

R3G630-AB06-03 ebmpapst 400V 4.2A 630mm EC Centrifugal Fan

SKU: R3G630-AB06-03

Price: \$3,799.81

Categories: Fans

Tags: ebmpapst

Product Link:

<https://www.electspares.com/product/r3g630-ab06-03-ebmpapst-400v-4-2a-630mm-ec-centrifugal-fan/>

Product Description

The ebmpapst R3G630-AB06-03 is a high-performance 400 V industrial EC centrifugal fan with an impeller size of 630 mm, purpose-built to deliver elite-level thermal cooling in high-resistance airflow paths. This unit features a heavy-duty M3G150-IF brushless EC motor capable of sustaining a 2800 W power input to drive its specialized 6-blade backward-curved aluminum impeller at a consistent 1200 RPM. Engineered specifically for air displacement in large-scale air handling units and data center cooling systems, it utilizes a high-efficiency aerodynamic design to provide superior static pressure for central ventilation in mission-critical hardware. The mechanical design relies on precision maintenance-free ball bearings and a black-painted rotor to ensure reliable continuous operation across an ambient temperature range of -25 °C to 50 °C. Featuring a sophisticated electrical interface with 0-10 VDC/PWM control, integrated PID controller, and RS-485 ebmbus for real-time speed monitoring and adjustment, this fan is a critical component for HVAC systems, clean room modules, and industrial heat exchangers where maximum efficiency and intelligent system feedback are mandatory.

R3G630-AB06-03 Fan Parameters

Manufacturer: ebmpapst

Model Number: R3G630-AB06-03

Motor Model: M3G150-IF

Series: RadiPac

Impeller Size: 630 mm

Type: EC Centrifugal Fan (Backward-curved)

Bearing Type: Ball Bearing

Nominal Voltage: 400 VAC (3-phase)

Voltage Range: 380 - 480 VAC

Frequency: 50/60 Hz

Weight: 29000 g

[Electrical Data]

Input Power: 2800 W

Nominal Current: 4.2 A

Nominal Speed: 1200 RPM

Motor Design: EC Motor (External rotor)

Control Interface: 0-10 VDC / PWM / RS-485 ebmBUS

Signal Output: Alarm relay, 10 VDC (10 mA) and 20 VDC (50 mA) supply

Integrated Intelligence: PID controller, Sensor input (0-10 V / 4-20 mA)

Motor Protection: Thermal overload, Locked-rotor, Phase failure, Reverse polarity

Insulation Class: Class F

Touch Current: ≤ 3.5 mA

Termination: Terminal box

[Performance & Acoustics]

Max. Air Flow: 5888.8 CFM (10005 m³/h / 166.75 m³/min)

Max. Static Pressure: 56.59 mmH₂O (555.0 Pa / 2.23 inH₂O)

Efficiency Grade: N 63.7 (Static efficiency η_{es} 57.9%)

Number of Blades: 6

Direction of Rotation: Clockwise (Viewed toward rotor)

Airflow Direction: Radial (Intake axial, exhaust radial)

Mode of Operation: S1 (Continuous operation)

[Materials & Construction]

Electronics Housing: Die-cast aluminum

Impeller Material: Sheet aluminum

Rotor Surface: Painted black

Installation Position: Shaft horizontal or rotor on bottom

Degree of Protection: IP55

Moisture Protection: F4-1 / H1

[Reliability & Safety Standards]

Min. Ambient Temperature: -25 °C

Max. Ambient Temperature: 50 °C

Storage Temperature: -40 °C - 80 °C

Standard Compliance: EN 61800-5-1, CE, EN 61000-6-2/3

Approval Agency: VDE, CSA C22.2 No. 77, EAC

Application

The ebmpapst R3G630-AB06-03 centrifugal fan is used in large air handling units, data center cooling arrays, clean room ventilation modules, industrial heat exchangers, and central building climate control systems.

Product Images



Scan for product details:

