

RH50E-4DK.6K.1R ZIEHL-ABEGG 230/400V AC Centrifugal Fan

SKU: RH50E-4DK.6K.1R

Price: \$794.81

Categories: Fans

Tags: Ziehl-Abegg

Product Link:

<https://www.electspares.com/product/rh50e-4dk-6k-1r-ziehl-abegg-230-400v-ac-centrifugal-fan/>

Product Description

The ZIEHL-ABEGG RH50E-4DK.6K.1R is a professional-grade 230/400 V 3-Phase Backward Curved Centrifugal Fan with a 500 mm impeller diameter, specifically engineered for variable speed operation (VSD required) in high-static pressure air handling units. Driven by a high-torque 4-pole external rotor motor with THCL 155 (Class F) insulation and moisture protection, this unit features a dual-voltage Delta/Star (Δ/Y) configuration, delivering a precise Power Consumption of 1.60 kW at 1300 RPM (50 Hz). Optimized for high-resistance industrial ventilation, it achieves a maximum air flow of 8500.0 m³/h (5003.0 CFM) with a static efficiency (η_{statA}) of 48.6%, fully compliant with ErP 2013 standards (N=59.0). Constructed with a high-strength aluminum impeller and a 22.00 kg heavy-duty assembly, this German-engineered motorized impeller provides IP54 protection and ensures maximum mechanical stability for mission-critical HVAC applications at the end.

RH50E-4DK.6K.1R Fan Parameters

Model Number: RH50E-4DK.6K.1R

Manufacturer: ZIEHL-ABEGG

Type: AC Centrifugal Fan

Series: RH Series (C-series backward curved)

Impeller Size: 500.0 mm

Weight: 22.00 kg

Bearing Type: Ball bearing with long-time lubrication

Nominal Voltage: 3~ 230/400 VAC +10% (Δ / Y)

Phase: 3~

Frequency: 50 Hz

Rated Performance (Delta Δ , 230V): 1.60 kW | 5.0 A | 1300 RPM | $\cos \phi$ 0.76 | 60 °C

Rated Performance (Star Y, 400V): 1.60 kW | 2.9 A | 1300 RPM | $\cos \varphi$ 0.76 | 60 °C

Max. Air Flow: 5003.0 CFM (8500.0 m³/h / 141.67 m³/min)

Max. Static Pressure: 3.01 inAq (750.0 Pa / 76.5 mmH₂O)

Working Air Flow: 8500.0 m³/h

Static Pressure Increase: 750.0 Pa

Efficiency Grade: $\eta_{actual} = 59.0$ ($\eta_{target} = 58$ / ErP 2013 compliant)

Static Efficiency (η_{statA}): 48.6 %

Motor Type: External rotor motor (4-pole)

Motor Protection: Thermal contact (Thermostatschalter) wired internally

Insulation Class: THCL 155 (Class F)

Degree of Protection: IP54

Speed Control: VSD required (Variable Speed Drive)

Electrical Hookup: Terminal box

Connection Diagram: 1360-108XA (Δ / Y connection)

Number of Blades: 7

Direction of Rotation: Clockwise (viewed toward suction side)

Impeller Material: Aluminum (AlMg3)

Operation Mode: S1 (Continuous operation)

Sound Power Level: 79.0 dB(A)

Service Life (L10): 40,000 h (at 40 °C)

Operating Temperature: -20 - +60 °C

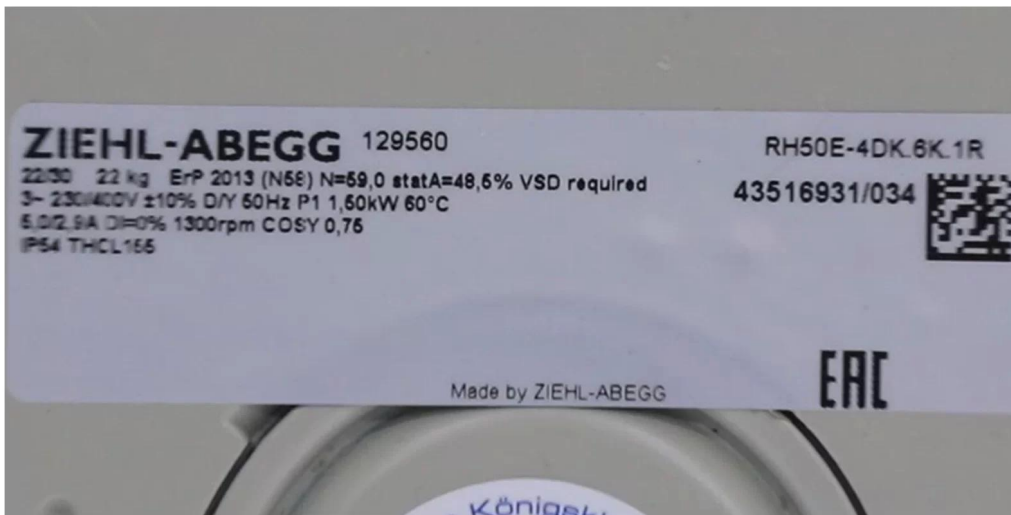
Standard Compliance: CE; EN 60335-1; ErP 2013

Application

The ZIEHL-ABEGG RH50E-4DK.6K.1R centrifugal fan is the primary cooling component for industrial air handling units (AHU), variable air volume (VAV) systems, and large-scale ventilation modules requiring VSD-based precision speed control and high-static pressure in 400V environments.

Product Images





Scan for product details:

