollen (M5) 1x Filter | 444199 |
| Grease 2x Filter | 372774 |
| Acoustic Purge Fan | 477988 |
| Acoustic Purge Fan XL | 479829 |

SAP PCDB Test Results

| SAP 2009 | | | SAP 2012 | |
|----------|----------------------|-------------|----------------------|-------------|
| | Thermal Efficiency % | SFP (W/l/s) | Thermal Efficiency % | SFP (W/l/s) |
| K+1 | 85 | 0.72 | 85 | 0.78 |
| K+2 | 85 | 0.74 | 85 | 0.89 |
| K+3 | 84 | 0.83 | 82 | 1.03 |
| K+4 | 83 | 0.92 | | |

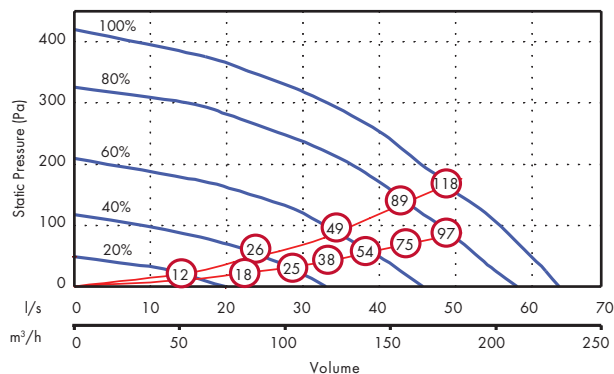
SEC Class

| Model | SEC Class |
|-----------------|-----------|
| Kinetic CWH/CSH | A |

Performance

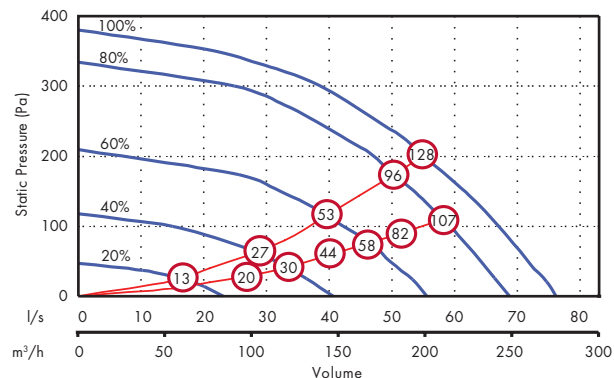
Fan speeds are fully adjustable within the performance range.

Horizontal Spigots



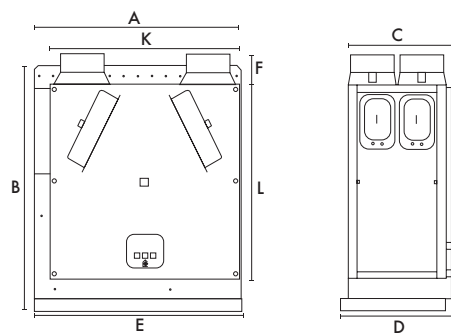
(x) figure relates to Wattage (both motors)

Vertical Spigots



Dimensions (mm)

Unit

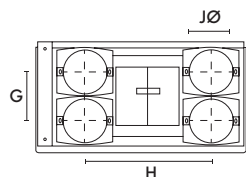


Minimum clearance from the bottom of this unit to the top of the hob must be:

Gas: 750mm

Electric: 650mm/ 550mm

(SELV)



| A | B | C | D | E | F | G | H | JØ | K | L | kg |
|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|----|
| 590 | 710 | 295 | 316 | 598 | 90 | 140 | 360 | 125 | 550 | 550 | 27 |

Sound Data

| Test | | Octave band, Hz, dB SWL | | | | | | | | SPL dB(A) |
|----------|----------|-------------------------|------|------|------|------|------|------|------|-----------|
| Flow l/s | mode | 63 | 125 | 250 | 500 | 1K | 2k | 4K | 8K | @ 3m |
| 10 | Supply | 47.8 | 40.2 | 38 | 31.1 | 28.2 | 22.1 | 23.6 | 30.9 | 21.4 |
| | Extract | 47 | 38.7 | 36 | 29.9 | 25 | 22.4 | 23.3 | 30.8 | 20.6 |
| | Breakout | 43.6 | 36.2 | 37.4 | 30.9 | 27.4 | 23.3 | 24.2 | 31.4 | 18.6 |
| 20 | Supply | 54 | 46.6 | 50.2 | 44.5 | 44.4 | 38.3 | 28.8 | 31.9 | 31.2 |
| | Extract | 46.8 | 40.5 | 34.6 | 34.2 | 34.6 | 25.9 | 23.7 | 30.3 | 22.9 |
| | Breakout | 45.9 | 39.9 | 40.6 | 35.7 | 33.5 | 28.4 | 25.3 | 31.2 | 21.3 |
| 30 | Supply | 58.1 | 54.5 | 57.6 | 52.2 | 51.7 | 47.6 | 38.6 | 35.8 | 38.5 |
| | Extract | 47.6 | 46.2 | 38.7 | 41.3 | 42.8 | 33.9 | 26.4 | 30.5 | 28.4 |
| | Breakout | 45.2 | 42.4 | 48.2 | 40.8 | 37.7 | 35.2 | 30 | 31.1 | 25.2 |
| 40 | Supply | 65.2 | 58.4 | 62.3 | 58 | 56.5 | 52.5 | 44.1 | 41.4 | 43.6 |
| | Extract | 53.5 | 53 | 44 | 47.7 | 48.1 | 39.7 | 31.5 | 31.5 | 33.5 |
| | Breakout | 50.9 | 47.6 | 47.4 | 48.1 | 42.5 | 40.8 | 36.3 | 34.4 | 29.3 |
| 50 | Supply | 66.4 | 63.2 | 66.3 | 62.5 | 61.7 | 57.4 | 50 | 47.8 | 48.3 |
| | Extract | 64.2 | 55.2 | 48 | 50.9 | 52.1 | 44.5 | 35.9 | 35 | 37.2 |
| | Breakout | 55 | 51 | 51.3 | 51.6 | 46.9 | 46.0 | 42 | 38.3 | 33.2 |

Tested according to BS EN 13141-7:2010. Breakout quoted spherical. Supply and Extract quoted hemispherical. For in-duct data, end reflections are added based on the spigot size of the unit.

Consultant's Specification

Operation

The supply and extract ventilation unit shall be a Sentinel Kinetic as manufactured by Vent-Axia and shall be sized as indicated on the drawings and shall be in accordance with the particular specification.

Supply air to the room shall be pre-heated by the extract air via the integrated composite plastic counterflow heat recovery cell. The Sentinel Kinetic shall automatically vary the ventilation rate via EC/DC motors, as it receives signals from one of the optional interconnected sensors. When a signal is received, the fans shall either vary their speed proportionally or on a trickle and boost principle.

The unit shall have the facility to commission the supply and extract fans individually via in-built minimum and maximum speed adjustment, or alternative wired remote control unit. The fans themselves shall have independent, infinitely variable speed control.

Unit Specification

The unit shall be manufactured with an ABS outer case construction, and incorporate a metal duct to the cooker hood, intumescent fire damper and thermal switch, in accordance with BRE Digest 398.

The unit shall have a high efficiency composite plastic counterflow heat exchanger, supply and extract filters, automatic summer bypass, integral minimum and maximum infinitely variable speed controls with fascia mounted failure indication. The unit shall have low energy, high efficiency EC/DC fan/motor assemblies with sealed for life bearings. The impellers shall be high efficiency forward curved centrifugal type.

The unit shall have a heat exchanger cell with a thermal efficiency of up to 92% when tested to EN 308. This shall be protected by ISO 45% Coarse (G3) Filter 2pk grade synthetic filters on supply and extract. Complete with a condensate drip tray and drain connection.

The unit shall be constructed with a removable Core allowing full maintenance access. The removable Core shall provide access to the following:

- ✓ Supply and extract filter
- ✓ Heat exchanger
- ✓ Access to the electrical connections

Access shall be provided for wiring termination and setup/commissioning. The backlit LCD user interface therein shall be removable for remote mounting if required.

Units shall be as manufactured by Vent-Axia Ltd.

Sound tested to BS EN 13141-7:2010

Standard Controls

All Sentinel Kinetic units shall incorporate the following functions integrally mounted, pre-wired and factory fitted by the manufacturer:

- ✓ Integral infinitely variable fan speed control on supply and extract
- ✓ Integral min/max ventilation control/set point
- ✓ Integral BMS interfaces – control and status indication
- ✓ Heating interlocks
- ✓ 0-10V proportional speed adjustment
- ✓ Volt free contacts
- ✓ 24V sensor supply
- ✓ Integral on/off or trickle boost function from remote switch e.g. PIR occupancy detector
- ✓ The unit shall be controlled by the 'Sentinel' control devices (enablers and sensors) as detailed in the schedule or on the drawings
- ✓ Fully automatic summer bypass
- ✓ Switched Live input with adjustable 'Delay-On' feature

- ✓ Fan failure or component failure indicated via individual fault code display
- ✓ Running time counter
- ✓ Control panel PIN number lock
- ✓ Automatic frost protection effective to -20°C
- ✓ Tool free filter access
- ✓ The unit shall incorporate ('H' models) an integral humidity sensor with the following features:
 - Ambient Response; Raises the humidity trigger point as dwelling temperature reduces
 - Rapid Response; Monitors the rate of change in humidity and triggers increased airflow even if the humidity trigger threshold is not reached
 - Proportional Response; Incrementally increases the fan speed to reduce noise and reduce energy consumption

Integral Cooker Hood Specification

The Sentinel Kinetic Cooker Hood shall consist of a telescopic Hood and galvanised steel duct connection to the MVHR Unit.

The Hood construction shall be of grey powder coated steel with Brushed Aluminium or White painted fascia.

The Hood shall trigger the MVHR unit to a pre-defined boost speed and open the summer bypass when opened, and shall have two low-energy lamps illuminating the hob top.

Filter shall be a flat metal grease filter, removable for cleaning.

The galvanised steel ductwork shall provide a continuous fire barrier between the Hood and the MVHR unit. It shall contain an Intumescent fire damper, thermal cut-out and volume balancing damper. The thermal cut-out shall switch off the MVHR unit at a pre-defined safety temperature.

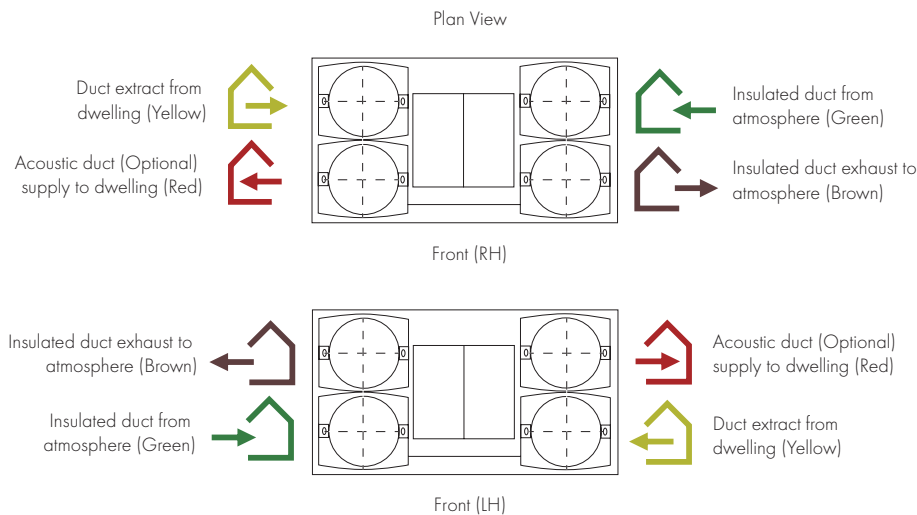
The duct shall have an access panel for cleaning by the end-user.

Mounting Option



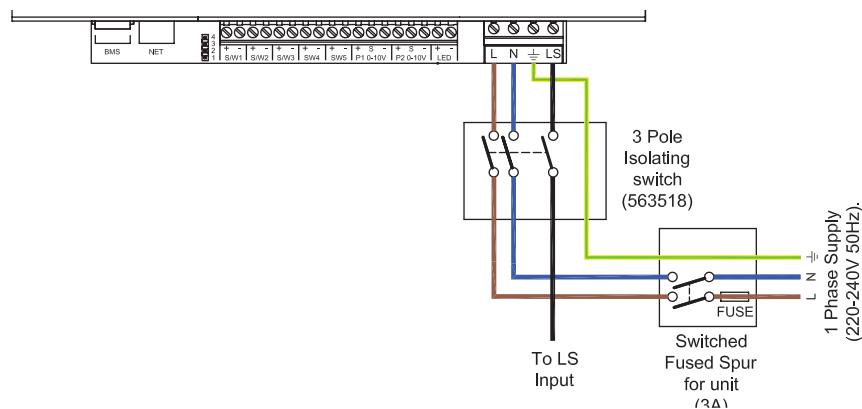
Wall

Airflow Direction

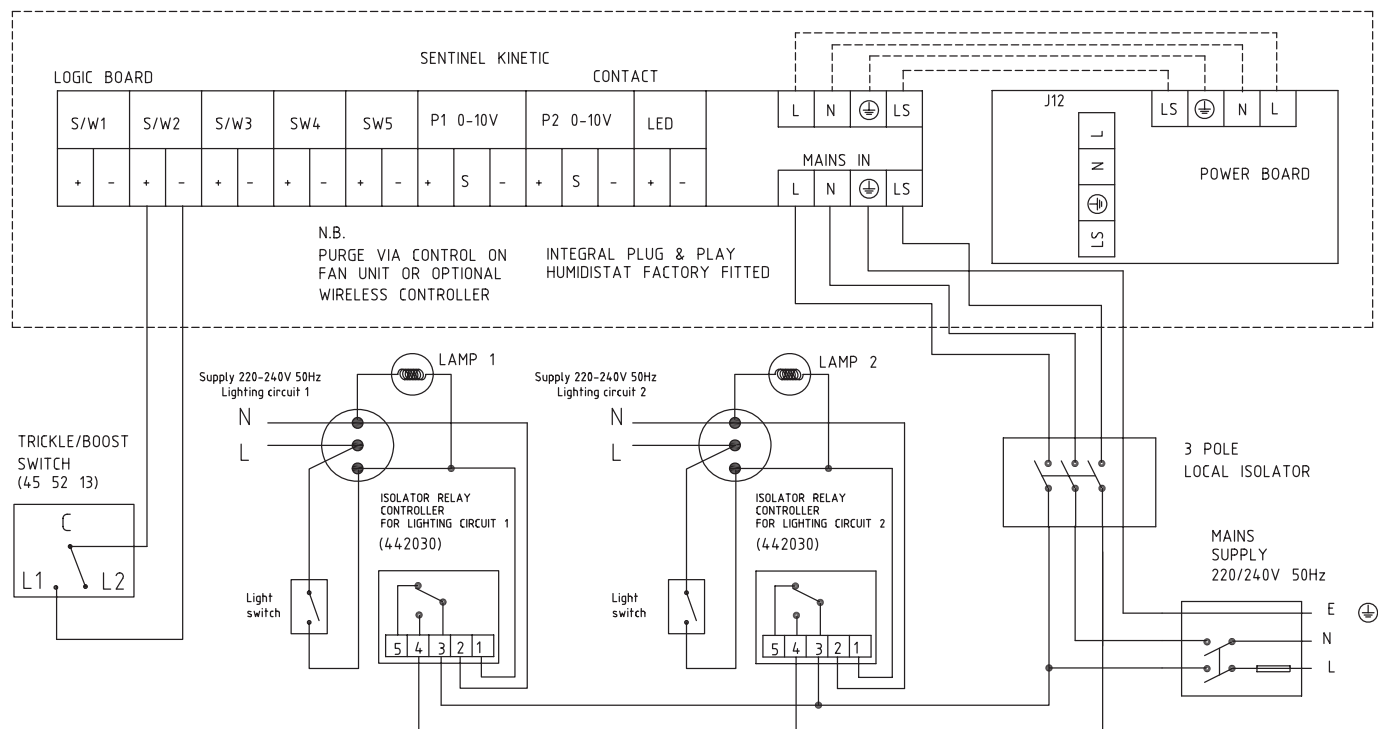


Electrical Connection

Please note: Electrical connection should be carried out by an appropriately qualified person and in accordance with current wiring regulations.

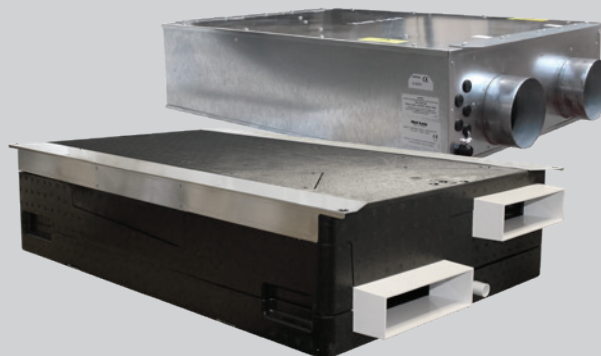


Trickle to Boost by a Light Circuit



Lo-Carbon Sentinel Kinetic Horizontal

- Manufactured in the UK
- Building Regulations ADF compliant
- Recognised in SAP PCDB
- Energy Savings Trust best practice compliant
- Up to 81% heat recovery whilst controlling condensation
- Programmable Summer bypass
- Digital controller for simple and accurate commissioning
- External condensate connection
- Plug and play controls; Humidistat
- LS inputs (Light Switch)
- Volt-free inputs
- Self diagnosis for simplified fault finding
- Adjustable delay On/delay Off timer



The Sentinel Kinetic Horizontal Range

A wholehouse heat recovery system with up to 81% heat exchange efficiency. An easily accessible heat recovery cube protected by two removable ISO 45% Coarse (G3) Filter 2pk. Two Lo-Carbon Energy Saving EC/DC fans ensure long life (typically over double the life of AC motors) and lowest possible energy use. Fully insulated construction with built-in condensation drain. Specifically designed for new build constructions with a high level of insulation.

Lo-Carbon Sentinel Kinetic Horizontal meets the latest requirements of the Building Regulations ADF for wholehouse system ventilation: Continuous mechanical supply and extract with heat recovery. Each model has three fully adjustable speeds and a purge setting (maximum flow). Supplied with the unit is a digital controller that can be used to pre-set the speeds to any required airflow within the performance range.

Integral Humidity Sensor

The integral humidity sensor ('H' models) increases 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 wet room. The night time relative humidity setback feature suppresses nuisance tripping as humidity gradually increases with falling temperature. Acoustically lined - low noise levels from only 20dB(A) @ 3m.

Models

| Model | Stock Ref |
|----------------|-----------|
| Kinetic 200ZPH | 407162 |
| Kinetic 200ZH | 449540 |
| Kinetic 200ZMH | 448778 |
| Kinetic 300ZH | 449536 |

Accessories

| Model | Stock Ref |
|-------------------------------------|-----------|
| 200ZPH 45% Coarse (G3) 2x Filter | 407584 |
| 200ZH/ZMH 45% Coarse (G3) 2x Filter | 449524 |

| | |
|---|--------|
| 200ZH/ZMH ePM10 50% Pollen (M5) 1x Filter | 404574 |
| 300ZH 45% Coarse (G3) 2x Filter | 449575 |
| 300ZH ePM10 50% Pollen (M5) 1x Filter | 404575 |
| Acoustic Purge Fan | 477988 |
| Acoustic Purge Fan XL | 479829 |

Multiple Control Options:

Five Volt-free pairs of switch terminals for sensor inputs allow boosting from a full range of Vent-Axia controllers - humidistats, PIR, timers.

Two terminals with 0-24V outputs allow 0V to 10V proportional control by sophisticated controllers such as CO₂ sensors and proportional humidistats.

Switch-live for boosting via light switches (220-240V AC) or manual Normal/Boost switches. This connection has the advantage of Delay-On and Delay-Off facility. Delay-On enables you to prevent the Boost airflow between 0 and 10 minutes after a light switch has been activated. Delay-Off allows the Boost airflow to continue after a light switch is turned off to ensure effective clearance of humidity. This timer is adjustable between 0 and 25 minutes.

Summer Bypass

An internal damper operates when the external temperature is below the internal temperature, and the internal temperature is too high.

The bypass opens and allows the cooler outside air to help cool the dwelling.

Normal mode: Fans run on Normal speed with bypass open until the internal dwelling temperature falls below the set 'Indoor' (maximum desired) temperature.

Evening Purge mode: The fans run on Boost speed until the internal temperature falls below the set 'Indoor' temperature. If, after five hours the internal temperature is still above the set 'Indoor' temperature, the unit will switch down to normal speed for the remainder of the 'bypass open' period.

NightTime Purge mode: As Evening Purge, except that the unit will continue on Boost speed until the internal air temperature reaches the 'Outdoor' temperature set point (Default 14°C). This mode gives pre-cooling of the dwelling for the following day.

In Evening and Night Time Purge modes, the user can turn off the boost function by pressing the Boost button.

Frost Protection

In cold climates there is a possibility of frost building up on the intake side of the heat exchanger. In order to prevent damage, the Kinetic reduces supply flow while maintaining extract flow at temperatures down to -20°C.

SEC Class

| Model | SEC Class |
|-----------------------|-----------|
| Kinetic 200ZH/ZPH/ZMH | A |
| Kinetic 300ZH | A |

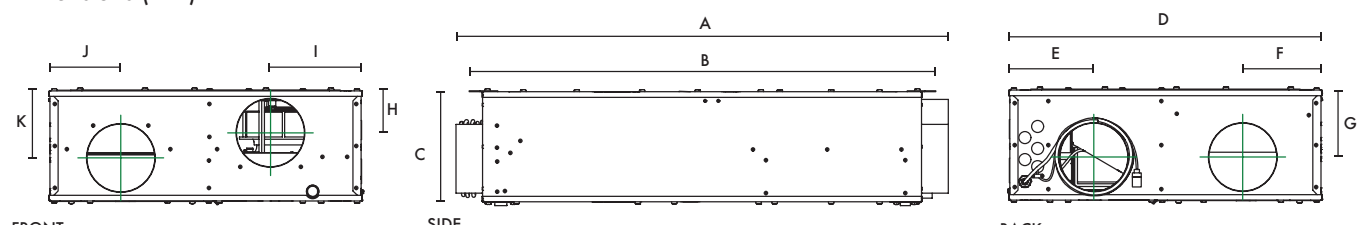
SAP PCDB Test Results

| SAP 2009 | | | SAP 2012 | |
|----------|----------------------|-------------|----------------------|-------------|
| 200ZPH | Thermal Efficiency % | SFP (W/l/s) | Thermal Efficiency % | SFP (W/l/s) |
| K+1 | 86 | 0.62 | 84 | 0.67 |
| K+2 | 84 | 0.65 | 82 | 0.82 |
| K+3 | 83 | 0.76 | 80 | 1.07 |

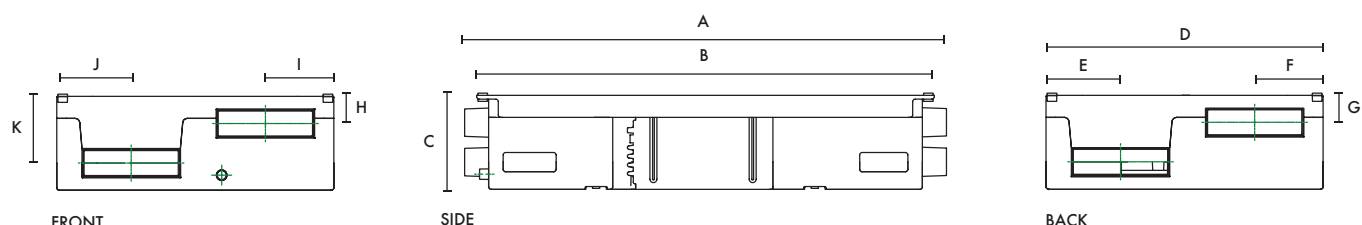
| SAP 2009 | | | SAP 2012 | |
|-----------|----------------------|-------------|----------------------|-------------|
| 200ZH/ZMH | Thermal Efficiency % | SFP (W/l/s) | Thermal Efficiency % | SFP (W/l/s) |
| K+1 | 80 | 0.69 | 81 | 0.73 |
| K+2 | 81 | 0.70 | 81 | 0.89 |
| K+3 | 80 | 0.80 | 79 | 1.12 |
| K+4 | 80 | 0.97 | 78 | 1.39 |
| K+5 | 79 | 1.14 | | |

| SAP 2009 | | | SAP 2012 | |
|----------|----------------------|-------------|----------------------|-------------|
| 300ZH | Thermal Efficiency % | SFP (W/l/s) | Thermal Efficiency % | SFP (W/l/s) |
| K+1 | 77 | 0.59 | 78 | 0.54 |
| K+2 | 78 | 0.51 | 78 | 0.61 |
| K+3 | 78 | 0.57 | 78 | 0.75 |
| K+4 | 78 | 0.66 | 78 | 0.93 |
| K+5 | 78 | 0.76 | 77 | 1.13 |
| K+6 | 78 | 0.88 | 76 | 1.35 |
| K+7 | 77 | 1.05 | | |

Dimensions (mm)

|  | | | | | | | | | | | | |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| Model | A | B | C | D | E | F | G | H | I | J | K | Spigots Ø |
| 200ZH | 895 | 849 | 200 | 570 | 155 | 144 | 122 | 76 | 167 | 131 | 122 | 125 |
| 300ZH | 985 | 940 | 301 | 720 | 184 | 179 | 187 | 102 | 279 | 174 | 187 | 150 |

Weight: 200ZH - 26kg, 300ZH - 38kg

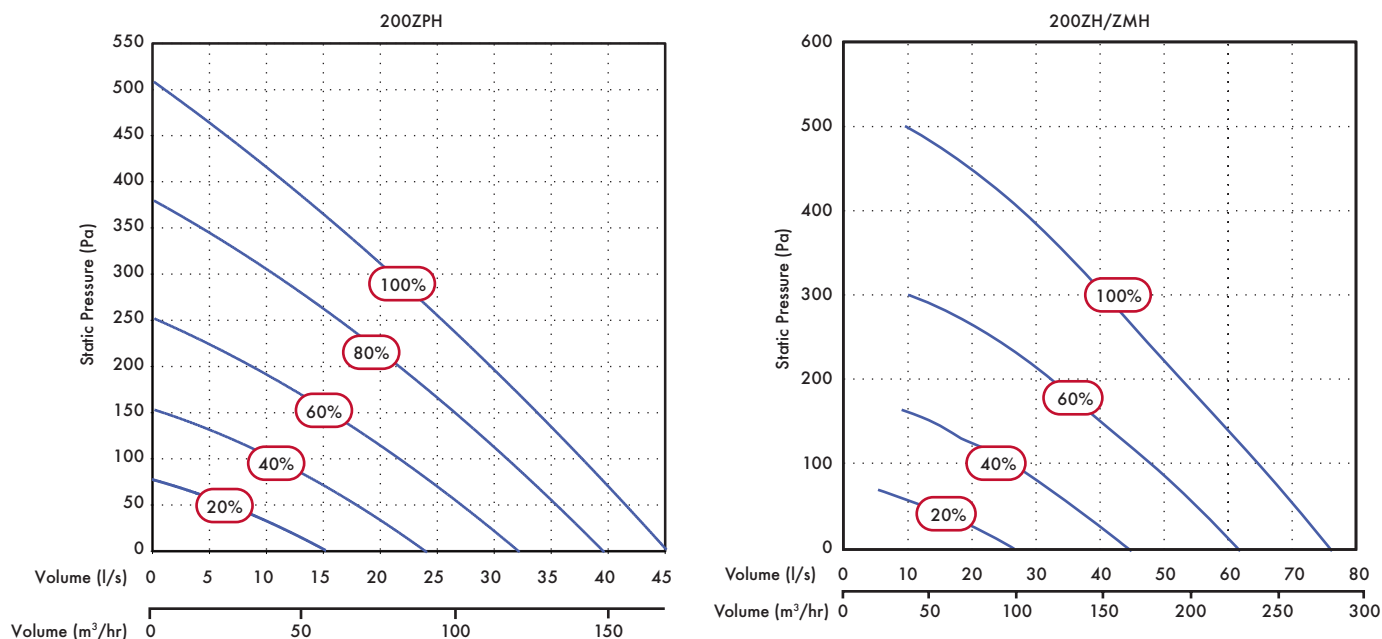
|  | | | | | | | | | | | | |
|--|------|-----|-----|-----|-----|-----|----|----|-----|-----|-----|---------|
| Model | A | B | C | D | E | F | G | H | I | J | K | Spigots |
| 200ZPH | 1000 | 950 | 200 | 575 | 155 | 142 | 60 | 61 | 142 | 154 | 143 | 204x60 |
| 200ZMH* | 895 | 849 | 200 | 570 | 195 | 140 | 54 | 66 | 168 | 138 | 143 | 204x60 |

Weight: 200ZPH - 14kg, 200ZMH - 26kg

*Galvanized steel outer case construction

Performance - 200ZH/ZMH/ZPH Model

Fan speeds are fully adjustable within the performance range.



Sound Data - 200ZPH Model

| Speed | Test mode | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) at 3m |
|-------|-----------|------|------|------|------|------|------|------|------|-------------|
| 20% | Breakout | 48.3 | 41.3 | 37.7 | 35.8 | 34.5 | 28.2 | 26 | 31.2 | 21.5 |
| | Supply | 39.6 | 37.1 | 36 | 32.9 | 30.6 | 22.9 | 24.9 | 29.4 | 23.1 |
| | Extract | 49.4 | 40.7 | 35 | 30.4 | 26.3 | 22.5 | 23.6 | 30.1 | 20.8 |
| 40% | Breakout | 47.8 | 42.2 | 46.7 | 40.6 | 40.2 | 34.2 | 28.1 | 31.2 | 25.3 |
| | Supply | 45.7 | 38.3 | 40.7 | 39 | 38.1 | 28.7 | 24.9 | 28.5 | 28.1 |
| | Extract | 50 | 45.5 | 39.9 | 37 | 34.3 | 28.6 | 25.1 | 30.6 | 24.3 |
| 60% | Breakout | 54.4 | 51.2 | 53.8 | 46.2 | 43 | 38.9 | 33.8 | 32 | 29.7 |
| | Supply | 46.1 | 49.2 | 45.3 | 44.4 | 42.4 | 35.2 | 27 | 29.3 | 32.7 |
| | Extract | 49.5 | 41.9 | 45.4 | 41.7 | 39.4 | 35.2 | 27.6 | 30.3 | 27.7 |
| 80% | Breakout | 50.4 | 51.2 | 56.7 | 53.9 | 48.5 | 43.2 | 39.9 | 34.9 | 34.5 |
| | Supply | 52.9 | 48.9 | 47.5 | 51.3 | 47.2 | 40.8 | 31.2 | 30 | 36.8 |
| | Extract | 48.9 | 43.3 | 46.8 | 50 | 42.4 | 38.6 | 31.3 | 30.1 | 32.2 |
| 100% | Breakout | 49.3 | 49.8 | 52.9 | 54 | 51 | 46.3 | 41.2 | 35.7 | 35.1 |
| | Supply | 43.8 | 45.8 | 50.7 | 56.3 | 50 | 44.3 | 35.7 | 29.7 | 38.2 |
| | Extract | 53.2 | 46.9 | 48 | 52.8 | 45.4 | 42.1 | 35.1 | 30.5 | 34.9 |

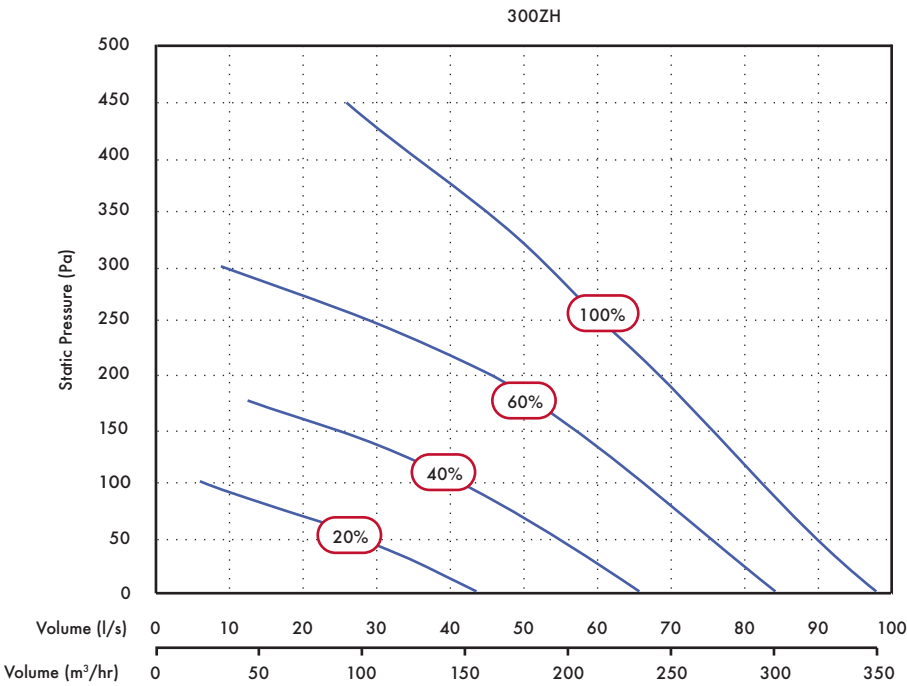
Sound Data - 200ZH/ZMH Model

| Flow % | Test mode | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) at 3m |
|--------|-----------|------|------|------|------|------|------|------|------|-------------|
| 20 | Supply | 50.3 | 54 | 50.1 | 45.5 | 37 | 36 | 27.5 | 31.1 | 30.0 |
| | Extract | 47.2 | 47.7 | 46.6 | 41.8 | 30.7 | 27.9 | 24.6 | 30.5 | 26.3 |
| | Breakout | 48.8 | 55.8 | 51.2 | 43.8 | 32.4 | 29.0 | 25.4 | 30.8 | 26.8 |
| 40 | Supply | 52.7 | 61.7 | 60.1 | 61.8 | 47.4 | 45.1 | 38.1 | 40.1 | 42.7 |
| | Extract | 50.7 | 55.4 | 55.0 | 51.5 | 37.5 | 34.6 | 25.9 | 30.7 | 33.9 |
| | Breakout | 53.7 | 60.1 | 61.1 | 50.7 | 40.2 | 35.8 | 27.1 | 30.3 | 34.0 |
| 60 | Supply | 52.8 | 64.5 | 66.7 | 59.4 | 51.1 | 51.1 | 42.9 | 39.3 | 44.0 |
| | Extract | 50.6 | 59.0 | 62.1 | 57.1 | 43.7 | 40.0 | 29.0 | 31.6 | 39.7 |
| | Breakout | 55.1 | 64.4 | 66.8 | 57.5 | 47.0 | 41.4 | 32.0 | 32.0 | 39.7 |
| 100 | Supply | 58.3 | 69.2 | 68.6 | 64.6 | 56.9 | 56.1 | 47.9 | 45.6 | 48.1 |
| | Extract | 51.8 | 63.1 | 64.9 | 63.9 | 52.4 | 45.9 | 34.8 | 34.8 | 45.2 |
| | Breakout | 59.4 | 68.1 | 69.7 | 68.3 | 53.1 | 47.1 | 36.5 | 34.3 | 46.5 |

Tested according to BS 848. Breakout quoted spherical. Supply and extract quoted hemispherical.

Performance - 300ZH Model

Fan speeds are fully adjustable within the performance range.



Sound Data - 300ZH Model

| Flow l/s | Flow % | Test mode | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) at 3m |
|----------|--------|-----------|------|------|------|------|------|------|------|------|-------------|
| 26 | 10 | Supply | 42.5 | 42.8 | 38.3 | 32.9 | 28 | 24.6 | 25.5 | 30.3 | 26.3 |
| | | Extract | 46.9 | 45 | 40.3 | 34.4 | 27.4 | 23 | 24.3 | 30.1 | 22.5 |
| | | Breakout | 48.7 | 52.1 | 47.7 | 40.5 | 32.9 | 27.3 | 25.1 | 31.6 | 24.4 |
| 44 | 20 | Supply | 45.6 | 47 | 41.7 | 35.7 | 31.7 | 26.7 | 24.8 | 30 | 29.9 |
| | | Extract | 46.9 | 48.6 | 47 | 38.2 | 29.5 | 25.3 | 23.8 | 29.9 | 25.3 |
| | | Breakout | 50.2 | 56.4 | 53.9 | 46.3 | 37.5 | 32.5 | 25.2 | 31.4 | 28.8 |
| 55 | 30 | Supply | 44.4 | 46 | 52.9 | 39.4 | 35.1 | 31.9 | 25.5 | 30.5 | 33.9 |
| | | Extract | 47 | 48 | 55.5 | 42.5 | 32.2 | 29.9 | 25.7 | 30.6 | 30.6 |
| | | Breakout | 52.2 | 59.6 | 62 | 51.4 | 41.9 | 37.4 | 28.1 | 31.4 | 34.7 |
| 66 | 40 | Supply | 43.1 | 44.4 | 54.3 | 43.5 | 39.2 | 35.7 | 27.7 | 29.9 | 35.0 |
| | | Extract | 48.9 | 49 | 58.4 | 45.9 | 35.7 | 33.4 | 25.3 | 29.9 | 33.4 |
| | | Breakout | 54.6 | 58.3 | 66.1 | 52.6 | 39.3 | 36.5 | 31.1 | 35.3 | 37.7 |
| 85 | 60 | Supply | 44.7 | 49.8 | 58 | 50.4 | 45 | 41.9 | 30.6 | 30.3 | 39.1 |
| | | Extract | 51 | 53.6 | 61.2 | 50.1 | 41.6 | 40.1 | 30.7 | 31.1 | 36.7 |
| | | Breakout | 57.5 | 62.6 | 68.7 | 57.5 | 45.9 | 41 | 36.3 | 34 | 40.7 |
| 96 | 80 | Supply | 46 | 52.2 | 57.1 | 56.5 | 47.2 | 44.2 | 32.3 | 30.5 | 40.5 |
| | | Extract | 55.5 | 55 | 63.1 | 53.4 | 44.3 | 41 | 33.5 | 31.4 | 38.8 |
| | | Breakout | 62.2 | 65.7 | 68.8 | 63 | 50.8 | 43.8 | 38.8 | 35.4 | 42.9 |
| 98 | 100 | Supply | 46.6 | 52.3 | 57 | 55.4 | 47.1 | 43.7 | 32.1 | 30.3 | 40.1 |
| | | Extract | 53.7 | 55.2 | 63.3 | 53.3 | 44.1 | 41.2 | 33.2 | 31.5 | 38.9 |
| | | Breakout | 62.2 | 73.8 | 77.4 | 74.1 | 67.4 | 61 | 53.6 | 45.4 | 53.9 |

Tested according to BS848. Breakout quoted spherical. Supply and Extract quoted hemispherical.

Consultant's Specification

Operation

The supply and extract ventilation unit shall be as Sentinel Kinetic Z as manufactured by Vent-Axia and shall be sized as indicated on the drawings and shall be in accordance with the particular specification; 200Z – 200mm deep, 300Z – 300mm deep.

The Sentinel Kinetic Z shall automatically vary the ventilation rate via EC/DC motors, as it receives signals from one of the optional interconnected sensors. When a signal is received, the fans shall either vary their speed proportionally or on a trickle and boost principle.

The unit shall have the facility to commission the supply and extract fans individually via the wired remote control unit. The fans themselves shall have independent, infinitely variable speed control.

Unit Specification (200Z/ZM, 300ZH)

The unit shall be manufactured with a galvanized steel outer case construction and shall have a high efficiency aluminium heat exchanger.

Unit Specification (200ZP)

The unit shall be manufactured with high density EPP case and shall have a high efficiency polymer heat exchanger.

The unit shall have supply and extract filters, automatic summer bypass, integral minimum and maximum infinitely variable speed controls with failure indication via the wired remote controller.

The unit shall have low energy, high efficiency EC/DC fan/motor assemblies with sealed for life bearings. The impellers shall be high efficiency backward curved centrifugal type.

The unit shall have a heat exchanger cell with a thermal efficiency of up to 81% when tested to EN 308. This shall be protected by ISO 45° Coarse (G3) Filter 2pk grade synthetic filters on supply and extract. Complete with a condensate drip tray and drain connection.

The unit shall be constructed with a removable access panel allowing full maintenance access from below. The removable panel shall provide access to the following:

- ✓ Supply or extract fan
- ✓ Supply and extract filter
- ✓ Heat exchanger
- ✓ Access to the electrical connections

Access shall be provided for wiring termination and setup/commissioning.

Sound tested to BS EN 13141-7:2010

Standard Controls

All Sentinel Kinetic Z units shall incorporate the following functions integrally mounted, pre-wired and factory fitted by the manufacturer:

- ✓ Infinitely variable fan speed control on supply and extract
- ✓ Min/max ventilation control/set point
- ✓ Heating interlocks
- ✓ 0-10V proportional speed adjustment
- ✓ Volt free contacts
- ✓ 24V sensor supply
- ✓ On/off or trickle boost function from remote switch, e.g. PIR occupancy detector
- ✓ The unit shall be controlled by the 'Sentinel' control devices (enablers and sensors) as detailed in the schedule or on the drawings

- ✓ Fully automatic summer bypass
- ✓ Switched Live input with adjustable 'delay-on' feature
- ✓ Fan failure or component failure indicated via individual fault code display
- ✓ Running time counter
- ✓ Control panel PIN number lock
- ✓ Automatic frost protection effective to -20°C
- ✓ The unit shall incorporate ('H' models) an integral humidity sensor with the following features:
 - Ambient Response: Raises the humidity trigger point as dwelling temperature reduces
 - Rapid Response: Monitors the rate of change in humidity and triggers increased airflow even if the humidity trigger threshold is not reached
 - Proportional Response: Incrementally increases the fan speed to reduce noise and reduce energy consumption

The unit shall be controlled by the 'Sentinel' control devices (enablers and sensors) as detailed in the schedule or on the drawings.

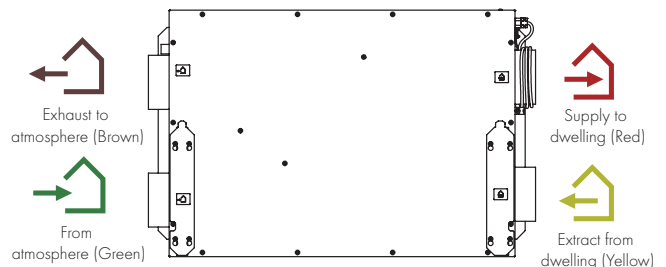
Mounting Option



Slab

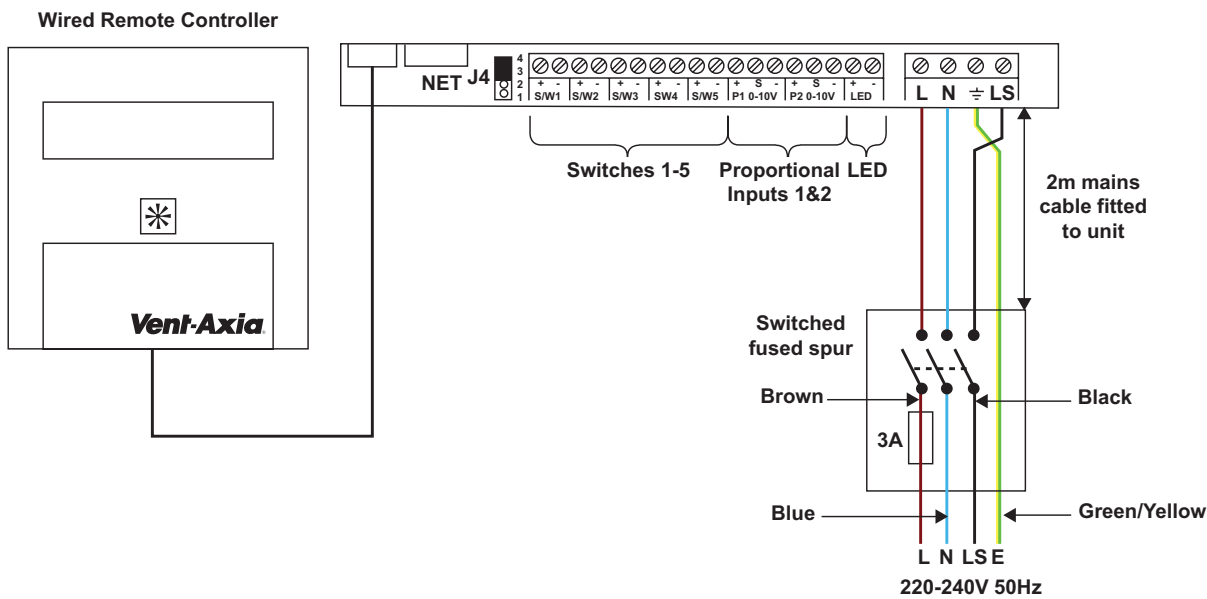
Airflow Direction

View from beneath (drawing for airflow demonstration only - not intended to be an accurate representation of the product)

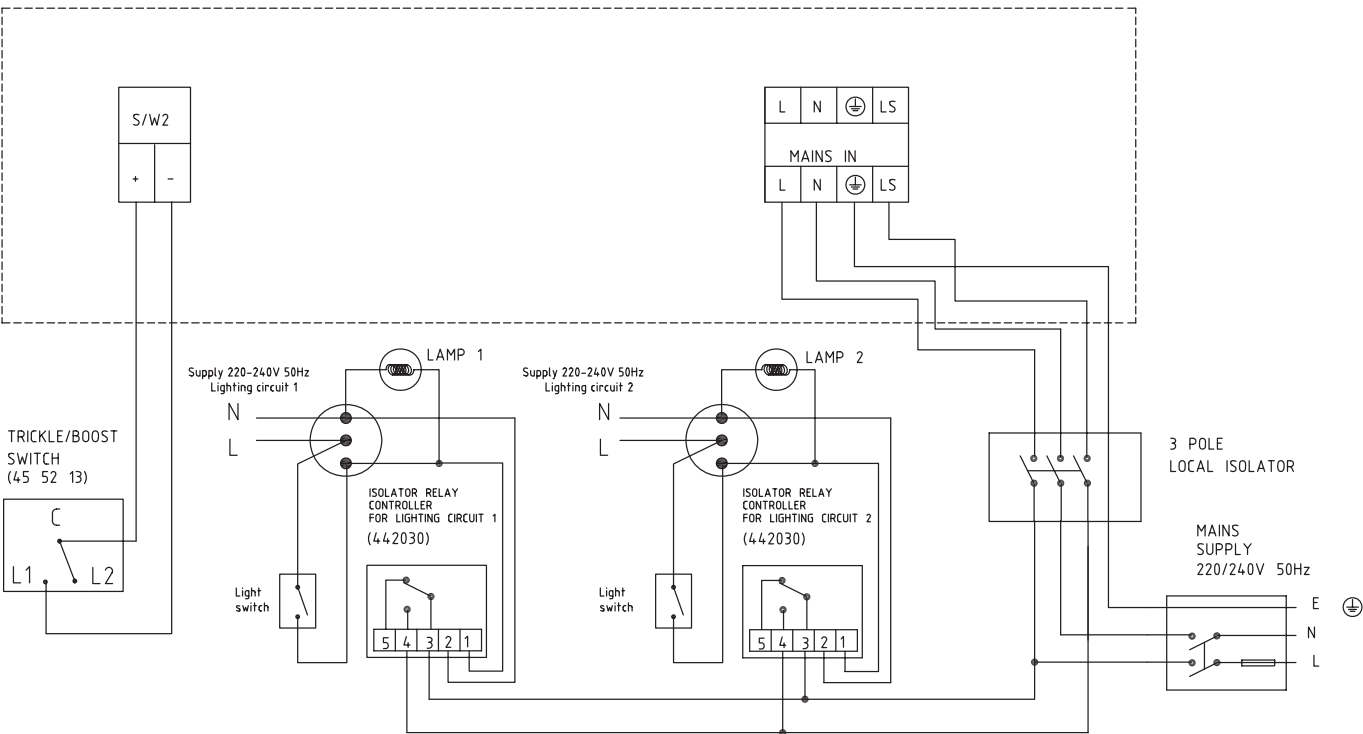


Electrical Connection

Please note: Electrical connection should be carried out by an appropriately qualified person and in accordance with current wiring regulations.



Trickle to Boost by two lighting circuits or Trickle/Boost Switch



Lo-Carbon Kinetic Plus E

- Acoustic Enclosure option for reduced breakout noise
- Acoustic Top Box option for reduced in-duct noise
- Lightweight for easy installation
- Easy access filters
- External condensate connection
- Compatible with a range of controls: PIR, Humidistat
- Horizontal duct option for space-saving installations
- Up to 94% heat recovery
- Summer mode
- Manufactured in the UK
- Switched live inputs (light switch control)



A wholehouse heat recovery system with up to 94% energy efficiency. An easily accessible heat recovery cube protected by two removable ISO 45% Coarse (G3) Filters. Two Lo-Carbon Energy Saving EC/DC fans ensure long life (typically over double the life of AC motors) and lowest possible energy use. Fully insulated construction with built-in condensation drain.

Lo-Carbon Kinetic Plus E meets the latest requirements of the Building Regulations Approved Document F for wholehouse system ventilation.

The Lo-Carbon Kinetic Plus E model has two adjustable speeds, normal and boost. On the front of the unit is the controller that can be used to preset the speeds to any required performance, up to 111l/s (400m³/hr) 150Pa. Offering 'Close Control' to prevent over ventilating. Acoustically lined - low noise levels from only 20dB(A) @ 3m.

For scenarios where noise is a critical issue, an Acoustic Enclosure is available to reduce breakout noise and the Acoustic Top Box will reduce in-duct noise at key frequencies.

Left or Right Hand Installation

Units are supplied right handed with duct spigots to outside on the right hand side. These can be reversed onsite by simply removing the control panel, rotating the unit 180 degrees and reattaching the control panel.

Spigot Options

The combination of spigot options allows installation in confined locations. If vertical and horizontal connections are required on the same outlet/inlet, additional spigots can be supplied.

Filter Check

An LED on the control panel illuminates at 6 month intervals to remind users to check and clean the filters.

Frost Protection

The Kinetic E range benefits from an automatic frost protection system to prevent the heat recovery cell freezing in very cold weather, while at the same time maintaining ventilation.

Control Options

There are two LS (Switched Live) inputs allowing the unit to be connected to a number of sensors and controllers such as Timespan, Ambient Response Humidistat. One of the LS connections also benefits from a 'Delay-On' feature which prevents the unit boosting unnecessarily. Switching on the control panel allows activation of the Summer Mode.

Model

| Model | Stock Ref |
|--|-----------|
| Kinetic Plus E | 449059 |
| Kinetic Plus E with Acoustic Top Box & Enclosure | 479562 |
| Kinetic Plus E with Acoustic Top Box | 479561 |
| Kinetic Plus E with Acoustic Enclosure | 479560 |

Accessories

| Model | Stock Ref |
|---------------------------------------|-----------|
| ISO 45% Coarse (G3) Filter 2pk | 403702 |
| ISO ePM10 50% (M5) Filter | 444201 |
| Isolator Relay Controller | 442030 |
| 180mm/200mm Spigot Kit (One per pack) | 446523 |

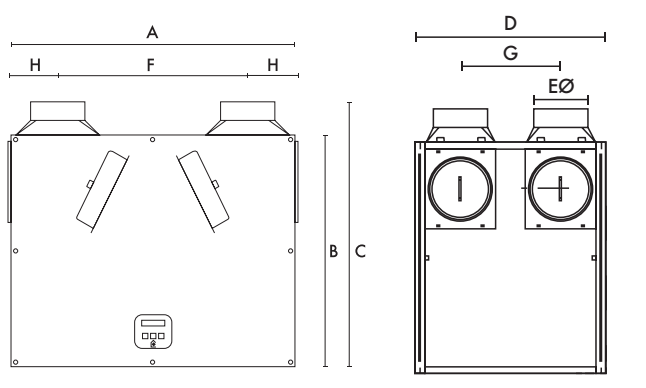
SEC Class

| Model | SEC Class |
|----------------|-----------|
| Kinetic Plus E | A+ |

SAP PCDB Test Results

| | SAP 2009 | | SAP 2012 | |
|-------|----------------------|-------------|----------------------|-------------|
| | Thermal Efficiency % | SFP (W/l/s) | Thermal Efficiency % | SFP (W/l/s) |
| K + 1 | 94 | 0.41 | 94 | 0.40 |
| K + 2 | 94 | 0.40 | 94 | 0.43 |
| K + 3 | 94 | 0.43 | 94 | 0.53 |
| K + 4 | 94 | 0.45 | 93 | 0.65 |
| K + 5 | 93 | 0.52 | 93 | 0.78 |
| K + 6 | 93 | 0.61 | 92 | 0.93 |
| K + 7 | 93 | 0.73 | | |

Dimensions (mm)

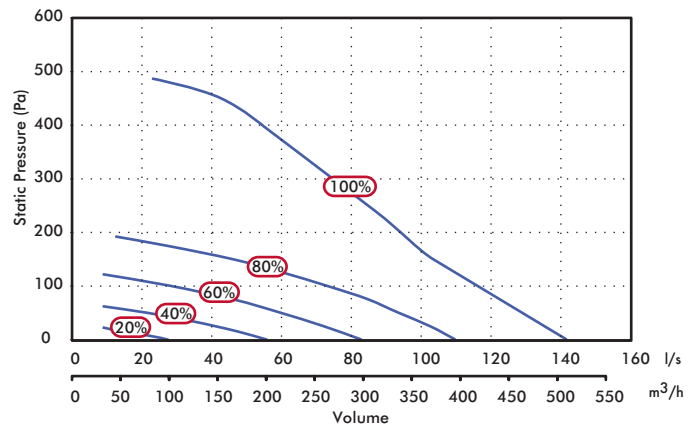


| A | B | C | D | EØ | F | G | H |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 785 | 635 | 722 | 550 | 150 | 520 | 275 | 135 |

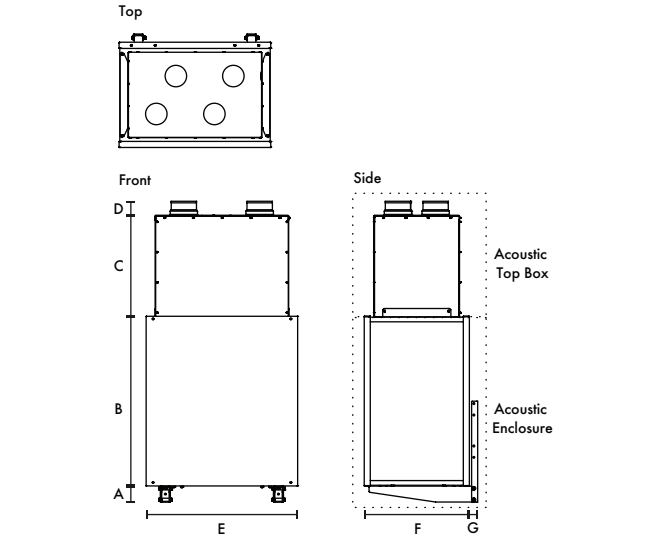
Weight: 24kg

Performance

Fan speeds are fully adjustable within the performance range.



Acoustic Solution



| A | B | C | D | E | F | G | kg | kg | Spigot |
|----|-----|-----|----|-----|-----|----|----|----|--------|
| 80 | 733 | 501 | 71 | 855 | 583 | 40 | 17 | 33 | 150 |

Sound Data (Unit only)

| Unit setting | Test mode | Octave band, Hz, dB SWL | | | | | | | | SPL dB(A) | |
|--------------|-----------|-------------------------|------|------|------|------|------|------|------|-----------|-------|
| | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | LwA | at 3m |
| 20% | Supply | 46.5 | 54.3 | 46.4 | 44.8 | 36.2 | 28.5 | 24.5 | 31.2 | 11.0 | 28.5 |
| | Extract | 46.0 | 52.2 | 42.3 | 38.7 | 27.6 | 24.2 | 24.0 | 31.7 | 7.5 | 25.0 |
| | Breakout | 48.5 | 42.6 | 43.3 | 38.9 | 35.8 | 29.3 | 23.8 | 30.7 | 2.3 | 22.8 |
| 40% | Supply | 50.3 | 59.1 | 54.5 | 56.5 | 47.0 | 39.9 | 26.3 | 31.7 | 20.5 | 38.0 |
| | Extract | 46.8 | 51.6 | 47.8 | 44.4 | 32.7 | 27.4 | 24.4 | 31.7 | 10.5 | 28.0 |
| | Breakout | 48.4 | 51.2 | 53.4 | 46.0 | 41.0 | 34.6 | 25.0 | 30.3 | 8.0 | 28.5 |
| 60% | Supply | 52.4 | 57.2 | 60.4 | 60.9 | 55.8 | 50.3 | 33.1 | 33.9 | 26.1 | 43.6 |
| | Extract | 50.0 | 49.8 | 56.8 | 52.4 | 40.2 | 35.9 | 33.4 | 39.8 | 17.7 | 35.2 |
| | Breakout | 55.0 | 49.6 | 59.7 | 54.5 | 46.9 | 39.9 | 33.6 | 39.2 | 14.4 | 34.9 |
| 80% | Supply | 54.9 | 60.7 | 67.4 | 66.6 | 61.8 | 56.0 | 39.6 | 37.7 | 32.0 | 49.5 |
| | Extract | 50.4 | 52.0 | 61.2 | 56.6 | 45.1 | 39.6 | 34.2 | 40.2 | 21.6 | 39.1 |
| | Breakout | 53.5 | 53.4 | 60.8 | 59.1 | 53.0 | 45.3 | 36.0 | 40.1 | 18.2 | 38.7 |
| 100% | Supply | 54.7 | 61.7 | 70.5 | 69.9 | 62.7 | 57.5 | 42.1 | 38.3 | 34.5 | 52.0 |
| | Extract | 54.4 | 55.1 | 65.8 | 57.5 | 46.9 | 40.6 | 33.7 | 40.0 | 24.3 | 41.8 |
| | Breakout | 56.6 | 54.6 | 60.5 | 60.7 | 54.7 | 45.9 | 36.5 | 39.6 | 19.5 | 40.0 |

Sound Data (Unit with Acoustic Solution)

| Unit setting | Test mode | Octave band, Hz, dB SWL | | | | | | | | SPL dB(A) | |
|--------------|-----------|-------------------------|------|------|------|------|------|------|------|-----------|-------|
| | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | LwA | at 3m |
| 20% | Supply | 55.7 | 49.2 | 36.6 | 23.6 | 17.4 | 14.9 | 17.8 | 23.3 | 36.1 | 18.6 |
| | Extract | 51.4 | 42.4 | 30.3 | 20.9 | 16.8 | 14.9 | 17.8 | 23.3 | 30.8 | 13.3 |
| | Breakout | 37.4 | 39.7 | 30.0 | 22.7 | 15.6 | 14.0 | 17.9 | 23.3 | 28.4 | 7.9 |
| 40% | Supply | 59.7 | 59.7 | 45.5 | 32.2 | 22.2 | 15.2 | 17.9 | 23.3 | 45.1 | 27.6 |
| | Extract | 54.8 | 55.0 | 38.0 | 26.8 | 18.1 | 14.9 | 17.8 | 23.3 | 40.2 | 22.7 |
| | Breakout | 45.7 | 48.5 | 39.9 | 32.8 | 24.2 | 17.5 | 18.0 | 23.4 | 36.8 | 16.3 |
| 60% | Supply | 66.1 | 61.9 | 53.6 | 41.0 | 29.8 | 18.3 | 18.0 | 23.3 | 49.5 | 32.0 |
| | Extract | 60.6 | 55.9 | 48.4 | 34.9 | 23.8 | 16.3 | 17.9 | 23.3 | 43.8 | 26.3 |
| | Breakout | 51.1 | 51.0 | 52.4 | 40.9 | 33.2 | 26.1 | 19.7 | 23.4 | 44.5 | 24.0 |
| 80% | Supply | 70.0 | 67.6 | 68.5 | 48.1 | 37.9 | 25.3 | 19.4 | 23.6 | 60.7 | 43.2 |
| | Extract | 65.4 | 59.7 | 57.2 | 41.6 | 31.3 | 21.8 | 19.2 | 23.4 | 50.4 | 32.9 |
| | Breakout | 55.6 | 55.6 | 57.9 | 47.9 | 40.4 | 34.3 | 26.1 | 23.7 | 51.3 | 30.8 |
| 100% | Supply | 72.1 | 70.1 | 66.4 | 51.6 | 41.9 | 29.7 | 21.7 | 24.0 | 60.0 | 42.5 |
| | Extract | 68.2 | 62.4 | 60.6 | 45.5 | 36.0 | 26.6 | 21.7 | 23.6 | 53.8 | 36.3 |
| | Breakout | 57.6 | 58.8 | 63.3 | 51.0 | 44.2 | 38.5 | 31.0 | 24.9 | 56.3 | 35.8 |

Tested according to BS848. Breakout quoted spherical. Supply and Extract quoted hemispherical. For in-duct data, end reflections are added.

Consultant's Specification

Operation

The supply and extract ventilation unit shall be as Kinetic Plus E as manufactured by Vent-Axia and shall be sized as indicated on the drawings and shall be in accordance with the particular specification.

Supply air to the room shall be pre-heated by the extract air via the integrated composite plastic counterflow heat recovery cell. The Kinetic Plus E shall automatically vary the ventilation rate via EC/DC motors, as it receives signals from one of the optional interconnected sensors. When a signal is received, the fans shall vary their speed on a trickle and boost principle. The unit shall have the facility to commission the supply and extract fans individually via in-built minimum and maximum speed adjustment. The fans themselves shall have independent, infinitely variable speed control.

Unit Specification

The unit shall be manufactured with an ABS outer case construction, and incorporate a reversible core to allow for left or right hand mounting. The unit shall have a high efficiency composite plastic counterflow heat exchanger, supply and extract filters, integral minimum and maximum infinitely variable speed controls with facia mounted failure indication.

The unit shall have low energy, high efficiency EC/DC fan/motor assemblies with sealed for life bearings. The impellers shall be high efficiency backward curved centrifugal type. The unit shall have a heat exchanger cell with a thermal efficiency of up to 94% when tested to EN 308. This shall be protected by ISO 45% Coarse (G3) Filter 2pk grade synthetic filters on supply and extract. Complete with a condensate drip tray and drain connection.

To reduce breakout noise, the MVHR unit shall be provided with an Acoustic Enclosure of steel construction lined with class 'O' acoustic foam. To reduce in-duct noise, the top of the MVHR shall be fitted with an Acoustic Top Box to provide attenuation to the 4 ducts of the unit. This Acoustic Top Box shall be of steel construction lined with acoustic class 'O' foam with the MVHR spigots linked to the Top Box via 4 separate attenuated ducts. The acoustic enclosure and top box shall each be independently tested for noise to BS EN 13141-7.

The unit shall be constructed with a removable Core allowing full maintenance access. The removable Core shall provide access to the following:

- ✓ Supply and extract filter
- ✓ Heat exchanger
- ✓ Access to the electrical connections

Access shall be provided for wiring termination and setup/commissioning.

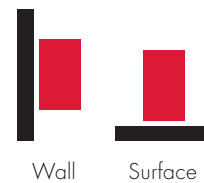
Sound tested to BS EN 13141-7:2010

Standard Controls

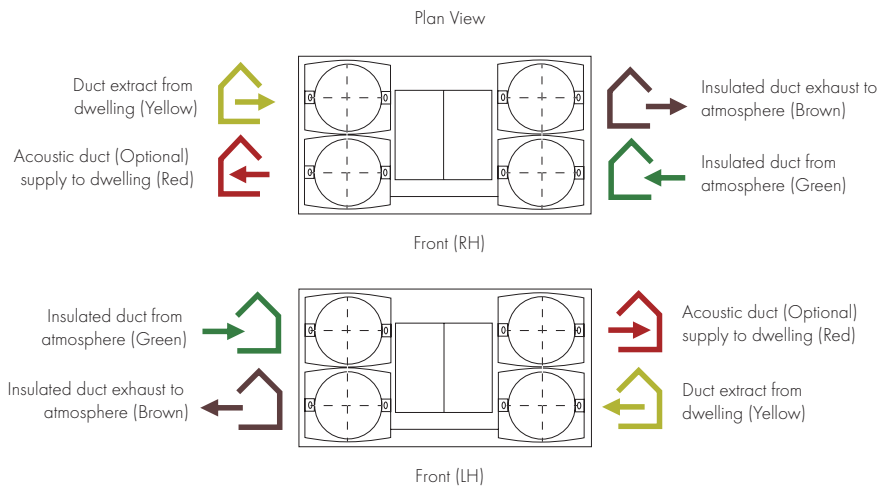
All Kinetic Plus E units shall incorporate the following functions integrally mounted, pre-wired and factory fitted by the manufacturer:

- ✓ Integral infinitely variable fan speed control on supply and extract
- ✓ Integral min/max ventilation control/set point
- ✓ Integral on/off or trickle boost function from remote switch, e.g. PIR occupancy detector
- ✓ Switched Live input with adjustable 'delay-on' feature
- ✓ Tool free filter access
- ✓ Frost protection
- ✓ LED 'filter check' indicator

Mounting Option



Airflow Direction

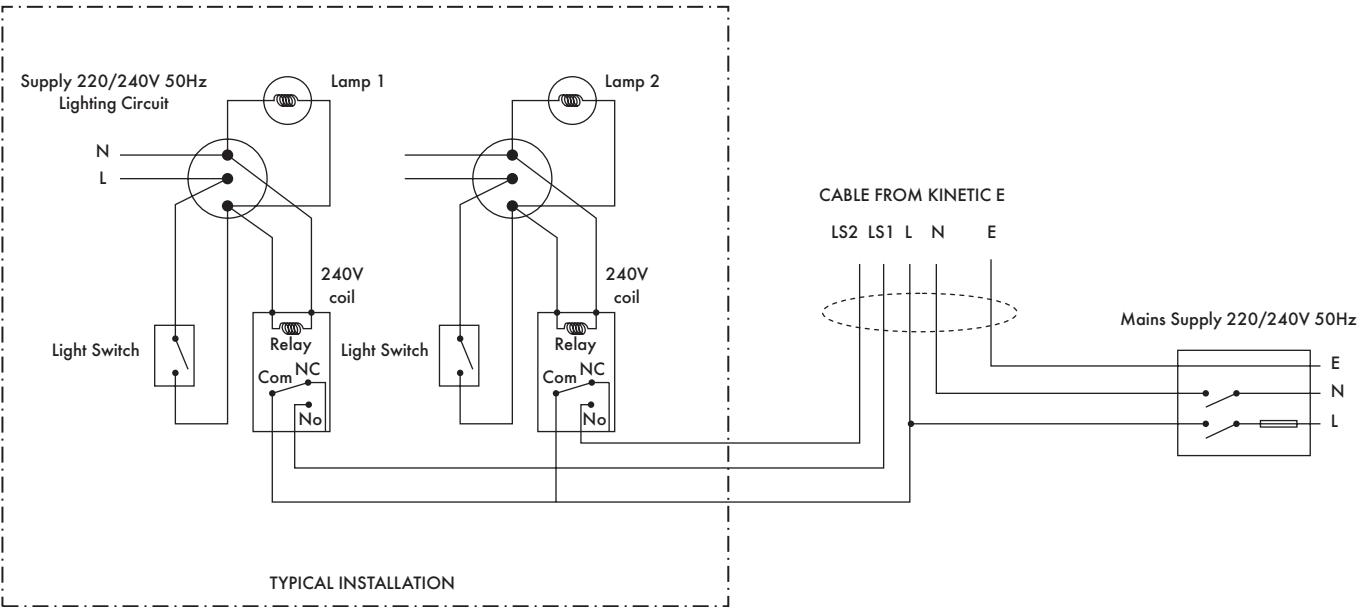


Electrical Connection

The unit can be switched to boost by applying 230 V to the LS1 or LS2 inputs. Alternatively, the boost button on the control unit may be used.

Mains Cable Connections

| Terminal No. | Name | Description |
|--------------|-----------------|---------------------------|
| L | Mains Live | 220-240 V AC, 50 Hz input |
| N | Mains Neutral | 220-240 V AC, 50 Hz input |
| EARTH | Mains Earth | Earthing connector |
| LS1 | Switched Live 1 | 220-240 V AC, 50 Hz input |
| LS2 | Switched Live 2 | 220-240 V AC, 50 Hz input |



Integra

- Heat recovery unit for smaller residential or commercial applications up to 180m²
- Up to 70% heat recovery
- Low power consumption
- Effective condensation control
- Summer mode



The Integra heat recovery unit has been specially designed to provide ventilation for flats or rooms in residential, commercial, educational or leisure applications. Balanced ventilation is achieved by using nominal 100mm diameter rigid ducting.

Using a high performance, polymeric heat exchange cube, together with two powerful fans, the Vent-Axia Integra achieves efficiencies of up to 70%.

The compact cube interleaves outgoing moist air with incoming fresh air, allowing the heat from one to warm the other without the two air streams mixing. Energy is saved on room heating, with no power being used by the cube itself.

Performance of Integra: Up to 49l/s FID. Ideal for installation in ceilings voids or cupboards.

The 150VA Transformer enables the selection of trickle settings to match dwelling volume.

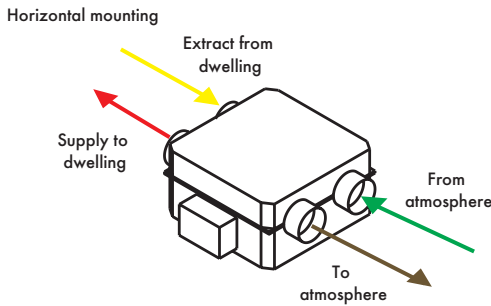
Models

| Model | Stock Ref |
|---------|-----------|
| Integra | 456864 |

Controller

| Model | Stock Ref |
|------------------|-----------|
| Controller 150VA | 563538 |

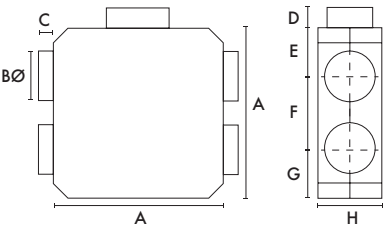
Airflow Direction



SEC Class

| Model | SEC Class | SEC Class (inc. LDC) |
|---------|-----------|----------------------|
| Integra | F | C |

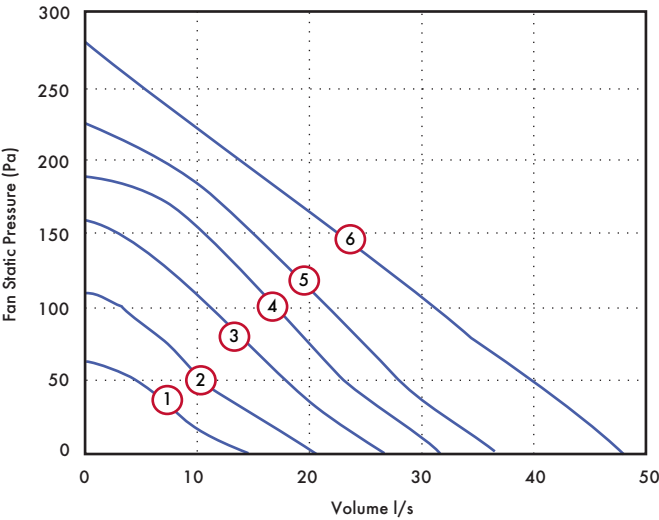
Dimensions (mm)



| A | BØ | C | D | E | F | G | H |
|-----|----|----|----|----|-----|----|-----|
| 400 | 98 | 50 | 65 | 85 | 230 | 85 | 210 |

Weight: 6.5kg

Performance



| Motor Speed/Curve | Volume (l/s) (FID) | Voltage (V) | Wattage (W) |
|-------------------|--------------------|-------------|-------------|
| 1 | 15 | 80 | 32 |
| 2 | 21 | 100 | 47 |
| 3 | 27 | 120 | 64 |
| 4 | 32 | 140 | 81 |
| 5 | 37 | 160 | 99 |
| 6 | 49 | 240 | 182 |

Integra to be used with a 150VA Transformer for maximum controllability.

Integra Plus EC

- Heat recovery unit for larger residential or commercial applications
- Up to 70% heat recovery
- Low power consumption
- Effective condensation control
- 3 speed control
- Summer mode
- EC motors



Easy Installation

The Vent-Axia Integra Plus EC is designed for mounting in ceiling voids, lofts and above a suspended ceiling. Four 150mm spigots are provided for simple connection to insulated flexible or rigid ventilation ducting. The unit comes complete with a 22mm condensate outlet.

The Integra Plus EC incorporates two adjustable speeds and a Purge setting (full Speed).

Switching on the controller allows activation of the Summer Mode.

Controllers & Sensors

| Model | Stock Ref |
|-----------------------------|-----------|
| Ambient Response Humidistat | 563550 |
| Visionex PIR | 459623 |

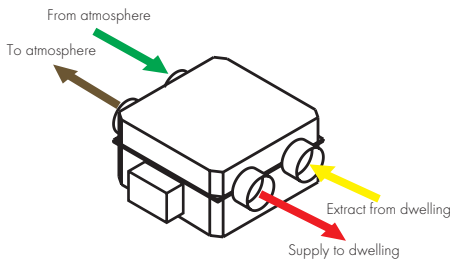
Model

| Model | Stock Ref |
|-----------------|-----------|
| Integra Plus EC | 437666EC |

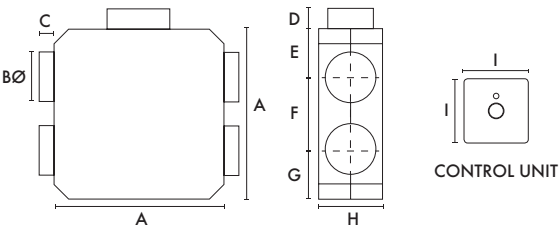
SEC Class

| Model | SEC Class | SEC Class (inc. LDC) |
|-----------------|-----------|----------------------|
| Integra Plus EC | B | A |

Airflow Direction



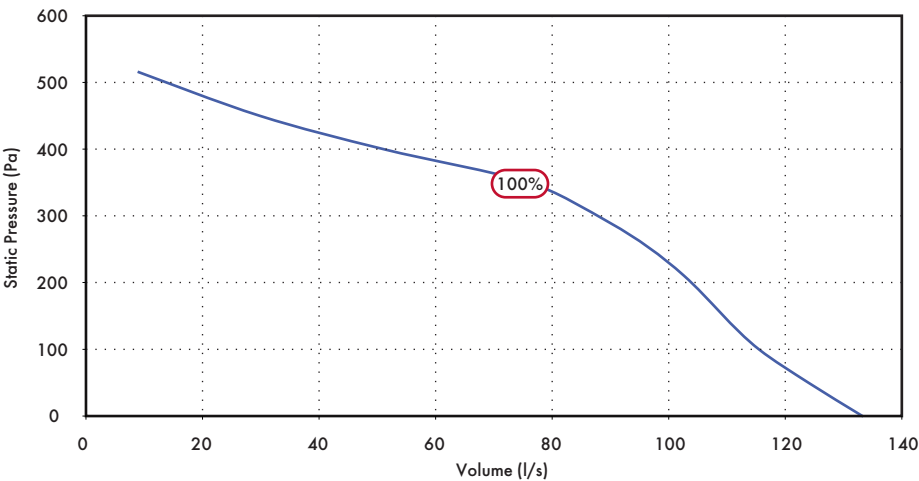
Dimensions (mm)



| A | ØB | C | D | E | F | G | H | I |
|-----|-----|-----|----|-----|-----|-----|-----|----|
| 580 | 150 | 100 | 64 | 125 | 350 | 125 | 305 | 85 |

Weight: 17kg fan box

Performance



Sound Data

| | | Octave band, Hz, dB SWL | | | | | | | | | SPL dB(A) at 3m |
|-----------|-------------------|-------------------------|------|------|------|------|------|------|------|------|--------------------|
| Flow, l/s | Unit setting V | Test mode | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | |
| 55 | 4 | Supply | 39.2 | 43.1 | 44.5 | 47.1 | 42.6 | 36.0 | 29.3 | 30.7 | 30.7 |
| | | Extract | 47.0 | 42.4 | 38.6 | 40.4 | 35.5 | 28.0 | 27.9 | 32.6 | 25.3 |
| | | Breakout | 43.2 | 42.7 | 38.2 | 37.6 | 33.4 | 28.4 | 27.6 | 31.5 | 21.7 |
| 69 | 5 | Supply | 42.0 | 47.6 | 46.1 | 49.9 | 48.8 | 41.2 | 33.7 | 32.5 | 34.4 |
| | | Extract | 47.8 | 42.2 | 41.4 | 43.2 | 40.4 | 29.6 | 27.7 | 32.5 | 27.7 |
| | | Breakout | 45.2 | 45.7 | 41.9 | 40.7 | 37.3 | 30.5 | 27.5 | 32.4 | 23.8 |
| 79 | 6 | Supply | 46.0 | 49.7 | 50.6 | 54.0 | 54.4 | 45.9 | 39.6 | 36.9 | 38.7 |
| | | Extract | 44.5 | 43.2 | 44.8 | 46.4 | 46.2 | 32.2 | 28.4 | 32.3 | 31.4 |
| | | Breakout | 46.2 | 47.2 | 44.3 | 43.4 | 43.1 | 32.8 | 28.5 | 32.2 | 26.6 |
| 81 | 6.6 | Supply | 47.0 | 52.5 | 53.8 | 56.4 | 58.3 | 48.8 | 42.8 | 40.8 | 41.8 |
| | | Extract | 50.3 | 45.3 | 47.7 | 48.5 | 47.4 | 35.0 | 30.7 | 32.9 | 33.0 |
| | | Breakout | 45.5 | 47.9 | 45.5 | 45.5 | 45.5 | 34.0 | 29.2 | 31.5 | 28.3 |
| 95 | 7 | Supply | 48.9 | 54.1 | 56.3 | 58.0 | 59.2 | 51.0 | 45.9 | 43.8 | 43.3 |
| | | Extract | 47.6 | 46.5 | 49.4 | 49.7 | 48.3 | 37.0 | 31.1 | 32.3 | 34.0 |
| | | Breakout | 49.0 | 49.5 | 48.2 | 47.5 | 47.3 | 36.7 | 31.1 | 32.3 | 30.1 |
| 109 | 8 | Supply | 51.0 | 58.2 | 57.4 | 60.1 | 61.2 | 54.4 | 48.9 | 48.0 | 45.6 |
| | | Extract | 56.2 | 52.4 | 51.7 | 53.1 | 49.6 | 39.5 | 33.8 | 33.2 | 36.3 |
| | | Breakout | 51.8 | 53.9 | 51.3 | 50.7 | 48.7 | 40.3 | 34.0 | 32.5 | 32.2 |
| 113 | 9 | Supply | 49.1 | 56.1 | 59.4 | 62.8 | 63.3 | 57.2 | 52.1 | 50.8 | 47.4 |
| | | Extract | 54.5 | 50.9 | 52.4 | 54.5 | 51.4 | 42.3 | 35.3 | 33.8 | 37.8 |
| | | Breakout | 53.6 | 54.3 | 52.8 | 52.3 | 50.8 | 43.4 | 36.2 | 33.5 | 34.1 |

Tested according to BS848. Breakout quoted spherical. Supply and Extract quoted hemispherical.

