

# 12038VA-48R-EM-0Y NMB 48VDC 120x120x38mm PWM Axial Fan Datasheet



**Brand:** NMB

**SKU:** [800473675819](#)

**Category:** Axial & Centrifugal Fans

**Price:** **\$32.99**

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Product Page:

<https://www.equipspares.com/product/12038va-48r-em-0y-nmb-48vdc-120x120x38mm-pwm-axial-fan>

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## Product Description

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The NMB 12038VA-48R-EM-0Y is a high-capacity DC axial fan engineered for critical thermal management in industrial and telecommunications environments. Featuring a robust dual ball bearing architecture and an advanced electromagnetic motor design, this unit delivers exceptional operational stability and longevity under continuous load. The aerodynamic impeller geometry is optimized to generate significant static pressure, effectively overcoming the thermal impedance characteristic of high-density server racks and power electronics. Its structural rigidity and UL94V-0 compliant construction ensure reliability in mission-critical applications requiring precise pulse width modulation (PWM) speed control.

Model Number: 12038VA-48R-EM-0Y

Brand: NMB-MAT (MinebeaMitsumi)

Product Type: DC Axial Fan

Rated Voltage: 48VDC

Voltage Range: 36.0 - 55.2 VDC

Rated Current: 0.90 A

Power Input: 43.2 W

Rated Speed: 5300 RPM

Bearing Type: Dual Ball Bearing

Max. Air Flow: 260.0 CFM (441.7 m<sup>3</sup>/h / 7.36 m<sup>3</sup>/min)

Max. Static Pressure: 28.5 mmH<sub>2</sub>O (279.5 Pa / 1.12 inH<sub>2</sub>O)

Dimensions: 120 x 120 x 38 mm

Weight: 370 g

Noise Level: 64.5 dB-A

Speed Control: PWM (Pulse Width Modulation)

Termination: 4-Wire Lead (Red +, Black -, Yellow Sensor, Blue PWM)

Frame Material: Aluminum Die-Cast

Impeller Material: Reinforced Plastic (UL94V-0)

Operating Temperature: -10 to +70 °C

Storage Temperature: -40 to +70 °C

Life Expectancy: 100,000 Hours (L10 at 25°C)

Ingress Protection: IP50

Insulation Class: Class E

Certifications: UL, CSA, TUV, CE

Protection: Locked Rotor, Polarity Protection, Auto Restart

Deployment of the 12038VA-48R-EM-0Y is critical in environments demanding high-static pressure airflow, such as enterprise server chassis, telecommunications base stations, and industrial automation cabinets. The 48V architecture makes the 12038VA-48R-EM-0Y specifically suited for telecom rectifiers and uninterrupted power supplies (UPS) where reliable heat dissipation prevents component degradation. Additionally, its PWM functionality is utilized in precision medical instrumentation and CNC machinery, allowing for dynamic thermal regulation based on real-time system processing loads.

## Supplemental Images

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