

R3G280-AU11-C1 ebmpapst 400VAC 280mm EC Centrifugal Fan

SKU: R3G280-AU11-C1

Price: \$978.08

Categories: Fans

Tags: ebmpapst

Product Link:

<https://www.electspares.com/product/r3g280-au11-c1-ebmpapst-400vac-280mm-ec-centrifugal-fan/>

Product Description

The ebmpapst R3G280-AU11-C1 is a high-performance 400VAC EC Centrifugal Fan with dimensions of 325 x 325 x 252.5 mm, featuring a RadiCal backward-curved, single-intake impeller with a support bracket, specifically engineered for mission-critical cooling in Industrial Frequency Converters and high-precision HVAC systems. Driven by a 3-phase high-efficiency EC external rotor M3G084-GF motor with integrated electronics and maintenance-free ball bearings, this 6.6 kg unit operates on a 380 - 480 VAC supply delivering a Max. Power Consumption of 1000 W and a Max. Current Draw of 1.6 A at a rated speed of 3100 RPM. This High-performance unit achieves a Max. Air Flow of 1415.6 CFM (2405.0 m³/h / 40.08 m³/min) and a Max. Static Pressure of 85.86 mmH₂O (842.0 Pa / 3.38 inAq). Featuring intelligent speed regulation via 0-10V/PWM and RS-485 MODBUS-RTU, integrated PID controller, and passive PFC, this 7-blade unit with sheet aluminum construction is optimized for industrial VFD systems requiring advanced motor protection and massive airflow in a black-painted rotor design at the end.

R3G280-AU11-C1 Fan Parameters

Model Number: R3G280-AU11-C1

Motor Model: M3G084-GF

Manufacturer: ebmpapst

Type: EC Centrifugal Fan (RadiCal, backward-curved, single-intake, with support bracket)

Impeller Size: 280 mm

Dimensions: 325 x 325 x 252.5 mm

Weight: 6.6 kg

Bearing Type: Ball bearing (sealed)

Phase: 3~

Nominal Voltage: 400 VAC

Nominal Voltage Range: 380 - 480 VAC

Frequency: 50 / 60 Hz

Method of Obtaining Data: ml (Max. load)

Max. Current Draw: 1.6 A

Max. Power Consumption: 1000 W

Rated Speed: 3100 RPM

Max. Air Flow: 1415.6 CFM (2405.0 m³/h / 40.08 m³/min)

Max. Static Pressure: 85.86 mmH₂O (842.0 Pa / 3.38 inAq)

Working Air Flow: 2405.0 m³/h

Static Pressure Increase: 842.0 Pa

Efficiency Grade N: 75.4

Overall Efficiency η_{es} : 64.6%

Control Interface: Control input 0-10 VDC / PWM; RS-485 MODBUS-RTU

Output Signal: Alarm relay; Status message via LED; Output 10 VDC (max. 10 mA)

Number of Blades: 7

Technical Features: Integrated PID controller; Passive PFC; MODBUS-RTU; Soft start; Power limiter; Motor current limitation; Line undervoltage / phase failure detection; Input for sensor 0-10 V or 4-20 mA

Motor Protection: Thermal overload protector (TOP) internally connected

Touch Current (IEC 60990): ≤ 3.5 mA

Insulation Class: Class B

Degree of Protection: IP54

Protection Class: I (if protective earth is connected)

Humidity Class: H1

Impeller Material: Sheet aluminum

Electronics Housing Material: Die-cast aluminum

Rotor Surface: Painted black

Direction of Rotation: Clockwise (viewed toward rotor)

Installation Position: Shaft horizontal or rotor on bottom; rotor on top on request

Condensation Drainage Holes: On rotor side

Mode: S1

Strength Class of Screws: 8.8

Ambient Temperature (Max.): 60 °C (Transport/Storage: +80 °C)

Min. Operating Temperature: -25 °C (Transport/Storage: -40 °C)

Standard Compliance: EN 61800-5-1; CE; UKCA

Approval: UL 1004-7 + 60730-1; CCC; EAC; CSA C22.2 No. 77 + CAN/CSA-E60730-1

Application

The ebmpapst R3G280-AU11-C1 RadiCal module is the primary cooling component for industrial frequency converters and high-precision ventilation systems requiring high-efficiency 400V EC performance, PID control, and integrated MODBUS-RTU communication.

Product Images





Scan for product details:

