

Dental X-ray

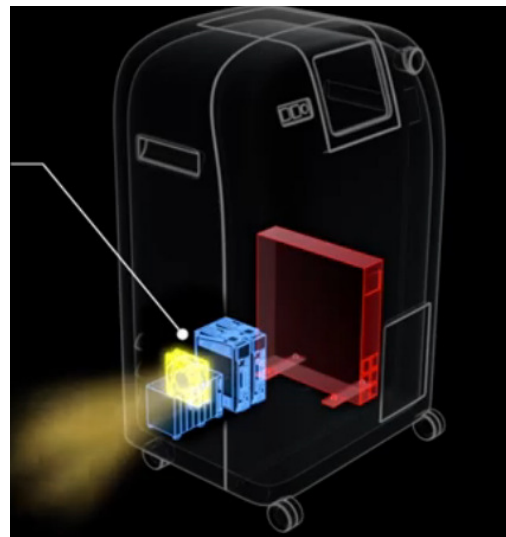
Description

A dental x-ray is a device that uses X-ray radiation to make images. With the patient's head immobilized, an image of any section of teeth can be taken.

High image resolution is essential in both dental panoramic and intraoral radiography for investigating the cause and symptoms of undiagnosed pain. To improve image resolution and analytical capability, control panel density is increased. Higher density means more heat requiring a high airflow fan.

In recent years, the increasing demand for energy conservation has underscored the importance of energy-saving components.

SANYO DENKI Proposal



SANYO DENKI

(Application image)



Low Power
Consumption Fan
San Ace 92
9GA type

Products and solutions proposed for installation in different environments:

■ 9GA0924P4S03 / 92 x 92 x 25 mm / 24 V / PWM control function / 60,000 h @ 60°C / 1 unit

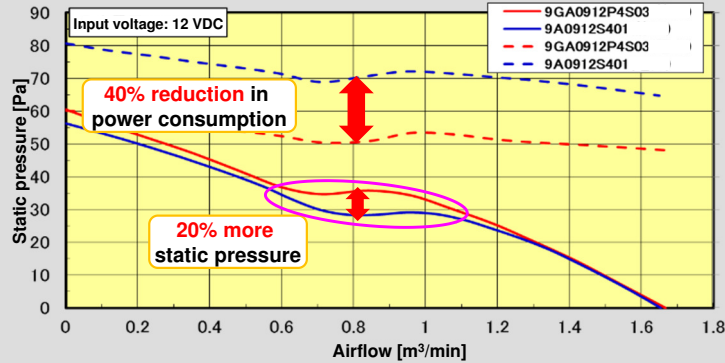
Purpose: Used for removing heat from the x-ray generator.

Rated speed: 4,400min⁻¹ / Max. airflow: 1.93 m³/min / Max. static pressure: 81 Pa / SPL: 39 dB(A)

Features

■ Reduced power consumption

Optimized stator shape, windings, and impellers have improved motor efficiency. Compared with our conventional product, power consumption is 40% lower and static pressure is 20% higher near the operating point.

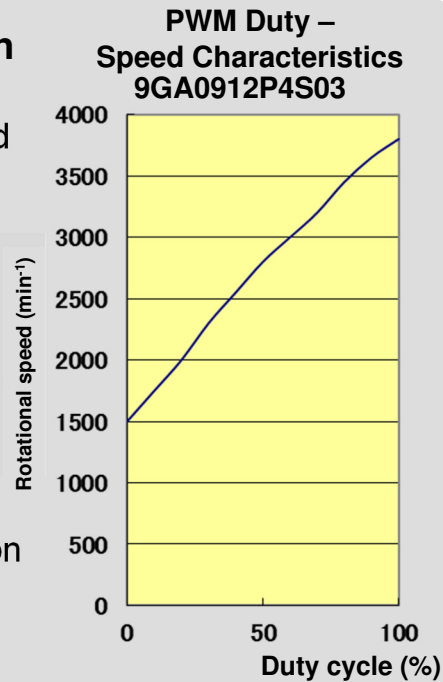


■ PWM control function

PWM control function controls the rotational speed of the fan by changing the duty cycle.

Sets an optimal rotational speed in accordance with the temperature.

Reduces power consumption and noise by setting a low rotational speed.



Merits

■ Improved device energy efficiency

Issue:

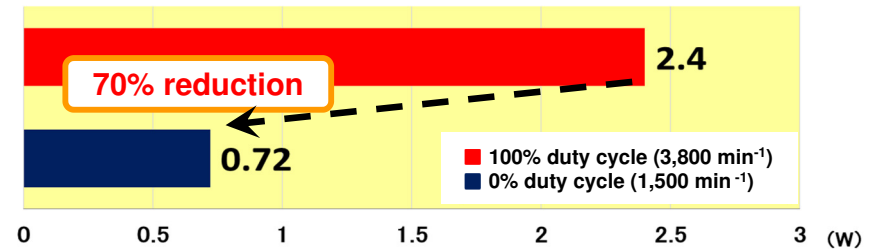
- Customer wanted to reduce power consumption while boosting cooling performance.

⇒ With the 9GA type, cooling performance was improved while reducing power consumption by about 40%.

■ Improved energy efficiency and reduced noise

Regulating the rotational speed to match with the internal temperature of the device reduces power consumption and noise.

Power consumption comparison – 9GA0924P4S03



Sound pressure comparison – 9GA0924P4S03

