

R3G250-RR01-H1 ebm-papst 230VAC 250mm EC Motor Centrifugal Fan Datasheet



Brand: ebmpapst

SKU: 998927139434

Category: Axial & Centrifugal Fans

Price: \$1,285.99

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Product Page:

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Product Description

The ebm-papst R3G250-RR01-H1 is a precision-engineered EC Centrifugal Fan designed for high-efficiency thermal management in demanding industrial applications. Featuring advanced GreenTech EC motor technology, this unit offers superior aerodynamic performance through its backward-curved impeller design, which significantly reduces turbulence and acoustic noise generation. The integrated electronics provide seamless speed control via 0-10V or PWM interfaces, ensuring optimal airflow modulation relative to the specific thermal load. Constructed with high-grade glass-fiber reinforced composite materials for structural rigidity, the fan minimizes vibration while maintaining a low thermal impedance profile. Its robust commutation logic and durable ball bearing architecture ensure exceptional longevity and reliability, making it an ideal solution for systems requiring continuous, maintenance-free operation.

Model Number: R3G250-RR01-H1

Brand: ebm-papst

Product Type: EC Centrifugal Fan (Backward Curved)

Rated Voltage: 230 VAC

Frequency: 50 / 60 Hz

Voltage Range: 200 - 277 VAC

Rated Current: 1.4 A

Power Input: 168 W
Rated Speed: 2570 RPM
Max. Air Flow: 756.3 CFM (1285 m³/h)
Max. Static Pressure: 51.0 mmH₂O (500 Pa / 2.01 inH₂O)
Impeller Diameter: 250 mm
Bearing Type: Ball Bearing
Motor Type: M3G055-CF
Weight: 2.2 kg
Speed Control: 0-10 VDC / PWM Control Input
Ingress Protection: IP54
Insulation Class: B
Impeller Material: PA Plastic (Glass-fiber reinforced)
Electronics Housing Material: Die-cast aluminum
Operating Temperature: -25°C to +60°C
Storage Temperature: -40°C to +80°C
Direction of Rotation: Clockwise (viewed toward rotor)
Number of Blades: 7
Motor Protection: Thermal Overload Protector (TOP) wired internally
Cable Exit: Variable
Approvals: CE, UL, CSA, VDE, CCC
Life Expectancy: 40,000 Hours (L10 at 40°C)

This high-performance air mover is specifically engineered for critical cooling applications within the HVAC and industrial refrigeration sectors. The R3G250-RR01-H1 is frequently deployed in precision air conditioning units, clean room filtration systems, and electronic cabinet cooling where consistent static pressure is required. Additionally, the R3G250-RR01-H1 serves as a vital component in heat exchangers and ventilation ducts, providing reliable airflow for server racks and telecom infrastructure, ensuring sensitive equipment operates within safe thermal limits.

Supplemental Images

