

A4D450-BA14-02 ebmpapst 400V 450mm AC Axial Fan

SKU: A4D450-BA14-02

Price: \$769.96

Categories: Fans

Tags: ebmpapst

Product Link:

<https://www.electspares.com/product/a4d450-ba14-02-ebmpapst-400v-450mm-ac-axial-fan/>

Product Description

The ebmpapst A4D450-BA14-02 is a high-performance 400 VAC AC Axial Fan with an impeller size of 450 mm, specifically engineered for demanding thermal management in industrial frequency converters and electrical control cabinets. Driven by a robust three-phase M4D094-HA external rotor motor with a maximum power input of 660.0 W at 400 VAC/60 Hz (Delta connection), this precision unit operates at a maximum speed of 1540 RPM, delivering a powerful airflow for efficient heat extraction. Constructed with a 5-blade sheet steel impeller system coated in black featuring high-precision ball bearings and an ABS plastic terminal box, this 7.9 kg unit provides a dependable and energy-efficient air-moving solution with a static efficiency of 39.4% and IP54 protection, ensuring maximum cooling performance and long-term mechanical stability with a maximum safe operating speed of 1800 RPM for high-power inverters, variable frequency drives (VFD), and integrated electrical switchgear systems at the end.

A4D450-BA14-02 Fan Parameters

Model Number: A4D450-BA14-02

Manufacturer: ebmpapst

Motor Model: M4D094-HA

Series: S Series

Type: AC Axial Fan

Impeller Size: 450 mm

Weight: 7.9 kg

Bearing Type: Ball bearing

Nominal Voltage: 400 VAC (3-phase)

Wiring: Δ / Y connection

Frequency: 50 / 60 Hz

Power Input (ml): 585 W (50Hz/ Δ) / 390 W (50Hz/Y) / 660 W (60Hz/ Δ) / 400 W (60Hz/Y)

Nominal Current (ml): 1.1 A (50Hz/ Δ) / 0.67 A (50Hz/Y) / 1.16 A (60Hz/ Δ) / 0.7 A (60Hz/Y)

Starting Current: 3.9 A (50Hz/ Δ) / 1.3 A (50Hz/Y) / 3.5 A (60Hz/ Δ) / 1.2 A (60Hz/Y)

Speed (ml): 1330 RPM (50Hz/ Δ) / 1000 RPM (50Hz/Y) / 1540 RPM (60Hz/ Δ) / 1060 RPM (60Hz/Y)

Max. Back Pressure (ml): 200 Pa (50Hz/ Δ) / 110 Pa (50Hz/Y) / 110 Pa (60Hz/ Δ) / 55 Pa (60Hz/Y)

Maximum Safe Speed: 1800 RPM

Max. Air Flow: 62.23 CFM (105.7 m³/h / 1.76 m³/min)

Actual Air Flow (qv): 4500.0 m³/h (At optimum efficiency)

Pressure Increase (pfs): 135 Pa

Overall Efficiency (η_{es}): 39.4% (Actual 2015)

Efficiency Grade: N 48.1

Specific Ratio: 1.00

Measurement/Efficiency Category: A / Static

Motor Protection: Thermal overload protector (TOP) brought out

Insulation Class: Class F

Humidity Class: F3-1

Electrical Hookup: Via terminal box (ABS plastic)

Number of Blades: 5

Direction of Rotation: Clockwise, viewed toward rotor

Airflow Direction: "A" (Airflow over struts)

Impeller Material: Sheet steel, coated in black

Rotor Surface: Coated in black

Installation Position: Any

Condensate Discharge Holes: Rotor-side

Operation Mode: S1

Touch Current (IEC 60990): \leq 3.5 mA

Operating Temperature: -40 - +70 °C (50Hz) / -40 - +50 °C (60Hz)

Storage Temperature: -40 - +80 °C

Degree of Protection: IP54

Standard Compliance: EN 60034-1 (2010); CE

Approval Agency: CCC; EAC

Application

The ebmpapst A4D450-BA14-02 AC fan is primarily utilized in industrial frequency converters, power inverters, and electrical control cabinet heat dissipation systems.

Product Images





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