

# FN045-VDK.2F.V7P2 ZIEHL-ABEGG 400V 450mm AC Axial Fan

**SKU:** FN045-VDK.2F.V7P2

**Price:** \$484.26

**Categories:** Fans

**Tags:** Ziehl-Abegg

**Product Link:**

<https://www.electspares.com/product/fn045-vdk-2f-v7p2-ziehl-abegg-400v-450mm-ac-axial-fan/>

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## Product Description

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The ZIEHL-ABEGG FN045-VDK.2F.V7P2 is a professional-grade 400 V 3-Phase Industrial AC Axial Fan with a 450 mm blade diameter, featuring bionic scythe-shaped Owllet blades with serrated trailing edges for optimized acoustic performance. Driven by a high-torque 4-pole external rotor motor with THCL 155 (Class F) insulation and moisture protection, this unit features a versatile dual-speed Delta/Star ( $\Delta/Y$ ) configuration, delivering a precise Max. Power Consumption of 0.46 kW at 1340 RPM (Delta) or 0.31 kW at 1030 RPM (Star) at 50 Hz. Optimized for high-static pressure cooling modules, it achieves a maximum air flow of 7000.0 m<sup>3</sup>/h (4120.0 CFM) with an efficiency grade of N=40 to ensure superior heat extraction in refrigeration condensers. Constructed with high-strength die-cast aluminum blades and a 26.00 kg heavy-duty assembly (including wall ring/guard), this German-engineered unit provides IP54 protection and long-term mechanical stability for mission-critical industrial applications at the end.

FN045-VDK.2F.V7P2 Fan Parameters

Model Number: FN045-VDK.2F.V7P2

Manufacturer: ZIEHL-ABEGG (Made in Germany)

Type: 3-Phase AC Axial Fan (Scythe-shaped Owllet blades)

Blade Diameter: 450.0 mm

Weight: 26.00 kg

Bearing Type: Ball bearing with long-time lubrication

Nominal Voltage: 3~ 400 VAC  $\pm 10\%$  ( $\Delta / Y$ )

Phase: 3~

Frequency: 50/60 Hz

Rated Performance (Delta  $\Delta$ , 50 Hz): 0.46 kW | 0.88 A | 1340 RPM |  $\cos \phi$  0.75 | 70 °C

Rated Performance (Star Y, 50 Hz): 0.31 kW | 0.52 A | 1030 RPM |  $\cos \varphi$  0.86 | 70 °C  
Rated Performance (Delta  $\Delta$ , 60 Hz): 0.65 kW | 1.15 A | 1480 RPM |  $\cos \varphi$  0.81 | 55 °C  
Rated Performance (Star Y, 60 Hz): 0.37 kW | 0.66 A | 1000 RPM |  $\cos \varphi$  0.84 | 55 °C  
Max. Air Flow: 4120.0 CFM (7000.0 m<sup>3</sup>/h / 116.67 m<sup>3</sup>/min)  
Max. Static Pressure: 16.3 mmH<sub>2</sub>O (160.0 Pa / 0.64 inH<sub>2</sub>O)  
Working Air Flow: 7000.0 m<sup>3</sup>/h  
Static Pressure Increase: 160.0 Pa  
Efficiency Grade: N=40 (ErP 2015 compliant)  
Static Efficiency ( $\eta$  statA): 33.1 %  
Motor Type: External rotor motor (4-pole)  
Motor Protection: Thermal overload protector (TOP) wired internally  
Insulation Class: THCL 155 (Class F)  
Degree of Protection: IP54  
Electrical Hookup: Terminal box K62 (Mounted on Stator)  
Connection Diagram: 1360-108XA  
Number of Blades: 7 (Bionic Owlet profile)  
Direction of Rotation: Clockwise (viewed toward rotor)  
Impeller Material: Die-cast aluminum  
Housing Material: Galvanized steel / RAL 9005 powder coating  
Operation Mode: S1 (Continuous operation)  
Sound Power Level: 74.0 dB(A) (at 50 Hz, Delta)  
Sound Pressure Level: 51.0 dB(A) (at 7m distance)  
Service Life (L10): 40,000 h (at 40 °C)  
Operating Temperature: -40 - +70 °C (50 Hz) / -40 - +55 °C (60 Hz)  
Standard Compliance: ErP 2015; EN 60335-1; CE; UL

#### Application

The ZIEHL-ABEGG FN045-VDK.2F.V7P2 axial fan is the primary cooling component for high-performance refrigeration condensers, dry coolers, and industrial HVAC units requiring reliable dual-speed airflow and optimized noise-to-power ratios in 400V power grids.

## Product Images

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Scan for product details:

