

U12E12MS1M3-52Z20 Nidec 12VDC 120x120x32mm Axial Fan Datasheet



Brand: Nidec

SKU: [705997354764](#)

Category: Axial & Centrifugal Fans

Price: **\$16.99**

E-mail: sales@equipspares.com

Web: <https://www.equipspares.com>

Product Page:

<https://www.equipspares.com/product/u12e12ms1m3-52z20-nidec-12vdc-120x120x32mm-axial-fan>

Product Description

The Nidec U12E12MS1M3-52Z20 is a precision-engineered DC axial fan designed for critical thermal management in refrigeration and industrial cooling systems. Utilizing advanced DC brushless motor technology, this unit delivers consistent airflow while maintaining optimal energy efficiency. The 120mm frame architecture is constructed to minimize structural vibration and enhance aerodynamic performance, ensuring reliable operation in continuous-duty environments. Engineered with a focus on low thermal impedance and high durability, the U12E12MS1M3-52Z20 integrates robust bearing mechanisms to withstand the rigors of cold-storage applications. Its specific design parameters make it an ideal solution for maintaining temperature stability in commercial and residential refrigeration units, balancing static pressure requirements with acoustic performance.

Model Number: U12E12MS1M3-52Z20

Brand: Nidec Corporation

Product Type: DC Axial Fan

Rated Voltage: 12 VDC

Operating Voltage Range: 10.2 - 13.8 VDC

Rated Current: 0.136 A

Input Power: 1.63 W

Rated Speed: 2200 RPM

Bearing Type: Specialized Sleeve Bearing

Max. Air Flow: 86.5 CFM (147 m³/h)

Max. Static Pressure: 4.2 mmH₂O (41.2 Pa)

Dimensions: 120 x 120 x 32 mm

Frame Material: Polybutylene Terephthalate (PBT) UL94V-0

Blade Material: Polybutylene Terephthalate (PBT) UL94V-0

Noise Level: 36.0 dB(A)

Termination: 3-Wire Lead with Connector

Signal Output: Tachometer (Frequency Generator)

Operating Temperature: -10°C to +70°C

Storage Temperature: -40°C to +70°C

Life Expectancy: 40,000 Hours at 40°C

Motor Protection: Impedance Protected, Reverse Polarity

Weight: 210 g

Certifications: UL, cUL, TUV, CE

The U12E12MS1M3-52Z20 is specifically calibrated for integration into refrigeration systems, including commercial display coolers, residential refrigerators, and freezer units where reliable air circulation is paramount to food preservation. Beyond cold storage, the U12E12MS1M3-52Z20 serves effectively in electronics cabinet cooling and general ventilation requiring a slim 32mm profile. Manufacturers rely on the U12E12MS1M3-52Z20 for its ability to operate efficiently in low-temperature environments, ensuring consistent thermal regulation across evaporator coils and condenser units.

Supplemental Images

