



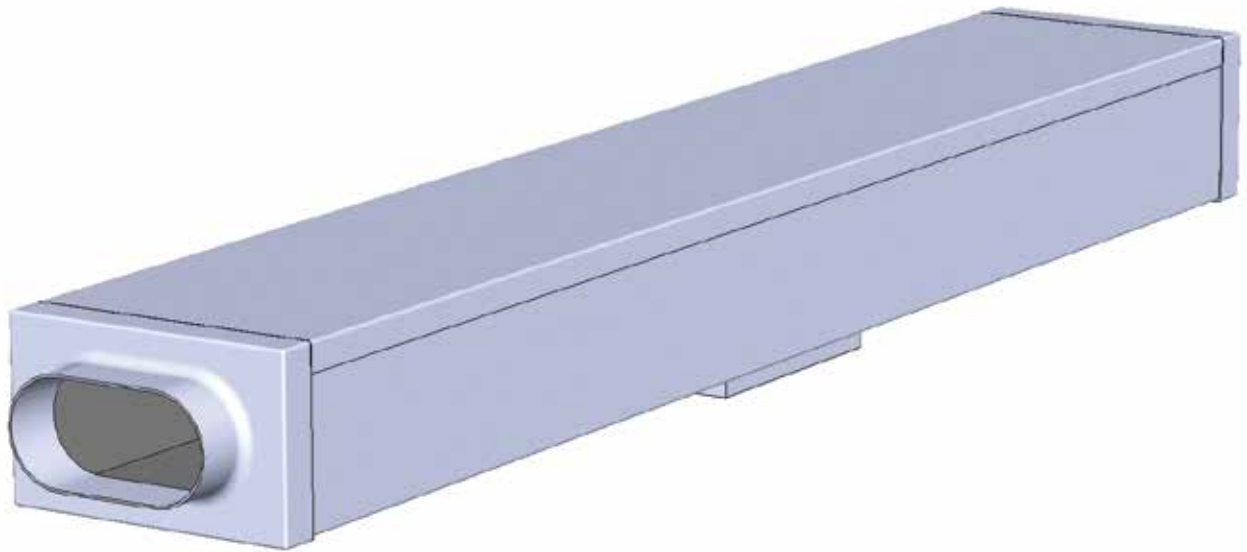
NCS Acoustics

DESIGN · MANUFACTURE · INSTALL



AFA150 Compartment Unit

Fan unit with integrated attenuation



The complete solution for removing moisture or providing outside air, that's very quiet, easy to install and economical. Ideal for bathrooms, apartments and hotel rooms.

The AFA150 incorporates a fan with integral inlet and outlet attenuators. The one piece design encloses the fan in a steel casing reducing fan radiated noise, important for 'in ceiling' use. The AFA150 can be configured to run in a two speed mode for 'trickle' and 'boost' in bathroom extract type applications.

- Quiet airflow from less than 25 l/s up to 85 l/s.
- A compact 250mm wide x 150mm deep x 1500mm long (plus spigot), a low profile, ideal for tight in-ceiling applications.
- Two fan options, EC or AC.



ACOUSTIC PERFORMANCE

The AFA150 is very quiet. It can be installed to deliver 85 l/s airflow with intake noise at NC38 and radiated noise (via a Gib ceiling) at a remarkable NC20. At lower flow rates of 25 - 50 l/s noise from the AFA150 is barely audible even with low ambient background noise levels.

Applications for the AFA150 include outside air supply, bathroom and toilet extracts. Ideal for apartments, hotels, commercial applications and is so quiet that it can be used in domestic houses.

The AFA150 can be easily set up to run in a low speed 'trickle' mode of 25 l/s continuously and switched to full speed 'boost' of 85 l/s. This is an ideal setup for bathrooms where the continuous low speed mode provided code compliance ventilation and the high speed 'boost' mode is used during showers to extract excess steam.

AERODYNAMIC PERFORMANCE

Two fan options AC (standard) or EC.

AC Fan

ebmPapst R2E-190-RA26-05 backward curved centrifugal fan impeller with external rotor motor. Air flow is up to 85 l/s at 20°C (free air) and can easily be tailored to each application by simply changing a capacitor.

