

8418N/2HI-181 ebm-papst 48VDC 80x80x25mm 3-Wire Axial Fan Datasheet



Brand: ebmpapst

SKU: [956693717597](#)

Category: Axial & Centrifugal Fans

Price: **\$32.99**

E-mail: sales@equipspares.com

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Product Page:

<https://www.equipspares.com/product/8418n-2hi-181-ebm-papst-48vdc-80x80x25mm-3-wire-axial-fan>

Product Description

The ebm-papst 8418N/2HI-181 is a precision-engineered DC Axial Fan designed for critical thermal management in industrial environments. Utilizing advanced motor technology, this unit operates efficiently at 48VDC with a robust power consumption of 3.4W. The chassis houses a durable ball bearing system, ensuring exceptional longevity and reduced friction even under continuous operation. Its aerodynamic impeller design optimizes airflow while maintaining structural rigidity, effectively lowering thermal impedance within high-density enclosures. Featuring a 3-wire configuration for speed monitoring, the 8418N/2HI-181 delivers reliable cooling performance, making it an ideal solution for systems requiring consistent air exchange and operational stability.

Model Number: 8418N/2HI-181

Brand: ebm-papst

Product Type: DC Axial Fan

Rated Voltage: 48VDC

Voltage Range: 36.0 - 60.0 VDC

Rated Current: 0.07 A (70mA)

Power Consumption: 3.4 W

Rated Speed: 3600 RPM

Bearing Type: Ball Bearing

Max. Air Flow: 46.5 CFM (79 m³/h / 1.31 m³/min)

Max. Static Pressure: 6.12 mmH₂O (60 Pa / 0.24 inH₂O)

Dimensions: 80 x 80 x 25 mm

Weight: 95 g

Life Expectancy: 70,000 hrs at 40°C

Noise Level: 37 dB(A)

Termination: 3-Wire (Red/Blue/White)

Housing Material: Fiberglass-reinforced PBT plastic (UL94V-0)

Impeller Material: Fiberglass-reinforced PA plastic (UL94V-0)

Operating Temperature: -20°C to +70°C

Storage Temperature: -40°C to +80°C

Ingress Protection: IP20

Insulation Class: E

Motor Protection: Reverse Polarity, Locked Rotor Protection

Speed Signal: Tachometer Output

Direction of Rotation: Counter-clockwise (viewed toward rotor)

Airflow Direction: Air over struts

The 8418N/2HI-181 is frequently deployed in demanding industrial sectors such as telecommunications infrastructure, server cabinet cooling, and precision automation control panels. Its compact form factor allows for integration into tight spaces within CNC machinery and power supply units where reliable heat dissipation is paramount. Engineers rely on the 8418N/2HI-181 for its consistent performance in maintaining optimal operating temperatures for sensitive electronic components, ensuring system uptime in medical devices and network switching gear.

Supplemental Images

