

RH50M-4DK.6F.1R Ziehl-Abegg 230V/400V AC Centrifugal Fan

SKU: RH50M-4DK.6F.1R

Price: \$1,783.91

Categories: Fans

Tags: Ziehl-Abegg

Product Link:

<https://www.electspares.com/product/rh50m-4dk-6f-1r-ziehl-abegg-230v-400v-ac-centrifugal-fan/>

Product Description

The Ziehl-Abegg RH50M-4DK.6F.1R is an ultra-high-capacity industrial AC Backward Curved Centrifugal Fan with an impeller size of 500 mm. Driven by the MK137-4DK.15.N dual-voltage external rotor motor, this 17 kg model is engineered to operate on either 400 VAC (Star) or 230 VAC (Delta) three-phase power supplies. It delivers an exceptional maximum airflow of 8850 m³/h at 1340 RPM (50 Hz). Featuring the specialized 7-blade "C-series" profile made of high-performance Zamid composite, the RH50M-4DK.6F.1R is optimized to generate intense static pressure (520 Pa) required to overcome the air resistance of massive heat exchangers and dense filter arrays. This heavy-duty unit is specifically designed as a primary inverter cooling fan for high-power frequency drives, offering variable installation flexibility and mission-critical reliability for 230V/400V industrial automation and central HVAC infrastructure.

RH50M-4DK.6F.1R Fan Parameters

Manufacturer: Ziehl-Abegg (Germany)

Model Number: RH50M-4DK.6F.1R

Motor Model: MK137-4DK.15.N (3-Phase External Rotor)

Type: AC Centrifugal Fan (Backward Curved)

Impeller Size: 500 mm

Dimensions: 500 mm (Diameter) x 245 mm (Height)

Nominal Voltage (Delta Connection): 3~ 230 VAC

Nominal Voltage (Star Connection): 3~ 400 VAC

Frequency: 50 / 60 Hz

Speed (50/60 Hz): 1340 / 1520 RPM

Power Input (50/60 Hz): 820 / 1250 W

Rated Current at 230V (50/60 Hz): 2.70 / 3.60 A

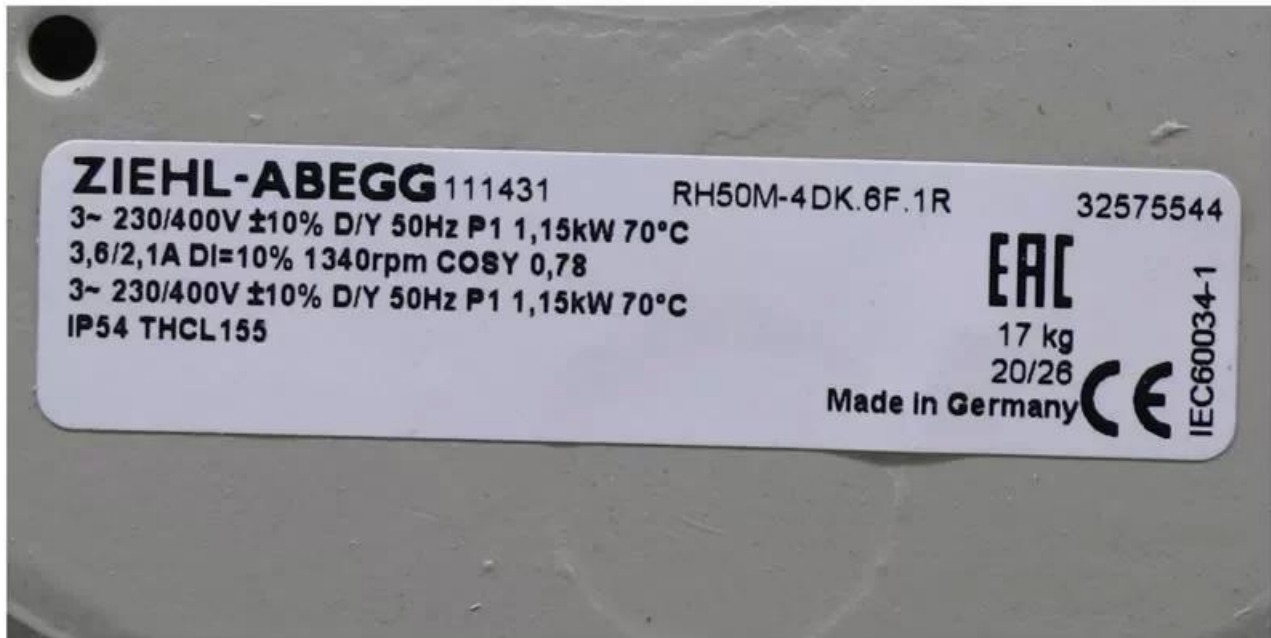
Rated Current at 400V (50/60 Hz): 1.55 / 2.10 A
Cos φ (Power Factor): 0.77
Starting Current at 230V: 7.80 A
Starting Current at 400V: 4.50 A
Max. Airflow (50/60 Hz): 8850 / 9900 m³/h
Max. Static Pressure (50/60 Hz): 520 / 700 Pa (2.09 inAq)
Noise Level: 74 dB(A)
Weight: 17 kg
Termination: Terminal Box (Star/Delta switchable)
Bearing Type: Dual Ball Bearing
Impeller Material: Zamid (High-performance composite, Blue)
Rotor Material: Die-cast aluminum
Number of Blades: 7
Direction of Rotation: Clockwise (viewed toward rotor)
Degree of Protection: IP54
Insulation Class: F (155 °C)
Motor Protection: Thermal Contact (TK) wired to terminals
Operating Temp. Range: -40 °C to +70 °C
Safety Approvals: CE, UL, CSA, CCC, VDE, EAC, ErP 2015

Application

The RH50M-4DK.6F.1R is primarily utilized as a heavy-duty inverter cooling fan for high-power frequency drives (such as Siemens SINAMICS or ABB ACS series), where its dual-voltage capability allows for flexible integration into both 230V and 400V three-phase control systems. It is essential for managing the massive thermal dissipation of IGBT power modules, providing the 520 Pa of static pressure necessary to force airflow through dense internal heat sinks and dust filtration systems. This 17 kg robust unit is also a standard component in precision data center cooling units (CRAC) and industrial heat exchangers. The combination of its 3-phase external rotor motor and high-torque Zamid impeller ensures consistent, 24/7 cooling performance, safeguarding the operational stability of mission-critical industrial automation and renewable energy converter systems.

Product Images







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