

AB5012DX-A03 ADDA 12VDC 50mm Hypro Bearing Blower Fan Datasheet



Brand: ADDA

SKU: 990851770824

Category: Axial & Centrifugal Fans

Price: **\$11.99**

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Product Page:

<https://www.equipspares.com/product/ab5012dx-a03-adda-12vdc-50mm-hypro-bearing-blower-fan>

Product Description

The ADDA AB5012DX-A03 is a precision-engineered DC centrifugal blower designed for compact thermal management applications requiring concentrated airflow. Utilizing ADDA's proprietary Hypro bearing technology, this unit balances structural rigidity with extended operational longevity, effectively mitigating friction-induced thermal degradation. The aerodynamic volute design optimizes static pressure generation, making it ideal for high-impedance systems where standard axial fans fail to penetrate dense fin arrays. Engineered with a brushless DC motor architecture, the AB5012DX-A03 ensures consistent rotational stability and reduced electromagnetic interference. This specific thermal solution provides a reliable cooling mechanism for sensitive electronic components within restricted enclosures, maintaining optimal performance envelopes under continuous operation and varying load conditions.

Model Number: AB5012DX-A03

Brand: ADDA

Product Type: DC Centrifugal Blower

Rated Voltage: 12VDC

Voltage Range: 10.8 - 13.2 VDC

Rated Current: 0.15 A

Input Power: 1.80 W

Rated Speed: 4500 RPM

Bearing Type: Hypro Bearing

Max. Air Flow: 3.20 CFM (5.43 m³/h / 0.09 m³/min)

Max. Static Pressure: 11.43 mmH₂O (112.1 Pa / 0.45 inH₂O)

Dimensions: 50mm x 50mm x 15mm

Noise Level: 34.0 dB(A)

Frame Material: PBT Thermoplastic (UL94V-0)

Impeller Material: PBT Thermoplastic (UL94V-0)

Operating Temperature: -10°C to +70°C

Storage Temperature: -40°C to +70°C

Life Expectancy: 40,000 Hours at 40°C

Termination: 2-Wire Lead (Red +, Black -)

Motor Protection: Impedance Protected

Polarity Protection: Reverse Polarity Protected

Safety Approvals: UL, CUL, TUV, CE

Weight: 28g

This centrifugal blower is specifically engineered for space-constrained applications such as multimedia projectors and portable optical devices. The AB5012DX-A03 excels in directing airflow through dense heatsinks found in projection lighting modules, ensuring optimal operating temperatures for bulbs and DLP/LCD chips. Additionally, the AB5012DX-A03 is suitable for small form-factor servers, embedded industrial PCs, and spot cooling in telecommunications equipment where lateral airflow intake and exhaust are required to maintain system integrity.

Supplemental Images