HR100R/RS

- Controls condensation and odours
- Eliminates mould growth
- Up to 70% heat recovery - saves energy
- Extremely quiet operation
- Two speed settings
- ERP exempt (<30W)



The HR100R and HR100RS are ideal for single bedrooms/bathroom applications situated in hotel rooms, nursing homes and residential care homes.

The HR100R features top access making it ideal for loft installations.

The HR100RS features bottom access for installation on the slab above a suspended ceiling.

The HR100R/RS is a self-contained heat recovery unit for mounting in lofts and suspended ceilings. The unit is supplied without controls to allow for the unit to be tailored to suit the individual requirements.

Compatible with standard 100mm ducting for connection to internal grilles and external cowl.

The unit comes fitted with a single 2-speed motor, and provides continuous low volume ventilation with a boost option. A variety of control devices are available for manual or automatic speed control.

An integral heat exchanger transfers heat from the outgoing stale air to the fresh air supply, raising the supply air temperature whilst at the same time reducing its relative humidity.

Up to 18l/s FID capacity. The unit provides superior control of condensation and odours, ideal for bathrooms or small internal rooms.

Controllers

Normal Boost Switch

A single gang switch to boost from high to low speeds on all heat recovery systems.

85 x 85 x 10mm (H x W x D)

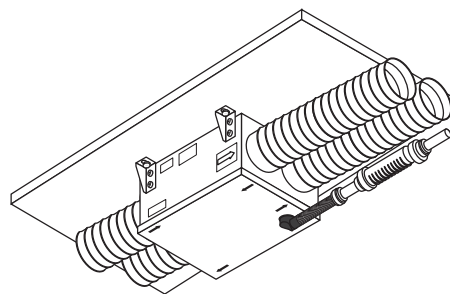
Model

Stock Ref

Normal Boost Switch

455213

HR100RS Version



Models

HR100R

Top access - ideal in loft installations.

Model

Stock Ref

HR100R

370377

HR100RS

Bottom access - ideal for suspended ceilings.

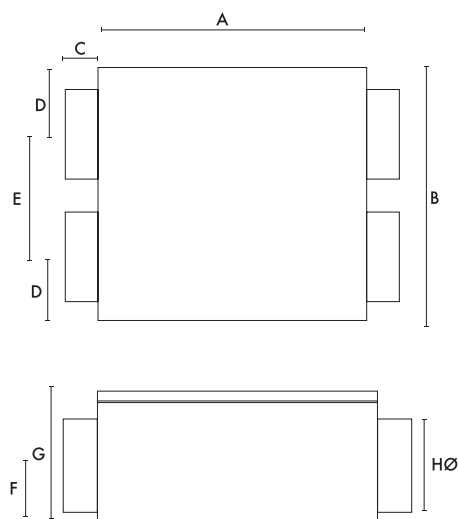
Model

Stock Ref

HR100RS

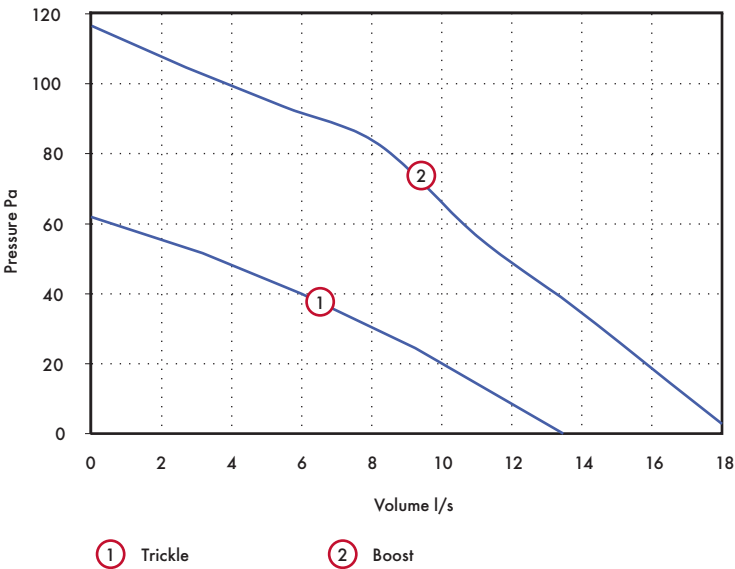
435004

Dimensions (mm)



| A | B | C | D | E | F | G | HØ |
|-----|-----|----|----|-----|----|-----|----|
| 305 | 240 | 50 | 60 | 120 | 70 | 160 | 98 |

Performance



| Model | Weight kg | Extract Perf. l/s | | Watts | | dB(A) @ 3m* | |
|---------|--------------|-------------------|---------|-------|---------|-------------|---------|
| | | Boost | Trickle | Boost | Trickle | Boost | Trickle |
| HR100R | 5.6 | 18.3 | 13.6 | 29 | 19 | 30 | 20 |
| HR100RS | 5.6 | 18.3 | 13.6 | 29 | 19 | 30 | 20 |

Mains electrical supply: 230V/50Hz

HR500

- Efficient 550m³/h heat recovery ventilation unit or high performance 900m³/h extract fan
- Lightweight, compact and easy to install
- Integral shutters on X type model
- Easy to clean
- Up to 70% heat recovery
- Controller with sensor mode, allows a range of sensors to be used in conjunction with the HR500 and HR500X units
- IPX5 rated



Heat Recovery Ventilation

HR500 heat recovery ventilation units for through the wall installation, which exhaust stale air whilst introducing warmed fresh air from the outside.

Ideal for computer rooms, classrooms, offices and the health and leisure industries. The Vent-Axia HR500 unit is the perfect solution for commercial areas that require a high performance balanced intake/extract ventilation scheme. As a heat recovery ventilation unit it moves a useful 153l/s of air.

The compact heat recovery cube interleaves outgoing warm air with incoming fresh air and allows the heat from one to warm the other without the two air streams mixing. Energy is saved on room heating with no power being used by the cube itself.

The HR500 and HR500X consist of a tough telescopic wall sleeve into which the main body of the unit is housed. Walls of up to 670mm thick can be easily accommodated. Behind the neat deflecting fascia grilles are the filters, the heat exchange cube and fan units. All wall sleeve components, the heat exchange cube and the fascia grilles are made of tough polymeric materials.

Electrical

Maximum ambient temperature +40°C.
Supply Voltage 220-240V/1/50Hz.

Models

HR500 Commercial

Wall-mounted intake/extract ventilation unit with built-in heat recovery facility. For commercial and leisure areas. Lightweight, compact and easy to install.

| | |
|-------|-----------|
| Model | Stock Ref |
| HR500 | 14101010 |

HR500X

As HR500 with shutters.

| | |
|--------|-----------|
| Model | Stock Ref |
| HR500X | 14101070 |

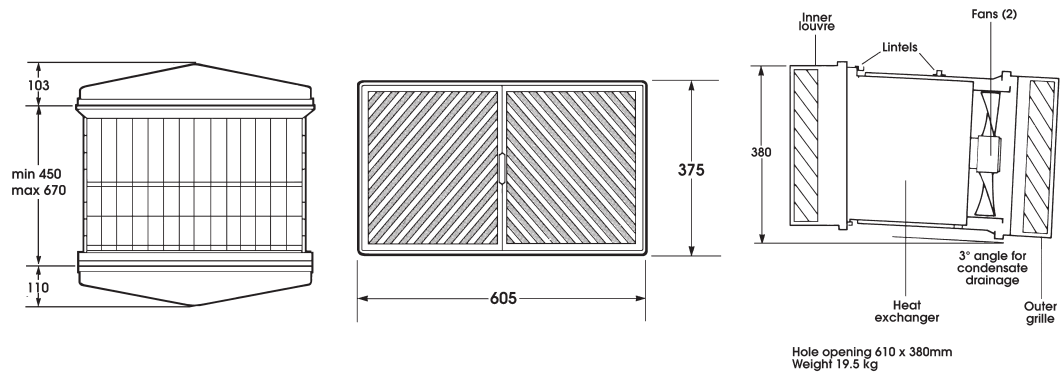
Controller

HR500 Controller

Surface mounting. On/Off remote sensor mode. Heat exchange, single fan extract or twin fan extract modes. Infinitely variable speed. Minimum speed setting. Suitable for controlling up to 2x HR500. 86 x 156 x 53 (W x H x D).

| | |
|------------------|-----------|
| Model | Stock Ref |
| HR500 Controller | W14301010 |

Dimensions (mm)



Performance

| Model | Airflow performance (l/s) | | Watts (max) | Sound dB(A) @ 3m (max) |
|--------|---------------------------|-----------------------|----------------|------------------------------|
| | Heat recovery mode | Extract mode (max) | | |
| HR500 | 153l/s | 250l/s | 200 | 53 |
| HR500X | 153l/s | 250l/s | 220 | 53 |

HR500D

- Self-contained unit with integral fans
- Up to 70% heat recovery
- External wall mounting



The HR500D is a self-contained unit with integral extract and supply fans to provide balanced ventilation and heat recovery via supply diffusers and extraction grilles. The unit is fully speed controllable.

The compact heat recovery cube interleaves outgoing warm air with incoming fresh air and allows the heat from one to warm the other without the two air streams mixing.

Energy is saved on room heating with no power being used by the cube itself.

Performance of HR500D: Supply and extract up to 174l/s FID capacity on heat recovery mode. Ideal for offices, computer rooms, pubs and clubs, etc.

Model

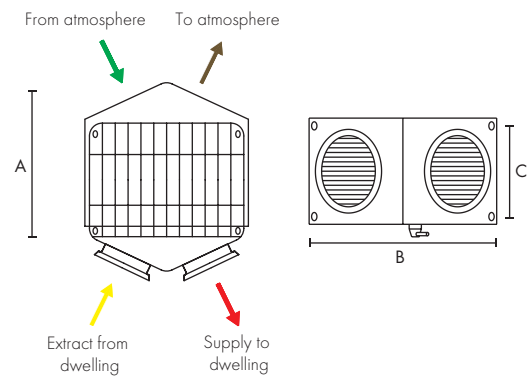
Surface mounting. On/Off remote sensor mode. Heat exchange, single fan extract or twin fan extract modes. Infinitely variable speed. Minimum speed setting. Suitable for controlling up to 2x HR500.

| Model | Stock Ref |
|--------|-----------|
| HR500D | 370450 |

Controller

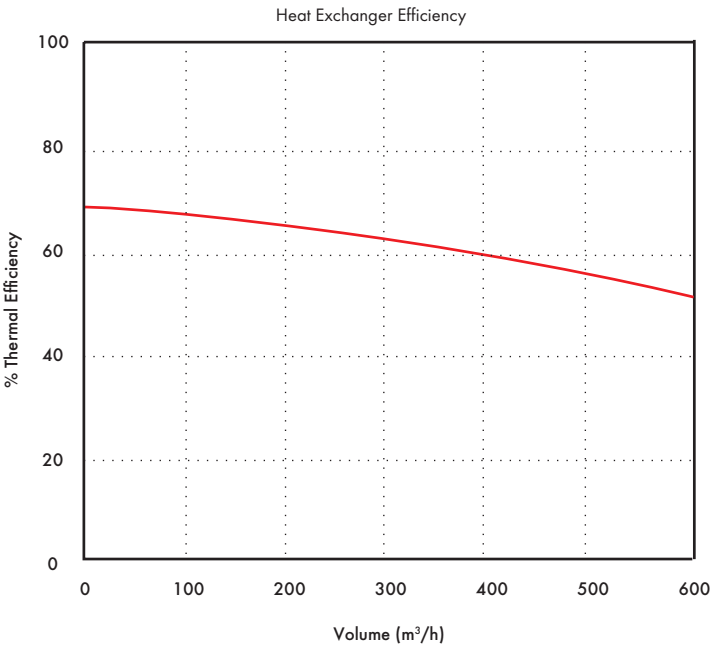
| Model | Stock Ref |
|------------------|-----------|
| Speed Controller | W14301010 |

Dimensions (mm)
Hole opening: 610 x 381mm



| A | B | C |
|---------|-----|-----|
| 480-750 | 600 | 340 |

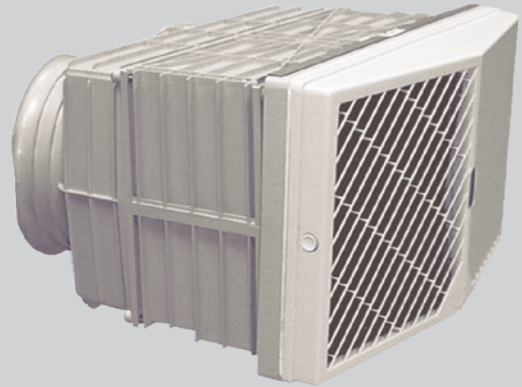
Performance Guide



| Airflow performance l/s (max) | Watts (max) | dB(A) @ 3m (max) | Weight kg |
|-------------------------------|-------------|------------------|-----------|
| 174 l/s | 210 | 53 | 19 |

HR500EP/IP

- Passive - no fans
- Lightweight - easy installation
- Up to 70% heat recovery
- Internal wall mounting HR500IP
- External wall mounting HR500EP



The unit is a semi-remote heat exchange unit with 70% heat recovery, designed for mounting in internal walls (HR500IP) and external walls (HR500EP) for installations using ducted extraction and fresh air supply. The HR500 units provides air movement via two independent in-line duct fans to suit length and configuration of ducting systems. The unit is ideal for use with in-line centrifugal type fans and compatible accessories. Performance of HR500EP and HR500IP: Up to 244 l/s FID capacity (balanced airflow). Ideal for computer rooms, classrooms, offices and the health & leisure industries.

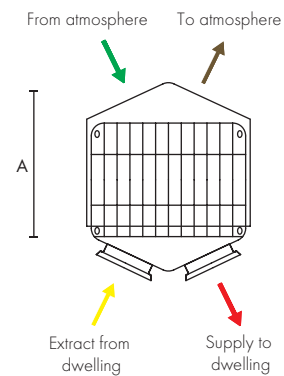
Model

Model
HR500IP
HR500EP

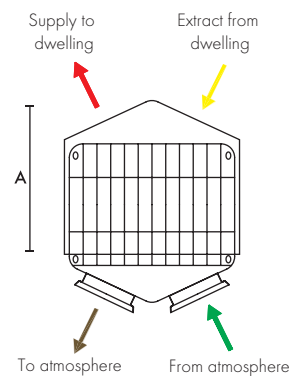
Stock Ref
370447
370451

EP Unit

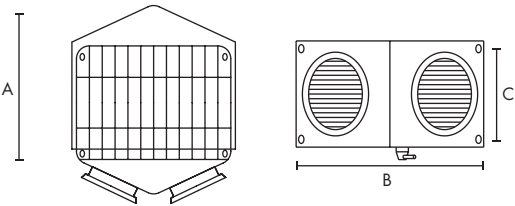
Hole opening: 610 x 381 mm



IP Unit



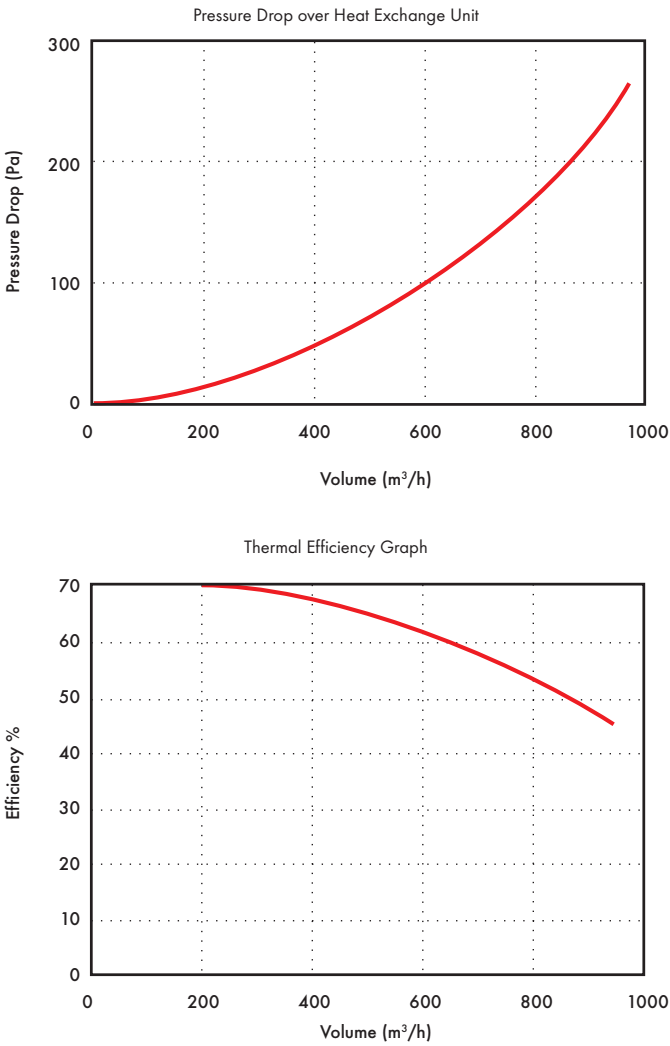
Dimensions (mm)
EP & IP Unit
Hole opening: 610 x 381mm



| A | B | C |
|---------|-----|-----|
| 480-750 | 600 | 340 |

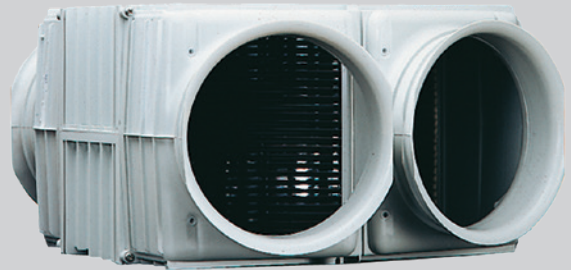
Weight: 9kg

Performance



HR500DP

- Passive - no fans
- Lightweight, compact and easy to install
- Up to 70% heat recovery
- Easy to clean



A 'stand alone' heat exchange module which will transfer up to 70% of the outgoing heat to incoming air. Polymeric construction with spigots to suit 200, 250 and 315mm Ø flexible ductwork.

Module accessible for routine cleaning. Condensate outlet provided. Ideal for use in air conditioned environments.

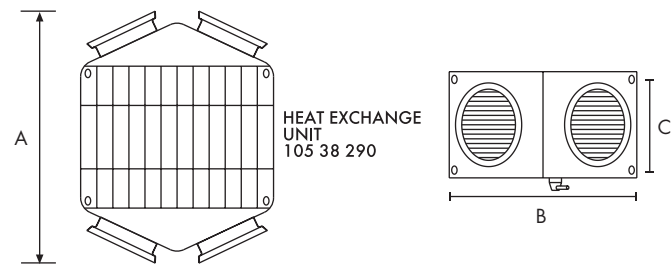
The heat exchanger works at the same high efficiency, automatically keeping a cool room cool.

Performance of the Heat Exchange Unit: At 180l/s achieves 70% temperature efficiency (balanced airflow). Ideal for schools, pubs, offices and leisure industries.

Model

| Model | Stock Ref |
|---------|-----------|
| HR500DP | 10538290 |

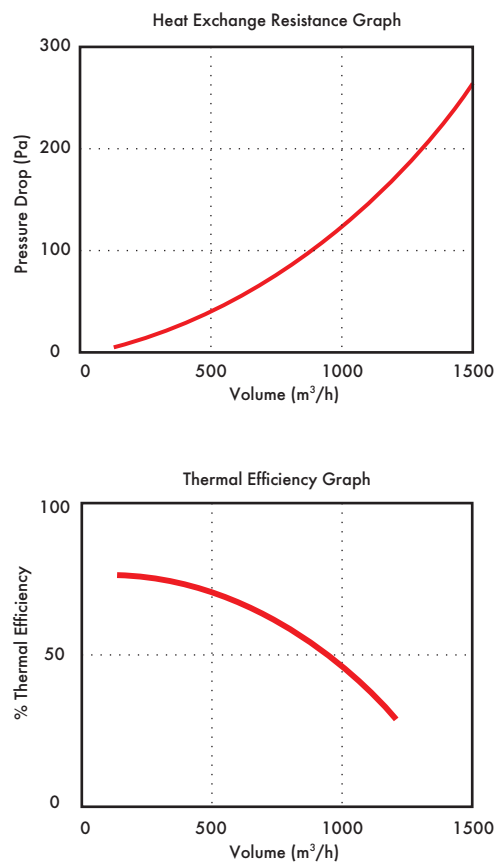
Dimensions (mm)



| A | B | C |
|-----|-----|-----|
| 700 | 600 | 340 |

Weight: 9kg

Performance



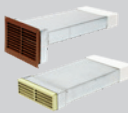









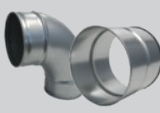
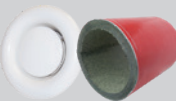

Ducting & Fittings



Since 1936, Vent-Axia has been known for providing a complete ventilation solution. This has not changed, and now we offer one of the widest ranges of ancillaries available today.

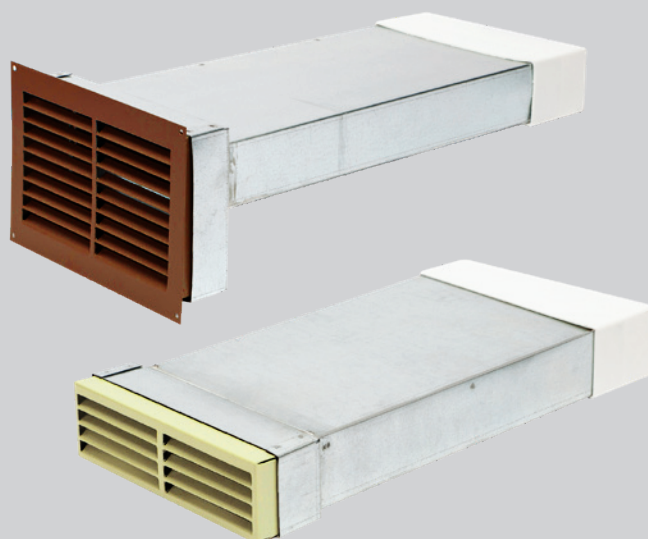
Vent-Axia®

Vent-Axia®
Lo-Carbon™
Approved
Installer

| | | |
|---|--|---------|
|  | A1 Fire-Rated Ducting Kit | G3-G4 |
|  | Uniflexplus+ RV Adjustable Valve | G5-G8 |
|  | Acoustic Residential Purge Ventilator | G9-G10 |
|  | Vent-Axia Pure Air | G11-G12 |
|  | Wholehouse Attenuators | G13-G14 |
|  | Universal Roof Vents | G15 |
|  | Pull-out System Hood | G16 |
|  | Arterial Duct System | G17-G18 |
|  | Uniflexplus+ Semi-Rigid Duct System | G19-G20 |
|  | Internal Fit Wall Kit | G21 |
|  | Low Resistance Inlet/Outlet Air Brick | G22 |
|  | Ducting & Accessories | G23-G30 |
|  | Galvanised Spiral Wound Ducting | G31 |
|  | Fire Stopping - Round and Flat Ducting | G32 |
|  | 100mm & 150mm Accessories | G33-G36 |

A1 Fire-Rated Ducting Kit

- "Telescopic" grille, providing flexibility during installation, accommodating variations in facade
- Built-in weather protection with angled grilles to promote run off
- Precautionary drainage holes
- Compliant with Approved Document B
- Compliant with Building (Scotland) Technical Handbook 2019
- Available in a choice of styles to suit new build and retrofit projects



Fire rated ductwork improves the safe operation of ventilation systems by minimising the chance of fire spread. Effective fire resilient insulation acts as a barrier between ducts, to slow down or prevent the passage of flames and smoke around the building.

A1 Fire-rated metal ducting kits, delivered as one piece, to allow for ease of installation, saving time on site. Perfect for multi-storey developments which require all materials forming part of the external wall to be made from non-combustible materials.

Models

A1 Fire-rated ducting kit 204x60

| Model | Colour | Stock Ref. |
|-----------------------|-------------------------|------------|
| Single Grille | Terracotta RAL 8004 | 498264 |
| Single Grille Flanged | Terracotta RAL 8004 | 498265 |
| Double Grille | Terracotta RAL 8004 | 498266 |
| Double Grille Flanged | Terracotta RAL 8004 | 498267 |
| Single Grille | Cotswold Stone RAL 1001 | 498270 |
| Single Grille Flanged | Cotswold Stone RAL 1001 | 498271 |
| Double Grille | Cotswold Stone RAL 1001 | 498272 |
| Double Grille Flanged | Cotswold Stone RAL 1001 | 498273 |

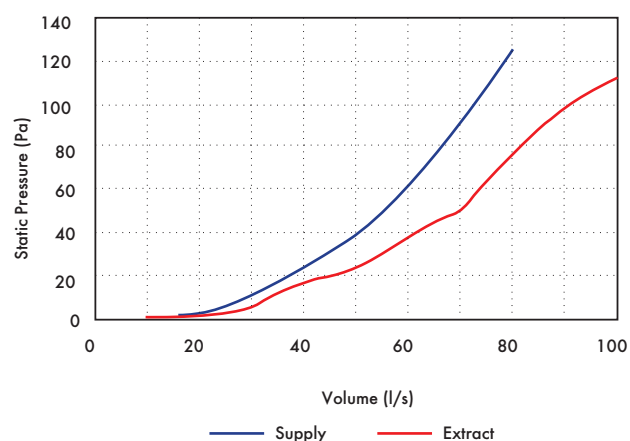
A1 Fire-rated ducting kit 220x90

| Model | Colour | Stock Ref. |
|-----------------------|-------------------------|------------|
| Double Grille | Terracotta RAL 8004 | 498268 |
| Double Grille Flanged | Terracotta RAL 8004 | 498269 |
| Double Grille | Cotswold Stone RAL 1001 | 498274 |
| Double Grille Flanged | Cotswold Stone RAL 1001 | 498275 |

Performance

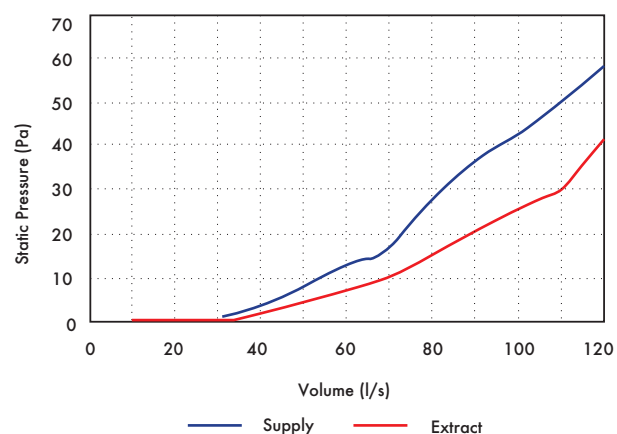
Single Grille

| Model Range | l/s | Pressure (Pa) | |
|---------------|-----|---------------|---------|
| | | Supply | Extract |
| Single Grille | 10 | 0.17 | 0.17 |
| | 20 | 0.8 | 0.18 |
| | 30 | 9 | 5 |
| | 40 | 25 | 17 |
| | 50 | 39 | 22 |
| | 60 | 60 | 38 |
| | 70 | 92 | 50 |
| | 80 | 125 | 77 |
| | 90 | - | 99 |
| | 100 | - | 112 |

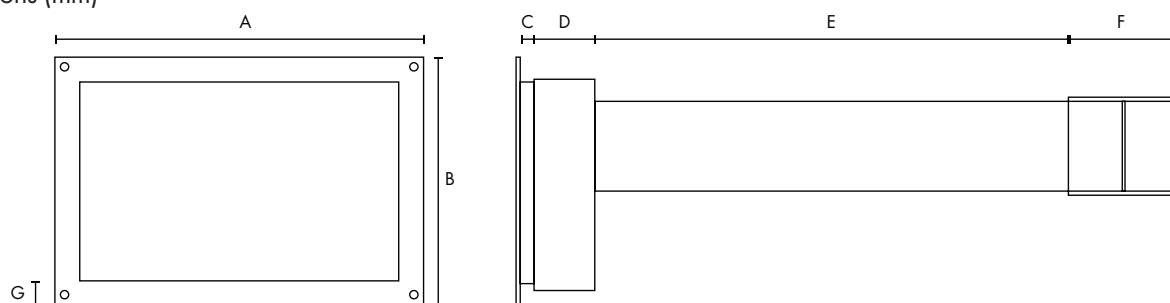


Double Grille

| Model Range | l/s | Pressure (Pa) | |
|---------------|-----|---------------|---------|
| | | Supply | Extract |
| Double Grille | 10 | 0.16 | 0.14 |
| | 20 | 0.19 | 0.146 |
| | 30 | 0.33 | 0.146 |
| | 40 | 3.18 | 1.48 |
| | 50 | 7.9 | 4 |
| | 60 | 12.35 | 7.5 |
| | 70 | 16.28 | 9.9 |
| | 80 | 28 | 15 |
| | 90 | 36 | 21 |
| | 100 | 43 | 25 |
| | 110 | 50.9 | 30 |
| | 120 | 58 | 42 |



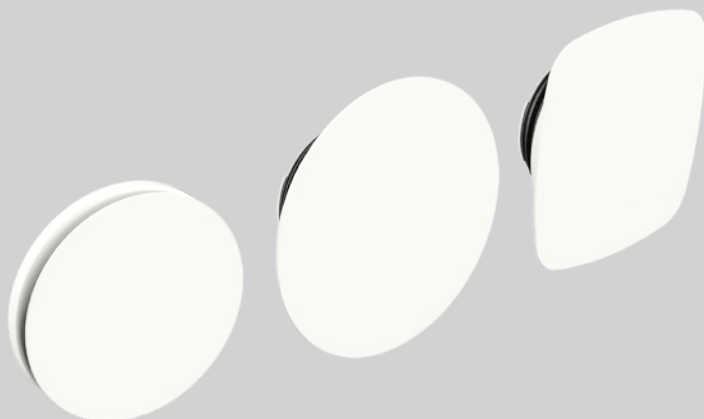
Dimensions (mm)



| Model | Duct Size | A | B | C | D | E | F | G |
|-----------------------|---------------------|-----|-----|----|----|-----|----|----|
| Double Grille Flanged | 204 x 60 / 220 x 90 | 245 | 165 | 10 | 40 | 276 | 74 | 15 |
| Double Grille | 204 x 60 / 220 x 90 | 220 | 141 | 10 | 40 | 276 | 74 | - |
| Single Grille Flanged | 204 x 60 / 220 x 90 | 245 | 90 | 10 | 40 | 276 | 74 | 15 |
| Single Grille | 204 x 60 / 220 x 90 | 220 | 66 | 10 | 40 | 276 | 74 | - |

Uniflexplus+ RV Adjustable Valve

- One valve for air supply and extraction: suitable for up to 21l/s
- Easy to adjust: 26 lockable positions for setting the air volume
- Excellent performance: the lowest noise and pressure drop values
- Same appearance for each volume of air: external dimensions stay the same irrespective of the selected setting
- Low turbulence airflows: prevents accumulation of dirt around the valve
- Flexible installation for all types of air ducts with connection Ø116 or Ø125
- Easy to clean: no need to remove the valve base
- Multiple designs available to suit various interior styles



Adjusting and locking

The Uniflexplus+ air distribution system has been designed to make installing and adjusting ventilation as quick and as easy as possible. With the Uniflexplus+ RV adjustable valve, the supply and extraction of air can be set and locked at fixed volumes in an instant.

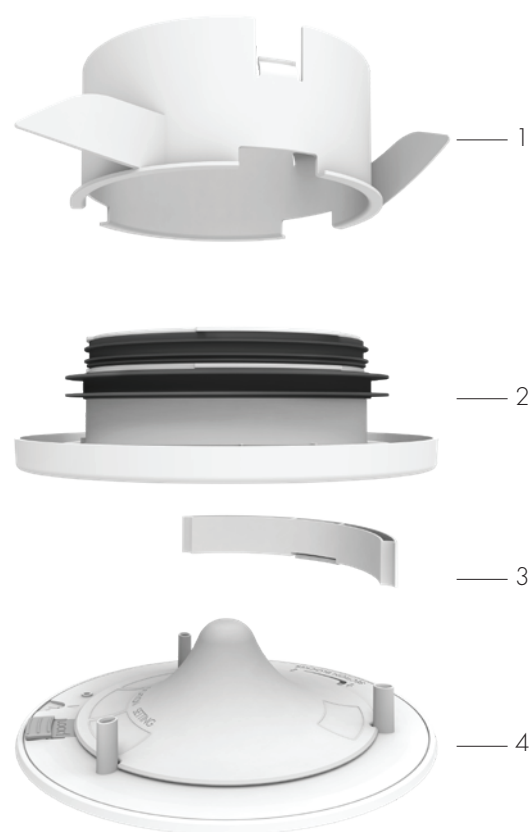
The Uniflexplus+ RV is easy to install, even in suspended ceilings (with the aid of the special collar). The valve is also easy to maintain, as the base of the valve does not need to be removed from the ceiling. The air volume is adjusted entirely in the interior of the valve. This means that the external dimensions – and therefore the appearance – of the valves are always the same.

Airtight and quiet

Uniflexplus+ is well known for its airtight connection without the use of mounting aids. Uniflexplus+ RV combines this with unique noise performance levels. Thanks to very low resistances, it is possible to meet the highest requirements in terms of comfort. If necessary, 120° of the supply/extraction opening can be blocked. In addition, the adjustable valve contains antistatic and antibacterial additives and is UV-resistant.

Different versions

A great deal of attention has been devoted to the design of the adjustable valve and the materials used in it. It has an elegant appearance, with three different designs to suit various interior styles (RV 125, RVG 125 & RVV 125).



1. Collar (Accessory: RVK)
2. Base
3. Blanking plate (Accessory: RVB)
4. Regulating cone

Models



Adjustable Round Valve
Model
RV 125



Adjustable Round Valve Large
Model
RVG 125



Adjustable Square Valve
Model
RVV 125

Accessories



Stock Ref
479372

Collar
Model
RVK

Stock Ref
479376



Stock Ref
479373

Blanking Plate*
Model
RVB

Stock Ref
479377

*Not suitable for RVV 125 model

Specification

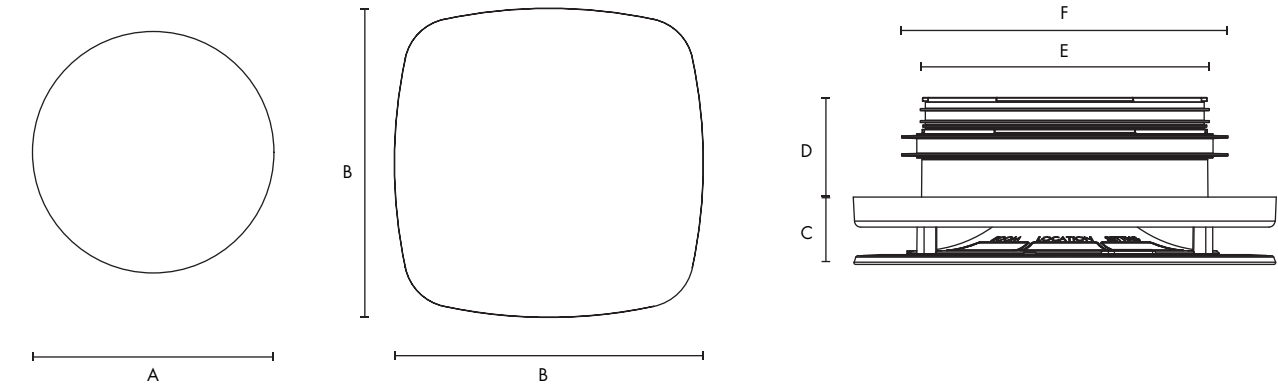
| Model | Weight (g) | Colour | Material |
|---------|------------|----------|------------------------|
| RV 125 | 230 | RAL 9003 | ASA |
| RVG 125 | 410 | | ASA, powder-coated ALU |
| RVV 125 | 450 | | |

Dimensions (mm)

Front view
RV 125 / RVG 125

RVV 125

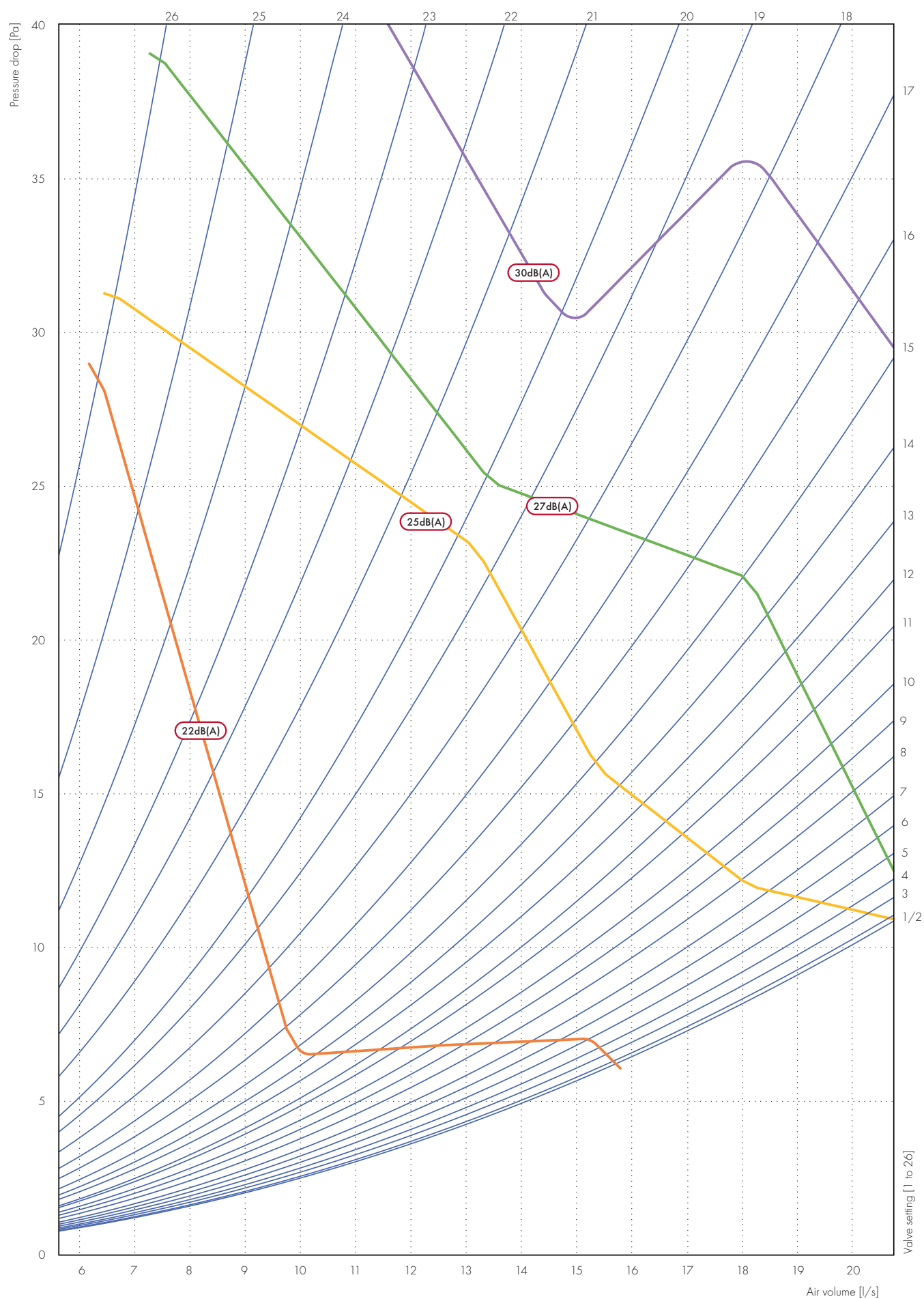
Side view
(Based on drawing of RV 125)



| AØ | B | C | D | EØ | FØ |
|---------|-----|----|----|-----|-----|
| 170/215 | 215 | 27 | 40 | 116 | 125 |

Performance graph for Uniflexplus+ RV: Air supply

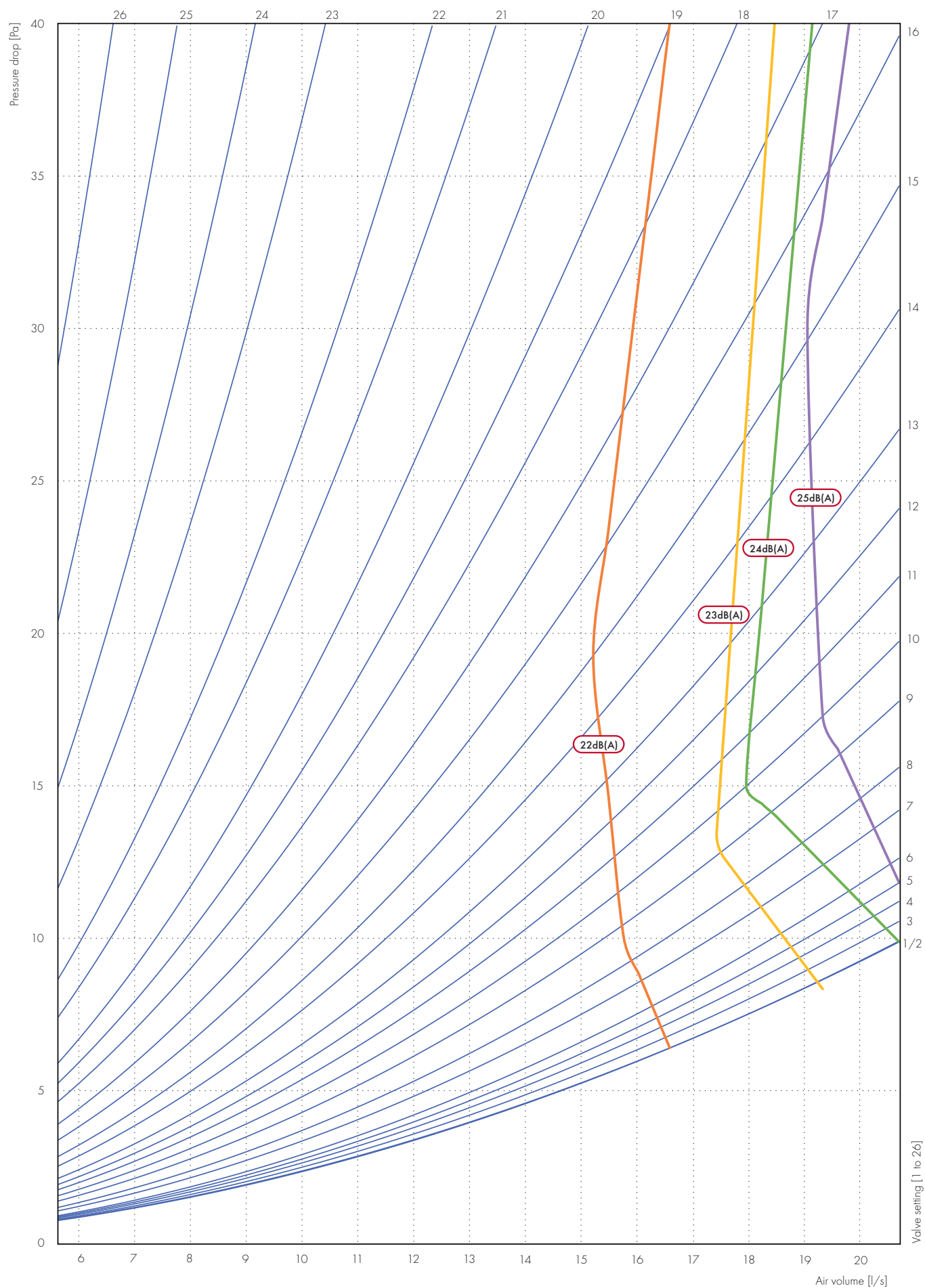
For each valve setting, the noise and pressure drop performance characteristics are shown in relation to the various air volumes.



Tested in accordance with: EN ISO 5135:1999

Performance graph for Uniflexplus+ RV: Air extraction

For each valve setting, the noise and pressure drop performance characteristics are shown in relation to the various air volumes.



Tested in accordance with: EN ISO 5135:1999

Acoustic Residential Purge Ventilator

- Rapid local extract
- Satisfies Part F purge requirements
- Acoustically treated for low noise
- Helps to reduce overheating
- Can be used in conjunction with MVHR and MEV units or as standalone system
- 220x90 or 250 diameter spigots
- Low profile design
- Easy setup
- Energy efficient EC fan
- Variable speed control
- Low maintenance requirement



The Vent-Axia Acoustic Purge Fan is used to rapidly remove indoor pollutants as well as reducing the impact of overheating in residential dwellings, providing a more comfortable and healthy internal environment for home-owners.

The Acoustic Purge Fan can be used in conjunction with a Sentinel Kinetic MVHR unit or independently via a separate switched live connection or 0-10V external sensor input. The Acoustic Purge Fan can be installed in habitable rooms to satisfy Approved Document F Purge requirements (4 air changes per hour). The unit can be installed in conjunction with controllable duct dampers and/ or background ventilators to manage the supply air into the dwelling under purge operation.

The Acoustic Purge Fan is specially treated with acoustic foam to reduce breakout and induct noise, ensuring end-user comfort during operation. As well as boasting a low-profile design, the unit utilises 220x90 spigots to allow easy use of flat ducting in tight void spaces in apartments.

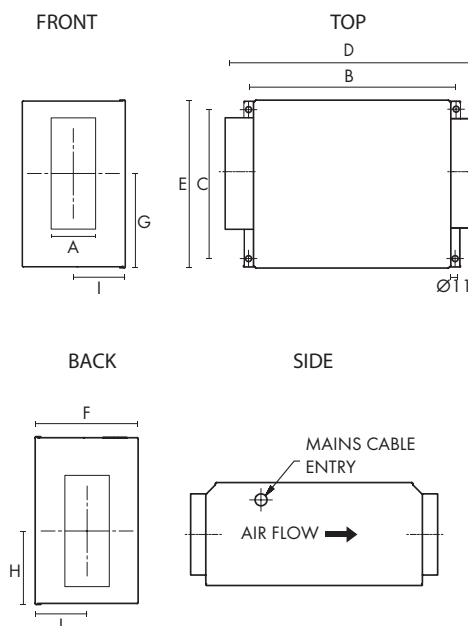
Model

| Model | Stock Ref |
|-----------------------|-----------|
| Acoustic Purge Fan | 477988 |
| Acoustic Purge Fan XL | 479829 |

Accessories

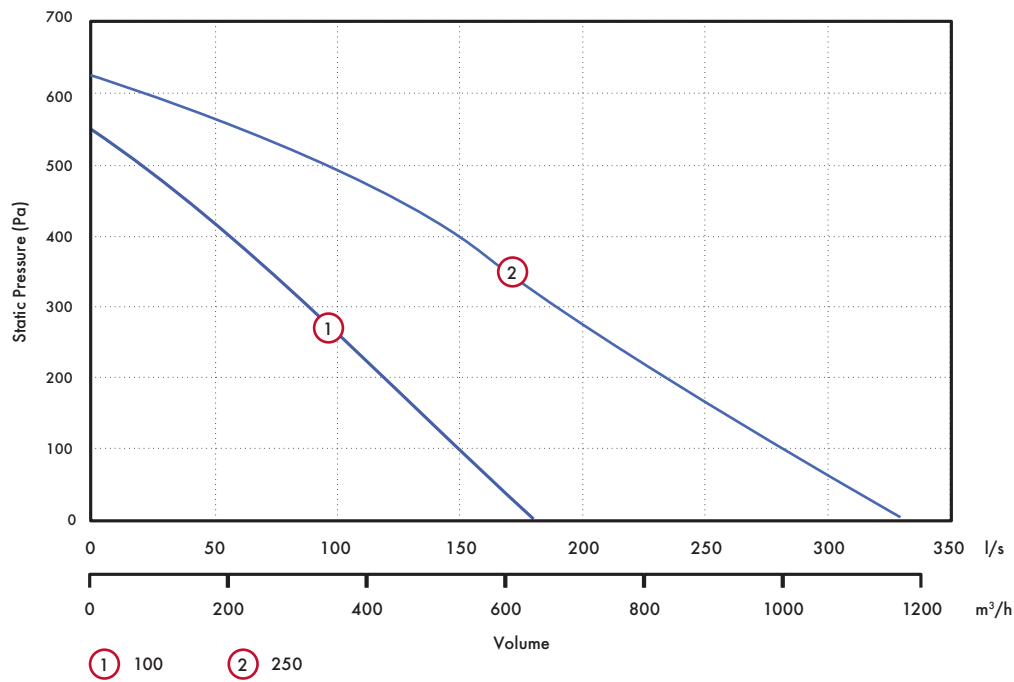
| Model | Stock Ref |
|--------------------------|-----------|
| Remote Speed Control | 10520602 |
| Trickle/Boost Controller | 475775 |

Dimensions (mm)



| Stock Ref | Spigot | A | B | C | D | E | F | G | H | I | kg |
|-----------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|
| 477988 | 220x90 | 85 | 380 | 275 | 456 | 310 | 191 | 165 | 145 | 103.5 | 7.5 |
| 479829 | 250Ø | 250 | 435 | 330 | 511 | 364 | 287 | 182 | 122 | 143 | 13 |

Performance



Sound Data

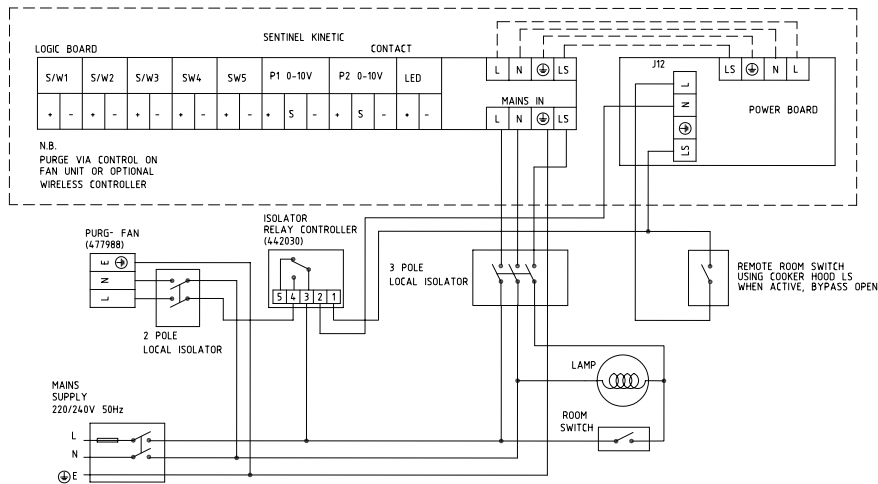
Acoustic Purge Fan

| | | Octave Band (Hz) Sound Power Levels, dB | | | | | | | | dB(A) @ | |
|-------|-----------|---|-----|-----|-----|----|----|----|----|---------|----|
| Speed | Test mode | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | LwA | 3m |
| 25% | Inlet | 35 | 30 | 34 | 32 | 26 | 20 | 18 | 24 | 32 | 15 |
| | Outlet | 36 | 32 | 36 | 34 | 33 | 28 | 20 | 23 | 37 | 19 |
| | Breakout | 37 | 34 | 31 | 28 | 24 | 18 | 18 | 23 | 30 | 10 |
| 50% | Inlet | 40 | 38 | 51 | 47 | 41 | 38 | 31 | 26 | 48 | 31 |
| | Outlet | 40 | 44 | 57 | 51 | 50 | 49 | 43 | 31 | 56 | 38 |
| | Breakout | 43 | 46 | 50 | 46 | 43 | 39 | 32 | 27 | 48 | 27 |
| 80% | Inlet | 45 | 45 | 60 | 60 | 52 | 49 | 44 | 40 | 59 | 42 |
| | Outlet | 50 | 50 | 68 | 65 | 61 | 61 | 56 | 49 | 68 | 50 |
| | Breakout | 64 | 53 | 57 | 58 | 54 | 50 | 47 | 45 | 59 | 39 |
| 100% | Inlet | 55 | 46 | 60 | 61 | 53 | 50 | 45 | 41 | 60 | 43 |
| | Outlet | 53 | 51 | 65 | 66 | 62 | 63 | 57 | 51 | 68 | 51 |
| | Breakout | 56 | 54 | 57 | 60 | 56 | 52 | 49 | 47 | 61 | 41 |

Acoustic Purge Fan XL

| | | Octave Band (Hz) Sound Power Levels, dB | | | | | | | | dB(A) @ | |
|-------|-----------|---|-----|-----|-----|----|----|----|----|---------|----|
| Speed | Test mode | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | LwA | 3m |
| 25% | Inlet | 48 | 49 | 42 | 38 | 35 | 24 | 24 | 29 | 40 | 22 |
| | Outlet | 47 | 46 | 41 | 37 | 41 | 29 | 24 | 29 | 42 | 24 |
| | Breakout | 42 | 42 | 37 | 31 | 29 | 26 | 25 | 31 | 40 | 19 |
| 50% | Inlet | 55 | 57 | 65 | 58 | 49 | 43 | 45 | 38 | 57 | 39 |
| | Outlet | 53 | 57 | 62 | 58 | 54 | 55 | 51 | 36 | 59 | 41 |
| | Breakout | 52 | 48 | 53 | 43 | 37 | 36 | 34 | 30 | 48 | 27 |
| 80% | Inlet | 63 | 65 | 69 | 76 | 62 | 54 | 53 | 49 | 71 | 53 |
| | Outlet | 63 | 66 | 69 | 72 | 69 | 68 | 62 | 55 | 72 | 54 |
| | Breakout | 54 | 56 | 57 | 57 | 48 | 46 | 45 | 36 | 57 | 36 |
| 100% | Inlet | 68 | 71 | 72 | 80 | 68 | 62 | 59 | 56 | 76 | 58 |
| | Outlet | 68 | 71 | 70 | 78 | 75 | 75 | 68 | 63 | 78 | 60 |
| | Breakout | 61 | 63 | 62 | 62 | 55 | 54 | 52 | 45 | 63 | 42 |

Wiring Diagram



Vent-Axia Pure Air

- Removes NOX and other gases
- Removes particles down to PM2.5
- Offers multiple spigot options
- Low pressure drop
- Easy to install with mounting brackets
- Conforms to international air quality guideline limits
- Easy installation & maintenance
- Various sizes to suit residential or commercial applications
- Provides induct noise attenuation
- Insulating jackets available
- New compact unit available



What is it?

The Vent-Axia Pure Air combines particulate and gas filters to remove pollutants prior to entering residences and commercial buildings through mechanical ventilation and heat recovery systems. The Vent-Axia Pure Air is designed to bring outdoor air pollutant levels within the guideline exposure limits as set out in the World Health Organisation Air Quality Guidelines and the CAFE Directive prior to entering an occupied space.

Indoor air quality (IAQ) is becoming increasingly important with properties being built in urban, industrialised areas. The Vent-Axia Pure Air offers a complete filtration solution with a range of specifiable products that meet planning obligations and refine traditional filtration, leaving home owners with confidence in their heat recovery systems.

What does it do?

The Vent-Axia Pure Air sets the benchmark for high level filtration. It targets pollutants generated outside of the home, by traffic and industrial processes, and reduces these before supplying the air into the dwelling.

The Vent-Axia Pure Air filter is fitted to the intake airflow and incorporates two types of filtration:

- Enhanced activated Carbon which removes unpleasant odours and harmful gasses such as Nitrous Oxide (NO₂).
- ISO 65% Coarse (G4) or ePM2.5 (F7) particulate filters which can remove tiny airborne contaminants such as pollen, bacteria and even PM2.5 diesel particulates.

The combination of MVHR and Vent-Axia Pure Air filtration offers the ideal indoor environment.

Unit Specification

The Vent-Axia Pure Air is manufactured from 1.2mm Galvanised Steel together with suitable sealing for particulate and gas filters. Access is available on both sides via bolted lift off panels. Various round and rectangular transformation spigots are available to suit ductwork systems for both domestic and commercial duct work.

Filter Specification

Particulates, PM10, PM2.5

A new ISO filtration standard has come into force. The test method has changed so direct comparisons between EN779 2012 and ISO 16890 cannot be drawn. Below is a guide to the filter efficiencies:

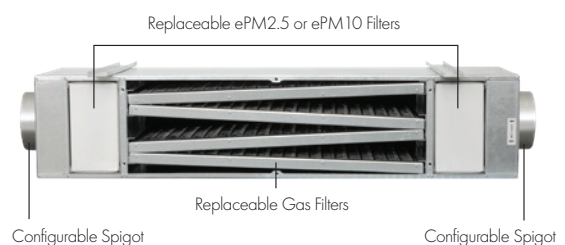
| ISO 16890 | EN779 |
|------------|-------|
| 45% Coarse | G3 |
| 65% Coarse | G4 |
| ePM10 50% | M5 |
| ePM2.5 70% | F7 |

Pollutant Gases, NO₂, SO₂, O₃, VOC

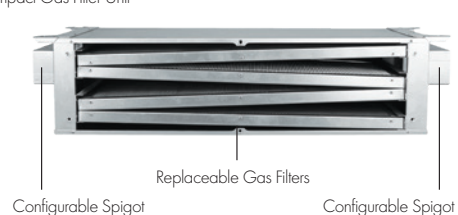
The gas stage filters in the Vent-Axia Pure Air are designed to achieve a minimum contact time suitable for the removal of pollutant gases at the rated airflow. A specially formulated activated carbon and chemical mix acts upon pollutant concentrations common in dirty city air, reducing them below guidelines set by current legislation.

Unit Configuration

Standard Gas Filter Unit



Compact Gas Filter Unit



Accessories

Model

Spare ePM2.5 filter

Spare ePM10 filter

Spare gas filter

Stock Ref

PAFIL-25

PAFIL-10

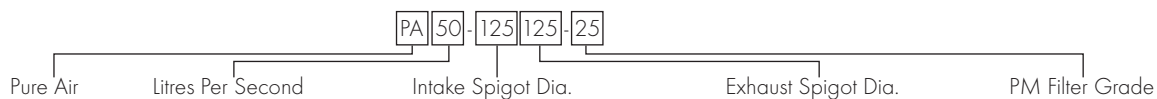
PAFIL-NO2

Models

| Model Range | Stock Ref | Airflow l/s | Intake Spigot (mm)* | Exhaust Spigot (mm)* | Filter Types | Clean Filter Pressure Drop (Pa) | Approximate Unit Weight (kg) |
|--------------------------|-----------------|-------------|---------------------|----------------------|--------------|---------------------------------|------------------------------|
| Standard Gas Filter Unit | PA50-125125-25 | 50 | 125Ø | 125Ø | PM2.5 | 100 | 25 |
| | PA50-204204-25 | 50 | 204x60 | 204x60 | PM2.5 | 100 | 25 |
| | PA50-125125-10 | 50 | 125Ø | 125Ø | PM10 | 45 | 25 |
| | PA50-204204-10 | 50 | 204x60 | 204x60 | PM10 | 45 | 25 |
| | PA100-150150-25 | 100 | 150Ø | 150Ø | PM2.5 | 100 | 49 |
| | PA100-220220-25 | 100 | 220x90 | 220x90 | PM2.5 | 100 | 49 |
| | PA100-150150-10 | 100 | 150Ø | 150Ø | PM10 | 45 | 49 |
| | PA100-220220-10 | 100 | 220x90 | 220x90 | PM10 | 45 | 49 |
| | PA200-200200-10 | 200 | 200Ø | 200Ø | PM10 | 45 | 96 |
| Compact Gas Filter Unit | PA200-250250-10 | 200 | 250Ø | 250Ø | PM10 | 45 | 96 |
| | PA300-315315-10 | 300 | 315Ø | 315Ø | PM10 | 45 | 144 |
| | PAC50-125 | 50 | 125Ø | 125Ø | PM10 | 45 | 23 |
| | PAC50-150 | 50 | 150Ø | 150Ø | PM10 | 45 | 23 |
| | PAC50-204 | 50 | 204x60 | 204x60 | PM10 | 45 | 23 |
| | PAC50-220 | 50 | 220x90 | 220x90 | PM10 | 45 | 23 |
| | PAC100-125 | 100 | 125Ø | 125Ø | PM10 | 45 | 45 |
| | PAC100-150 | 100 | 150Ø | 150Ø | PM10 | 45 | 45 |
| | PAC100-204 | 100 | 204x60 | 204x60 | PM10 | 45 | 45 |
| | PAC100-220 | 100 | 220x90 | 220x90 | PM10 | 45 | 45 |

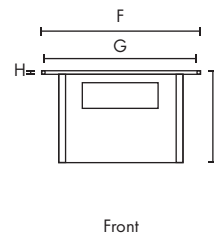
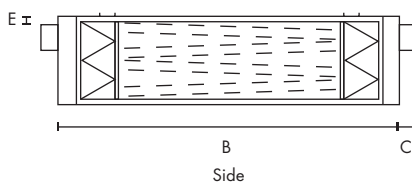
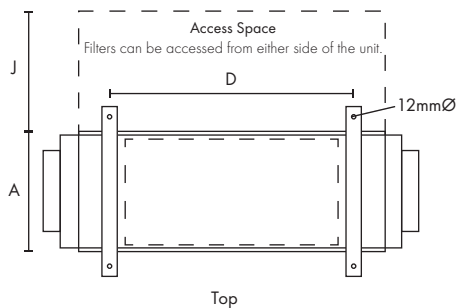
*Airflow may be reversed through the unit to offer alternative spigot options.

Example Stock Ref:

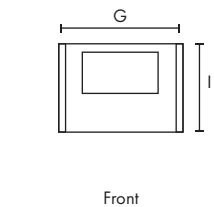
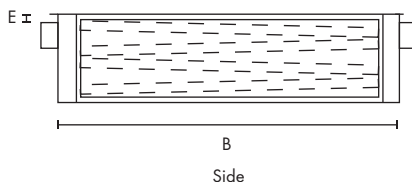
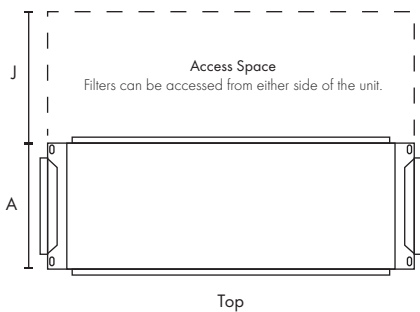


Dimensions (mm)

PM & Gas Filter Unit



Compact Gas Filter Unit



| Model Range | Airflow l/s | A | B | C | D | E | F | G | H | I | J |
|--------------------------|-------------|-----|-----|----|-----|--------|-----|-----|----|-----|-----|
| Standard Gas Filter Unit | 50 | 320 | 980 | 50 | 700 | 25 | 435 | 405 | 10 | 220 | 325 |
| | 100 | 620 | 980 | 50 | 700 | 25 | 730 | 700 | 10 | 220 | 325 |
| | 200 | 620 | 980 | 50 | 700 | 110/85 | 730 | 700 | 10 | 420 | 650 |
| | 300 | 620 | 980 | 50 | 700 | 160 | 730 | 700 | 10 | 630 | 960 |
| Compact Gas Filter Unit | 50 | 320 | 690 | - | - | 25 | - | 260 | - | 180 | 325 |
| | 100 | 620 | 690 | - | - | 25 | - | 560 | - | 180 | 325 |

Wholehouse Attenuators

- Reduces induct noise
- Variety of sizes to suit specified noise requirements
- Compatible with both 204x60mm² and 220x90mm² rectangular ductwork
- Central and offset spigot options to suit each installation
- Rigid galvanized steel construction
- Easy installation
- Suitable for almost any ventilation system
- Low pressure loss



The Vent-Axia Wholehouse Attenuator has been developed to reduce induct noise in both residential and commercial ducting systems.

Technical Details

The Wholehouse Attenuator is compatible with either 204x60mm² or 220x90mm² ducting. It also offers two spigot options to suit the installation and design requirements. The Wholehouse Attenuator is available with either a standard centralised spigot or, for instances when the ducting is installed flat to a concrete slab, an offset spigot. As well as saving the need for additional ducting components, this allows for a much easier and quicker installation.

Noise Reduction

Offering excellent sound reduction over a range of frequencies, the Wholehouse Attenuator is available in two lengths depending on the noise suppression requirements. For MVHR systems the attenuator can be fitted on the supply side to habitable rooms, reducing airborne in-duct noise. For MVHR and extract-only systems, the attenuator may be placed on the extract side to limit 'crosstalk' through ductwork between rooms.

Models

Attenuator with Central Spigot

| Model | Stock Ref |
|---------------------------|-----------|
| 204x60 Duct 620mm Length | 477369 |
| 204x60 Duct 920mm Length | 407915 |
| 204x60 Duct 1220mm Length | 407916 |
| 220x90 Duct 620mm Length | 477370 |
| 220x90 Duct 920mm Length | 407920 |
| 220x90 Duct 1220mm Length | 407921 |

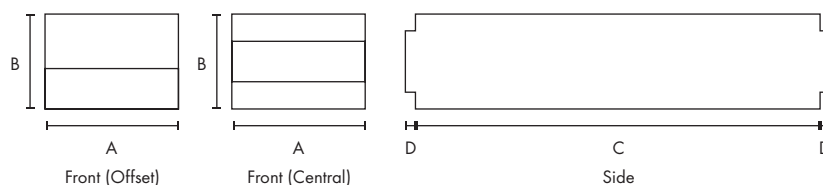
Attenuator with Offset Spigot

| Model | Stock Ref |
|---------------------------|-----------|
| 204x60 Duct 620mm Length | 477371 |
| 204x60 Duct 920mm Length | 475427 |
| 204x60 Duct 1220 Length | 475428 |
| 220x90 Duct 620mm Length | 477372 |
| 220x90 Duct 920mm Length | 475429 |
| 220x90 Duct 1220mm Length | 475430 |

Acoustic Flexible Ducting

| Model | Stock Ref |
|-----------------------|-----------|
| 125mmØ Duct 1m Length | 443793 |
| 150mmØ Duct 1m Length | 443274 |

Dimensions (mm)



| Model | Stock Ref | A | B | C | D | kg |
|---------------------------|----------------|-----|-----|------|----|----|
| 204x60 Duct 620mm Length | 477369/477371 | 196 | 125 | 620 | 50 | 10 |
| 204x60 Duct 920mm Length | 407915/ 475427 | 200 | 120 | 920 | 50 | 13 |
| 204x60 Duct 1220mm Length | 407916/475428 | 200 | 120 | 1220 | 50 | 17 |
| 220x90 Duct 620mm Length | 477370/477372 | 207 | 148 | 620 | 50 | 10 |
| 220x90 Duct 920mm Length | 407920/ 475429 | 210 | 145 | 920 | 50 | 14 |
| 220x90 Duct 1220mm Length | 407921/475430 | 210 | 145 | 1220 | 50 | 17 |

Acoustic Performance

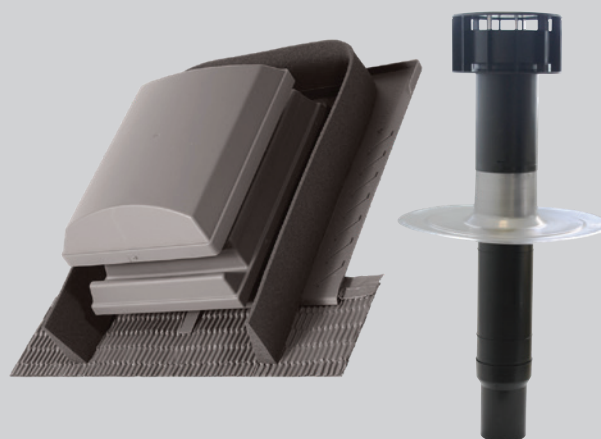
| Model | Stock Ref | Insertion Loss (dB) | | | | | | | |
|---|---------------------------------|---------------------|------|------|------|------|------|------|------|
| | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 204x60 Duct 620mm Length/ 220x90 Duct 620mm Length | 477369/477370/ 477371/477372 | 3 | 4 | 7 | 13 | 21 | 38 | 45 | 33 |
| 204x60 Duct 920mm Length | 407915/475427 | 0.3 | 3.2 | 11.6 | 24.2 | 38 | 49.1 | 50.3 | 36.4 |
| 204x60 Duct 1220mm Length | 407916/475428 | 0.3 | 1.8 | 14.1 | 21.3 | 35.4 | 46.9 | 50.4 | 36.4 |
| 220x90 Duct 920mm Length | 407920/475429 | 7.3 | 10.2 | 13.1 | 26.2 | 34.9 | 47.6 | 52.2 | 38.9 |
| 220x90 Duct 1220mm Length | 407921/475430 | 1.2 | 7.4 | 18.6 | 30.2 | 39.1 | 51 | 45.2 | 38.6 |
| 125mmØ Duct 1m Length | 443793 | 5.5 | 11.5 | 17 | 19.9 | 19.1 | 25.6 | 20 | 21.6 |
| 150mmØ Flexible Duct 1m Length | 443274 | -1.2 | 10.6 | 19 | 16.8 | 15.7 | 22.2 | 15.7 | 17.6 |

Pressure Loss

| Model | Duct Size (mm) | Volume (l/s) | Pressure Loss (Pa) |
|--------------------------------|----------------|--------------|--------------------|
| Attenuator | 204x60 | 15 | 6 |
| | | 30 | 10 |
| | | 60 | 25 |
| | | 80 | 41 |
| Attenuator | 220x90 | 15 | 6 |
| | | 30 | 10 |
| | | 60 | 22 |
| | | 80 | 36 |
| Acoustic Flexible Ducting (1m) | 125 | 15 | 2.8 |
| | | 30 | 8.8 |
| | | 60 | 19.2 |
| | | 80 | 37.5 |
| Acoustic Flexible Ducting (1m) | 150 | 15 | 1.7 |
| | | 30 | 6.4 |
| | | 60 | 13.8 |
| | | 80 | 28.4 |

Universal Roof Vents

- Models available for both pitched and flat roof types
- Complies with Building Regulations
- Suitable for most installations
- Corrosion resistant and weather proof
- Compatible with both mechanical and natural ventilation systems
- Three colours available for pitched roof vents



Wholehouse ventilation systems require termination to the external atmosphere, often through the roof. To ensure that the ventilation system is able to achieve its optimum level of performance, it is important that a suitable roof termination product is installed.

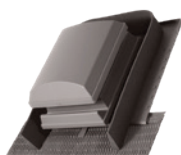
With this in mind, Vent-Axia is pleased to offer a range of Universal Roof Vents; including products suitable for both pitched and flat roof types.

A selection of colours and sizes should ensure that our range offers a product suitable for most residential applications with a pitched or flat roof. Pitched roof vents are available in a variety of colours as detailed in the Specification Table - custom colour and textured vents to match your exact needs are also available at an extra charge. Please contact our Technical Support team for more details.

Models

Universal Roof Vent suitable for Pitched Roofs

Manufactured in the UK, these products have been specifically developed for use with both natural and mechanical ventilation systems.



All models have been independently tested by the BRE to BS476 Part 3: 2004 and have been awarded an AA classification - the highest possible. Thus they can be installed without restriction on any pitched roof.

All models have low resistances to airflow (see table) and incorporate condensation grooves to prevent any condensate running back down the duct. Universal Roof Vents are designed to resist the ingress of deluge and driving rain. Universal Roof Vents (pitched roof models) are suitable for roof pitches between 20° and 60°.

The pitched roof vents are available as a 'tiled' roof vent to fit alongside most traditional roof tiles, as well as a 'slate' version which can be easily cut down to fit alongside all traditional roof slates.

| Stock Ref | Tile Type | Spigot mm | Colour | Airflow Resistance (Pa) at l/s | | | | |
|-----------|------------|-----------|------------------|--------------------------------|-----|------|-----|------|
| | | | | 14 | 28 | 56 | 83 | 140 |
| 407329 | Universal* | 125 | Red | 1.1 | 4.1 | 16.8 | N/A | N/A |
| 407330 | Universal* | 125 | Brown | 1.1 | 4.1 | 16.8 | N/A | N/A |
| 407331 | Universal* | 125 | Grey | 1.1 | 4.1 | 16.8 | N/A | N/A |
| 407332 | Universal* | 150 | Red | 0.3 | 1.0 | 4.2 | 9.5 | 27.4 |
| 407333 | Universal* | 150 | Brown | 0.3 | 1.0 | 4.2 | 9.5 | 27.4 |
| 407334 | Universal* | 150 | Grey | 0.3 | 1.0 | 4.2 | 9.5 | 27.4 |
| 407335 | Slate | 125 | Slate Blue/Black | 1.1 | 4.1 | 16.8 | N/A | N/A |
| 407336 | Slate | 150 | Slate Blue/Black | 0.3 | 1.0 | 4.2 | 9.5 | 27.4 |

*Universal Roof Vents are not suitable for the following tile types: Plain, Clay Single Pantiles, Forticrete Centurion, Goxhill Gaelic Tiles, Double Lap or Interlocking Slates. If the Universal Roof Vent does not meet your requirements, please contact our Technical Support team for a bespoke solution

Universal Roof Vent suitable for Flat Roofs

Capped stacks for use in asphalt and built-up felt roofs. Special low air resistance cowl - the pressure/airflow resistance is <1.0 Pascal at 63l/s. The pipework above the roofline is twin walled and incorporates an integral condensation drain. The stack pipe has an integral collar and separate aluminium flange for use with both felt and asphalt roof finishes.



All Vent-Axia Universal Roof Vents have a free area exceeding those required by Building Regulations.

| Stock Ref | Colour | Free Vent Area mm ² | Pressure/Airflow Resistance | Dia. mm | Height Above Roof mm | Flange Dia. mm | Depth Below Flange mm |
|-----------|--------|--------------------------------|-----------------------------|---------|----------------------|----------------|-----------------------|
| 407337 | Black | 8,400 | <1.0 | 110 | 300 | 395 | 350 |
| 407338 | Black | 12,000 | <1.0 | 131 | 400 | 450 | 350 |
| 407339 | Black | 20,000 | <1.0 | 166 | 540 | 450 | 510 |

Pull-out System Hood/SELV

- Models available with either a White or Brushed Aluminium trim
- Fits within a 600mm wide aperture (300mm deep)
- Complete with two low energy 9W lamps
- All models are fitted with a metal washable grease filter as standard
- 125mm galvanised duct connection piece
- Integral fire damper in accordance with BRE 398
- Weight: 3.7kg
- SELV hoods allow the distance between the hood and an electric hob to be reduced from 650mm to 550mm



Product

The Pull-out System Hood is designed to fit in a 600mm aperture above a hob. The telescopic hood incorporates two flat removable metal grease filters, two low energy light bulbs and is available with a White or Brushed Aluminium front trim.

The hood contains an integral fire damper in accordance with BRE Digest 398 and is connected to the mechanical ventilation unit by a galvanised steel duct connection piece. When the hood is opened the mechanical ventilation unit goes to boost speed.

Why install a cooker hood?

Steam created during the cooking process can cause moisture to form on walls and furniture. In extreme cases this can lead to mould growth. Strong smells can also be created during cooking and these can spread throughout the dwelling. Cooking oils may be vaporised when frying and this oil can be deposited in areas around the cooker.

The solution

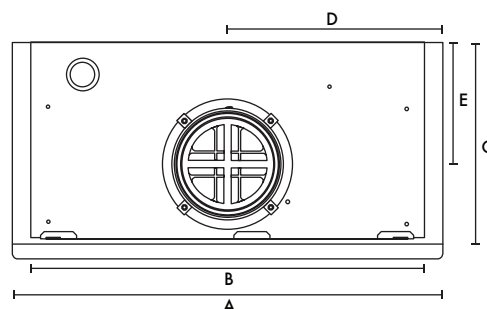
When connected to an MEV or MVHR system, the Pull-out System Hood can be wired in such a way that when the hood part of the unit is pulled out the MEV or MVHR system will automatically switch to boost.

The Pull-out Hood System Hood comes with an integrated 125mm galvanised spigot to allow for connection to the MEV or MVHR system.

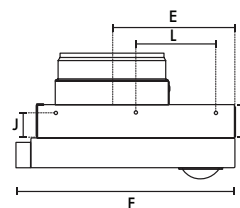
SELV hoods allow the distance between the hood and an electric hob to be reduced from 650mm to 550mm.

Dimensions (mm)

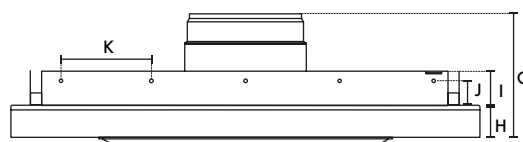
TOP



SIDE



FRONT



| A | B | C | D | E | F | G | H | I | J | K | L |
|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|-----|
| 598 | 570 | 280 | 299 | 126 | 300 | 158 | 41 | 50 | 40 | 120 | 110 |

Models

| Model | Stock ref |
|----------------|-----------|
| White | 407509 |
| Aluminium | 407206 |
| White SELV | 474790 |
| Aluminium SELV | 474791 |

Arterial Duct System

- Reduces installation time
- Can be applied in SAP as a rigid duct system
- Crush resistant semi-rigid duct
- Unique low-resistance manifolds
- Simple installation through joists
- Smooth inner surface with antistatic and antibacterial coating
- Combines the advantages of rigid ducting with the versatility of a semi-rigid system



Arterial System

For use with MVHR systems, the Arterial air distribution system provides a flexible, highly robust solution, which can significantly reduce the installation time when compared to a standard system.

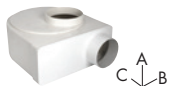
Rigid vs Semi-Rigid Systems

Both traditional duct types have limitations in modern construction. **Rigid systems:** Passing rigid duct through a floor cassette at right-angles to the joists is time consuming and multiple connections increase the risk of leaking ductwork. **Semi-rigid Systems:** It can often be difficult to accommodate two distribution boxes and multiple semi-rigid pipe runs in new buildings and the time saving advantages are soon overtaken by the additional cost of materials.

Reduced Installation Time

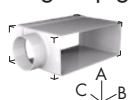
The Vent-Axia Arterial range combines the advantages of semi-rigid and traditional rigid ducting in one simple system. The system is independently tested and can be applied in SAP as a standard rigid system. Drops between floors to/from the MVHR unit remain in rigid PVC, having the advantage of low space usage and low cost. Traversing through joists in a floor cassette is much simpler and faster when using semi-rigid duct. The secret to the Arterial System is the unique low-resistance distribution plenum (Patent Pending) which is sited between joists allowing connection between semi-rigid and rigid sections.

100mm Elbow Bend to 90mm



| | | External Dimensions (mm) | | |
|-----------|---------|--------------------------|-----|-----|
| Stock Ref | O/I Ømm | A | B | C |
| 496741 | 90/78 | 119 | 226 | 280 |

Single Spigot Adaptor



| | | External Dimensions (mm) | | |
|-----------|---------------|--------------------------|-----|-----|
| Stock Ref | Duct Size | A | B | C |
| 408872 | 220x90 to 78Ø | 94 | 258 | 150 |

Double Connector Plate



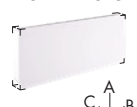
| | | External Dimensions (mm) | | |
|-----------|---------------|--------------------------|-----|----|
| Stock Ref | Duct Size | A | B | C |
| 408873 | 220x90 to 78Ø | 98 | 226 | 66 |

Single Connector Plate



| | | External Dimensions (mm) | | |
|-----------|---------------|--------------------------|-----|----|
| Stock Ref | Duct Size | A | B | C |
| 408874 | 220x90 to 78Ø | 98 | 226 | 66 |

Blank Plate



| | | External Dimensions (mm) | | |
|-----------|---------------|--------------------------|-----|----|
| Stock Ref | Duct Size | A | B | C |
| 408875 | 220x90 to 78Ø | 98 | 226 | 26 |

Reducer



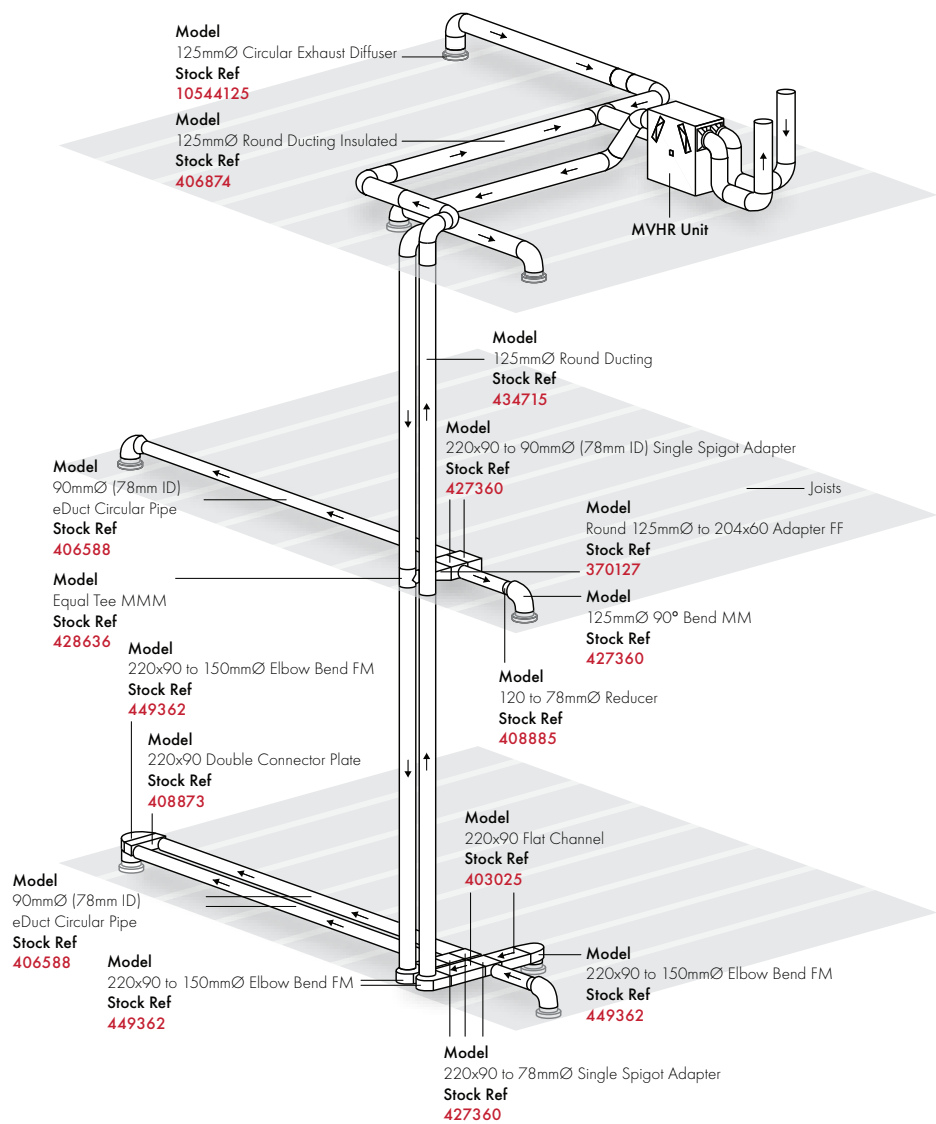
| | | External Dimensions (mm) | | |
|-----------|------------|--------------------------|-----|-----|
| Stock Ref | Duct Size | A | B | C |
| 408885 | 120 to 78Ø | 129 | 105 | 129 |

Semi-Rigid Ducting

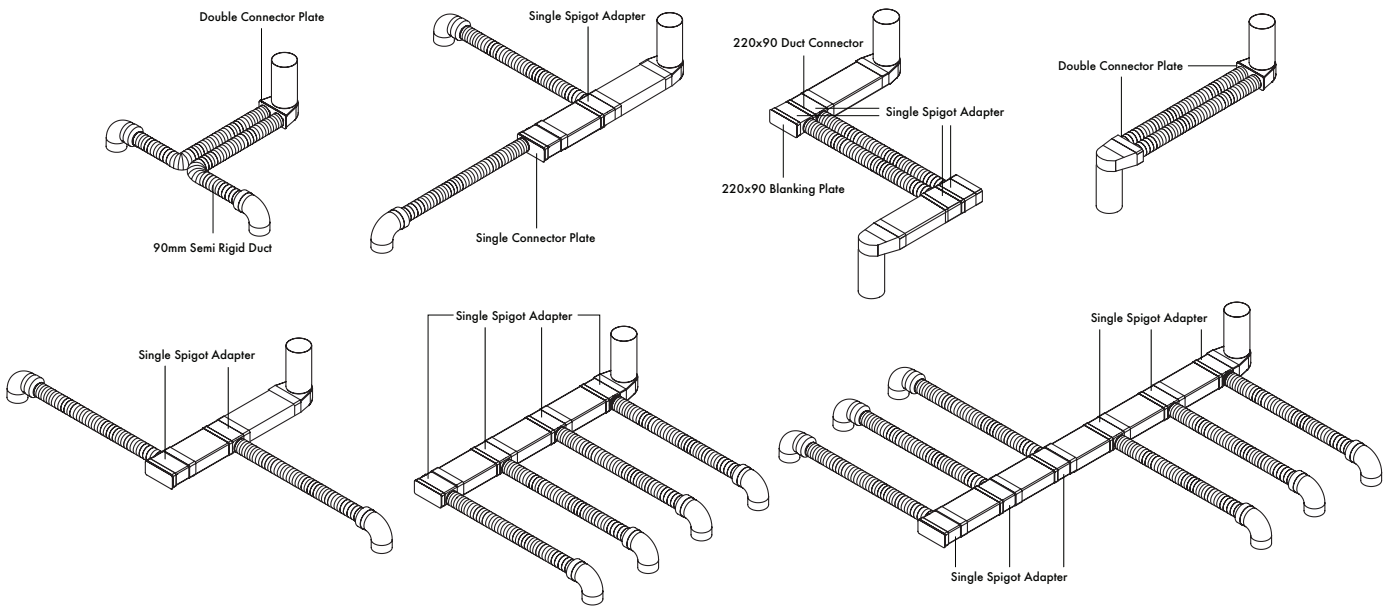


| Stock Ref | O/I Ømm | Length m | Coil Ømm | Coil Height | |
|-----------|---------|----------|----------|-------------|------|
| | | | | mm | kg |
| 412607 | 90/78 | 50 | 1130 | 250 | 19.5 |
| 412608 | 90/78 | 25 | 1130 | 125 | 9.8 |

Complete System Setup Example

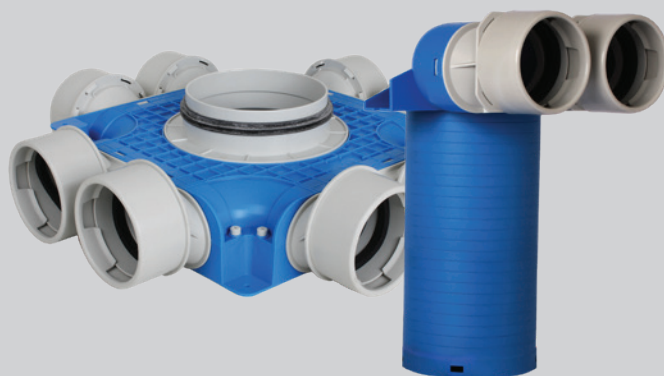


System Configuration Examples



Uniflexplus+ Semi-Rigid Duct System

- Compact, low profile system
- Highly flexible and robust
- Extremely crush resistant
- Quick and easy to install
- PCDB listed
- Suitable for installation in concrete
- Corrosion resistant
- Smooth inner surface with antistatic and antibacterial coating
- Independently tested and accredited for air tightness
- Class D air tightness
- Operating temp.: -20°C to +60°C
- A spigot blanking cap is provided for use with single runs of semi-rigid



Uniflexplus+ Semi-Rigid Range

The new Uniflexplus+ Semi-Rigid Range sets the standard for easy to install, low profile ducting solutions. The system gives all of the flexibility that semi-rigid ducting provides - without taking up vital space. With minimal components, the system is uncomplicated to ensure a hassle-free, speedy install.

The Uniflexplus+ Semi-Rigid Range is compatible with most wholehouse ventilation systems including the Lo-Carbon Sentinel Kinetic Range (MVHR).

Accessories

| Description | Duct Size | Stock Ref |
|----------------------------|-----------|-----------|
| Circular Extract Diffusers | 125mmØ | 10544125 |
| Duct Knife | Ø90mm | 472252 |
| 90° Bend | Ø90mm | 472253 |
| Coupler | Ø90mm | 472254 |

| Description | Model | Duct Size | Stock Ref |
|----------------------------------|--------|-----------|-----------|
| Adjustable Round Valve | RV125 | 125mmØ | 479372 |
| Adjustable Round Valve Large | RVG125 | 125mmØ | 479373 |
| Adjustable Square Valve | RVV125 | 125mmØ | 479374 |
| Adjustable Valve Collar | RVK | 125mmØ | 479376 |
| Adjustable Valve Blanking Plate* | RVB | 125mmØ | 479377 |

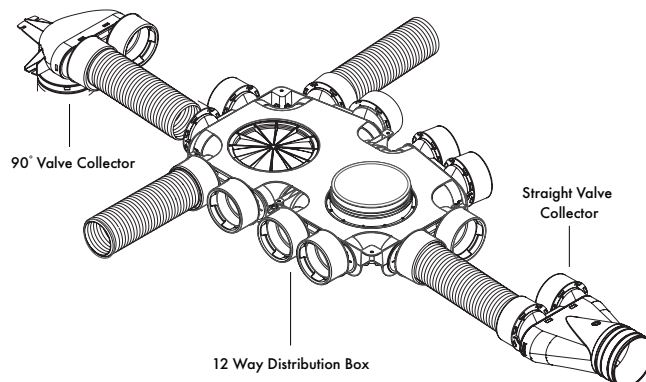
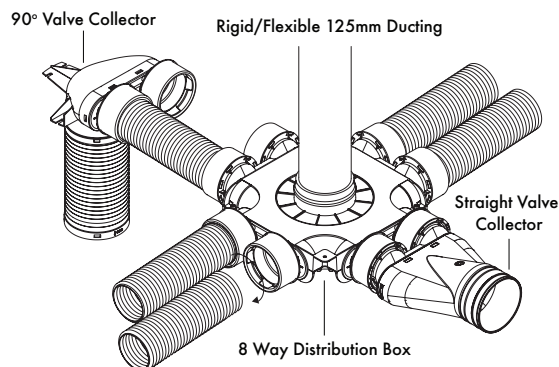
*Not suitable for RVV125 model

Complete System Setup Examples

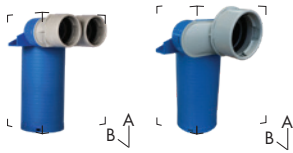
The distribution boxes can be mounted vertically on a wall or fixed horizontally onto a ceiling slab to achieve a solution tailored to your need. At a depth of just 90mm, the distribution boxes offer a considerably low-profile solution - they can then be combined with various components to suit on-site needs.

Semi-Rigid ducting is run from distribution boxes and ancillaries to respective rooms in the dwelling. Connecting the Semi-Rigid ducting to components is exceptionally straightforward to allow speedy installation - simply turn the ducting into the spigot until it clicks twice to achieve an airtight mechanical seal.

Rigid or flexible 125mm diameter ducting is then run from the MVHR unit to the distribution box.



Models



90° Valve Collector

The 90° Valve Collector connects a section of 125mm diameter ducting and turns 90° into 1 or 2 spigots to connect to the semi rigid - ideal for dropping semi-rigid into ceiling diffusers.

Duct Size

2xØ90 - Ø125mm

1xØ90 - Ø125mm

Stock Ref

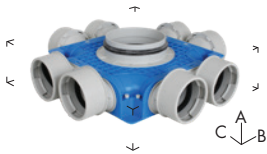
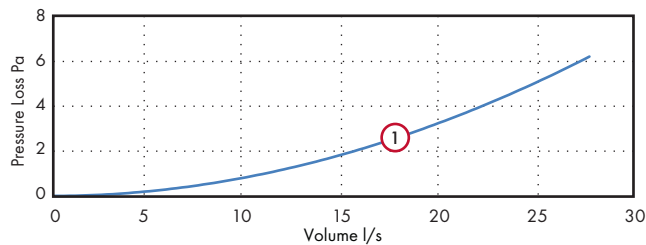
472248

472249

Dimensions (mm)

| Stock Ref | Curve Ref | A | B | kg |
|-----------|-----------|-----|-----|-----|
| 472248 | 1 | 376 | 300 | 0.9 |
| 472249 | | | | 0.8 |

Performance



Distribution Box

The low-profile distribution box runs a central spigot of diameter 125mm into a set of either 8 or 12 sub-spigots, depending on requirements. Available with 90mm semi-rigid spigots.

Model

12xØ90 - Ø125mm

8xØ90 - Ø125mm

Stock Ref

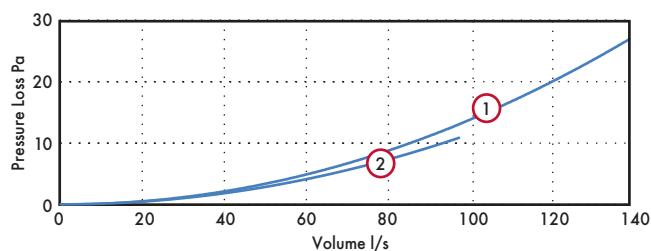
472250

472251

Dimensions (mm)

| Stock Ref | Curve Ref | A | B | C | kg |
|-----------|-----------|-----|-----|-----|-----|
| 472250 | 1 | 124 | 755 | 520 | 3.9 |
| 472251 | 2 | 125 | 479 | 479 | 2.3 |

Performance



Straight Valve Collector

The straight valve collector takes 125mm ducting and turns it straight into 2 spigots to connect to semi-rigid.

Model

2xØ90mm - Ø125mm

Stock Ref

472262

Dimensions (mm)

| Stock Ref | A | B | C |
|-----------|-----|-----|-----|
| 472262 | 123 | 311 | 229 |



Semi-Rigid Ducting

Suitable for installation in concrete ceilings, suspended ceilings, internal walls, risers or frames, the Semi-Rigid Ducting is double-walled providing optimum flexibility. With an antistatic and antibacterial coating, the internal surface of the Semi-Rigid Ducting is smooth to ensure minimal resistance to airflow. Normally flammable construction material class E, according to EN-13501-1.

Pipe Size

90mmØ x 50m

90mmØ x 25m

Stock Ref

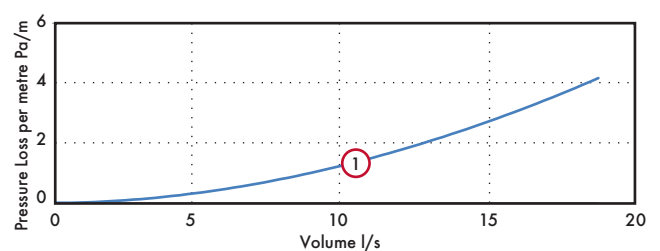
406588

474078

Dimensions (mm)

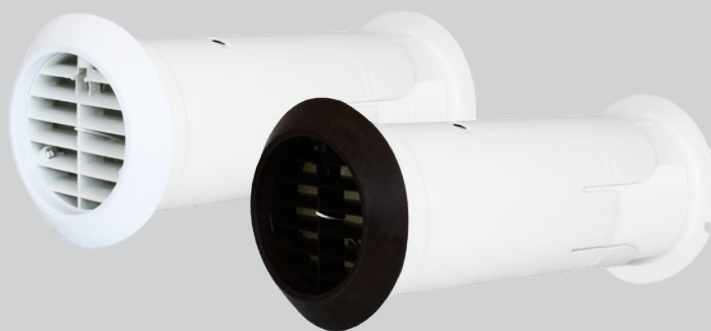
| Stock Ref | Curve Ref | O/I Ømm | Length m | Coil Ømm | Coil Height mm | kg |
|-----------|-----------|---------|----------|----------|----------------|------|
| 406588 | 1 | 90/78 | 50 | 1130 | 250 | 19.5 |
| 474078 | - | 90/78 | 25 | 1130 | 125 | 9.8 |

Performance



Internal Fit Wall Kit

- Ideal for high-rise applications
- Suitable for 100mm fans
- Quick & easy installation
- Extendable length
- Fits from inside the property
- Reduces water ingress
- Includes low-resistance external grille
- Suitable as a passive air grille
- Covers external break-out



Internal Fit Wall Kit

The Internal Fit Wall Kit is designed to simplify installation and improve the finish of 100mm through the wall installations, also providing an external grille and water ingress protection shroud.

High Rise Buildings

The Wall Kit can be fully installed from inside the building, avoiding the need for scaffolding and significantly reducing the cost and complexity associated with these sites. After core-drilling a 117mm hole, or utilising an appropriate existing hole, the Kit simply pushes through from the inside of the building. Spring pins secure the external grille in position and the external shroud deploys around the grille covering up break-out from the external surface.

Installer Friendly

Quick and easy to install, the Internal Fit Wall Kit cuts down time on site when compared to traditional methods using flexi-duct. Installers no longer need to spend time fixing flexi-duct to fans and grilles using jubilee clips, or going outside to fit the grille. The tubes extend to accommodate wall thicknesses from 225mm up to 390mm and lock into position for a secure fit. The internal flange is also flexible enough to accommodate deviations in the internal surface finish.

Building Regulations

The external grille free area is greater than 90% of the area of the duct making it suitable for continuous running systems as well as for intermittent fans.

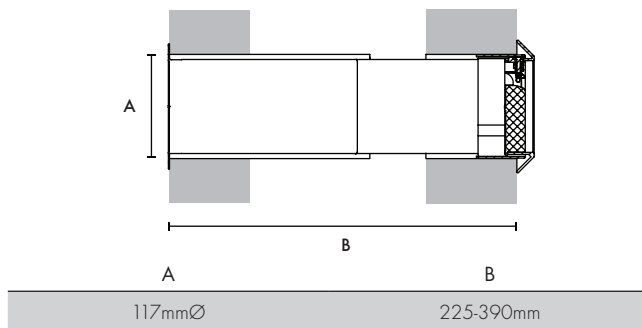
Backdraught Shutter

The Internal Fit Wall Kit has optional backdraught shutter models. Particularly useful with intermittent fans, the backdraught shutter will ensure no draughts and gusts come in to the home through the wall kit.

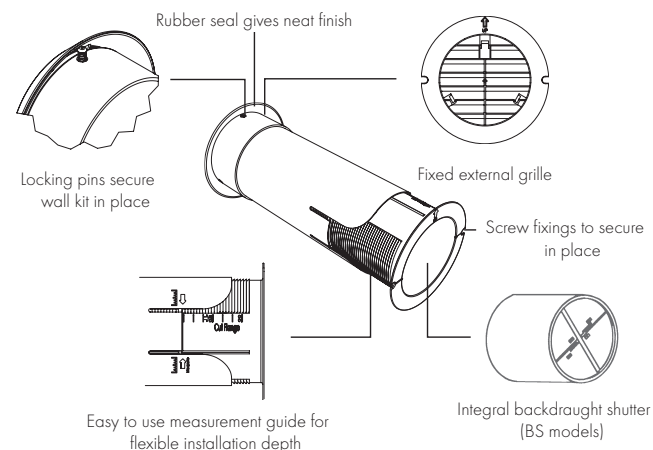
Models

| Model | Stock Ref |
|--|-----------|
| White External Grille | 472318 |
| Brown External Grille | 472319 |
| White External Grille with Backdraught Shutter | 474779 |

Dimensions (mm)



Features



Low Resistance Inlet/Outlet Air Brick

- Provides over 90% free area of duct
- Easier to install than a double air brick
- Guide vanes for improved duct connection
- Optional first fix duct section



Available in five colours, this low resistance air brick has been designed to comply with the latest Building Regulations Approved Document F, which requires a ventilation outlet to achieve a minimum of 90% of the cross sectional area of the ductwork.

Installing a single air brick is much simpler than a double air brick and offers more versatility for locations.

Suitable for installation with round 100mm and 125mm diameter and rectangular 204 x 60mm ducting.

Attaching duct to the air brick is simplified by the use of guide vanes which help locate the duct onto the spigot.

A 500mm section of 204 x 60 duct is available for first fix which ensures that connections are accessible after completion of building works.

Five colour options ensure that the low resistance air brick will be a match for almost any application.

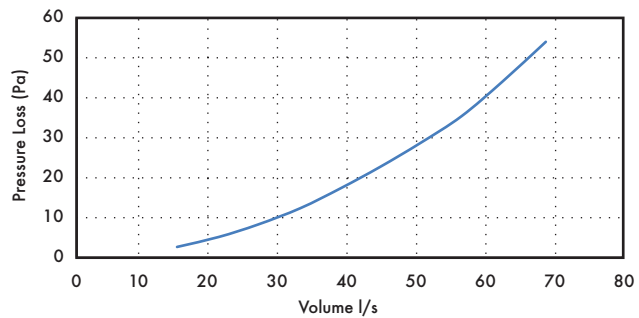
Models

| Model | Stock Ref |
|----------------------|-----------|
| White | 449223 |
| Brown | 449224 |
| Cotswold Stone | 449225 |
| Grey | 449226 |
| Terracotta | 449227 |
| 1st Fix duct section | 403255 |
| 500 x 204 x 60 | |

Available Colours

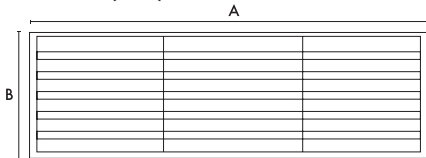
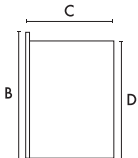
| | | | | |
|---|---|---|---|---|
|  |  |  |  |  |
| White RAL 9003 | Brown RAL 8017 | Cotswold Stone RAL 1001 | Grey RAL 7037 | Terracotta RAL 8004 |

Performance Guide



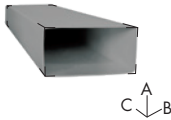
| Pressure (Pa) | Volume (m³/h) | Volume (l/s) |
|---------------|---------------|--------------|
| 2.7 | 53.7 | 14.9 |
| 5.2 | 75.9 | 21.1 |
| 8.3 | 97.0 | 26.9 |
| 12.4 | 119.4 | 33.2 |
| 17.4 | 141.0 | 39.2 |
| 22.7 | 162.0 | 45.0 |
| 28.7 | 183.7 | 51.0 |
| 35.4 | 205.6 | 57.1 |
| 44.1 | 227.6 | 63.2 |
| 54.0 | 250.4 | 69.6 |

Dimensions (mm)

| | | | |
|--|----|---|----|
|  | |  | |
| A | B | C | D |
| 212 | 67 | 58 | 65 |


Ducting & Accessories

Flat Channel Ducting Insulated/Uninsulated




| Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | | |
|----------------|--------------------------------|--------------------------|-----|------|------------------------------|--------|--------|---------|--------|--------|---------|--------|--|
| | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s | |
| 433944 | Uninsulated 110 x 54 x 2m | 54 | 110 | 2000 | - | - | - | - | - | - | - | - | |
| 436599 | Uninsulated 110 x 54 x 1.5m | 54 | 110 | 1500 | 1.2 | 2.4 | 5.3 | 9.1 | 13.9 | 19.8 | 25.9 | 32 | |
| 496156 | Uninsulated 204 x 60 x 1m | 60 | 204 | 1000 | <1 | <1 | <1 | 1.5 | 2.2 | 3.0 | 3.9 | 5.1 | |
| 436617 | Uninsulated 204 x 60 x 1.5m | 60 | 204 | 1500 | <1 | <1 | 1.3 | 2.2 | 3.3 | 4.5 | 5.9 | 7.8 | |
| 406870* | Insulated 204 x 60 x 1.5m | 210 | 354 | 1500 | <1 | <1 | 1.3 | 2.2 | 3.3 | 4.5 | 5.9 | 7.8 | |
| 496160* | Insulated Sleeve 204 x 60 x 2m | 210 | 354 | 2000 | - | - | - | - | - | - | - | - | |
| 496161* | Insulated 204 x 60 x 2m | 210 | 354 | 2000 | - | - | - | - | - | - | - | - | |
| 474677 | Uninsulated 204 x 60 x 2m | 60 | 204 | 2000 | <1 | <1 | 1.7 | 2.9 | 4.3 | 5.9 | 7.7 | 10.4 | |
| Stock Ref | Duct Size | A | B | C | 60 l/s | | | 120 l/s | | | 180 l/s | | |
| 496157 | Uninsulated 220 x 90 x 1m | 90 | 220 | 1000 | 0.9 | | | 3.2 | | | 6.7 | | |
| 407343* | Insulated 220 x 90 x 1.5m | 240 | 370 | 1500 | 1.4 | | | 4.9 | | | 10.2 | | |
| 403025 | Uninsulated 220 x 90 x 1.5m | 90 | 220 | 1500 | 1.4 | | | 4.9 | | | 10.2 | | |
| 474678 | Uninsulated 220 x 90 x 2m | 90 | 220 | 2000 | 1.9 | | | 2.6 | | | 13.6 | | |


Flat Channel Connector. F to F



| Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | | |
|-----------|-----------|--------------------------|-----|-----|------------------------------|--------|--------|---------|--------|--------|---------|--------|--|
| | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s | |
| 436623** | 204 x 60 | 64 | 212 | 100 | <1 | <1 | <1 | <1 | <1 | <1 | 1.2 | 1.5 | |
| 436605 | 110 x 54 | 54 | 114 | 100 | <1 | <1 | 1.1 | 1.4 | 2.2 | 3.4 | 4.8 | 6.4 | |
| Stock Ref | Duct Size | A | B | C | 60 l/s | | | 120 l/s | | | 180 l/s | | |
| 403026 | 220 x 90 | 95 | 224 | 52 | <1 | | | <1 | | | <1 | | |

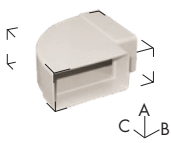


Channel Fixing Clip (Pack of 10)




| Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | | |
|---------------|-----------|--------------------------|----|----|------------------------------|--|--|---------|--|--|---------|--|--|
| | | A | B | C | 60 l/s | | | 120 l/s | | | 180 l/s | | |
| 403030 | 220 x 90 | 97 | 44 | 19 | N/A | | | N/A | | | N/A | | |

Horizontal 90° Bend. F to F



| Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | | |
|-----------------|----------------------|--------------------------|-----|-----|------------------------------|--------|--------|---------|--------|--------|---------|--------|--|
| | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s | |
| 406879* | Insulated 204 x 60 | 210 | 385 | 385 | 0.7 | 1.7 | 4.1 | 8.4 | 13 | 18 | 25 | 34 | |
| 436620** | Uninsulated 204 x 60 | 65 | 260 | 260 | 0.7 | 1.7 | 4.1 | 8.4 | 13 | 18 | 25 | 34 | |
| 436602 | Uninsulated 110 x 54 | 60 | 152 | 152 | 2.3 | 9.9 | 21 | 38 | 64 | 93 | 124 | 162 | |
| Stock Ref | Duct Size | A | B | C | 60 l/s | | | 120 l/s | | | 180 l/s | | |
| 407342* | Insulated 220 x 90 | 240 | 375 | 375 | 9 | | | 36 | | | 80 | | |
| 403028 | Uninsulated 220 x 90 | 95 | 250 | 250 | 9 | | | 36 | | | 80 | | |

Horizontal 45° Bend. F to F

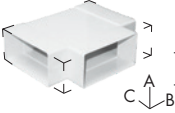
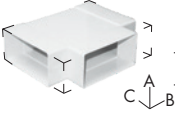


| Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | | |
|-----------|----------------------|--------------------------|-----|-----|------------------------------|--------|--------|---------|--------|--------|---------|--------|---|
| | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s | |
| 437280 | Uninsulated 110 x 54 | - | - | - | - | - | - | - | - | - | - | - | - |
| 406876* | Insulated 204 x 60 | 210 | 390 | 385 | 0.2 | 0.7 | 1.2 | 2.1 | 3.8 | 6.1 | 9.2 | 13 | |
| 249944** | Uninsulated 204 x 60 | 65 | 240 | 260 | 0.2 | 0.7 | 1.2 | 2.1 | 3.8 | 6.1 | 9.2 | 13 | |
| Stock Ref | Duct Size | A | B | C | 60 l/s | | | 120 l/s | | | 180 l/s | | |
| 449363 | Uninsulated 220 x 90 | 95 | 240 | 200 | 5 | | | 20 | | | 46 | | |

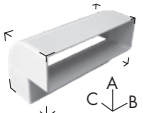
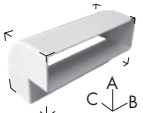
* Minimum insulation wall thickness 25mm. Insulation Thermal Conductivity: 0.04 W/(m.K)

** This part comes in Grey. Whilst we will look to maintain the colour of Grey, by the nature of adopting a recycled plastic the colour and shade may vary at any given time.

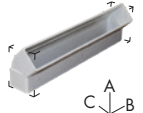
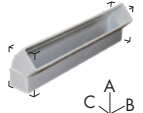
Horizontal T. F to F to F

|  | Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | |
|---|-----------|----------------------|--------------------------|-----|-----|------------------------------|--------|----------------------|--------|--------|---------|--------|--------|
| | | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
| | 406883* | Insulated 204 x 60 | 210 | 410 | 380 | vary on installation | | | | | | | |
| | 436551** | Uninsulated 204 x 60 | 65 | 310 | 255 | vary on installation | | | | | | | |
|  | 436614 | Uninsulated 110 x 54 | 60 | 185 | 150 | vary on installation | | | | | | | |
| | Stock Ref | Duct Size | A | B | C | 60 l/s | | 120 l/s | | | 180 l/s | | |
| | 449365 | Uninsulated 220 x 90 | 95 | 275 | 250 | | | vary on installation | | | | | |



Vertical 90° Bend. F to F

|  | Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | |
|---|-----------|----------------------|--------------------------|-----|-----|------------------------------|--------|---------|--------|--------|---------|--------|--------|
| | | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
| | 406872* | Insulated 204 x 60 | 240 | 360 | 240 | 1.1 | 2.5 | 5.2 | 9.8 | 16.1 | 24 | 33.6 | 45 |
| | 436621** | Uninsulated 204 x 60 | 115 | 210 | 115 | 1.1 | 2.5 | 5.2 | 9.8 | 16.1 | 24 | 33.6 | 45 |
|  | 436603 | Uninsulated 110 x 54 | 95 | 115 | 95 | 3.3 | 15.5 | 36 | 61 | 96 | 138 | 190 | 253 |
| | Stock Ref | Duct Size | A | B | C | 60 l/s | | 120 l/s | | | 180 l/s | | |
| | 403029 | Uninsulated 220 x 90 | 117 | 224 | 120 | 7 | | 28 | | | 66 | | |

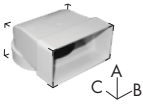
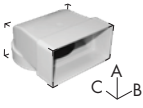
Vertical 45° Bend. F to F

|  | Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | |
|---|-----------|----------------------|--------------------------|-----|-----|------------------------------|--------|---------|--------|--------|---------|--------|--------|
| | | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
| | 406871* | Insulated 204 x 60 | 225 | 360 | 230 | 0.1 | 0.5 | 1.3 | 2.5 | 4.4 | 6.9 | 10 | 13.3 |
| | 445196** | Uninsulated 204 x 60 | 100 | 210 | 115 | 0.1 | 0.5 | 1.3 | 2.5 | 4.4 | 6.9 | 10 | 13.3 |
|  | 441655 | Uninsulated 110 x 54 | 115 | 115 | 70 | 1 | 2.4 | 6.6 | 12.9 | 23.1 | 35.1 | 48 | 64 |
| | Stock Ref | Duct Size | A | B | C | 60 l/s | | 120 l/s | | | 180 l/s | | |
| | 449364 | Uninsulated 220 x 90 | 110 | 225 | 115 | 6 | | 27 | | | 65 | | |

Elbow Bend. 100mm to Rectangular. M to F

|  | Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | |
|---|-----------|-----------|--------------------------|-----|-----|------------------------------|--------|---------|--------|--------|---------|--------|--------|
| | | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
| | 436624** | 204 x 60 | 80 | 215 | 195 | 2.9 | 7.1 | 15.1 | 28 | 45.1 | 68.1 | 92.2 | 118 |
| | 436607 | 110 x 54 | 90 | 115 | 140 | 3 | 8 | 17.7 | 33 | 49.9 | 74.5 | 101 | 137 |
|  | Stock Ref | Duct Size | A | B | C | 60 l/s | | 120 l/s | | | 180 l/s | | |
| | 403027 | 220 x 90 | 118 | 226 | 240 | N/A | | N/A | | | N/A | | |

Elbow Bend. 125mm to Rectangular. M to F

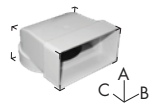
|  | Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | |
|---|-----------|-----------|--------------------------|-----|-----|------------------------------|--------|---------|--------|--------|---------|--------|--------|
| | | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
| | 436625** | 204 x 60 | 80 | 215 | 195 | 3.1 | 5.9 | 12.2 | 25 | 43.6 | 62.2 | 86 | 111 |
| | Stock Ref | Duct Size | A | B | C | 60 l/s | | 120 l/s | | | 180 l/s | | |
|  | 449361 | 220 x 90 | 118 | 226 | 240 | N/A | | N/A | | | N/A | | |

*Minimum insulation wall thickness 25mm. Insulation Thermal Conductivity: 0.04 W/(m.K)

** This part comes in Grey. Whilst we will look to maintain the colour of Grey, by the nature of adopting a recycled plastic the colour and shade may vary at any given time.

Ducting & Accessories

Elbow Bend. 150mm to Rectangular. M to F



Stock Ref
436626**
Stock Ref
449362

Duct Size
204 x 60
Duct Size
220 x 90

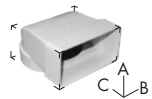
External Dimensions (mm)

| A | B | C |
|-----|-----|-----|
| 80 | 215 | 195 |
| 118 | 226 | 240 |

Resistance (Pa) at flow rate

| 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
|--------|--------|--------|---------|--------|--------|---------|--------|
| 2.8 | 4.9 | 11.6 | 21 | 31 | 41 | 53 | 67 |
| 60 l/s | | | 120 l/s | | | 180 l/s | |
| N/A | | | N/A | | | N/A | |

Elbow Bend. 100mm to Rectangular. F to F



Stock Ref
436608**

Duct Size
110 x 54

External Dimensions (mm)

| A | B | C |
|----|-----|-----|
| 90 | 115 | 140 |

Resistance (Pa) at flow rate

| 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
|-------|--------|--------|--------|--------|--------|--------|--------|
| 2.1 | 5.5 | 14.3 | 27.2 | 44.3 | 69 | 93 | 118 |

Flat Channel connector with Damper



Stock Ref
400735

Duct Size
110 x 54

External Dimensions (mm)

| A | B | C |
|----|-----|----|
| 60 | 115 | 75 |

Resistance (Pa) at flow rate

| 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
|-------|--------|--------|--------|--------|--------|--------|--------|
| 16 | 17.5 | 19.5 | 22 | 25.5 | 30.5 | 36 | 42 |

Drop down section F to F



Stock Ref
442273

Duct Size
204 x 60

External Dimensions (mm)

| A | B | C |
|-----|-----|-----|
| 120 | 220 | 210 |

Resistance (Pa) at flow rate

| 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
|-------|--------|--------|--------|--------|--------|--------|--------|
| 0.2 | 0.5 | 1.7 | 3.6 | 6.0 | 9.1 | 12.4 | 16.6 |

Single Air Brick Horizontal (System 60 Air Grille Adaptor is supplied with the Single Air Bricks)



Stock Ref
436612
436611

Duct Size
110 x 54 (Terracotta)
110 x 54 (Brown)

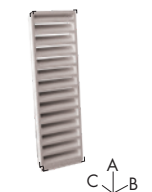
External Dimensions (mm)

| A | B | C |
|----|-----|----|
| 65 | 210 | 85 |
| 65 | 210 | 85 |

Resistance (Pa) at flow rate

| 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
|-------|--------|--------|--------|--------|--------|--------|--------|
| 3.2 | 7.8 | 20.9 | 39 | 65 | 96 | 128 | 176 |
| 3.2 | 7.8 | 20.9 | 39 | 65 | 96 | 128 | 176 |

Single Air Grille Soldier



Stock Ref
438594
468728
468730
468729

Duct Size
204 x 60 (White)
204 x 60 (Terracotta)
204 x 60 (Brown)
204 x 60 (Beige)

External Dimensions (mm)

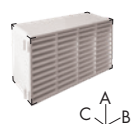
| A | B | C |
|-----|----|----|
| 210 | 65 | 15 |
| 210 | 65 | 15 |
| 210 | 65 | 15 |
| 210 | 65 | 15 |

Resistance (Pa) at flow rate

| 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
|-------|--------|--------|--------|--------|--------|--------|--------|
| 3.3 | 10 | 20.6 | 40 | 63 | 92.8 | 128 | 168 |
| 3.3 | 10 | 20.6 | 40 | 63 | 92.8 | 128 | 168 |
| 3.3 | 10 | 20.6 | 40 | 63 | 92.8 | 128 | 168 |
| 3.3 | 10 | 20.6 | 40 | 63 | 92.8 | 128 | 168 |

**This part comes in Grey. Whilst we will look to maintain the colour of Grey, by the nature of adopting a recycled plastic the colour and shade may vary at any given time.

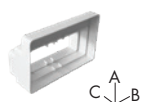
Double Air Brick



| Stock Ref | Duct Size* | Colour | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | |
|---------------|----------------------------|------------|--------------------------|-----|----|------------------------------|--------|--------|--------|--------|--------|--------|--------|
| | | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
| 438604 | 204 x 60 or 220 x 90 | White | 145 | 245 | 80 | 0.2 | 1.6 | 4.3 | 8.7 | 13.9 | 21.1 | 27.5 | 37.4 |
| 438607 | | Terracotta | 145 | 245 | 80 | 0.2 | 1.6 | 4.3 | 8.7 | 13.9 | 21.1 | 27.5 | 37.4 |
| 438605 | | Brown | 145 | 245 | 80 | 0.2 | 1.6 | 4.3 | 8.7 | 13.9 | 21.1 | 27.5 | 37.4 |
| 438606 | | Beige | 145 | 245 | 80 | 0.2 | 1.6 | 4.3 | 8.7 | 13.9 | 21.1 | 27.5 | 37.4 |

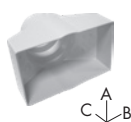
*In conjunction with Double Air Brick Adaptor below

Double Air Brick Adaptor Rectangular Duct



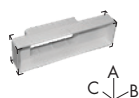
| Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | |
|---------------|-----------|--------------------------|-----|----|------------------------------|--------|--------|--------|--------|--------|--------|--------|
| | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
| 438608 | 204 x 60 | 135 | 226 | 85 | - | - | - | - | - | - | - | - |
| 449367 | 220 x 90 | 135 | 226 | 85 | - | - | - | - | - | - | - | - |

Double Air Brick Adaptor Round Duct



| Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | |
|---------------|-------------------------|--------------------------|---|---|------------------------------|--------|--------|--------|--------|--------|--------|--------|
| | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
| 449360 | 220 x 90 to 100/125/150 | - | - | - | - | - | - | - | - | - | - | - |

Air Grille Adaptor



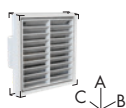
| Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | |
|---------------|-----------|--------------------------|-----|----|------------------------------|--------|--------|--------|--------|--------|--------|--------|
| | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
| 436609 | 110 x 54 | 65 | 210 | 85 | 0.2 | 1.2 | 2.5 | 4.7 | 7.8 | 11 | 14 | 18 |

Flexible Ducting



| Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | |
|----------------|-----------|--------------------------|---|---|------------------------------|--------|---------|--------|---------|--------|--------|--------|
| | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
| 5109662 | 204 x 60 | - | - | - | 0.2 | 0.6 | 1.5 | 2.6 | 4.1 | 6.0 | 8.2 | 11.5 |
| Stock Ref | Duct Size | A | B | C | 60 l/s | | 120 l/s | | 180 l/s | | | |
| 449366 | 220 x 90 | - | - | - | N/A | | N/A | | N/A | | | |

Louvred Grille with Flyscreen Fitting



| Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | |
|---------------|-----------|--------------------------|-----|----|------------------------------|--------|--------|--------|--------|--------|--------|--------|
| | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
| 400743 | 110 x 54 | 140 | 140 | 50 | 5.7 | 14.5 | 37 | 75 | 120 | - | - | - |

Round (M) 100mm to Rectangular (F/M) Adaptor

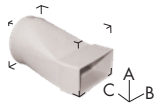


| Stock Ref | Duct Size | External Dimensions (mm) | | | Resistance (Pa) at flow rate | | | | | | | |
|------------------|-----------------|--------------------------|-----|-----|------------------------------|--------|--------|--------|--------|--------|--------|--------|
| | | A | B | C | 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
| 441654 ** | M to F 204 x 60 | 140 | 210 | 215 | 1.0 | 1.96 | 3.2 | 4.9 | 6.7 | 8.7 | 11.2 | 14.5 |
| 400740 | M to M 110 x 54 | 100 | 115 | 180 | 1.2 | 4.2 | 8.3 | 19.8 | 29.9 | 42 | 60 | 86 |

**This part comes in Grey. Whilst we will look to maintain the colour of Grey, by the nature of adopting a recycled plastic the colour and shade may vary at any given time.

Ducting & Accessories

Round (F) 125mm to Rectangular (F) Adaptor



Stock Ref
370127**

Duct Size
204 x 60

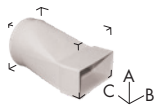
External Dimensions (mm)

| A | B | C |
|-----|-----|-----|
| 140 | 210 | 213 |

Resistance (Pa) at flow rate

| 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
|-------|--------|--------|--------|--------|--------|--------|--------|
| <1 | <1 | 1.5 | 2.8 | 4.5 | 6.7 | 9 | 11.5 |

Round (F) 150mm to Rectangular (F) Adaptor



Stock Ref
403031

Duct Size
220 x 90

External Dimensions (mm)

| A | B | C |
|-----|-----|-----|
| 160 | 225 | 203 |

Resistance (Pa) at flow rate

| 60 l/s | 120 l/s | 180 l/s |
|--------|---------|---------|
| N/A | N/A | N/A |

Short Round (M) 100mm to 110 x 54 (F) Adaptor



Stock Ref
455035

Duct Size
110 x 54

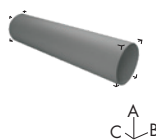
External Dimensions (mm)

| A | B | C |
|----|-----|-----|
| 60 | 110 | 105 |

Resistance (Pa) at flow rate

| 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
|-------|--------|--------|--------|--------|--------|--------|--------|
| 1.2 | 4.3 | 8.4 | 20 | 30.2 | 43 | 62 | 88 |

Round Ducting Insulated/Uninsulated



Stock Ref

Duct Size

External Dimensions (mm)

| A | B | C |
|---|---|---|
|---|---|---|

Resistance (Pa) at flow rate

| 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
|-------|--------|--------|--------|--------|--------|--------|--------|
|-------|--------|--------|--------|--------|--------|--------|--------|

| | | | | | | | | | | | | |
|----------------|---------------------------|-----|-----|------|------|------|------|------|-----|------|------|------|
| 497488 | Uninsulated 100 Ø x 1m | 100 | 100 | 1000 | <0.5 | <0.5 | 0.85 | 1.4 | 1.8 | 2.25 | 2.65 | 3.1 |
| 406873 | Insulated 100 Ø* x 2m | 250 | 250 | 2000 | <1 | <1 | 1.7 | 2.8 | 3.6 | 4.5 | 5.3 | 6.2 |
| 5108250 | Uninsulated 100 Ø x 2m | 100 | 100 | 2000 | <1 | <1 | 1.7 | 2.8 | 3.6 | 4.5 | 5.3 | 6.2 |
| 496155 | Uninsulated 120 Ø x 1m | 120 | 120 | 1000 | <0.5 | <0.5 | <0.5 | 0.65 | 0.9 | 1.2 | 1.55 | 1.9 |
| 434715 | Uninsulated 125 Ø* x 1.5m | 125 | 125 | 1500 | <1 | <1 | <1 | 1.3 | 1.8 | 2.4 | 3.1 | 3.8 |
| 406874 | Insulated 125 Ø* x 2m | 275 | 275 | 2000 | <1 | <1 | <1 | 1.3 | 1.8 | 2.4 | 3.1 | 3.8 |
| 496158 | Uninsulated 150 Ø x 1m | 150 | 150 | 1000 | <0.5 | <0.5 | <0.5 | <0.5 | 0.6 | 0.8 | 1 | 1.25 |
| 496159 | Uninsulated 150 Ø x 1.5m | 150 | 150 | 1500 | - | - | - | - | - | - | - | - |
| 406875 | Insulated 150 Ø* x 2m | 315 | 315 | 2000 | <1 | <1 | <1 | <1 | 1.2 | 1.6 | 2 | 2.5 |
| 5108248 | Uninsulated 150 Ø x 2m | 150 | 150 | 2000 | <1 | <1 | <1 | <1 | 1.2 | 1.6 | 2 | 2.5 |

Equal Tee Insulated/Uninsulated MMM



Stock Ref

Duct Size

External Dimensions (mm)

| A | B | C |
|---|---|---|
|---|---|---|

Resistance (Pa) at flow rate

| 8 l/s | 13 l/s | 21 l/s | 29 l/s | 37 l/s | 45 l/s | 53 l/s | 61 l/s |
|-------|--------|--------|--------|--------|--------|--------|--------|
|-------|--------|--------|--------|--------|--------|--------|--------|

| | | | | | | | | | | | | |
|---------------|-------------------|-----|-----|-----|----------------------|--|--|--|--|--|--|--|
| 406884 | Insulated 100 Ø* | 290 | 260 | 260 | vary on installation | | | | | | | |
| 372007 | Uninsulated 100 Ø | 190 | 110 | 135 | vary on installation | | | | | | | |
| 406885 | Insulated 125 Ø* | 310 | 265 | 285 | vary on installation | | | | | | | |
| 428636 | Uninsulated 125 Ø | 210 | 115 | 160 | vary on installation | | | | | | | |
| 406886 | Insulated 150 Ø* | 335 | 295 | 310 | vary on installation | | | | | | | |
| 370237 | Uninsulated 150 Ø | 235 | 130 | 177 | vary on installation | | | | | | | |

* Minimum insulation wall thickness 25mm. Insulation Thermal Conductivity: 0.04 W/(m.K)

** This part comes in Grey. Whilst we will look to maintain the colour of Grey, by the nature of adopting a recycled plastic the colour and shade may vary at any given time.

Ducting & Accessories



Fabric Woven PVC Flexible Ducting

Manufactured using fabric woven PVC with a wire helix. Used with single spigots and in multi-duct systems. Operating temperature -30°C to 70°C.

6 metre lengths

| Duct Size | Stock Ref |
|-----------|-----------|
| 100 Ø | 427569 |
| 125 Ø | 427570 |
| 150 Ø | 370281 |

T-Series Flexible Ducting

PVC with wire helix. For use with T-Series.

6m lengths

| Size | Duct Size | Stock Ref |
|---------|-----------|-----------|
| Size 6 | 175 Ø | 566607 |
| Size 7 | 225 Ø | 566609 |
| Size 9 | 300 Ø | 566612 |
| Size 12 | 400 Ø | 566616 |



Insulated Flexible Ducting

Insulated ducting should be used when duct passes through an unheated area. Minimises heat loss when used with heat recovery fans. Available in 6 diameters. An additional benefit is that thermally insulated duct offers some measure of acoustic attenuation.

10 metre lengths

| Duct Dia | Stock Ref |
|----------|-----------|
| 100 Ø | 561654 |
| 125 Ø | 561655 |
| 150 Ø | 561656 |



Duct Y Piece

For dividing a ventilation system, providing ducting to multiple supply or extract grilles using only a single fan source.

| 2x Into | 1x | Stock Ref |
|---------|-------|-----------|
| 100 Ø | 100 Ø | 452081 |
| 100 Ø | 150 Ø | 452082 |
| 125 Ø | 125 Ø | 455211 |
| 125 Ø | 150 Ø | 455212 |
| 150 Ø | 150 Ø | 452083 |
| 150 Ø | 200 Ø | 452084 |
| 200 Ø | 200 Ø | 452085 |
| 200 Ø | 250 Ø | 452078 |
| 250 Ø | 250 Ø | 452076 |
| 250 Ø | 300 Ø | 452079 |



Acoustic Insulated Ducting

Multiple layer aluminium/polyester laminate with micro perforated flexible core to enhance acoustic performance. Core surrounded by 25mm fibreglass insulation with outer vapour barrier.

| Duct Size | Length | Stock Ref |
|-----------|--------|-----------|
| 100 Ø | 1m | 443273 |
| 125 Ø | 1.5m | 443793 |
| 150 Ø | 1m | 443274 |



Reducer

| Duct Size | Stock Ref |
|-----------|-----------|
| R125/100 | 370302 |
| R150/100 | 370303 |
| R150/125 | 370304 |
| R200/150 | 370307 |
| R250/200 | 370309 |
| R300/100 | 370310 |
| R300/200 | 370312 |



Circular Extract Diffuser

Manufactured from powder coated steel. Suitable for exhausting air and can be fitted directly to the duct or in the ceiling.

| Duct Size | Stock Ref |
|-----------|-----------|
| 125 Ø | 10544125 |



Circular Supply Diffuser

Manufactured from powder coated steel. Suitable for supplying air and can be fitted directly to the duct or in the ceiling.

| Duct Size | Stock Ref |
|-----------|-----------|
| 100 Ø | 10543100 |



Acoustic Mat

486mm x 486mm x 25mm thick foam mat for use as a resilient mounting for wholehouse units.

| Model | Stock Ref |
|-----------|-----------|
| ACM/House | 370179 |



Circular Push-Fit Supply Diffuser

Manufactured from ABS. Easy to install by direct push-fit into duct. Suitable for supplying air and can be fitted directly to the duct or in the ceiling.

| Duct Size | Stock Ref |
|-----------|-----------|
| 100 Ø | 476936 |
| 125 Ø | 476937 |
| 150 Ø | 476938 |
| 200 Ø | 476939 |

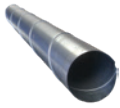


Circular Push-Fit Extract Diffuser

Manufactured from ABS. Easy to install by direct push-fit into duct. Suitable for supplying air and can be fitted directly to the duct or in the ceiling.

| Duct Size | Stock Ref |
|-----------|-----------|
| 100 Ø | 476944 |
| 125 Ø | 476945 |
| 150 Ø | 476946 |
| 200 Ø | 476947 |

Galvanised Spiral Wound Ducting



Spiral Ductwork - 3m Length

| Duct Size | Stock Ref |
|-----------|-----------|
| 100 Ø | 400900 |
| 125 Ø | 400901 |
| 150 Ø | 400902 |
| 200 Ø | 410922 |
| 250 Ø | 410923 |
| 315 Ø | 410924 |



Equal Tee

| Duct Size | Stock Ref |
|-----------|-----------|
| 100 Ø | 400749 |
| 150 Ø | 400751 |
| 315 Ø | 410925 |



90° Bend

| Duct Size | Stock Ref |
|-----------|-----------|
| 125 Ø | 400753 |
| 150 Ø | 400754 |
| 200 Ø | 370202 |



Female Coupler

| Duct Size | Stock Ref |
|-----------|-----------|
| 100 Ø | 400755 |
| 125 Ø | 400756 |
| 150 Ø | 400757 |
| 200 Ø | 410927 |
| 315 Ø | 410929 |



Joining Piece

In sheet metal. For joining lengths of flexible ducting to give long lasting airtight connection.

| Duct Size | Stock Ref |
|-----------|-----------|
| 100 Ø | 561804 |
| 125 Ø | 561805 |
| 150 Ø | 561806 |
| 200 Ø | 561808 |
| 250 Ø | 561810 |
| 315 Ø | 561813 |



Rectangular Balancing Damper

| Duct Size | Stock Ref |
|-----------|-----------|
| 110 x 54 | 405156 |
| 204 x 60 | 403698 |
| 220 x 90 | 403699 |



Circular Balancing Damper

| Duct Size | Stock Ref |
|-----------|-----------|
| 100 Ø | 400758 |
| 125 Ø | 400759 |
| 150 Ø | 400760 |
| 200 Ø | 410930 |
| 250 Ø | 410931 |
| 315 Ø | 410932 |

Fire Stopping

Vent-Axia provides a complete range of fire stopping products specifically tested with ventilation ducting. This versatile selection allows for stacking and parallel installation in certain circumstances, along with creative solutions for partition walls and slab mounting. All Fire Sleeves provide 120 minutes Integrity & Insulation. Fire Rated diffusers are tested successfully to 60 minutes.

Please note: For installations above 18m for England / Wales and NI and 11m for Scotland, all external grilles/parts used within the system must comply with BSEN13501-1:2018.



Fire Rated Diffuser

| Duct Size | Extract Stock Ref |
|-----------|----------------------|
| 100 Ø | 403431 |
| 125 Ø | 403432 |
| 150 Ø | 403433 |
| 200 Ø | 408828 |



Ceiling Fan Fire Stop

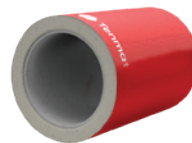
For ceiling breaks only

Model

125mmØ Fire Collar - 30 min fire-rated

Stock Ref

435135



Round Fire Sleeve

Model

Round 100mm sleeve

Round 125mm sleeve

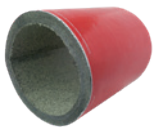
Round 150mm sleeve

Stock Ref

403428

403429

403430



Round Fire Sleeve - Low profile

Thickness:

Length:

CE Marked

Duct Size

100mm

125mm

150mm

10-15mm

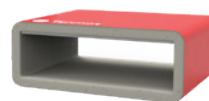
280mm (180mm 407655)

Stock Ref

407655

407656

407657



Rectangular Fire sleeve

Model

Rectangular 204x60mm sleeve - 3 sided

Rectangular 204x60mm wrap

Stock Ref

403498

435138

Fire Sleeves are tested & approved to:

BS EN 1366-3: 2009 - Uncapped/Uncapped (U/U) Constructions = Plasterboard & Masonry Walls

Fire Rating: EI120 (120 mins Integrity & Insulation)

Report No.'s: RF13219A, RF12096, RF10167, IF11007, IF10066, IF05055, IF06016, / Chiltern Int. Fire PAR/11078/01-IFC Assessment Report

Fire Rated Diffusers successfully tested for 60 minutes according to BS EN 1365-2:1999 Test Report Number: BTC 18074F & CHILT/IF10090

Fire Test Assessment also covers multiple flat ducts to be installed in series / side by side, max. 3No., 30, 60 & 120 Minute Partitions, Single & Double Boards.

Note: For a copy of the Fire Certificates for the product(s) above, visit our webpage www.vent-axia.com/range/ventilation-fire-stopping.



Rectangular Fire sleeve - Low profile - 4 sided

Thickness:

Length:

CE Marked

Duct Size

110x54mm

204x60mm

220x90mm

10-15mm

180mm

Stock Ref

407658

407659

407660

100 - 150mm Accessories



Wall Fitting Kit

A range of wall kits suitable for Vent-Axia range of 100 - 150mm fans. The kit can be installed into most walls using the telescopic liners supplied.

White

| Model | Stock Ref |
|-------|-----------|
| 100mm | 254102 |
| 125mm | 455226 |
| 150mm | 140902 |

Brown

| Model | Stock Ref |
|-------|-----------|
| 100mm | 254100 |
| 125mm | 497434 |
| 150mm | 140903 |

Terracotta

| Model | Stock Ref |
|-------|-----------|
| 125mm | 497432 |



Window Fitting Kit

For use in single or sealed double glazing and most materials up to 40mm thick.

White

| Model | Stock Ref |
|----------------|-----------|
| VA100 (105Ø) | 254101 |
| VA100 (110Ø) | 443234 |
| Centra/Sil 100 | 442947 |
| VA140/150 | 140901 |
| Solo Pro | 11461685 |



Air Grille

Louvre grille for external termination of 100mm diameter rigid ducting. Consists of wall mounting piece and grille with 2 fixing screws.

| | |
|-------------|------------------|
| Colour: | White or Brown |
| Dimensions: | 155 x 155 x 32mm |
| Material: | ABS plastic |

| Colour | Stock Ref |
|--------|-----------|
| White | 563511 |
| Brown | 563500 |



Termination Set

Used as a decorative inlet grille or soffit termination set in conjunction with 100mm or 125mm diameter ducting. Two fixing screws supplied to secure grille to the spigot through material up to 25mm thick. Dimension 155mm x 155mm.

| | |
|-----------|-------------|
| Colour: | White |
| Material: | ABS plastic |

| Stock Ref |
|-----------|
| 563513 |



Decoration Frame

A decoration frame that converts old Centrif to new Centrif Duo without the need to redecorate. The frame can be used with Quadra and Centrif Duo Plus.

The frame is simply installed using two wall fixing screws, allowing the fan to be mounted via it's standard mountings. Finished in a high moulded material plastic colour matched to the fan.

Colour: White
Size: 386mm x 296 x 32 mm deep

Stock Ref
442551



Quick Fit 100mm Airflow Shutter

Shutter with gravity flaps to protect against backdraught. The spigot connects to 100mm rigid ducting using quick fix grips provided.

Dimensions: 155 x 155 x 20mm
Material: Plastic

Colour Stock Ref
White **563522**
Brown **563542**



External Terminations Louvre Grille with Spigot

Plastic louvre grilles with either 100mm, 125mm or 150mm diameter spigots.

| Duct Size | Colour | Stock Ref |
|-----------|----------------|---------------|
| 100 Ø | Terracotta | 370328 |
| 100 Ø | Brown | 370329 |
| 100 Ø | White | 370330 |
| 100 Ø | Grey | 495334 |
| 100 Ø | Cotswold Stone | 495335 |
| 100 Ø | Black | 495336 |
| 125 Ø | Terracotta | 403569 |
| 125 Ø | Brown | 436649 |
| 125 Ø | White | 372278 |
| 125 Ø | Grey | 403568 |
| 125 Ø | Cotswold Stone | 403570 |
| 125 Ø | Black | 495337 |
| 150 Ø | Brown | 370337 |
| 150 Ø | Terracotta | 370338 |
| 150 Ø | White | 370339 |
| 150 Ø | Grey | 495338 |
| 150 Ø | Cotswold Stone | 495339 |
| 150 Ø | Black | 495340 |

100 - 150mm Accessories



Quick Fit 100mm Grille

Terminates a rigid duct on an outside wall using the 'quick fix' side grips without the need for additional fixings.

| Colour | Stock Ref |
|--------|-----------|
| White | 563521 |
| Brown | 563541 |



Vent Cowl

External termination for 110mm diameter rigid ducting through roofs and walls in exposed situations. Overall diameter 200mm. Not suitable for use with flexible ducting.

| Material | Stock Ref |
|-----------|-----------|
| Grey PVCu | 561403 |
| White | 457845 |



Quick Fix Termination

The quick fix termination is designed to be installed from inside the building to a nominal 117mm or 165mm diameter core-cut hole, saving time and cost. Four sealing rings ensures a weather tight fit to the wall external leaf. Effective length 370mm.

| Duct Size | Stock Ref |
|-----------|-----------|
| 100 Ø | 563535 |
| 150 Ø | 434656 |



Air Replacement Set

Bathroom and toilet ventilation is only effective when there is adequate air replacement into the room. This is often most effectively achieved by fitting a pair of air replacement grilles at low level in a door. Consists of a two piece telescopic set which fits unobtrusively on either side of the door panel.

| | |
|---------------------------|--------------------------------|
| Minimum fixing thickness: | 30mm |
| Dimensions: | 454 x 90mm |
| Hole size: | 435 x 76mm |
| Material: | HIPS / High Impact Polystyrene |
| Free area: | 16,600mm ² |

| Colour | Stock Ref |
|--------|-----------|
| Ivory | 561401 |



Condensation Trap

Condensation trap, for fitting in vertical rigid PVCu pipe ducting. Must be used where pipe ducts pass through unheated roof voids. Fitted with 20mm pipe connection for running off condensate. Not suitable for use with flexible ducting.

| | |
|-----------|-----------|
| Length: | 85mm |
| Material: | Grey PVCu |

| Size | Stock Ref |
|-------|-----------|
| 100mm | 563516A |
| 125mm | 455191 |



Wind Baffles

A range of 150mm wind baffles. Cowled wall outlet with damper protected gravity grille including foam lined damper to reduce noise.

Available in white and brown they are ideal for exposed coastal applications, helping to prevent unwanted backdraughts.

150mm

Colour

White

Brown

Stock Ref

452096

452097



VA140/150 Window Wind Cowl

Wind cowl for exposed areas.

Stock Ref

455262



Wind Baffle Kits

100mm wind baffle kit consisting of a telescopic wall tube and wind baffle. Available with either a white or brown wind baffle including foam lined damper to reduce noise.

Colour

White

Brown

Stock Ref

407382

407577


















Commercial Range



Lo-Carbon T-Series

The UK's No. 1 Commercial Fan is available with a low energy DC motor providing up to 65% energy saving. The motor is designed to provide longer life, improved performance, lower running costs and maintain the T-Series rugged reliability. Vent-Axia have improved the way this product can be purchased for the refurbishment market. As well as being able to purchase it as you always have, you can also purchase it as a fan core plus optional application specific fitting kit, which gives you more flexibility in both stocking and installing the product. It also supports our lo-carbon drive to reduce waste and landfill.

Vent-Axia®

| | | |
|---|--|---------|
|  | ACM 100-200 | H3-H4 |
|  | ACM 250-315 | H5-H6 |
|  | Powerflow Range | H7-H8 |
|  | Lo-Carbon T-Series Overview | H9-H10 |
|  | Lo-Carbon T-Series Window Fan | H11-H12 |
|  | Lo-Carbon T-Series Wall Fan | H13-H14 |
|  | Lo-Carbon T-Series Roof Fan | H15-H16 |
|  | Lo-Carbon T-Series Panel Fan | H17-H18 |
|  | Traditional T-Series Overview | H19-H20 |
|  | Traditional T-Series Window Fan | H21-H22 |
|  | Traditional T-Series Wall Fan | H23-H24 |
|  | Traditional T-Series Roof Fan | H25-H26 |
|  | Traditional T-Series Panel/Ceiling Fan | H27-H28 |
|  | Traditional T-Series Darkroom Fan | H29-H30 |
|  | Traditional T-Series In-line Fan | H31-H32 |
|  | Super T-Series Heavy Duty Wall Fans | H33-H34 |
|  | Traditional Standard Range Spares | H35-H38 |

ACM 100-200

- Designed and manufactured in the UK
- Three speed motor
- Timer versions available
- Removable motor core
- Rotating motor chassis
- IP44 rated
- Aesthetically pleasing with wipe clean polymer casing
- Sound data from independent testing
- Running speed selected on installation



Ducted Ventilation

Vent-Axia has designed a complete range of energy efficient Mixed Flow In-Line fans that are now quieter, offer two and half times the pressure of conventional axial fans and are dimensionally more compact making them ideal for many ducted applications.

The ACM Mixed Flow In-Line fan can operate in both horizontal and vertical positions.

Motor

All motors have three speeds selectable on installation and are fitted with Standard Thermal Overload Protection (S.T.O.P.). Designed for ambient temperatures up to +50°C. All sizes with capacitor run motors. All sizes are Class II appliances. Supply voltage 220-240V/1/50Hz.

Installation

These units have a separate footplate for simple location mounting and detachable spigots for simple connection to ducting. The motor body chassis rotates to provide connection in acute spaces. Cleaning the product is simple as all parts can be removed without removing the ducting.

Controller

For optimum variable speed performance use a Vent-Axia 1.5 Amp electronic controller. Surface mounted providing variable speed control with an On/Off/sensor slider with indication light. There is an adjustable minimum speed setting. The controller has electrical connections for use with suitable external sensors. Cannot be used with timer models.

1.5 Amp Controller (Suitable for 100mm – 200mm models). Dimensions: 86 x 156 x 53mm (H x W x D).

Stock Ref

W300310

For flush fitting, a metal wall box accessory is available.

Stock Ref

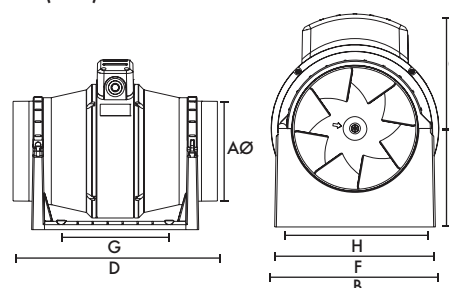
400144

Hole for wall box: 80 x 150 x 150mm (H x W x D).

Models

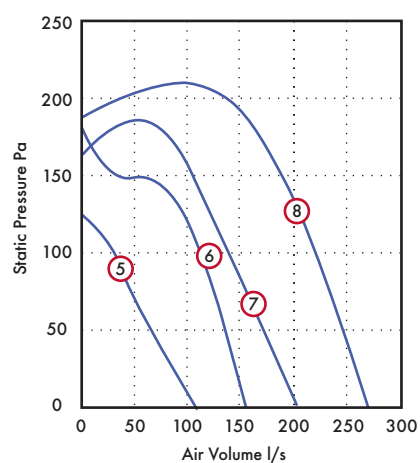
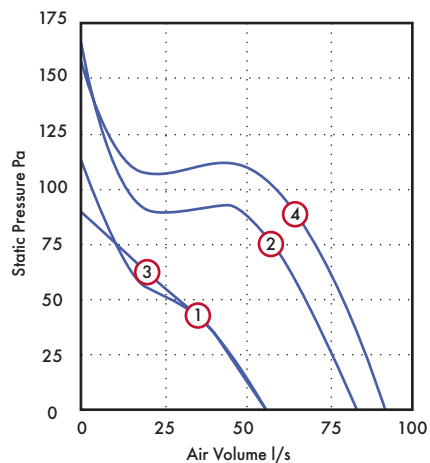
| Model | Stock Ref |
|---------|-----------------|
| ACM100 | 17104010 |
| ACM100T | 17104020 |
| ACM125 | 17105010 |
| ACM125T | 17105020 |
| ACM150 | 17106010 |
| ACM150T | 17106020 |
| ACM200 | 17108010 |
| ACM200T | 17108020 |

Dimensions (mm)



| Size | 100 | 125 | 150 | 200 |
|-----------------|-------|-------|-----|-------|
| AØ | 97 | 122 | 147 | 199.5 |
| B | 178 | 178 | 200 | 223 |
| C | 124 | 124 | 138 | 146 |
| D | 298 | 259 | 350 | 300 |
| E | 96 | 96 | 118 | 130 |
| F | 168 | 168 | 192 | 195 |
| G (fixing hole) | 120 | 120 | 162 | 100 |
| H (fixing hole) | 153.5 | 153.5 | 178 | 180 |

Performance Guide



| Dia. | Motor Phase | Speed | r.p.m | IP Rating | Curve Ref. | 0 | 50 | 100 | 150 | 200 | Motor kW | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-------|-------|-----------|------------|-----|-----|-----|-----|-----|----------|------------|------------|
| 100 | 1 | Low | 1580 | IP44 | 1 | 55 | 28 | - | - | - | 0.02 | 0.09 | 16 |
| 100 | 1 | High | 2200 | IP44 | 2 | 85 | 69 | 33 | - | - | 0.02 | 0.1 | 22 |
| 125 | 1 | Low | 1450 | IP44 | 3 | 55 | 30 | - | - | - | 0.02 | 0.1 | 17 |
| 125 | 1 | High | 2400 | IP44 | 4 | 92 | 79 | 60 | - | - | 0.03 | 0.12 | 24 |
| 150 | 1 | Low | 1645 | IP44 | 5 | 105 | 65 | 31 | - | - | 0.04 | 0.17 | 29 |
| 150 | 1 | High | 2350 | IP44 | 6 | 155 | 135 | 112 | 46 | - | 0.05 | 0.21 | 36 |
| 200 | 1 | Low | 1845 | IP44 | 7 | 204 | 170 | 138 | 103 | - | 0.08 | 0.48 | 26 |
| 200 | 1 | High | 2350 | IP44 | 8 | 270 | 247 | 220 | 188 | 134 | 0.11 | 0.55 | 41 |

*Medium speed is not shown.

Sound Data

| Dia. | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|---------------|----|-----|-----|-----|----|----|----|----|------------|
| 100 | Breakout High | 32 | 36 | 41 | 39 | 37 | 37 | 28 | 22 | 22 |
| 100 | Breakout Low | 30 | 31 | 34 | 36 | 28 | 29 | 23 | 22 | 16 |
| 100 | Inlet High | 38 | 42 | 57 | 56 | 54 | 46 | 38 | 30 | 37 |
| 100 | Inlet Low | 35 | 40 | 49 | 49 | 47 | 37 | 28 | 24 | 30 |
| 100 | Outlet High | 36 | 41 | 52 | 52 | 53 | 44 | 37 | 28 | 34 |
| 100 | Outlet Low | 38 | 41 | 45 | 46 | 45 | 36 | 28 | 24 | 27 |
| 125 | Breakout High | 32 | 33 | 38 | 41 | 41 | 40 | 33 | 23 | 24 |
| 125 | Breakout Low | 27 | 33 | 30 | 39 | 30 | 29 | 24 | 22 | 17 |
| 125 | Inlet High | 36 | 47 | 53 | 58 | 55 | 53 | 47 | 39 | 39 |
| 125 | Inlet Low | 38 | 42 | 45 | 48 | 45 | 41 | 35 | 26 | 29 |
| 125 | Outlet High | 36 | 47 | 51 | 54 | 55 | 50 | 46 | 37 | 37 |
| 125 | Outlet Low | 33 | 41 | 45 | 45 | 44 | 38 | 33 | 25 | 26 |
| 150 | Breakout High | 26 | 28 | 41 | 45 | 48 | 54 | 41 | 29 | 36 |
| 150 | Breakout Low | 21 | 29 | 45 | 49 | 43 | 44 | 32 | 22 | 29 |
| 150 | Inlet High | 40 | 49 | 59 | 63 | 59 | 63 | 55 | 47 | 46 |
| 150 | Inlet Low | 38 | 46 | 52 | 57 | 52 | 54 | 46 | 37 | 38 |
| 150 | Outlet High | 36 | 48 | 54 | 60 | 58 | 61 | 54 | 46 | 44 |
| 150 | Outlet Low | 33 | 45 | 49 | 54 | 54 | 52 | 45 | 36 | 37 |
| 200 | Breakout High | 38 | 53 | 47 | 47 | 56 | 60 | 44 | 33 | 41 |
| 200 | Breakout Low | 26 | 46 | 40 | 34 | 30 | 26 | 18 | 21 | 26 |
| 200 | Inlet High | 46 | 52 | 54 | 60 | 61 | 63 | 60 | 49 | 47 |
| 200 | Inlet Low | 38 | 37 | 40 | 41 | 39 | 35 | 24 | 23 | 22 |
| 200 | Outlet High | 63 | 68 | 69 | 73 | 70 | 69 | 62 | 54 | 54 |
| 200 | Outlet Low | 53 | 54 | 52 | 52 | 48 | 47 | 39 | 28 | 33 |

ACM 250-315

- Available in two sizes
- Supplied complete for simple installation
- Optimise fan performance by using an approved Vent-Axia controller
- Diagonal impeller with stator
- Galvanized metal housing
- Integrated thermal switch
- Includes a mounting bracket
- Designed to meet IP54



Ducted Ventilation

Vent-Axia has designed a complete range of energy efficient Mixed Flow In-Line fans for use with rigid and flexible ducting.

In-line Mixed Flow fans offer two and half times the pressure of conventional axial fans and are dimensionally more compact making them ideal for many ducted applications.

The ACM Mixed Flow In-Line fan can operate in both horizontal and vertical positions and can be mounted to meet its optimum performance.

Motor

All motors are fitted with Standard Thermal Overload Protection (S.T.O.P.). Designed for ambient temperatures up to +50°C. All sizes with capacitor run motors. ACM 250 and 315 are Class I appliances. Supply voltage 220-240V/1/50Hz.

Models

| Model | Stock Ref |
|--------|-----------|
| ACM250 | 17110010 |
| ACM315 | 17112010 |

ACM 250 Controller

For optimum performance use a Vent-Axia electronic controller. Surface mounted providing variable speed control with an On/Off/sensor slider with indication light. There is an adjustable minimum speed setting. The controller is radio suppressed to BS EN 55014 and electrical connections for use with suitable external sensors are provided.

