D1751S48BPCP-49 Nidec 48VDC High Airflow Inverter Fan Datasheet

Brand: Nidec

SKU: 740702728720

Category: Axial & Centrifugal Fans

Price: **$200.99**

E-mail: sales@equipspares.com

Web: https://www.equipspares.com

Product Page:
https://www.equipspares.com/product/d1751s48bpcp-49-nidec-48vdc-high-airflow-inverter-fan

Product Description

The Nidec D1751S48BPCP-49 is a high-performance axial cooling fan designed for rigorous industrial environments. Engineered with a robust aluminum die-cast frame and a reinforced plastic impeller, this 172mm fan delivers exceptional airflow and static pressure capabilities. It operates on a 48VDC system and features a 4-wire configuration supporting PWM speed control and tachometer output, allowing for precise thermal management and system monitoring. Its durable dual ball bearing system ensures a long operational lifespan, making it an ideal replacement component for heavy-duty frequency inverters and power electronics.

Manufacturer: Nidec Servo Corporation
Model Number: D1751S48BPCP-49
Product Type: DC Axial Fan
Rated Voltage: 48VDC
Operating Voltage Range: 36.0 - 56.0 VDC
Rated Current: 0.85 A
Power Consumption: 40.8 W
Rated Speed: 4000RPM
Max. Air Flow: 235.0 CFM (399.3 m^3/h / 6.65 m^3/min)
Max. Static Pressure: 21.5 mmH_2O (210.8 Pa / 0.85 inH_2O)
Noise Level: 58.0 dB(A)

Bearing Type: Dual Ball Bearing
Frame Material: Aluminum Die-Cast
Impeller Material: Reinforced Plastic (UL94V-0)
Termination: 4-Wire (Red: +, Black: -, Yellow: Sensor, Blue: PWM)
Dimensions: 172mm x 150mm x 51mm
Mounting Hole Distance: 162mm
Weight: 850 g
Operating Temperature: -10 to +70 °C
Life Expectancy: 70,000 Hours at 40°C

This high-static pressure fan is specifically engineered for applications requiring forced air convection through dense component arrays. It is widely recognized as a critical spare part for ABB variable frequency drives (VFDs) and inverters, where efficient heat dissipation is paramount to prevent thermal shutdowns. The D1751S48BPCP-49 is also suitable for cooling server cabinets, telecommunications rectifiers, and large-scale industrial automation enclosures. Its robust design allows it to withstand the vibration and continuous duty cycles typical of manufacturing plants and data centers.

Supplemental Images


Nidec
SERVO
NIDEC SERVO CORPORATION
D1751S48B9CP-49
DC48V 2.3A
MADE IN VIETNAM
7C09
001