



PowerBox³ Performance Evolved

**SUPPLY AND EXTRACT
VENTILATION SOLUTIONS**





POWERBOX³

**A newly developed
range of box fans with
higher static efficiency
and very low breakout
sound levels**



With over 100 years of experience in the air movement industry, Woods Air Movement is a trusted and reliable supplier of high-quality “Made in Britain” fans for all demanding applications – from comfort to safety critical.

The new PowerBox³ range offers high efficiency and very low breakout sound levels. Available in eight inlet spigot sizes from 315 mm up to 630 mm with dual voltage single and three phase electrical connections options (dependent on size). With a max airflow up to 4.7 m³/s and max static pressure up to 1100 Pa, the PowerBox³ fans caters to a wide variety of applications.

Our sales and engineering teams are committed to provide you with exceptional products and technical guidance as well as ensuring your logistical needs are met. All Woods Air Movement fans are easy to select and order – our online Fan Selector tool is easy to use and will give all information needed to design your application. We are also focused on providing great after-sales support – from installation and commissioning to regular servicing.

In short; Woods Air Movement is a complete partner for all your fan needs.

PowerBox³ delivers outstanding performance for a wide range of applications

› VOLUME FLOW RATE UP TO 4.7 m³/s › STATIC PRESSURE UP TO 1100 Pa › ErP COMPLIANT

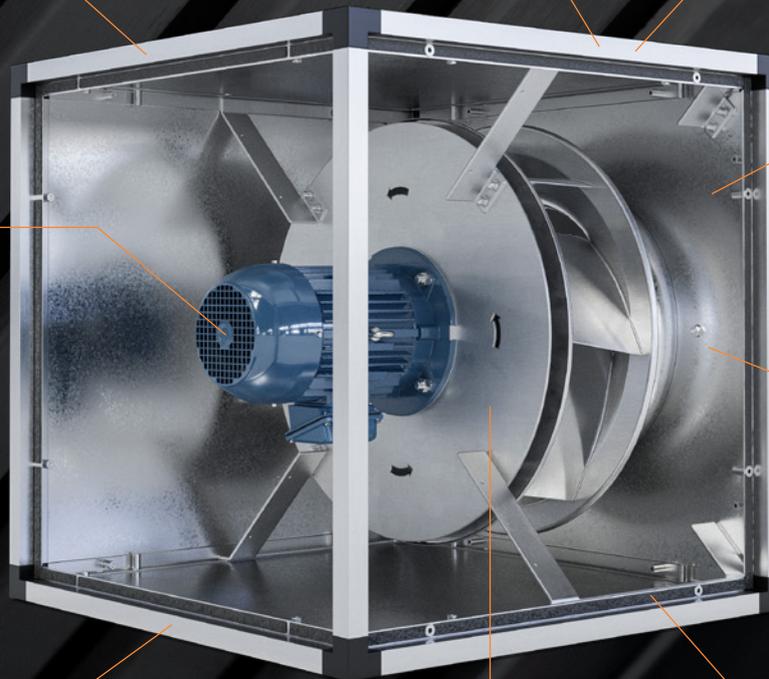
All aluminium Pentapost frame and corner design provides a sturdy and robust structure.

Highly efficient Powerdrive system with configurable speed control.



Thermally insulated double skinned galvanised steel panels reduce breakout noise to a minimum.

Panel with handle installed to aid for easy removal.



Choice of 3 box sizes with multiple air performance options.

Capable of handling air temperatures up to 50°C.

Panels designed for quick and easy removal during installation and to provide access for maintenance.

Highly efficient, low-noise backward curved centrifugal impeller. Rugged aluminium construction withstands harsh operation and high temperature.

Grease resistant gasket to prevent leakage.

› PERPENDICULAR (90°) DISCHARGE CAN BE RE-CONFIGURED FOR INLINE DISCHARGE



A great fit for all your box fan needs

Our new PowerBox³ can be used for supply or extract air applications and can be installed in any position. The units comply with the Ventilation Unit Regulation 1253/2014 and can be installed with perpendicular (90°) discharge in all vertical and horizontal directions. They can be quickly reconfigured by changing panels to provide an inline outlet flow.

SUITABLE APPLICATIONS

- **Kitchen extract and supply**
- **In-duct ventilation in hotels, offices and other buildings.**
- **Can be used for internal and external applications.**



Our team is always happy to answer your questions. You can contact us on:

- +44 (0) 1206 222 555
- quotations.woods@flaktgroup.com
- woodsairmovement.com

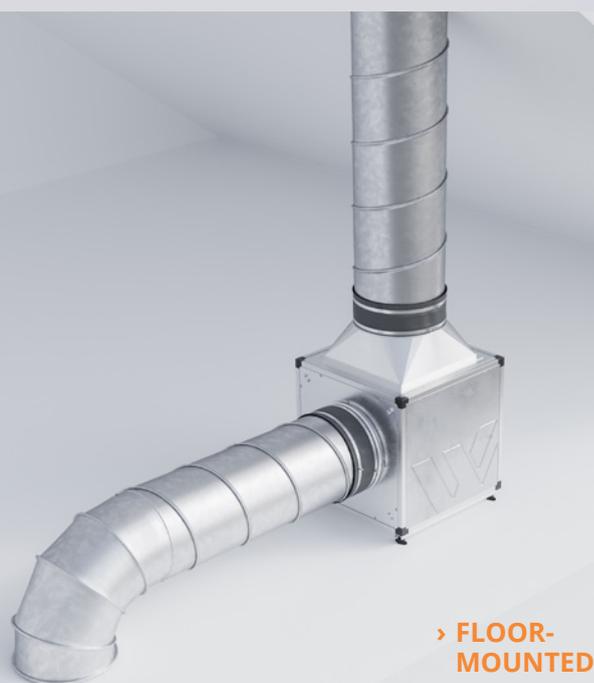
Inside, outside, floor, wall or roof – the flexible PowerBox³ is always a reliable choice

The PowerBox³ can be floor or wall-mounted, internally, and externally as standard. These being centrifugal fans, the PowerBox³ range is most suitable for installations where there is high static pressure due to length of duct run, filtration, number of direction changes etc.

