Cooling Systems Division

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Cooling fans are used for a wide range of applications, including communication equipment, information-processing equipment, industrial equipment, and power supplies. With devices advancing with higher performance and higher functionality, customers request high cooling performance, low noise, and low vibration from cooling fans, while also required support for low power consumption and environmental compatibility.

In order to meet to these market trends and needs, Sanyo Denki presses forward with the development of new products and necessary technological development for these customer demands. In the future, we plan to provide the best possible products to the market.

This document introduces the main technical developments for the Cooling Systems Division in 2010.

■ Low Power Consumption Fan Series

DC Fan

"San Ace 40" GA type
40 mm sq., 20 mm thick
"San Ace 60" GA type
60 mm sq., 20 mm thick
"San Ace 80" GA type
80 mm sq., 32 mm thick
Above 3 models of the low power consumption fan series were developed.

In the 40 mm sq., 20 mm thick model, power consumption is reduced by approximately 50% and sound pressure level is reduced by approximately 4 dB(A) compared to the conventional model at the same cooling performance, and maximum air flow is increased 1.2 times and maximum static pressure is increased 2 times considerably compared with the conventional model.

The "PWM control function" is added as a function to control the speed from an external source.

Application: OA equipment, servers and various types of industrial equipment.

Details of the "San Ace 40" GA type are described in the features in this Technical Report.

■ “San Ace B120” BFB Type

Blower

Achieved top performance in the industry as 120 mm sq., 32 mm thick model.

Maximum air flow is increased 2.1 times and static pressure is increased 7.1 times compared with our conventional model, and power consumption is reduced by 38% and sound pressure level is reduced by approximately 5 dB(A) at equal air flow as the conventional model.

The “PWM control function” is added as a function to control the speed from an external source.

Application: OA equipment, servers and various types of industrial equipment.

Additional details are described in the features in this Technical Report.

■ High Air Flow Splash Proof Fan Series

Splash Proof Fan

“San Ace 92” WV type
92 mm sq., 38 mm thick
“San Ace 120” WV type
120 mm sq., 38 mm thick
Above 2 models of the high air flow splash proof fan series were developed.

In the 120 mm sq., 38 mm thick model, the maximum air flow is increased 1.6 times and the maximum static pressure is increased 2.6 times considerably compared with our conventional model.

The “PWM control function” is added to control the speed from an external source.

Application: Storage systems, communication equipment, and various types of industrial equipment.

■ Oil Proof Fan Series

Oil Proof Fan

"San Ace 60" WF type
60 mm sq., 20 mm thick
"San Ace 92" WF type
92 mm sq., 32 mm thick
Above 2 models of the oil proof fan series were developed.

The 60 mm sq., 20 mm thick model has a maximum air flow of 0.69 m^3/min and maximum static pressure of 114 Pa to achieve the same cooling performance as our conventional 60 mm sq., 25 mm thick model.

Similarly, the 92 mm sq., 32 mm thick model has a maximum air flow of 2.8 m^3/min and maximum static pressure of 255 Pa to achieve the same cooling performance as our conventional 120 mm sq., 38 mm thick model.

Therefore, these models can even be used in severe environments, such as where the models will be exposed to oil mist.

The oil proof fan line-up has been expanded to two 40 mm sq. models, three 60 mm sq. models, one 80 mm sq. model, two 92 mm sq. models, and one 120 mm sq. model for a total of nine models.

Application: Robot control panels, inverters, NC lathes and various types of industrial equipment.

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Joined Sanyo Denki in 1984.
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Worked on the development and design of cooling fans.