1.5 Amp Controller – Suitable for 250mm model

Dimensions: 86 x 156 x 53mm (H x W x D).

| Model | Stock Ref |
|----------------------------|-----------|
| 1.5A Electronic Controller | W300310 |

ACM315 Controller

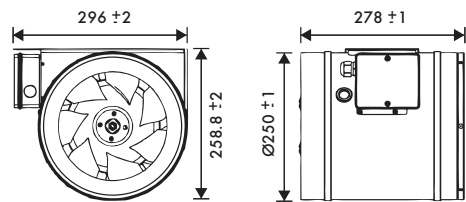
The electronic infinitely variable fan speed controller allow you to manually adjust the speed of single phase AC fans by varying the motor voltage through phase angle control. The integrated switch enables or disables the motor.

| | |
|---|----------------------------------|
| Supply voltage: | 230 VAC / 50–60 Hz |
| Regulated output: | U _{min} –U _s |
| Min. speed adjustment: | 80–180 VAC |
| Unregulated output: | 230VAC max 2.0A |
| Protection standard - Flush mounting: | IP44* |
| Protection standard - Surface mounting: | IP54* |
| Ambient conditions - Temperature: | 0–40 °C |
| Ambient conditions - Rel. humidity: | 5–95 % rH (non-condensing) |
| Maximum load - Rated max. current: | 0.2 - 3.0A |

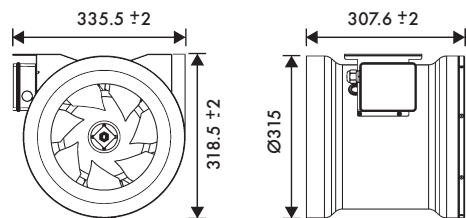
*According to EN 60529

| Model | Stock Ref |
|---------------------------|-----------|
| 3A Transformer Controller | SC5030 |

Dimensions (mm)

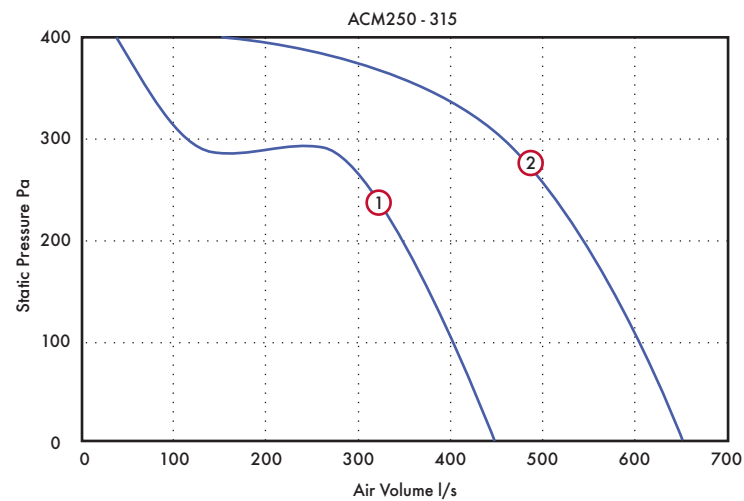


ACM250



ACM315

Performance Guide



| Dia. | Stock Ref. | Poles | r.p.m | IP Rating | Curve Ref. | l/s @ Pa | | | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|------------|-------|-------|-----------|------------|----------|-----|-----|-----|-----|----------|-----------|------------|------------|
| | | | | | | 0 | 100 | 200 | 300 | 400 | | | | |
| 250 | 17110010 | 2 | 2720 | IP54 | 1 | 450 | 410 | 350 | 120 | 40 | 0.14 | 0.8 | 1 | 53 |
| 315 | 17112010 | 2 | 2840 | IP54 | 2 | 650 | 610 | 540 | 460 | 150 | 0.27 | 1.2 | 1.6 | 56 |

Sound Data

| Dia. | Spectrum | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|----------|-----|-----|-----|----|----|----|----|------------|
| 250 | Inlet | 34 | 54 | 61 | 65 | 67 | 66 | 55 | 72 |
| 250 | Outlet | 39 | 64 | 68 | 71 | 70 | 66 | 55 | 78 |
| 250 | Breakout | 34 | 41 | 43 | 46 | 46 | 42 | 37 | 54 |
| 315 | Inlet | 45 | 60 | 66 | 68 | 69 | 67 | 56 | 75 |
| 315 | Outlet | 47 | 69 | 73 | 74 | 72 | 66 | 57 | 79 |
| 315 | Breakout | 38 | 41 | 46 | 50 | 49 | 46 | 41 | 58 |

Powerflow (ACP)

- Tough plastic in-line range in seven models
- 50-80mm long ribbed spigots
- Flame retardant casing
- All models speed controllable
- Fitted with Standard Thermal Overload Protection (S.T.O.P.)
- For the best performance from your fan, use a Vent-Axia controller
- IP44 Rated



Ducted Ventilation

Powerflow models provide a compact yet versatile range designed with the installer in mind, combining the acoustic benefits of a tough plastic casing with the pressure characteristics of a centrifugal fan.

A range of seven models available from 100 to 315mm dia. duct sizes. The 315mm dia. model has been specifically developed for use with rigid ductwork. Air volumes from 59l/s to 340l/s in free air and capable of pressure development up to 500 Pa.

Powerflow has 50-80mm long inlet and discharge spigots allowing easy installation and fixing. The adjustable mounting foot allows the terminal box to be rotated to any angle and allows plenty of space and adjustment for screw fixing. The robust fire retardant polymeric casing combined with internal guide vanes ensures optimum airflow management through the unit.

Electrical

Motors are 220-240V single phase 50Hz. Capacitor start and run. The terminal box is integral with the case moulding. All motors are fitted with Standard Thermal Overload Protection (S.T.O.P.).

Motor/Impeller

All models are fitted with an external rotor motor and backward curved impeller assembly for long life and reliability.

All sizes are IP44 according to BS EN 60529. Ball bearings are greased for life and designed to run at any angle. Insulation is Class 'B' (from -30°C to +40°C). Manufacture is controlled to BS EN ISO 9001.

Models

2 Pole In-Line Duct Fan - Single Phase.

Stock Ref

ACP10012

ACP12512

ACP15012

ACP16012

ACP20012

ACP25012

ACP31512

2.5A Electronic Controller

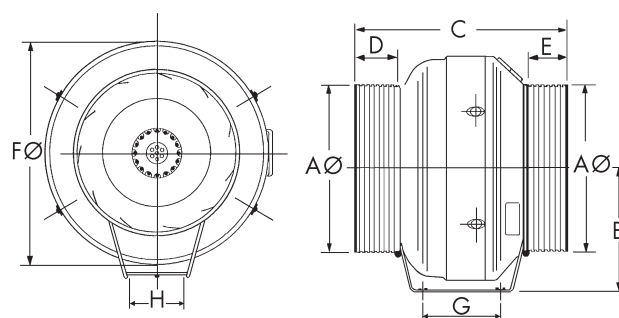
On/Off indication light. Infinitely variable speed control. Adjustable minimum speed setting and optional sensor mode. The controller is radio-suppressed to BS800 and rated at 2.5 amps.

Model

Stock Ref

2.5A Electronic Controller W10303102M

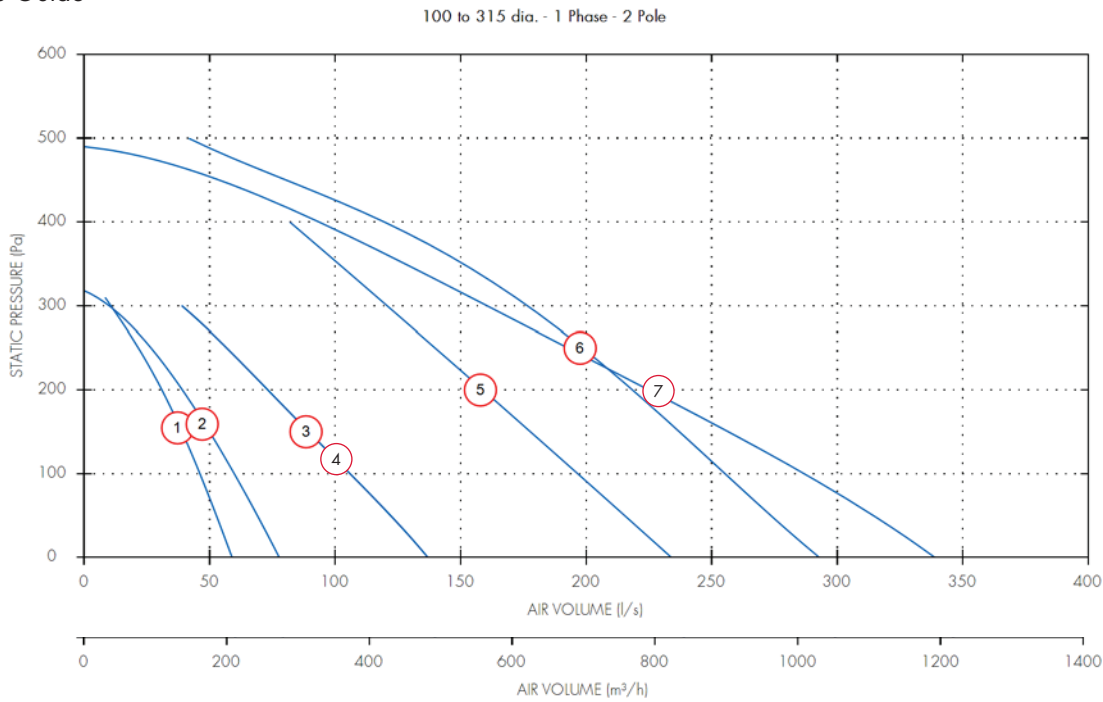
Dimensions (mm)



| Dia | AØ | B | C | D | E | FØ | G | H | Weight |
|-----|-----|-----|-----|----|----|-----|-----|------|--------|
| 100 | 100 | 146 | 287 | 52 | 52 | 254 | 110 | 270* | 2.2 |
| 125 | 125 | 146 | 287 | 60 | 60 | 254 | 110 | 270* | 2.2 |
| 150 | 149 | 175 | 287 | 52 | 52 | 301 | 110 | 270* | 3.1 |
| 160 | 160 | 175 | 287 | 52 | 52 | 301 | 110 | 270* | 3.1 |
| 200 | 200 | 193 | 290 | 47 | 47 | 344 | 92 | 130 | 4.3 |
| 250 | 250 | 218 | 312 | 65 | 65 | 367 | 92 | 130 | 4.6 |
| 315 | 315 | 250 | 366 | 76 | 76 | 405 | 92 | 130 | 5.9 |

*Sizes 100, 125, 150 & 160 have a flat mounting foot

Performance Guide



| Dia. | Motor Phase | Stock Ref | r.p.m | IP Rating | Curve Ref. | l/s at Pa | | | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-------|-----------|------------|-----------|-----|-----|-----|-----|----------|-----------|------------|------------|
| | | | | | | 0 | 100 | 200 | 300 | 400 | | | | |
| 100 | 1 | ACP10012 | 2740 | IP44 | 1 | 60 | 50 | 30 | 10 | | 0.08 | 0.85 | 0.34 | 35 |
| 125 | 1 | ACP12512 | 2410 | IP44 | 2 | 80 | 60 | 40 | 10 | | 0.08 | 0.85 | 0.34 | 35 |
| 150 | 1 | ACP15012 | 2520 | IP44 | 3 | 140 | 110 | 70 | 40 | | 0.1 | 1.1 | 0.43 | 45 |
| 150 | 1 | ACP16012 | 2520 | IP44 | 4 | 140 | 110 | 70 | 40 | | 0.1 | 1.1 | 0.43 | 45 |
| 200 | 1 | ACP20012 | 2620 | IP44 | 5 | 230 | 200 | 160 | 120 | | 0.15 | 1.52 | 0.68 | 47 |
| 250 | 1 | ACP25012 | 2720 | IP44 | 6 | 290 | 260 | 220 | 180 | 120 | 0.19 | 1.6 | 0.77 | 48 |
| 315 | 1 | ACP31512 | 2720 | IP44 | 7 | 340 | 290 | 220 | 160 | 90 | 0.18 | 1.57 | 0.75 | 51 |

Sound Data

| Dia. | Motor Phase | Stock Ref. | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|------------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 100 | 1 | ACP10012 | Inlet | 81 | 84 | 75 | 68 | 61 | 52 | 46 | 40 | 51 |
| 100 | 1 | ACP10012 | Outlet | 82 | 84 | 77 | 68 | 61 | 52 | 49 | 43 | 52 |
| 100 | 1 | ACP10012 | Breakout | 52 | 48 | 57 | 53 | 53 | 48 | 40 | 38 | 36 |
| 125 | 1 | ACP12512 | Inlet | 80 | 79 | 76 | 70 | 61 | 57 | 51 | 45 | 51 |
| 125 | 1 | ACP12512 | Outlet | 82 | 80 | 76 | 71 | 61 | 54 | 51 | 43 | 52 |
| 125 | 1 | ACP12512 | Breakout | 52 | 48 | 57 | 53 | 53 | 48 | 40 | 38 | 36 |
| 150 | 1 | ACP15012 | Inlet | 79 | 84 | 84 | 76 | 69 | 65 | 61 | 52 | 58 |
| 150 | 1 | ACP15012 | Outlet | 78 | 84 | 83 | 74 | 69 | 65 | 60 | 50 | 57 |
| 150 | 1 | ACP15012 | Breakout | 59 | 62 | 66 | 62 | 62 | 58 | 51 | 43 | 45 |
| 150 | 1 | ACP16012 | Inlet | 81 | 81 | 79 | 76 | 66 | 61 | 58 | 49 | 55 |
| 150 | 1 | ACP16012 | Outlet | 80 | 82 | 81 | 73 | 67 | 62 | 57 | 49 | 55 |
| 150 | 1 | ACP16012 | Breakout | 59 | 62 | 66 | 62 | 62 | 58 | 51 | 43 | 45 |
| 200 | 1 | ACP20012 | Inlet | 80 | 79 | 74 | 76 | 67 | 65 | 66 | 60 | 55 |
| 200 | 1 | ACP20012 | Outlet | 79 | 79 | 74 | 71 | 69 | 69 | 65 | 59 | 55 |
| 200 | 1 | ACP20012 | Breakout | 54 | 70 | 67 | 66 | 62 | 59 | 53 | 43 | 47 |
| 250 | 1 | ACP25012 | Inlet | 84 | 80 | 74 | 74 | 69 | 69 | 67 | 63 | 56 |
| 250 | 1 | ACP25012 | Outlet | 75 | 79 | 73 | 72 | 72 | 73 | 68 | 64 | 58 |
| 250 | 1 | ACP25012 | Breakout | 60 | 71 | 70 | 66 | 65 | 62 | 55 | 44 | 49 |
| 315 | 1 | ACP31512 | Inlet | 84 | 80 | 74 | 74 | 69 | 69 | 67 | 63 | 56 |
| 315 | 1 | ACP31512 | Outlet | 75 | 79 | 73 | 72 | 72 | 73 | 68 | 64 | 58 |
| 315 | 1 | ACP31512 | Breakout | 72 | 71 | 73 | 71 | 66 | 63 | 55 | 45 | 52 |

Lo-Carbon T-Series Range Overview

- Wall, Window, Roof and panel mounting versions available
- Low Energy DC Motor
- Up to 70% energy saving
- Modular design, available as a complete unit or as a separate fitting kit and fan core for refurbishment



ErP Regulations

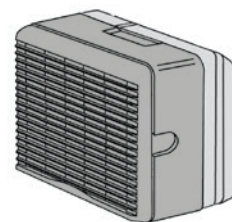
The introduction of the ErP regulations gave us the opportunity to review our product ranges and has enabled us to improve the way we stock and sell them. You can still buy the market leading T-Series in the same way you always have, as a complete product, however we have taken the opportunity to add a more flexible option if you need it. We have introduced a modular option for refurbishment situations where you may not want to replace the whole product.

For new build projects and complete building refits the market leading T-Series is unchanged and available as a complete unit generally supplied in one carton.

For refurbishment markets, supplying it as separate core and specific fitting kit gives more flexibility in both stocking and installing the product. This also gives the lowest overall cost to refurbish your fan system without changing wiring or controls, furthermore it also supports our Lo-Carbon drive to reduce waste and landfill.

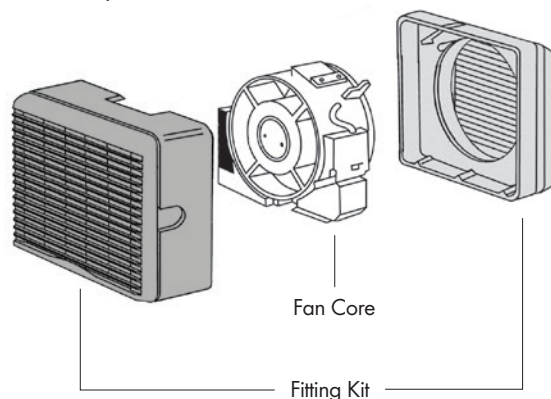
Wired controller available to make the Lo-Carbon T Series range the most flexible, efficient and controllable range of commercial wall and window fan systems.

Complete Product Option







Complete product

Modular Option





Lo-Carbon T-Series Complete Fan

| | |  |  |  |  |
|------------------|------|---|---|--|---|
| Controller Type* | Size | Window Stock Ref | Wall Stock Ref | Roof Stock Ref | Panel Stock Ref |
| Wired | 9" | 456165 | 456166 | 456168 | 456167 |
| Wired | 12" | 456173 | 456174 | 456176 | 456175 |

* Wired refers to the controller type that can be utilised with the particular model.

Lo-Carbon T-Series Modular Option

| | |  |  | | | |
|------------------|------|---|--|----------------|----------------|-----------------|
| | | Fitting Kit Options (excludes Fan Core) | | | | |
| Controller Type* | Size | Fan Core Stock Ref | Window Stock Ref | Wall Stock Ref | Roof Stock Ref | Panel Stock Ref |
| Wired | 9" | 472039 | 472047 | 472043 | 472055 | 472051 |
| Wired | 12" | 472040 | 472048 | 472044 | 472056 | 472052 |

* Wired refers to the controller type that can be utilised with the particular model.

Lo-Carbon T-Series Window Fan

- Reduces your carbon footprint
- Extract/intake model in 2 sizes: 9" and 12"
- Long life Lo-Carbon motor lasts twice as long as conventional motors
- Up to 70% energy saving
- Easy fit connector Top Socket, standard on all models



UK's No. 1 Commercial Fan

The Lo-Carbon T-Series Fan range utilises a low energy DC motor, developed to improve performance, lower running costs and maintain T-Series' rugged reliability.

Window Fan

The fitting kit is designed for installation through single or double glazing and material up to 32mm thick. Greater thicknesses can be accommodated using extended fixing rod sets. Alternatively, the Lo-Carbon T-Series range can be used in conjunction with Vent-Axia ventilation accessories in flexible and rigid ducting systems to suit individual requirements. It can also be mounted in a fixing plate on walls or above ceilings.

Instantaneous Shutter

With energy saving in mind, units are supplied complete with an integral instantaneous automatic louvre shutter concealed behind the interior grille. It operates on both extract and intake and at any angle of mounting.

The shutter is electronically controlled by an actuator with a damped action giving quiet operation during instant opening and closing. The interlocking edges of the shutter blades provide maximum back draught protection. When the fan is used with the Lo-Carbon T-Series controller, the shutter can be set open with the fan motor switched Off to provide natural ventilation without the security risk of an open window.

Top Socket

A connector Top Socket is standard on all T-Series fans. Allowing fast and trouble-free mains connection.

Models

Complete Fan

| Model | Stock Ref |
|-----------|-----------|
| 9" Wired | 456165 |
| 12" Wired | 456173 |

Fan Core (excludes Window Kit)

| Model | Stock Ref |
|-----------|-----------|
| 9" Wired | 472039 |
| 12" Wired | 472040 |

Window Kit (excludes Fan Core)

| Model | Stock Ref |
|-----------|-----------|
| 9" Wired | 472047 |
| 12" Wired | 472048 |

Accessory

Extended Fixing Rod set

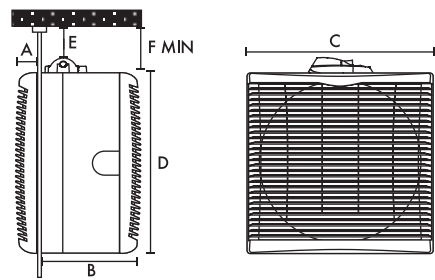
| Size | Stock Ref |
|------|-----------|
| 9" | 568104 |
| 12" | 568106 |

Controller



| Models | Stock Ref |
|--------|-----------|
| Wired | 455873 |

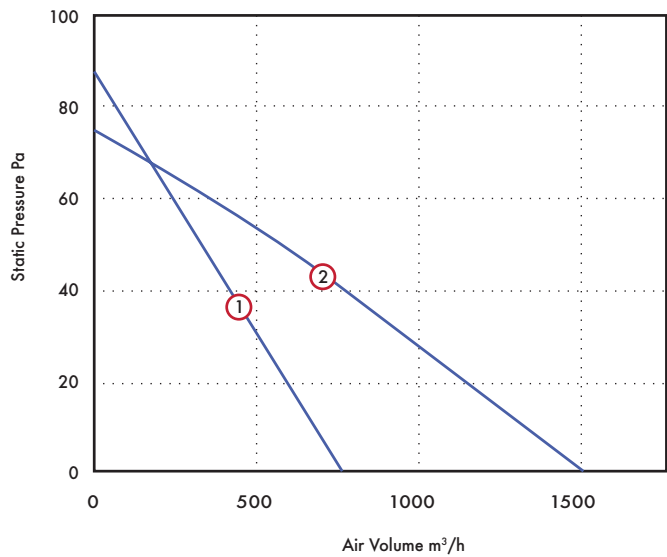
Dimensions (mm)



| Size Dim. | 9 in | 12 in |
|---------------|------|-------|
| A | 39 | 41 |
| B | 150 | 177 |
| C | 304 | 381 |
| D | 302 | 378 |
| E | 19 | 19 |
| F | 54 | 54 |
| Fixing hole Ø | 260 | 337 |
| Weight kg* | 5.35 | 7.7 |

*Complete product. Controller (W x H x D) 97 x 99 x 32

Performance Guide



| Model | Curve | Extract performance m³/h (l/s) | | | Watts (high) | Sound dB(A) (med) @ 3m | Amps @ 240V |
|------------------------------|-------|--------------------------------|------------|------------|-----------------|---------------------------|----------------|
| | | low | medium | high | | | |
| Lo-Carbon 9" Window - Wired | 1 | 332 (90) | 571 (160) | 761 (210) | 30.8 | 40 | 0.35 |
| Lo-Carbon 12" Window - Wired | 2 | 660 (185) | 1295 (360) | 1550 (430) | 68.6 | 46 | 0.73 |

Lo-Carbon T-Series Wall Fan

- Long life Lo-Carbon motor lasts twice as long as conventional motors
- Reduces your carbon footprint
- Extract/intake model in 2 sizes: 9" and 12"
- Up to 70% energy saving
- Easy fit connector Top Socket, standard on all models



UK's No. 1 Commercial Fan

The Lo-Carbon T-Series Fan range utilises a low energy DC motor, developed to improve performance, lower running costs and maintain T-Series' rugged reliability.

Wall Fan

Lo-Carbon T-Series wall models are designed to fit directly into double brick, solid and cavity walls. The two part telescopic liner accommodates wall thicknesses from 240 to 315mm. For thicker walls additional liner sections are available. Lo-Carbon T-Series wall models are provided with internal and external wall frames which fit flush with both faces of the wall.

Instantaneous Shutter

Lo-Carbon T-Series models are supplied complete with an integral instantaneous automatic louvre shutter which will operate on both intake and extract and at any angle of mounting.

When the fan is used with a Lo-Carbon T-Series controller, the shutter can be set open with the fan motor switched Off to provide natural ventilation without the security risk of an open window.

Electrical

Motor purpose-designed. Suitable for running at any angle. Quiet running. Suitable for operation in ambient temperatures from -40°C to +50°C.

Fitted with self resetting Standard Thermal Overload Protection (S.T.O.P.).

Supply voltage 220-240V/1/50Hz.

Top Socket

A connector Top Socket is standard on all T-Series fans. Allowing fast and trouble-free mains connection.

Models

Complete Fan

| Size | Stock Ref |
|-----------|-----------|
| 9" Wired | 456166 |
| 12" Wired | 456174 |

Fan Core (excludes Wall Kit)

| Size | Stock Ref |
|-----------|-----------|
| 9" Wired | 472039 |
| 12" Wired | 472040 |

Wall Kit (excludes Fan Core)

| Size | Stock Ref |
|-----------|-----------|
| 9" Wired | 472043 |
| 12" Wired | 472044 |

Accessory

Additional Wall Liner Section

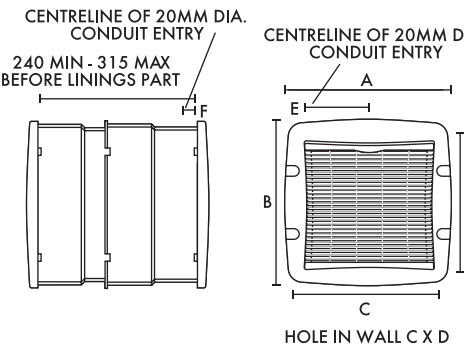
| Size | Stock Ref |
|------|-----------|
| 9" | 460096 |
| 12" | 460086 |

Controller



| Models | Stock Ref |
|--------|-----------|
| Wired | 455873 |

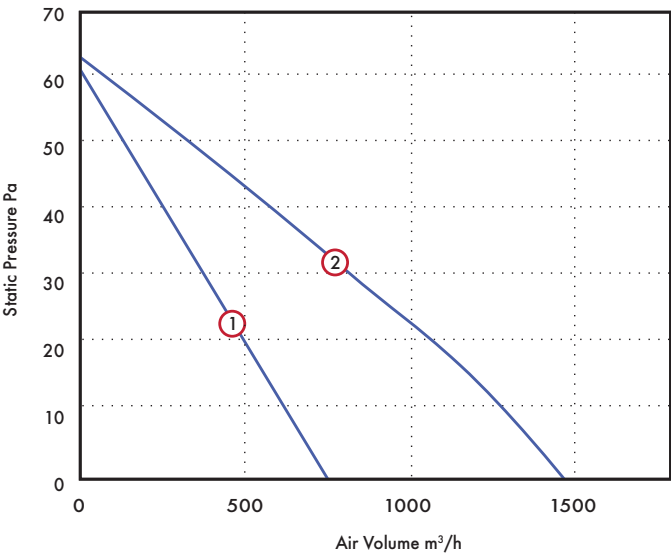
Dimensions (mm)



| Size Dim. | 9 in | 12 in |
|------------|------|-------|
| A | 391 | 470 |
| B | 388 | 467 |
| C | 365 | 442 |
| D | 375 | 450 |
| E | 143 | 182 |
| F | 25 | 25 |
| Weight kg* | 7.77 | 10.86 |

*Complete product. Controller (W x H x D) 97 x 99 x 32

Performance Guide



| Model | Curve | Extract performance m³/h (l/s) | | | Watts (high) | Sound dB(A) (med) @ 3m | Amps @ 240V |
|----------------------------|-------|--------------------------------|------------|------------|--------------|------------------------|-------------|
| | | low | medium | high | | | |
| Lo-Carbon 9" Wall - Wired | 1 | 326 (90) | 562 (160) | 732 (210) | 27 | 39 | 0.31 |
| Lo-Carbon 12" Wall - Wired | 2 | 660 (185) | 1355 (360) | 1650 (430) | 68 | 48 | 0.70 |

Lo-Carbon T-Series Roof Fan

- Reduces your carbon footprint
- Extract / intake model in 2 sizes: 9" and 12"
- Long life Lo-Carbon motor lasts twice as long as other conventional motors
- Up to 70% energy saving
- Easy fit connector Top Socket, standard on all models



UK's No. 1 Commercial Fan

The Lo-Carbon T-Series Fan range utilises a low energy DC motor, developed to improve performance, lower running costs and maintain T-Series' rugged reliability.

Roof Fitting Kit

Designing ventilation systems with the unit mounted in a skylight or a flat roof is easy. With a low profile cowl, the Lo-Carbon T-Series Roof model is suitable for installation in horizontal, angled (max pitch 30deg) and vertical glass and for fixing plates in roofs. For vertical windows or walls in exposed areas and single and double glazing including most types of glass up to 32mm thick. Greater thicknesses can be accommodated using extended fixing rod sets. Both sizes of Vent-Axia roof plate assemblies can be fitted easily into flat roofs.

Instantaneous Shutter

With energy saving in mind, Lo-Carbon T-Series models are supplied complete with an integral, instantaneous, automatic louvre shutter concealed behind the interior grille.

It will operate on both intake and extract and at any angle of mounting. The shutter is electronically controlled by an actuator with a damped action giving quiet operation during instant opening and closing.

When the fan is used with a Lo-Carbon T-Series controller, the shutter can be set open with the fan motor switched off to provide natural ventilation without the security risk of an open window.

Top Socket

A connector Top Socket is standard on all T-Series fans. Allowing fast and trouble-free mains connection.

Electrical

Motor purpose-designed. Suitable for running at any angle. Quiet

running, enclosed. Suitable for operation in ambient temperatures from -40°C to +50°C.

Fitted with self resetting Standard Thermal Overload Protection (S.T.O.P.).

Supply voltage 220-240V/1/50Hz.

Models

Complete Fan

| Model | Stock Ref |
|-----------|-----------|
| 9" Wired | 456168 |
| 12" Wired | 456176 |

Fan Core (excludes Roof Kit)

| Size | Stock Ref |
|-----------|-----------|
| 9" Wired | 472039 |
| 12" Wired | 472040 |

Roof Kit (excludes Fan Core)

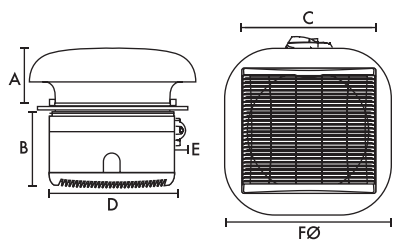
| Size | Stock Ref |
|-----------|-----------|
| 9" Wired | 472055 |
| 12" Wired | 472056 |

Controller



| Models | Stock Ref |
|--------|-----------|
| Wired | 455873 |

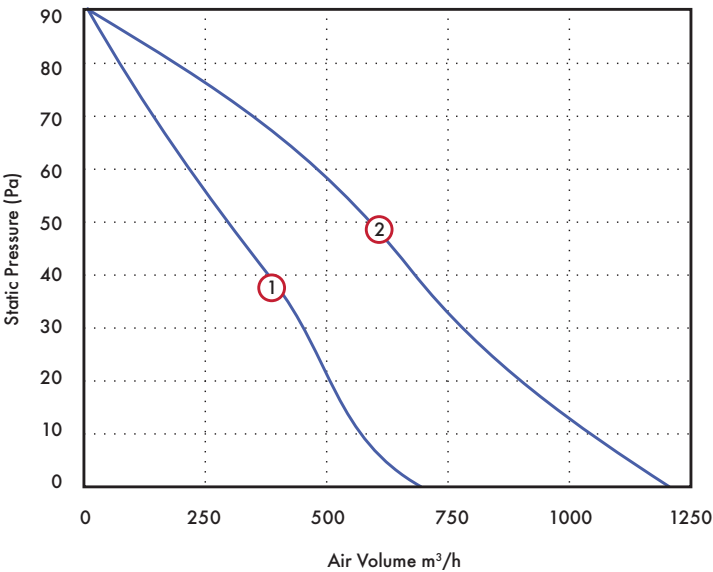
Dimensions (mm)



| Size Dim. | 9 in | 12 in |
|-------------|------|-------|
| A | 136 | 171 |
| B | 150 | 177 |
| C | 304 | 381 |
| D | 302 | 378 |
| E | 54 | 54 |
| FØ | 400 | 500 |
| Fixing Hole | 260 | 337 |
| Weight kg* | 6.22 | 9.28 |

*Complete product. Controller (W x H x D) 97 x 99 x 32

Performance Graph



| Model | Curve | Extract performance m³/h (l/s) | | | Watts (high) | Sound dB(A) (med) @ 3m | Amps @ 240V |
|----------------------------|-------|--------------------------------|------------|------------|-----------------|---------------------------|----------------|
| | | low | medium | high | | | |
| Lo-Carbon 9" Roof - Wired | 1 | 313 (85) | 562 (155) | 693 (190) | 27 | 40 | 0.34 |
| Lo-Carbon 12" Roof - Wired | 2 | 518 (143) | 1017 (282) | 1194 (330) | 67 | 48 | 0.69 |

Lo-Carbon T-Series Panel Fan

- Reduces your carbon footprint
- Extract / intake model in 2 sizes: 9" and 12"
- Long life Lo-Carbon motor last twice as long as other conventional motors
- Up to 70% energy saving
- Easy fit connector Top Socket, standard on all models



UK's No. 1 Commercial Fan

The Lo-Carbon T-Series Fan range utilises a low energy DC motor, developed to improve performance, lower running costs and maintain T-Series' rugged reliability.

Panel Fitting Kit

Lo-Carbon T-Series panel/ceiling models are suitable for mounting at any angle in internal partitions, ceilings, ducts and, with louvre grilles, through external walls. When installed only the louvre grille is visible.

Instantaneous Shutter

With energy saving in mind, Lo-Carbon T-Series models are supplied complete with an integral instantaneous automatic louvre shutter concealed behind the interior grille. With a Lo-Carbon T-Series Controller the fan will operate on both extract and intake, suitable for any angle of mounting. When the fan is used with a Lo-Carbon T-Series controller, the shutter can be set open with the fan motor switched off to provide natural ventilation without the security risk of an open window.

Top Socket

A connector Top Socket is standard on all T-Series fans. Allowing fast and trouble-free mains connection.

Electrical

Suitable for operation in ambient temperatures from -40°C to +50°C.

Fitted with self resetting Standard Thermal Overload Protection (S.T.O.P). Supply voltage: 220-240V/1/50Hz.

Easy Cleaning

Integrated component design allows all parts to be dismantled for cleaning without the use of specialist tools.

Models

Complete Fan

| Size | Stock Ref |
|-----------|-----------|
| 9" Wired | 456167 |
| 12" Wired | 456175 |

Fan Core (excludes wired Panel Kit)

| Size | Stock Ref |
|-----------|-----------|
| 9" Wired | 472039 |
| 12" Wired | 472040 |

Panel Kit (excludes Fan Core)

| Size | Stock Ref |
|-----------|-----------|
| 9" Wired | 472051 |
| 12" Wired | 472052 |

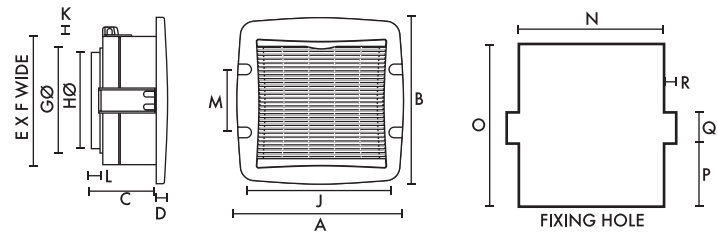
Controller



Models

| Models | Stock Ref |
|--------|-----------|
| Wired | 455873 |

Dimensions (mm)

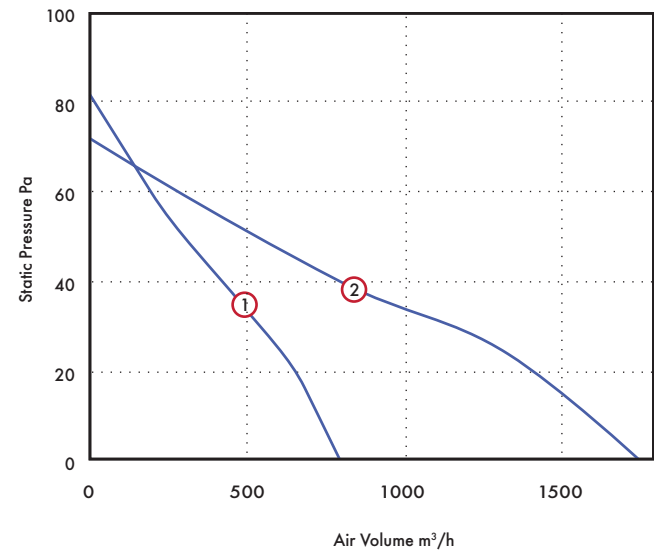


| Size | 9 in | 12 in | Size | 9 in | 12 in |
|------|------|-------|------|------|-------|
| A | 391 | 470 | J | 345 | 422 |
| B | 388 | 467 | K | 19 | 19 |
| C | 129 | 152 | L | 22 | 22 |
| D | 39 | 41 | M | 180 | 180 |
| E | 302 | 378 | N | 309 | 386 |
| F | 304 | 381 | O | 326 | 402 |
| GØ | 255 | 334 | P | 126 | 164 |
| HØ | 247 | 325 | Q | 55 | 55 |

Weight kg*: 9mm - 5.13, 12mm - 7.44

*Complete product. Controller (W x H x D) 97 x 99 x 32

Performance Guide



| Model | Curve | Extract performance m³/h (l/s) | | | Watts (high) | Sound dB(A) (med) @ 3m | Amps @ 240V |
|-----------------------------|-------|--------------------------------|------------|------------|--------------|------------------------|-------------|
| | | low | medium | high | | | |
| Lo-Carbon 9" Panel - Wired | 1 | 357 (100) | 601 (166) | 799 (221) | 30 | 41 | 0.33 |
| Lo-Carbon 12" Panel - Wired | 2 | 737 (205) | 1487 (413) | 1761 (490) | 67 | 48 | 0.70 |

Traditional T-Series Range Overview

- Available as wall, window, panel, roof, inline or Darkroom models
- Available as a complete unit or modular fan core and fitting kit for refurbishments
- Flexible installation design
- Simple installation



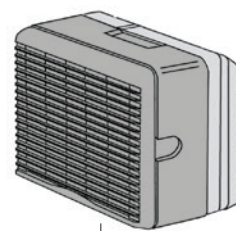
ErP Regulations

The introduction of the ErP regulations gave us the opportunity to review our product ranges and has enabled us to improve the way we stock and sell them. You can still buy the market leading T-Series in the same way you always have, as a complete product, however we have taken the opportunity to add a more flexible option if you need it. We have introduced a modular option for refurbishment situations where you may not want to replace the whole product.

For new build projects and complete building refits the market leading T-Series is unchanged and available as a complete unit generally supplied in one carton.

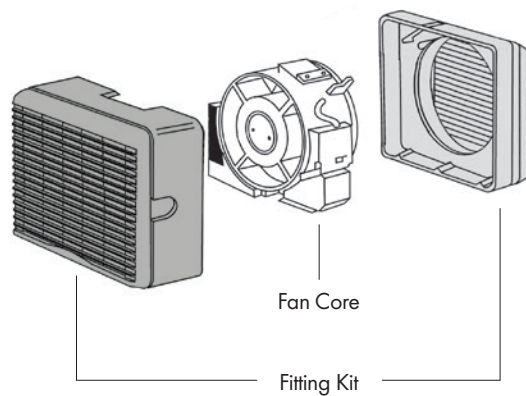
For refurbishment markets, supplying as separate core and specific fitting kit gives more flexibility in both stocking and installing the product. This also gives the lowest overall cost to refurbish your fan system without changing wiring or controls, furthermore it also supports our Lo-Carbon drive to reduce waste and landfill.

Complete Product Option



Complete product

Modular option



Traditional T-Series Complete Fan

| |  |  |  |  |  |  |
|------|---|---|---|---|---|---|
| Size | Window Stock Ref | Wall Stock Ref | Roof Stock Ref | Panel Stock Ref | Darkroom Stock Ref | In-line Stock Ref |
| 6" | W161110 | W161510 | W161210 | W161610 | W161240 | W161710 |
| 7" | W162110 | W162510 | W162210 | W162610 | W162240 | N/A |
| 9" | W163110 | W163510 | W163210 | W163610 | W163240 | W163710 |
| 12" | W164110 | W164510 | W164210 | W164610 | W164240 | W164710 |

Traditional T-Series Modular Option



Fitting Kit Options (excludes Fan Core)

| Size | Fan Core Stock Ref | Window Stock Ref | Wall Stock Ref | Roof Stock Ref | Panel Stock Ref | Darkroom Stock Ref | In-line Stock Ref |
|------|-----------------------|---------------------|-------------------|-------------------|--------------------|-----------------------|----------------------|
| 6" | 472012 | 472020 | 472016 | 472028 | 472024 | 472032 | 472036 |
| 7" | 472013 | 472021 | 472017 | 472029 | 472025 | 472033 | N/A |
| 9" | 472014 | 472022 | 472018 | 472030 | 472026 | 472034 | 472037 |
| 12" | 472015 | 472023 | 472019 | 472031 | 472027 | 472035 | 472038 |

Traditional T-Series Window Fan

- Extract/intake fans in 4 sizes: 6", 7", 9" and 12"
- Patented electronic shutter system ensures quiet, trouble free operation
- To obtain the best from your fan, use the Ecotronic controller
- Shutter open/fan off mode
- Low sound levels
- Easy fit connector Top Socket, standard on all models
- Designed for single or double glazing up to 32mm thick



UK's No. 1 Commercial Fan

The T-Series fan range is fitted with a Vent-Axia M-Tech motor, developed to improve performance, lower running costs and maintain the T-Series' rugged reliability. A patented speed control pack is simply plugged in one of 3 positions to provide low, medium or boost speed matching the fan performance to the requirements of the installation.

Instantaneous Shutter

With energy saving in mind T-Series Fitting Kits are supplied complete with an integral instantaneous automatic louvre shutter concealed behind the interior grille. It operates on both extract and intake and at any angle of mounting.

When the fan is used with a T-Series or Ecotronic controller, the shutter can be set open with the fan motor switched off to provide natural ventilation without the security risk of an open window.

Top Socket

A connector Top Socket is standard on all T-Series fans allowing fast and trouble-free mains connection.

Easy Cleaning

Integrated component design allows all parts to be dismantled for cleaning without the use of specialist tools.

Electrical

Motor purpose-designed. Suitable for running at any angle. Quiet running. Suitable for operation in ambient temperatures from -40°C to +50°C.

Fitted with Standard Thermal Overload Protection (S.T.O.P.).

Supply voltage 220-240V/1/50Hz.

Window Kit

Designed for use in single or double glazing, most types of glass and materials up to 32mm thick. Greater thicknesses can be accommodated using Extended Fixing Rod Sets. Can also be mounted in a fixing plate or wall, in ducts or above ceilings.

Models

Complete Fan

| Model | Stock Ref |
|--------|-----------|
| TX6WW | W161110 |
| TX7WW | W162110 |
| TX9WW | W163110 |
| TX12WW | W164110 |

Fan Core (excludes Fitting Kit)

| Size | Stock Ref |
|------|-----------|
| TX6 | 472012 |
| TX7 | 472013 |
| TX9 | 472014 |
| TX12 | 472015 |

Window Kits (excludes Fan Core)

| Size | Stock Ref |
|------|-----------|
| TX6 | 472020 |
| TX7 | 472021 |
| TX9 | 472022 |
| TX12 | 472023 |

Accessories

Extended Fitting Rod set

| Size | Stock Ref |
|--------|-----------|
| 6/7/9" | 568104 |
| 12" | 568106 |

Controllers

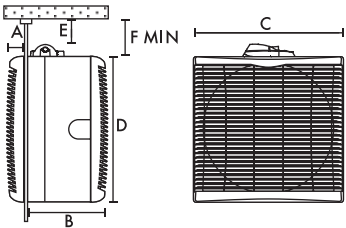


Ecotronic Controller Surface Mounting
Stock Ref
W362320



T-Series Controller Surface Mounting
Stock Ref
W361119

Dimensions (mm)



| Size Dim. | 6 in | 7 in | 9 in | 12 in |
|---------------|------|------|------|-------|
| A | 31 | 31 | 39 | 41 |
| B | 130 | 130 | 150 | 177 |
| C | 226 | 265 | 304 | 381 |
| D | 220 | 258 | 302 | 378 |
| E | 19 | 19 | 19 | 19 |
| F | 54 | 54 | 54 | 54 |
| Fixing hole Ø | 184 | 222 | 260 | 337 |
| Weight kg* | 3.57 | 3.93 | 5.35 | 7.7 |

*Complete product.

Performance Guide

| Model | Extract performance m³/h (l/s) | | | Watts (high) | Sound dB(A) (med) @ 3m | Amps @ 240V |
|-------------|--------------------------------|------------|------------|-----------------|---------------------------|----------------|
| | low | medium | high | | | |
| TX6 Window | 245 (68) | 315 (88) | 360 (100) | 30 | 41 | 0.24 |
| TX7 Window | 305 (85) | 395 (110) | 485 (135) | 40 | 37 | 0.24 |
| TX9 Window | 465 (130) | 685 (190) | 795 (220) | 85 | 43 | 0.42 |
| TX12 Window | 1095 (305) | 1415 (393) | 1615 (449) | 105 | 48 | 0.51 |

Traditional T-Series Wall Fan

- Extract/intake model in 4 sizes: 6", 7", 9" and 12"
- Patented electronic shutter system ensures quiet, trouble free operation
- For the very best from your fan use the Ecotronic controller
- Easy fit connector Top Socket, standard on all models



UK's No. 1 Commercial Fan

Behind the grille of the Vent-Axia T-Series Wall model is a range of high performance extract/intake fans designed to fit through most wall thicknesses using telescopic liners supplied.

T-Series also features a unique speed control pack which enables high, medium or low speed to be preset to suit room size or required duty.

T-Series controllers may be used with this model to obtain a choice of speeds, reversible airflow direction and automatic sensor operation. The Vent-Axia Ecotronic controller gives even greater running economy with its minimum speed setting and 'E' mode.

Top Socket

A connector Top Socket is standard on all T-Series fans. Allowing fast and trouble-free mains connection.

Shutter

TX models are supplied complete with an integral instantaneous automatic louvre shutter which will operate on both intake and extract and at any angle of mounting.

When the fan is used with a T-Series or Ecotronic controller, the shutter can be set open with the fan motor switched off to provide natural ventilation without the security risk of an open window.

Electrical

Motor purpose-designed. Suitable for running at any angle. Quiet running, enclosed. Suitable for operation in ambient temperatures from -40°C to +50°C.

Fitted with Standard Thermal Overload Protection (S.T.O.P.).

Supply voltage 220-240V/1/50Hz.

Wall Kits

Designed to fit into most double brick walls using the telescopic liners, supplied. Additional liners are available to accommodate exceptionally thick brick walls.

Models

Complete Fan

| Model | Stock Ref |
|--------|-----------|
| TX6WL | W161510 |
| TX7WL | W162510 |
| TX9WL | W163510 |
| TX12WL | W164510 |

Fan Core (excludes Fitting Kit)

| Size | Stock Ref |
|------|-----------|
| TX6 | 472012 |
| TX7 | 472013 |
| TX9 | 472014 |
| TX12 | 472015 |

Wall Kits (excludes Fan Core)

| Size | Stock Ref |
|------|-----------|
| TX6 | 472016 |
| TX7 | 472017 |
| TX9 | 472018 |
| TX12 | 472019 |

Accessories

Additional Wall Liner Section

| Size | Stock Ref |
|------|-----------|
| TX6 | 460094 |
| TX7 | 460095 |
| TX9 | 460096 |
| TX12 | 460086 |

Controllers

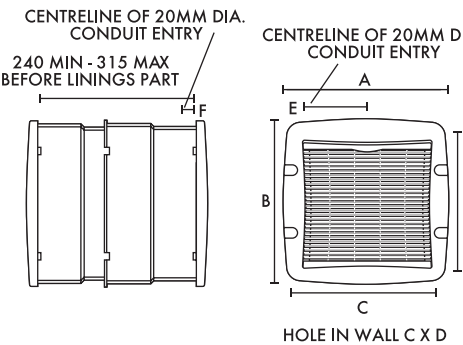


Ecotronic Controller Surface Mounting
Stock Ref
W362320



T-Series Controller Surface Mounting
Stock Ref
W361119

Dimensions (mm)



| Size Dim. | 6 in | 7 in | 9 in | 12 in |
|-----------|------|------|------|-------|
| A | 310 | 352 | 391 | 470 |
| B | 303 | 345 | 388 | 467 |
| C | 290 | 330 | 365 | 442 |
| D | 290 | 330 | 375 | 450 |
| E | 104 | 124 | 143 | 182 |
| F | 25 | 25 | 25 | 25 |
| Weight kg | 5.54 | 6.13 | 7.77 | 10.86 |

*Complete product.

Performance Guide

| Model | Extract performance m ³ /h (l/s) | | | Watts (high) | Sound dB(A) (med) @ 3m | Amps @ 240V |
|-----------|---|------------|------------|-----------------|---------------------------|----------------|
| | low | medium | high | | | |
| TX6 Wall | 270 (75) | 350 (97) | 395 (110) | 40 | 43 | 0.24 |
| TX7 Wall | 335 (93) | 435 (120) | 530 (147) | 40 | 39 | 0.24 |
| TX9 Wall | 515 (143) | 755 (210) | 870 (241) | 85 | 43 | 0.42 |
| TX12 Wall | 1185 (329) | 1530 (425) | 1745 (485) | 105 | 49 | 0.51 |

Traditional T-Series Roof Fan

- Extract/intake model in 4 sizes: 6", 7", 9" and 12"
- Patented electronic shutter system ensures quiet, trouble free operation
- For the very best from your fan use the Ecotronic controller
- T-Series controllers and sensors save energy by only switching on the units when you want, either manually or automatically
- Easy fit connector Top Socket, standard on all models



UK's No. 1 Commercial Fan

With a low profile cowl, the T-Series Roof model is suitable for installation in horizontal, angled (max pitch 30deg) and vertical glass and for fixing plates in roofs. For vertical windows or walls in exposed areas and single or double glazing including most types of glass up to 32mm thick. Greater thicknesses can be accommodated using extended fixing rod sets. All four sizes of Vent-Axia roof plate assemblies can be fitted easily into flat roofs.

T-Series features a unique speed control pack which enables high, medium or low speed to be preset to suit room size or required duty. When used with a T-Series TSC controller, the speed control pack is removed from the T-Series fan and fitted into the 3-pin socket in the back of the controller. The Vent-Axia Ecotronic controller gives even greater running economy with its minimum speed setting and 'E' mode. When using the Ecotronic controller the speed control pack remains in the fan.

Shutter

With energy saving in mind, T-Series Fitting Kits are supplied complete with an integral instantaneous automatic louvre shutter concealed behind the interior grille. It will operate on both intake and extract and at any angle of mounting.

When the fan is used with a T-Series or Ecotronic controller, the shutter can be set open with the fan motor switched off to provide natural ventilation without the security risk of an open window.

Electrical

Motor purpose-designed. Suitable for running at any angle. Quiet running, enclosed. Suitable for operation in ambient temperatures from -40°C to +50°C.

Fitted with Standard Thermal Overload Protection (S.T.O.P.).

Supply voltage 220-240V/1/50 Hz.

Top Socket

A connector Top Socket is standard on all T-Series fans. Allowing fast and trouble-free mains connection.

Models

Complete Fan

| Model | Stock Ref |
|--------|-----------|
| TX6RF | W161210 |
| TX7RF | W162210 |
| TX9RF | W163210 |
| TX12RF | W164210 |

Fan Core (excludes Fitting Kit)

| Size | Stock Ref |
|------|-----------|
| TX6 | 472012 |
| TX7 | 472013 |
| TX9 | 472014 |
| TX12 | 472015 |

Roof Kit (excludes Fan Core)

| Size | Stock Ref |
|------|-----------|
| TX6 | 472028 |
| TX7 | 472029 |
| TX9 | 472030 |
| TX12 | 472031 |

Controllers

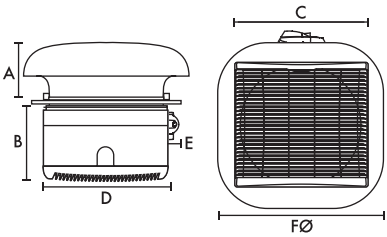


Ecotronic Controller Surface Mounting
 Stock Ref
 W362320



T-Series Controller Surface Mounting
 Stock Ref
 W361119

Dimensions (mm)



| Size Dim. | 6 in | 7 in | 9 in | 12 in |
|---------------|------|------|------|-------|
| A | 100 | 136 | 136 | 171 |
| B | 130 | 130 | 150 | 177 |
| C | 226 | 265 | 304 | 381 |
| D | 220 | 258 | 302 | 378 |
| E | 54 | 54 | 54 | 54 |
| F Ø | 285 | 400 | 400 | 500 |
| Fixing Hole Ø | 184 | 222 | 260 | 337 |
| Weight kg * | 3.96 | 4.89 | 6.22 | 9.28 |

*Complete product.

Performance

| Model | Extract performance m ³ /h (l/s) | | | Watts (high) | Sound dB(A) (med) @ 3m | Amps @ 240V |
|-----------|---|------------|------------|-----------------|---------------------------|----------------|
| | low | medium | high | | | |
| TX6 Roof | 195 (55) | 250 (70) | 290 (80) | 30 | 41 | 0.24 |
| TX7 Roof | 305 (85) | 395 (110) | 485 (135) | 40 | 37 | 0.24 |
| TX9 Roof | 465 (130) | 685 (190) | 795 (220) | 85 | 43 | 0.42 |
| TX12 Roof | 1010 (280) | 1305 (362) | 1485 (412) | 105 | 48 | 0.51 |

Traditional T-Series Panel/Ceiling Fan

- Extract/intake model in 4 sizes: 6", 7", 9" and 12"
- Colour: soft tone grey
- Patented electronic shutter system ensures quiet, trouble-free operation
- For the very best from your fan use the Ecotronic controller
- Easy fit connector Top Socket, standard on all models



UK's No. 1 Commercial Fan

Vent-Axia T-Series Panel/Ceiling models are suitable for mounting at any angle in internal partitions, ceilings, ducts and, with louvre grilles, through external walls. When installed only the louvre grille is visible. The range features a unique speed control pack which enables high, medium or low speed to be preset to suit a specific room size or required duty.

T-Series controllers may be used with this model to obtain a choice of speeds, reversible airflow direction and automatic sensor operation. When used with a controller, the speed control pack is removed from the T-Series fan and fitted into the 3-pin socket in the back of the controller. The Vent-Axia Ecotronic controller gives even greater running economy with its minimum speed setting on 'E' mode and infinitely variable speed control. For this controller the speed control pack remains in the fan.

Electrical

Suitable for operation in ambient temperatures from -40°C to +50°C.

Fitted with Standard Thermal Overload Protection (S.T.O.P).

Supply voltage: 220-240V/1/50Hz.

Top Socket

A connector Top Socket is standard on all T-Series fans allowing fast and trouble-free mains connection.

Shutter

With energy saving in mind, panel/ceiling kits are supplied complete with an integral instantaneous automatic louvre shutter concealed behind the interior grille. It will operate on both intake and extract and at any angle of mounting.

When the fan is used with a T-Series or Ecotronic controller, the shutter can be set open with the fan motor switched off to provide natural ventilation without the security risk of an open window.

Models

Complete Fan

| Model | Stock Ref |
|--------|-----------|
| TX6PL | W161610 |
| TX7PL | W162610 |
| TX9PL | W163610 |
| TX12PL | W164610 |

Fan Core (excludes Fitting Kit)

| Size | Stock Ref |
|------|-----------|
| TX6 | 472012 |
| TX7 | 472013 |
| TX9 | 472014 |
| TX12 | 472015 |

Panel/Ceiling Kit (excludes Fan Core)

| Size | Stock Ref |
|------|-----------|
| TX6 | 472024 |
| TX7 | 472025 |
| TX9 | 472026 |
| TX12 | 472027 |

Controllers



Ecotronic Controller Surface Mounting

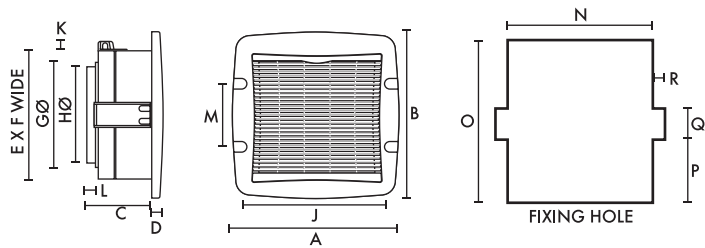
Stock Ref
W362320



T-Series Controller Surface Mounting

Stock Ref
W361119

Dimensions (mm)



| Size Dim. | 6 in | 7 in | 9 in | 12 in |
|------------|------|------|------|-------|
| A | 310 | 352 | 391 | 470 |
| B | 303 | 345 | 388 | 467 |
| C | 117 | 117 | 129 | 152 |
| D | 32 | 32 | 39 | 41 |
| E | 220 | 258 | 302 | 378 |
| F | 226 | 265 | 304 | 381 |
| GØ | 180 | 218 | 255 | 334 |
| HØ | 171 | 210 | 247 | 325 |
| J | 267 | 306 | 345 | 422 |
| K | 19 | 19 | 19 | 19 |
| L | 22 | 22 | 22 | 22 |
| M | 180 | 180 | 180 | 180 |
| N | 231 | 270 | 309 | 386 |
| O | 244 | 282 | 326 | 402 |
| P | 85 | 104 | 126 | 164 |
| Q | 55 | 55 | 55 | 55 |
| R | 12 | 12 | 12 | 12 |
| Weight kg* | 3.50 | 3.82 | 5.13 | 7.44 |

* Complete product.

Performance Guide

| Model | Extract performance m³/h (l/s) | | | Watts (high) | Sound dB(A) (med) @ 3m | Amps @ 240V |
|--------------------|--------------------------------|------------|------------|-----------------|---------------------------|----------------|
| | low | medium | high | | | |
| TX6 Panel/Ceiling | 295 (81) | 380 (105) | 435 (120) | 30 | 41 | 0.24 |
| TX7 Panel/Ceiling | 365 (101) | 480 (133) | 585 (162) | 40 | 37 | 0.24 |
| TX9 Panel/Ceiling | 565 (157) | 830 (230) | 960 (267) | 85 | 43 | 0.42 |
| TX12 Panel/Ceiling | 1270 (353) | 1640 (456) | 1885 (524) | 105 | 44 | 0.51 |

Traditional T-Series Darkroom Fan

- Extract/intake models in 4 sizes: 6", 7", 9" and 12"
- Specially designed to provide extract/intake ventilation in darkrooms, X-ray areas, etc
- Patented electronic shutter system ensures quiet, trouble free operation
- For the very best from your fan use the Ecotronic controller
- Integrated component design allows all parts to be dismantled for cleaning without the use of specialist tools
- Easy fit connector Top Socket, standard on all models



UK's No. 1 Commercial Fan

A range designed for photographic, medical, dental and veterinarian applications, also for opticians and other specialist applications. Most darkrooms need a minimum of ten air changes per hour for comfort and efficiency. For rooms containing heat producing equipment (eg: print glazers) a higher rate of air change may be desirable.

The Darkroom fitting kit has two cowls, the interior cowl being designed to give light protection. It can be installed in windows, partitions, external walls or roofs. Extended fixing rods for fixing thicknesses up to 370mm are supplied with the unit. Provision should be made for adequate air replacement through Vent-Axia non-vision grilles.

Shutter

With energy savings in mind Darkroom models are supplied complete with an integral instantaneous automatic louvre shutter concealed behind the interior cowl. Operates on intake and extract at any angle of mounting.

When used with a T-Series or Ecotronic controller, the shutter can be set open with the fan motor switched Off to provide natural ventilation without the security risk of an open window.

Top Socket

A connector Top Socket is standard on all T-Series fans. Allowing fast and trouble-free mains connection.

Electrical

Suitable for running at any angle. Quiet running, enclosed. Fitted with Standard Thermal Overload Protection (S.T.O.P.).

Supply voltage: 220-240V/1/50Hz.

Suitable for operation in ambient temperatures from -40°C to +50°C.

Models

Complete Fan

| Model | Stock Ref |
|--------|-----------|
| TX6DR | W161240 |
| TX7DR | W162240 |
| TX9DR | W163240 |
| TX12DR | W164240 |

Fan Core (excludes Fitting Kit)

| Size | Stock Ref |
|------|-----------|
| TX6 | 472012 |
| TX7 | 472013 |
| TX9 | 472014 |
| TX12 | 472015 |

Darkroom Kit (excludes Fan Core)

| Size | Stock Ref |
|------|-----------|
| TX6 | 472032 |
| TX7 | 472033 |
| TX9 | 472034 |
| TX12 | 472035 |

Controllers



Ecotronic Controller Surface Mounting

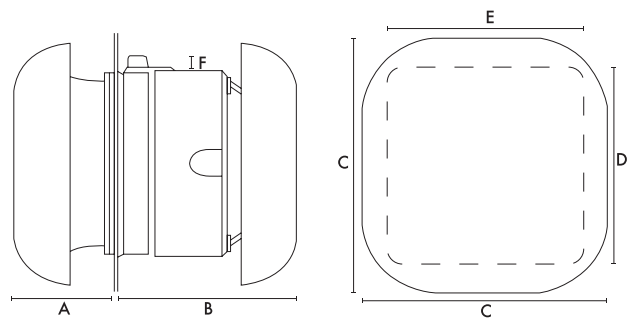
Stock Ref
W362320



T-Series Controller Surface Mounting

Stock Ref
W361119

Dimensions (mm)



| Size Dim. | 6 in | 7 in | 9 in | 12 in |
|---------------|------|------|------|-------|
| A | 100 | 136 | 136 | 171 |
| B | 196 | 206 | 229 | 308 |
| C | 285 | 400 | 400 | 500 |
| D | 220 | 258 | 302 | 378 |
| E | 226 | 265 | 304 | 381 |
| F | 19 | 19 | 19 | 19 |
| Fixing Hole Ø | 184 | 222 | 260 | 337 |
| Weight kg * | 4.13 | 5.33 | 6.60 | 10.05 |

*Complete product.

Performance Guide

| Model | Extract performance m³/h (l/s) | | | Watts (high) | Sound dB(A) (med) @ 3m | Amps @ 240V |
|---------------|--------------------------------|------------|------------|-----------------|---------------------------|----------------|
| | low | medium | high | | | |
| TX6 Darkroom | 200 (55) | 240 (67) | 265 (74) | 30 | 43 | 0.24 |
| TX7 Darkroom | 330 (92) | 415 (115) | 530 (147) | 40 | 42 | 0.24 |
| TX9 Darkroom | 455 (126) | 630 (175) | 725 (201) | 85 | 45 | 0.42 |
| TX12 Darkroom | 870 (242) | 1040 (289) | 1130 (314) | 105 | 42 | 0.51 |

Traditional T-Series In-Line Fan

- Extract/intake model in 3 sizes: 6", 9" and 12"
- Patented instantaneous electronic shutter system ensures quiet, trouble free operation
- For the best from your fan use the Ecotronic controller
- T-Series controllers and sensor save energy by only switching on the units when you want, either manually or automatically
- Easy fit connector Top Socket, standard on all models



UK's No. 1 Commercial Fan

No other range of high performance in-line duct fans offers a combination of 3 impeller diameters, reversibility, low sound level, speed control and built-in electric shutter. T-Series features a unique speed control pack which enables high, medium or low speed to be preset to suit room size or required duty. Designed for use with rigid or flexible ducting, T-Series In-Line models can be plate mounted or fixed through partitions and in ceiling voids.

T-Series controllers may be used with this model to obtain a choice of speeds, extract/intake airflow direction and automatic sensor operation. The Vent-Axia Ecotronic controller gives even greater running economy with its minimum speed setting and 'E' mode.

Top Socket

A connector Top Socket is standard on all T-Series fans. Allowing fast and trouble-free mains connection.

Shutter

The shutter is electronically controlled by an actuator with a damped action giving quiet operation during instant opening and closing. The interlocking edges of the shutter blades provide maximum back draught protection.

When the fan is used with a T-Series or Ecotronic controller, the shutter can be set open with the fan motor switched off to provide natural ventilation without the security risk of an open window.

Ducts

Where ducts pass through an unheated roof void, the duct should be insulated. Horizontal ducts should fall away from the fan unit. In circumstances where an excessive amount of moisture is present, a condensation trap should be installed in the exhaust duct. The fan unit should be accessible for regular maintenance.

Electrical

Suitable for operation in ambient temperatures from -40°C to +50°C.

Fitted with Standard Thermal Overload Protection (S.T.O.P.).

Supply voltage 220-240V/1/50 Hz.

Models

Complete Fan

| Model | Stock Ref |
|--------|-----------|
| TX6IL | W161710 |
| TX9IL | W163710 |
| TX12IL | W164710 |

Fan Core (excludes Fitting Kit)

| Model | Stock Ref |
|-------|-----------|
| TX6 | 472012 |
| TX9 | 472014 |
| TX12 | 472015 |

In-line Kit (excludes Fan Core)

| Model | Stock Ref |
|-------|-----------|
| TX6 | 472036 |
| TX9 | 472037 |
| TX12 | 472038 |

For use with rigid and flexible ducting. Can be plate-mounted or fixed to partitions and in ceiling voids.

Controllers



Ecotronic Controller Surface Mounting

Stock Ref

W362320



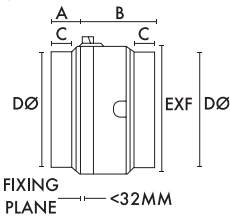
T-Series Controller Surface Mounting

Stock Ref

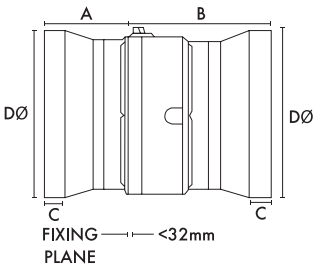
W361119

Dimensions (mm)

Sizes 6 & 9



Size 12



| Size Dim. | 6 in | 9 in | 12 in |
|---------------|------|------|-------|
| A | 75 | 71 | 200 |
| B | 175 | 183 | 337 |
| C | 45 | 41 | 45 |
| DØ | 175 | 300 | 400 |
| E | 220 | 302 | 378 |
| F | 226 | 304 | 381 |
| Fixing Hole Ø | 184 | 260 | 337 |
| kg | 4.5 | 8 | 11.5 |

Performance Guide

| Model | Extract performance m³/h (l/s) | | | Watts (high) | Sound dB(A) (med) @ 3m | Amps @ 240V |
|--------------|--------------------------------|------------|------------|-----------------|---------------------------|----------------|
| | low | medium | high | | | |
| TX6 In-line | 318 (88) | 398 (110) | 444 (123) | 30 | 45 | 0.24 |
| TX9 In-line | 703 (195) | 966 (268) | 1050 (292) | 85 | 47 | 0.42 |
| TX12 In-line | 1674 (465) | 2000 (556) | 2230 (620) | 105 | 51 | 0.51 |

Super T-Series

- 4 impeller diameters 355, 400, 450, 500mm
- Complete with telescopic wall sleeve and shutter, ready for installation
- IP54 motor and terminal box
- Smart internal grille and external shutter with flange trim
- Super quiet operation
- For the very best performance from your fan, use the Vent-Axia 2.5 Amp electronic controller



Powerful Ventilation

Vent-Axia's Super T-Series 355, 400, 450 and 500mm fans provide efficient, quiet powerful ventilation with performances up to 4940m³/h. Tough heavy duty internal grilles and external weather shutters ensure longevity, performance and peace of mind.

Construction

The axial fan at the heart of the Super T range is based on an integrated impeller and internal rotor motor design which produces a very compact unit. A specially designed bellmouth inlet and mounting plate ensures an excellent performance to sound level ratio.

Electrical

Single phase 220-240V 50Hz. Capacitor start and run. An IP54 terminal box is supplied with all models with conduit entry from the side of the wall liner. All motors are fitted with Standard Thermal Overload Protection (S.T.O.P.), which should be wired via the controller.

Models

Super T - Gravity shutter

When installed, only the room side aluminium fascia grille is visible. The outside is finished with an external gravity shutter and frame.

| Model | Stock Ref |
|-------------|-----------|
| ST355-16-WL | 165510 |
| ST400-16-WL | 166510 |
| ST450-16-WL | 167510 |
| ST500-16-WL | 168510 |

Super T TX - Electric shutter

Super T TX extract or intake models with powerful, quiet, smooth-operation electric shutters.

| Model | Stock Ref |
|-----------|-----------|
| STX355-16 | 165710 |
| STX400-16 | 166710 |

| | |
|-----------|--------|
| STX450-16 | 167710 |
| STX500-16 | 168710 |

Super T Filtered Air Input

Super T ARX and AR filtered passive air replacement input unit. Consisting of a wall liner with high capacity high disposable EU4 pleated filter which fits inside the wall liner.

ARX Models

With electronically controlled integral shutter AR Models - external louvre fixed blade.

| Model | Stock Ref |
|-----------------------------|-----------|
| Units with integral shutter | |
| STARX355-16 | 165810 |
| STARX450-16 | 167810 |

Units with louvre fixed blades

| | |
|------------|--------|
| STAR355-16 | 165910 |
| STAR450-16 | 167910 |

Filtered Kitchen Extract - Super T GF

Super T GF extract unit without internal grille, but with matching stainless steel filter housing and tray kit ready for assembly on site and 50mm stainless steel framed mesh grease filter with handles.

| Model | Stock Ref |
|------------|-----------|
| STGF355-14 | 165620 |
| STGF400-14 | 166620 |

Accessories

Replacement Grease Filters

Super T replacement grease filters 50mm stainless steel mesh filter with handles. Supplied in packs of two.

| Model | Stock Ref |
|-------|-----------|
| 355 | 452550 |
| 400 | 452551 |

Replacement Air Filters

High capacity EU4 pleated filter which fits inside wall liner. Supplied in packs of five.

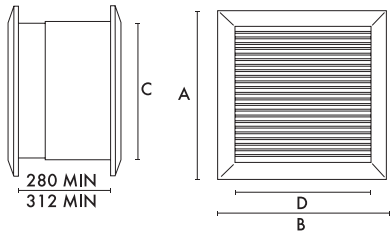
| Model | Stock Ref |
|-------|-----------|
| 355 | 452814 |
| 450 | 452815 |

Electronic 2.5A Controller

Provides variable motor speed control. On/Off with indication light. Infinitely variable speed slider control. Presettable minimum speed and sensor mode option: can be connected to a range of Vent-Axia sensors. Radio suppressed to BS 800. Includes electric shutter output.

| Stock Ref |
|------------|
| W10303102M |

Dimensions (mm)



CxD SQ. HOLE THROUGH WALL

| Impeller dia. | 355 | 400 | 450 | 500 |
|---------------|-----|-----|-----|-----|
| A | 550 | 597 | 657 | 727 |
| B | 550 | 597 | 657 | 727 |
| C | 470 | 520 | 580 | 650 |
| D | 470 | 520 | 580 | 650 |
| Weight kg | 17 | 22 | 28 | 33 |

Performance Guide

| Model | Extract Performance m³/h (l/s) F.I.D. | Watts | S.C. amps | F.L.C. amps | Sound dB(A) @ 3m |
|--------|--|-------|-----------|-------------|------------------|
| 355-16 | 1800 (500) | 130 | 1.38 | 0.6 | 40 |
| 400-16 | 2034 (565) | 90 | 1.2 | 0.46 | 45 |
| 450-16 | 2561 (761) | 100 | 1.4 | 0.48 | 48 |
| 500-16 | 4378 (1216) | 360 | 3.6 | 1.6 | 51 |
| 355-14 | 2150 (597) | 150 | 1.38 | 0.7 | 56 |
| 400-14 | 3500 (972) | 190 | 1.45 | 0.84 | 59 |

Standard Range Spares Only



As the iconic Standard Range is being made obsolete after such a long life, we would like to provide answers to some of your questions.

Time line of the Standard Range

- Launched in 1958, with no significant design changes from inception to today.
- T-Series launched in 1986 and was designed as the Standard Range's replacement.
- 30 years later we still sell the Standard Range as well.
- In 2018 the Standard Range was 60 years old!
- We have tried to manage the end of the Standard Range as best we can to fully support our customers.

Why is it being discontinued?

The moulding method is very outdated and materials used in its production are coming to the end of their available life, with costs and lead times rising significantly. Tools are now at the end of life, at current volumes it is uneconomic to make new tools. Future regulation changes will eventually make this range obsolete.

What are my options when Standard Range is not available?

The T-Series was designed as a replacement. Most installations can be fitted with a T-Series instead of a Standard Range model with only a small amount of modification.

Please see the 'Fitting Guide for Replacing a Standard Range Installation with a T-Series Model' for full details explaining each model and the options/modifications that may be required on site.

My building is listed/I must keep the look of the existing Standard Range fan

We are supporting this type of request by keeping a limited range of key spares for the Standard Range. This will not cover any mouldings, fascias and grills but will cover the motor and impeller. You will be able to replace these key parts and keep the existing mouldings to extend the life of your Standard Range fan.

















One of the moulded parts has been damaged/vandalised - will any spare mouldings be available?

Unfortunately not, however it is always worth a call to Technical Support with an image and size of the moulding required, they will then be able to investigate if there are any replacement mouldings available. Please note that we cannot guarantee this will be the case.

Fitting Guide for Replacing a Standard Range Installation with a T-Series Model







Modifications Required for Electrical Fit



| Installation Type | Standard Range Fan Model | | T-Series Fan Equivalent Fan Model | | Mechanical Fit Modifications required | No Controller Fitted | Rangemaster Controller Fitted | Old style Rangemaster Controller with Boost Fitted | Further Comments |
|-------------------|--------------------------|---|-----------------------------------|---|--|---|--|---|--|
| Window | No Shutter Fitted |  | S6WW > TX6WW |  | None | No wiring modification required. Follow T-Series installation instructions. | Remove the shutter assembly. Use existing controller. To make use of T-Series shutter, change to 5 core cable. | Replace controller with T-Series or Ecotronic controller. Remove the shutter assembly. To make use of T-Series shutter, change to 5 core cable - See controller instructions. | Window cut out of same size models is identical. |
| | | S7WW > TX7WW | | | | | | | |
| | | S9WW > TX9WW | | | | | | | |
| | | S12WW > TX12WW | | | | | | | |
| Window | Shutter Fitted |  | S6WW > TX6WW |  | None | No wiring modification required. Follow T-Series installation instructions. | Can use existing controller. To make use of T-Series shutter, change to 5 core cable. | Replace controller with T-Series or Ecotronic controller. To make use of T-Series shutter, change to 5 core cable - See controller instructions. | Window cut out of same size models is identical. |
| | | S7WW > TX7WW | | | | | | | |
| | | S9WW > TX9WW | | | | | | | |
| | | S12WW > TX12WW | | | | | | | |
| Roof | No Shutter Fitted |  | S6RF > TX6RF |  | None | No wiring modification required. Follow T-Series installation instructions. | Remove the shutter assembly. Use existing controller. To make use of T-Series shutter, change to 5 core cable. | Replace controller with T-Series or Ecotronic controller. Remove the shutter assembly. To make use of T-Series shutter, change to 5 core cable - See controller instructions. | Roof cut out of same size models is identical. |
| | | S7RF > TX7RF | | | | | | | |
| | | S9RF > TX9RF | | | | | | | |
| | | S12RF > TX12RF | | | | | | | |
| Roof | Shutter Fitted |  | S6RF > TX6RF |  | None | No wiring modification required. Follow T-Series installation instructions. | Can use existing controller. To make use of T-Series shutter, change to 5 core cable. | Replace controller with T-Series or Ecotronic controller. To make use of T-Series shutter, change to 5 core cable - See controller instructions. | Roof cut out of same size models is identical. |
| | | S7RF > TX7RF | | | | | | | |
| | | S9RF > TX9RF | | | | | | | |
| | | S12RF > TX12RF | | | | | | | |
| Wall | No Shutter Fitted |  | S6WL > TX6PL |  | Wall box is a different dimension, new fixings and cabling required. | Follow T-Series installation instructions. | Remove the shutter assembly. Use existing controller. To make use of T-Series shutter, change to 5 core cable. | Replace controller with T-Series or Ecotronic controller. Remove the shutter assembly. To make use of T-Series shutter, change to 5 core cable - See controller instructions. | Use Panel Fan model. Appropriate fixing screws should be used to secure Panel Fan through external wall. |
| | | S7WL > TX7PL | | | | | | | |
| | | S9WL > TX9PL | | | | | | | |
| | | S12WL > TX12PL | | | | | | | |
| Wall | Shutter Fitted |  | S6WL > TX6PL |  | Wall box is a different dimension, new fixings and cabling required. | Follow T-Series installation instructions. | Can use existing controller. To make use of T-Series shutter, change to 5 core cable. | Replace controller with T-Series or Ecotronic controller. To make use of T-Series shutter, change to 5 core cable - See controller instructions. | Use Panel Fan model. Appropriate fixing screws should be used to secure Panel Fan through external wall. |
| | | S7WL > TX7PL | | | | | | | |
| | | S9WL > TX9PL | | | | | | | |
| | | S12WL > TX12PL | | | | | | | |
| Panel | No Shutter Fitted |  | S6PL > TX6PL |  | New fixing and cut out modifications required. New cabling required. | Follow T-Series installation instructions. | Remove the shutter assembly. Use existing controller. To make use of T-Series shutter, change to 5 core cable. | Replace controller with T-Series or Ecotronic controller. Remove the shutter assembly. To make use of T-Series shutter, change to 5 core cable - See controller instructions. | None |
| | | S7PL > TX7PL | | | | | | | |
| | | S9PL > TX9PL | | | | | | | |
| | | S12PL > TX12PL | | | | | | | |
| Panel | Shutter Fitted |  | S6PL > TX6PL |  | New fixing and cut out modifications required. New cabling required. | Follow T-Series installation instructions. | Can use existing controller. To make use of T-Series shutter, change to 5 core cable. | Replace controller with T-Series or Ecotronic controller. To make use of T-Series shutter, change to 5 core cable - See controller instructions. | None |
| | | S7PL > TX7PL | | | | | | | |
| | | S9PL > TX9PL | | | | | | | |
| | | S12PL > TX12PL | | | | | | | |

Please contact Technical Support on 0344 856 0594 for any questions or issues.

Standard Range Spare Guide

| | |   | | | |
|-------------------|---|---|-----------------------|-----------------------|--------|
| Installation Type | Standard Range Fan Model | Motor | Impeller with Dwasher | Cone/ Impeller Nut | |
| Window |  | S6WW | 444834 | 430763 | 430366 |
| | | S7WW | 444835 | 430764 | 430366 |
| | | S9WW | 444836 | 430765 | 430366 |
| | | S12WW | 444837 | 430766 | 430366 |
| Roof |  | S6RF | 444834 | 430763 | 430366 |
| | | S7RF | 444835 | 430764 | 430366 |
| | | S9RF | 444836 | 430765 | 430366 |
| | | S12RF | 444837 | 430766 | 430366 |
| Wall |  | S6WL | 444834 | 430763 | 430366 |
| | | S7WL | 444835 | 430764 | 430366 |
| | | S9WL | 444836 | 430765 | 430366 |
| | | S12WL | 444837 | 430766 | 430366 |
| Panel |  | S6PL | 444834 | 430763 | 430366 |
| | | S7PL | 444835 | 430764 | 430366 |
| | | S9PL | 444836 | 430765 | 430366 |
| | | S12PL | 444837 | 430766 | 430366 |

Please contact Technical Support on 0344 856 0594 for any questions or issues.

