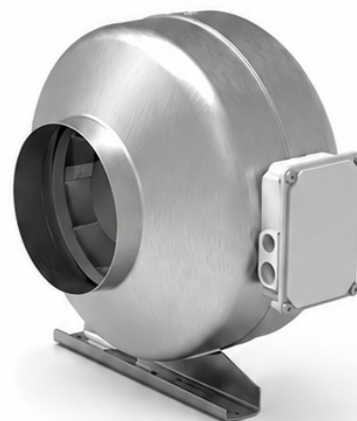


Inline Duct Fan

VDF Series



VDF-B



VDF



Inline Duct Fan

VDF - Series

Description

VDF inline fans are built for reliable day-to-day ventilation in commercial and grow room applications. The housings and components are manufactured using precise cutting, forming and welding methods to ensure good fit, strength and durability.

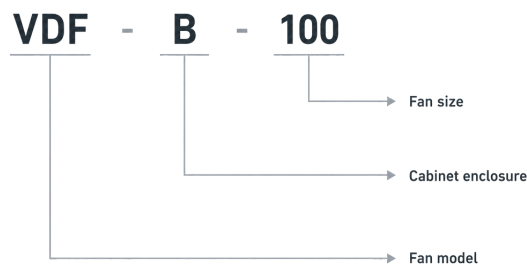
Each fan is checked before dispatch to help ensure smooth installation and trouble-free operation.

The design focuses on stable airflow, low vibration and practical installation features, providing dependable performance with up-to-date ventilation engineering.

Application

Inline duct fans are suitable for a wide range of residential, commercial, and industrial ventilation applications, including kitchens, bathrooms, offices, laboratories, factories, workshops, retail shops, laundromats, restaurants, cafés, bars, theatres, ballrooms, hotels, hospitals, schools, warehouses, and other facilities requiring efficient supply, exhaust, fresh air, or general ventilation with reliable performance and low noise operation.

Model number nomenclature.



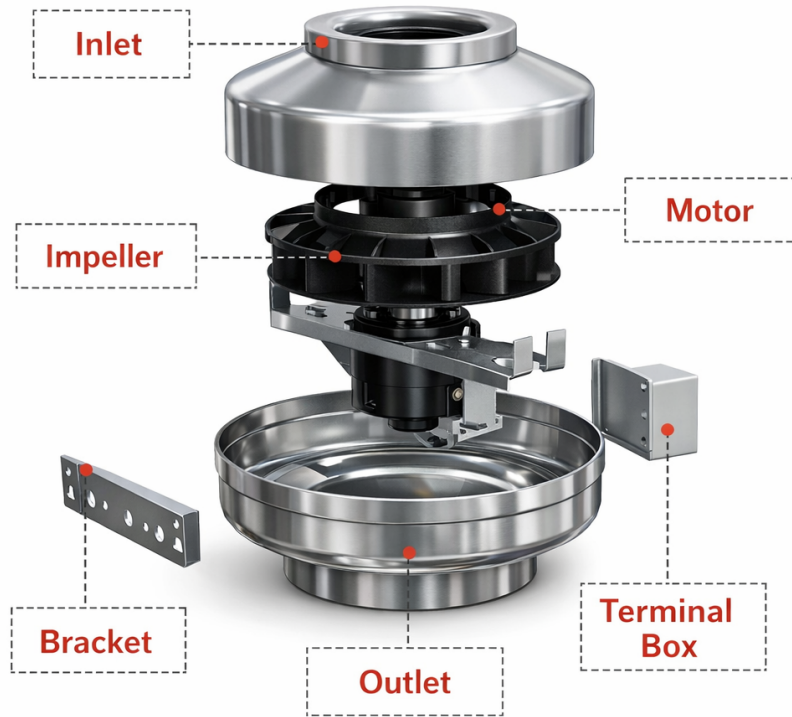
Construction Features

- Designed for direct in-line installation with standard circular duct systems for both supply and exhaust ventilation. Cabinet Enclosure is available as an optional for VDF-B series
- fan casings are made from corrosion-resistant galvanized steel
- Backward-curved centrifugal impeller, dynamically balanced to ISO 1940 standards for smooth, low-vibration operation.
- Factory-matched external rotor motor ensures optimum aerodynamic performance, compact construction, and low noise levels.
- Suitable for continuous-duty operation with ambient temperatures from -20°C to +50°C.
- Compact, space-saving design with mounting brackets for quick and flexible installation in any position..
- Remote terminal box provided for convenient electrical connection and simplified maintenance.
- Maintenance-free sealed ball bearings ensure reliable, long service life..
- Available in 230V single-phase , 50/60 Hz configurations,

INSTALLATION

The fan is suitable for wall, ceiling, or roof installation, depending on the model, and is supplied with mounting brackets for easy installation. Roof-mounted units shall be installed horizontally. For smooth and quiet operation, flexible connectors or anti-vibration mountings are recommended. The fan is designed for continuous-duty service. To achieve optimum performance, connect ductwork to both the inlet and outlet, providing a straight duct length of at least 1× the inlet diameter and 2 to 3× the outlet diameter, free from obstructions. Electrical connections shall be made through the external terminal box in accordance with the supplied wiring diagram and local installation regulations.