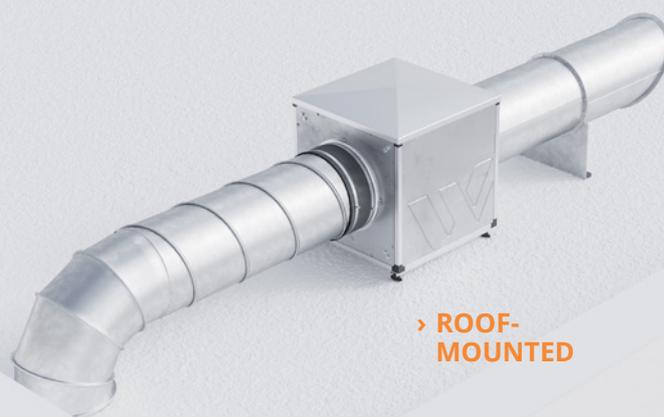
With five possible discharge directions, the PowerBox³ gives the flexibility to install under different site conditions. They can be placed on anti-vibration mounting tracks to reduce vibration transfer through the mounting surface and can also be connected using flexible connectors to reduce transmission of vibration to the ductwork. During installation, extra care should be taken to check if the wall/roof or the fan clamp can handle the fan weight and/or vibration.



› WALL-MOUNTED*



› FLOOR-MOUNTED



› ROOF-MOUNTED

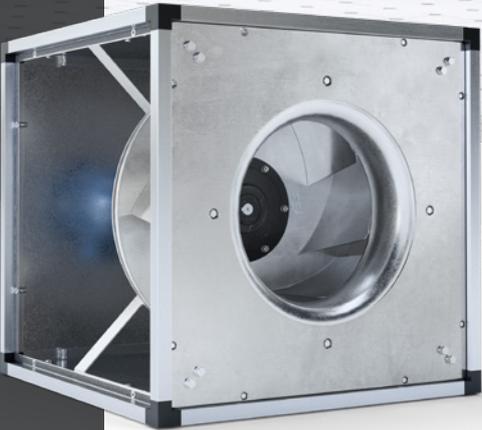
**Mounting brackets are not supplied by Woods Air Movement. Please note that these illustrations are for marketing purposes, we would recommend when installing that you use best practice.*



PowerBox³

– a key ingredient for an efficient kitchen ventilation system

This product seamlessly integrates into your kitchen environment, ensuring minimal disruption while delivering maximum performance. It's the perfect blend of form and function, combining sleek design with industry-leading extraction capabilities. Efficiently removing fumes and smoke from your kitchen space.



PowerBox³ overview

Product name	Part number	Speed (rpm)	Electrical supply	Input power (kW)
PowerBox ³ 50-315-1	PB315140	1420	220-240V /50Hz/1ph*	0.24
PowerBox ³ 50-315-3	PB315340	1420	380-420V /50Hz/3ph	0.24
PowerBox ³ 50-355-1	PB355140	1420	220-240V /50Hz/1ph*	0.38
PowerBox ³ 50-355-3	PB355340	1420	380-420V /50Hz/3ph	0.38
PowerBox ³ 67-400-1	PB400140	1450	220-240V /50Hz/1ph*	0.65
PowerBox ³ 67-400-3	PB400340	1450	380-420V /50Hz/3ph	0.65
PowerBox ³ 67-450-1	PB450140	1440	220-240V /50Hz/1ph*	1.05
PowerBox ³ 67-450-3	PB450340	1440	380-420V /50Hz/3ph	1.05
PowerBox ³ 67-500-1	PB500140	1460	220-240V /50Hz/1ph*	1.82
PowerBox ³ 67-500-3	PB500340	1460	380-420V /50Hz/3ph	1.82
PowerBox ³ 80-560-3	PB560340	1460	380-420V /50Hz/3ph	3.14
PowerBox ³ 80-630-3	PB630340	1350	380-420V /50Hz/3ph*	4.64



NOTES

*Operation requires a pre-programmed speed control drive.

**Soft start via an inverter and cannot be operated by Direct Online (DOL).

***Sound pressure levels are average dB(A) at 3 metres distance over sphere, under free field conditions and are presented for comparative purposes only.

Full load current (A)	Starting current (A)	Max temperature (°C)	Speed controller part number	Breakout sound level (dBA)***	Weight (kg)
1.41	N/A**	50	PK901102	30	43
0.81	3.2	50	EA901016	30	43
1.89	N/A**	50	PK901103	32	45
1.09	4.4	50	EA901016	32	45
2.81	N/A**	50	PK901104	37	63
1.62	8.0	50	EA901016	37	63
3.30	N/A**	50	PK901105	41	65
1.90	11.8	50	EA901016	41	65
6.03	N/A**	50	PK901106	44	73
3.47	24.7	50	EA901018	44	73
5.80	48.0	50	EA901020	50	108
8.47	N/A**	50	PK901107	55	114

PowerBox³ specifications

PRODUCT FACTS

- Airflow rate up to 4.7 m³/s
- Static pressure up to 1100 Pa
- Available in 7 inlet spigot sizes: 315, 355, 400, 450, 500, 560, 630 mm
- High efficiency motor.
- Box sizes (side lengths): 500, 670, 800 mm
- All aluminium Pentapost frame and corner design provides a sturdy and robust structure.
- Highly efficient, low-noise backward curved centrifugal impeller. Rugged aluminium construction withstands harsh operation and high temperature.
- Capable of handling air temperatures up to 50°C.
- Thermally insulated double skinned galvanised steel panels reduce breakout noise to a minimum.
- Perpendicular (90°) discharge options in all vertical and horizontal directions. Can be quickly reconfigured to provide an inline outlet flow.
- Quick and easy to maintain.

CONSTRUCTION

The casing is made from pre-galvanised sheet steel BS EN 10346: 2009 DX 51D + Z 275G/M2 with double chambered aluminium supporting frames and corners. The thermal insulation is achieved using glass fibre sheets. The unit can be mounted vertically or horizontally and has removable side panels.

IMPELLER

The unit is equipped with a highly efficient, low-noise backward curved centrifugal impeller. Its rugged aluminium construction withstands harsh operation and high temperature and is dynamically balanced to ISO 21940-11 grade G6.3.

SPEED CONTROLLER

The units are operated and controlled using Woods supplied speed control drives. Most three phase units can also be operated at full speed via direct on line connection, with the exception of the 630 size and single phase range.

ELECTRICAL SUPPLY

- 220-240V/50Hz/1PH and 380-420V/50Hz/3PH

TEMPERATURE RANGE

- Up to 50°C

INLET SPIGOT SIZES

- 315, 355, 400, 450, 500, 560, 630 mm

MOTOR

The units are equipped with direct drive high efficiency motors with ingress protection to IP55.

PRODUCT CODE

POWERBOX³ – AA – BBB – C

- POWERBOX³ – Fan name
- AA – Box size (67, 80 cm, etc.)
- BBB – Spigot diameter (500, 560 mm, etc.)
- C – Phase (1 or 3)

AVAILABLE ACCESSORIES

- Mounting tracks complete with A/V mounts
- Square to round transformation
- Flexible connectors
- Inverters
- Inlet spigot (available via our distribution partners)
- Weather roof

For more information and part numbers – please view our Fan Selector or our online Accessories Catalogue.