Accessories

Standard Range impeller with D washer



| Size | Stock Ref |
|----------------|-----------|
| 6" All models | 430763 |
| 7" All models | 430764 |
| 9" All models | 430765 |
| 12" All models | 430766 |

Note:
Please ensure you keep the impeller cone nut from the original unit.

Standard Range motor assembly



| Size | Stock Ref |
|----------------|-----------|
| 6" All models | 444834 |
| 7" All models | 444835 |
| 9" All models | 444836 |
| 12" All models | 444837 |

Note:
Please ensure you keep the impeller cone nut from the original unit.
Please ensure you keep the motor cone nut and washers from the original unit. Please ensure you keep all electrical connector sockets and internal lead assemblies from the original unit.

Hygiene



Vent-Axia has been at the forefront of technical innovation for over 80 years and we understand that hand dryer hygiene is essential in our daily lifestyles. We have an extensive hand dryer range suitable for use in many locations, from pubs and restaurants to hotels, schools, service stations and retail centres.

Each of our hand dryer products is powerful yet quiet and all our models come in sleek, elegant designs to blend well into any kitchen, bathroom or WC location. From the powerful fast-speed JetDry Plus to the classic Turbodry, our hand dryer products are all designed with energy efficiency firmly in mind, saving you as much as 70% of the equivalent cost of paper towels.

For any situation where hygiene, convenience, economy and safety are all key considerations, you can trust Vent-Axia's hand dryer range to deliver the solutions you need.



Jet Dry® Plus

The Jet Dry Plus features a 99.9% HEPA filter and UV sterilization for use in areas where good hygiene is vital.

Vent-Axia®



Restroom

| | | |
|---|---|----|
|  | Jet Dry® Plus | 13 |
|  | Jet Dry® Junior | 13 |
|  | Tempest® | 13 |
|  | Lo-Carbon eTempest | 13 |
|  | Ultradry® SX Stainless Steel | 14 |
|  | Prepdry | 14 |
|  | Professional E® | 14 |
|  | Easy Dry | 14 |
|  | Insect Killers | 15 |
|  | Touchless Sensor Operated Hand Sanitiser/Soap Dispenser | 15 |

Fast Dry Hand Dryers



Jet Dry® Plus

Automatic double sided, high speed dryer, for high traffic settings.

- 99.9% HEPA filter
- UV sterilisation
- 10 second drying time
- LED indicator
- Removable drip tray
- Air speed 95m/s
- Low carbon DC motor, as low as 750W to 2050W
- Heater element 900W - 1300W, adjustable on/off
- 700 x 300 x 225mm (H x W x D)
- Weight 9.5kg
- IPX4 rated
- Sound level: 75dB(A) at 1m
- Cable entry bottom right
- Three-year warranty
- Ambient temperature response element
- Antibacterial coating
- GS approved

Models

Silver

Stock Ref

409117



Jet Dry® Junior

Automatic double sided, high speed dryer, for low traffic settings.

- 99.9% HEPA filter
- UV Sterilisation
- 8-10 second drying time
- LED indicator
- Removable drip tray
- Air speed 150m/s
- Brushed motor, as low as 1250W to 1650W
- Heater element 400W adjustable on/off
- 671 x 297 x 195mm (H x W x D)
- Weight 8.8kg
- IP23 rated
- Sound level: 70dB(A) at 1m
- Cable entry bottom right
- Two-year warranty

Models

Silver

Stock Ref

497992



Tempest® - Reduced Sound

Automatic no-touch hand dryer for heavy duty applications.

- 10 second drying time
- Air speed: 75-100 m/s, adjustable
- Infrared automatic operation
- Unique blue dry zone indicator
- Automatically senses work surfaces to avoid nuisance running
- Cover: Steel. Finish: Polished or satin stainless steel
- Insulation Earthed Class 1
- Heater element 450 - 900W, adjustable on/off
- Rated at 500W - 1.6kW at 230V
- Weight 6.6kg (packaged)
- 277 x 201 x 175mm (H x W x D)
- 60 second auto shut off
- Soft start
- IP23 rated
- GS approved
- Cable entry bottom left
- Motor: Max 18,000rpm brushed motor
- Motor speed adjustable
- Sound level: reduced to 72dB(A) at 1m

Models

Satin Stainless

Polished Stainless

White

Filter Assembly Pack

Filter Replacement 2 pack

Stock Ref

439464

439463

437231

444959

444960



Lo-Carbon eTempest

Automatic hand dryer for fast drying applications.

- 10 second drying time
- Air speed: 52-90 m/s, adjustable
- Infrared automatic operation
- Unique blue dry zone indicator
- Automatically senses work surfaces to avoid nuisance running
- Cover: Steel 1.2 mm thick, epoxy coated
- Insulation Earthed Class 1
- Heater element 500W adjustable on/off
- Rated at 500kW - 1.2 kW at 230V
- Weight: 3.8Kg
- 180 x 250 x 138.5mm (H x W x D)
- 60 seconds auto shut off
- Soft start
- IPX1 rated
- GS approved
- Cable entry bottom left
- Motor: Max 30,000rpm brushed motor

Model

White

Stock Ref

444956



Hand Dryers



Professional E®

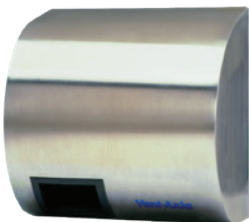
Automatic 'no-touch' hand dryer for smaller office washrooms, kitchens and clinics.

- Cover and base: High gloss, fire retardant ABS/polycarbonate alloy
- Motor: 2700rpm external rotor, brushless motor
- Double insulated appliance
- 262 x 261 x 141mm (H x W x D)
- Weight: 3.09kg (3.52kg packed)
- Sound level: 65 dB(A) at 1m
- Rated at: 2.0 kW at 240V
- 31 second drying time
- BEAB Approved
- Supply voltage: 220-240V/1/50Hz
- IP24 Rated
- Cable entry bottom right



Stock Ref

20101402



Ultradry® SX Stainless Steel

Automatic 'no-touch' hand dryer specially designed for high performance hand drying in food preparation areas and hospital applications and eminently suitable for prestige installations.

- Cover: Satin polished stainless steel
- Motor: 5,500rpm, suppressed brushed motor
- Insulation Earthed Class 1
- 264 x 275 x 177mm (H x W x D)
- Weight: 6.0kg (6.6kg packed)
- Sound level: 79 dB(A) at 1m
- Rated at: 2.4kW at 230V
- 28 second drying time
- BEAB Approved
- IP24 Rated
- Cable entry bottom right



Stock Ref

20101840SX



Prepdry-Stainless Steel

Designed for food preparation areas and hospital applications where the highest levels of hygiene have to be observed. Automatic 'no-touch' hand dryer.

- Cover: Satin polished stainless steel
- Motor: External Rotor Brushless Motor 2700 rpm
- Insulation Earthed Class 1
- 280 x 270 x 148mm (H x W x D)
- Weight: 4.0kg (4.5kg packed)
- Sound level: 65 dB(A) at 1m
- Rated at: 2.0 kW at 240V
- 31 second drying time
- Supply voltage: 220-240V/1/50Hz
- BEAB Approved
- IP24 Rated
- Cable entry bottom right



Stock Ref

20101440



Easy Dry Range

An economical ABS covered automatic dryer, designed for use in applications where good performance linked with price sensitivity is of paramount importance.

- 2500 - 4200rpm induction motor
- Insulation Earthed Class 1
- 225 x 275 x 160mm (H x W x D)
- Weight: ABS Models - 3.3kg (3.65kg packed),
- Sound levels: 54 dB(A) at 1m
- Rated: 1.0kW, 1.25kW or 2kW at 240V
- 30 seconds drying time
- Supply voltage: 220-240V/1/50Hz
- GS Approved
- IP22 Rated
- Cable entry bottom right



| Models | RPM | Stock Ref |
|------------|------|-----------|
| 1.0kW ABS | 2500 | 427935 |
| 1.25kW ABS | 2500 | 436297 |
| 2kW ABS | 2500 | 497154 |

Insect Killers & Hand Sanitiser



IK50

- Durable ABS fire proof plastic on side panels
- Large removable collection tray for easy cleaning
- High quality aluminium, easy to clean. Crack, fade, scratch and oil resistant
- Fully protected outer mesh
- Energy efficient UV-A lamp
- Free standing, suspend or hang from wall
- Approved to EN60335-2 59 CE/ GS/ROHS/REACH/PAH(TUV)
- Weight: 1.83kg
- Coverage: 50m²
- Watts: 2x 8W
- Fitted with Type G British 3-pin Electrical Plug

| Model | Stock Ref |
|------------|-----------|
| IK50 | 446878 |
| Spare Bulb | 446937 |



IK80

- Durable ABS fire proof plastic on side panels
- Large removable collection tray for easy cleaning
- High quality aluminium, crack, fade, scratch and oil resistant
- Fully protected outer mesh
- Energy efficient UV-A lamp
- Free standing, suspend or hang from wall
- Approved to EN60335-2 59 CE/ GS/ROHS/REACH/PAH(TUV)
- Weight: 2.6kg
- Coverage: 80m²
- Watts: 2x 10W
- Fitted with Type G British 3-pin Electrical Plug

| Model | Stock Ref |
|------------|-----------|
| IK80 | 446879 |
| Spare Bulb | 446938 |



IK150

- Durable ABS fire proof plastic on side panels
- Large removable collection tray for easy cleaning
- High quality aluminium, easy to clean. Crack, fade, scratch and oil resistant
- Fully protected outer mesh
- Energy efficient UV-A lamp
- Free standing, suspend or hang from wall
- Approved to EN60335-2 59 CE/ GS/ROHS/REACH/PAH(TUV)
- Weight: 3.60kg
- Coverage: 150m²
- Watts: 2x 20W
- Fitted with Type G British 3-pin Electrical Plug

| Model | Stock Ref |
|------------|-----------|
| IK150 | 446880 |
| Spare Bulb | 446939 |



Touchless Sensor Operated Hand Sanitiser/Soap Dispenser

- Touchless operation to reduce cross contamination and the spread of germs
- Gel hand sanitiser and liquid soap
- Lockable via a key to prevent tampering
- Easy to view window for replenishment
- Bulk fill unit
- Lightweight at only 700g
- 1100ml capacity
- 1ml delivery shot
- Battery operated, 6V (4 x AA batteries)
- 70,000 cycle battery life
- Material: High impact ABS plastic
- Sensor range: 3-10cm

| Model | Stock Ref |
|----------------|-----------|
| Hand Sanitiser | 495929 |

Cooling



Vent-Axia offers a range of cooling products for both fixed and portable applications. Products such as Hi-Line Plus are ideal for warehouse or office environments with high interior ceilings. For emergency or occasional use, our portable box fan is ideal.

NEW Stanza 48" Ceiling Sweep Fans

The Stanza fan is a stylish, modern ceiling fan, ideal for homes, offices, stores, shops and many other applications. The precision moulded glass fibre composite blades give increased stability and higher airflow, working to cool the environment in summer months. In winter months, the Stanza can be set to Eco mode, which will gently recirculate heat from the ceiling towards occupants, therefore helping to conserve energy.

Vent-Axia®





Hi-Line Plus 35-55" Ceiling Sweep Fans

J3



NEW Stanza 48" Ceiling Sweep Fans

J4



Jupiter De-Stratification Unit

J5



12" Wall Fan

J6



14" Box Fan

J6

Hi-Line Plus® Ceiling Sweep Fans

- Suitable for winter de-stratification applications or summer cooling
- Three sweep diameters: 900mm, 1200mm, and 1400mm
- Two down rod lengths included
- Easy to install
- Quiet running
- Can be installed for either upward or downward airflow
- Reversible electronic controller available



De-stratification Fans

Hi-Line Plus ceiling fans can be used in offices, stores, shops, foyers, schools, hospitals, kitchens, restaurants and many industrial applications such as warehouses, factories, tanneries and workshops. Hi-Line Plus fans will provide effective and positive air movement to improve the working environment particularly during summer months. In addition, Hi-Line Plus fans can be used during winter months to re-circulate hot air from ceiling areas down to living and working areas thus helping to conserve energy.

An infinitely variable speed controller is available for use with one or a combination of models up to 3 units. Alternatively, Hi-Line Plus fans may be wired directly to a normal On/Off switch. For maximum benefit, good ventilation is vital, we advise that Hi-Line Plus fans are used in conjunction with Vent-Axia T-Series or Standard Range ventilation units.

Hi-Line Plus blades are produced from sheet steel and individually weighed to produce matched sets.

Motor

The motor is totally enclosed, capacitor start and run. Suitable for temperatures up to +40°C. Supply Voltage 220-240V/1/50Hz.

Down Rods

The Hi-Line Plus fans include both a long and short down rod packaged as standard. The total drop length of the short down rod including motor is 360mm. The total drop length of the long down rod including motor is 610mm.

Models

| Model | Stock Ref |
|--------|-----------|
| HL 90 | 428049 |
| HL 120 | 428050 |
| HL 140 | 428051 |

Ceiling Fan Controller

SAC3 Reversible Controller

The Vent-Axia ceiling fan controller adds extra flexibility to all Hi-Line Plus installations. Fan speeds can be selected to suit varying conditions. This is of particular benefit where mounting height is low. The controller is designed to be used with a single fan or up to 3 Hi-Line fans.

The controller is infinitely variable, has solid state components, an insulated spindle, white cover plate and can be flush or surface mounted. Suitable for commercial environments.

Hi-Line Plus fans should be used only with a Vent-Axia ceiling fan controller or an On/Off switch. Supply Voltage 220-240V/1/50Hz.

| Model | Stock Ref |
|------------|-----------|
| Controller | 499301 |

For completely silent running we recommend the use of a 5 step transformer. Suitable for up to 9 ceiling sweep fans.

| Model | Stock Ref |
|--------------------|-----------|
| 5 Step Transformer | 10314103 |

Performance

| | Sweep | | Air Displacement | Max. | Amps | |
|--------|---------|--------|-------------------|-------|-------|-----|
| Model | Dia. mm | Colour | m ³ /h | Watts | @240V | RPM |
| HL 90 | 900 | White | 8100 | 41 | 0.176 | 335 |
| HL 120 | 1200 | White | 12600 | 52 | 0.235 | 315 |
| HL 140 | 1400 | White | 15000 | 65 | 0.285 | 295 |

Weight approximately 7kg.

NEW Stanza 48" Ceiling Sweep Fans

- Satin white indoor ceiling fan available with or without dimmable LED light
- Three speed settings allowing for use in summer or winter
- Delivered with three-speed long distance remote control
- 48" precision moulded blades for higher airflow
- Individually balance tested and quality checked for trouble free operation
- True-spin Technology™ for enhanced efficiency and performance
- Four year warranty



Overview

The Stanza fan is a stylish, modern ceiling fan, ideal for homes, offices, stores, shops and many other applications*. The precision moulded glass fibre composite blades give increased stability and higher airflow, working to cool the environment in summer months. In winter months, the Stanza can be set to Eco mode, which will gently recirculate heat from the ceiling towards occupants, therefore helping to conserve energy.

There are three settable speeds on the Stanza fan, which can be set with the remote control that is included. The ceiling fan can displace air at either 5,700, 8640 or 11,700 m³/h, depending on the speed that has been selected.

The motor in the Stanza fan uses the latest developments in ceiling fan motor engineering. It means that the fan offers enhanced efficiency and performance. The motor, in conjunction with the moulded blades, provides more air movement per. watt of power, therefore using less energy to provide better air circulation.

Each fan is individually tested and quality checked to ensure trouble free operation. The Stanza fan also has a four year warranty for peace of mind.

LED Light

The Stanza LED model uses a 20 watt LED acrylic light to add dual functionality to the fan. The light can be set at 25%, 50%, 75% or 100% to suit the needs of the occupant, simply by changing the setting on the remote.

Ceiling Fan Controller

The Stanza ceiling fan comes delivered with a three speed remote control. You are able to change the fan speed using Eco, Medium or High buttons accordingly. It is recommended that Eco mode is used in winter to re-circulate warm air at low speeds.

The remote uses radio frequency, so that you can operate the fan at long distances.

There is a four step dimmable light function, allowing you to change the brightness of the light to either 100%, 75%, 50% or 25%. The remote also has quick connect terminals.

Performance

| Stock Ref | Sweep Dia. mm | Colour | Air Displacement m ³ /h | Max. Watts | RPM |
|-----------------|------------------|--------|---------------------------------------|---------------|---------|
| STA1203WH-VA | 1220 | Satin | 5700/8640 | 55 | 190/150 |
| STA1203WHLED-VA | | White | /11700 | | /105 |

Dimensions

| Stock Ref | Width (mm) | Height (mm) | Weight |
|-----------------|------------|-------------|--------|
| STA1203WH-VA | 1220 | 349 | 7 kg |
| STA1203WHLED-VA | 1220 | 370 | 7 kg |

Models

Stanza 48" Ceiling Fan with Wireless Remote

Stock Ref

STA1203WH-VA

Stanza 48" Ceiling Fan with LED Light & Wireless Remote

Stock Ref

STA1203WHLED-VA

* Must be mounted above 2.3m

Jupiter De-Stratification Unit

- Available in two sizes
- Speed controllable
- High velocity fans
- Supplied with a grey coated finish - other colours available to special order
- Available with built-in thermostat



Air Movement Fans

The Vent-Axia Jupiter range of de-stratification units is based on direct drive axial fans, housed in a neat and sturdy casing complete with eyebolts for suspension from chains or steel wires. Ideal for applications where the proposed mounting height requires higher velocity fans or where open bladed ceiling fans are considered unsuitable. Jupiter fans can be used in stores, warehouses, factories, workshops, as well as many other industrial applications. The unit provides effective and positive air movement to improve the working environment, particularly during summer months. In addition Jupiter fans can be used during the winter to re-circulate hot air from ceilings and roofs down to living and working areas.

Electrical

Supply voltage 220-240V/1/50Hz. Direct drive axials with speed controllable motors. The motor hub and impeller are statically and dynamically balanced for smooth operation and optimum performance. Class F insulation, suitable for operating in atmospheres of up to 95% RH and ambient temperature of up to +60°C.

General Installation

For cooling effect, circulation of air is required in any given area. As a guide, mount Jupiter fans 4.5-6m apart, in tropical climates 3m apart. Fans should be mounted so that they do not interfere with lighting installations in any way. Mount fans away from walls or pillars where possible to avoid obstruction of airflow.

Heat Saving

Heat savings are largely dependent on the difference between the roof level and the working level temperatures, the ventilation rate and the geographical position.

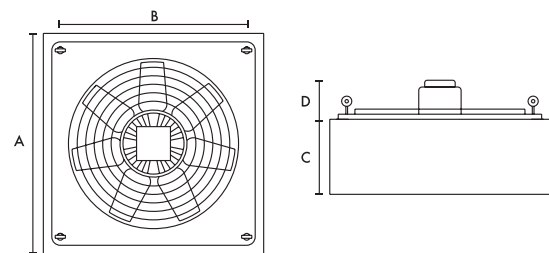
Models

| Model | Stock Ref |
|------------|-----------|
| NJUP315 | 457485 |
| NJUP400 | 457487 |
| NJUP400CTS | 457488 |

Accessories

| Model | Stock Ref |
|------------------|-----------|
| Speed Controller | RTRE20 |
| ThermoSwitch | 563502 |
| Suspension Pack | 457490 |

Dimensions (mm)



| Size | A | B | C | D | Weight |
|------|-----|-----|-----|----|--------|
| 315 | 500 | 380 | 200 | 84 | 11 kg |
| 400 | 620 | 490 | 200 | 93 | 16 kg |

Performance

| Models | Duty | | Speed | | dB(A) | | 220/240V/50Hz/1Ph | | Max Mounting Height | |
|-------------|------|-------|-------|-----|-------|------|-------------------|------|---------------------|--|
| | CFM | m³/s | RPM | @3M | kW | FLC | SC | Feet | Metres | |
| NJUP315 | 1290 | 0.610 | 1380 | 45 | 0.15 | 0.70 | 2.50 | 44 | 13.4 | |
| NJUP400/CTS | 3000 | 1.415 | 1320 | 51 | 0.35 | 1.60 | 5.50 | 72 | 22.0 | |

Vent-Axia Cooling



12" Wall Fan

The 12" Wall Fan has a quiet operating motor for minimal disturbance. The 3-speed options and free neck allow the fan to move back and forth in a regular rhythm. The fan has an 8 hour On/Off timer which can be set via remote controller. The fan comes with a double insulated cable and Type G British 3-pin electrical plug making it easy to install without wiring it into the wall.



Stock Ref
427583



14" Box Fan

The 14" Box Fan is a portable cooling fan with a quiet operating motor ideal for office spaces when additional cooling is needed. With its 3-speed options and 360 louver system, cool air can be distributed in any preferred direction. The in-built double insulated cable and Type G British 3-pin electrical plug, makes it safe and easy to plug and use where needed.



Stock Ref
427584

Electric Heating



Vent-Axia heating is ideal for residential or commercial applications. So whether it's a bedroom or hallway, office or shop, we can provide the solution.

The simplicity of installing electric heating, particularly in high rise apartments means it is the natural choice for your project.

Comfort heating products with innovative zone control features provide energy savings for the occupier without compromising comfort in the home, coupled with low capital outlay they offer a cost effective solution for installer and occupier.

Vent-Axia®





Heated Towel Rails

K3-K4



Radiant Heaters

K5-K6



Lot 20 Panel Heater

K7



Warm Air Curtains

K8

Heated Towel Rails

- New and improved IP55 rated
- Plug kit can be handed left or right
- Five year leakage warranty
- One year manufacturer's warranty
- Heating element included
- Stylish designs
- Steel construction with high quality white and chrome finishes
- Production is carried out using latest technology resulting in absolute consistency in quality
- Complete fitting set supplied



Range Options

Vent-Axia Heated Towel Rails quickly warm and dry towels. Their presence on the wall also adds to the overall style, temperature and comfort of the room.

This comprehensive range of white and chrome towel rails offers 9 different models across the flat, curved and designer ranges. The range offers sizes from 500 x 600mm to 500 x 1500mm available in four heat outputs of 100, 150, 250 and 400W matched to the size of the rail.

Advantages of Towel Rails

Adequately heating your bathroom using a Vent-Axia towel rail not only leaves your towels warm and dry, but helps regulate temperature to the rest of the room decreasing the chances of mould and condensation.

Product Selection

Sizing the correct towel rail can be made easy by using our online heating tool available on the website www.vent-axia.com/heating-guide

Style and Comfort

With the Vent-Axia range of towel rails you will find a towel rail to suite all applications and sizes. Every towel rail uses thermally regulated heating elements and a mixture of high inertia fluid to order to maintain even heat distribution around the entire rail.

Controller

The range is complemented by an advanced controller available in white and chrome giving you control of five heat outputs. The controller also offers an eco mode ideal for use when drying your towels to ensure minimal energy use. This feature turns on the rail on full power for 30 minutes then reduces the output to the user setting for a further 90 minutes before turning the towel rail off.



- IPX4 rated
- White or chrome finish
- Five power settings
- Eco timed function
- Two year warranty

Model

VATRCW White
VATRCC Chrome

Stock Ref

447864
447865

Specification



| Stock Ref | Model | Description | Finish | Dimensions mm | | Output |
|---------------|------------|-------------|--------|---------------|------|--------|
| | | | | W | H | W |
| 476254 | VATR150F | Flat | Chrome | 400 | 700 | 150 |
| 476255 | VATR250F-W | | White | 500 | 1100 | 250 |
| 476256 | VATR250F | | Chrome | 500 | 1100 | 250 |
| 476257 | VATR400F | | Chrome | 500 | 1500 | 400 |



| Stock Ref | Model | Description | Finish | Dimensions mm | | Output |
|---------------|----------|-------------|--------|---------------|------|--------|
| | | | | W | H | W |
| 476258 | VATR250C | Curved | Chrome | 500 | 1100 | 250 |
| 476259 | VATR400C | | Chrome | 500 | 1500 | 400 |



| Stock Ref | Model | Description | Finish | Dimensions mm | | Output |
|---------------|------------|-------------|--------|---------------|------|--------|
| | | | | W | H | W |
| 476260 | VATR250-FR | Flat Railed | Chrome | 500 | 1000 | 250 |
| 476261 | VATR150-FR | | Chrome | 400 | 700 | 150 |



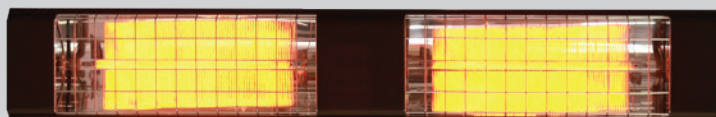
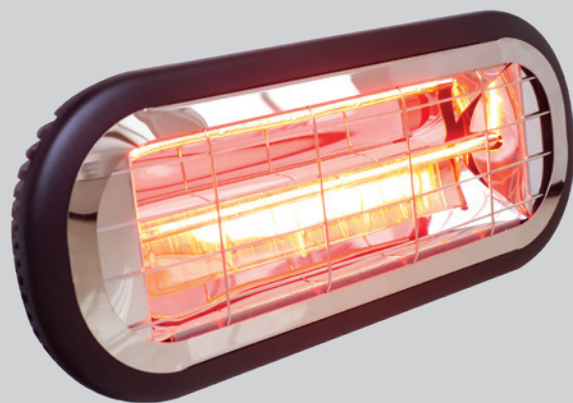
| Stock Ref | Model | Description | Finish | Dimensions mm | | Output |
|---------------|-------|-------------|--------|---------------|------|--------|
| | | | | W | H | W |
| 476262 | Varma | Designer | Chrome | 500 | 1200 | 250 |



| Stock Ref | Model | Description | Finish | Dimensions mm | | Output |
|---------------|---------|-------------|--------|---------------|------|--------|
| | | | | W | H | W |
| 476263 | Atacama | Designer | Chrome | 500 | 1200 | 250 |

Radiant Heaters

- Economical and easy to install
- Silent in operation
- No yearly maintenance cost
- Instant heat from switch on
- Precision heating directed where needed



Profile

The Vent-Axia radiant heating product range gives the flexibility to deal with large and small unheated spaces which would be uneconomical to heat using traditional space heating.

Areas such as bars, restaurants, terraces, delivery areas, warehouses and churches are some examples where the radiant heating products will provide an economical heating solution.

Radiant heat and its advantages

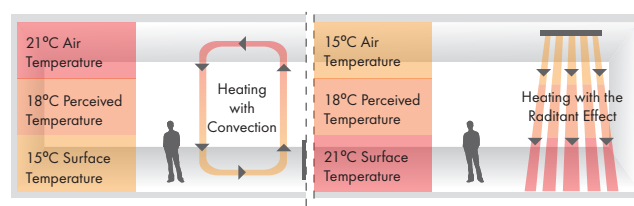
The heat felt from the sun is called radiant heat and is part of the electromagnetic spectrum called infrared. Ultra violet and visible light also belong to the same family.

Visible light is the easiest part of this spectrum to understand, light travels in a straight line from the source, is unaffected by air and is invisible until it hits a surface. Shadows are a good example of this and are the absence of light.

Infrared rays behave in the same way, they cannot be seen but can be felt as warmth. A good example of this is the effect created when you move from the shade into the sun, although the temperature is the same, the perceived temperature when in direct sunlight is much higher. This phenomenon makes sunbathing possible during winter holidays. There are three categories of infrared; short wave (IR A), medium wave (IR B) and long wave (IR C), the shorter the wave length the easier it travels through the air.

The advantage when using short wave infrared heating is that the rays cut through the air and are not affected by air movement and only transmits its energy when it collides with a solid object. The rays also travel in a straight line so can be directed where you need it, ideal in locations which feature high ceilings, have high air change rates or are outside.

Convection Heating and Radiant Heating Comparison



Wave Infrared comparison

| | Short Wave Infrared | Medium Wave Infrared | Long Wave Infrared |
|---------------------|---|---|--|
| Typical source | IR Halogen Lamp | Quartz Heat Source | Resistance |
| Materials | Tungsten Filament welded in a quartz tube | Filament in compound of Fe-Cr-Al in a quartz tube | Filament in compound of Fe-Cr-Al in a steel tube |
| Radiant efficiency | 92% | 60% | 40% |
| Switch on/off times | 1 second | 30 second | 5 minutes |

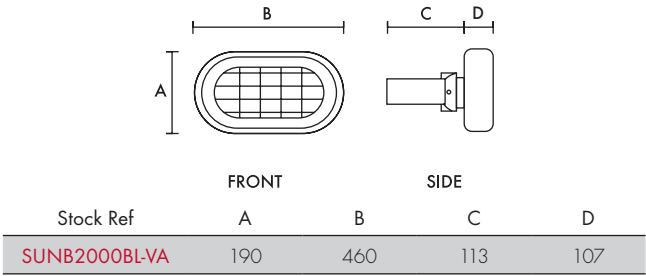
Models



Model
Sunburst 2kW

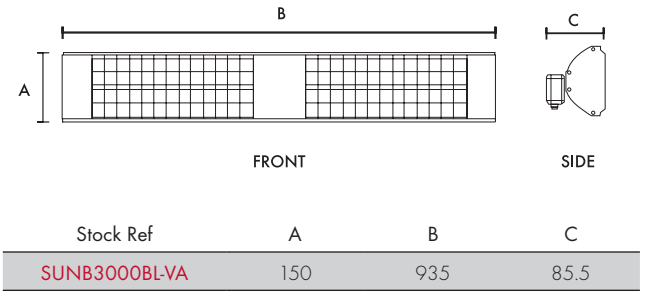
Stock Ref
SUNB2000BL-VA

Dimensions (mm)



Model
Sunburst 3kW

Stock Ref
SUNB3000BL-VA



Technical Details

| Stock Ref | Model | Weight | | Voltage rating | Luminous spectrum | Accessories | Output | | Heating range m ² | Lamp Type | Element Life Span |
|---------------|--------------|--------|--|----------------|-------------------|--------------|--------|------|------------------------------|-----------------------------|-------------------|
| | | kg | | | | | W | Amps | | | |
| SUNB2000BL-VA | Sunburst 2kW | 2.6 | | 220-240V 50Hz | IR-A | Wall bracket | 2000 | 9 | 10-12 | Low glare halogen lamp | 5000 hrs |
| SUNB3000BL-VA | Sunburst 3kW | 4.6 | | 220-240V 50Hz | IR-A | Wall bracket | 3000 | 14 | 18-36 | Long life carbon fibre lamp | 10000 hrs |

Lot 20 Panel Heaters

- Complies with Lot 20 ERP directive
- Silent operation
- Energy saving 'open window' detection
- Slim line design with 3 sizes available
- Electronic thermostatic control accurate $\pm 0.2^{\circ}\text{C}$
- Easy to use top mounted customised user-defined LCD display controls
- 7 day electronic programmable controls with backlit display
- 12 pre-set heating profiles
- Splash proof to IP24 for bathrooms or wet areas
- Overheat thermal cut-out
- Supplied with wall fittings
- Suitable for domestic or commercial application
- 2 year replacement warranty



Comfort Heating

Lot 20 Panel Heaters are direct acting heaters, used to heat up a space quickly with 100% efficiency.

Vent-Axia's Panel Heaters offer a range of heat outputs from 1kW to 2kW and every model comes with electronic thermostatic control and 12 pre-set heating programmes. Vent-Axia Panel Heaters look as good as they perform. Stylish and slim, they occupy minimal wall space and are finished in an attractive gloss white finish.

Vent-Axia Panel Heaters are wall mounted and connected to the permanent electrical supply via a fused connection switched outlet. Vent-Axia Panel Heaters are supplied with mounting brackets, 1.5m of flex and come fitted with an easy to use LCD display screen.

Models

| Model | Stock Ref |
|----------|-----------|
| VAPH1000 | 495792 |
| VAPH1500 | 495793 |
| VAPH2000 | 495794 |

Adjustable Electronic Thermostat

All Vent-Axia Panel Heaters have a built-in adjustable thermostat offering a full temperature range between 5.30°C , including a 5°C frost protection setting.

For maximum safety there is also a child safety lock and thermal cut-out on all models to prevent overheating should the outlet grille be accidentally covered.

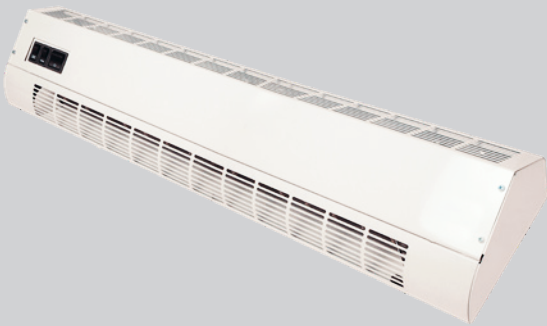


Specification

| Model | Power | Colour | Heating | Heating | Voltage | Approval | Product dimensions mm | | | Packaged dimensions mm | | | Product | Gross |
|----------|-------|--------|-----------|---------------------|------------------|-------------------------------|-----------------------|-----|-----|------------------------|-----|-----|-----------|-----------|
| | W | | Setting W | Area m ² | | | H | W | D | H | W | D | Weight kg | Weight kg |
| VAPH1000 | 1000 | White | 1000 | 10-13 | 230-240V 50Hz | CE, EMC, LVD, RoHS, ERP | 440 | 455 | 125 | 505 | 520 | 155 | 4 | 5.1 |
| VAPH1500 | 1500 | | 1500 | 15-18 | | | 440 | 615 | 125 | 505 | 680 | 155 | 5.1 | 6.3 |
| VAPH2000 | 2000 | | 2000 | 20-23 | | | 440 | 775 | 125 | 505 | 840 | 155 | 6.55 | 7.88 |

Warm Air Curtains

- Integral switching for faster installation
- Three heat settings and fan only mode
- Models to suit single and double doorways
- Suitable for use as a high level fan heater



Vent-Axia Warmair Curtains provide a heated downflow of warm air in doorways of commercial premises such as shops, offices and schools.

The robust outer case is made from painted steel with an off white epoxy finish. Accommodating varying door widths is easily achieved by installing Warmair units ‘side by side’.

Vent-Axia Warmair Curtains are supplied with 0.75m of 3 core cable, and mounting brackets. The mounting brackets are only available with Warmair 3 and Warmair 4.5, but not with the Warmair 6.

Three Warmair models are available offering heat outputs plus fan only setting:

| | |
|-------------|------------------------|
| Warmair 3 | - 3 kW, 2 kW, 1 kW |
| Warmair 4.5 | - 4.5 kW, 3 kW, 1.5 kW |
| Warmair 6 | - 6kW, 3 kW |

Models

Warm Air Curtains

| Model | Stock Ref |
|-------------|-----------|
| Warmair 3 | 456343 |
| Warmair 4.5 | 456344 |
| Warmair 6 | 456345 |

Remote Switch

Remote Switch unit to control Warmair units. Switch allows for fan only & three heat settings.

| Model | Stock Ref |
|-------|-----------|
| VARSU | 436494 |

Specification

| Model | Rating | Dimensions mm | | | Weight |
|-------------|--------|---------------|-----|-----|--------|
| | kW | W | H | D | kg |
| Warmair 3 | 3.0 | 650 | 103 | 210 | 6.1 |
| Warmair 4.5 | 4.5 | 650 | 103 | 210 | 6.5 |
| Warmair 6 | 6.0 | 900 | 103 | 210 | 8.7 |

220-240V-50Hz. BEAB Approved.

Accessories & Controllers



For ventilation systems to be truly efficient it is important for them to operate only when needed. Our range of Sentinel demand ventilation systems along with our controls and sensors help respond to the exact ventilation requirements of a room at any one time. Providing airflow only when it is required and at the level that it is required ensures that only the energy that is needed is used; no more, no less.

Approved Document L recognises the value that controls can offer and you will find Vent-Axia offers a range of solutions to ensure that you can maximise the benefit of automation wherever you chose to use it.

Vent-Axia®





Controllers and Sensors

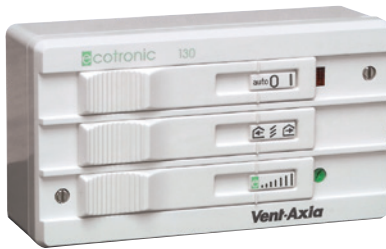
L3-L10



Ventilation Accessories

L11-L18

Controllers & Sensors



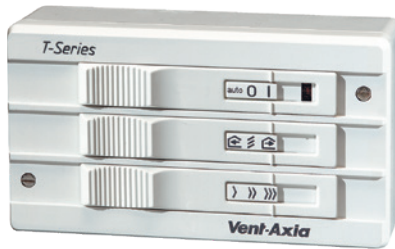
Ecotronic Controller Surface Mounting

An electronic controller for use with all Traditional T-Series and Standard Range models to give extract/intake and speed variation. For groups of units of any one size up to a total of 400 Watts. Do not mix T-Series with Standard Range. Where a controller is used with T-Series, 5-core flexible cable is required.

- 'E' running position for optimum efficiency.
- Finger-tip sliders.
- Infinitely variable speed control.
- Double pole On/Off switching.
- Extract/intake airflow direction.
- Neon indicator.
- Sensor mode for use with suitable electromechanical switches, eg. ThermoSwitch, HumidiSwitch to give automatic fan operation.
- Adjustable minimum speed setting.
- Knockouts for recessed wiring.
- Ambient operating temperature range 0°C to +40°C.
- Dimensions: 86 x 156 x 53mm (H x W x D).
- Supply voltage 220-240V/1/50Hz.
- Maximum load: Ecotronic - 400 Watts.
- Designed to meet IP20.
- BEAB approved.

Stock Ref
W362320

Flush Fitting Box
Stock Ref
400144



T-Series® Controller Surface Mounting

A single unit controller for use with all Traditional T-Series ventilating units. With knockouts for recessed wiring. Where a controller is used with T-Series, 5-core flexible cable is required.

- 3-speed operation. High, medium or low.
- Finger-tip sliders.
- Double pole On/Off switching.
- Extract/intake airflow direction.
- Sensor mode for use with suitable electromechanical switches, eg. ThermoSwitch, HumidiSwitch to give automatic fan operation.
- Unique shutter open/ fan Off setting.
- Neon indicator.
- Knockouts for recessed wiring.
- Ambient operating temperature range 0°C to +40°C.
- Dimensions: 86 x 156 x 53mm (H x W x D).
- Supply voltage 220-240V/1/50Hz.
- Designed to meet IP20.
- BEAB approved.

Stock Ref
W361119

Flush Fitting Box
Stock Ref
400144



TimeSpan® Controller

Adjustable timer with overrun facility for fans ventilating WCs and other small rooms.

For use with any Vent-Axia fan within maximum rating below. The fan is switched On with the light and keeps running for a pre-set period after the light is switched Off.

- Fits to any single gang box.
- Adjustable time delay 5-25 minutes.
- Ambient operating temperature range 0°C to + 40°C.
- Maximum load 250W inductive.
- BEAB approved.
- Dimensions: 87 x 87 x 33mm (H x W x D).
- Supply voltage 220-240V/1/50Hz.
- Will fit single gang box for surface mounting.

Stock Ref
563519

Surface Mounting Box
A surface mounting back box is available.
Stock Ref
410020

Registered design numbers: 1 030 207 Surface Mounting Controller, 1 030 208 Flush Fitting Controller. Patented Remote Speed Control Circuit. European Patent number EP 0180311.



Air Quality Sensor

Automatically reacts to the depletion of air quality, sensing unpleasant smells and toilet odours to regulate mechanically ventilated areas such as cinemas, pubs, clubs, restaurants, kitchens, toilets and conference rooms. This is not a CO₂ sensor.

The sensor switches the fan On when the air quality declines below an adjustable preset level. This is registered by the ceramic sensing head which is self-cleaning, a process which occurs every time the unit is triggered. When the atmosphere has returned to normal, the fan will continue to run for a pre-set period (adjustable between 1-25 minutes) and then switch Off.

The air quality sensor should not be used for the detection of combustible gases and is not designed for use as a smoke detector in an alarm system.

For use with various Vent-Axia fans within maximum rating below.

The Air Quality Sensor is also able to switch between trickle and boost speed on the appropriate ventilation units.

- Ambient operating temperature range 0°C to +50°C.
- Dimensions: 87 x 157 x 47mm (H x W x D).
- Maximum switched load: 2A inductive at 240V.
- Sensor consumption: 25mA at 240V.
- Supply voltage 240V/1/50Hz.

Stock Ref
563506



Electronic 1.5A Controller

Surface mounted, providing infinitely variable speed control and features an On/Off/sensor slider with neon indicator. There is an adjustable minimum speed setting. The controller is radio suppressed to BS EN 55014 and electrical connections for use with suitable external sensors are provided.

86 x 156 x 53mm (H x W x D).

Hole for wall box:
80x150x150mm (H x W x D).

Stock Ref
W300310

For flush fitting a metal wall box accessory is available.

Flush fitting box
Stock Ref
400144



HR500 Controller

Suitable for use with HR500 MVHR units. Surface mounting. On/Off remote sensor mode. Heat exchange, single fan extract or twin fan extract modes. Infinitely variable speed. Minimum speed setting.

Stock Ref
W14301010

Controllers & Sensors



Ambient Response Humidity Sensor

A self programming electronic On/Off wall mounted humidity sensor which reacts to any rapid increase in humidity and temperature by switching a Vent-Axia fan 'On' for rapid removal of moisture laden air in domestic bathrooms and kitchens. Can be wired into controller 'Auto' mode connections. Night time relative humidity increment setback feature suppresses nuisance tripping when the humidity level gradually rises as the temperature falls.

- Pullcord override and neon indicator.
- Changeover relay switch.
- Operating range: 30%-90%RH.
- Ambient operating temperature +5°C to +40°C.
- Dimensions: 87 x 87 x 33mm (H x W x D).
- Will fit single gang box for surface mounting.

Stock Ref

563550 240VAC 50Hz

European Patent No: 2298057

Surface Mounting Box

A surface mounting back box is available.

Stock Ref

410020



Ambient Response SELV 12 Humidity Sensor

12V Safety Extra Low Voltage version for use with VA100 SELV, Solo SELV, LuminAir SELV and HR100 SELV range.

The latest self programming electronic On/Off wall mounted humidity sensor which reacts to any rapid increase in humidity and temperature by switching a Vent-Axia fan 'On' for rapid removal of moisture laden air in domestic bathrooms and kitchens. Can be wired into controller 'Auto' mode connections. Night time relative humidity increment setback feature suppresses nuisance tripping when the humidity level gradually rises as the temperature falls.

- Pullcord override and neon indicator.
- Changeover relay switch.
- Operating range: 30%-90%RH.
- Ambient operating temperature +5°C to +40°C.
- Dimensions: 87 x 87 x 33mm (H x W x D).
- Will fit single gang box for surface mounting.

Stock Ref

563551 12VAC 50Hz

Surface Mounting Box

A surface mounting back box is available.

Stock Ref

410020



Lo-Carbon Ambient Response Humidity Sensor

Designed specifically for the Lo-Carbon product range. This self programming electronic On/Off wall mounted humidity sensor reacts to any rapid increase in humidity and temperature by switching a Vent-Axia fan 'On' for rapid removal of moisture laden air in domestic bathrooms and kitchens. Night time relative humidity increment setback feature suppresses nuisance tripping when the humidity level gradually rises as the temperature falls.

- Pullcord override and neon indicator.
- Changeover relay switch.
- Operating range: 30%-90%RH.
- Ambient operating temperature +5°C to +40°C.
- Dimensions: 87 x 87 x 33mm (H x W x D).
- Will fit single gang box for surface mounting.

Stock Ref

563552 12VDC

Surface Mounting Box

A surface mounting back box is available.

Stock Ref

410020

All of these Sensors can be wired for either On/Off or Trickle/Boost operation.



Ecotronic Humidity Sensor Surface Mounting

An adjustable set point, solid state On/Off sensor. A pullcord provides manual override, indicated by lamp. Adjustable from 65 to 90% relative humidity. Can be wired into controller 'Auto' mode connections. Incorporates changeover switch to select low/high speed.

- Setting range 65% - 90%RH.
- Maximum switching load 1 Amp inductive.
- Pullcord override indicated by lamp.
- Ambient operating temperature 0°C to +40°C.
- Dimensions: 87 x 87 x 33mm. (H x W x D).
- Supply voltage 220-240V/1/50Hz.

Stock Ref
563532

Surface Mounting Box

A surface mounting back box is available.

Stock Ref
410020



Ecotronic® SELV 12 Humidity Sensor

12V Safety Extra Low Voltage version for use with VA100 SELV, Solo SELV, and LuminAir SELV range. Incorporates changeover switch to select low/high speed.

Although suitable for siting within reach of a shower or bath we recommend this model is located out of the spray zone of a bath or shower.

- Setting range 65% - 90%RH.
- Maximum switching load 5.6A @ 12V AC.
- Pullcord override indicated by lamp.
- Ambient operating temperature 0°C to +40°C.
- Dimensions: 87 x 87 x 33mm (H x W x D).
- Supply voltage 12V AC.

Stock Ref
563531

Surface Mounting Box

A surface mounting back box is available.

Stock Ref
410020



Vent-Axia HumidiSwitch

Operates Vent-Axia ventilating units on either a rise or a fall in humidity to control the damaging effects of condensation.

- Concealed adjustment.
- Setting range 20% to 80% RH.
- Ambient operating temperature 0°C to +50°C.
- Dimensions: 82 x 132 x 40mm (H x W x D).
- Rating 2A (1A inductive).
- Switching range 120-240V.
- Designed for use with controllers with 'Auto' mode facility.
- Single pole changeover contacts.

Stock Ref
563501

The Ecotronic and Ecotronic SELV 12 Sensor can be wired for either On/Off or Trickle/Boost operation.

Controllers & Sensors



7 Day TimeSwitch

For applications where regular switching is required at fixed periods or at different times on different days of the week, eg: offices, shops, pubs and restaurants.

The 7-day TimeSwitch gives twelve On or Off positions per day and can be set for 7 days. The cycle will repeat until changed.

- Analogue clock display and integral time switches for ease of setting.
- Manual override.
- Removable clear plastic cover protects TimeSwitch face.
- Volt free changeover contacts.
- Time base: 7 days.
- Shortest switching time: 2 hours.
- Maximum load: 16amp resistive (8amp inductive).
- Ambient operating temperature range -20°C to +85°C.
- Dimensions: 104 x 74 x 52mm (H x W x D).
- Supply voltage 220-240V/1/50Hz.

Stock Ref
563515



Vent-Axia ThermoSwitch

Automatically switches On fans on either a rise or fall in air temperature. The ThermoSwitch can be used with all Vent-Axia fans (via switch gear if appropriate) for the removal of warm air from buildings. It can also be used to switch On Hi-Line ceiling fans for summer cooling and to move high level warm air down to the working level during winter.

- Setting range: +6°C to +30°C.
- Two internal range limit/locking rings are included to allow setting within a limited temperature range or locking at a fixed t/o point.
- IP20 rated.
- Sealed sensing mechanism.
- Snap-action, single pole, changeover contacts.
- Mounting direct on surface only.
- Electrical connection to screw type terminals with rear or side cable entry.
- Dimensions: 80 x 104 x 36mm (H x W x D).
- Contact rating: 1.5 amp (inductive).
- 16 amps (resistive).
- Maximum voltage 250V.

Stock Ref
563502



Guardian Personnel Detector (PIR Sensor)

Suitable for controlling a range of Vent-Axia fans. Continuously monitors an area and activates when a moving body is detected.

- Supplied complete with wall mounting bracket.
- Adjustable timer overrun (5 seconds to 20 minutes).
- Supplied with lens to provide 15m (max) range, 200° detection area.
- Designed to meet IP55.
- Ambient operating temperature range -20°C to +50°C.
- Maximum load: 10 amp resistive (5 amp inductive).
- Suitable for use with fluorescent lighting up to 500W.
- Internal/External use.
- Supply voltage 220-240V/1/50Hz.

Stock Ref
563548

7 day Time Switch & ThermoSwitch can be wired for either On/Off or Trickle/Boost operation.



Vent-Axia Visionex PIR

A wall or ceiling mounted movement detector for use with any domestic Vent-Axia mains voltage product. Also suitable for use with Vent-Axia T-Series controllers on 'Auto' setting and ITC controllers on sensor mode. Visionex PIR can be wired for either On/Off or Trickle/Boost operation.

- Fits any UK single gang mounting box.
- Adjustable timer overrun (5-25 minutes).
- Range of detection up to 10 metres.
- Designed to meet IP43.
- Ambient operating temperature range 0°C to +50°C.
- Maximum load: 2.5 amps/600W inductive. Not suitable for use with lighting.
- Internal use only.
- No switched live required for internal rooms and WCs.
- Double insulated.
- Volt-free contacts.
- Supply voltage 220-240V/1/50Hz.

Stock Ref
459623

Surface Mounting Box

A surface mounting back box is available.

Stock Ref
410020



Vent-Axia Visionex SELV 12 PIR

A wall or ceiling mounted movement detector for use with any domestic Vent-Axia SELV 12 product.

- Fits any UK single gang mounting box.
- Adjustable timer overrun (5-25 minutes).
- Range of detection up to 10 metres.
- Designed to meet IP43.
- Ambient operating temperature range 0°C to +50°C.
- Maximum load: 5.6 amps inductive @ 12V.
- Internal use only.
- No switched live required for internal rooms and WCs.
- Class III product.
- Volt-free contacts.
- Supply voltage 12V/1/50Hz.

Stock Ref
459624

Surface Mounting Box

A surface mounting back box is available.

Stock Ref
410020



3 Pole Isolator

Isolates Live, Neutral and Switched Live for integral timer fans. 6 amp, 3 pole isolator complying to the 3mm contact separation requirement for routine maintenance repair.

Stock Ref
563518

Surface Mounting Box

A surface mounting back box is available.

Stock Ref
410020



5 Step Auto Controller

Used in conjunction with speed controllable fans to provide 5 stepped speed without electronic motor 'hum'. Several fans can be connected to one transformer provided their combined load does not exceed the controller rating.

Single phase: 3.5, 6.0 and 7.5 amp. Rotary switch giving On/Off and five speeds. Output voltages at 240V/1PH/50Hz 0, 90, 115, 140, 175, 240 volts. Neon indicator. Enclosures are protected to IP54.

| Dimensions | Stock Ref |
|-----------------|-----------------|
| 230 x 168 x 118 | 10314103 |
| 230 x 168 x 118 | 10314105 |
| 284 x 240 x 132 | 10314107 |

Additional ratings and three phase units are available, please enquire.

Controllers & Sensors



Remote Delay Timer

A remote delay timer for use with all domestic products gives the option of offering a 2 minute delay before the fan starts. Once the fan has started the overrun timer is adjustable between 5-25 minutes.

Stock Ref
457986

Surface Mounting Box

A surface mounting back box is available.

Stock Ref
410020



Isolator Relay Controller

Allows fan unit to be isolated from other mains circuit when used with trickle/boost switch or light switch control.

Stock Ref
442030

Surface Mounting Box

A surface mounting back box is available.

Stock Ref
410020



150VA Transformer

Surface Mounting Transformer with six voltage selections for trickle settings to match dwelling volume. Provides Boost/Trickle ventilation when used with humidity sensors or a manual switch.

95 x 225 x 75mm (H x W x D).

Stock Ref
563538



2-Way Switch and Neons

A double gang switch to boost from high to low speeds on all heat recovery systems, incorporating neon lights to indicate speed settings. Suitable changeover relay required. 85 x 145 x 10mm (H x W x D).

Stock Ref
459746



Normal Boost Switch

A single gang switch to boost from high to low speeds on all heat recovery systems.
85 x 85 x 10mm (H x W x D).

Stock Ref
455213



LED Indicator

Compatible with the Sentinel Kinetic range, the LED indicator illuminates when the MVHR unit requires a filter check or if the unit has a fault. Supplied with 15 metres of cable.
85 x 85 x 10mm (H x W x D).

Stock Ref
448356



Normal Boost Purge Switch

A single gang switch to operate between normal, boost and purge speeds.
85 x 85 x 10mm (H x W x D).

Stock Ref
5108454



Momentary Push Switch

Compatible with the Sentinel Kinetic range, the momentary switch boosts the unit for 30 minutes.
85 x 85 x 10mm (H x W x D).

Stock Ref
448929



Summer Mode Switch

Suitable for Integra, HR200V and HR300RW6, the Summer Mode Switch isolates the intake fan to give an Extract-Only mode.

Stock Ref
409999



Normal/Boost Switch - Stainless Steel

A single gang switch to operate normal/boost functions on MVHR systems. Brushed stainless steel finish.
90 x 90 x 18 (H x W x D).

Stock Ref
437320



Normal/Boost Switch with Light Indicator

A single gang switch with LED illumination when in the Boost condition.
85 x 85 x 10mm (H x W x D).

Stock Ref
449060

Ventilation Accessories

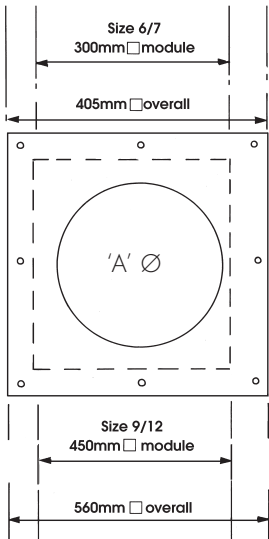


Fixing Plates

A single plate available in 300mm and 450mm square modular sizes for permanent fixing on walls or for use with other modular components.

Manufactured in high impact recyclable thermoplastic.

| Unit Size | Stock Ref |
|-----------|-----------|
| 6" | 561136 |
| 7" | 561137 |
| 9" | 561139 |
| 12" | 561142 |



| Vent-Axia fixing plate | | |
|------------------------|-------|-------------|
| Unit size | 'A' Ø | Module Size |
| 6" | 184mm | 300mm □ |
| 7" | 222mm | 300mm □ |
| 9" | 260mm | 450mm □ |
| 12" | 337mm | 450mm □ |

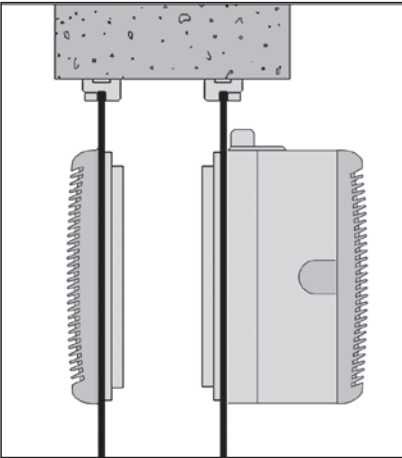


T-Series Adaptor Kits

Used for T-Series Window models in secondary double glazing, Roof models in secondary double glazing in exposed areas, Roof models through roofs and Darkroom models installed through either roof or walls. Adaptor kits allow units to be installed on two surfaces.

T-Series Adaptor kits consist of two Mounting plates with weather-tight seals and a set of fixing screws.

| Unit Size | Stock Ref |
|-----------|-----------|
| 6" | W561031 |
| 7" | W561032 |
| 9" | W561033 |
| 12" | W561034 |



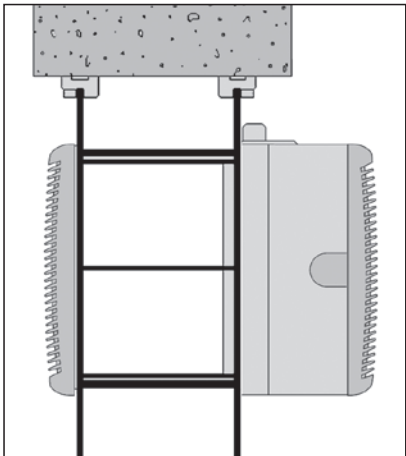
T-Series Extended Fixing Rod Sets

For use with T-Series Window and Roof models fitted through walls. Consists of a set of rods which are cut to suit the wall thickness.

Maximum thickness of wall 370mm.

Rod thread 3.5mm.

| Unit Size | Stock Ref |
|-------------|-----------|
| 6", 7" & 9" | 568104 |
| 12" | 568106 |



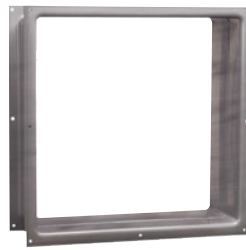


Wall Liner Section

Designed for T-Series units installed in walls thicker than 315mm, each liner section provides a maximum extension of 150mm. Wall liner section can also form a frame for Panel models in walls.

T-Series Wall Liners

| Unit Size | Stock Ref |
|-----------|-----------|
| 6" | 460094 |
| 7" | 460095 |
| 9" | 460096 |
| 12" | 460086 |



Mounting Boxes

A flanged sleeve in 300mm and 450mm square modular sizes used as an interconnecting sleeve between other modular accessories.

Mounting boxes will accept the depth of a unit and can be mounted in conjunction with a Fixing plate and Eggcrate grille for ventilation through ceilings.

Duct length 200mm.

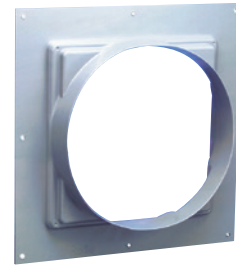
| Unit Size | Stock Ref |
|-----------|-----------|
| 6"/7" | 560236 |
| 9"/12" | 560239 |

| Unit Size | Mounting box modular size |
|-----------|---------------------------|
| 6"/7" | 300mm □ |
| 9"/12" | 450mm □ |

Joining Bolt Set

Set of 8 nuts, bolts and washers.

Stock Ref
563000



Single Spigots

Single spigots in 300mm and 450mm square modular sizes. Used to connect Flexible ducting to Mounting boxes and other modular accessories or can be fixed directly to walls.

Manufactured in flame retardant high impact thermoplastic.

| Unit Size | Nom Dia | Stock Ref |
|-----------|----------|-----------|
| 6" | 175mm(B) | 560637 |
| 6"/7" | 225mm(B) | 560639 |
| 7" | 250mm(A) | 560640 |
| 9" | 300mm(A) | 560642 |
| 9" | 300mm(B) | 566142 |
| 12" | 400mm(B) | 566146 |

Vent-Axia single spigot

| Unit Size | 'A' Ø | Module Size |
|-----------|---------|-------------|
| 6" | B 175mm | 300mm |
| 6" | B 225mm | 300mm |
| 7" | B 225mm | 300mm |
| 7" | A 250mm | 300mm |
| 9" | A 300mm | 300mm |
| 9" | B 300mm | 450mm |
| 12" | B 400mm | 450mm |

Ventilation Accessories



Multi-Spigot Plates

Available with 2, 3, 4 or 5 circular spigots of 100mm diameter. Multi-spigot plates are used in conjunction with 100mm Flexible ducting and other modular accessories to ventilate several small areas especially internal WCs. For use with Size 6 units only. Manufactured in flame retardant high impact recyclable thermoplastic.

Available in 300mm square modular size.

| Description | Stock Ref |
|---------------|-----------|
| 2-3-4 Spigots | 560734 |
| 5 Spigots | 560735 |

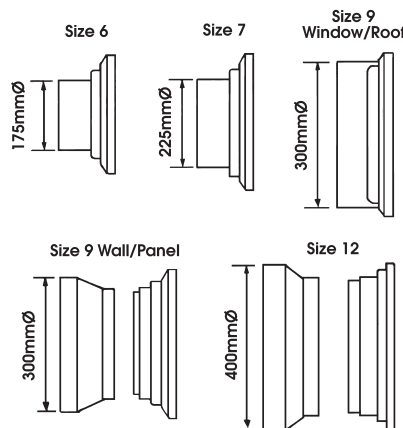


T-Series Direct Mount Spigots

Used to connect Flexible ducting directly to the inlet side of all T-Series models and the outlet side of T-Series Window models.

Manufactured in flame-retardant high impact recyclable thermoplastic.

| Unit Size | Stock Ref |
|----------------|-----------|
| 6" All models | 560501 |
| 7" All models | 560502 |
| 9" WW/RF | 560503 |
| 9" WL/PL | 560504 |
| 12" All models | 560505 |



T-Series Darkroom Cowl Assembly

For use with all T-Series fans for Darkroom applications. Designed to give light protection.

Can also be used in other light sensitive areas such as medical, dental and veterinarian applications.

| Unit Size | Stock Ref |
|-----------|-----------|
| 6" | 460585 |
| 7" | 460586 |
| 9" | 460587 |
| 12" | 460588 |

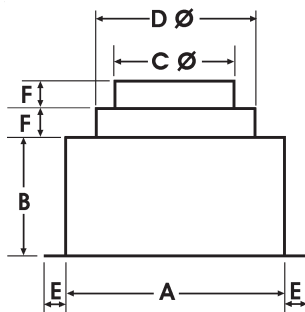


Plenum Boxes

The Plenum box allows square grilles and diffusers to connect to circular duct. Each box size has a two diameter circular spigot for maximum versatility. The box is deep enough to accommodate both a double deflection grille and opposed blade damper.

Manufactured in flame retardant high impact recyclable thermoplastic.

| Size | Stock Ref | Nom. Ø |
|-------|-----------|-----------|
| 200mm | 560601 | 125/150mm |
| 250mm | 560602 | 150/175mm |
| 300mm | 560603 | 200/225mm |
| 300mm | 560604 | 250/300mm |
| 450mm | 560605 | 315/400mm |



Dimensions (mm)

| Stock Ref. | A | B | C Ø | D Ø | E | F |
|------------|-----|-----|-----|-----|----|----|
| 560601 | 200 | 130 | 125 | 150 | 25 | 25 |
| 560602 | 250 | 130 | 150 | 175 | 25 | 25 |
| 560603 | 300 | 130 | 200 | 225 | 25 | 25 |
| 560604 | 300 | 130 | 250 | 300 | 25 | 25 |
| 560605 | 450 | 130 | 315 | 400 | 25 | 25 |



Single Deflection Grilles

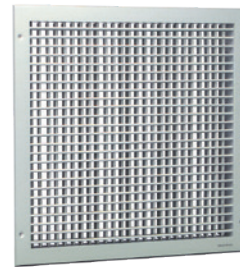
Single deflection grilles are suitable for either side wall or exposed duct applications.

The Single deflection grille has a single row of blades which permit up to 45° deflection of the air in one plane.

Satin silver finish.

Size 6/7 fits 300mm square modular size and size 9/12 fits 450mm square modular size.

| Module size | Stock Ref |
|-------------|-----------|
| 200mm sq | 561370 |
| 250mm sq | 561371 |
| 300mm sq | 561372 |
| 450mm sq | 561373 |



Double Deflection Grilles

Double deflection grilles are suitable for supply air for either side wall or exposed duct applications.

The Double deflection grille has two rows of blades set at 90° apart which permit up to 45° deflection of the air in two planes.

Satin silver finish.

Size 6/7 fits 300mm square modular size and size 9/12 fits 450mm square modular size.

| Module size | Stock Ref |
|-------------|-----------|
| 200mm sq | 561380 |
| 250mm sq | 561381 |
| 300mm sq | 561382 |
| 450mm sq | 561383 |

Ventilation Accessories



Eggcrate Grilles

Eggcrate grilles can be used for air replacement or air extract purposes.

Used underneath Roof plate assemblies with Roof models, underneath single spigots in ceilings, underneath mounting boxes and on the inside faces of walls that have units in fixed and removable wall plates on the outside of the wall.

Comprising a 13mm square by 13mm deep mesh eggcrate core housed in a frame which has a satin silver or white finish.

Size 6/7 fits 300mm square modular size and size 9/12 fits 450mm square modular size.

Size 6/7 - 785cm² free area
Size 9/12 - 1810cm² free area

200mm Sq - 340 cm²
250mm Sq - 530 cm²

Satin finish.

| Module size | Stock Ref |
|-------------|-----------|
| 200mm sq | 561303 |
| 250mm sq | 561305 |
| 300mm sq | 561301 |
| 450mm sq | 561302 |

White finish.

| Module size | Stock Ref |
|-------------|-----------|
| 125mm sq | 560846 |
| 200mm sq | 560847 |
| 250mm sq | 560848 |
| 300mm sq | 560849 |
| 450mm sq | 560850 |



Opposed Blade Dampers

Opposed blade dampers are used to regulate air flow through all Vent-Axia grilles and diffusers. Key operated.

This action ensures that the downstream airflow is non-directional when the damper is in the partially closed position. Opposed blade dampers have aluminium blades and the frame is left in natural mill finish.

Can be used in conjunction with Eggcrate, Single deflection and Double deflection grilles.

Size 6/7 fits 300mm square modular size and size 9/12 fits 450mm square modular size.

| Module size | Stock Ref |
|-------------|-----------|
| 200mm sq | 561341 |
| 250mm sq | 561342 |
| 300mm sq | 561343 |
| 450mm sq | 561344 |



Filtered Inlet Grille

For ceiling, panel or glass mounting. Consists of a size 6 grille, washable filter, adaptor kit and a stepped spigot to suit 100, 125 or 150mm diameter ducting.

Grille size: 226mm x 220mm
Spigot depth: 100mm
Fixing hole diameter: 184mm

Stock Ref
W563536



4-Way Diffusers

Manufactured in polypropylene plastic. Four diffuser cassettes can be set for downward or 45° discharge in any of sixteen directional combinations.
Colour: Ivory

| Neck Size | Stock Ref |
|-----------|-----------|
| 225mm | 10546230 |
| 300mm | 10546300 |
| 350mm | 10546350 |



Neck Adaptor

Used to connect Flexible ducting directly to 4-way diffusers. Integral volume control damper for duct sizes up to 300mm.

| Diffuser | 4-Way | |
|-----------|-----------|-----------|
| Duct Size | Neck Size | Stock Ref |
| 150mm Ø | 225mm | 10547150 |
| 200mm Ø | 225mm | 10547200 |
| 250mm Ø | 300mm | 10547250 |
| 300mm Ø | 350mm | 10547300 |



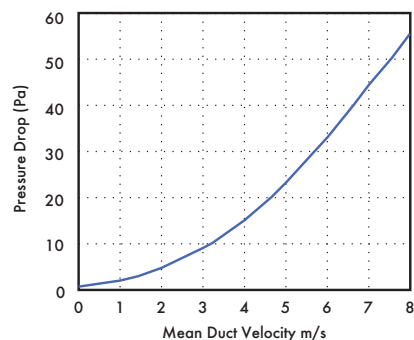
Window/Wall/Ceiling Termination Sets

Used to terminate Flexible ducting at windows. Can be used with the Extended fixing rod set or Fixing plates for termination at walls. Used with Flexible ducting and Worm drive clips.

Consists of a Direct mount spigot, Adaptor kit, Window grille and all screws.

| Unit Size | Spigot DiaØ | Stock Ref |
|-----------|-------------|-----------|
| 6" | 175mm | W560151 |
| 7" | 225mm | W560152 |
| 9" | 300mm | W560153 |
| 12" | 400mm | W560154 |

| Other sizes | Stock Ref |
|---------------|-----------|
| Spigot DiaØ | |
| 100/125/150mm | W10554150 |
| 200mm | W10554200 |
| 250mm | W10554250 |
| 315mm | W10554315 |



Air Replacement Non-Vision Grilles

Satin finish

Non-vision grilles consist of a single row of overlapping chevron vanes. Used as transfer grilles for doors or partitions, the overlapping vanes prevent through-vision.

| Module size | Stock Ref |
|-------------|-----------|
| 300mm sq | 561311 |
| 450mm sq | 561312 |

Black finish

In addition to preventing through-vision the black finish also limits light transference. Use two grilles back to back for darkroom applications.

| Module size | Stock Ref |
|-------------|-----------|
| 300mm sq | 561321 |
| 450mm sq | 561322 |



Roof Termination Sets

Used to terminate Flexible ducting at roofs.

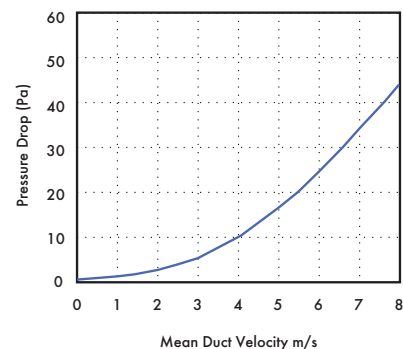
Consists of: Direct mount spigot, Adaptor kit, Roof cowl, Deflector and all screws. Can be used with Roof Plate Assemblies for installation on flat roofs.

T-series units

| Size | Spigot Ø | Stock Ref |
|------|----------|-----------|
| 6" | 175mm | 560161 |
| 7" | 225mm | 560162 |
| 9" | 300mm | 560163 |
| 12" | 400mm | 560164 |

Vent-Axia roof termination

| Diameter | Stock Ref |
|---------------|-----------|
| 100/125/150mm | 10555150 |
| 200mm | 10555200 |
| 250mm | 10555250 |
| 315mm | 10555315 |



Ventilation Accessories



Air Replacement Non-Vision Door Grilles with Matching Flanges

Non-vision grilles consist of a single row of overlapping chevron vanes to prevent through-vision, supplied with matching flanges. The grille is fitted to one side of the door with the matching flange on the other side.

Suitable for door thicknesses of 19-49mm.

Available in Silver or Brown finish, in two sizes, 600 x 150 and 600 x 300mm.

Satin finish

| Size | Stock Ref |
|-------------|---------------|
| 600 x 150mm | 561390 |
| 600 x 300mm | 561391 |

Brown finish

| Size | Stock Ref |
|-------------|---------------|
| 600 x 150mm | 560900 |
| 600 x 300mm | 560901 |



Heavy Duty T-Series Wall Grilles

Tough aluminium construction for accessible public areas. Fits T-Series wall models in place of existing external grille. Finish T-Series grey.

| Size | Stock Ref |
|------|---------------|
| 6" | 452725 |
| 7" | 452726 |
| 9" | 452727 |
| 12" | 452728 |



External Louvre Mill and Brown Finish

Weather resistant external louvres are suitable for air intake or discharge and for use with ducting on external walls.

The narrow blade construction has a 38mm pitch set at 45° with a depth of 41mm and an integral rain lip.

Standard 32mm wide undrilled outer flanges in aluminium have fully welded mitre corners as standard.

Size 6/7 fits 300mm square modular size and size 9/12 fits 450mm square modular size.

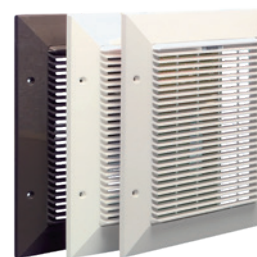
Size 6/7 - 345cm² free area
Size 9/12 - 824cm² free area

Satin finish

| Size | Stock Ref |
|----------|---------------|
| 225mm sq | 561350 |
| 300mm sq | 561351 |
| 400mm sq | 561355 |
| 450mm sq | 561352 |

Brown finish

| Size | Stock Ref |
|----------|---------------|
| 225mm sq | 560910 |
| 300mm sq | 560911 |
| 400mm sq | 560912 |
| 450mm sq | 560913 |



Louvre Grilles

Louvre grilles can be used for air replacement, for extract purposes and as an external louvre. Available in four sizes, the assembly fits over rather than into the aperture making it especially useful where there are space restrictions within the duct.

Manufactured in thermoplastic. Choice of three colours: White, Brown and Grey.

| | |
|---------|--------------------------------|
| Size 6 | - 190cm ² free area |
| Size 7 | - 335cm ² free area |
| Size 9 | - 415cm ² free area |
| Size 12 | - 705cm ² free area |

Grille Dimensions (mm)

| Size | W x H |
|------|-------------|
| 6" | = 310 x 303 |
| 7" | = 352 x 345 |
| 9" | = 391 x 388 |
| 12" | = 470 x 467 |

The grilles and surrounds are moulded in ABS plastic to tone in with building materials, therefore an equivalent BS or RAL colour reference cannot be given.

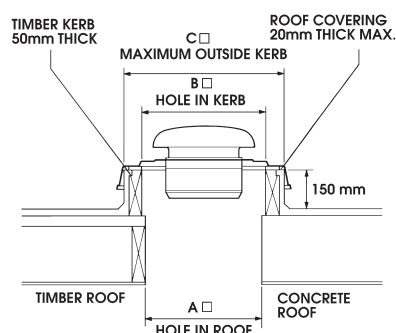
| Unit Size | Colour | Stock Ref |
|-----------|--------|----------------|
| 6" | Grey | W561431 |
| 6" | Brown | 561411 |
| 6" | White | 561421 |
| 7" | Grey | W561432 |
| 7" | Brown | 561412 |
| 7" | White | 561422 |
| 9" | Grey | W561433 |
| 9" | Brown | 561413 |
| 9" | White | 561423 |
| 12" | Grey | W561434 |
| 12" | Brown | 561414 |
| 12" | White | 561424 |



Roof Plate Assemblies

Vent-Axia roof plate assemblies are manufactured in high impact recyclable thermoplastic. They consist of a strong one piece moulded plate with extended sides to assist flashing and weather protection. A separate sub-frame is provided for permanent fixing to the roof kerb. The Vent-Axia Roof model is then fitted to the plate using a suitable sealing compound between the Cowl and plate, ensuring a weather-tight seal.

| Size | Stock Ref |
|------|-----------|
| 6" | 560136 |
| 7" | 560137 |
| 9" | 560139 |
| 12" | 560142 |



| Size | A | B | C |
|------|-------|-------|-------|
| 6" | 300mm | 335mm | 465mm |
| 7" | 300mm | 335mm | 465mm |
| 9" | 450mm | 490mm | 615mm |
| 12" | 450mm | 490mm | 615mm |

In addition to the size 6, 7, 9 & 12 Roof Termination Sets, the Roof Plate Assemblies can also be used with the following Roof Terminations part numbers.

10555150 use size 6 Roof Plate Assembly
 10555200 use size 7 Roof Plate Assembly
 10555250 use size 9 Roof Plate Assembly
 10555315 use size 12 Roof Plate Assembly



Joining Pieces

Used to join lengths of flexible ducting to give a long-lasting airtight connection.

| Duct Size | Stock Ref |
|-----------|-----------|
| 100mm Ø | 561804 |
| 125mm Ø | 561805 |
| 150mm Ø | 561806 |
| 175mm Ø | 561807 |
| 200mm Ø | 561808 |
| 225mm Ø | 561809 |
| 250mm Ø | 561810 |
| 300mm Ø | 561812 |
| 315mm Ø | 561813 |
| 400mm Ø | 561816 |

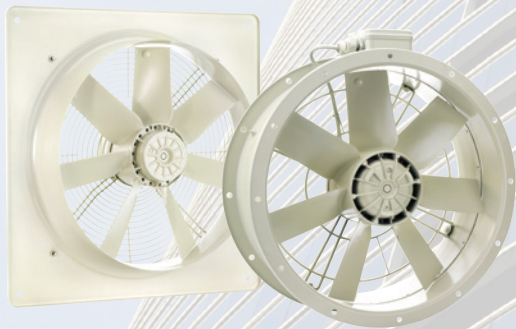


Worm Drive Clips

Stainless steel tightening band with quick-fix screwed ends for securing flexible ducting.

| Max. Ø | Stock Ref |
|--------|-----------|
| 110mm | 561704 |
| 215mm | 561707 |
| 270mm | 561710 |
| 380mm | 561715 |
| 525mm | 561720 |
| 660mm | 561726 |

Roof Units™ Industrial



Roof Units™ from Vent-Axia

The Roof Units™ name has long been associated with high quality ventilation products at affordable prices. With ERP compliance assured you can be certain of high quality ventilation products meeting the exacting demands of today's buildings.

The extensive Roof Units™ product range includes the Euroseries® Axial plate, short cased & roof fans, as well as inline centrifugal extract fans and twin fans. When matched with the Roof Units™ and Vent-Axia ranges of controllers, flexible ducting and other accessories you can be certain of fulfilling the complete installation from one supplier.

Characterised by design excellence, Roof Units™ fans are purpose designed to deliver controllable outputs of up to 15m³/s, plus the right balance of airflow, pressure development, quietness and energy efficiency for every type of project.

The Euroseries® range of Axial bladed fans cover plate, short cased & roof variants, all fully speed controllable, incorporating modern high efficiency external rotor motors with single piece die-cast aluminium rotor/impellers offering smoother running & giving longer reliable service life.

Vent-Axia®

| | | |
|---|--|---------|
|  | EuroSeries (SDX EC) In-Line Centrifugal Duct Fans | M3-M6 |
|  | EuroSeries® (ESP) Plate Mounted Axial Fans | M7-M14 |
|  | EuroSeries® (ESC) Short Case Axial Fans | M15-M22 |
|  | EuroSeries® (ESR) Fan Assisted Roof Cows | M23-M30 |
|  | Quiet Pack (QP) In-Line Centrifugal Duct Fans | M31-M34 |
|  | Quiet Pack (QPTW) In-Line Twin Fans | M35-M38 |
|  | Slimpak EC Box Fan (SLP EC) In-Line Centrifugal Duct Fans | M39-M44 |
|  | Slimpak EC Twin Fan (SLPT EC) In-Line Twin Duct Fans | M45-M50 |
|  | EuroSeries® (SDX) In-Line Centrifugal Duct Fans | M51-M54 |
|  | Speed Controllers Single & Three Phase | M55-M56 |
|  | Starter & Overloads | M57 |
|  | Sonex Circular Sound Attenuators | M58 |
|  | Pyrocheck (CVT) Intumescent Fire Dampers | M59 |
|  | Unitex Roof Cowl System | M60 |
|  | Unitex Wall Terminal (SA & QSA) | M61 |

EuroSeries (SDX EC)

- Available in sizes 125 to 315
- EC Motor, backward curved impeller
- Protected to IPX2
- Mounting for internal use
- Integral speed setting potentiometer
- 0-10v potentiometer speed controllable
- Operating temperatures from -25°C up to +60°C
- Quality Assurance to BS EN ISO 9001:1994
- 2 Year Warranty



The SDX EC Euroflow in-line centrifugal duct fans are designed around an efficient backward curved centrifugal impeller and EC motor to ensure a compact and efficient unit, providing high performance and controllability as standard.

