



NV-AA1-12

Airflow Amplifier for Boosting NF-A12x25 120mm Fans

The NV-AA1-12 is an airflow amplifier for NF-A12x25 120mm fans that is ideal for boosting their performance in desk and room ventilation applications. Thanks to a three-way airflow amplification system that combines helix energy recovery, progressive flow acceleration, and Venturi-effect volume enhancement, the NV-AA1 enables these fans to create a strong, focused beam of air while maintaining exceptional quietness of operation. As such, the NV-AA1-12 is both perfect for situations where fans are required to blow air across a room or other bigger spaces, but also for applications with smaller working distances like typical desk or ambient fans, where the amplification effect of the NV-AA1-12 makes it possible to achieve the same ventilation performance at lower fan speeds and noise levels.

Three-way airflow amplification system

The NV-AA1-12 leverages a sophisticated three-step procedure to significantly boost the NF-A12x25's performance in ambient ventilation applications. Through the combination of helix energy recovery, progressive flow acceleration, and Venturi-effect volume enhancement, the NV-AA1-12 enables these fans to produce a strong, focused beam of air even when they run at near-inaudible noise levels.

Helix energy recovery

The air that comes out of an axial fan has a high amount of rotational energy, which results in a helix-shaped flow path. The NV-AA1-12 recovers this rotational energy and uses it to accelerate the airflow. With the inside shape of the NV-AA1's funnel carefully fine-tuned to the helix structure produced by the NF-A12x25 fan, it achieves an extremely high rate of energy recovery.

Progressive flow acceleration

Following the principle of mass continuity, a fluid's speed increases when it's forced through a reduced cross-sectional area, so when the air is driven through the NV-AA1's progressively narrowing funnel, air speed increases continuously until it reaches maximum velocity at the outlet.

Venturi-effect volume enhancement

In accord with the principle of conservation of energy, air pressure must decrease as air velocity increases (Bernoulli's principle). This reduction in pressure that occurs when a fluid flows through a constriction, the so-called Venturi-effect, creates a suction force at the outlet, which draws in additional air from the sides and through the cuts of the NV-AA1's funnel, thereby enhancing the airflow volume.

Ideal in combination with NV-FM1

Do you require strong but quiet airflow on your desk or somewhere in your room? Combine the NV-AA1-12 and NF-A12x25 fan with the NV-FM1 multi-purpose pivoting fan mount! With its solid metal construction and flexible mounting options, the NV-FM1 is the ideal solution for putting or fixing a fan literally anywhere – from your desk or shelf to your walls or ceilings.

Easy installation

Installing the NV-AA1 couldn't be easier: First, remove the fan's pre-installed anti-vibration pads on the outlet side of the fan and replace them with the NV-AVG1 anti-vibration gasket that came with the fan so that there will be no gap between the fan and the NV-AA1. Then, screw-fix the NV-AA1 to the fan's mounting holes using the supplied screws.

Optimised for NF-A12x25

The NV-AA1-12's aerodynamic design has been created and carefully fine-tuned for use with Noctua's NF-A12x25 series fans. For home applications, the 5V PWM models with USB power adaptor cables can easily be run off power banks or standard USB power supplies. The NV-PS1 power supply is available for powering 12V models.

NV-AA1-12 SPECIFICATIONS

Colour	Black
Fan compatibility	All square frame Noctua 12cm fans
Warranty	6 years

LOGISTIC DATA

Product name	Noctua NV-AA1-12
EAN	9010018900194
UPC	841501190193
Packaging dimensions (HxWxD)	83x125.5x123.5 mm
Weight incl. packaging	160 g
Warranty	6 years
Packaging unit	24 pcs
Packaging dimensions / unit (HxWxD)	38x39.6x27.8 mm
Weight incl. packaging / unit	4.60 kg

SCOPE OF DELIVERY

NA-AA1-12 airflow amplifier
4x fan screws