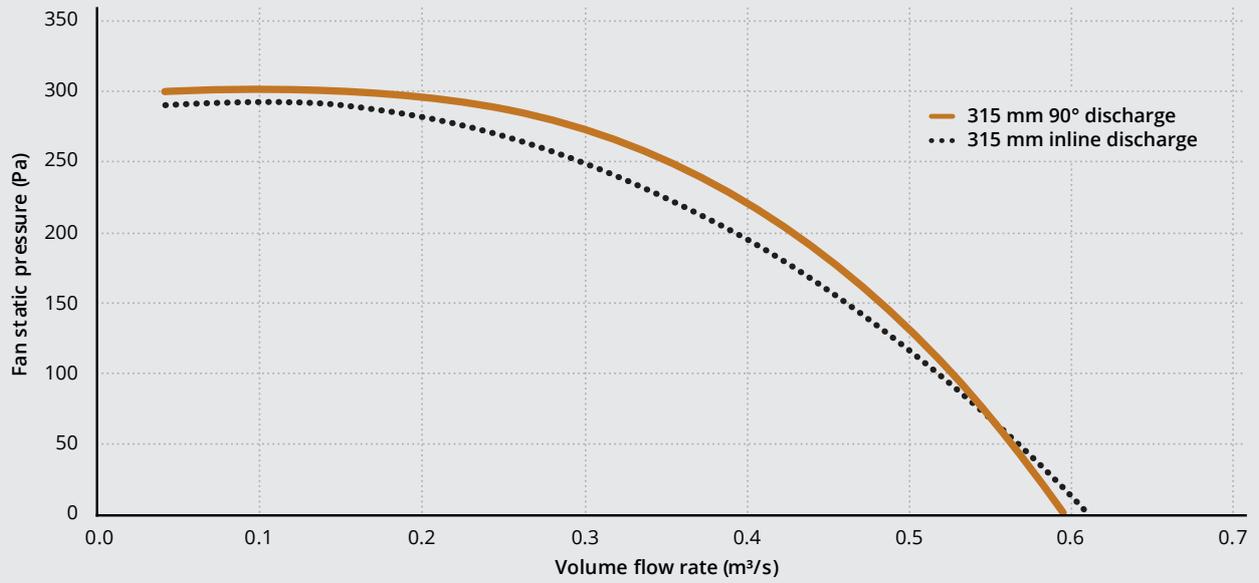




Performance charts

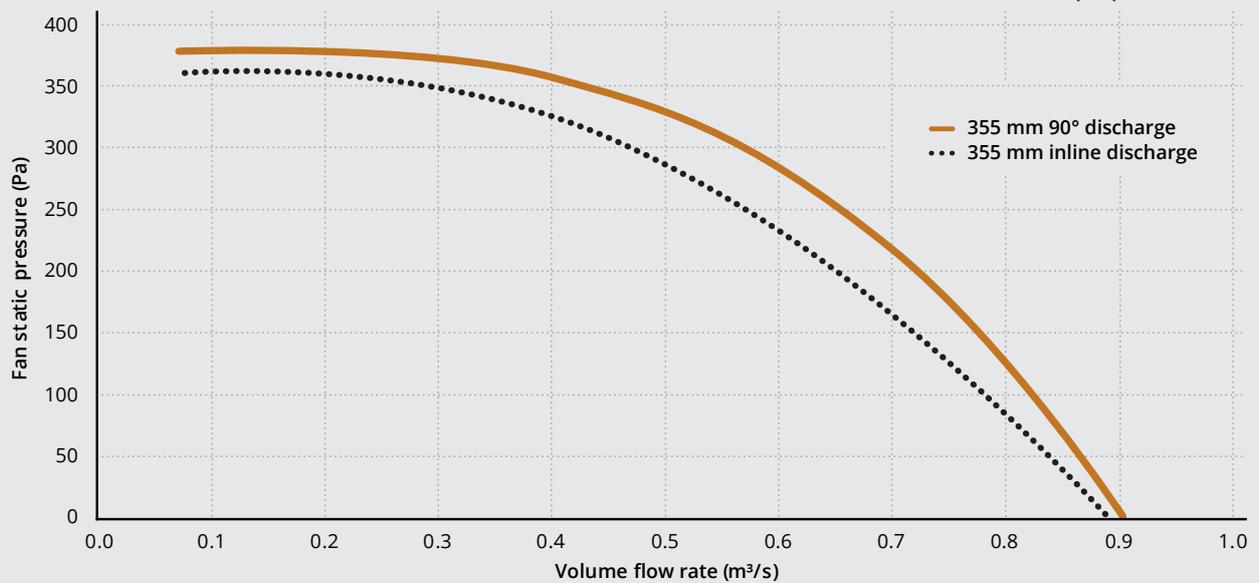
POWERBOX³ 50-315-1 & 50-315-3

1420 rpm performance



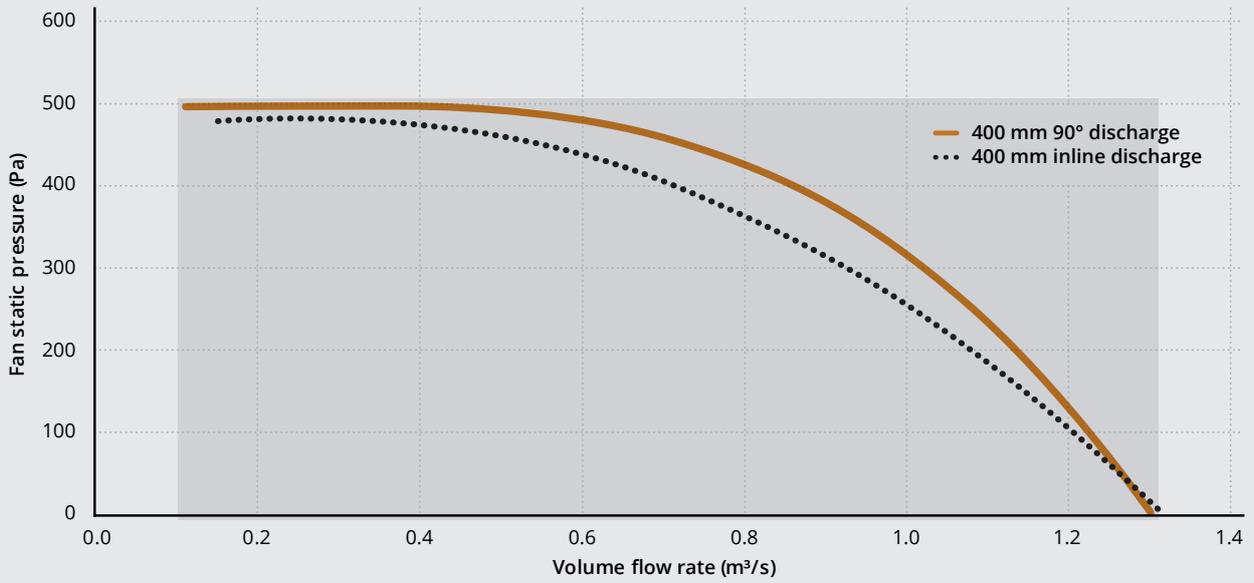
POWERBOX³ 50-355-1 & 50-355-3

1420 rpm performance



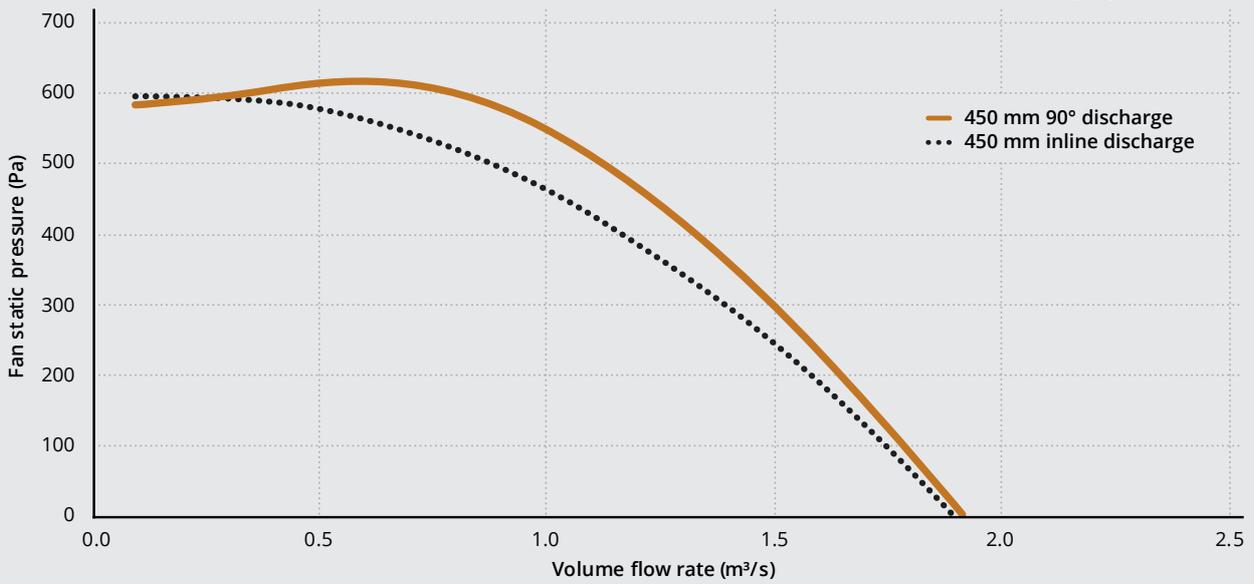
POWERBOX³ 67-400-1 & 67-400-3

1450 rpm performance



POWERBOX³ 67-450-1 & 67-450-3

