

W4D500-ZL09-01 ebmpapst 400/480VAC 500mm AC Axial Fan

SKU: W4D500-ZL09-01

Price: \$2,421.31

Categories: Fans

Tags: ebmpapst

Product Link:

<https://www.electspares.com/product/w4d500-zl09-01-ebmpapst-400-480vac-500mm-ac-axial-fan/>

Product Description

The ebmpapst W4D500-ZL09-01 is a versatile industrial AC axial fan with a nominal voltage of 400/480 VAC and dimensions of 600 x 600 x 256 mm, engineered for high-efficiency thermal management in refrigeration and industrial ventilation. Driven by a multi-phase M4D110-GF external rotor motor with power ratings from 475 W to 1090 W depending on wiring configuration (Δ/Y), this unit features a heavy-duty dual ball bearing system designed for long-term mechanical stability and continuous S1 duty. Its aerodynamic design with a 500 mm impeller, constructed from PP plastic and galvanized sheet-metal, delivers a robust airflow of 5810 m³/h at its optimum efficiency point while maintaining high static pressure capability. Built with a PP plastic fan housing and a terminal box for flexible electrical hookup, this 14.58 kg fan provides a dependable and weather-resistant cooling solution with IP54 protection and H2 environmental class for industrial condensers, dry coolers, and large-scale HVAC units at the end.

W4D500-ZL09-01 Fan Parameters

Model Number: W4D500-ZL09-01

Manufacturer: ebmpapst

Motor Model: M4D110-GF

Series: W4D Series

Type: AC Axial Fan

Impeller Size: 500 mm

Dimensions: 600 x 600 x 256 mm

Weight: 14.58 kg

Bearing Type: Ball bearing

Nominal Voltage: 400 VAC / 480 VAC (3-phase)

Voltage Range: 380 - 480 VAC

Frequency: 50 / 60 Hz

Power Consumption: 695 W (400V Δ 50Hz) / 475 W (400V Y 50Hz) / 1090 W (480V Δ 60Hz)

Nominal Current: 1.4 A (400V Δ 50Hz) / 0.8 A (400V Y 50Hz) / 1.65 A (480V Δ 60Hz)

Speed: 1340 RPM (50Hz) / 1560 RPM (60Hz)

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

Max. Static Pressure: 9.81 mmH₂O (96.24 Pa / 0.39 inH₂O)

Actual Air Flow: 5810 m³/h (@ optimum efficiency)

Actual Static Pressure: 220 Pa (Max. back pressure @ 50Hz Δ)

Overall Efficiency (η_{es}): 44.6 %

Motor Design: Three-phase AC external rotor motor

Motor Protection: Thermal switch auto reset (TOP) wired internally

Technical Features: Star-delta (Δ /Y) wiring; Soft start; Moisture protection

Insulation Class: Class F

Electrical Hookup: Terminal box

Number of Blades: 5

Direction of Rotation: Clockwise, viewed toward rotor

Airflow Direction: V (Exhaust over struts)

Impeller Material: PP plastic, galvanized sheet-metal plate

Housing Material: PP plastic

Terminal Box Material: PP plastic

Installation Position: Shaft horizontal or rotor on bottom

Degree of Protection: IP54

Environmental Protection: H2

Operating Temperature: -40 - +60 °C

Standard Compliance: EN 60034-1; CE

Approval Agency: CSA C22.2 No. 100; EAC; UL 1004-1

Application

The ebmpapst W4D500-ZL09-01 AC fan is primarily utilized in industrial refrigeration condensers, dry coolers, air conditioning units, and large-scale ventilation systems for heat exchangers.

Product Images









Scan for product details:

