



6314H ebmpapst

Brand: ebmpapst

SKU: 6314H

Category: DC Fans

URL: <https://www.fansco.com/item/6314h-ebmpapst/>

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Product Description

6314H ebmpapst 24VDC 172x51mm 349CFM Ball 31W 5000RPM 2 Wire Leads Tubeaxial DC Fan

The ebmpapst 6314H is a versatile fan designed with a counterclockwise rotating rotor (when viewed from the rotor side) and an airflow direction that expels air through struts, supported by a durable ball bearing system allowing installation in any shaft orientation. Mechanically, it features a compact design with a 172.0 mm diameter, 51.0 mm depth, and a mass of 0.825 kg, constructed with a metal housing and a plastic impeller for balanced durability and lightweight operation. Mounting requires M4 screws (ISO 4762, degreased) with a uniform maximum torque of 600 Ncm across all flanges. Electrical connections utilize 365 mm lead wires (AWG 22, 1.7 mm insulation diameter), with red for +UB (power) and blue for -GND (ground), toleranced to ± 10 mm in length, and a 10 mm tube (± 2 mm tolerance), though auxiliary components shown in schematics are not included.

Electrical specifications include a wide operating voltage range of 16.0 V to 30.0 V, with a nominal voltage of 24.0 V. Power consumption varies from 16.5 W ($\pm 15\%$) at free air flow to 30 W and 32 W ($\pm 10\%$) under different conditions, paired with current draws of 1,040 mA ($\pm 15\%$), 1,250 mA ($\pm 10\%$), and 1,050 mA ($\pm 10\%$) respectively, and speeds ranging from 3,900 to 5,000 1/min (with $\pm 10\%$ or $\pm 5\%$ tolerances). 6314H incorporates speed control, reversed polarity protection (via a rectifying diode limiting residual current to ≤ 5 mA), and auto-restart for locked rotor situations, supported by a 4 A Littlefuse NANO2® fast-acting fuse. Aerodynamically, it achieves a maximum static pressure of 410 Pa at 5,000 1/min free air flow (per DIN EN ISO 5801), with acoustic performance rated at 58.0 dB(A) sound pressure (1 m from intake) and 6.9 bel(A) sound power at its optimal point of 450 m³/h at 117 Pa, measured in a semianechoic chamber.

Environmentally, the fan operates in temperatures from -20°C to 65°C and stores safely between -40°C and 80°C, suited for sheltered, temperature/humidity-controlled environments with pollution degree 1 (dry, non-conductive conditions), avoiding direct water, dust, or salt fog exposure. Safety certifications include CE, EAC, UL (UL507), VDE (EN 60950), and CSA (C22.2 No. 113), with electrical safety validated by 500 VAC type tests (1 min, 95% RH storage) and 850 VDC routine tests (1 sec), ensuring no arcing/breakdown, and an insulation resistance > 10 M Ω . Its protection class is III, with clearance/creepage distances of 1.0 mm/1.2 mm. Reliability is highlighted by an L10 life expectancy of 77,500 hours at 40°C (90% reliability), 42,500 hours at its

maximum operating temperature, and 130,000 hours per IPC 9591 standards at 40°C, making it a robust choice for engineered systems requiring consistent performance and longevity.

Technical Specifications

Attribute	Value
Part Number	6314H
Manufacturer	ebm-papst
Series	6300H
Voltage Rating	24 VDC
Dimensions	172x51 mm
Air Flow	349 CFM
Air Flow (m3)	9.77m ³ /min
Bearing Type	Ball Bearing
Fan Type	DC
Noise Level	58 dB(A)
Power Rating	31 W
Fan Speed	5000 RPM
Termination	2 Wire Leads
Operating Temperature	-4 ~ 149°F (-20 ~ 65°C)
Weight	1.8 lbs (816.5 g)
Subcategory	Tubeaxial