Exploded View



Specifications

- Drive Type: Direct driven External Rotor Motor
- Impeller: Backward curved - plastic or Galvanized steel
- Air Flow Range: 100 m³/h to 2500 m³/h
- Static Pressure: Up to 750 Pa
- Material: Galvanized
- Dynamic Balancing: G2.5 or G6.3, statically and dynamically balanced according to ISO 1940 / AMCA 204
- Power supply: 230V /1PH/50-60HZ
- Manufacturing Standards: ISO 9001 / 14001 / 45001
- Accessories: Speed controller, backdraft damper, silencer & insulated housing

AMCA certification

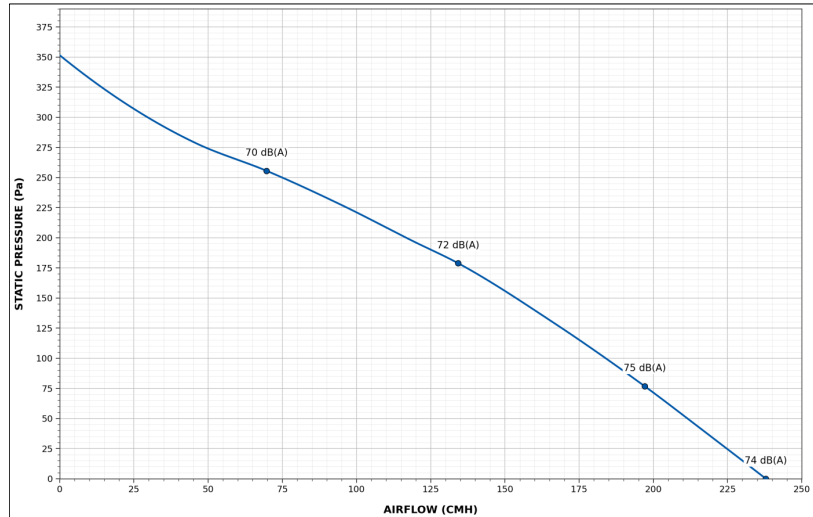


Ecoair Air Conditioning Manufacturing certifies that the VDF & VDF-B models shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

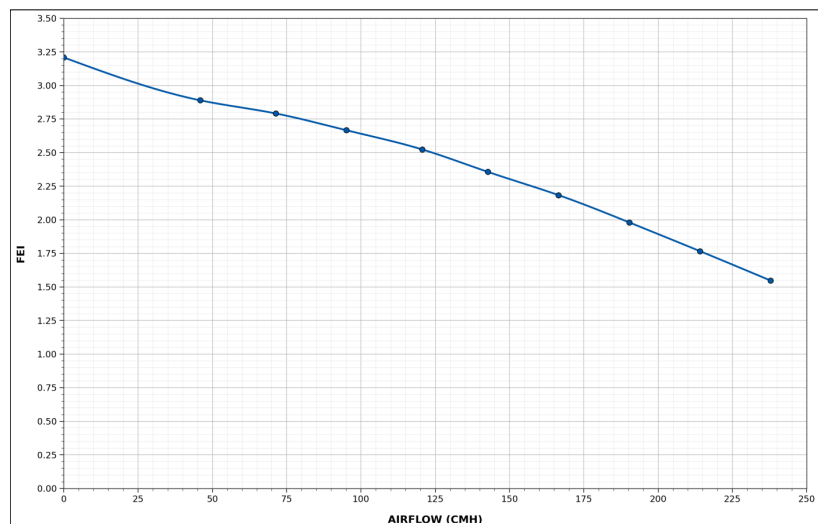
Performance curve for fans

Density - 1.2 kg/m³

Airflow, Static Pressure & Sound Level



Fan Energy Index



Model: Model: VDF 100 & VDF -B -100

Voltage	230V
Max Power Input	67W
Frequency	50 HZ
Nominal Speed	2666 RPM
Working temp	50°C

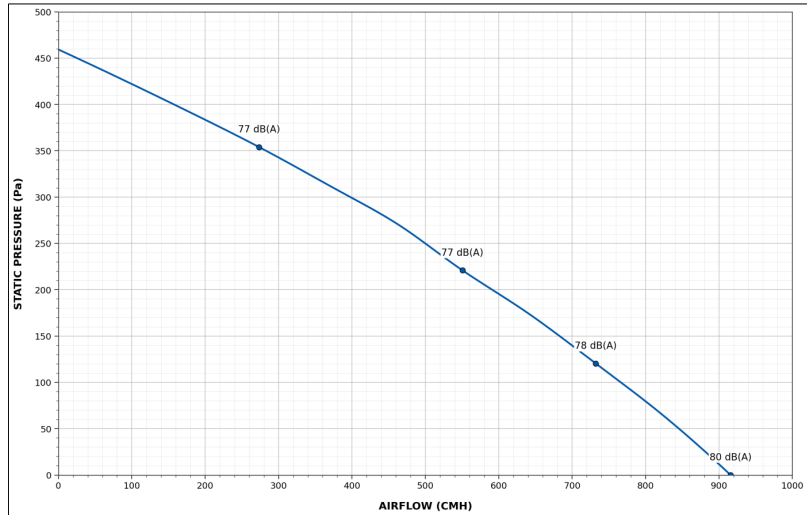
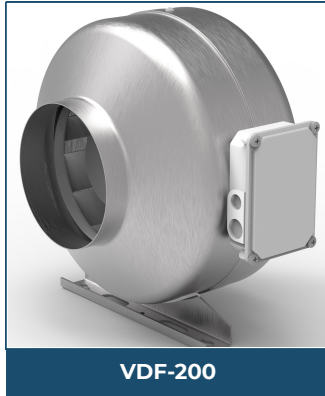


Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance certified is for Installation Type D – Ducted Inlet, Ducted Outlet. Performance ratings do not include the effects of appurtenances (accessories). The A-weighted sound ratings shown have been calculated in accordance with AMCA International Standard 301. Values shown are for inlet LwA sound power levels for Installation Type D (Ducted Inlet, Ducted Outlet). Ratings include the effects of duct end correction. FEI calculation is based on wire-to-air tests.

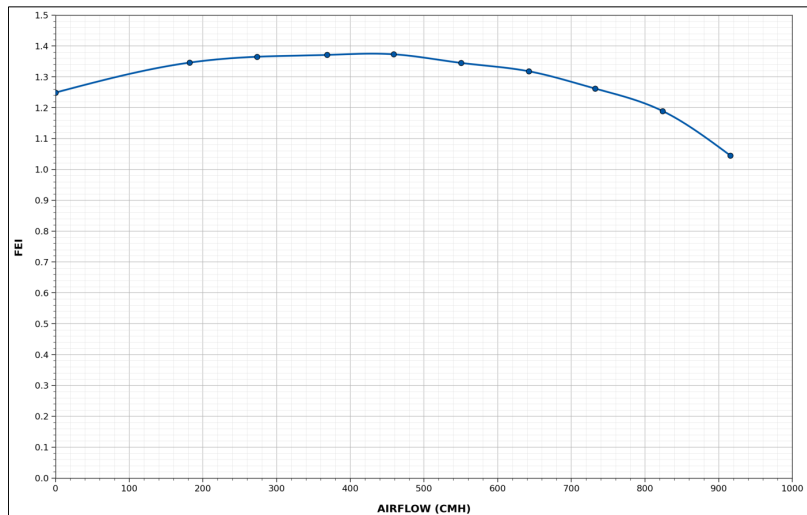
Performance curve for fans

Density - 1.2 kg/m³

Airflow, Static Pressure & Sound Level



Fan Energy Index



Model: VDF 200 & VDF -B -200

Voltage	230V
Max Power Input	177W
Frequency	50 HZ
Nominal Speed	2568 RPM
Working temp	50°C

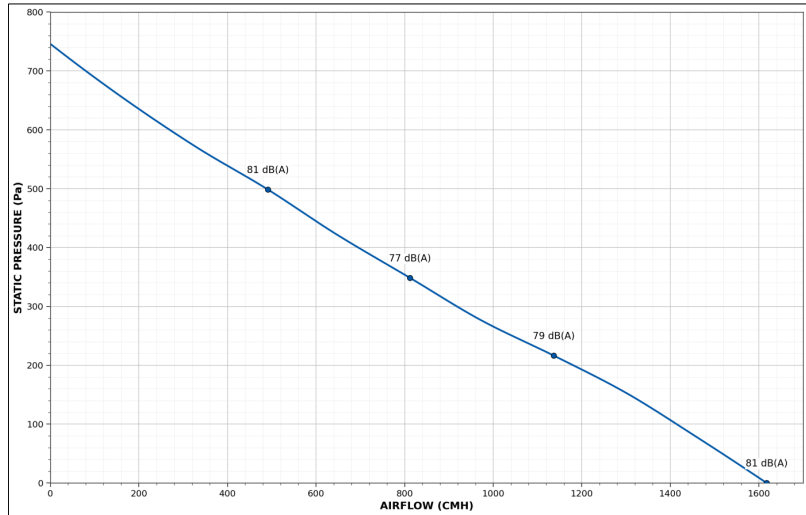
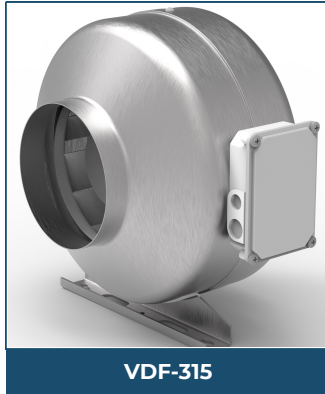


Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance certified is for Installation Type D – Ducted Inlet, Ducted Outlet. Performance ratings do not include the effects of appurtenances (accessories). The A-weighted sound ratings shown have been calculated in accordance with AMCA International Standard 301. Values shown are for inlet LwA sound power levels for Installation Type D (Ducted Inlet, Ducted Outlet). Ratings include the effects of duct end correction. FEI calculation is based on wire-to-air tests.

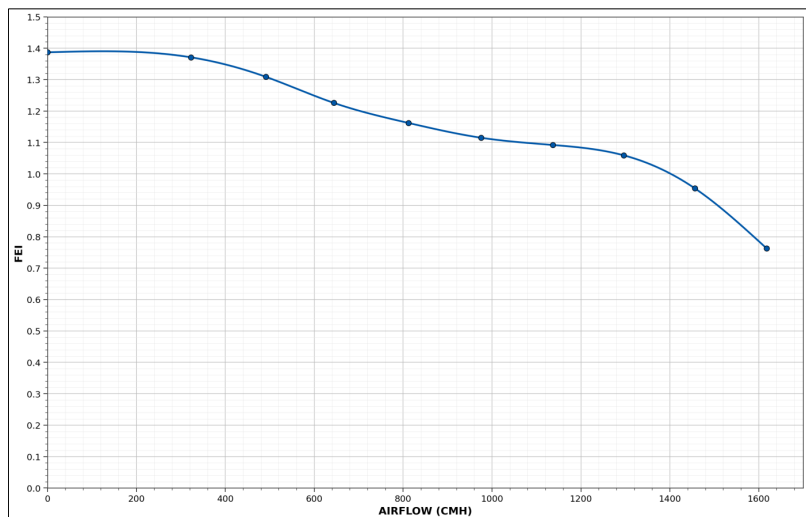
Performance curve for fans

Density - 1.2 kg/m³

Airflow, Static Pressure & Sound Level



Fan Energy Index



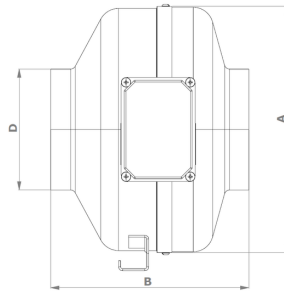
Model: VDF 315 & VDF -B -315

Voltage	230V
Max Power	314W
Frequency	50 HZ
Nominal Speed	2465 RPM
Working temp	50°C

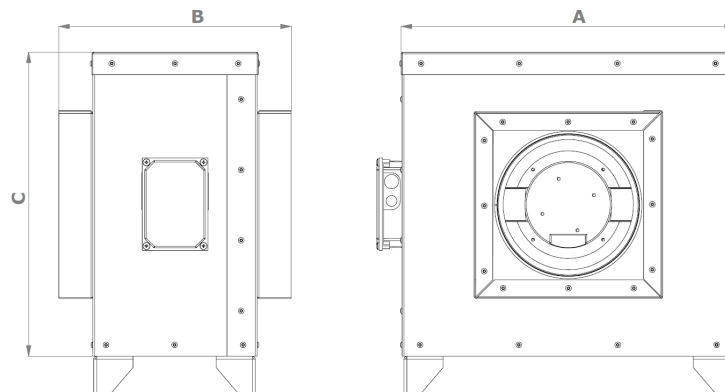


Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance certified is for Installation Type D – Ducted Inlet, Ducted Outlet. Performance ratings do not include the effects of appurtenances (accessories). The A-weighted sound ratings shown have been calculated in accordance with AMCA International Standard 301. Values shown are for inlet LwA sound power levels for Installation Type D (Ducted Inlet, Ducted Outlet). Ratings include the effects of duct end correction. FEI calculation is based on wire-to-air tests.

Dimensions



Type	A-mm	B-mm	D-mm
VDF-100	242	202	98
VDF-200	333	224	198
VDF-315	401	233	315



Type	A-mm	B-mm	C-mm
VDF-B-100	320	202	302
VDF-B-200	410	224	410
VDF-B-315	480	233	480