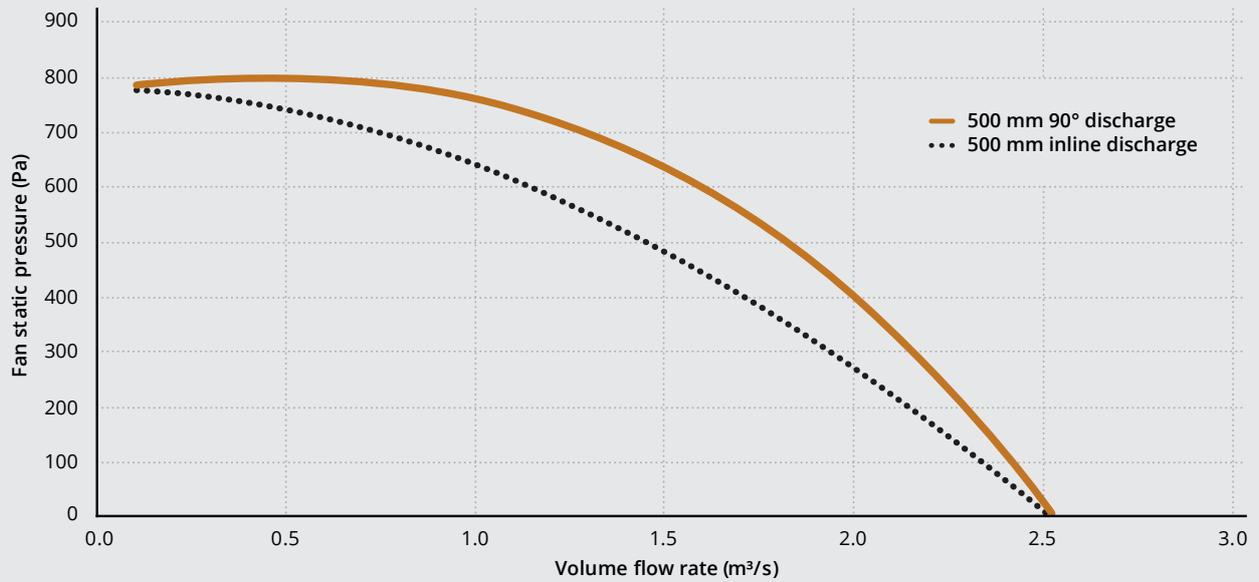
1440 rpm performance



Performance charts

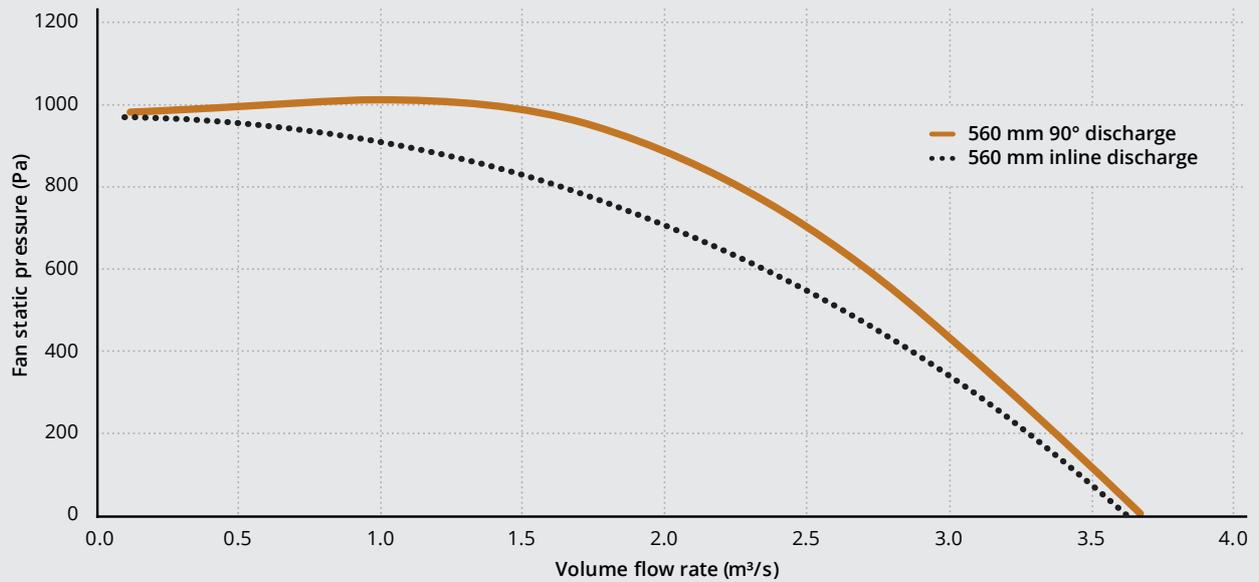
POWERBOX³ 67-500-1 & 67-500-3

1460 rpm performance



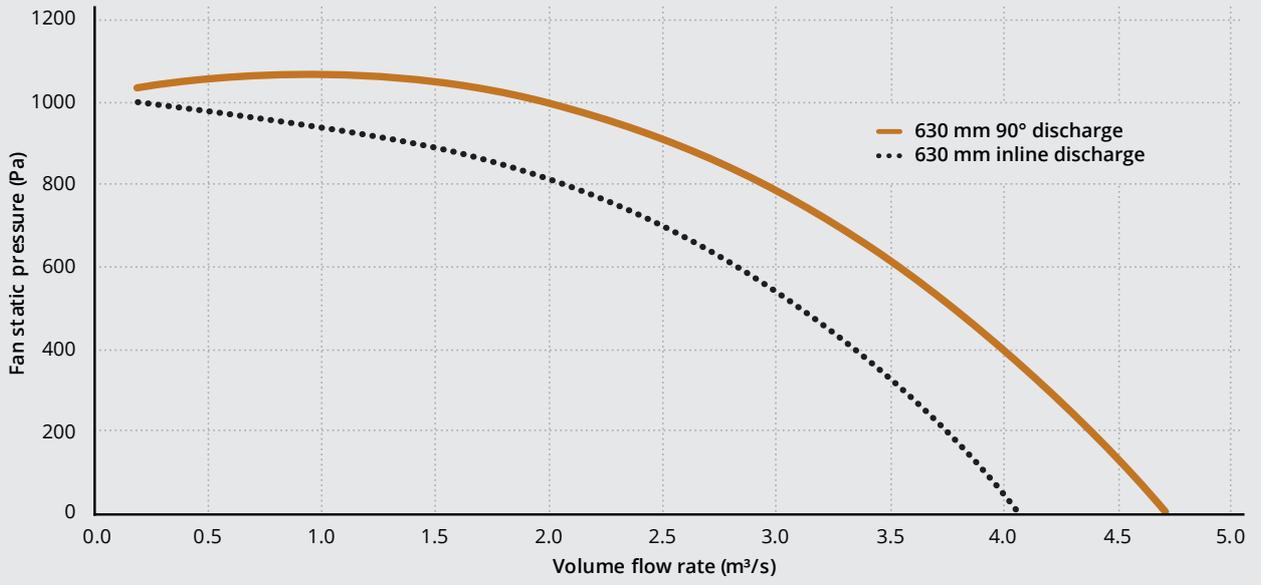
POWERBOX³ 80-560-3

1460 rpm performance

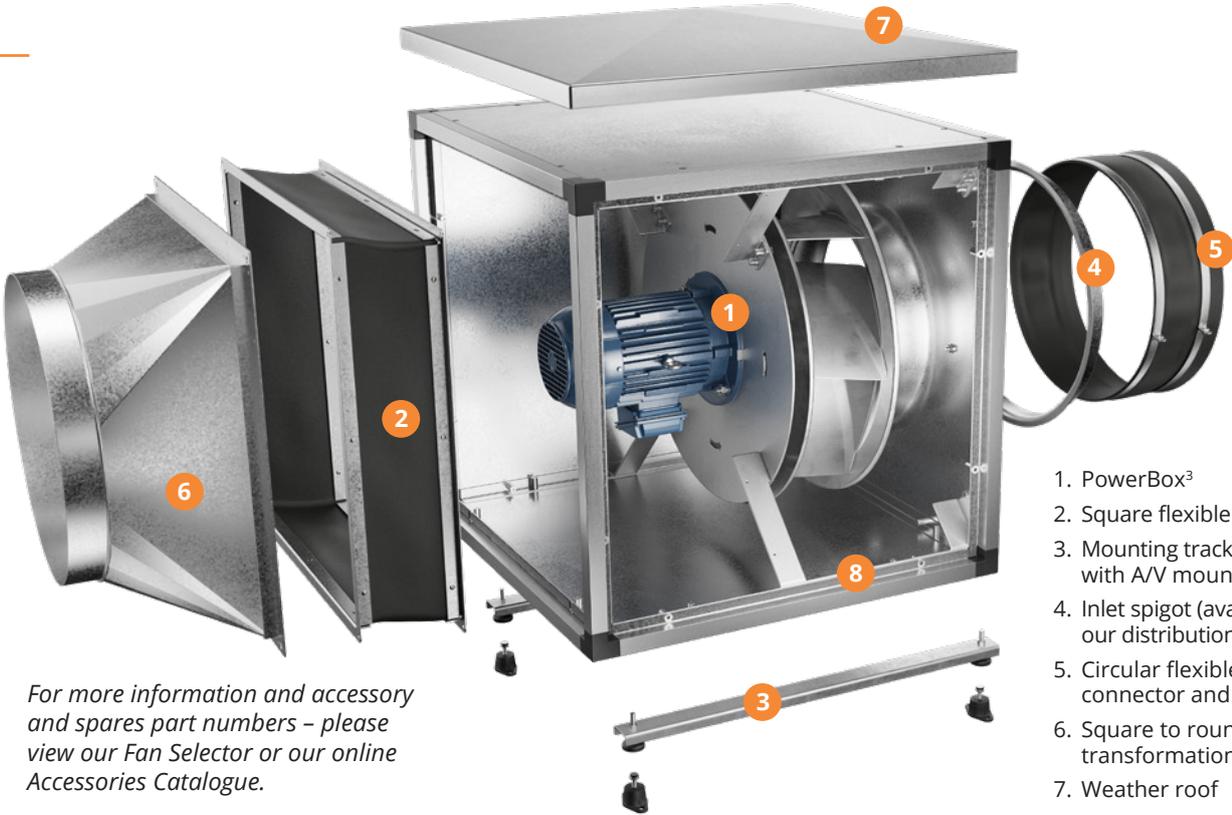


POWERBOX³ 80-630-3*

1350 rpm performance
*Requires Speed Control Drive



Technical details