The in-line fan casing is constructed from epoxy coated pressed steel and incorporates an aerodynamically designed airflow guide vane, ensuring maximum performance from the unit while maintaining minimum noise levels. All models are supplied with a simple mounting foot for ease of installation.

The SDX EC range is available in five model sizes: 125, 150, 200, 250 & 315mm diameter as standard performance.

The range provides a performance up to 0.36m³/s with a maximum pressure development of 600 Pa.

The SDX EC range is suitable for the extraction of clean air only. It is not suitable for extracting or transporting grinding dust, soot, explosive or other aggressive gases etc.

Impellers

All SDX EC units feature an energy efficient, Class 1, EC/DC external rotor motor and backward curved impeller assembly specifically chosen for performance and non-overloading characteristics. The assembly is dynamically balanced to DIN ISO 1940 Grade 6.3, IP44 according to BS EN 60529.

Ball bearings are greased for life. Insulation is Class 'B' (from -25°C to +60°C). All models incorporate internal electronic overload protection and soft start function.

Control

Every SDX EC unit is fitted with a integral commissioning potentiometer giving the ability to set the exact duty required at commissioning. Alternatively, the integral potentiometer can be bypassed to allow remote speed control via an external 0-10V potentiometer.

Terminal Box

An IP55 terminal box fitted to the casing with multiple cable entry positions.

Performance

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1m from the fan.

Quality Assurance

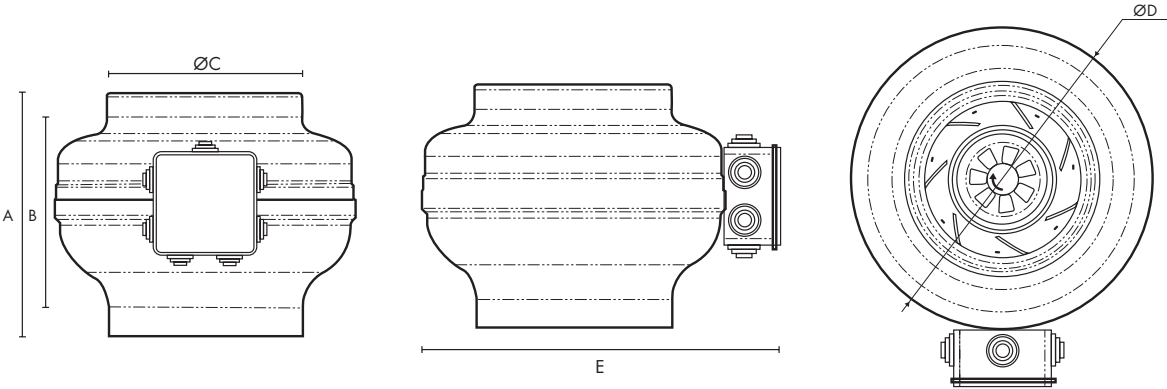
Design and manufacture is in accordance with the standard for quality management systems BS EN ISO 9001:1994.

Accessories

A full range of accessories are available with the Euroflow in-line centrifugal duct fans such as:

- 0-10V potentiometer
 - Pre & Secondary Filter Cassettes
 - Electric Heater Batteries
 - In-Line Attenuators
 - Backdraught Shutters
 - Fast Clamps
 - Flexible Ducting
 - Wall Terminals
 - Roof Terminals
-

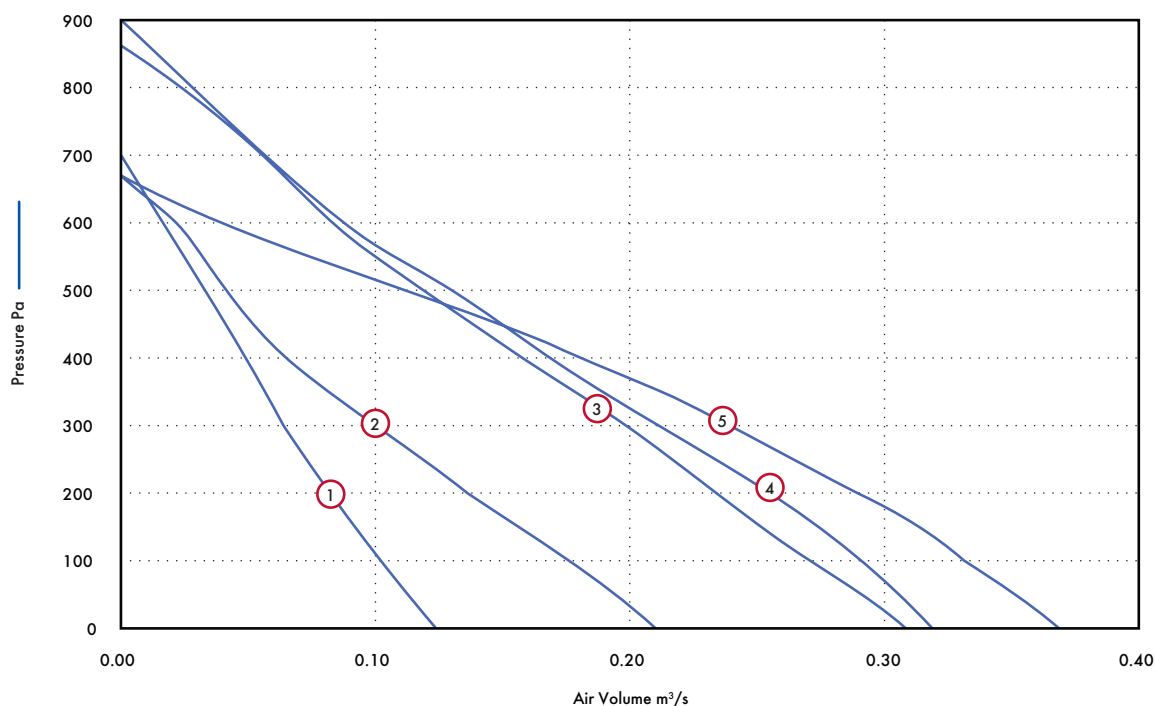
Dimensions (mm)



| Unit Size | A | B | ØC | ØD | E | kg |
|-----------|-----|-----|-----|-----|-----|-----|
| SDX125EC | 207 | 175 | 125 | 245 | 290 | 2.1 |
| SDX150EC | 222 | 172 | 150 | 344 | 386 | 3.1 |
| SDX200EC | 240 | 190 | 200 | 345 | 390 | 3.7 |
| SDX250EC | 245 | 185 | 250 | 345 | 390 | 3.6 |
| SDX315EC | 250 | 180 | 315 | 400 | 445 | 4.6 |

Performance Curves

SDX EC 125-315



Performance Guide

| Dia. | Motor Phase | Stock Ref | r.p.m | IP Rating | Curve Ref. | m³/s @ Pa | | | | | | | | | | Motor kW | F.L.C Amps | dBA @ 3m |
|------|-------------|---------------|-------|-----------|------------|-----------|------|------|------|------|------|------|------|------|------|----------|------------|----------|
| | | | | | | 0 | 50 | 100 | 150 | 200 | 300 | 400 | 500 | 600 | 700 | | | |
| 125 | 1 | SDX125EC 3200 | IPX2 | 1 | m³/s | 0.12 | 0.11 | 0.10 | 0.09 | 0.08 | 0.06 | 0.05 | 0.03 | 0.02 | | 0.08 | 0.75 | 35 |
| | | | | | kW | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.07 | 0.07 | | | | |
| | | | | | W/l/s | 0.67 | 0.73 | 0.81 | 0.89 | 1.01 | 1.27 | 1.59 | 2.07 | 3.96 | | | | |
| 150 | 1 | SDX150EC 2550 | IPX2 | 2 | m³/s | 0.21 | 0.19 | 0.18 | 0.16 | 0.14 | 0.10 | 0.06 | 0.04 | 0.02 | | 0.09 | 0.7 | 41 |
| | | | | | kW | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | | | | |
| | | | | | W/l/s | 0.43 | 0.47 | 0.51 | 0.57 | 0.67 | 0.91 | 1.41 | 2.17 | 4.55 | | | | |
| 200 | 1 | SDX200EC 3230 | IPX2 | 3 | m³/s | 0.31 | 0.29 | 0.27 | 0.25 | 0.23 | 0.20 | 0.16 | 0.12 | 0.08 | 0.06 | 0.17 | 1.4 | 33 |
| | | | | | kW | 0.17 | 0.17 | 0.16 | 0.16 | 0.17 | 0.17 | 0.16 | 0.17 | 0.16 | 0.16 | | | |
| | | | | | W/l/s | 0.54 | 0.59 | 0.60 | 0.64 | 0.71 | 0.85 | 1.04 | 1.37 | 1.92 | 2.88 | | | |
| 250 | 1 | SDX250EC 3230 | IPX2 | 4 | m³/s | 0.32 | 0.31 | 0.29 | 0.27 | 0.26 | 0.22 | 0.17 | 0.13 | 0.09 | 0.06 | 0.17 | 1.4 | 33 |
| | | | | | kW | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | | | |
| | | | | | W/l/s | 0.52 | 0.54 | 0.57 | 0.61 | 0.65 | 0.78 | 0.99 | 1.30 | 1.89 | 0.28 | | | |
| 315 | 1 | SDX315EC 2510 | IPX2 | 5 | m³/s | 0.37 | 0.35 | 0.33 | 0.31 | 0.29 | 0.24 | 0.18 | 0.11 | 0.04 | | 0.17 | 1.4 | 41 |
| | | | | | kW | 0.14 | 0.14 | 0.15 | 0.16 | 0.16 | 0.17 | 0.16 | 0.15 | 0.12 | | | | |
| | | | | | W/l/s | 0.37 | 0.40 | 0.45 | 0.52 | 0.56 | 0.69 | 0.90 | 1.33 | 3.14 | | | | |

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Spectrum | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dBA @ 3m |
|------|-------------|-----------|----------|-----|-----|-----|----|----|----|----|----------|
| 125 | 1 | SDX125EC | Inlet | 53 | 58 | 68 | 64 | 66 | 61 | 54 | 50 |
| | | | Outlet | 48 | 53 | 63 | 59 | 61 | 56 | 49 | 45 |
| | | | Breakout | 38 | 43 | 51 | 48 | 51 | 46 | 39 | 35 |
| 150 | 1 | SDX150EC | Inlet | 56 | 60 | 71 | 66 | 69 | 63 | 57 | 53 |
| | | | Outlet | 51 | 55 | 66 | 61 | 64 | 58 | 52 | 35 |
| | | | Breakout | 44 | 48 | 59 | 54 | 57 | 51 | 45 | 41 |
| 200 | 1 | SDX200EC | Inlet | 20 | 62 | 69 | 72 | 71 | 68 | 64 | 56 |
| | | | Outlet | 48 | 57 | 64 | 67 | 66 | 63 | 59 | 51 |
| | | | Breakout | -2 | 39 | 46 | 49 | 48 | 45 | 41 | 33 |
| 250 | 1 | SDX250EC | Inlet | 20 | 62 | 69 | 72 | 71 | 68 | 64 | 56 |
| | | | Outlet | 48 | 57 | 64 | 67 | 66 | 63 | 59 | 51 |
| | | | Breakout | -2 | 39 | 46 | 49 | 48 | 45 | 41 | 33 |
| 315 | 1 | SDX315EC | Inlet | 55 | 63 | 67 | 71 | 70 | 72 | 62 | 56 |
| | | | Outlet | 50 | 58 | 62 | 66 | 65 | 67 | 57 | 51 |
| | | | Breakout | 40 | 48 | 52 | 56 | 55 | 57 | 47 | 41 |

Models & Accessories

| Fan Stock Ref | 0-10v external control | |
|------------------|------------------------|-----------|
| | | Stock Ref |
| SDX125EC | | 426332 |
| SDX150EC | | 426332 |
| SDX200EC | | 426332 |
| SDX250EC | | 426332 |
| SDX315EC | | 426332 |

| Dia | In-Line Attenuators | | | |
|-----|---------------------|-----------|-----------|-----------|
| | 300mm | 600mm | 900mm | 1200mm |
| | Stock Ref | Stock Ref | Stock Ref | Stock Ref |
| 125 | 83012030 | 83012060 | 83012090 | - |
| 150 | 83015030 | 83015060 | 83015090 | - |
| 200 | - | 83020060 | 83020090 | 83020120 |
| 250 | - | 83025060 | 83025090 | 83025120 |
| 315 | - | 83031060 | 83031090 | 83031120 |

| Fan Stock Ref | Wall Terminal Stock Ref | Wall Terminal Stock Ref | Electric Heaters Stock Ref | Panel Filters Stock Ref |
|------------------|----------------------------|----------------------------|-------------------------------|----------------------------|
| 125 | SA125/280 | SA125/80 | 10531125T1 | QPF125A |
| 150 | SA150/280 | SA150/80 | 10531150T1 | QPF150A |
| 200 | SA200/280 | SA200/80 | 10531200T1 | QPF200A |
| 250 | SA250/280 | SA250/80 | 10531250T1 | QPF250A |
| 315 | SA315/280 | SA315/80 | 10531315T1 | QPF315A |

| Fan Stock Ref | Bag Filters Stock Ref | Roof Terminal Stock Ref | Louvre Shutter Stock Ref |
|------------------|--------------------------|----------------------------|-----------------------------|
| 125 | QPFB125A | WB160 | LS250 |
| 150 | QPFB150A | WB160 | LS250 |
| 200 | QPFB200A | WB200 | LS250 |
| 250 | QPFB250A | RCZ300 | LS250 |
| 315 | QPFB315A | RCZ300 | LS315 |

EuroSeries[®] (ESP)

- Die cast aluminium impellers
- Fully speed controllable
- Air Volumes up to 13.89m³/s
- Sizes 250 to 1000 dia protected to IP54
- Operating Temperatures from -40°C up to +70°C Motor
- Insulation Class F
- Thermal overload for motor protection
- Reversible - Supply or Extract
- Tough epoxy paint finish
- Quality Assurance to BS EN ISO 9001:1994
- Performance tested to ISO 5801



The EuroSeries[®] ESP axial blade plate fans, feature a single shot die cast aluminium blade and external rotor motor design.

The EuroSeries[®] ESP range is available in eleven sizes with the extract performances up to 13.89m³/s, with pressure characteristics of up to 300Pa. All units are designed for speed controllable.

Impellers

All sizes are supplied with cast aluminium impellers, ensuring performance when working against outdoor conditions and abrasive airflow. Where fans are reversible for Intake a -30% drop in performance can be expected.

Motors

External rotor motors are specially designed and styled for this range of fan. Ball bearings are greased for life. Rotors are dynamically balanced to ISO 1940. Sizes 250-1000mm, motors are protected to IP54, against dust and moisture complying with BS EN 60529:1992. They are ribbed aluminium body castings for efficient cooling. Motor insulation is Class 'F' (from -40°C to +70°C).

Electrical

Single phase 220-240V 50Hz. Capacitor start and run. Three phase 380-415V 50Hz. An IP54 terminal box are supplied with 20mm and PGII entry. All motors are fitted with thermal overload protection which should be wired into all controller circuits and into starter contactors. Models are available with either 2,4,6 or 8 pole motors.

Terminal Box

Terminal Box to IP54 as standard, protected against dust and water from any angle allowing outside applications.

Performance

The fan performance is in accordance with tests to BS848 Part 1 1980.

Sound Levels

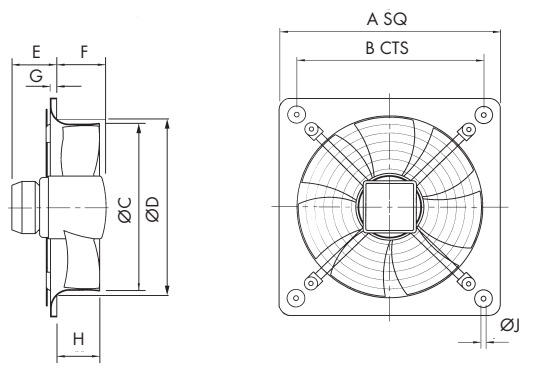
Fan sound levels are measured in a reverberant chamber in accordance with BS848 Part 2 1985. Published dB(A) figures are free field sound pressure levels at 3m with spherical propagation at a reference level of 2×10^{-5} Pa (20 micro-Pascal). The sound power level spectra figures are dB with reference level of 10^{-12} Watts (1 pico-watt). To ensure minimum noise levels during speed control, an auto transformer speed control is recommended.

Accessories

A full range of accessories:

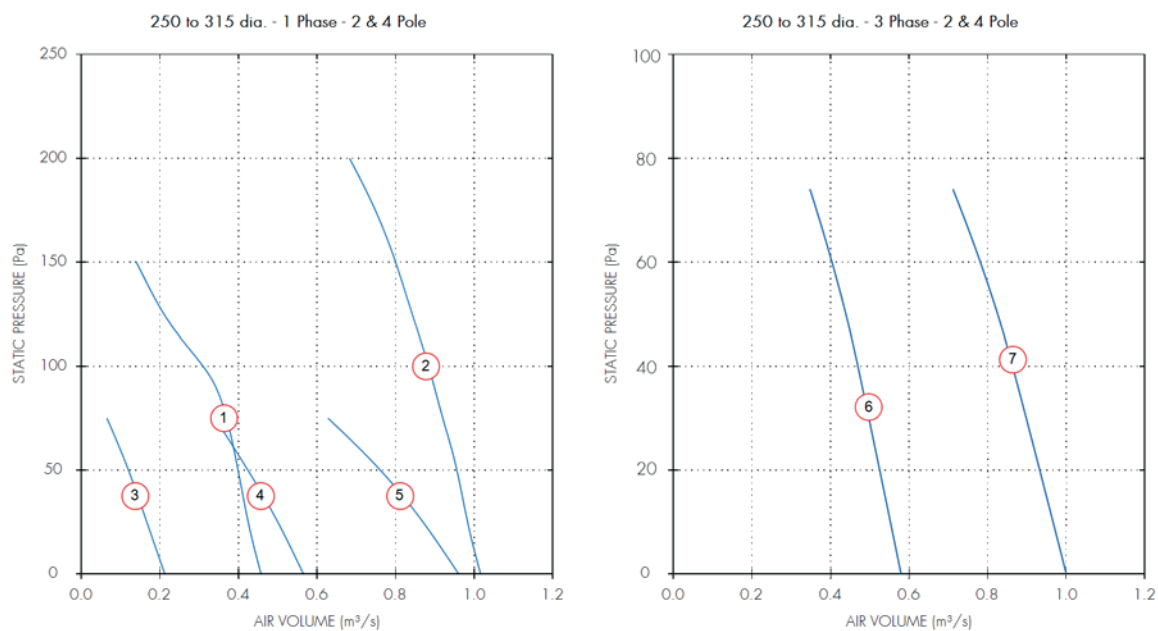
- Electronic Speed Controllers
- Auto Transformer Speed Controllers
- D.O.L. Starters & Overloads
- Discharge Guards
- Louvre Shutters

Dimensions (mm)



| Dia | A | B | ØC | ØD | E | F | G | H | ØJ | kg |
|------|------|------|-------|-------|----|-------|----|-----|------|------|
| 250 | 370 | 320 | 256.5 | 264.5 | 84 | 80 | 6 | 80 | 9 | 3.4 |
| 315 | 430 | 380 | 320 | 328 | 84 | 84 | 19 | 70 | 9 | 6.3 |
| 355 | 485 | 435 | 367 | 372 | 86 | 97 | 21 | 75 | 9 | 7.3 |
| 400 | 540 | 490 | 412 | 420 | 93 | 100 | 12 | 88 | 9 | 10.2 |
| 450 | 575 | 535 | 463 | 480 | 86 | 139 | 14 | 96 | 11 | 15.8 |
| 500 | 655 | 615 | 517 | 528 | 84 | 141 | 16 | 104 | 11 | 17.3 |
| 560 | 725 | 675 | 568 | 589 | 81 | 142.5 | 16 | 119 | 11 | 24 |
| 630 | 805 | 750 | 643 | 664 | 82 | 142.5 | 20 | 130 | 11 | 45 |
| 710 | 850 | 810 | 720 | 763 | 37 | 176.5 | 20 | 150 | 14.5 | 31 |
| 800 | 970 | 910 | 804 | 869 | 34 | 244 | 17 | 193 | 14.5 | 38 |
| 1000 | 1170 | 1110 | 1009 | 1067 | 40 | 284 | 20 | 200 | 14.5 | 84 |

Performance Guide



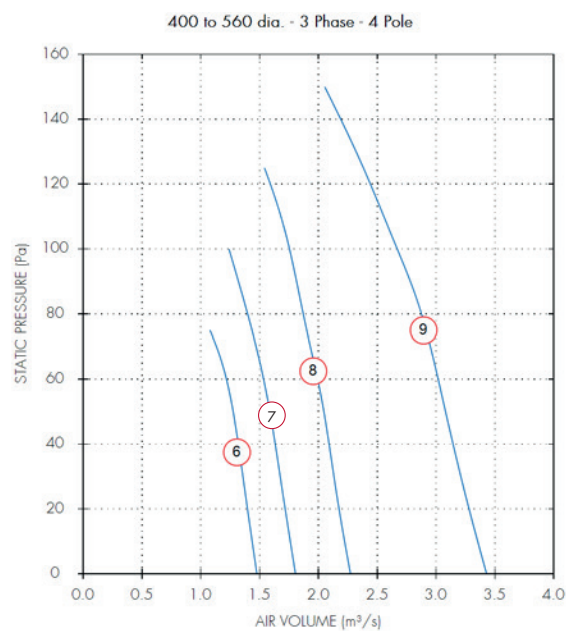
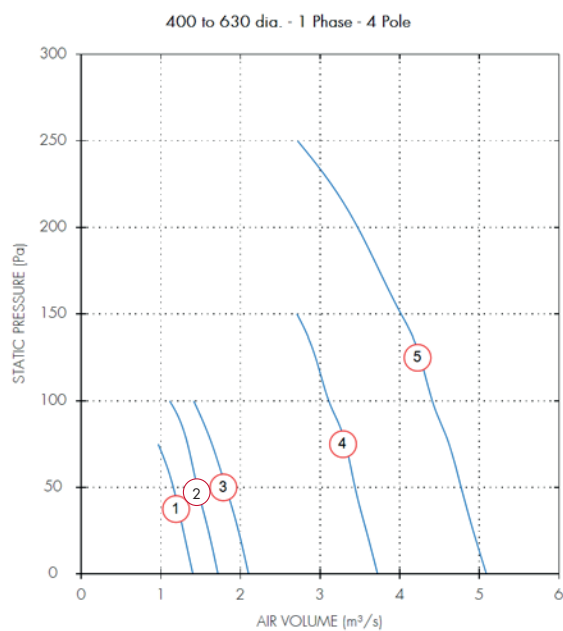
| Dia. | Motor Phase | Stock Ref | Poles | r.p.m | IP Rating | Curve Ref. | 0 | m³/s @ Pa | | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-------|-------|-----------|------------|------|-----------|------|------|------|----------|-----------|------------|------------|
| | | | | | | | | 50 | 100 | 150 | 200 | | | | |
| 250 | 1 | ESP25012 | 2 | 2440 | IP44 | 1 | 0.46 | 0.4 | 0.31 | 0.14 | | 0.12 | 1.15 | 0.54 | 59 |
| 315 | 1 | ESP31512 | 2 | 2690 | IP54 | 2 | 1.02 | 0.96 | 0.88 | 0.8 | 0.68 | 0.56 | 7.2 | 2.4 | 64 |
| 250 | 1 | ESP25014 | 4 | 1340 | IP44 | 3 | 0.21 | 0.12 | | | | 0.04 | 0.3 | 0.16 | 44 |
| 315 | 1 | ESP31514 | 4 | 1300 | IP54 | 4 | 0.57 | 0.42 | | | | 0.15 | 1.38 | 0.7 | 50 |
| 355 | 1 | ESP35514 | 4 | 1330 | IP54 | 5 | 0.96 | 0.76 | | | | 0.19 | 1.45 | 0.84 | 53 |
| 315 | 3 | ESP31534 | 4 | 1390 | IP54 | 6 | 0.58 | 0.44 | | | | 0.11 | 2.1 | 0.27 | 46 |
| 355 | 3 | ESP35534 | 4 | 1370 | IP54 | 7 | 1 | 0.83 | | | | 0.17 | 1.35 | 0.37 | 49 |

For fans wired to reverse run, duty reduced by 30%. ESP25012, ESP31512 and ESP25014 not suitable for reverse airflow.

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Poles | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|-------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 250 | 1 | ESP25012 | 2 | Inlet | 69 | 70 | 76 | 76 | 70 | 70 | 67 | 59 | 57 |
| 250 | 1 | ESP25012 | 2 | Outlet | 69 | 70 | 76 | 76 | 70 | 70 | 67 | 59 | 57 |
| 315 | 1 | ESP31512 | 2 | Inlet | 69 | 73 | 79 | 74 | 74 | 76 | 73 | 66 | 61 |
| 315 | 1 | ESP31512 | 2 | Outlet | 69 | 73 | 79 | 74 | 74 | 76 | 73 | 66 | 61 |
| 250 | 1 | ESP25014 | 4 | Inlet | 70 | 72 | 63 | 58 | 54 | 52 | 45 | 35 | 41 |
| 250 | 1 | ESP25014 | 4 | Outlet | 70 | 72 | 63 | 58 | 54 | 52 | 45 | 35 | 41 |
| 315 | 1 | ESP31514 | 4 | Inlet | 70 | 68 | 66 | 61 | 60 | 62 | 58 | 51 | 47 |
| 315 | 1 | ESP31514 | 4 | Outlet | 70 | 68 | 66 | 61 | 60 | 62 | 58 | 51 | 47 |
| 355 | 1 | ESP35514 | 4 | Inlet | 65 | 70 | 67 | 65 | 64 | 64 | 62 | 55 | 50 |
| 355 | 1 | ESP35514 | 4 | Outlet | 65 | 70 | 67 | 65 | 64 | 64 | 62 | 55 | 50 |
| 315 | 3 | ESP31534 | 4 | Inlet | 64 | 67 | 69 | 63 | 62 | 60 | 58 | 53 | 47 |
| 315 | 3 | ESP31534 | 4 | Outlet | 64 | 67 | 69 | 63 | 62 | 60 | 58 | 53 | 47 |
| 355 | 3 | ESP35534 | 4 | Inlet | 58 | 73 | 63 | 64 | 64 | 65 | 64 | 58 | 50 |
| 355 | 3 | ESP35534 | 4 | Outlet | 58 | 73 | 63 | 64 | 64 | 65 | 64 | 58 | 50 |

Performance Guide



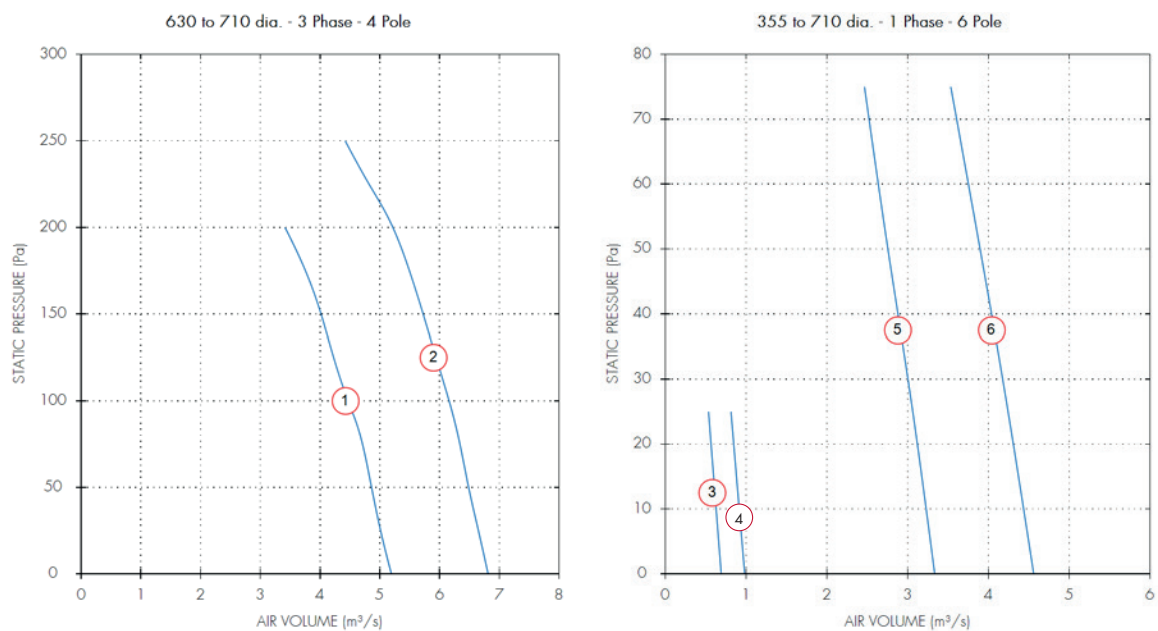
| Dia. | Motor Phase | Stock Ref | Poles | r.p.m | IP Rating | Curve Ref. | 0 | 50 | m³/s @ Pa | | | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-------|-------|-----------|------------|------|------|-----------|------|------|------|--|----------|-----------|------------|------------|
| 400 | 1 | ESP40014 | 4 | 1350 | IP54 | 1 | 1.4 | 1.16 | | | | | | 0.29 | 2.4 | 1.45 | 56 |
| 450 | 1 | ESP45014 | 4 | 1370 | IP54 | 2 | 1.72 | 1.46 | 1.11 | | | | | 0.36 | 3.6 | 1.6 | 61 |
| 500 | 1 | ESP50014 | 4 | 1290 | IP54 | 3 | 2.1 | 1.82 | 1.41 | | | | | 0.51 | 4.3 | 2.3 | 55 |
| 560 | 1 | ESP56014 | 4 | 1320 | IP54 | 4 | 3.72 | 3.44 | 3.11 | 2.71 | | | | 1.35 | 9.3 | 6 | 63 |
| 630 | 1 | ESP63014 | 4 | 1320 | IP54 | 5 | 5.09 | 4.77 | 4.41 | 4.02 | 3.47 | 2.72 | | 2.2 | 28 | 9.9 | 70 |
| 400 | 3 | ESP40034 | 4 | 1350 | IP54 | 6 | 1.48 | 1.27 | | | | | | 0.26 | 2.1 | 0.56 | 51 |
| 450 | 3 | ESP45034 | 4 | 1380 | IP54 | 7 | 1.8 | 1.59 | 1.24 | | | | | 0.36 | 2.6 | 0.8 | 56 |
| 500 | 3 | ESP50034 | 4 | 1380 | IP54 | 8 | 2.27 | 2.05 | 1.75 | | | | | 0.55 | 4.2 | 1.05 | 58 |
| 560 | 3 | ESP56034 | 4 | 1220 | IP54 | 9 | 3.43 | 3.08 | 2.67 | 2.05 | | | | 1.25 | 7.7 | 2.2 | 70 |

For fans wired to reverse run, duty reduced by 30%.

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Poles | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|-------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 400 | 1 | ESP40014 | 4 | Inlet | 70 | 72 | 67 | 66 | 65 | 65 | 64 | 56 | 51 |
| 400 | 1 | ESP40014 | 4 | Outlet | 70 | 72 | 67 | 66 | 65 | 65 | 64 | 56 | 51 |
| 450 | 1 | ESP45014 | 4 | Inlet | 69 | 76 | 73 | 72 | 70 | 71 | 70 | 62 | 57 |
| 450 | 1 | ESP45014 | 4 | Outlet | 69 | 76 | 73 | 72 | 70 | 71 | 70 | 62 | 57 |
| 500 | 1 | ESP50014 | 4 | Inlet | 65 | 75 | 69 | 70 | 70 | 71 | 69 | 62 | 56 |
| 500 | 1 | ESP50014 | 4 | Outlet | 65 | 75 | 69 | 70 | 70 | 71 | 69 | 62 | 56 |
| 630 | 1 | ESP63014 | 4 | Inlet | 82 | 86 | 79 | 79 | 80 | 78 | 75 | 70 | 64 |
| 630 | 1 | ESP63014 | 4 | Outlet | 82 | 86 | 79 | 79 | 80 | 78 | 75 | 70 | 64 |
| 400 | 3 | ESP40034 | 4 | Inlet | 62 | 73 | 65 | 65 | 67 | 69 | 67 | 60 | 53 |
| 400 | 3 | ESP40034 | 4 | Outlet | 62 | 73 | 65 | 65 | 67 | 69 | 67 | 60 | 53 |
| 450 | 3 | ESP45034 | 4 | Inlet | 65 | 82 | 75 | 76 | 73 | 72 | 69 | 62 | 58 |
| 450 | 3 | ESP45034 | 4 | Outlet | 65 | 82 | 75 | 76 | 73 | 72 | 69 | 62 | 58 |
| 500 | 3 | ESP50034 | 4 | Inlet | 67 | 71 | 69 | 72 | 70 | 71 | 68 | 61 | 56 |
| 500 | 3 | ESP50034 | 4 | Outlet | 67 | 71 | 69 | 72 | 70 | 71 | 68 | 61 | 56 |
| 560 | 3 | ESP56034 | 4 | Inlet | 85 | 79 | 77 | 76 | 76 | 75 | 72 | 66 | 61 |
| 560 | 3 | ESP56034 | 4 | Outlet | 85 | 79 | 77 | 76 | 76 | 75 | 72 | 66 | 61 |

Performance Guide



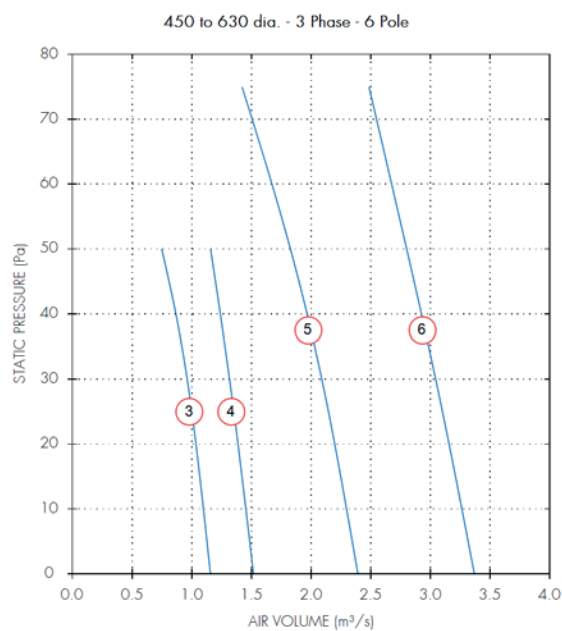
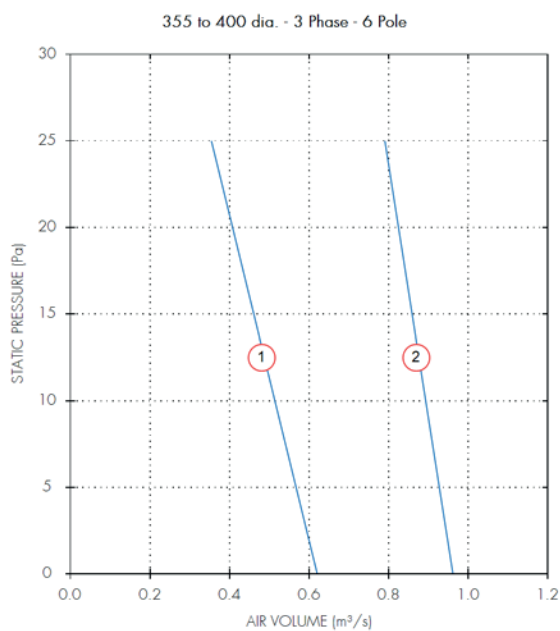
| Dia. | Motor Phase | Stock Ref | Poles | r.p.m | IP Rating | Curve Ref. | m³/s @ Pa | | | | | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-------|-------|-----------|------------|-----------|------|------|------|------|------|------|----------|-----------|------------|------------|
| | | | | | | | 0 | 25 | 50 | 100 | 150 | 200 | 250 | | | | |
| 630 | 3 | ESP63034 | 4 | 1360 | IP54 | 1 | 5.19 | 5.01 | 4.86 | 4.47 | 4.02 | 3.41 | | 1.9 | 17 | 3.2 | 64 |
| 710 | 3 | ESP71034 | 4 | 1290 | IP54 | 2 | 6.81 | 6.65 | 6.49 | 6.16 | 5.72 | 5.22 | 4.42 | 2.9 | 20 | 5.3 | 72 |
| 355 | 1 | ESP35516 | 6 | 950 | IP54 | 3 | 0.69 | 0.53 | | | | | | 0.09 | 1.2 | 0.46 | 44 |
| 400 | 1 | ESP40016 | 6 | 940 | IP54 | 4 | 0.98 | 0.81 | | | | | | 0.1 | 1.4 | 0.48 | 45 |
| 630 | 1 | ESP63016 | 6 | 880 | IP54 | 5 | 3.33 | 3.06 | 2.75 | | | | | 0.6 | 5.3 | 2.7 | 57 |
| 710 | 1 | ESP71016 | 6 | 850 | IP54 | 6 | 4.56 | 4.24 | 3.89 | | | | | 0.89 | 8 | 4.1 | 60 |

For fans wired to reverse run, duty reduced by 30%.

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Poles | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|-------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 630 | 3 | ESP63034 | 4 | Inlet | 71 | 88 | 82 | 83 | 82 | 81 | 78 | 72 | 67 |
| 630 | 3 | ESP63034 | 4 | Outlet | 71 | 88 | 82 | 83 | 82 | 81 | 78 | 72 | 67 |
| 710 | 3 | ESP71034 | 4 | Inlet | 80 | 87 | 86 | 88 | 89 | 86 | 83 | 79 | 72 |
| 710 | 3 | ESP71034 | 4 | Outlet | 80 | 87 | 86 | 88 | 89 | 86 | 83 | 79 | 72 |
| 355 | 1 | ESP35516 | 6 | Inlet | 59 | 59 | 60 | 57 | 56 | 57 | 55 | 46 | 42 |
| 355 | 1 | ESP35516 | 6 | Outlet | 59 | 59 | 60 | 57 | 56 | 57 | 55 | 46 | 42 |
| 400 | 1 | ESP40016 | 6 | Inlet | 76 | 74 | 70 | 65 | 63 | 58 | 52 | 44 | 48 |
| 400 | 1 | ESP40016 | 6 | Outlet | 76 | 74 | 70 | 65 | 63 | 58 | 52 | 44 | 48 |
| 630 | 1 | ESP63016 | 6 | Inlet | 88 | 85 | 81 | 77 | 76 | 70 | 64 | 58 | 60 |
| 630 | 1 | ESP63016 | 6 | Outlet | 88 | 85 | 81 | 77 | 76 | 70 | 64 | 58 | 60 |
| 710 | 1 | ESP71016 | 6 | Inlet | 83 | 83 | 84 | 80 | 78 | 74 | 70 | 72 | 63 |
| 710 | 1 | ESP71016 | 6 | Outlet | 83 | 83 | 84 | 80 | 78 | 74 | 70 | 72 | 63 |

Performance Guide



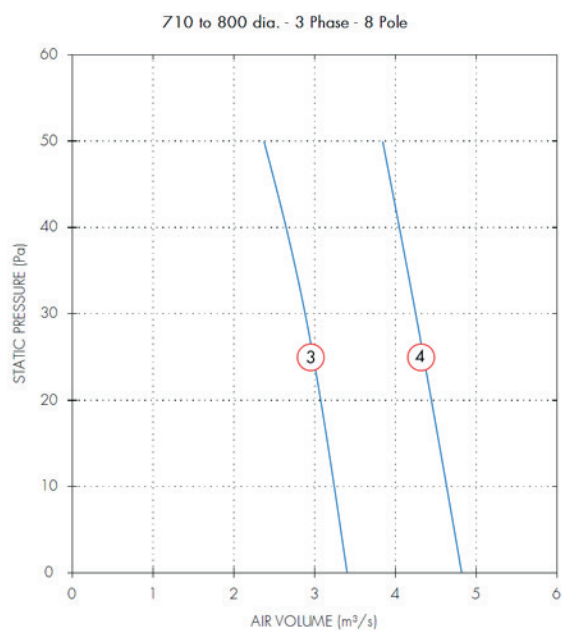
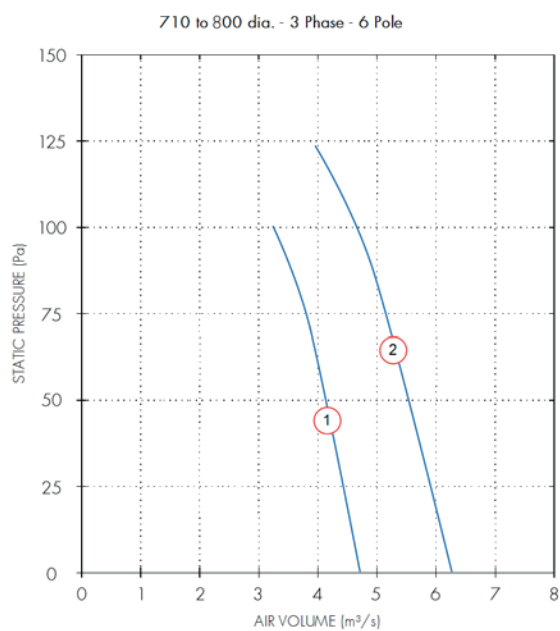
| Dia. | Motor Phase | Stock Ref | Poles | r.p.m | IP Rating | Curve Ref. | 0 | m³/s @ Pa | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-------|-------|-----------|------------|------|-----------|------|------|----------|-----------|------------|------------|
| 355 | 3 | ESP35536 | 6 | 910 | IP54 | 1 | 0.62 | 0.35 | | | 0.09 | 0.5 | 0.25 | 45 |
| 400 | 3 | ESP40036 | 6 | 920 | IP54 | 2 | 0.96 | 0.79 | | | 0.11 | 0.9 | 0.28 | 50 |
| 450 | 3 | ESP45036 | 6 | 890 | IP54 | 3 | 1.16 | 1 | 0.75 | | 0.12 | 1 | 0.28 | 51 |
| 500 | 3 | ESP50036 | 6 | 900 | IP54 | 4 | 1.52 | 1.35 | 1.16 | | 0.23 | 1.5 | 0.56 | 56 |
| 560 | 3 | ESP56036 | 6 | 860 | IP54 | 5 | 2.39 | 2.14 | 1.83 | 1.42 | 0.36 | 1.75 | 0.74 | 56 |
| 630 | 3 | ESP63036 | 6 | 890 | IP54 | 6 | 3.37 | 3.1 | 2.8 | 2.48 | 0.59 | 3.6 | 1.3 | 59 |

For fans wired to reverse run, duty reduced by 30%.

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Poles | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|-------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 355 | 3 | ESP35536 | 6 | Inlet | 60 | 61 | 60 | 56 | 56 | 56 | 54 | 46 | 42 |
| 355 | 3 | ESP35536 | 6 | Outlet | 60 | 61 | 60 | 56 | 56 | 56 | 54 | 46 | 42 |
| 400 | 3 | ESP40036 | 6 | Inlet | 60 | 60 | 62 | 59 | 60 | 60 | 58 | 50 | 45 |
| 400 | 3 | ESP40036 | 6 | Outlet | 60 | 60 | 62 | 59 | 60 | 60 | 58 | 50 | 45 |
| 450 | 3 | ESP45036 | 6 | Inlet | 63 | 72 | 66 | 63 | 63 | 62 | 59 | 48 | 48 |
| 450 | 3 | ESP45036 | 6 | Outlet | 63 | 72 | 66 | 63 | 63 | 62 | 59 | 48 | 48 |
| 500 | 3 | ESP50036 | 6 | Inlet | 78 | 73 | 68 | 67 | 68 | 66 | 59 | 51 | 52 |
| 500 | 3 | ESP50036 | 6 | Outlet | 78 | 73 | 68 | 67 | 68 | 66 | 59 | 51 | 52 |
| 560 | 3 | ESP56036 | 6 | Inlet | 67 | 72 | 72 | 68 | 68 | 68 | 65 | 57 | 53 |
| 560 | 3 | ESP56036 | 6 | Outlet | 67 | 72 | 72 | 68 | 68 | 68 | 65 | 57 | 53 |
| 630 | 3 | ESP63036 | 6 | Inlet | 67 | 78 | 76 | 74 | 73 | 72 | 77 | 59 | 60 |
| 630 | 3 | ESP63036 | 6 | Outlet | 67 | 78 | 76 | 74 | 73 | 72 | 77 | 59 | 60 |

Performance Guide



| Dia. | Motor Phase | Stock Ref | Poles | r.p.m | IP Rating | Curve Ref. | m³/s @ Pa | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-------|-------|-----------|------------|-----------|------|------|----------|-----------|------------|------------|
| | | | | | | | 0 | 50 | 100 | | | | |
| 710 | 3 | ESP71036 | 6 | 860 | IP54 | 1 | 4.71 | 4.11 | 3.29 | 1.1 | 7.7 | 2.2 | 62 |
| 800 | 3 | ESP80036 | 6 | 900 | IP54 | 2 | 6.3 | 5.58 | 4.67 | 1.4 | 9.8 | 2.7 | 64 |
| 710 | 3 | ESP71038 | 8 | 630 | IP54 | 3 | 3.4 | 2.37 | | 0.43 | 3.3 | 1.1 | 55 |
| 800 | 3 | ESP80038 | 8 | 670 | IP54 | 4 | 4.82 | 3.84 | | 0.69 | 5 | 1.75 | 58 |

For fans wired to reverse run, duty reduced by 30%.

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Poles | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|-------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 710 | 3 | ESP71036 | 6 | Inlet | 80 | 77 | 78 | 75 | 76 | 75 | 70 | 64 | 60 |
| 710 | 3 | ESP71036 | 6 | Outlet | 80 | 77 | 78 | 75 | 76 | 75 | 70 | 64 | 60 |
| 800 | 3 | ESP80036 | 6 | Inlet | 73 | 83 | 79 | 75 | 75 | 77 | 74 | 64 | 62 |
| 800 | 3 | ESP80036 | 6 | Outlet | 73 | 83 | 79 | 75 | 75 | 77 | 74 | 64 | 62 |
| 710 | 3 | ESP71038 | 8 | Inlet | 75 | 75 | 73 | 71 | 72 | 70 | 64 | 57 | 56 |
| 710 | 3 | ESP71038 | 8 | Outlet | 75 | 75 | 73 | 71 | 72 | 70 | 64 | 57 | 56 |
| 800 | 3 | ESP80038 | 8 | Inlet | 75 | 75 | 73 | 71 | 72 | 70 | 64 | 57 | 56 |
| 800 | 3 | ESP80038 | 8 | Outlet | 75 | 75 | 73 | 71 | 72 | 70 | 64 | 57 | 56 |

Models & Accessories

| Speed Controllers | | | | | | | | | |
|-------------------|---------------------|--------------------------|-------------------|--------------------|------------------|---|-------------------|--------------------|--|
| Fan Stock Ref | Elect 1ph Stock Ref | Auto Transfor. Stock Ref | Starter Stock Ref | Overload Stock Ref | Fan Stock Ref | Speed Controller Auto Transfor. Stock Ref | Starter Stock Ref | Overload Stock Ref | |
| 1 Phase - 4 Pole | | | | | 3 Phase - 4 Pole | | | | |
| ESP31514 | SC5001 | SPM5020 | 444744 | 444699 | ESP31534 | RDTK10 | 444747 | 444697 | |
| ESP35514 | SC5050TK | SPM5020 | 444744 | 444699 | ESP35534 | RDTK10 | 444747 | 444698 | |
| ESP40014 | SC5030TK | SPM5020 | 444744 | 444701 | ESP40034 | RDTK10 | 444747 | 444699 | |
| ESP45014 | SC5030TK | SPM5035 | 444744 | 444701 | ESP45034 | RDTK10 | 444747 | 444699 | |
| ESP50014 | SC5030TK | SPM5035 | 444744 | 444702 | ESP50034 | RDTK20 | 444747 | 444700 | |
| ESP56014 | SC5010TK | SPM5075 | 444744 | 444704 | ESP56034 | RDTK40 | 444747 | 444701 | |
| ESP63014 | - | - | 444744 | 444706 | ESP63034 | RDTK40 | 444747 | 444702 | |
| | | | | | ESP71034 | RDTK70 | 444747 | 444703 | |
| 1 Phase - 6 Pole | | | | | 3 Phase - 6 Pole | | | | |
| ESP35516 | SC5030TK | SPM5020 | 444744 | 444698 | ESP35536 | RDTK10 | 444747 | 444697 | |
| ESP40016 | SC5030TK | SPM5020 | 444744 | 444699 | ESP40036 | RDTK10 | 444747 | 444697 | |
| | | | | | ESP45036 | RDTK10 | 444747 | 444697 | |
| | | | | | ESP50036 | RDTK10 | 444747 | 444699 | |
| | | | | | ESP56036 | RDTK10 | 444747 | 444699 | |
| ESP63016 | SC5050TK | SPM5035 | 444744 | 444702 | ESP63036 | RDTK20 | 444747 | 444700 | |
| ESP71016 | SC5050TK | SPM5060 | 444744 | 444703 | ESP71036 | RDTK40 | 444747 | 444702 | |
| | | | | | ESP80036 | RDTK40 | 444747 | 444702 | |
| | | | | | 3 Phase - 8 Pole | | | | |
| | | | | | ESP71038 | RDTK20 | 444747 | 444700 | |
| | | | | | ESP80038 | RDTK20 | 444747 | 444701 | |

*Not suitable for voltage speed control. Inverter speed control with sine filters only.

| Size | Roof Cowl Assembly Stock Ref | Louvre Shutter Stock Ref | Impeller Discharge Side Guard Stock Ref | Imp. Disch. Guard when used with LS shutter Stock Ref |
|------|------------------------------|--------------------------|---|---|
| 250 | RCZ300 | LS250 | 10502325 | 10502375 |
| 315 | RCZ300 | LS315 | 10502325 | 10502375 |
| 355 | RCZ300 | LS350 | 10502375 | 10502450 |
| 400 | RCZ400 | LS400 | 10502450 | 10502525 |
| 450 | RCZ400 | LS450 | 10502525 | 10502630 |
| 500 | RCZ500 | LS500 | 10502525 | 10502630 |
| 560 | RCZ500 | LS560 | 10502630 | 10502630 |
| 630 | RCZ630 | LS630 | 10502630 | 10502800 |
| 710 | RCZ630 | LS710 | 10502800 | 10502800 |
| 800 | RCZ800 | LS800 | 10502800 | 105021000 |

Note:

- The Standard roof cowl colour is BS 00A 05 (Goose Wing Grey), for all special B.S. or RAL colours contact Vent-Axia.
- When speed control is required a 5 step auto transformer speed controller is recommended, to ensure low noise levels.
- All 3 phase models are suitable for frequency inverter speed control.
- Vent-Axia only recommends using inverters with integral sine filters for reliable operation.

EuroSeries® (ESC)

- External rotor motors
- Die cast aluminium impellers
- Fully speed controllable
- Air Volumes up to 13.89m³/s
- Sizes 250 to 1000 protected to IP54
- Operating Temperatures from -40°C up to +70°C
- Motor Insulation Class F
- HOT SPOT Protection
- Reversible for supply or extract
- Tough epoxy paint finish
- Quality Assurance to BS EN ISO 9001:1994
- Performance tested to BS848 Part 1 1980



The EuroSeries® ESC Short Cased axial blade fans, feature a single shot die cast aluminium blade & external rotor motor design.

The EuroSeries® ESC range is available in eleven sizes with the extract performances up to 13.89m³/s, with pressure characteristics of up to 300Pa. All units are designed for & fully speed controllable.

Impellers

All sizes are supplied with cast aluminium impellers, ensuring performance when working against outdoor conditions and abrasive airflow.

Motors

External rotor motors are specially designed and styled for this range of fan. Ball bearings are greased for life. Rotors are dynamically balanced to ISO 1940. Sizes 250-1000mm, motors are protected to IP54, against dust and moisture complying with BS EN 60529:1992. They are ribbed aluminium body castings for efficient cooling. Motor insulation is Class 'F' (from -40°C to +70°C).

Electrical

Single phase 220-240V 50Hz. Capacitor start and run. Three phase 380-415V 50Hz. An IP54 terminal box are supplied with most models with 20mm and PG11 entry. All motors are fitted with thermal overload Protection which should be wired into all controller circuits and into starter contactors. Models are available with either 2,4, 6 & 8 pole motors.

Terminal Box

Terminal Box to IP54 as standard, protected against dust and water from any angle allowing outside applications.

Performance

The fan performance is in accordance with tests to BS848 Part 1 1980.

Sound Levels

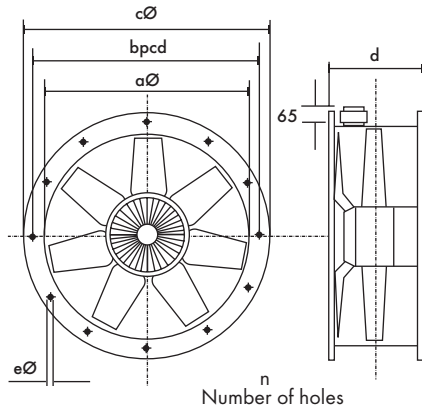
Fan sound levels, measured in a reverberant chamber in accordance with BS848 Part 2 1985. Published dB(A) figures are free field sound pressure levels at 3m with spherical propagation at a reference level of 2 x 10⁻⁵ Pa (20 micro-Pascal). The sound power level spectra figures are dB with reference level of 10⁻¹² Watts (1 pico-watt). To ensure minimum noise levels during speed control, an auto transformer speed control is recommended.

Accessories

A full range of accessories:

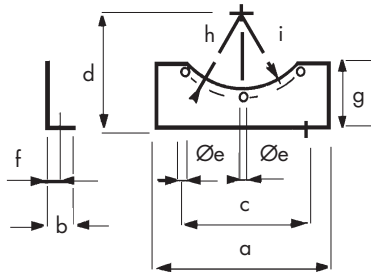
- Electronic Speed Controllers
- Auto Transformer Speed Controllers
- D.O.L. Starters & Overloads
- Ancillary Packs (comprising:- 4 AVM's, 2 mounting feet, 2 matching flanges, 2 flexible connectors + clips)
- Wire Guards
- Attenuators
- Mounting Feet
- Matching Flanges
- Anti Vibration Mounts
- Louvre Shutters

Dimensions (mm)



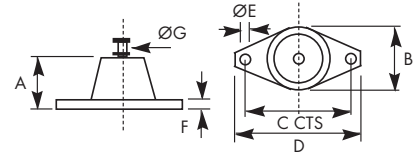
| Dia | Øa | Øb | Øc | d | Øe | n | kg |
|------|-------|------|------|-----|------|----|------|
| 250 | 254 | 286 | 306 | 110 | 7 | 8 | 5 |
| 315 | 316.5 | 356 | 382 | 135 | 9.5 | 8 | 6.1 |
| 355 | 356 | 395 | 421 | 135 | 9.5 | 8 | 7.1 |
| 400 | 400 | 438 | 466 | 155 | 9.5 | 12 | 8.1 |
| 450 | 451 | 487 | 515 | 160 | 9.5 | 12 | 13.4 |
| 500 | 503 | 541 | 567 | 166 | 9.5 | 12 | 15.7 |
| 560 | 559 | 605 | 635 | 210 | 11.5 | 16 | 20.1 |
| 630 | 634 | 674 | 707 | 220 | 11.5 | 16 | 44 |
| 710 | 711 | 751 | 785 | 260 | 11.5 | 16 | 31 |
| 800 | 797 | 837 | 871 | 280 | 11.5 | 24 | 39 |
| 1000 | 1001 | 1043 | 1080 | 330 | 11.5 | 24 | 73 |

Mounting Feet



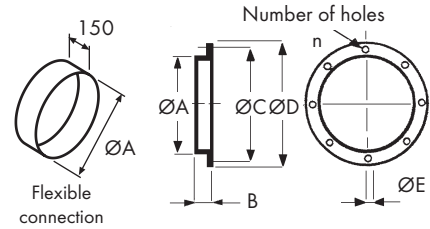
| Stock Ref | a | b | c | d | Øe | f | g | h | i |
|-----------|-----|----|-----|-----|----|----|------|-----|-----|
| MFZ315 | 315 | 40 | 265 | 200 | 10 | 20 | 71 | 178 | 166 |
| MFZ355 | 350 | 40 | 300 | 225 | 10 | 20 | 81.5 | 198 | 186 |
| MFZ400 | 250 | 40 | 220 | 250 | 10 | 20 | 78 | 219 | 205 |
| MFZ450 | 275 | 40 | 240 | 275 | 10 | 20 | 82 | 244 | 230 |
| MFZ500 | 315 | 50 | 280 | 315 | 1 | 25 | 100 | 271 | 255 |
| MFZ560 | 355 | 50 | 320 | 355 | 12 | 25 | 97 | 303 | 285 |
| MFZ630 | 400 | 50 | 360 | 400 | 12 | 25 | 109 | 337 | 320 |
| MFZ710 | 465 | 50 | 415 | 450 | 12 | 25 | 119 | 376 | 362 |
| MFZ800 | 458 | 50 | 420 | 518 | 12 | 25 | 176 | 419 | 405 |

Anti Vibration Mountings

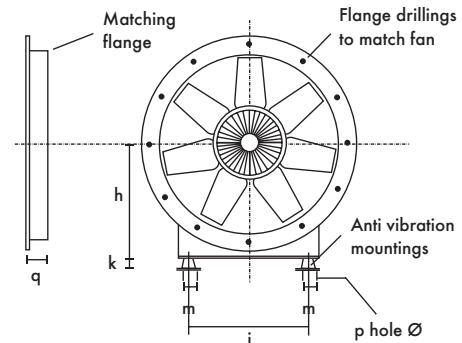


| Stock Ref | A | B | C | D | ØE | F | ØG |
|-----------|----|----|----|----|----|---|----|
| 68MP033G | 27 | 37 | 54 | 67 | 7 | 3 | M8 |

Coupling Flanges

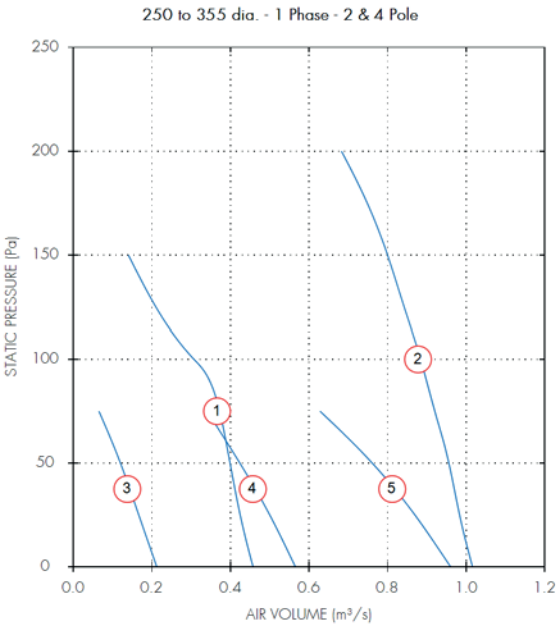


| Stock Ref | ØA | B | ØC | ØD | ØE | n | Flexible Connection |
|-----------|-----|----|-----|-----|----|----|---------------------|
| CFZ315 | 313 | 40 | 356 | 382 | 10 | 8 | FCZ315 |
| CFZ355 | 353 | 40 | 395 | 421 | 10 | 8 | FCZ355 |
| CFZ400 | 398 | 45 | 438 | 466 | 10 | 12 | FCZ400 |
| CFZ450 | 448 | 45 | 487 | 515 | 10 | 12 | FCZ450 |
| CFZ500 | 498 | 45 | 541 | 567 | 10 | 12 | FCZ500 |
| CFZ560 | 558 | 45 | 605 | 635 | 12 | 16 | FCZ560 |
| CFZ630 | 628 | 45 | 674 | 707 | 12 | 16 | FCZ630 |
| CFZ710 | 708 | 50 | 751 | 785 | 12 | 16 | FCZ710 |
| CFZ800 | 798 | 50 | 837 | 871 | 12 | 24 | FCZ800 |



| Unit size | h | i | k† | m | pØ | q |
|-----------|-----|-----|----|----|----|----|
| 315 | 200 | 265 | 27 | 54 | 7 | 40 |
| 355 | 225 | 300 | 27 | 54 | 7 | 40 |
| 400 | 250 | 220 | 27 | 54 | 7 | 45 |
| 450 | 275 | 240 | 27 | 54 | 7 | 45 |
| 500 | 315 | 280 | 27 | 54 | 7 | 45 |
| 560 | 355 | 320 | 27 | 54 | 7 | 45 |
| 630 | 400 | 360 | 27 | 54 | 7 | 45 |
| 710 | 450 | 415 | 27 | 54 | 7 | 50 |
| 800 | 518 | 420 | 27 | 54 | 7 | 50 |

Performance Guide



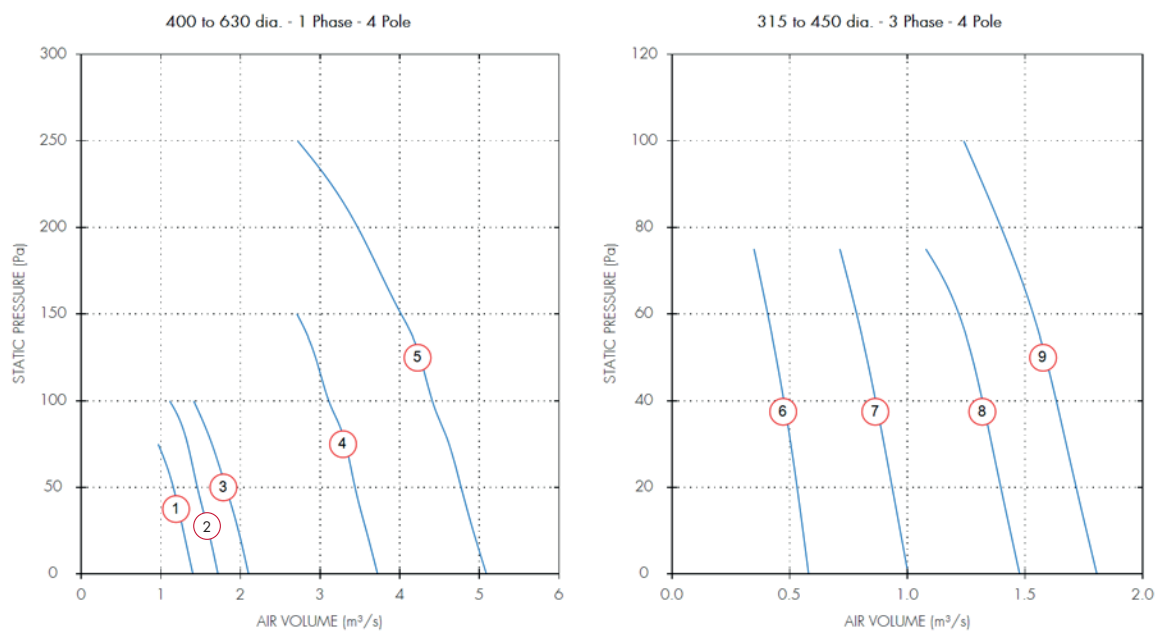
| Dia. | Motor Phase | Stock Ref | Poles | r.p.m | IP Rating | Curve Ref. | m³/s @ Pa | | | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-------|-------|-----------|------------|-----------|------|------|------|------|----------|-----------|------------|------------|
| | | | | | | | 0 | 50 | 100 | 150 | 200 | | | | |
| 250 | 1 | ESC25012 | 2 | 2440 | IP44 | 1 | 0.46 | 0.4 | 0.31 | 0.14 | | 0.12 | 1.15 | 0.54 | 59 |
| 315 | 1 | ESC31512 | 2 | 2690 | IP54 | 2 | 1.02 | 0.96 | 0.88 | 0.8 | 0.68 | 0.56 | 7.2 | 2.4 | 64 |
| 250 | 1 | ESC25014 | 4 | 1340 | IP44 | 3 | 0.21 | 0.12 | | | | 0.04 | 0.3 | 0.16 | 44 |
| 315 | 1 | ESC31514 | 4 | 1300 | IP54 | 4 | 0.57 | 0.42 | | | | 0.15 | 1.38 | 0.7 | 50 |
| 355 | 1 | ESC35514 | 4 | 1330 | IP54 | 5 | 0.96 | 0.76 | | | | 0.19 | 1.45 | 0.84 | 53 |

For Fans wired to reverse run, duty reduced by 30%
ESC25012, ESC31512 and ESC25014 not suitable for reverse airflow

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Poles | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|-------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 250 | 1 | ESC25012 | 2 | Inlet | 69 | 70 | 76 | 76 | 70 | 70 | 67 | 59 | 57 |
| 250 | 1 | ESC25012 | 2 | Outlet | 69 | 70 | 76 | 76 | 70 | 70 | 67 | 59 | 57 |
| 315 | 1 | ESC31512 | 2 | Inlet | 69 | 73 | 79 | 74 | 74 | 76 | 73 | 66 | 61 |
| 315 | 1 | ESC31512 | 2 | Outlet | 69 | 73 | 79 | 74 | 74 | 76 | 73 | 66 | 61 |
| 250 | 1 | ESC25014 | 4 | Inlet | 70 | 72 | 63 | 58 | 54 | 52 | 45 | 35 | 41 |
| 250 | 1 | ESC25014 | 4 | Outlet | 70 | 72 | 63 | 58 | 54 | 52 | 45 | 35 | 41 |
| 315 | 1 | ESC31514 | 4 | Inlet | 70 | 68 | 66 | 61 | 60 | 62 | 58 | 51 | 47 |
| 315 | 1 | ESC31514 | 4 | Outlet | 70 | 68 | 66 | 61 | 60 | 62 | 58 | 51 | 47 |
| 355 | 1 | ESC35514 | 4 | Inlet | 65 | 70 | 67 | 65 | 64 | 64 | 62 | 55 | 50 |
| 355 | 1 | ESC35514 | 4 | Outlet | 65 | 70 | 67 | 65 | 64 | 64 | 62 | 55 | 50 |

Performance Guide



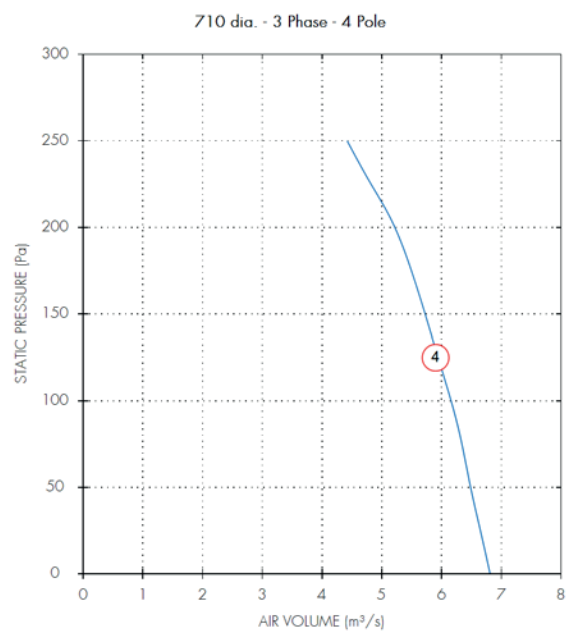
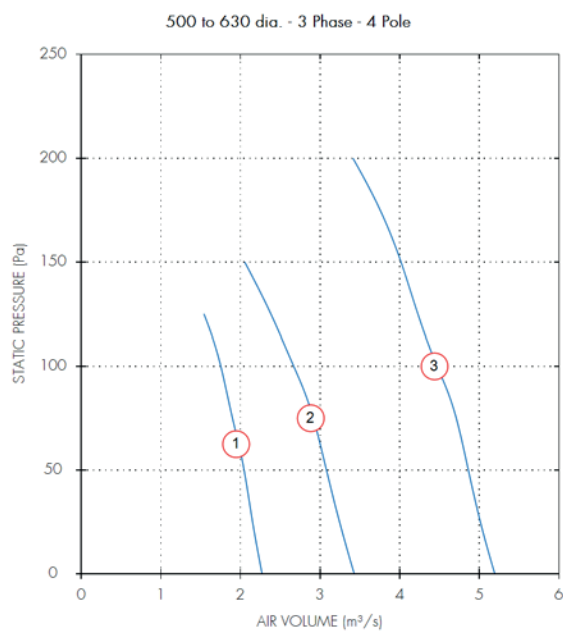
| Dia. | Motor Phase | Stock Ref | Poles | r.p.m | IP Rating | Curve Ref. | m³/s @ Pa | | | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|----------------|-----------|-------|-------|-----------|------------|-----------|------|------|------|------|-------------|--------------|---------------|---------------|
| | | | | | | | 0 | 50 | 100 | 150 | 200 | | | | |
| 400 | 1 | ESC40014 | 4 | 1350 | IP54 | 1 | 1.4 | 1.16 | | | | 0.29 | 2.4 | 1.45 | 56 |
| 450 | 1 | ESC45014 | 4 | 1370 | IP54 | 2 | 1.72 | 1.46 | 1.11 | | | 0.36 | 3.6 | 1.6 | 61 |
| 500 | 1 | ESC50014 | 4 | 1290 | IP54 | 3 | 2.1 | 1.82 | 1.41 | | | 0.51 | 4.3 | 2.3 | 55 |
| 560 | 1 | ESC56014 | 4 | 1320 | IP54 | 4 | 3.72 | 3.44 | 3.11 | 2.71 | | 1.4 | 9.3 | 6 | 63 |
| 630 | 1 | ESC63014 | 4 | 1320 | IP54 | 5 | 5.09 | 4.77 | 4.41 | 4.02 | 3.47 | 2.2 | 28 | 9.9 | 70 |
| 315 | 3 | ESC31534 | 4 | 1390 | IP54 | 6 | 0.58 | 0.44 | | | | 0.11 | 2.1 | 0.27 | 46 |
| 355 | 3 | ESC35534 | 4 | 1370 | IP54 | 7 | 1 | 0.83 | | | | 0.17 | 1.35 | 0.37 | 49 |
| 400 | 3 | ESC40034 | 4 | 1350 | IP54 | 8 | 1.48 | 1.27 | | | | 0.26 | 2.1 | 0.56 | 51 |
| 450 | 3 | ESC45034 | 4 | 1380 | IP54 | 9 | 1.8 | 1.59 | 1.24 | | | 0.36 | 2.6 | 0.8 | 56 |

For Fans wired to reverse run, duty reduced by 30%

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Poles | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|-------|----------|-----|-----|-----|-----|----|----|----|----|------------|
| 400 | 1 | ESC40014 | 4 | Inlet | 70 | 72 | 67 | 66 | 65 | 65 | 64 | 56 | 51 |
| 400 | 1 | ESC40014 | 4 | Outlet | 70 | 72 | 67 | 66 | 65 | 65 | 64 | 56 | 51 |
| 450 | 1 | ESC45014 | 4 | Inlet | 69 | 76 | 73 | 72 | 70 | 71 | 70 | 62 | 57 |
| 450 | 1 | ESC45014 | 4 | Outlet | 69 | 76 | 73 | 72 | 70 | 71 | 70 | 62 | 57 |
| 500 | 1 | ESC50014 | 4 | Inlet | 65 | 75 | 69 | 70 | 70 | 71 | 69 | 62 | 56 |
| 500 | 1 | ESC50014 | 4 | Outlet | 65 | 75 | 69 | 70 | 70 | 71 | 69 | 62 | 56 |
| 560 | 1 | ESC56014 | 4 | Inlet | 100 | 90 | 89 | 84 | 82 | 79 | 75 | 68 | 67 |
| 560 | 1 | ESC56014 | 4 | Outlet | 100 | 90 | 89 | 84 | 82 | 79 | 75 | 68 | 67 |
| 630 | 1 | ESC63014 | 4 | Inlet | 82 | 86 | 79 | 79 | 80 | 78 | 75 | 70 | 64 |
| 630 | 1 | ESC63014 | 4 | Outlet | 82 | 86 | 79 | 79 | 80 | 78 | 75 | 70 | 64 |
| 315 | 3 | ESC31534 | 4 | Inlet | 64 | 67 | 69 | 63 | 62 | 60 | 58 | 53 | 47 |
| 315 | 3 | ESC31534 | 4 | Outlet | 64 | 67 | 69 | 63 | 62 | 60 | 58 | 53 | 47 |
| 355 | 3 | ESC35534 | 4 | Inlet | 58 | 73 | 63 | 64 | 64 | 65 | 64 | 58 | 50 |
| 355 | 3 | ESC35534 | 4 | Outlet | 58 | 73 | 63 | 64 | 64 | 65 | 64 | 58 | 50 |
| 400 | 3 | ESC40034 | 4 | Inlet | 62 | 73 | 65 | 65 | 67 | 69 | 67 | 60 | 53 |
| 400 | 3 | ESC40034 | 4 | Outlet | 62 | 73 | 65 | 65 | 67 | 69 | 67 | 60 | 53 |
| 450 | 3 | ESC45034 | 4 | Inlet | 65 | 82 | 75 | 76 | 73 | 72 | 69 | 62 | 58 |
| 450 | 3 | ESC45034 | 4 | Outlet | 65 | 82 | 75 | 76 | 73 | 72 | 69 | 62 | 58 |

Performance Guide



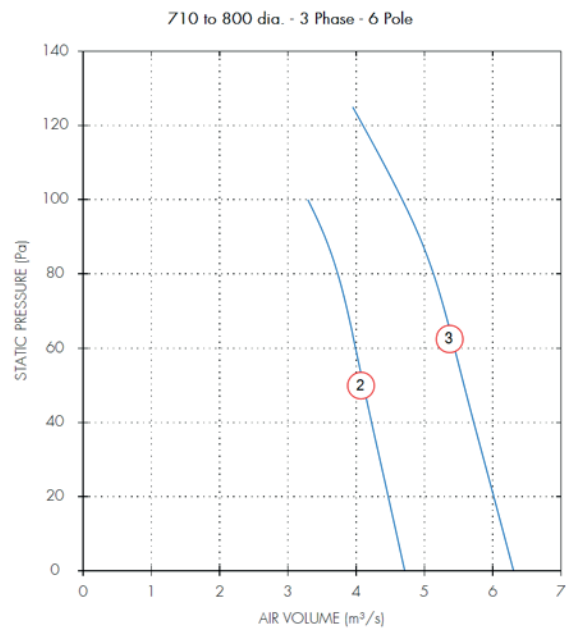
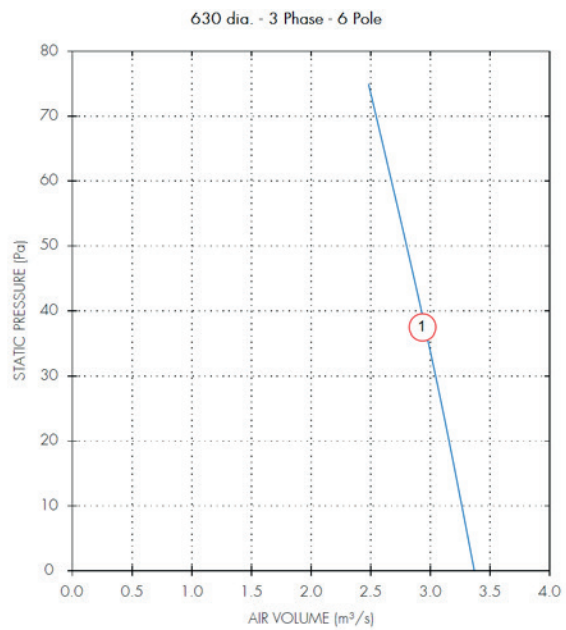
| Dia. | Motor Phase | Stock Ref | Poles | r.p.m | IP Rating | Curve Ref. | m³/s @ Pa | | | | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-------|-------|-----------|------------|-----------|------|------|------|------|------|----------|-----------|------------|------------|
| | | | | | | | 0 | 50 | 100 | 150 | 200 | 250 | | | | |
| 500 | 3 | ESC50034 | 4 | 1380 | IP54 | 1 | 2.27 | 2.05 | 1.75 | | | | 0.55 | 4.2 | 1.05 | 58 |
| 560 | 3 | ESC56034 | 4 | 1220 | IP54 | 2 | 3.43 | 3.08 | 2.67 | 2.05 | | | 1.25 | 7.7 | 2.2 | 70 |
| 630 | 3 | ESC63034 | 4 | 1360 | IP54 | 3 | 5.19 | 4.86 | 4.47 | 4.02 | 3.41 | | 1.9 | 14 | 3.2 | 64 |
| 710 | 3 | ESC71034 | 4 | 1290 | IP54 | 4 | 6.81 | 6.49 | 6.16 | 5.72 | 5.22 | 4.42 | 2.9 | 19 | 5.3 | 72 |

For Fans wired to reverse run, duty reduced by 30%

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Poles | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|-------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 500 | 3 | ESC50034 | 4 | Inlet | 67 | 71 | 69 | 72 | 70 | 71 | 68 | 61 | 56 |
| 500 | 3 | ESC50034 | 4 | Outlet | 67 | 71 | 69 | 72 | 70 | 71 | 68 | 61 | 56 |
| 560 | 3 | ESC56034 | 4 | Inlet | 85 | 79 | 77 | 76 | 76 | 75 | 72 | 66 | 61 |
| 560 | 3 | ESC56034 | 4 | Outlet | 85 | 79 | 77 | 76 | 76 | 75 | 72 | 66 | 61 |
| 630 | 3 | ESC63034 | 4 | Inlet | 71 | 88 | 82 | 83 | 82 | 81 | 78 | 72 | 67 |
| 630 | 3 | ESC63034 | 4 | Outlet | 71 | 88 | 82 | 83 | 82 | 81 | 78 | 72 | 67 |
| 710 | 3 | ESC71034 | 4 | Inlet | 80 | 87 | 86 | 88 | 89 | 86 | 83 | 79 | 72 |
| 710 | 3 | ESC71034 | 4 | Outlet | 80 | 87 | 86 | 88 | 89 | 86 | 83 | 79 | 72 |

Performance Guide



| Dia. | Motor Phase | Stock Ref | Poles | r.p.m | IP Rating | Curve Ref. | m³/s @ Pa | | | | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-------|-------|-----------|------------|-----------|------|------|------|------|------|----------|-----------|------------|------------|
| | | | | | | | 0 | 25 | 50 | 75 | 100 | 125 | | | | |
| 630 | 3 | ESC63036 | 6 | 890 | IP54 | 1 | 3.37 | 3.1 | 2.8 | 2.48 | | | 0.59 | 3.6 | 1.3 | 59 |
| 710 | 3 | ESC71036 | 6 | 860 | IP54 | 2 | 4.71 | 4.41 | 4.11 | 3.8 | 3.29 | | 1.1 | 7.7 | 2.2 | 62 |
| 800 | 3 | ESC80036 | 6 | 900 | IP54 | 3 | 6.3 | 5.94 | 5.58 | 5.22 | 4.67 | 3.95 | 1.4 | 9.8 | 2.7 | 64 |

For Fans wired to reverse run, duty reduced by 30%

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Poles | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|-------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 630 | 3 | ESC63036 | 6 | Inlet | 67 | 78 | 76 | 74 | 73 | 72 | 77 | 59 | 60 |
| 630 | 3 | ESC63036 | 6 | Outlet | 67 | 78 | 76 | 74 | 73 | 72 | 77 | 59 | 60 |
| 710 | 3 | ESC71036 | 6 | Inlet | 80 | 77 | 78 | 75 | 76 | 75 | 70 | 64 | 60 |
| 710 | 3 | ESC71036 | 6 | Outlet | 80 | 77 | 78 | 75 | 76 | 75 | 70 | 64 | 60 |
| 800 | 3 | ESC80036 | 6 | Inlet | 75 | 75 | 73 | 71 | 72 | 70 | 64 | 57 | 56 |
| 800 | 3 | ESC80036 | 6 | Outlet | 75 | 75 | 73 | 71 | 72 | 70 | 64 | 57 | 56 |

Models & Accessories

| Speed Controller | | | | | Speed Controller | |
|------------------|------------|----------------|-----------|-----------|------------------|----------------|
| Fan | Electronic | Auto Transfor. | Starter | Overload | Fan | Auto Transfor. |
| Stock Ref | Stock Ref | Stock Ref | Stock Ref | Stock Ref | Stock Ref | Stock Ref |
| 1 Phase 2 Pole | | | | | 3 Phase 4 Pole | |
| ESC25012 | SC5001 | SPM5020 | 444744 | 444699 | | |
| ESC31512 | SC5030TK | SPM5035 | 444744 | 444701 | ESC31534 | RDTK10 |
| 1 Phase 4 Pole | | | | | ESC35534 | RDTK10 |
| ESC25014 | SC5001 | SPM5020 | 444744 | 444696 | ESC40034 | RDTK10 |
| ESC31514 | SC5001 | SPM5020 | 444744 | 444699 | ESC45034 | RDTK10 |
| ESC35514 | SC5030TK | SPM5020 | 444744 | 444699 | ESC50034 | RDTK20 |
| ESC40014 | SC5030TK | SPM5020 | 444744 | 444701 | ESC56034 | RDTK40 |
| ESC45014 | SC5030TK | SPM5035 | 444744 | 444701 | ESC63034 | RDTK40 |
| ESC50014 | SC5030TK | SPM5035 | 444744 | 444702 | ESC71034 | RDTK70 |
| ESC56014 | SC5010TK | SPM5075 | 444744 | 444704 | 3 Phase 6 Pole | |
| ESC63014 | - | - | 444744 | 444706 | | |
| | | | | | ESC63036 | RDTK20 |
| | | | | | ESC71036 | RDTK40 |
| | | | | | ESC80036 | RDTK40 |

*Not suitable for voltage speed control. Inverter speed control with sine filters only.

| Size | 1D Long - No Pod | 1D Long - With Pod | 2D Long - No Pod | 2D Long - With Pod |
|------|------------------|--------------------|------------------|--------------------|
| | Stock Ref | Stock Ref | Stock Ref | Stock Ref |
| 250 | ACZ2501D | - | ACZ2502D | - |
| 315 | ACZ3151D | ACZ3151DP | ACZ3152D | ACZ3152DP |
| 355 | ACZ3551D | ACZ3551DP | ACZ3552D | ACZ3552DP |
| 400 | ACZ4001D | ACZ4001DP | ACZ4002D | ACZ4002DP |
| 450 | ACZ4501D | ACZ4501DP | ACZ4502D | ACZ4502DP |
| 500 | ACZ5001D | ACZ5001DP | ACZ5002D | ACZ5002DP |
| 560 | ACZ5601D | ACZ5601DP | ACZ5602D | ACZ5602DP |
| 630 | ACZ6301D | ACZ6301DP | ACZ6302D | ACZ6302DP |
| 710 | ACZ7101D | ACZ7101DP | ACZ7102D | ACZ7102DP |
| 800 | ACZ8001D | ACZ8001DP | ACZ8002D | ACZ8002DP |

| Starter | Overload | Ancillary Packs | Mounting Feet (pair) | Matching Flanges (each) | Wire Guards (each) | Anti-Vibration Mounts (set of 4) |
|-----------|-----------|-----------------|----------------------|-------------------------|--------------------|-------------------------------------|
| Stock Ref | Stock Ref | Stock Ref | Stock Ref | Stock Ref | Stock Ref | Stock Ref |
| 444747 | 444699 | APZ250 | MFZ250 | CFZ250 | WGZ250 | 68MP033G |
| 444747 | 444700 | APZ315 | MFZ315 | CFZ315 | WGZ315 | 68MP033G |
| | | APZ250 | MFZ250 | CFZ250 | WGZ250 | 68MP033G |
| 444747 | 444697 | APZ315 | MFZ315 | CFZ315 | WGZ315 | 68MP033G |
| 444747 | 444698 | APZ355 | MFZ355 | CFZ355 | WGZ355 | 68MP033G |
| 444747 | 444699 | APZ400 | MFZ400 | CFZ400 | WGZ400 | 68MP033G |
| 444747 | 444699 | APZ450 | MFZ450 | CFZ450 | WGZ450 | 68MP033G |
| 444747 | 444700 | APZ500 | MFZ500 | CFZ500 | WGZ500 | 68MP033G |
| 444747 | 444701 | APZ560 | MFZ560 | CFZ560 | WGZ560 | 68MP033G |
| 444747 | 444702 | APZ630 | MFZ630 | CFZ630 | WGZ630 | 68MP033G |
| 444747 | 444703 | APZ710 | MFZ710 | CFZ710 | WGZ710 | 68MP033G |

Note:

- The Standard roof cowl colour is BS 00A 05 (Goose Wing Grey) for all special B.S. or RAL colours contact Vent-Axia.
- When speed control is required a 5 step auto transformer speed controller is recommended, to ensure low noise levels.
- All 3 phase models are suitable for frequency inverter speed control.
- Vent-Axia only recommends using inverters with integral sine filters for reliable operation.