EC Fan

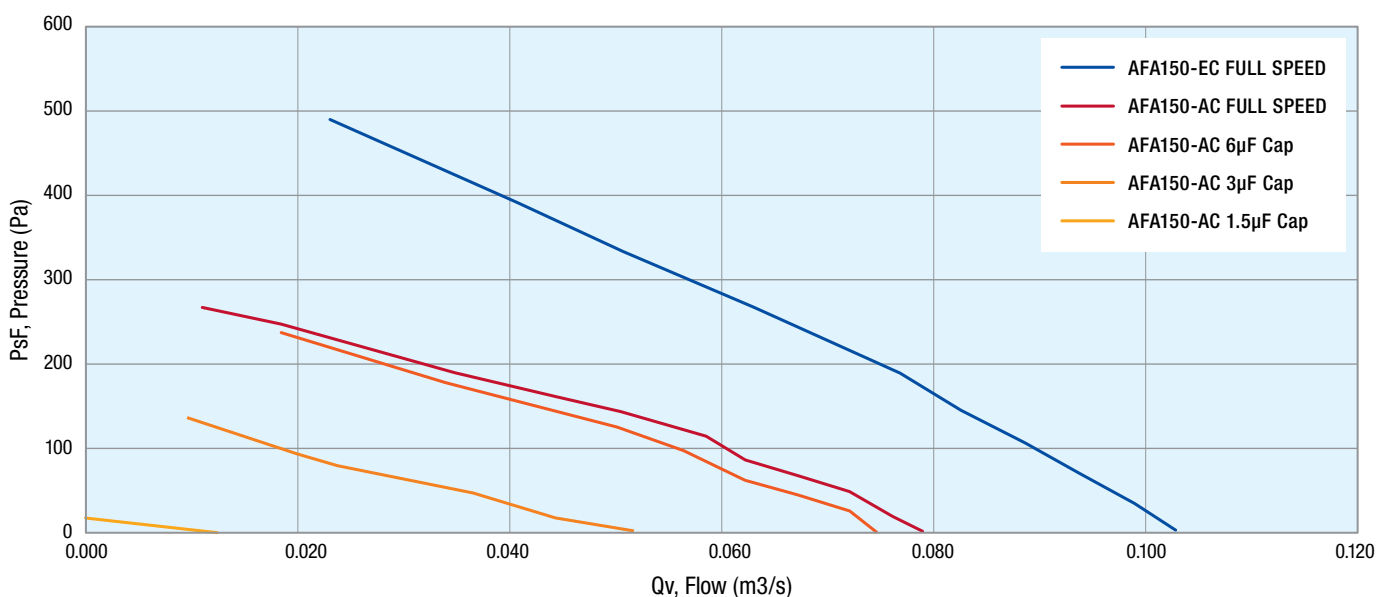
ebmPapst R3G-190-RC05-03 Electronically commutated external-rotor motor with integrated control electronics. Offers greater performance of 0 to nominal 100 l/s by manual or electronic input.

The addition of duct work alters airflow performance.

FAN SPECIFICATIONS

Model	AFA150-AC	AFA150-EC
Code	R2E-190-RA26-05	R3G-190-RC05-03
Diameter	190 mm	190 mm
Speed	2350 rpm max	3640 rpm
Power	0.052 kW	0.12 kW
Phase	1	1
Current	0.23 A	1.1 A
Voltage	230 V	230 V

AFA150 COMPARTMENT UNIT PERFORMANCE CURVE





CONSTRUCTION

Construction material: 1.2mm mild steel.

Infill material: High density glass wool with scrim facing.

Connection system: 150 oval spigot.

Fan Impellers made of high-tech compound material with optimized flow control, combined with proven single phase asynchronous AC or highly efficient EC motors.

Size: 250mm wide x 150mm deep x 1500mm long (plus spigot). Also allow for junction box, which can be positioned, side, under or loose.

DIMENSIONS & MASS				
Model	Dimensions (mm)			Mass (kg)
	Width	Height	O/A Length	
AFA150	250	150	1500 + spigot	20

INSTALLATION

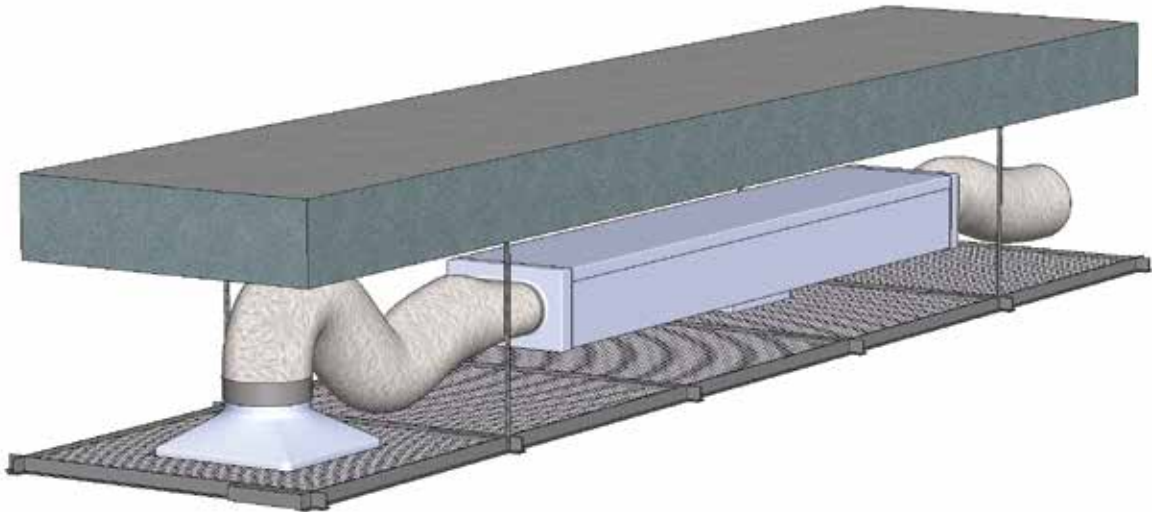
The one piece AFA150 makes installation simple and straight forward. Just couple up 150mm diameter inlet and outlet ducts. Reduces on-site time spent with fans, flexible couplings, silencers, speed regulators etc.

Installation should be carried out so the fan mounting plate and electrical junction box are accessible. Junction box can be positioned, side, under or loose.

Grilles and ducting not supplied as standard, contact us for complete kitset if required.

There are no user-serviceable parts fitted to the AFA150. A registered electrician must connect the fan wiring to the buildings electrical system. Electrical wiring diagram supplied with unit.

See AFA150 Operation and Maintenance Sheet for more information.



ADDITIONAL INFORMATION

Visit our website or contact us for information on installation, testing, monitoring, maintenance services and technical guides.

Data correct at time of publication, please ensure you have the latest version by checking our website. NCS Acoustics Limited accepts no liability for use of data within this brochure. Materials may be updated at any time without notice.


Got a question? Call us to discuss with an experienced engineer:
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