

R2S175-AB56-01 ebmpapst 230V 175mm AC Centrifugal Fan

SKU: R2S175-AB56-01

Price: \$179.99

Categories: Fans

Tags: ebmpapst

Product Link:

<https://www.electspares.com/product/r2s175-ab56-01-ebmpapst-230v-175mm-ac-centrifugal-fan/>

Product Description

The ebmpapst R2S175-AB56-01 is a high-performance 230 V AC centrifugal fan with an impeller size of 175 mm, purpose-built to deliver elite-level thermal cooling in high-resistance airflow paths. This unit features a heavy-duty M2S052-CA external rotor motor capable of sustaining a 51.0 W power input to drive its specialized 7-blade glass-fiber reinforced PA 6 plastic impeller at a consistent 2300 RPM. Engineered specifically for high-efficiency air displacement in compact electronics enclosures, it utilizes a backward-curved design to generate high static pressure without the need for a scroll housing. The mechanical design relies on a precision-shielded dual ball bearing system and a painted black rotor surface to ensure continuous S1 mode operation. Featuring an internal thermal overload protector and a robust Class I protection structure, this fan is a critical component for control cabinet ventilation, laboratory equipment, and industrial cooling where consistent air density and operational safety are mandatory.

R2S175-AB56-01 Fan Parameters

Manufacturer: ebmpapst

Model Number: R2S175-AB56-01

Motor Model: M2S052-CA

Series: AC Centrifugal Fan

Impeller Size: 175 mm

Type: AC Centrifugal Fan (Backward-curved)

Bearing Type: Ball Bearing

Nominal Voltage: 230 VAC

Voltage Range: 200.0 - 240.0 VAC

Frequency: 50 / 60 Hz

Weight: 0.9 kg

[Electrical Data]

Input Power (50/60Hz): 53.0 / 51.0 W

Nominal Current (50/60Hz): 0.33 / 0.29 A

Nominal Speed (50/60Hz): 2350 / 2300 RPM

Motor Design: 1-phase 2-pole external rotor motor

Motor Protection: Thermal overload protector (TOP) internally connected

Insulation Class: Class B

Moisture Protection: H0+

Termination: Axial cable

[Performance & Acoustics]

Max. Air Flow: 282.5 CFM (480.0 m³/h / 8.00 m³/min)

Max. Static Pressure: 36.71 mmH₂O (360.0 Pa / 1.45 inH₂O)

Sound Pressure Level: 61.0 dB(A) (Typical for series at max speed)

Number of Blades: 7

Direction of Rotation: Clockwise (viewed toward rotor)

Airflow Direction: Radial

[Materials & Construction]

Impeller Material: PA 6 plastic, glass-fiber reinforced

Rotor Surface: Painted black

Installation Position: Any

Condensation Drainage: None (Open rotor)

Degree of Protection: IP20

Mode of Operation: S1 (Continuous operation)

[Reliability & Safety Standards]

Min. Ambient Temperature: -25 °C

Max. Ambient Temperature (50/60Hz): 40 °C / 55 °C

Storage Temperature: -40 °C - 80 °C

Standard Compliance: EN 60335-1, CE, UKCA

Approval Agency: CCC, EAC

Application

The ebmpapst R2S175-AB56-01 centrifugal fan is used in control cabinet cooling, industrial ventilation, cleanroom equipment, lab automation systems, and high-performance server rack heat dissipation.

Product Images