EuroSeries® (ESR)

- Cowl & base moulded from recyclable polymeric material
- All sizes resistant to UV light
- Sizes 250 to 1000 dia are protected to IP54
- Optional backdraught shutters and bird guard (250-630mm)
- All models speed controllable
- Motor Insulation Class F, -40°C to +70°C operating temperature
- Reversible for supply or extract units
- Thermal overload for motor protection
- Performance tested to BS848 part 1 1980
- Designed for Data Centre and Warehouse cooling



A range of extract axial blade industrial roof fans incorporating the Euroseries® ESP axial plate fan, featuring a single shot die cast aluminium blade & external rotor motor design.

Cowl and roof mounting base are moulded from specially formulated recyclable polymeric materials, which are high impact resistant and provide a rigid profile against strong winds and resistance to UV light. Standard colour BS00A05

EuroSeries® ESR units are suitable for flat or inclined roofs (max. angle 30°) and are designed for either kerb or purlin box mounting.

The EuroSeries® ESR range is available in eleven sizes with the extract performances up to 10.88m³/s, with pressure characteristics of up to 300Pa. All units are designed for & fully speed controllable.

Air Operated Shutters & Bird Guards

The shutters fits beneath the cowl using fitting provided. Shutters should not be used when the fan performance is below 30% of maximum and the hinge should point up the roof incline.

The standard shutters for sizes 800 & 1000mm must not be used with 4 & 6 pole unit. Please enquire for special metal shutters. Bird Guards are manufactured to fit neatly between the roof cowl and the base.

Impellers

All sizes are supplied with cast aluminium impellers, ensuring performance when working against outdoor conditions and abrasive airflow. All fans are reversible for Intake (approx 30% reduction in performance). Backdraught shutters should not be used when operated as an intake fan.

Motors

External rotor motors are specially designed and styled for this range of fan. Ball bearings are greased for life. Rotors are dynamically balanced to ISO 1940. Sizes 250-1000mm, motors are protected to IP54, against

dust and moisture complying with BS EN 60529:1992. They are ribbed aluminium body castings for efficient cooling. Motor insulation is Class 'F' (from -40°C to +70°C).

Electrical

Single phase 220-240V 50Hz. Capacitor start and run. Three phase 380-415V 50Hz. An IP54 terminal box is supplied with most models with 20mm and PGII entry. All motors are fitted with thermal overload protection which should be wired into all controller circuits and into starter contactors. Models are available with either 2,4, 6 & 8 pole motors.

Terminal Box

Are to IP54, as standard, protected against dust and water from any angle allowing outside applications.

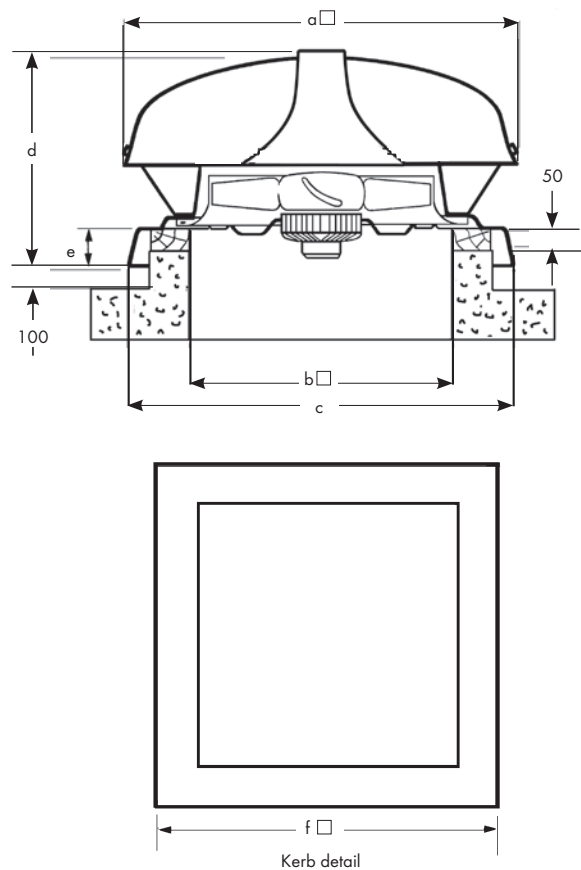
Performance

The fan performance is in accordance with tests to BS848 Part 1 1980.

Sound Levels

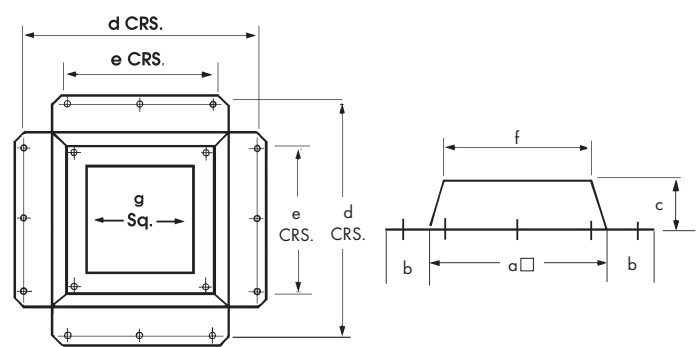
Fan sound levels, measured in a reverberant chamber in accordance with BS848 Part 2 1985. Published dB(A) figures are free field sound pressure levels at 3m with spherical propagation at a reference level of 2×10^{-5} Pa (20 micro-Pascal). The sound power level spectra figures are dB with reference level of 10^{-12} Watts (1 pico-watt). To ensure minimum noise levels during speed control, an auto transformer speed control is recommended.

Fan Dimensions (mm)



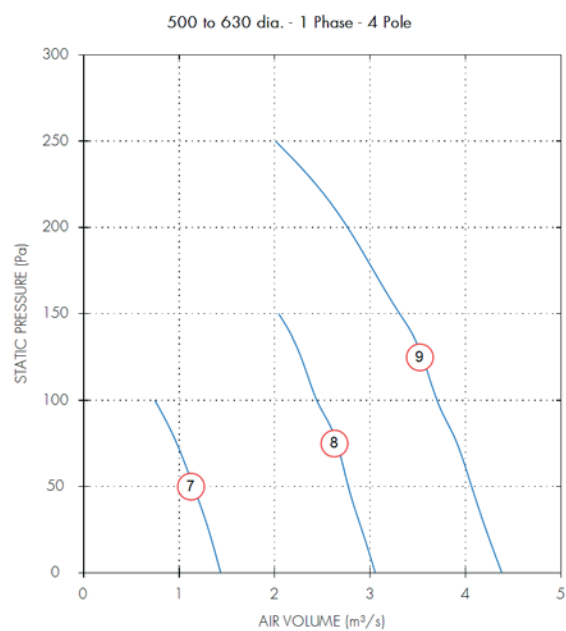
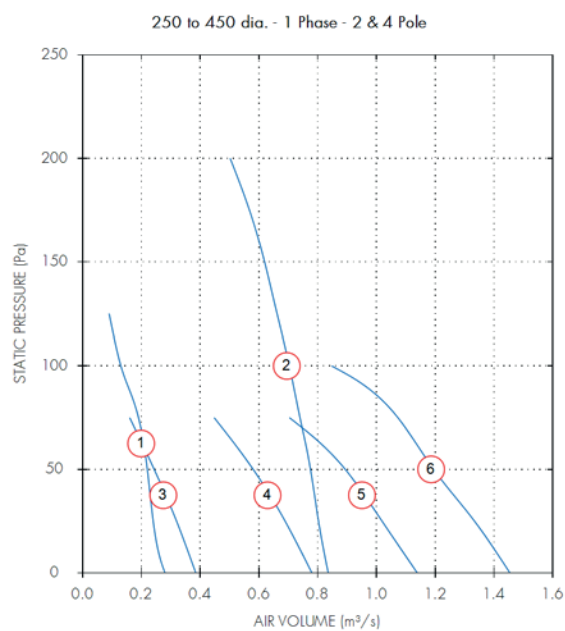
| Size | a | b | c | d | e | f | kg Max |
|------|------|------|------|-----|-----|------|--------|
| 250 | 700 | 475 | 737 | 411 | 97 | 675 | 13.25 |
| 315 | 700 | 475 | 737 | 411 | 97 | 675 | 16.3 |
| 355 | 700 | 475 | 737 | 411 | 97 | 675 | 16.3 |
| 400 | 800 | 575 | 830 | 466 | 97 | 775 | 18.4 |
| 450 | 800 | 575 | 830 | 466 | 97 | 775 | 20.3 |
| 500 | 950 | 715 | 1000 | 579 | 100 | 915 | 35.5 |
| 560 | 950 | 715 | 1000 | 579 | 100 | 915 | 35.5 |
| 630 | 1230 | 840 | 1100 | 731 | 105 | 1040 | 62 |
| 710 | 1230 | 840 | 1100 | 731 | 105 | 1040 | 62 |
| 800 | 1420 | 870 | 1190 | 731 | 105 | 1070 | 78 |
| 1000 | 1680 | 1070 | 1455 | 795 | 131 | 1270 | 134 |

Purlin Box (mm)



| Size | a | b | c | d | e | f | g |
|------|------|----|-----|------|-----|------|------|
| 250 | 625 | 90 | 240 | 765 | 400 | 590 | 460 |
| 315 | 625 | 90 | 240 | 765 | 400 | 590 | 460 |
| 355 | 625 | 90 | 240 | 765 | 400 | 590 | 460 |
| 400 | 725 | 90 | 240 | 865 | 500 | 705 | 565 |
| 450 | 725 | 90 | 240 | 865 | 500 | 705 | 565 |
| 500 | 890 | 70 | 250 | 990 | 650 | 850 | 640 |
| 560 | 890 | 70 | 250 | 990 | 650 | 870 | 700 |
| 630 | 1030 | 75 | 250 | 1140 | 760 | 985 | 775 |
| 710 | 1030 | 75 | 250 | 1140 | 760 | 985 | 840 |
| 800 | 980 | 37 | 267 | 1016 | 406 | 980 | 880 |
| 1000 | 1180 | 76 | 279 | 1294 | 508 | 1180 | 1080 |

Performance Guide



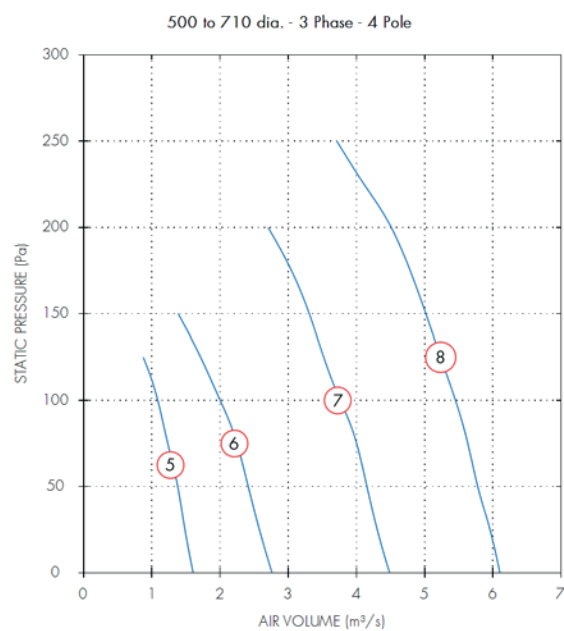
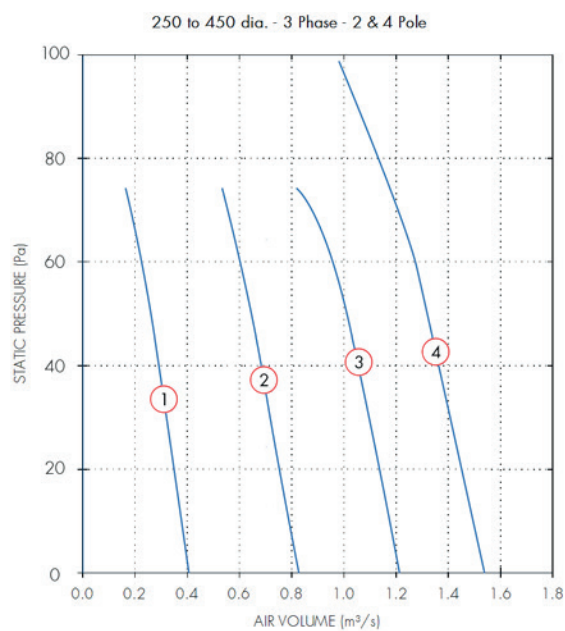
| Dia. | Motor Phase | Stock Ref | Poles | r.p.m | IP Rating | Curve Ref. | 0 | 50 | 100 | m³/s @ Pa | | | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-------|-------|-----------|------------|------|------|------|-----------|------|------|--|--|----------|-----------|------------|------------|
| 250 | 1 | ESR25012 | 2 | 2440 | IP44 | 1 | 0.28 | 0.22 | 0.13 | | | | | | 0.12 | 1.15 | 0.54 | 59 |
| 315 | 1 | ESR31512 | 2 | 2690 | IP54 | 2 | 0.84 | 0.78 | 0.7 | 0.62 | 0.5 | | | | 0.56 | 7.2 | 2.4 | 64 |
| 315 | 1 | ESR31514 | 4 | 1300 | IP54 | 3 | 0.38 | 0.24 | | | | | | | 0.15 | 1.38 | 0.7 | 50 |
| 355 | 1 | ESR35514 | 4 | 1330 | IP54 | 4 | 0.78 | 0.58 | | | | | | | 0.19 | 1.45 | 0.84 | 53 |
| 400 | 1 | ESR40014 | 4 | 1350 | IP54 | 5 | 1.14 | 0.89 | | | | | | | 0.29 | 2.4 | 1.45 | 56 |
| 450 | 1 | ESR45014 | 4 | 1370 | IP54 | 6 | 1.45 | 1.19 | 0.85 | | | | | | 0.36 | 3.6 | 1.6 | 61 |
| 500 | 1 | ESR50014 | 4 | 1290 | IP54 | 7 | 1.43 | 1.15 | 0.75 | | | | | | 0.51 | 4.3 | 2.3 | 55 |
| 560 | 1 | ESR56014 | 4 | 1320 | IP54 | 8 | 3.05 | 2.77 | 2.44 | 2.04 | | | | | 1.35 | 21 | 6 | 63 |
| 630 | 1 | ESR63014 | 4 | 1320 | IP54 | 9 | 4.38 | 4.06 | 3.7 | 3.31 | 2.76 | 2.01 | | | 2.2 | 28 | 9.9 | 70 |

ESR25012, ESR31512 & ESR25014 not suitable for reverse airflow.

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Poles | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|-------|----------|-----|-----|-----|-----|----|----|----|----|------------|
| 250 | 1 | ESR25012 | 2 | Inlet | 69 | 70 | 76 | 76 | 70 | 70 | 67 | 59 | 57 |
| 250 | 1 | ESR25012 | 2 | Outlet | 69 | 70 | 76 | 76 | 70 | 70 | 67 | 59 | 57 |
| 315 | 1 | ESR31512 | 2 | Inlet | 69 | 73 | 79 | 74 | 74 | 76 | 73 | 66 | 61 |
| 315 | 1 | ESR31512 | 2 | Outlet | 69 | 73 | 79 | 74 | 74 | 76 | 73 | 66 | 61 |
| 315 | 1 | ESR31514 | 4 | Inlet | 70 | 68 | 66 | 61 | 60 | 62 | 58 | 51 | 47 |
| 315 | 1 | ESR31514 | 4 | Outlet | 70 | 68 | 66 | 61 | 60 | 62 | 58 | 51 | 47 |
| 355 | 1 | ESR35514 | 4 | Inlet | 65 | 70 | 67 | 65 | 64 | 64 | 62 | 55 | 50 |
| 355 | 1 | ESR35514 | 4 | Outlet | 65 | 70 | 67 | 65 | 64 | 64 | 62 | 55 | 50 |
| 400 | 1 | ESR40014 | 4 | Inlet | 70 | 72 | 67 | 66 | 65 | 65 | 64 | 56 | 51 |
| 400 | 1 | ESR40014 | 4 | Outlet | 70 | 72 | 67 | 66 | 65 | 65 | 64 | 56 | 51 |
| 450 | 1 | ESR45014 | 4 | Inlet | 69 | 76 | 73 | 72 | 70 | 71 | 70 | 62 | 57 |
| 450 | 1 | ESR45014 | 4 | Outlet | 69 | 76 | 73 | 72 | 70 | 71 | 70 | 62 | 57 |
| 500 | 1 | ESR50014 | 4 | Inlet | 65 | 75 | 69 | 70 | 70 | 71 | 69 | 62 | 56 |
| 500 | 1 | ESR50014 | 4 | Outlet | 65 | 75 | 69 | 70 | 70 | 71 | 69 | 62 | 56 |
| 560 | 1 | ESR56014 | 4 | Inlet | 100 | 90 | 89 | 84 | 82 | 79 | 75 | 68 | 67 |
| 560 | 1 | ESR56014 | 4 | Outlet | 100 | 90 | 89 | 84 | 82 | 79 | 75 | 68 | 67 |
| 630 | 1 | ESR63014 | 4 | Inlet | 82 | 86 | 79 | 79 | 80 | 78 | 75 | 70 | 64 |
| 630 | 1 | ESR63014 | 4 | Outlet | 82 | 86 | 79 | 79 | 80 | 78 | 75 | 70 | 64 |

Performance Guide

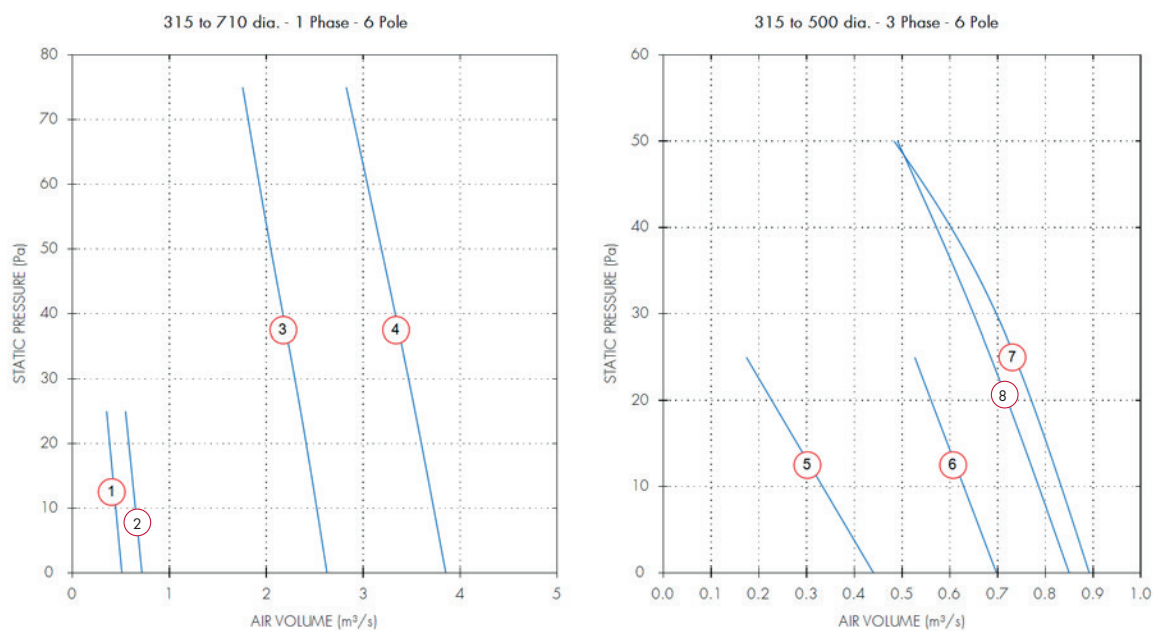


| Dia. | Motor Phase | Stock Ref | Poles | r.p.m | IP Rating | Curve Ref. | 0 | 50 | 100 | m³/s @ Pa 150 | 200 | 250 | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-------|-------|-----------|------------|------|------|------|---------------|------|------|----------|-----------|------------|------------|
| 315 | 3 | ESR31534 | 4 | 1390 | IP54 | 1 | 0.4 | 0.26 | | | | | 0.11 | 2.1 | 0.27 | 46 |
| 355 | 3 | ESR35534 | 4 | 1370 | IP54 | 2 | 0.82 | 0.65 | | | | | 0.17 | 1.35 | 0.37 | 49 |
| 400 | 3 | ESR40034 | 4 | 1350 | IP54 | 3 | 1.21 | 1.01 | | | | | 0.26 | 2.1 | 0.56 | 51 |
| 450 | 3 | ESR45034 | 4 | 1380 | IP54 | 4 | 1.54 | 1.32 | 0.98 | | | | 0.36 | 2.6 | 0.8 | 56 |
| 500 | 3 | ESR50034 | 4 | 1380 | IP54 | 5 | 1.6 | 1.38 | 1.09 | | | | 0.55 | 3.7 | 1.05 | 58 |
| 560 | 3 | ESR56034 | 4 | 1220 | IP54 | 6 | 2.76 | 2.41 | 2 | 1.39 | | | 1.25 | 7.7 | 2.2 | 70 |
| 630 | 3 | ESR63034 | 4 | 1360 | IP54 | 7 | 4.49 | 4.15 | 3.76 | 3.31 | 2.7 | | 1.9 | 14 | 3.2 | 64 |
| 710 | 3 | ESR71034 | 4 | 1290 | IP54 | 8 | 6.1 | 5.78 | 5.45 | 5.02 | 4.51 | 3.71 | 2.9 | 19 | 5.3 | 72 |

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Poles | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|-------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 315 | 3 | ESR31534 | 4 | Inlet | 64 | 67 | 69 | 63 | 62 | 60 | 58 | 53 | 47 |
| 315 | 3 | ESR31534 | 4 | Outlet | 64 | 67 | 69 | 63 | 62 | 60 | 58 | 53 | 47 |
| 355 | 3 | ESR35534 | 4 | Inlet | 58 | 73 | 63 | 64 | 64 | 65 | 64 | 58 | 50 |
| 355 | 3 | ESR35534 | 4 | Outlet | 58 | 73 | 63 | 64 | 64 | 65 | 64 | 58 | 50 |
| 400 | 3 | ESR40034 | 4 | Inlet | 62 | 73 | 65 | 65 | 67 | 69 | 67 | 60 | 53 |
| 400 | 3 | ESR40034 | 4 | Outlet | 62 | 73 | 65 | 65 | 67 | 69 | 67 | 60 | 53 |
| 450 | 3 | ESR45034 | 4 | Inlet | 65 | 82 | 75 | 76 | 73 | 72 | 69 | 62 | 58 |
| 450 | 3 | ESR45034 | 4 | Outlet | 65 | 82 | 75 | 76 | 73 | 72 | 69 | 62 | 58 |
| 500 | 3 | ESR50034 | 4 | Inlet | 67 | 71 | 69 | 72 | 70 | 71 | 68 | 61 | 56 |
| 500 | 3 | ESR50034 | 4 | Outlet | 67 | 71 | 69 | 72 | 70 | 71 | 68 | 61 | 56 |
| 560 | 3 | ESR56034 | 4 | Inlet | 85 | 79 | 77 | 76 | 76 | 75 | 72 | 66 | 61 |
| 560 | 3 | ESR56034 | 4 | Outlet | 85 | 79 | 77 | 76 | 76 | 75 | 72 | 66 | 61 |
| 630 | 3 | ESR63034 | 4 | Inlet | 71 | 88 | 82 | 83 | 82 | 81 | 78 | 72 | 67 |
| 630 | 3 | ESR63034 | 4 | Outlet | 71 | 88 | 82 | 83 | 82 | 81 | 78 | 72 | 67 |
| 710 | 3 | ESR71034 | 4 | Inlet | 80 | 87 | 86 | 88 | 89 | 86 | 83 | 79 | 72 |
| 710 | 3 | ESR71034 | 4 | Outlet | 80 | 87 | 86 | 88 | 89 | 86 | 83 | 79 | 72 |

Performance Guide

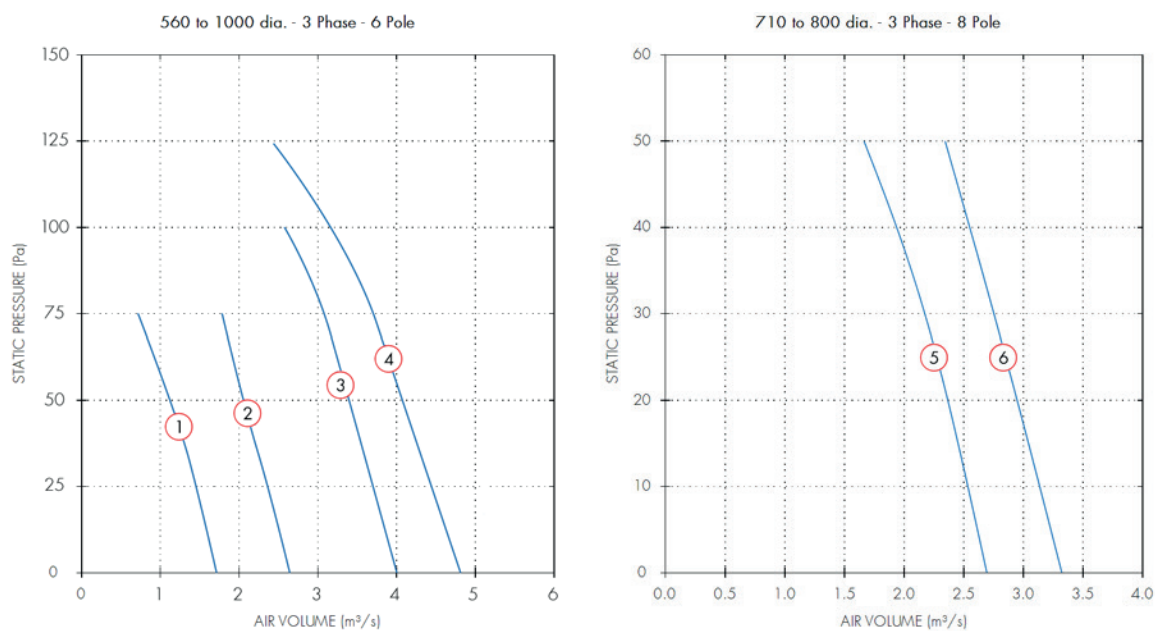


| Dia. | Motor Phase | Stock Ref | Poles | r.p.m | IP Rating | Curve Ref. | m³/s @ Pa | | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-------|-------|-----------|------------|-----------|------|------|------|----------|-----------|------------|------------|
| | | | | | | | 0 | 25 | 50 | 75 | | | | |
| 355 | 1 | ESR35516 | 6 | 950 | IP54 | 1 | 0.51 | 0.35 | | | 0.09 | 1.2 | 0.46 | 44 |
| 400 | 1 | ESR40016 | 6 | 940 | IP54 | 2 | 0.72 | 0.55 | | | 0.13 | 1.4 | 0.6 | 45 |
| 630 | 1 | ESR63016 | 6 | 880 | IP54 | 3 | 2.63 | 2.35 | 2.05 | 1.76 | 0.6 | 5.3 | 2.7 | 57 |
| 710 | 1 | ESR71016 | 6 | 850 | IP54 | 4 | 3.85 | 3.53 | 3.19 | 2.82 | 0.89 | 8 | 4.1 | 60 |
| 355 | 3 | ESR35536 | 6 | 910 | IP54 | 5 | 0.44 | 0.17 | | | 0.09 | 0.5 | 0.25 | 45 |
| 400 | 3 | ESR40036 | 6 | 920 | IP54 | 6 | 0.7 | 0.53 | | | 0.11 | 0.9 | 0.28 | 50 |
| 450 | 3 | ESR45036 | 6 | 890 | IP54 | 7 | 0.89 | 0.74 | 0.48 | | 0.12 | 1 | 0.28 | 51 |
| 500 | 3 | ESR50036 | 6 | 900 | IP54 | 8 | 0.85 | 0.69 | 0.49 | | 0.23 | 1.5 | 0.56 | 56 |

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Poles | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|-------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 355 | 1 | ESR35516 | 6 | Inlet | 59 | 59 | 60 | 57 | 56 | 57 | 55 | 46 | 42 |
| 355 | 1 | ESR35516 | 6 | Outlet | 59 | 59 | 60 | 57 | 56 | 57 | 55 | 46 | 42 |
| 400 | 1 | ESR40016 | 6 | Inlet | 76 | 74 | 70 | 65 | 63 | 58 | 52 | 44 | 48 |
| 400 | 1 | ESR40016 | 6 | Outlet | 76 | 74 | 70 | 65 | 63 | 58 | 52 | 44 | 48 |
| 630 | 1 | ESR63016 | 6 | Inlet | 88 | 85 | 81 | 77 | 76 | 70 | 64 | 58 | 60 |
| 630 | 1 | ESR63016 | 6 | Outlet | 88 | 85 | 81 | 77 | 76 | 70 | 64 | 58 | 60 |
| 710 | 1 | ESR71016 | 6 | Inlet | 83 | 83 | 84 | 80 | 78 | 74 | 70 | 72 | 63 |
| 710 | 1 | ESR71016 | 6 | Outlet | 83 | 83 | 84 | 80 | 78 | 74 | 70 | 72 | 63 |
| 355 | 3 | ESR35536 | 6 | Inlet | 60 | 61 | 60 | 56 | 56 | 56 | 54 | 46 | 42 |
| 355 | 3 | ESR35536 | 6 | Outlet | 60 | 61 | 60 | 56 | 56 | 56 | 54 | 46 | 42 |
| 400 | 3 | ESR40036 | 6 | Inlet | 60 | 60 | 62 | 59 | 60 | 60 | 58 | 50 | 45 |
| 400 | 3 | ESR40036 | 6 | Outlet | 60 | 60 | 62 | 59 | 60 | 60 | 58 | 50 | 45 |
| 450 | 3 | ESR45036 | 6 | Inlet | 63 | 72 | 66 | 63 | 63 | 62 | 59 | 48 | 48 |
| 450 | 3 | ESR45036 | 6 | Outlet | 63 | 72 | 66 | 63 | 63 | 62 | 59 | 48 | 48 |
| 500 | 3 | ESR50036 | 6 | Inlet | 78 | 73 | 68 | 67 | 68 | 66 | 59 | 51 | 52 |
| 500 | 3 | ESR50036 | 6 | Outlet | 78 | 73 | 68 | 67 | 68 | 66 | 59 | 51 | 52 |

Performance Guide



| Dia. | Motor Phase | Stock Ref | Poles | r.p.m | IP Rating | Curve Ref. | m³/s @ Pa | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-------|-------|-----------|------------|-----------|------|------|----------|-----------|------------|------------|
| | | | | | | | 0 | 50 | 100 | | | | |
| 560 | 3 | ESR56036 | 6 | 860 | IP54 | 1 | 1.72 | 1.16 | | 0.36 | 1.75 | 0.74 | 56 |
| 630 | 3 | ESR63036 | 6 | 890 | IP54 | 2 | 2.66 | 2.07 | | 0.59 | 3.6 | 1.3 | 59 |
| 710 | 3 | ESR71036 | 6 | 860 | IP54 | 3 | 4 | 3.4 | 2.58 | 1.1 | 7.7 | 2.2 | 62 |
| 800 | 3 | ESR80036 | 6 | 900 | IP54 | 4 | 4.81 | 4.08 | 3.18 | 1.4 | 7.7 | 2.2 | 64 |
| 710 | 3 | ESR71038 | 8 | 630 | IP54 | 5 | 2.69 | 1.66 | | 0.43 | 3.3 | 1.1 | 55 |
| 800 | 3 | ESR80038 | 8 | 670 | IP54 | 6 | 3.32 | 2.34 | | 0.69 | 5 | 1.75 | 58 |

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Poles | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|-------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 560 | 3 | ESR56036 | 6 | Inlet | 67 | 72 | 72 | 68 | 68 | 68 | 65 | 57 | 53 |
| 560 | 3 | ESR56036 | 6 | Outlet | 67 | 72 | 72 | 68 | 68 | 68 | 65 | 57 | 53 |
| 630 | 3 | ESR63036 | 6 | Inlet | 67 | 78 | 76 | 74 | 73 | 72 | 77 | 59 | 60 |
| 630 | 3 | ESR63036 | 6 | Outlet | 67 | 78 | 76 | 74 | 73 | 72 | 77 | 59 | 60 |
| 710 | 3 | ESR71036 | 6 | Inlet | 80 | 77 | 78 | 75 | 76 | 75 | 70 | 64 | 60 |
| 710 | 3 | ESR71036 | 6 | Outlet | 80 | 77 | 78 | 75 | 76 | 75 | 70 | 64 | 60 |
| 800 | 3 | ESR80036 | 6 | Inlet | 73 | 83 | 79 | 75 | 75 | 77 | 74 | 64 | 62 |
| 800 | 3 | ESR80036 | 6 | Outlet | 73 | 83 | 79 | 75 | 75 | 77 | 74 | 64 | 62 |
| 710 | 3 | ESR71038 | 8 | Inlet | 75 | 75 | 73 | 71 | 72 | 70 | 64 | 57 | 56 |
| 710 | 3 | ESR71038 | 8 | Outlet | 75 | 75 | 73 | 71 | 72 | 70 | 64 | 57 | 56 |
| 800 | 3 | ESR80038 | 8 | Inlet | 75 | 75 | 73 | 71 | 72 | 70 | 64 | 57 | 56 |
| 800 | 3 | ESR80038 | 8 | Outlet | 75 | 75 | 73 | 71 | 72 | 70 | 64 | 57 | 56 |

Models & Accessories

| Speed Controllers | | | | | |
|-------------------|------------|-----------|-----------|-----------|------------------|
| Fan | Electronic | Auto | Starter | Overload | Fan |
| Stock Ref | Stock Ref | Transfor | Stock Ref | Stock Ref | Stock Ref |
| Stock Ref | Stock Ref | Stock Ref | Stock Ref | Stock Ref | Stock Ref |
| 1 Phase - 2 Pole | | | | | 3 Phase - 4 Pole |
| ESR25012 | SC5001 | SPM5020 | 444744 | 444699 | ESR31534 |
| ESR31512 | SC5030TK | SPM5035 | 444744 | 444701 | ESR35534 |
| 1 Phase - 4 Pole | | | | | ESR40034 |
| ESR25014 | SC5001 | SPM5020 | 444744 | 444696 | ESR45034 |
| ESR31514 | SC5001 | SPM5020 | 444744 | 444699 | ESR50034 |
| ESR35514 | SC5030TK | SPM5020 | 444744 | 444699 | ESR56034 |
| ESR40014 | SC5030TK | SPM5020 | 444744 | 444701 | ESR63034 |
| ESR45014 | SC5030TK | SPM5020 | 444744 | 444701 | ESR71034 |
| ESR50014 | SC5030TK | SPM5035 | 444744 | 444702 | 3 Phase - 6 Pole |
| ESR56014 | SC5010TK | SPM5075 | 444744 | 444704 | ESR35536 |
| ESR63014 | - | - | 444744 | 444706 | ESR40036 |
| | | | | | ESR50036 |
| 1 Phase - 6 Pole | | | | | ESR56036 |
| ESR35516 | SC5030TK | SPM5020 | 444744 | 444698 | ESR63036 |
| ESR40016 | SC5030TK | SPM5020 | 444744 | 444699 | ESR71036 |
| | | | | | ESR80036 |
| | | | | | 3 Phase - 6 Pole |
| ESR63016 | SC5030TK | SPM5035 | 444744 | 444702 | ESR63038 |
| ESR71016 | SC5050TK | SPM5060 | 444744 | 444703 | ESR71038 |
| | | | | | ESR80038 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

*Not suitable for voltage speed control. Inverter speed control with sine filters only.

| Roof Cowl Assembly | | Drop in Curb Attenuator | | |
|--------------------|---------------|-------------------------|-----------|------------|
| Model Ref | ONLY (No Fan) | (600mm) | (900mm) | (1200mm) |
| | Stock Ref | Stock Ref | Stock Ref | Stock Ref |
| ESR250 | - | RAZ300600 | RAZ300900 | - |
| ESR315 & 355 | RCZ300 | RAZ300600 | RAZ300900 | RAZ3001200 |
| ESR400 & 450 | RCZ400 | RAZ400600 | RAZ400900 | RAZ4001200 |
| ESR500 & 560 | RCZ500 | RAZ500600 | RAZ500900 | RAZ5001200 |
| ESR630 | RCZ630 | RAZ600600 | RAZ600900 | RAZ6001200 |
| ESR710 | RCZ630 | RAZ600600 | RAZ600900 | RAZ6001200 |
| ESR800 | RCZ800 | | | |
| ESR1000 | RCZ1000 | | | |

| Speed Controllers | | | | | |
|-------------------------------|----------------------|-----------------------|-----------------------|------------------------|---|
| Auto Transfor Stock Ref | Starter Stock Ref | Overload Stock Ref | Shutters Stock Ref | Birdguard Stock Ref | Adaptor Units (Purlin Box) Stock Ref |
| RDTK10 | 444747 | 444699 | RSZ300 | BGZ300 | PBZ300 |
| - | 444747 | 444700 | RSZ300 | BGZ300 | PBZ300 |
| | | | RSZ300 | BGZ300 | PBZ300 |
| RDTK10 | 444747 | 444697 | RSZ300 | BGZ300 | PBZ300 |
| RDTK10 | 444747 | 444698 | RSZ300 | BGZ300 | PBZ300 |
| RDTK10 | 444747 | 444699 | RSZ400 | BGZ400 | PBZ400 |
| RDTK10 | 444747 | 444699 | RSZ400 | BGZ400 | PBZ400 |
| RDTK20 | 444747 | 444700 | RSZ500 | BGZ500 | PBZ500 |
| RDTK40 | 444747 | 444701 | RSZ500 | BGZ500 | PBZ560 |
| RDTK40 | 444747 | 444702 | RSZ630 | BGZ630 | PBZ630 |
| RDTK70 | 444747 | 444703 | RSZ630 | BGZ630 | PBZ710 |
| RDTK10 | 444747 | 444697 | RSZ300 | BGZ300 | PBZ300 |
| RDTK10 | 444747 | 444697 | RSZ400 | BGZ400 | PBZ400 |
| RDTK10 | 444747 | 444699 | RSZ500 | BGZ500 | PBZ500 |
| RDTK10 | 444747 | 444699 | RSZ500 | BGZ500 | PBZ560 |
| RDTK20 | 444747 | 444700 | RSZ630 | BGZ630 | PBZ630 |
| RDTK40 | 444747 | 444702 | RSZ630 | BGZ630 | PBZ710 |
| RDTK40 | 444747 | 444702 | - | INCL | PBZ800 |
| - | 444748 | 444706 | - | INCL | PBZ1000 |
| RDTK10 | 444747 | 444699 | RSZ630 | BGZ630 | PBZ630 |
| RDTK20 | 444747 | 444700 | RSZ630 | BGZ630 | PBZ710 |
| RDTK20 | 444747 | 444701 | - | INCL | PBZ800 |

Note:

- The Standard roof cowl colour is BS 00A 05 (Goose Wing Grey) for all special B.S. or RAL colours contact Vent-Axia.
- When speed control is required a 5 step auto transformer speed controller is recommended, to ensure low noise levels.
- All 3 phase models are suitable for frequency inverter speed control.
- Vent-Axia only recommend using inverters with integral sine filters for reliable operation.

Quiet Pack (QP)

- 'O' Class rated acoustically treated casing, ensuring minimum duct and breakout noise levels
- Air volumes up to 1.59m³/s
- Suitable for external pressures up to 500Pa
- Designed to suit duct diameters from 100 to 500mm
- Operating Temperatures from -15°C up to +40°C
- Speed Controllable
- Quality Assurance to BS EN ISO 9001:1994
- Performance tested to BS848 Part 1 1980



The Quiet Pack in-line acoustic fans are as supplied from Roof Units, designed around a high performance centrifugal impeller, offering a highly efficient, quiet and compact in-line acoustic fan.

The Quiet Pack fan range is manufactured from prime quality galvanised sheet steel, ensuring a robust in-line fan for those tough site conditions.

Quiet Pack casings are suitable for internal mounting and internally treated with an 'O' class rated acoustic foam, which offers the benefits of excellent low level duct bound and breakout sound levels, in addition self extinguishing properties, zero burn rate, resistant to ignition, and no toxic fumes.

Quiet Pack fans are suitable for circular ducting ranging in sizes 100, 125, 150, 160, 200, 250, 315, 400 and 500mm, with air volumes from 0.016m³/s to 1.8m³/s and pressure development of up to 500Pa.

The casing are specially designed to allow the unit to be mounted via drop rods or anti vibration mounts, ensuring a quick and easy solution to installation of the Quiet Pack in-line acoustic fans. All manufacturing processes of the Quiet Pack fan units are computer designed and controlled to BS EN ISO 9001 Standards.

Impellers

The motor and backward curved impeller is factory matched, statically and dynamically balanced on precision machines, to DIN ISO 1940 Grade 6.3, to give quiet, vibration free running.

Motors

Motor insulation Class B, suitable for operating temperatures from -15°C to +40°C and atmospheres up to 95% RH.

All sizes are ideally suitable for speed control by electronic or voltage reduction. Vent-Axia would recommend that a voltage reduction Auto Transformer speed controller is used with all Quiet Pack units to ensure minimum noise levels during speed control and to eliminate any possibility of harmonic noise levels which may occur when using electronic speed controllers at lower speeds.

Performance

The fan performance is in accordance with tests to BS848 Part 1 1980, with the fan sound levels measured in a reverberant chamber in accordance with BS848 Part 2 1985.

Quality Assurance

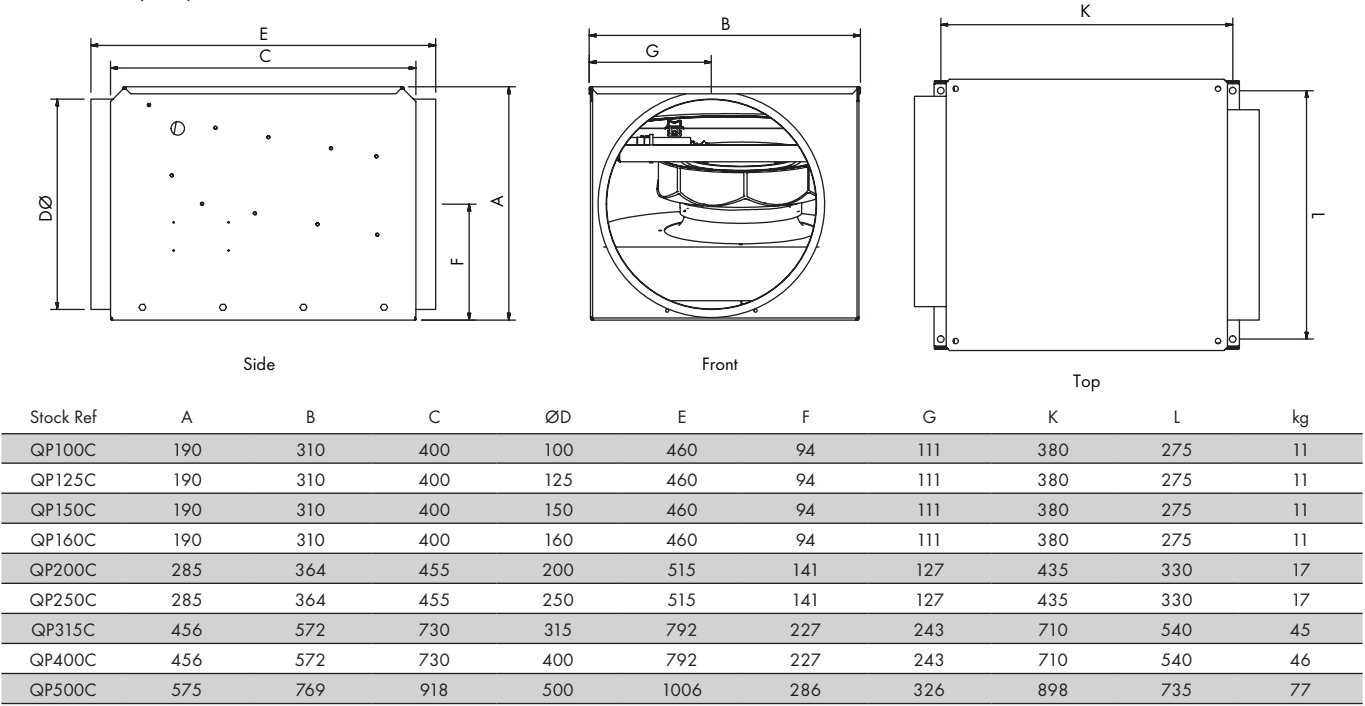
Design and manufacture is in accordance with the standard for quality management systems BS EN ISO 9001:1994.

Accessories

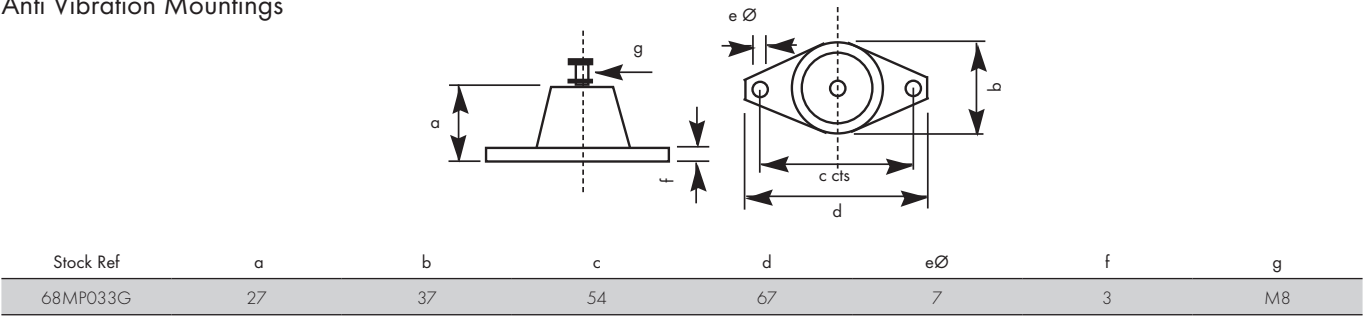
A full range of accessories are available with the Fan Box range of fans such as:

- Auto Transformer Speed Controllers
- Electronic Speed Controllers
- D.O.L. Starters
- Standard, Acoustic & Thermal Flexible Ducting
- Pre-Panel or Secondary Bag Filters
- Electric Heater Batteries
- Backdraught Shutters
- In-Line Attenuators
- Wall & Roof Terminals
- Fast Clamps

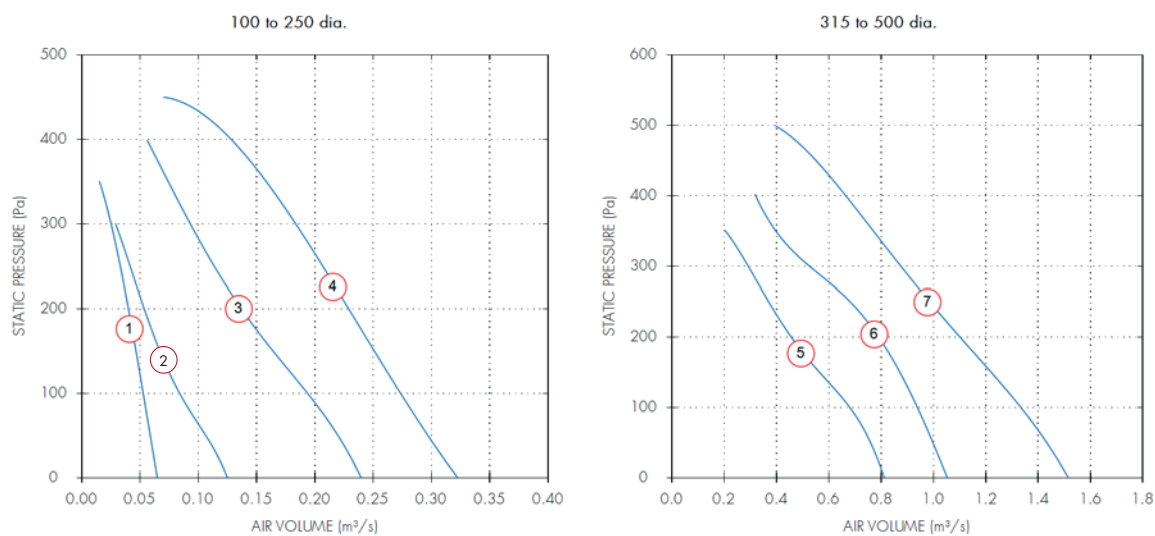
Dimensions (mm)



Anti Vibration Mountings



Performance Guide



| Dia. | Motor Phase | Stock Ref | r.p.m | Curve Ref. | m³/s @ Pa | | | | | Motor kW | S.C. Amps | F.L.C Amps | dBA @ 3m |
|------|-------------|-----------|-------|------------|-----------|------|------|------|------|----------|-----------|------------|----------|
| | | | | | 0 | 100 | 200 | 300 | 400 | | | | |
| 100 | 1 | QP100C | 2350 | 1 | 0.06 | 0.05 | 0.04 | 0.03 | | 0.05 | 0.37 | 0.23 | 32 |
| 125 | 1 | QP125C | 2350 | 1 | 0.07 | 0.05 | 0.04 | 0.02 | | 0.05 | 0.37 | 0.23 | 33 |
| 150 | 1 | QP150C | 2350 | 2 | 0.12 | 0.08 | 0.05 | 0.03 | | 0.05 | 0.37 | 0.23 | 33 |
| 150 | 1 | QP160C | 2350 | 2 | 0.12 | 0.08 | 0.05 | 0.03 | | 0.05 | 0.37 | 0.23 | 33 |
| 200 | 1 | QP200C | 2700 | 3 | 0.24 | 0.19 | 0.14 | 0.09 | | 0.09 | 0.85 | 0.38 | 36 |
| 250 | 1 | QP250C | 2500 | 4 | 0.32 | 0.27 | 0.23 | 0.18 | 0.13 | 0.16 | 1.25 | 0.68 | 36 |
| 315 | 1 | QP315C | 1330 | 5 | 0.81 | 0.68 | 0.46 | 0.29 | | 0.27 | 2.2 | 1.18 | 38 |
| 400 | 1 | QP400C | 1340 | 6 | 1.05 | 0.94 | 0.79 | 0.53 | 0.32 | 0.47 | 5.9 | 2.33 | 39 |
| 500 | 1 | QP500C | 1330 | 7 | 1.52 | 1.33 | 1.1 | 0.88 | 0.66 | 0.73 | 6.27 | 3.21 | 47 |

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 100 | 1 | QP100C | Inlet | 53 | 59 | 68 | 58 | 50 | 45 | 34 | 33 | 41 |
| 100 | 1 | QP100C | Outlet | 54 | 57 | 63 | 59 | 60 | 54 | 49 | 42 | 43 |
| 100 | 1 | QP100C | Breakout | 48 | 52 | 59 | 49 | 41 | 39 | 31 | 32 | 32 |
| 125 | 1 | QP125C | Inlet | 51 | 65 | 73 | 62 | 51 | 46 | 36 | 36 | 45 |
| 125 | 1 | QP125C | Outlet | 52 | 62 | 67 | 64 | 62 | 55 | 52 | 45 | 46 |
| 125 | 1 | QP125C | Breakout | 51 | 53 | 60 | 49 | 41 | 40 | 33 | 33 | 33 |
| 150 | 1 | QP150C | Inlet | 54 | 60 | 70 | 59 | 52 | 46 | 38 | 36 | 42 |
| 150 | 1 | QP150C | Outlet | 56 | 58 | 63 | 58 | 59 | 56 | 49 | 43 | 43 |
| 150 | 1 | QP150C | Breakout | 50 | 55 | 60 | 50 | 43 | 38 | 31 | 32 | 33 |
| 160 | 1 | QP160C | Inlet | 54 | 60 | 70 | 59 | 52 | 46 | 38 | 36 | 42 |
| 160 | 1 | QP160C | Outlet | 56 | 58 | 63 | 58 | 59 | 56 | 49 | 43 | 43 |
| 160 | 1 | QP160C | Breakout | 50 | 55 | 60 | 50 | 43 | 38 | 31 | 32 | 33 |
| 200 | 1 | QP200C | Inlet | 60 | 65 | 63 | 68 | 58 | 55 | 54 | 46 | 46 |
| 200 | 1 | QP200C | Outlet | 60 | 63 | 68 | 72 | 68 | 67 | 62 | 53 | 53 |
| 200 | 1 | QP200C | Breakout | 54 | 58 | 60 | 57 | 46 | 41 | 35 | 34 | 36 |
| 250 | 1 | QP250C | Inlet | 64 | 74 | 72 | 67 | 57 | 55 | 56 | 53 | 48 |
| 250 | 1 | QP250C | Outlet | 64 | 74 | 75 | 69 | 70 | 71 | 65 | 64 | 56 |
| 250 | 1 | QP250C | Breakout | 52 | 57 | 68 | 52 | 44 | 40 | 36 | 38 | 39 |
| 315 | 1 | QP315C | Inlet | 66 | 78 | 68 | 60 | 52 | 49 | 42 | 40 | 45 |
| 315 | 1 | QP315C | Outlet | 67 | 75 | 77 | 71 | 69 | 62 | 56 | 49 | 53 |
| 315 | 1 | QP315C | Breakout | 54 | 70 | 63 | 53 | 47 | 41 | 35 | 34 | 38 |
| 400 | 1 | QP400C | Inlet | 73 | 82 | 79 | 68 | 62 | 55 | 50 | 49 | 52 |
| 400 | 1 | QP400C | Outlet | 72 | 78 | 78 | 75 | 74 | 66 | 58 | 53 | 57 |
| 400 | 1 | QP400C | Breakout | 57 | 71 | 63 | 56 | 51 | 46 | 39 | 35 | 39 |
| 500 | 1 | QP500C | Inlet | 77 | 85 | 78 | 71 | 64 | 62 | 54 | 52 | 54 |
| 500 | 1 | QP500C | Outlet | 74 | 83 | 82 | 78 | 77 | 72 | 64 | 58 | 61 |
| 500 | 1 | QP500C | Breakout | 68 | 81 | 72 | 63 | 56 | 49 | 42 | 41 | 48 |

Models & Accessories

| Fan Stock Ref | Speed Controller | | Starter Stock Ref | Overload Stock Ref | Anti Vibration Mounts (set of 4) Stock Ref |
|------------------|------------------|-----------|----------------------|-----------------------|--|
| | Electronic | Auto | | | |
| | Stock Ref | Transfor. | | | |
| QP100C | SC5001 | SPM5020 | 444744 | 444699 | 68MP033G |
| QP125C | SC5001 | SPM5020 | 444744 | 444699 | 68MP033G |
| QP150C | SC5001 | SPM5020 | 444744 | 444699 | 68MP033G |
| QP160C | SC5001 | SPM5020 | 444744 | 444699 | 68MP033G |
| QP200C | SC5001 | SPM5020 | 444744 | 444699 | 68MP033G |
| QP250C | SC5001 | SPM5020 | 444744 | 444699 | 68MP033G |
| QP315C | SC5030 | SPM5035 | 444744 | 444699 | 68MP033G |
| QP400C | SC5050TK | SPM5035 | 444744 | 444699 | 68MP033G |
| QP500C | SC5050TK | SPM5060 | 444744 | 444171 | 68MP033G |

| Fan Stock Ref | Electric | | Panel Filters Stock Ref | Bag Filters Stock Ref |
|------------------|------------|--|----------------------------|--------------------------|
| | Heaters | | | |
| | Stock Ref | | | |
| QP100C | 10531100T1 | | QPF100A | QPFB100A |
| QP125C | 10531125T1 | | QPF125A | QPFB125A |
| QP150C | 10531150T1 | | QPF150A | QPFB150A |
| QP160C | - | | QPF160A | QPFB160A |
| QP200C | 10531200T1 | | QPF200A | QPFB200A |
| QP250C | 10531250T1 | | QPF250A | QPFB250A |
| QP315C | 10531315T1 | | QPF315A | QPFB315A |
| QP400C | 10531400T3 | | QPF400A | QPFB400A |
| QP500C | 10531500T3 | | QPF500A | QPFB500A |

| Fan Stock Ref | In-line Attenuators | | | | Wall Terminal Stock Ref |
|------------------|---------------------|-----------|-----------|-----------|----------------------------|
| | 300mm | 600mm | 900mm | 1200mm | |
| | Stock Ref | Stock Ref | Stock Ref | Stock Ref | |
| QP100C | 83010030 | 83010060 | 83010090 | - | SA100/280 |
| QP125C | 83012030 | 83012060 | 83012090 | - | SA125/280 |
| QP150C | 83015030 | 83015060 | 83015090 | - | SA150/280 |
| QP160C | 83016030 | 83016060 | 83016090 | - | SA150/280 |
| QP200C | - | 83020060 | 83020090 | 83020120 | SA200/280 |
| QP250C | - | 83025060 | 83025090 | 83025120 | SA250/280 |
| QP315C | - | 83031060 | 83031090 | 83031120 | SA315/280 |
| QP400C | - | - | 83040090 | 83040120 | QSA400/280 |
| QP500C | - | - | 83050090 | 83050120 | - |

Quiet Pack Twin Fan (QPTW)

- Air volumes up to 1.07m³/s
- Suitable for external pressures up to 450Pa
- Designed to suit duct diameters from 100 to 400mm
- Operating temperatures up to 40°C
- Speed controllable
- Quality assurance to BS EN ISO 9001:1994
- Performance tested to BS848 Part 1 1980



The Quiet Pack Twin in-line fans are as supplied from Roof Units, designed around a high performance centrifugal impeller, offering a highly efficient, quiet and compact twin in-line acoustic fan.

The Quiet Pack Twin fan range is manufactured from prime quality galvanised sheet steel, ensuring a robust twin in-line fan for those tough site conditions.

Casings are suitable for internal mounting only and internally treated with an 'O' class rated acoustic foam, which offers the benefits of excellent low level duct bound and breakout sound levels, in addition self extinguishing properties, zero burn rate, resistant to ignition, and no toxic fumes.

Quiet Pack Twin fans are suitable for circular ducting ranging in sizes 100, 125, 150, 160, 250, 315 and 400 with air volumes up to 1.07m³/s and pressure development of up to 450Pa.

They are specially designed to allow the unit to be mounted via drop rods or anti vibration mounts, ensuring a quick and easy solution to installation with all units fitted with backdraught shutters to prevent air flow returning back through the system during shutdown periods.

Impellers

The motor and backward curved impeller is factory matched, statically and dynamically balanced on precision machines, to ISO 1940 Grade 6.3., to give quiet, vibration free running.

Motors

Motor insulation Class B, suitable for operating temperatures from -15°C up to +40°C and atmospheres up to 95% RH.

All sizes are suitable for speed control by electronic or voltage reduction. Vent-Axia would recommend that a voltage reduction Auto Transformer speed controller is used with all units to ensure minimum noise levels during speed control and to eliminate any possibility of harmonic noise levels which may occur when using electronic speed controllers at lower speeds.

Performance

The fan performance is in accordance with tests to BS848 Part 1 1980, with the fan sound levels measured in a reverberant chamber in accordance with BS848 Part 2 1985.

Quality Assurance

Design and manufacture is in accordance with the standard for quality management systems BS EN ISO 9001:1994.

Accessories

A full range of accessories are available to complement the range of fans such as:

- Manual/Auto Changeover Twin Fan Controllers
- Auto Transformer Speed Controllers
- D.O.L. Starters
- Standard, Acoustic & Thermal Flexible Ducting
- In-Line Attenuators
- Wall & Roof Terminals
- Fast Clamps

ACOB1A Twin Fan Controller



- Manual or auto changeover facilities
- 2 to 24 hour adjustable duty sharing
- Diagnostic program facility on start up
- Suitable for 1 phase twin fan units up to 8 amps
- Can be wired in conjunction with speed controllers
- Volt free contacts fitted as standard
- Neon failure indicators

Specification

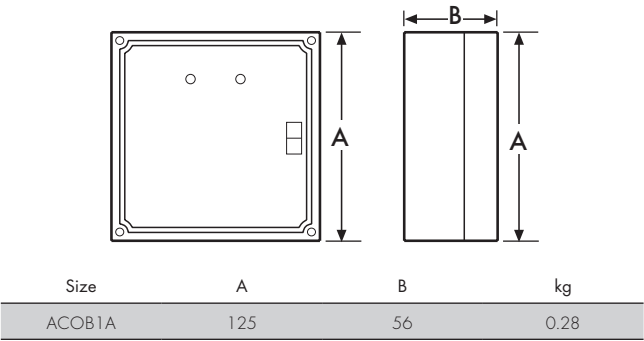
Supply Voltage: 230 to 240V/1ph/50Hz.
Maximum Current Capacity: 0.1 to 8.0 amps.
Operating temperature: 0°C to +40°C.

IP rating: IP40.
Fuse Size: T rated 15 amp glass fuse (5x20mm).

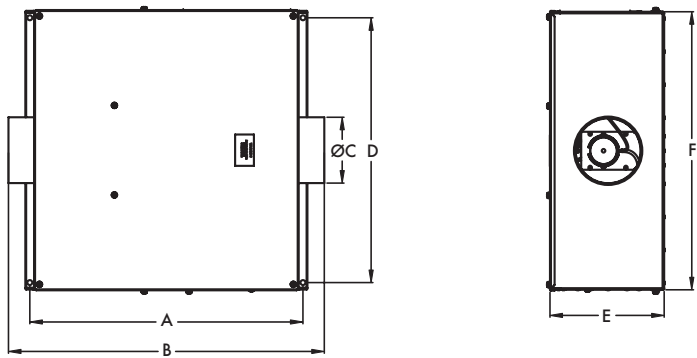
Models

Stock Ref
ACOB1A

Dimensions (mm)

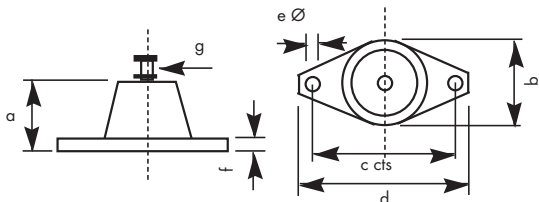


Dimensions (mm)



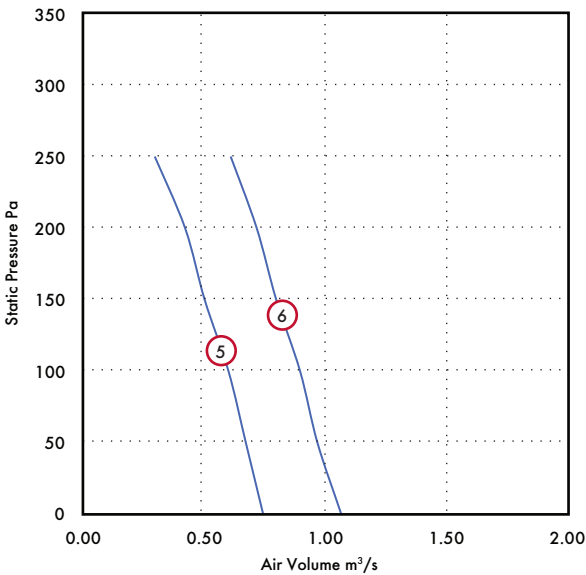
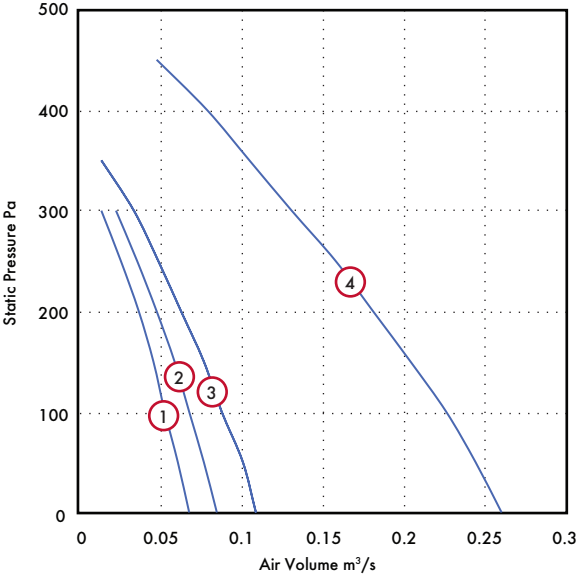
| Stock Ref | Duct Diameter mm | | | | | | Weight kg |
|-----------|------------------|------|-----|------|-----|------|--------------|
| | A | B | ØC | D | E | F | |
| QPTW100C | 610 | 705 | 100 | 591 | 256 | 622 | 26 |
| QPTW125C | 610 | 705 | 125 | 591 | 256 | 622 | 26 |
| QPTW150C | 610 | 705 | 150 | 591 | 256 | 622 | 26 |
| QPTW250C | 925 | 1020 | 250 | 798 | 354 | 829 | 48 |
| QPTW315C | 1255 | 1353 | 315 | 1145 | 536 | 1176 | 88 |
| QPTW400C | 1255 | 1353 | 400 | 1145 | 536 | 1176 | 90 |

Anti Vibration Mountings



| Stock ref | a | b | c | d | eØ | f | g |
|-----------|----|----|----|----|----|---|----|
| 68MP033G | 27 | 37 | 54 | 67 | 7 | 3 | M8 |

Performance Guide



| Stock Ref | rpm | Phase | Curve Ref | Duty m³/s @ Pa | | | | | | | | | | Motor kW | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|-----------|------|-------|-----------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-----------|------------|------------|
| | | | | 0 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | | | | |
| QPTW100C | 2450 | 1 | 1 | 0.068 | 0.061 | 0.053 | 0.046 | 0.037 | 0.026 | 0.014 | | | | 0.05 | 0.37 | 0.23 | 32 |
| QPTW125C | 2450 | 1 | 2 | 0.085 | 0.077 | 0.068 | 0.059 | 0.048 | 0.036 | 0.023 | | | | 0.05 | 0.37 | 0.23 | 33 |
| QPTW150C | 2450 | 1 | 3 | 0.109 | 0.101 | 0.088 | 0.077 | 0.063 | 0.049 | 0.034 | 0.014 | | | 0.05 | 0.37 | 0.23 | 33 |
| QPTW160C | 2700 | 1 | 3 | 0.109 | 0.101 | 0.088 | 0.077 | 0.063 | 0.049 | 0.034 | 0.014 | | | 0.05 | 0.37 | 0.23 | 33 |
| QPTW250C | 2550 | 1 | 4 | 0.260 | 0.244 | 0.226 | 0.204 | 0.181 | 0.158 | 0.131 | 0.105 | 0.079 | 0.048 | 0.16 | 1.25 | 0.68 | 36 |
| QPTW315C | 1330 | 1 | 5 | 0.747 | 0.675 | 0.603 | 0.504 | 0.423 | 0.297 | | | | | 0.27 | 2.2 | 1.18 | 38 |
| QPTW400C | 1340 | 1 | 6 | 1.071 | 0.972 | 0.9 | 0.801 | 0.72 | 0.612 | | | | | 0.47 | 5.9 | 2.33 | 39 |

FLC = Full Load Current SC = Starting Current

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 100 | 1 | QPTW100C | Inlet | 53 | 59 | 68 | 58 | 50 | 45 | 34 | 33 | 41 |
| 100 | 1 | QPTW100C | Outlet | 54 | 57 | 63 | 59 | 60 | 54 | 49 | 42 | 43 |
| 100 | 1 | QPTW100C | Breakout | 48 | 52 | 59 | 49 | 41 | 39 | 31 | 32 | 32 |
| 125 | 1 | QPTW125C | Inlet | 51 | 65 | 73 | 62 | 51 | 46 | 36 | 36 | 45 |
| 125 | 1 | QPTW125C | Outlet | 52 | 62 | 67 | 64 | 62 | 55 | 52 | 45 | 46 |
| 125 | 1 | QPTW125C | Breakout | 51 | 53 | 60 | 49 | 41 | 40 | 33 | 33 | 33 |
| 150 | 1 | QPTW150C | Inlet | 54 | 60 | 70 | 59 | 52 | 46 | 38 | 36 | 42 |
| 150 | 1 | QPTW150C | Outlet | 56 | 58 | 63 | 58 | 59 | 56 | 49 | 43 | 43 |
| 150 | 1 | QPTW150C | Breakout | 50 | 55 | 60 | 50 | 43 | 38 | 31 | 32 | 33 |
| 160 | 1 | QPTW160C | Inlet | 54 | 60 | 70 | 59 | 52 | 46 | 38 | 36 | 42 |
| 160 | 1 | QPTW160C | Outlet | 56 | 58 | 63 | 58 | 59 | 56 | 49 | 43 | 43 |
| 160 | 1 | QPTW160C | Breakout | 50 | 55 | 60 | 50 | 43 | 38 | 31 | 32 | 33 |
| 250 | 1 | QPTW250C | Inlet | 64 | 74 | 72 | 67 | 57 | 55 | 56 | 53 | 48 |
| 250 | 1 | QPTW250C | Outlet | 64 | 74 | 75 | 69 | 70 | 71 | 65 | 64 | 56 |
| 250 | 1 | QPTW250C | Breakout | 52 | 57 | 68 | 52 | 44 | 40 | 36 | 38 | 39 |
| 315 | 1 | QPTW315C | Inlet | 66 | 78 | 68 | 60 | 52 | 49 | 42 | 40 | 45 |
| 315 | 1 | QPTW315C | Outlet | 67 | 75 | 77 | 71 | 69 | 62 | 56 | 49 | 53 |
| 315 | 1 | QPTW315C | Breakout | 54 | 70 | 63 | 53 | 47 | 41 | 35 | 34 | 38 |
| 400 | 1 | QPTW400C | Inlet | 73 | 82 | 79 | 68 | 62 | 55 | 50 | 49 | 52 |
| 400 | 1 | QPTW400C | Outlet | 72 | 78 | 78 | 75 | 74 | 66 | 58 | 53 | 57 |
| 400 | 1 | QPTW400C | Breakout | 57 | 71 | 63 | 56 | 51 | 46 | 39 | 35 | 39 |

Models & Accessories

| Fan Stock Ref | Auto Changeover Controller Stock Ref | Auto Transformer Stock Ref | In-line Attenuators | | | |
|------------------|--|-------------------------------|---------------------|--------------------|--------------------|---------------------|
| | | | 300mm Stock Ref | 600mm Stock Ref | 900mm Stock Ref | 1200mm Stock Ref |
| QPTW100C | ACOB1A | SPM5020 | 83010030 | 83010060 | 83010090 | - |
| QPTW125C | ACOB1A | SPM5020 | 83012030 | 83012060 | 83012090 | - |
| QPTW150C | ACOB1A | SPM5020 | 83015030 | 83015060 | 83015090 | - |
| QPTW160C | ACOB1A | SPM5020 | | 83016060 | 83016090 | - |
| QPTW250C | ACOB1A | SPM5035 | - | 83025060 | 83025090 | 83025120 |
| QPTW315C | ACOB1A | SPM5060 | - | 83031060 | 83031090 | 83031120 |
| QPTW400C | ACOB1A | SPM5060 | - | - | 83040090 | 83040120 |

| Fan Stock Ref | Anti Vibration Mounts Stock Ref | Intumescent Fire Dampers Stock Ref | Wall Terminal Stock Ref | Roof Terminal Stock Ref |
|------------------|---------------------------------------|---|-------------------------------|----------------------------|
| | | | | |
| QPTW100C | 68MP033G | CVT100 | SA100/280 | WRC100 |
| QPTW125C | 68MP033G | CVT130 | SA125/280 | WB160 |
| QPTW150C | 68MP033G | CVT150 | SA150/280 | WB160 |
| QPTW160C | 68MP033G | - | SA150/280 | WB200 |
| QPTW250C | 68MP033G | CVT250 | SA250/280 | WB200 |
| QPTW315C | 68MP033G | CVT300 | SA315/280 | RCZ300 |
| QPTW400C | 68MP033G | - | QSA400/280 | RCZ400 |

Slimpak EC Box Fan (SLP EC)

- Ultra slim and compact
- Energy efficient EC/DC motor
- Backward curved impeller
- Acoustically treated 'O' class rated
- 'Eco Flow' computer modelled design
- Integral commissioning potentiometer
- Optional external speed control input
- Matching ancillaries



The Slimpak EC single in-line box fans incorporate an energy efficient EC motor and basic commissioning controls to offer an energy efficient basic fan system.

Manufactured from Galvanised sheet the Slimpak (SLP EC) fan units are internally treated with an 'O' class rated, BS476 part 6 & 7, acoustic foam, which offers the benefits of high sound absorption and good thermal insulation properties, in addition to self extinguishing properties and resistance to ignition.

The casing includes an inclined inlet and bellmouth entry which directs the incoming air to the impeller with minimal turbulence. The result is better air management through the unit, less noise, higher efficiency and an increased performance.

The housing is designed to be as compact as possible for ceiling or plant room applications with integral mounting points to allow quick and easy installation.

Motor / Impellers

All SLP EC units feature an energy efficient, Class 1, EC/DC external rotor motor and backward curved impeller assembly specifically chosen for performance and non-overloading characteristics. The assembly is dynamically balanced to DIN ISO 1940 Grade 6.3, duct size 500mm rated IP54, all other sizes, IP44 according to BS EN 60529. Ball bearings are greased for life. Insulation is Class 'B' (from -25°C to +60°C). All models incorporate internal electronic overload protection and soft start function.

Control

Every SLP EC unit is fitted with a purpose designed integral commissioning controller giving the ability to set the exact duty required at commissioning. Alternatively the integral potentiometer can be bypassed to allow remote speed control via an external 0-10V potentiometer. Low voltage control wiring is kept separate from the mains wiring.

Electrical

Motors are single phase 230V +/- 10% / 50/60Hz / 1ph (size 100-400mm) or 400V +/- 10% / 50/60Hz / 3ph (size 500mm).

Performance/Sound

Extensively tested to BS848 parts 1 & 2. Published dB(A) figures are free field sound pressure levels at 3m with spherical propagation at reference level of 2 x 10⁻⁵ Pa. The inlet/outlet sound power level spectra figures are dB with a reference of 10-12 watts.

Quality Assurance

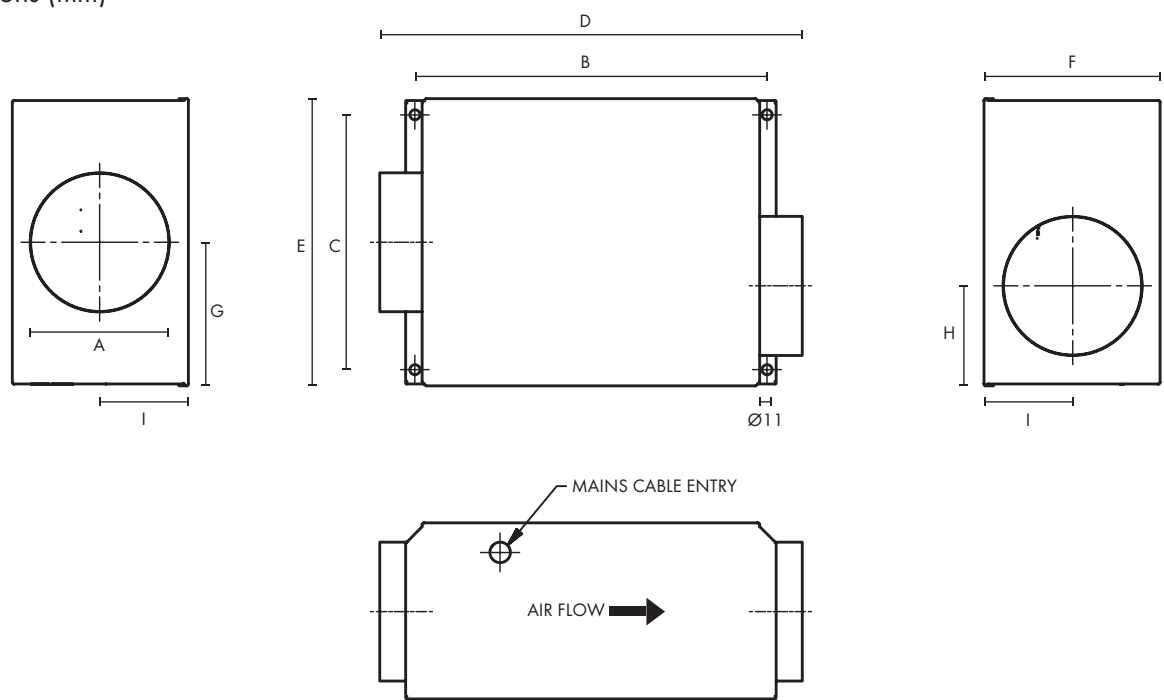
Design and manufacture are in accordance with the standard for quality management systems BS EN ISO 9001:1994.

Accessories

A full range of accessories are available with the Slimpak EC range of fans such as:

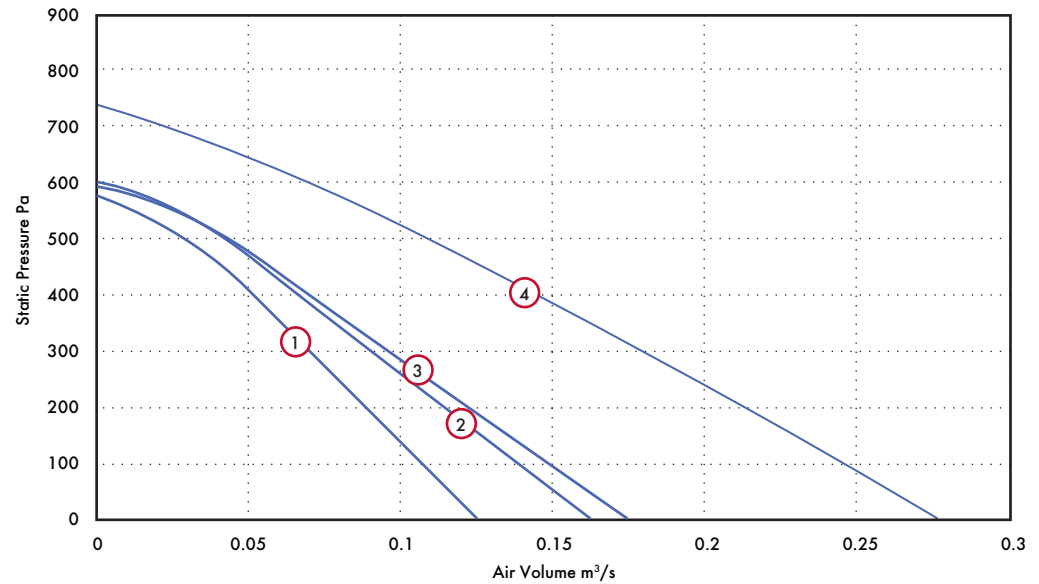
- Remote potentiometer speed controller
 - Two speed trickle boost controller
 - Pre & secondary filter cassettes
 - Electric heater batteries
 - Backdraught shutters
 - In-line attenuators
-

Dimensions (mm)



| Stock Ref | A | B | C | D | E | F | G | H | I | kg |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SLP100EC | 100 | 380 | 275 | 456 | 310 | 192 | 155 | 108 | 96 | 7.5 |
| SLP125EC | 125 | 380 | 275 | 456 | 310 | 192 | 155 | 108 | 96 | 7.5 |
| SLP150EC | 150 | 380 | 275 | 456 | 310 | 192 | 155 | 108 | 96 | 7.5 |
| SLP200EC | 200 | 435 | 330 | 511 | 364 | 287 | 182 | 122 | 143 | 12 |
| SLP250EC | 250 | 435 | 330 | 511 | 364 | 287 | 182 | 122 | 143 | 13 |
| SLP315EC | 315 | 710 | 540 | 785 | 572 | 460 | 286 | 243 | 230 | 33 |
| SLP400EC | 400 | 710 | 540 | 785 | 572 | 460 | 286 | 243 | 230 | 36 |
| SLP500EC | 500 | 898 | 735 | 975 | 770 | 577 | 385 | 326 | 286 | 58 |

Performance Guide

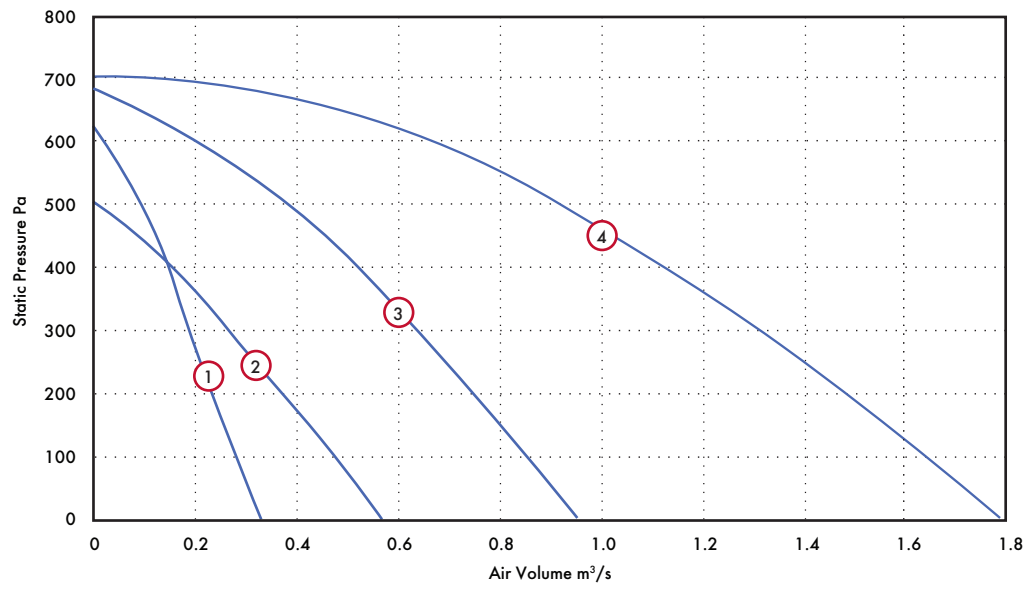


| Dia. | Motor Phase | Stock Ref | IP Rating | Curve Ref. | m³/s @ Pa | | | | | | | | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-----------|------------|-----------|------|------|------|------|------|------|------|-----------|------------|------------|
| | | | | | 0 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | | | |
| 100 | 1 | SLP100EC | IPX2 | 1 | m³/s | 0.13 | 0.11 | 0.09 | 0.07 | 0.05 | 0.03 | | 0.72 | 0.72 | 36 |
| | | | | | kW | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | | | | |
| | | | | | W/l/s | 0.64 | 0.76 | 0.92 | 1.15 | 1.54 | 2.69 | | | | |
| 125 | 1 | SLP125EC | IPX2 | 2 | m³/s | 0.16 | 0.14 | 0.11 | 0.09 | 0.07 | 0.04 | | 0.72 | 0.72 | 37 |
| | | | | | kW | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | | | | |
| | | | | | W/l/s | 0.50 | 0.58 | 0.72 | 0.92 | 1.24 | 1.95 | | | | |
| 150 | 1 | SLP150EC | IPX2 | 3 | m³/s | 0.17 | 0.15 | 0.12 | 0.10 | 0.07 | 0.04 | | 0.74 | 0.74 | 39 |
| | | | | | kW | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | | | | |
| | | | | | W/l/s | 0.46 | 0.54 | 0.66 | 0.85 | 1.17 | 1.94 | | | | |
| 200 | 1 | SLP200EC | IPX2 | 4 | m³/s | 0.28 | 0.25 | 0.21 | 0.18 | 0.14 | 0.11 | 0.07 | 0.72 | 0.72 | 42 |
| | | | | | kW | 0.15 | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.16 | | | |
| | | | | | W/l/s | 0.55 | 0.66 | 0.78 | 0.94 | 1.17 | 1.57 | 2.47 | | | |

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 100 | 1 | SLP100EC | Inlet | 57 | 62 | 68 | 71 | 58 | 52 | 47 | 41 | 48 |
| | | | Outlet | 57 | 63 | 71 | 72 | 66 | 62 | 55 | 48 | 51 |
| | | | Breakout | 64 | 63 | 60 | 55 | 47 | 46 | 44 | 38 | 36 |
| 125 | 1 | SLP125EC | Inlet | 58 | 69 | 70 | 70 | 60 | 56 | 48 | 42 | 48 |
| | | | Outlet | 58 | 70 | 71 | 73 | 70 | 67 | 60 | 52 | 54 |
| | | | Breakout | 62 | 58 | 59 | 57 | 52 | 46 | 37 | 33 | 37 |
| 150 | 1 | SLP150EC | Inlet | 59 | 68 | 72 | 76 | 64 | 58 | 51 | 48 | 53 |
| | | | Outlet | 59 | 70 | 74 | 76 | 71 | 70 | 64 | 58 | 57 |
| | | | Breakout | 62 | 61 | 59 | 60 | 54 | 49 | 43 | 37 | 39 |
| 200 | 1 | SLP200EC | Inlet | 68 | 71 | 72 | 77 | 70 | 63 | 61 | 57 | 56 |
| | | | Outlet | 70 | 72 | 69 | 80 | 76 | 76 | 72 | 65 | 62 |
| | | | Breakout | 63 | 69 | 66 | 60 | 53 | 51 | 50 | 50 | 42 |

Performance Guide



| Dia. | Motor Phase | Stock Ref | IP Rating | Curve Ref. | m³/s @ Pa | | | | | | | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-----------|------------|-----------|------|------|------|------|------|------|-----------|------------|------------|
| | | | | | 0 | 100 | 200 | 300 | 400 | 500 | 600 | | | |
| 250 | 1 | SLP250EC | IP44 | 1 | m³/s | 0.33 | 0.28 | 0.24 | 0.19 | 0.15 | 0.09 | 1.38 | 1.38 | 42 |
| | | | | | kW | 0.12 | 0.14 | 0.14 | 0.15 | 0.14 | 0.13 | | | |
| | | | | | W/l/s | 0.38 | 0.48 | 0.61 | 0.76 | 0.99 | 1.47 | | | |
| 315 | 1 | SLP315EC | IP44 | 2 | m³/s | 0.57 | 0.48 | 0.37 | 0.26 | 0.15 | | 1.36 | 1.36 | 44 |
| | | | | | kW | 0.15 | 0.16 | 0.16 | 0.16 | 0.16 | | | | |
| | | | | | W/l/s | 0.27 | 0.34 | 0.44 | 0.62 | 1.07 | | | | |
| 400 | 1 | SLP400EC | IP44 | 3 | m³/s | 0.95 | 0.85 | 0.75 | 0.64 | 0.52 | 0.38 | 2.47 | 2.47 | 48 |
| | | | | | kW | 0.40 | 0.42 | 0.44 | 0.44 | 0.44 | 0.36 | | | |
| | | | | | W/l/s | 0.42 | 0.49 | 0.58 | 0.69 | 0.84 | 1.09 | | | |
| 500 | 3 | SLP500EC | IP54 | 4 | m³/s | 1.79 | 1.63 | 1.47 | 1.31 | 1.13 | 0.93 | 2.1 | 2.1 | 49 |
| | | | | | kW | 0.68 | 0.78 | 0.86 | 0.92 | 0.95 | 0.88 | | | |
| | | | | | W/l/s | 0.38 | 0.48 | 0.58 | 0.70 | 0.84 | 1.02 | | | |

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 250 | 1 | SLP250EC | Inlet | 68 | 71 | 72 | 80 | 68 | 62 | 59 | 56 | 57 |
| | | | Outlet | 68 | 71 | 70 | 78 | 75 | 75 | 68 | 63 | 60 |
| | | | Breakout | 61 | 63 | 62 | 62 | 55 | 54 | 52 | 45 | 42 |
| 315 | 1 | SLP315EC | Inlet | 67 | 78 | 79 | 66 | 61 | 58 | 53 | 45 | 52 |
| | | | Outlet | 66 | 78 | 78 | 73 | 70 | 68 | 63 | 55 | 56 |
| | | | Breakout | 62 | 69 | 69 | 56 | 53 | 47 | 43 | 36 | 42 |
| 400 | 1 | SLP400EC | Inlet | 78 | 83 | 87 | 73 | 69 | 66 | 61 | 54 | 59 |
| | | | Outlet | 78 | 85 | 92 | 80 | 79 | 75 | 69 | 61 | 66 |
| | | | Breakout | 67 | 73 | 76 | 63 | 58 | 50 | 44 | 40 | 48 |
| 500 | 3 | SLP500EC | Inlet | 88 | 93 | 86 | 80 | 71 | 67 | 59 | 53 | 62 |
| | | | Outlet | 87 | 91 | 89 | 84 | 83 | 78 | 68 | 62 | 67 |
| | | | Breakout | 74 | 80 | 76 | 67 | 61 | 54 | 44 | 36 | 50 |

Models & Accessories



| Fan Stock Ref | Remote Speed Control Stock Ref | Trickle/Boost Controller Stock Ref |
|------------------|-----------------------------------|---------------------------------------|
| SLP100EC | 10520602 | 475775 |
| SLP125EC | 10520602 | 475775 |
| SLP150EC | 10520602 | 475775 |
| SLP200EC | 10520602 | 475775 |
| SLP250EC | 10520602 | 475775 |
| SLP315EC | 10520602 | 475775 |
| SLP400EC | 10520602 | 475775 |
| SLP500EC | 10520602 | 475775 |



Backdraught
Shutter
Stock Ref



Fast
Clamp
Stock Ref



Anti-Vibration
Mounts (set of 4)
Stock Ref

| Size | Backdraught Shutter Stock Ref | Fast Clamp Stock Ref | Anti-Vibration Mounts (set of 4) Stock Ref |
|------|-------------------------------------|----------------------------|--|
| 100 | 10542100 | 10540100 | 68MP033G |
| 125 | 10542125 | 10540125 | 68MP033G |
| 150 | 10542150 | 10540150 | 68MP033G |
| 200 | 10542200 | 10540200 | 68MP033G |
| 250 | 10542250 | 10540250 | 68MP033G |
| 315 | 10542315 | 10540315 | 68MP033G |
| 400 | 10542400 | 10540400 | 68MP033G |
| 500 | - | - | 68MP033G |



Duct Attenuator

| Size | 300mm Stock Ref | 600mm Stock Ref | 900mm Stock Ref | 1200mm Stock Ref |
|------|--------------------|--------------------|--------------------|---------------------|
| 100 | 10534100 | 10535100 | 10536100 | - |
| 125 | 10534125 | 10535125 | 10536125 | - |
| 150 | 10534150 | 10535150 | 10536150 | - |
| 200 | - | 10535200 | 10536200 | 10537200 |
| 250 | - | 10535250 | 10536250 | 10537250 |
| 315 | - | 10535315 | 10536315 | 10537315 |
| 400 | - | 10535400 | 10536400 | 10537400 |
| 500 | - | - | 10536500 | - |

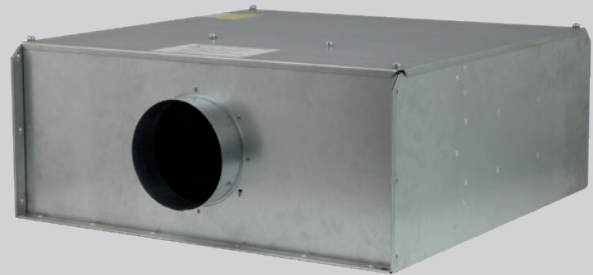
Models & Accessories



| | Duct Air Heater | Filter Cassette | Bag Filter Cassette | Flexible Connections |
|------|--------------------------|--------------------|------------------------|-------------------------|
| Size | Stock Ref | Stock Ref | Stock Ref | Stock Ref |
| 100 | 10531100T1 | 10532100 | 10533100 | FLX100 |
| 125 | 10531125T1 | 10532125 | 10533125 | FLX125 |
| 150 | 10531150T1 | 10532150 | 10533150 | FLX150 |
| 200 | 10531200T1 | 10532200 | 10533200 | FLX200 |
| 250 | 10531250T1 | 10532250 | 10533250 | FLX250 |
| 315 | 10531315T1 10531315T3 | 10532315 | 10533315 | FLX315 |
| 400 | 10531400T3 | 10532400 | 10533400 | FLX400 |
| 500 | 10531500T3 | 10532500A | 10533500 | FLX500 |

Slimpak EC Box Fan (SLPT EC)

- Compact low profile design
- Duct Sizes 100 – 500mm
- Performance - Airflow 0.01 to 1.2m³/s, Pressure up to 650Pa
- Latest energy saving EC/DC motors
- Internal mounting IPX2
- Manufactured controlled to BS EN ISO 9001
- Performance tested to BS848 Part 1 & 2



The Slimpak EC twin in-line duct fans incorporate energy efficient EC motors and basic commissioning controls to offer an energy efficient twin extract fan system.

Manufactured from prime quality galvanised sheet steel the Slimpak (SLPT EC) twin fan units are internally treated with an 'O' class rated, BS476 part 6 & 7, acoustic foam, which offers the benefits of high sound absorption, good thermal insulation properties in addition to self extinguishing properties and resistant to ignition.

The housing is designed to be as compact as possible for concealed false ceiling applications yet is suitable for ceiling or floor mounting, non-return dampers can be easily rotated on site to suit the application.

Motor / Impellers

All SLPT EC units feature a low energy, Class 1, EC/DC external rotor motor and backward curved impeller assembly specifically chosen for performance and non-overloading characteristics. The assembly is dynamically balanced to DIN ISO 1940 Grade 6.3, duct size 500mm rated IP54, all other sizes, IP44 according to BS EN 60529. Ball bearings are greased for life. Insulation is Class 'B' (from -25°C to +60°C).

All models incorporate internal electronic overload protection and soft start function.

Electrical

Every SLPT EC unit is fitted with a purpose designed common integral commissioning controller giving the ability to set the exact duty required at commissioning. Alternatively the integral potentiometer can be bypassed to allow remote speed control via an external 0-10V potentiometer. Low voltage wiring is kept separate from the mains wiring.

Electrical

Motors are single phase 230V +/- 10% / 50/60Hz / 1ph (size 100-400mm) or 400V +/- 10% / 50/60Hz / 3ph (size 500mm), (4 wire systems only).

Performance/Sound

Extensively tested to BS848 parts 1 & 2. Published dB(A) figures are free field sound pressure levels at 3m with spherical propagation at reference level of 2x10⁻⁵ Pa. The inlet/outlet sound power level spectra figures are dB with a reference of 10-12 watts.

Quality Assurance

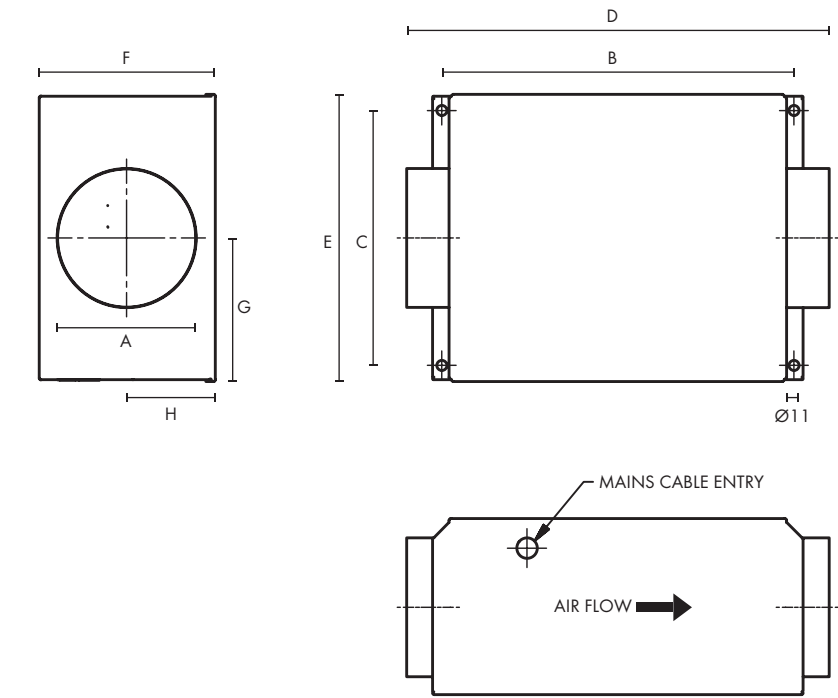
Design and manufacture are in accordance with the standard for quality management systems BS EN ISO 9001:1994.

Accessories

A full range of accessories are available with the Slimpak EC range of fans such as:

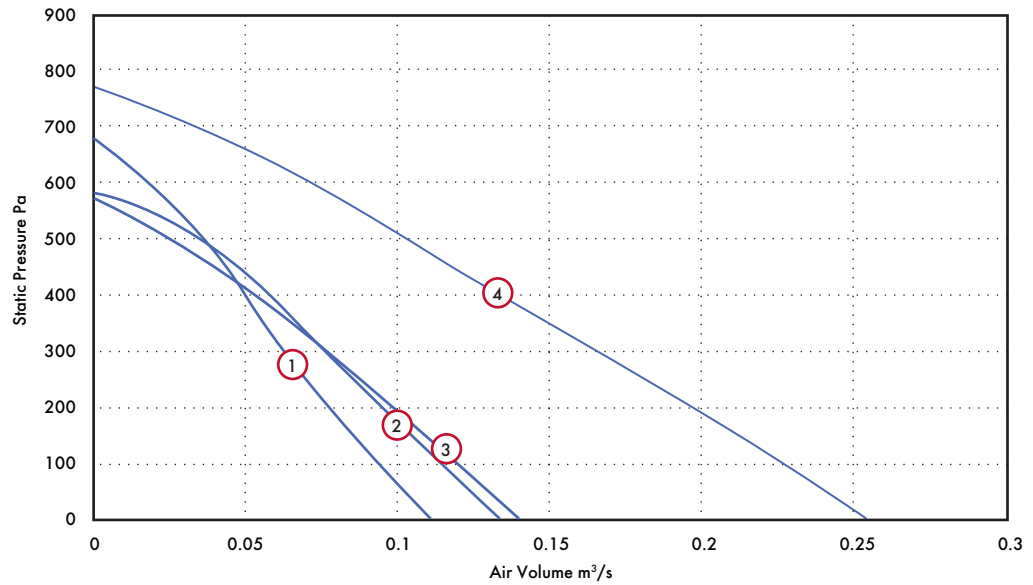
- Auto changeover controller designed for EC motors
 - Two speed trickle boost controller
 - Pre & secondary filter cassettes
 - Electric heater batteries
 - Backdraught shutters
 - In-line attenuators
-

Dimensions (mm)



| Stock Ref | A | B | C | D | E | F | G | H | kg |
|-----------|-----|------|------|------|------|-----|-----|-----|-----|
| SLPT100EC | 100 | 610 | 591 | 705 | 622 | 256 | 311 | 128 | 26 |
| SLPT125EC | 125 | 610 | 591 | 705 | 622 | 256 | 311 | 128 | 26 |
| SLPT150EC | 150 | 610 | 591 | 705 | 622 | 256 | 311 | 128 | 26 |
| SLPT200EC | 200 | 801 | 703 | 896 | 734 | 343 | 367 | 172 | 39 |
| SLPT250EC | 250 | 925 | 798 | 1020 | 829 | 354 | 415 | 177 | 48 |
| SLPT315EC | 315 | 1255 | 1145 | 1353 | 1176 | 536 | 588 | 268 | 88 |
| SLPT400EC | 400 | 1255 | 1145 | 1353 | 1176 | 536 | 588 | 268 | 90 |
| SLPT500EC | 500 | 1492 | 1533 | 1590 | 1564 | 675 | 782 | 338 | 175 |

Performance Guide

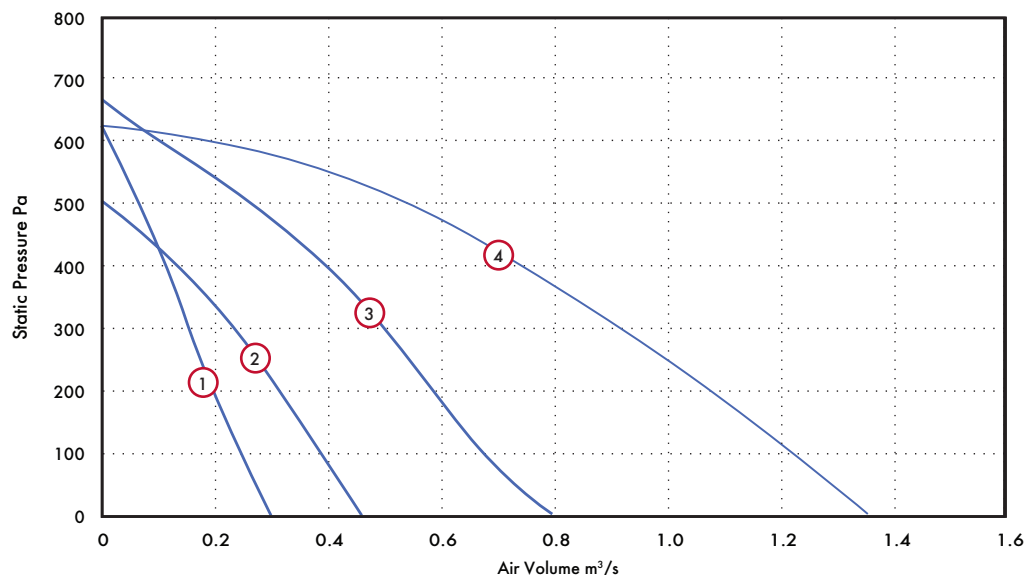


| Dia. | Motor Phase | Stock Ref | IP Rating | Curve Ref. | m³/s @ Pa | | | | | | | | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-----------|------------|-----------|------|------|------|------|------|------|------|-----------|------------|------------|
| | | | | | 0 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | | | |
| 100 | 1 | SLPT100EC | IP44 | 1 | m³/s | 0.11 | 0.09 | 0.08 | 0.06 | 0.05 | 0.04 | 0.02 | 0.69 | 0.69 | 36 |
| | | | | | kW | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | | | |
| | | | | | W/l/s | 0.74 | 0.89 | 1.09 | 1.34 | 1.70 | 2.35 | 4.40 | | | |
| 125 | 1 | SLPT125EC | IP44 | 2 | m³/s | 0.13 | 0.11 | 0.09 | 0.08 | 0.06 | 0.03 | | 0.72 | 0.72 | 39 |
| | | | | | kW | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | | | | |
| | | | | | W/l/s | 0.61 | 0.72 | 0.87 | 1.08 | 1.42 | 2.24 | | | | |
| 150 | 1 | SLPT150EC | IP44 | 3 | m³/s | 0.14 | 0.12 | 0.10 | 0.08 | 0.05 | 0.02 | | 0.71 | 0.71 | 39 |
| | | | | | kW | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | | | | |
| | | | | | W/l/s | 0.58 | 0.70 | 0.84 | 1.07 | 1.54 | 3.09 | | | | |
| 200 | 1 | SLPT200EC | IP44 | 4 | m³/s | 0.25 | 0.23 | 0.20 | 0.17 | 0.13 | 0.10 | 0.07 | 1.4 | 1.4 | 42 |
| | | | | | kW | 0.16 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.16 | | | |
| | | | | | W/l/s | 0.63 | 0.72 | 0.84 | 1.01 | 1.26 | 1.64 | 4.37 | | | |

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 100 | 1 | SLPT100EC | Inlet | 55 | 63 | 56 | 53 | 49 | 45 | 38 | 34 | 35 |
| | | | Outlet | 53 | 65 | 59 | 58 | 54 | 55 | 48 | 39 | 40 |
| | | | Breakout | 65 | 69 | 61 | 50 | 42 | 40 | 37 | 36 | 36 |
| 125 | 1 | SLPT125EC | Inlet | 52 | 66 | 66 | 56 | 51 | 47 | 38 | 39 | 40 |
| | | | Outlet | 54 | 69 | 64 | 61 | 57 | 57 | 52 | 43 | 43 |
| | | | Breakout | 59 | 72 | 64 | 52 | 41 | 36 | 35 | 36 | 39 |
| 150 | 1 | SLPT150EC | Inlet | 58 | 66 | 66 | 59 | 50 | 46 | 39 | 36 | 40 |
| | | | Outlet | 60 | 71 | 67 | 64 | 61 | 61 | 55 | 49 | 47 |
| | | | Breakout | 60 | 63 | 62 | 59 | 51 | 47 | 42 | 41 | 39 |
| 200 | 1 | SLPT200EC | Inlet | 58 | 70 | 63 | 68 | 62 | 55 | 51 | 49 | 47 |
| | | | Outlet | 68 | 75 | 65 | 80 | 67 | 67 | 64 | 60 | 58 |
| | | | Breakout | 67 | 69 | 64 | 63 | 51 | 45 | 38 | 40 | 42 |

Performance Guide



| Dia. | Motor Phase | Stock Ref | IP Rating | Curve Ref. | m³/s @ Pa | | | | | | | | S.C. Amps | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-----------|------------|-----------|------|------|------|------|------|------|-------|-----------|------------|------------|
| | | | | | 0 | 100 | 200 | 300 | 400 | 500 | 600 | | | | |
| 250 | 1 | SLPT250EC | IP44 | 1 | m³/s | 0.30 | 0.25 | 0.20 | 0.15 | 0.11 | 0.07 | 0.01 | 1.4 | 1.4 | 39 |
| | | | | | kW | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.12 | | | |
| | | | | | W/l/s | 0.47 | 0.58 | 0.69 | 0.88 | 1.25 | 2.13 | 17.44 | | | |
| 315 | 1 | SLPT315EC | IP44 | 2 | m³/s | 0.46 | 0.39 | 0.32 | 0.24 | 0.14 | | | 1.4 | 1.4 | 43 |
| | | | | | kW | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | | | | | |
| | | | | | W/l/s | 0.30 | 0.36 | 0.46 | 0.63 | 1.06 | | | | | |
| 400 | 1 | SLPT400EC | IP44 | 3 | m³/s | 0.80 | 0.68 | 0.59 | 0.50 | 0.40 | 0.27 | 0.10 | 2.86 | 2.86 | 48 |
| | | | | | kW | 0.39 | 0.38 | 0.37 | 0.36 | 0.37 | 0.39 | 0.39 | | | |
| | | | | | W/l/s | 0.49 | 0.56 | 0.63 | 0.73 | 0.92 | 1.46 | 3.90 | | | |
| 500 | 3 | SLPT500EC | IP54 | 4 | m³/s | 1.37 | 1.24 | 1.09 | 0.92 | 0.75 | 0.57 | 0.35 | 2.1 | 2.1 | 46 |
| | | | | | kW | 0.61 | 0.67 | 0.71 | 0.73 | 0.73 | 0.71 | 0.66 | | | |
| | | | | | W/l/s | 0.45 | 0.54 | 0.66 | 0.79 | 0.97 | 1.25 | 1.88 | | | |

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Spectrum | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|----------|----|-----|-----|-----|----|----|----|----|------------|
| 250 | 1 | SLPT250EC | Inlet | 64 | 68 | 61 | 69 | 60 | 50 | 50 | 47 | 47 |
| | | | Outlet | 63 | 69 | 62 | 78 | 66 | 67 | 61 | 57 | 56 |
| | | | Breakout | 61 | 64 | 61 | 60 | 49 | 42 | 36 | 35 | 39 |
| 315 | 1 | SLPT315EC | Inlet | 63 | 74 | 65 | 59 | 52 | 46 | 43 | 40 | 42 |
| | | | Outlet | 66 | 76 | 68 | 69 | 63 | 61 | 53 | 45 | 49 |
| | | | Breakout | 66 | 72 | 71 | 51 | 44 | 38 | 36 | 32 | 43 |
| 400 | 1 | SLPT400EC | Inlet | 73 | 82 | 73 | 66 | 62 | 53 | 50 | 45 | 50 |
| | | | Outlet | 75 | 85 | 78 | 77 | 73 | 69 | 63 | 55 | 58 |
| | | | Breakout | 78 | 77 | 75 | 61 | 55 | 48 | 46 | 41 | 48 |
| 500 | 3 | SLPT500EC | Inlet | 88 | 93 | 86 | 80 | 71 | 67 | 59 | 53 | 62 |
| | | | Outlet | 87 | 91 | 89 | 84 | 83 | 78 | 68 | 62 | 67 |
| | | | Breakout | 74 | 80 | 76 | 67 | 61 | 54 | 44 | 36 | 50 |

Models & Accessories



EC Fan Changeover
Controller
Stock Ref

| Fan Stock Ref | Trickle/Boost Controller Stock Ref | EC Fan Changeover Controller Stock Ref |
|------------------|---------------------------------------|--|
| SLPT100EC | 475775 | 476367 |
| SLPT125EC | 475775 | 476367 |
| SLPT150EC | 475775 | 476367 |
| SLPT200EC | 475775 | 476367 |
| SLPT250EC | 475775 | 476367 |
| SLPT315EC | 475775 | 476367 |
| SLPT400EC | 475775 | 476367 |
| SLPT500EC | 475775 | 476367 |



Backdraught
Shutter
Stock Ref



Fast
Clamp
Stock Ref



Anti-Vibration
Mounts (set of 4)
Stock Ref

| Size | Backdraught Shutter Stock Ref | Fast Clamp Stock Ref | Anti-Vibration Mounts (set of 4) Stock Ref |
|------|-------------------------------------|----------------------------|--|
| 100 | 10542100 | 10540100 | 68MP033G |
| 125 | 10542125 | 10540125 | 68MP033G |
| 150 | 10542150 | 10540150 | 68MP033G |
| 200 | 10542200 | 10540200 | 68MP033G |
| 250 | 10542250 | 10540250 | 68MP033G |
| 315 | 10542315 | 10540315 | 68MP033G |
| 400 | 10542400 | 10540400 | 68MP033G |
| 500 | - | - | 68MP033G |



Duct Attenuator

| Size | 300mm Stock Ref | 600mm Stock Ref | 900mm Stock Ref | 1200mm Stock Ref |
|------|--------------------|--------------------|--------------------|---------------------|
| 100 | 10534100 | 10535100 | 10536100 | - |
| 125 | 10534125 | 10535125 | 10536125 | - |
| 150 | 10534150 | 10535150 | 10536150 | - |
| 200 | - | 10535200 | 10536200 | 10537200 |
| 250 | - | 10535250 | 10536250 | 10537250 |
| 315 | - | 10535315 | 10536315 | 10537315 |
| 400 | - | 10535400 | 10536400 | 10537400 |
| 500 | - | - | 10536500 | - |

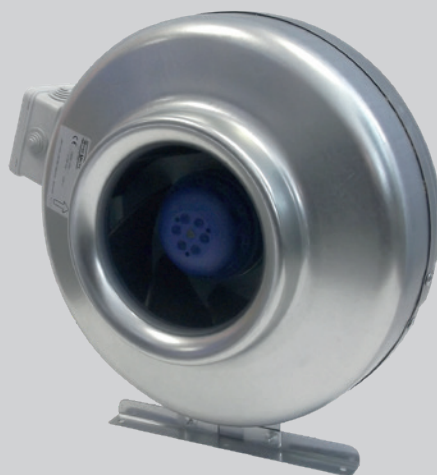
Models & Accessories



| | Duct Air Heater | Filter Cassette | Bag Filter Cassette | Flexible Connections |
|------|--------------------------|--------------------|------------------------|-------------------------|
| Size | Stock Ref | Stock Ref | Stock Ref | Stock Ref |
| 100 | 10531100T1 | 10532100 | 10533100 | FLX100 |
| 125 | 10531125T1 | 10532125 | 10533125 | FLX125 |
| 150 | 10531150T1 | 10532150 | 10533150 | FLX150 |
| 200 | 10531200T1 | 10532200 | 10533200 | FLX200 |
| 250 | 10531250T1 | 10532250 | 10533250 | FLX250 |
| 315 | 10531315T1 10531315T3 | 10532315 | 10533315 | FLX315 |
| 400 | 10531400T3 | 10532400 | 10533400 | FLX400 |
| 500 | 10531500T3 | 10532500A | 10533500 | FLX500 |

EuroSeries® (SDX)

- Available in sizes 100 to 315
- 200 and 250 sizes also available as high performance
- Motor Insulation Class B, protected to IP44
- Operating Temperatures from -25°C up to +60°C
- All units suitable for speed control
- Quality Assurance to BS EN ISO 9001:1994
- Performance tested to BS848 Part 1 1980
- 2 Year Warranty



The SDX Euroflow in-line centrifugal duct fans are designed around an efficient backward curved centrifugal impeller and external rotor motor to ensure a compact design, high performance and low sound levels.

The in-line fan casing is constructed from pressed steel and incorporates an aerodynamically designed airflow guide vane, ensuring maximum performance from the unit whilst maintaining minimum noise levels. All models are supplied with a simple mounting foot for ease of installation.

The SDX range is available in eight model sizes: 100, 125, 150, 200, 250 & 315mm diameter as standard performance and sizes 200 and 250 also available as a high performance in-line centrifugal duct fan. The range provides a performance up to 0.372m³/s with a maximum pressure development of 500 Pa.

The SDX range is suitable for the extract of clean air only. It is not suitable for extracting or transporting grinding dust, soot, explosive or other aggressive gases etc.

Impellers

The impellers are aerodynamically designed centrifugal backward curved type, manufactured by injection moulding of a polypropylene resin. The motor and impeller is factory matched, statically and dynamically balanced in two planes to ISO 1940, Grade G 6.3.

Motors

All units are fitted with motors protected to IP44, insulation Class B and are suitable for temperatures ranging from -25°C to +60°C with humidity levels of up to 95% RH ensuring reliable operation. All sizes are for a 220V/1/50Hz electrical supply and incorporate a manual reset thermal protection device.

Terminal Box

An IP54 terminal box fitted to the casing with multiple cable entry positions.

Performance

The fan performance is in accordance with tests to BS848 Part 1 1980, with the fan sound levels measured in a reverberant chamber in accordance with BS848 Part 2 1985.

Quality Assurance

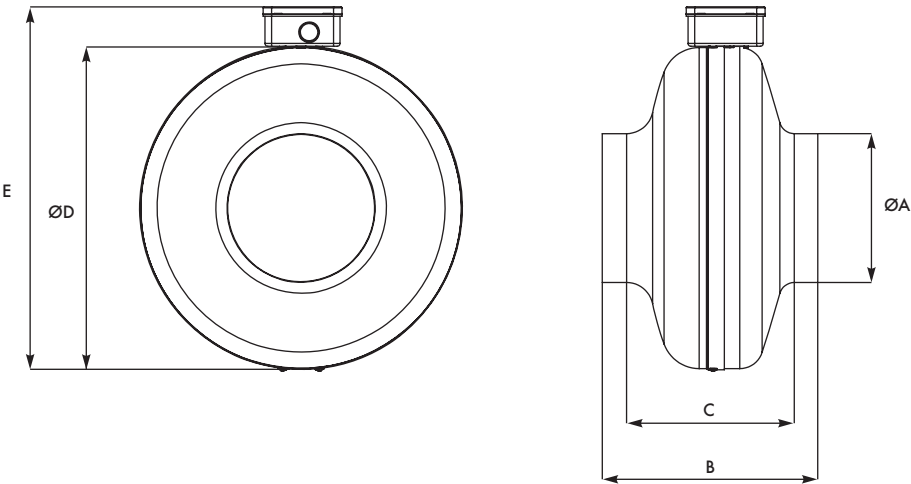
Design and manufacture is in accordance with the standard for quality management systems BS EN ISO 9001:1994.

Accessories

A full range of accessories are available with the Euroflow in-line centrifugal duct fans such as:

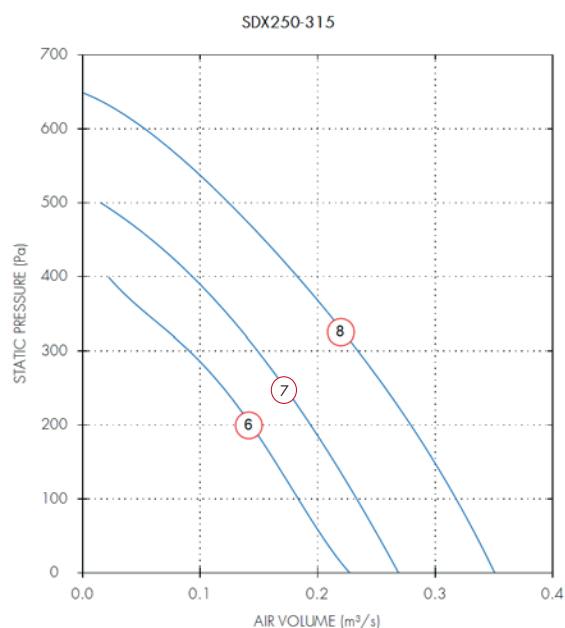
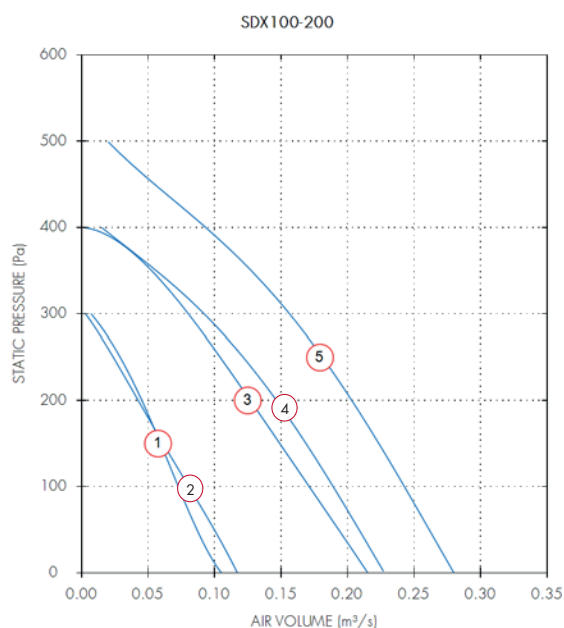
- Electronic Speed Controllers
 - Auto Transformer Speed Controllers
 - D.O.L. Starter and Overload
 - Pre & Secondary Filter Cassettes
 - Electric Heater Batteries
 - In-Line Attenuators
 - Backdraught Shutters
 - Fast Clamps
 - Flexible Ducting
 - Wall Terminals
 - Roof Terminals
-

Dimensions (mm)



| Unit Size | ØA | B | C | ØD | E | kg |
|-----------|-----|-----|-----|-----|-----|-----|
| SDX100 | 100 | 189 | 152 | 244 | 287 | 3 |
| SDX125 | 125 | 182 | 143 | 243 | 286 | 3 |
| SDX150 | 150 | 217 | 166 | 344 | 387 | 3 |
| SDX200 | 200 | 219 | 167 | 344 | 387 | 4 |
| SDX200H | 200 | 231 | 179 | 344 | 387 | 4.7 |
| SDX250 | 250 | 223 | 167 | 344 | 387 | 4 |
| SDX250H | 250 | 230 | 167 | 344 | 387 | 4.7 |
| SDX315 | 315 | 243 | 175 | 402 | 444 | 5.6 |

Performance Guide



| Dia. | Motor Phase | Stock Ref | r.p.m | IP Rating | Curve Ref. | 0 | 100 | 200 | m³/s @ Pa | | | | | Motor kW | F.L.C Amps | dB(A) @ 3m |
|------|-------------|-----------|-------|-----------|------------|------|------|------|-----------|------|------|------|--|----------|------------|------------|
| 100 | 1 | SDX100C | 2800 | IP44 | 1 | 0.11 | 0.07 | 0.05 | | | | | | 0.07 | 0.31 | 26 |
| 125 | 1 | SDX125C | 2800 | IP44 | 2 | 0.12 | 0.08 | 0.04 | | | | | | 0.08 | 0.31 | 24 |
| 150 | 1 | SDX150C | 2800 | IP44 | 3 | 0.22 | 0.17 | 0.13 | 0.08 | | | | | 0.1 | 0.44 | 35 |
| 200 | 1 | SDX200C | 2600 | IP44 | 4 | 0.23 | 0.19 | 0.15 | 0.09 | | | | | 0.11 | 0.45 | 34 |
| 200 | 1 | SDX200HC | 2660 | IP44 | 5 | 0.28 | 0.24 | 0.2 | 0.16 | 0.09 | | | | 0.14 | 0.56 | 38 |
| 250 | 1 | SDX250C | 2600 | IP44 | 6 | 0.23 | 0.18 | 0.14 | 0.09 | | | | | 0.11 | 0.45 | 31 |
| 250 | 1 | SDX250HC | 2460 | IP44 | 7 | 0.27 | 0.23 | 0.19 | 0.15 | 0.09 | 0.02 | | | 0.13 | 0.56 | 34 |
| 315 | 1 | SDX315C | 2567 | IP44 | 8 | 0.35 | 0.32 | 0.28 | 0.23 | 0.18 | 0.12 | 0.05 | | 0.22 | 0.96 | 36 |

Sound Power Level Spectra dB (ref 10⁻¹² Watts)

| Dia. | Motor Phase | Stock Ref | Spectrum | 125 | 250 | 500 | 1k | 2k | 4k | 8k | dB(A) @ 3m |
|------|-------------|-----------|----------|-----|-----|-----|----|----|----|----|------------|
| 100 | 1 | SDX100C | Inlet | 53 | 58 | 60 | 66 | 65 | 58 | 47 | 49 |
| 100 | 1 | SDX100C | Outlet | 54 | 60 | 61 | 67 | 66 | 58 | 48 | 50 |
| 100 | 1 | SDX100C | Breakout | 34 | 58 | 44 | 55 | 54 | 47 | 37 | 39 |
| 125 | 1 | SDX125C | Inlet | 50 | 54 | 63 | 65 | 64 | 56 | 47 | 48 |
| 125 | 1 | SDX125C | Outlet | 49 | 53 | 61 | 64 | 63 | 55 | 45 | 47 |
| 125 | 1 | SDX125C | Breakout | 28 | 29 | 45 | 53 | 52 | 44 | 35 | 36 |
| 150 | 1 | SDX150C | Inlet | 51 | 66 | 67 | 71 | 62 | 61 | 53 | 52 |
| 150 | 1 | SDX150C | Outlet | 52 | 67 | 68 | 72 | 64 | 63 | 50 | 54 |
| 150 | 1 | SDX150C | Breakout | 30 | 49 | 51 | 60 | 52 | 50 | 36 | 41 |
| 200 | 1 | SDX200C | Inlet | 46 | 53 | 62 | 66 | 63 | 64 | 54 | 50 |
| 200 | 1 | SDX200C | Outlet | 45 | 54 | 61 | 68 | 64 | 65 | 53 | 51 |
| 200 | 1 | SDX200C | Breakout | 22 | 24 | 41 | 49 | 53 | 43 | 40 | 35 |
| 200 | 1 | SDX200HC | Inlet | 53 | 60 | 66 | 69 | 66 | 65 | 63 | 53 |
| 200 | 1 | SDX200HC | Outlet | 54 | 62 | 65 | 70 | 67 | 67 | 63 | 54 |
| 200 | 1 | SDX200HC | Breakout | 25 | 35 | 46 | 53 | 55 | 47 | 45 | 38 |
| 250 | 1 | SDX250C | Inlet | 41 | 52 | 61 | 66 | 66 | 64 | 56 | 51 |
| 250 | 1 | SDX250C | Outlet | 43 | 53 | 60 | 68 | 67 | 65 | 57 | 52 |
| 250 | 1 | SDX250C | Breakout | 24 | 30 | 38 | 48 | 47 | 45 | 40 | 32 |
| 250 | 1 | SDX250HC | Inlet | 54 | 62 | 67 | 69 | 67 | 67 | 65 | 54 |
| 250 | 1 | SDX250HC | Outlet | 55 | 63 | 66 | 70 | 68 | 67 | 65 | 54 |
| 250 | 1 | SDX250HC | Breakout | 33 | 38 | 47 | 50 | 48 | 47 | 46 | 34 |
| 315 | 1 | SDX315C | Inlet | 50 | 59 | 67 | 68 | 66 | 65 | 64 | 52 |
| 315 | 1 | SDX315C | Outlet | 51 | 60 | 66 | 69 | 67 | 66 | 65 | 53 |
| 315 | 1 | SDX315C | Breakout | 33 | 38 | 45 | 48 | 47 | 45 | 43 | 32 |

Models & Accessories

| Fan | Speed Controller | | Starter (requires Overload) | Overload |
|-----------|------------------|-----------|-----------------------------|-----------|
| Stock Ref | Stock Ref | Stock Ref | Stock Ref | Stock Ref |
| SDX100C | SC5001 | SPM5020 | 444744 | 444696 |
| SDX125C | SC5001 | SPM5020 | 444744 | 444696 |
| SDX150C | SC5001 | SPM5020 | 444744 | 444697 |
| SDX200C | SC5001 | SPM5020 | 444744 | 444698 |
| SDX200HC | SC5001 | SPM5020 | 444744 | 444699 |
| SDX250C | SC5001 | SPM5020 | 444744 | 444698 |
| SDX250HC | SC5001 | SPM5020 | 444744 | 444699 |
| SDX315C | SC5001 | SPM5020 | 444744 | 444699 |

| In-Line Attenuators | | | | |
|---------------------|-----------|-----------|-----------|-----------|
| | 300mm | 600mm | 900mm | 1200mm |
| Dia | Stock Ref | Stock Ref | Stock Ref | Stock Ref |
| 100 | 83010030 | 83010060 | 83010090 | - |
| 125 | 83012030 | 83012060 | 83012090 | - |
| 150 | 83015030 | 83015060 | 83015090 | - |
| 200 | - | 83020060 | 83020090 | 83020120 |
| 250 | - | 83025060 | 83025090 | 83025120 |
| 315 | - | 83031060 | 83031090 | 83031120 |

| Fan | Wall Terminal | Wall Terminal | Electric Heaters | Panel Filters |
|-----------|---------------|---------------|------------------|---------------|
| Stock Ref | Stock Ref | Stock Ref | Stock Ref | Stock Ref |
| 100 | SA100/280 | SA100/80 | 10531100T1 | QPF100A |
| 125 | SA125/280 | SA125/80 | 10531125T1 | QPF125A |
| 150 | SA150/280 | SA150/80 | 10531150T1 | QPF150A |
| 200 | SA200/280 | SA200/80 | 10531200T1 | QPF200A |
| 250 | SA250/280 | SA250/80 | 10531250T1 | QPF250A |
| 315 | SA315/280 | SA315/80 | 10531315T1 | QPF315A |

| Fan | Bag Filters | Roof Terminal | Louvre Shutter |
|-----------|-------------|---------------|----------------|
| Stock Ref | Stock Ref | Stock Ref | Stock Ref |
| 100 | QPFB100A | WRC100 | LS250 |
| 125 | QPFB125A | WB160 | LS250 |
| 150 | QPFB150A | WB160 | LS250 |
| 200 | QPFB200A | WB200 | LS250 |
| 250 | QPFB250A | RCZ300 | LS250 |
| 315 | QPFB315A | RCZ300 | LS315 |

Speed Controllers

Single Phase SPM (Auto-Transformer)



- Single Phase, 5 step auto-transformer speed controller
- Low motor noise - no magnetic hum
- ON/OFF Switch

| Unit | Max Peak | Dimensions | Weight | Damper |
|-----------|--------------|-----------------|--------|-----------|
| Stock Ref | Load Current | H x W x D (mm) | kg | Enclosure |
| SPM5020 | 2.0 | 230 x 168 x 118 | 2.2 | IP54 |
| SPM5035 | 3.5 | 230 x 168 x 118 | 4.6 | IP54 |
| SPM5060 | 6.0 | 230 x 166 x 118 | 5.0 | IP50 |
| SPM5075 | 7.5 | 284 x 240 x 132 | 6.2 | IP54 |
| SPM5090 | 9.0 | 316 x 270 x 168 | 10.5 | IP54 |
| SPM5140 | 14.0 | 316 x 270 x 168 | 16.5 | IP54 |

Stock Ref

SPM5020
SPM5035
SPM5060
SPM5075
SPM5090
SPM5140

Single Phase RTRE (Enhanced Auto-Transformer)



- Single Phase 5 step auto-transformer speed controller
- Separate starter not required when used with HOT SPOT protected fans
- Low motor noise - no magnetic hum
- Additional terminals to allow connection of remote switching device
- Allows operation via BMS interface
- Additional terminals to allow connection of remote anti-freezing thermostat

| Unit | Max Peak | Dimensions | Weight | Damper |
|-----------|--------------|-----------------|--------|--------|
| Stock Ref | Load Current | H x W x D (mm) | kg | IP |
| RTRE20 | 2.0 amps | 230 x 166 x 118 | 2.3 | IP54 |
| RTRE35 | 3.5 amps | 230 x 166 x 118 | 3.6 | IP54 |
| RTRE60 | 6.0 amps | 230 x 166 x 118 | 5.1 | IP54 |
| RTRE90 | 9.0 amps | 284 x 240 x 132 | 10.6 | IP54 |

Stock Ref

RTRE20
RTRE35
RTRE60
RTRE90

Three Phase RDTK (Auto - Transformer)



- Three phase 5 step auto - transformer speed controller
- Separate starter not required when used with HOT SPOT protected fans
- Low motor noise - no magnetic hum
- Compact fire retardant surface mounting enclosure
- Additional terminals to allow connection of remote switching device
- Additional terminals to allow connection of remote anti-freezing thermostat

| Unit | Max Peak | Dimensions | Weight | Damper | |
|-----------|--------------|-----------------|--------|-----------|------------|
| Stock Ref | Load Current | H x W x D (mm) | kg | Enclosure | Connection |
| RDTK10 | 1.0 amps | 284 x 240 x 132 | 4.7 | IP54 | Yes |
| RDTK20 | 2.0 amps | 284 x 240 x 132 | 7.4 | IP54 | Yes |
| RDTK40 | 4.0 amps | 316 x 270 x 168 | 12.9 | IP21 | No |
| RDTK70 | 7.0 amps | 324 x 270 x 168 | 15.6 | IP21 | Yes |
| RD14 | 14.0 amps | 295 x 400 x 170 | 30.0 | IP21 | No |

Stock Ref
RDTK10
RDTK20
RDTK40
RDTK70
RD14

Starters & Overloads

- Suitable for all models
- Push button Start/Stop
- 240V contactor coil for single phase applications and three phase supplies where a neutral is present
- 415V contactor coil for three phase supplies where a neutral is not present or required
- Protection is given by an overload relay which is selected to match the load of the fan
- Enclosures are protected to IP55



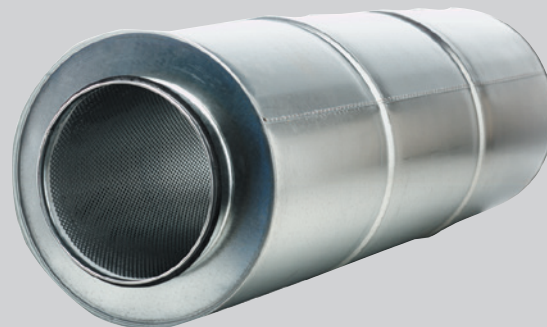
| Stock Ref | Starters | DOL Rating (Amps) | Star Delta Rating (Amps) | Dimensions H x W x D | Weight kg |
|-----------|-------------------------------|----------------------|-----------------------------|-------------------------|--------------|
| 444744 | DOL Starter 1 Phase 240V 12A | 12 | - | 174x104x134 | 3.0 |
| 444745 | DOL Starter 1 Phase 240V 25A | 25 | - | 174x104x134 | 1.5 |
| 444746 | DOL Starter 1 Phase 240V 32A | 32 | - | 184x184x149 | 2.5 |
| 444747 | DOL Starter 3 Phase 415V 12A | 12 | - | 174x104x134 | 3.0 |
| 444748 | DOL Starter 3 Phase 415V 25A | 25 | - | 174x104x134 | 3.5 |
| 444749 | DOL Starter 3 Phase 415V 32A | 32 | - | 184x184x149 | 2.5 |
| 444750 | DOL Starter 3 Phase 415 V 50A | 50 | - | 305x285x159 | 7.0 |
| 444842 | Star Delta Starter 21A | - | 21 | 184x284x149 | 3.5 |
| 444843 | Star Delta Starter 30A | - | 30 | 184x284x149 | 3.5 |

| Stock Ref | Overloads | DOL Rating (Amps) | Star Delta Rating (Amps) |
|-----------|--------------------|----------------------|-----------------------------|
| 444696 | OVERLOAD 0.16-0.25 | 0.16-0.25 | - |
| 444697 | OVERLOAD 0.25-0.40 | 0.25-0.40 | - |
| 444698 | OVERLOAD 0.40-0.63 | 0.40-0.63 | - |
| 444699 | OVERLOAD 0.63-1.0 | 0.63-1.0 | - |
| 444700 | OVERLOAD 1.0-1.6 | 1.0-1.6 | - |
| 444701 | OVERLOAD 1.6-2.5 | 1.6-2.5 | 2.7-4.3 |
| 444702 | OVERLOAD 2.5-4.0 | 2.5-4.0 | 4.3-6.9 |
| 444703 | OVERLOAD 4.0-6.0 | 4.0-6.0 | 6.9-10 |
| 444704 | OVERLOAD 5.5-8.0 | 5.5-8.0 | 9.5-13.8 |
| 444705 | OVERLOAD 7-10 | 7-10 | 12-17 |
| 444706 | OVERLOAD 10-13 | 10-13 | 17-22 |
| 444707 | OVERLOAD 13-18 | 13-18 | 22-31 |
| 444708 | OVERLOAD 18-25 | 18-25 | 31-43 |
| 444709 | OVERLOAD 23-32 | 23-32 | 39-55 |

This range of Starters and Overloads is not cross compatible with previous versions.

Sonex Circular Sound Attenuators

- Low cost – exceptional performance
- Ex stock availability
- Sheet steel casing and end plates 30 minute fire rating as standard
- Fitted spigot for direct connection to circular ductwork



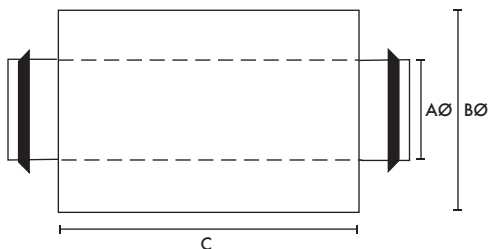
Application

The effective and economic solution for sound attenuation in circular duct systems from 100 to 500mm diameter. With at least three models per size throughout the range the system designer is given complete flexibility of choice allowing a selection which is the best balance of attenuation, size and cost for any application. Sonex Attenuators are fitted with a patented duct seal which enables leak free 'plug-in' connection to rigid ductwork with consequent savings of installation costs. The excellent attenuation characteristics of the Sonex range are achieved without imposing undue system resistance. Pressure losses are little more than those which would occur over a comparable section of straight duct.

Construction

The attenuator consists of a perforated tubular liner manufactured from sheet steel. The liner is enclosed by a thick layer of mineral wool sound absorbing material. Casing and end plates are formed from galvanised sheet steel. Standard models have a 30 minute fire rating (60 minutes also available).

Dimensions, Weights & Insertion Loss



| Stock Ref | Dimensions (mm) | | | | Attenuation dB mid Frequency Hz | | | | | | | |
|-----------|-----------------|-----|------|------|---------------------------------|-----|-----|-----|----|----|----|----|
| | AØ | BØ | C | kg. | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8k |
| 83010030 | 100 | 200 | 300 | 2.4 | 3 | 3 | 9 | 17 | 23 | 26 | 25 | 13 |
| 83010060 | 100 | 200 | 600 | 4.1 | 6 | 9 | 15 | 34 | 40 | 40 | 37 | 18 |
| 83010090 | 100 | 200 | 900 | 6.6 | 10 | 13 | 21 | 40 | 45 | 39 | 36 | 16 |
| 83012030 | 125 | 225 | 300 | 2.6 | 3 | 3 | 7 | 16 | 20 | 24 | 22 | 17 |
| 83012060 | 125 | 225 | 600 | 4.5 | 5 | 8 | 13 | 29 | 35 | 35 | 32 | 22 |
| 83012090 | 125 | 225 | 900 | 7.6 | 10 | 12 | 19 | 37 | 40 | 38 | 34 | 32 |
| 83015030 | 150 | 260 | 300 | 2.9 | 3 | 3 | 6 | 13 | 19 | 23 | 22 | 16 |
| 83015060 | 150 | 260 | 600 | 5.8 | 5 | 7 | 12 | 24 | 30 | 35 | 31 | 20 |
| 83015090 | 150 | 260 | 900 | 9 | 8 | 10 | 15 | 32 | 38 | 37 | 34 | 29 |
| 83016030 | 160 | 260 | 300 | 2.9 | 3 | 3 | 6 | 13 | 19 | 23 | 22 | 16 |
| 83016060 | 160 | 260 | 600 | 5.8 | 5 | 7 | 12 | 24 | 30 | 35 | 31 | 20 |
| 83016090 | 160 | 260 | 900 | 9 | 8 | 10 | 15 | 32 | 38 | 37 | 34 | 29 |
| 83020060 | 200 | 300 | 600 | 7 | 4 | 6 | 10 | 20 | 27 | 33 | 19 | 17 |
| 83020090 | 200 | 300 | 900 | 10 | 8 | 9 | 14 | 28 | 32 | 35 | 28 | 25 |
| 83020120 | 200 | 300 | 1200 | 14 | 10 | 12 | 17 | 36 | 41 | 43 | 28 | 26 |
| 83025060 | 250 | 355 | 600 | 8.6 | 4 | 5 | 10 | 19 | 25 | 29 | 18 | 17 |
| 83025090 | 250 | 355 | 900 | 12.2 | 6 | 7 | 12 | 23 | 30 | 30 | 22 | 19 |
| 83025120 | 250 | 355 | 1200 | 18 | 8 | 10 | 15 | 32 | 37 | 38 | 26 | 20 |
| 83031060 | 315 | 400 | 600 | 9.8 | 4 | 5 | 8 | 15 | 20 | 22 | 17 | 15 |
| 83031090 | 315 | 400 | 900 | 15 | 5 | 7 | 10 | 20 | 30 | 29 | 18 | 16 |
| 83031120 | 315 | 400 | 1200 | 21 | 7 | 9 | 13 | 22 | 32 | 33 | 19 | 18 |
| 83040090 | 400 | 606 | 900 | 21 | 3 | 5 | 9 | 19 | 26 | 20 | 13 | 11 |
| 83040120 | 400 | 606 | 1200 | 27 | 6 | 8 | 14 | 24 | 30 | 28 | 17 | 9 |
| 83050090 | 500 | 711 | 900 | 29 | 3 | 4 | 9 | 15 | 23 | 17 | 12 | 11 |
| 83050120 | 500 | 711 | 1200 | 38 | 5 | 7 | 13 | 18 | 26 | 23 | 15 | 9 |

Pyrocheck Intumescent Fire Dampers

- Suitable for air transfer in doors and partitions
- Complete seal achieved in approximately five minutes when tested in accordance with BS 476 pt 20 & 22
- UV Stabilised material UPVC
- Pyrocheck offer much lower resistance to airflow compared to traditional designs
- Independently tested to BS 476 pt. 22; fire integrity of 68 mins



Pyrocheck CVT Intumescent Fire Dampers are circular and have a minimum fire integrity of one hour (in accordance with BS476 Part 8 1972). The fire dampers have been independently tested at the Warrington Fire Research Centre.

Intumescent fire dampers require no mechanical or external device to operate as they rely solely on an internal reaction initiated by heat. They are, therefore, especially suitable for applications where regular inspection is unlikely or difficult or where mechanical devices would be susceptible to shock or corrosion damage.

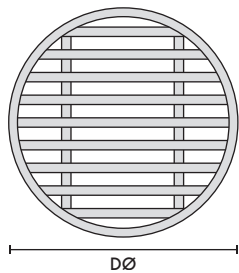
Typical applications are air transfer in fire doors or partitions.

The active material is encased in a PVC sleeve giving maximum protection against moulds, fungi, insect attack or similar biological damage, and may reasonably be expected to last for the life of the building. Unaffected by UV light, capable of withstanding freeze/thaw cycling and able to support ambient temperatures within the range -10°C to +80°C.

In a fire situation Pyrocheck CVT Dampers will rapidly expand to completely block the duct or opening thus preventing the further passage of smoke and hot gases.

An unusually high free area means that Pyrocheck CVT Dampers offer much lower resistance to air flow compared to traditional intumescent designs.

Dimensions



| Stock Ref | DØ |
|-----------|-----|
| CVT100 | 100 |
| CVT130 | 125 |
| CVT150 | 150 |
| CVT200 | 198 |
| CVT250 | 248 |
| CVT300 | 298 |

Vent-Axia does not guarantee compliance with Building Regulations Part B, Fire Spread or other regulations that relate to fire planning. Suitability to comply with these regulations should be determined prior to installation and in conjunction with Building Control Officers. Compliance with the Regulations is specifically excluded from quotations and designs.

Models

| Size | Stock Ref |
|-------|-----------|
| 4" Ø | CVT100 |
| 5" Ø | CVT130 |
| 6" Ø | CVT150 |
| 8" Ø | CVT200 |
| 10" Ø | CVT250 |
| 12" Ø | CVT300 |

Unitex Roof Cowl System

- Complete weather proofing with low pressure drop
- Size 160 to 250 supplied with bird guard
- Galvanised steel construction additionally protected by a dark brown epoxy powder coat finish (110mm grey PVC)
- Weather apron in stock aluminium
- Suitable for flat or pitched roofs up to 20° as standard
- Can be supplied in special colours to match building design (110mm grey PVC only)



The Unitex Roof Cowl System greatly simplifies the roof termination of mechanical ventilation systems. Consisting of an attractive epoxy finished cowl with a lead weather slate and a range of direct connection reducing fittings. It is suitable for connection to spiral duct, soil pipe and flexible duct from 125 to 250mm diameter.

Product Range

Cowl Assembly

WB160 For ducts from 125 to 160mm

WB200 For ducts from 200 to 250mm

Weather Apron for Flat Roofs

WA160

WA200

Weather Apron for Pitched Roofs (20° MAX)

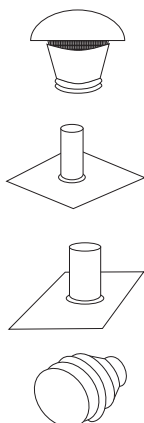
WA160/20

WA200/20

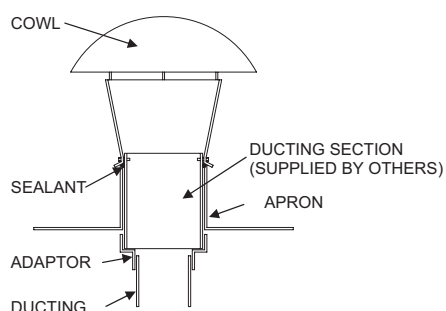
Adaptor

370304 (125 to 150mm)

370309 (200 to 250mm)



Installation with an Adaptor



WB160 with 125mm connection using adaptor 370304

WB200 with 250mm connection using adaptor 370309

Models



110mm (4") Roof System

Description

PVC Roof Cowl

Weather Apron (pitch roofs)

Stock Ref

WRC100

WA100



125mm to 160mm Roof System

Description

Roof Cowl - Standard Colour BSO8B29

Roof Cowl - Non-standard Colour

Weather Apron (flat roofs)

Stock Ref

WB160

WB160C

WA160



200mm to 250mm Roof System

Description

Roof Cowl - Standard Colour BSO8B29

Roof Cowl - Non-standard Colour

Weather Apron (flat roofs)

Stock Ref

WB200

WB200C

WA200

Weather Apron for pitched roof

Description

Weather Apron 20° (max) pitch roof

Weather Apron 20° (max) pitch roof

Stock Ref

WA160/20

WA200/20

Adaptor

Description

OR16012 (125 to 150mm)

OR25020 (200 to 250mm)

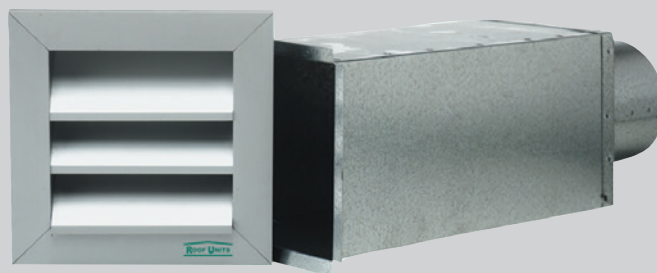
Stock Ref

370304

370309

Unitex Wall Terminals

- External weather louvre, wall sleeve and duct connection spigot in one unit
- Satin anodised louvre gives full weather protection
- Epoxy powder coated finish, weather louvre available as optional extra
- 280mm or 80mm wall sleeve section
- Spigot connections from 100mm to 400mm



The Unitex SA Wall Terminal Module consists of a high grade satin anodised weather louvre fitted with bird guard (epoxy finish to BS or RAL standard colour available at extra cost). This is located in a galvanised sheet metal 'box section' linked to a reinforced circular stub for direct connection to rigid or flexible ductwork.

Two lengths of 'box section' are available; 80mm and 280mm. An airstream operated back draught shutter can be fitted in the 280mm version. For applications where larger air volumes are involved the Unitex QSA range of wall terminals is available.

Note:

Volume Control Dampers, Speed Clamps & Backdraught Shutters available: see Accessories Section.

Models

Description **Stock Ref**
80mm wall sleeve, std. format louvre

| | |
|-------|----------|
| 100mm | SA100/80 |
| 125mm | SA125/80 |
| 150mm | SA150/80 |
| 200mm | SA200/80 |
| 250mm | SA250/80 |
| 315mm | |

80mm wall sleeve, large format louvre

| | |
|-------|-----------|
| 125mm | QSA125/80 |
| 200mm | QSA200/80 |
| 250mm | QSA250/80 |
| 315mm | QSA315/80 |

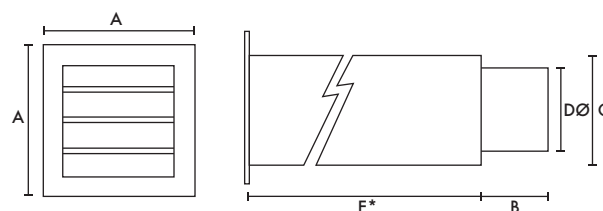
280mm wall sleeve, std. format louvre

| | |
|-------|-----------|
| 100mm | SA100/280 |
| 125mm | SA125/280 |
| 150mm | SA150/280 |
| 200mm | SA200/280 |
| 250mm | SA250/280 |
| 315mm | SA315/280 |

280mm wall sleeve, large format louvre

| | |
|-------|------------|
| 100mm | QSA100/280 |
| 125mm | QSA125/280 |
| 150mm | QSA150/280 |
| 200mm | QSA200/280 |
| 250mm | QSA250/280 |
| 315mm | QSA315/280 |
| 400mm | QSA400/280 |

Dimensions (mm)



*Dimensions E select from 280 or 80mm

| Model Ref | A | B | C | DØ |
|-----------|-----|----|-----|-----|
| SA100 | 180 | 80 | 130 | 99 |
| SA125 | 210 | 80 | 160 | 124 |
| SA150 | 230 | 80 | 180 | 149 |
| SA200 | 280 | 80 | 230 | 199 |
| SA250 | 330 | 80 | 280 | 249 |
| SA315 | 400 | 80 | 350 | 313 |
| QSA100 | 230 | 80 | 180 | 98 |
| QSA125 | 280 | 80 | 230 | 124 |
| QSA150 | 330 | 80 | 280 | 149 |
| QSA200 | 400 | 80 | 350 | 199 |
| QSA250 | 500 | 80 | 450 | 249 |
| QSA315 | 550 | 80 | 500 | 313 |
| QSA400 | 550 | 80 | 500 | 400 |

VENT-AXIA CONTACT NUMBERS

Free technical, installation and sales advice is available

| | |
|-------------------|--|
| Sales Tel: | 0344 856 0590 |
| Sales Fax: | 01293 565169 |
| Tech Support Tel: | 0344 856 0594 |
| Tech Support Fax: | 01293 532814 |
| Web: | www.vent-axia.com |
| Email: | sales@vent-axia.com |

Supply & Service

All sales made by Vent-Axia Limited are made only upon the terms of the Company's Conditions of Sale, a copy of which may be obtained on request. As part of the policy of continuous product improvement Vent-Axia reserves the right to alter specifications without notice.



Download our Knowledge Hub app - Your new pocket expert.

Search, View, Share - It's that easy!



Made in Britain



0224