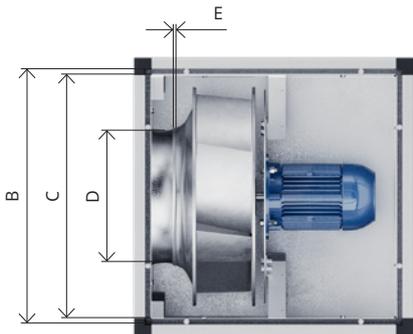
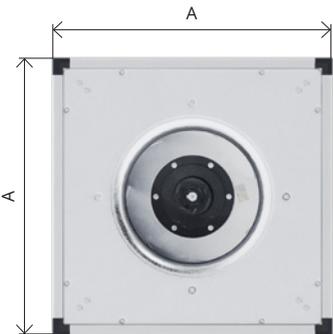


For more information and accessory and spares part numbers – please view our Fan Selector or our online Accessories Catalogue.

1. PowerBox³
2. Square flexible connector
3. Mounting tracks complete with A/V mounts
4. Inlet spigot (available via our distribution partners)
5. Circular flexible connector and clips
6. Square to round transformation
7. Weather roof
8. Grease resistant gasket

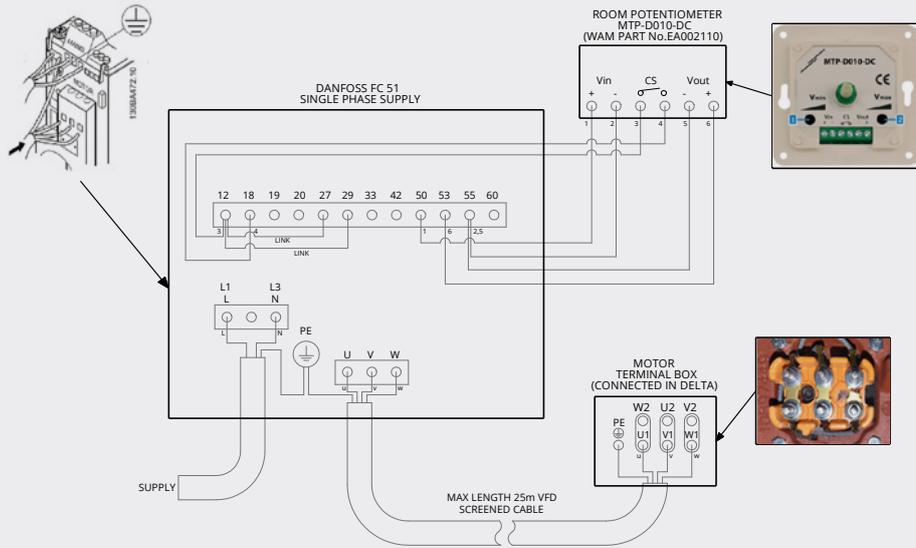
DIMENSIONS & WEIGHTS

Ø	Weight (≈kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
315	43	500	460	430	218	3.15
355	45	500	460	430	246.3	3.55
400	63	670	630	600	278	4
450	65	670	630	600	312	4.5
500	73	670	630	600	346.5	5
560	108	800	740	700	388.1	5.6
630	114	800	740	700	437	6.3

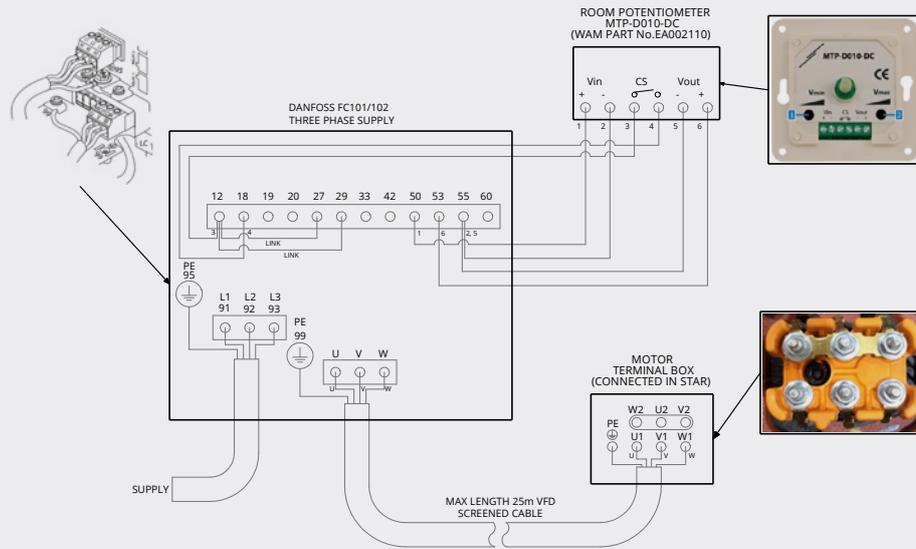


Rotation →

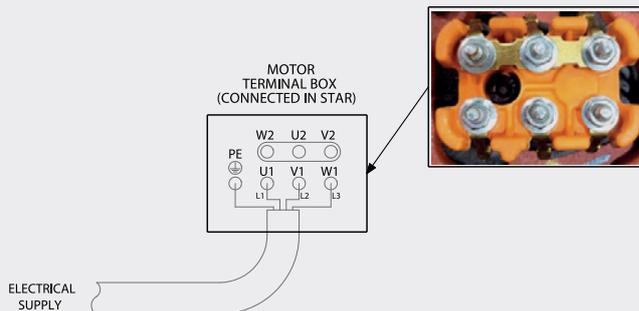
SINGLE PHASE / IEDXB20



THREE PHASE / IDDXF54, IDDXF55, IDDXF66



THREE PHASE / DOL



Woods Air Movement has a range of standard products or designs and develops a wide range of products

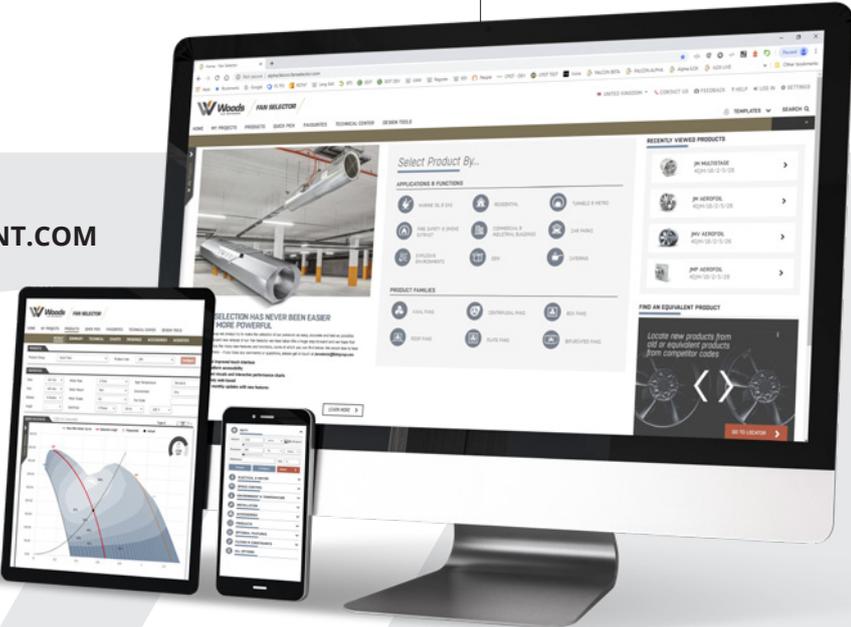
We manufacture a range of air movement and ventilation products that are the most reliable and of the best quality for various applications and industries. To ensure you receive the best quality, we run various tests on our fans before they are delivered to your doorstep.

Most of our product range are available as standard or high temperature, please contact one of our sales team members to find out more technical information on our products. If any of products do not meet your requirements then we have in-house capabilities to assist with designing, engineering and manufacturing the perfect solution for you.

ENSURING THE BEST POSSIBLE QUALITY IN EVERY DETAIL FOR OUR AXIAL FAN RANGE

- All impeller parts are X-ray inspected in accordance with ASTM E155.
- We ensure our products follow the ISO1940 Balance standards and Vibration BS848 pt 7 ISO14694.
- Our fans endure impeller strain gauge tests of speed over 125% for 15min.

> WOODSAIRMOVEMENT.COM



PRODUCT SELECTION AND CONFIGURATION HAS NEVER BEEN EASIER – OR MORE POWERFUL

We always try to make the selection of our products as easy, accurate and fast as possible. With the brand new release of our Fan Selector we have taken a huge step forward and we hope that you will enjoy the many new features and functions – including web-based multi-platform accessibility with touch interface and interactive performance charts.

Building on more than 100 years of innovation

Woods was founded in 1909 in Colchester, United Kingdom. We began as manufacturers of small electric motors and introduced a range of propeller fans in the 1920s.



Over the years, Woods moved away from manufacturing motors and concentrated on the design and manufacture of axial fans, developing the first aerofoil blade design. This continuous development has evolved into one of the world's largest ranges of certified axial fans for almost any application imaginable including fire safety, ventilation, industrial process, oil and gas and marine.

Woods was merged with Fläkt in 2002 to create Fläkt Woods which was subsequently merged with Denco Happel in 2016 to create FläktGroup. In 2020, Fläkt Woods changed their trading name to Woods Air Movement under FläktGroup holdings and opened offices in the United States of America, Germany and Singapore.

Woods has over 100 years of experience and knowledge in designing axial flow fans and remains a distinct brand within the FläktGroup family.



OUR FOOTPRINT

Our head office is situated in Colchester in the United Kingdom with the state of the art factory. We also have a factory and office in the United States of America and Singapore as well as an office situated in Germany. In India we have installed one of the first test rigs in the country. Our products are distributed and reach various markets globally, through strong partnerships with over 70 international distributors and agents.



Woods Air Movement delivers smart and energy efficient Air Movement and Fire Safety solutions to support every application area. We offer our customers innovative technologies, high quality and outstanding performance. The widest range of Air Movement and Ventilation products in the market, and strong market presence with over 100 years of experience and manufacturing of products, guarantees that we are always by your side, ready to deliver Excellence in Solutions.

**Contact our friendly sales team today
for more information**

Call: +44 (0) 1206 222 555

Email: quotations.woods@flaktgroup.com

www.woodsairmovement.com

