

TA450DC B34578-35 Nidec 48VDC 120x120x38mm Axial Fan Datasheet



Brand: Nidec

SKU: [989038860709](#)

Category: Axial & Centrifugal Fans

Price: **\$21.99**

E-mail: sales@equipspares.com

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Product Page:

<https://www.equipspares.com/product/ta450dc-b34578-35-nidec-48vdc-120x120x38mm-axial-fan>

Product Description

Nidec TA450DC B34578-35 is a 48VDC 120x120x38mm Axial Fan optimized for high-density thermal management in telecommunications and industrial power systems. Utilizing a brushless DC motor and precision dual ball bearing architecture, this unit minimizes thermal impedance while maintaining structural rigidity under continuous operation. The 4-wire configuration supports PWM speed control and tachometer feedback for precise airflow modulation. With a rated current of 0.25A and a rotational speed of approximately 3500 RPM, it delivers significant static pressure to overcome internal resistance in cramped enclosures. This model is engineered for longevity and reliability in mission-critical environments requiring consistent heat dissipation.

Model Number: TA450DC B34578-35

Brand: Nidec

Product Type: Axial Fan

Rated Voltage: 48 VDC

Voltage Range: 28.0 - 56.0 VDC

Rated Current: 0.25 A

Power: 12.0 W

Rated Speed: 3500 RPM

Bearing Type: Dual Ball Bearing

Max. Air Flow: 110.0 CFM (186.9 m³/h / 3.11 m³/min)

Max. Static Pressure: 12.5 mmH₂O (122.6 Pa / 0.49 inH₂O)

Dimensions: 120 x 120 x 38 mm

Weight: 350 g

Life Expectancy: 70,000 hours at 40°C

Speed Control: PWM Control

Signal Output: Tachometer / Frequency Generator

Ingress Protection: IP54

Insulation Class: Class A

Noise Level: 48.5 dB(A)

Housing Material: PBT Plastic (UL94V-0)

Blade Material: PBT Plastic (UL94V-0)

Termination: 4 Lead Wires

Operating Temperature: -10 to +70 °C

Storage Temperature: -40 to +75 °C

Protection Features: Locked Rotor Protection, Reverse Polarity Protection

Certifications: UL, TUV, CE, RoHS

TA450DC B34578-35 Applications

1. Telecom Base Stations: High static pressure overcomes the airflow resistance of dense filter media and heat sinks in outdoor cabinets.
2. Industrial Inverters and VFDs: The 48VDC rail compatibility and PWM control allow for dynamic cooling based on load-induced thermal stress.
3. Server Rack Replacement Fan: Ideal 12038 form factor for high-performance 4U chassis requiring 4-wire feedback for system health monitoring.

Supplemental Images

