

2218F/2TDH4OU ebmpapst 48V 2.65A 127W 220mm DC Axial Fan

SKU: 2218F/2TDH4OU

Price: \$219.99

Categories: Fans

Tags: ebmpapst

Product Link:

<https://www.electspares.com/product/2218f-2tdh4ou-ebmpapst-48v-2-65a-127w-220mm-dc-axial-fan/>

Product Description

The ebmpapst 2218F/2TDH4OU is a high-performance 48 V industrial axial fan with dimensions of 220 x 200 x 51 mm, meticulously engineered for critical thermal management in high-impedance environments. This unit integrates a high-torque brushless DC motor optimized for a 127.0 W power envelope, driving a specialized 5-blade impeller to a peak velocity of 7000 RPM. Designed to overcome extreme system backpressure, it generates exceptional airflow and static pressure, ensuring consistent laminar cooling through densely packed electronics. The mechanical foundation consists of a precision-balanced dual ball bearing system and a die-cast aluminum housing, providing 70,000 hours of reliable service even at a 40 °C ambient temperature. Featuring a robust 4-wire interface for advanced speed control and a certified IP68 rating for extreme environmental resistance, this fan is an essential component for IT/Telecom infrastructure, industrial inverters, and high-performance alternative energy systems where maximum air density and aerodynamic efficiency are mandatory.

2218F/2TDH4OU Fan Parameters

Manufacturer: ebmpapst

Model Number: 2218F/2TDH4OU

Internal Reference: 8317086496 / VWLG200FKLVZ

Series: S-Force (2200 FTD Series)

Industry Size Code: 22050

Type: DC Axial Fan

Bearing Type: Ball Bearing

Nominal Voltage: 48 VDC

Voltage Range: 36.0 - 72.0 VDC

Starting Voltage: 36.0 VDC

Dimensions: 220 x 200 x 51 mm

Weight: 1.0 kg

[Electrical Data]

Input Power: 127.0 W

Nominal Current: 2.65 A

Max. Current: 3.10 A

Nominal Speed: 7000 RPM (Tolerance $\pm 10\%$)

Motor Design: Brushless DC Motor

Signal Output: Speed Signal (Tachometer)

Control Input: PWM / Analog Speed Control

Motor Protection: Reverse Polarity and Locked-Rotor Protection

Insulation Class: Class E

Insulation Resistance: >10M ohm at 500 VDC

Termination: 4-Lead wires (AWG 20 / AWG 22)

[Performance & Acoustics]

Max. Air Flow: 718.1 CFM (1220.0 m³/h / 20.33 m³/min)

Max. Static Pressure: 65.0 mmH₂O (637.4 Pa / 2.56 inH₂O)

Sound Pressure Level: 74.0 dB(A) (Measured at 1 meter)

Number of Blades: 5

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

Airflow Direction: Exhaust over struts

Impeller Material: Glass-fiber reinforced PA plastic

Housing Material: Die-cast aluminum

[Materials & Construction]

Installation Position: Any

Degree of Protection: IP68 (Completely protected against dust and water immersion)

Surface Coating: Black, moisture-protected

[Reliability & Safety Standards]

Min. Ambient Temperature: -20 °C

Max. Ambient Temperature: 65 °C

Life Expectancy (L10): 70,000 hours at 40 °C (40,000 hours at 65 °C)

Standard Compliance: VDE, CSA, UL, CE

Approval Agency: VDE, CSA, UL, CE

Application

The ebmpapst 2218F/2TDH4OU axial fan is used in telecommunications rack cooling, industrial inverters, alternative energy power modules, server room ventilation, and high-performance printing equipment.

Product Images









Scan for product details:

