Smoke Detection System

SANYO DENKI

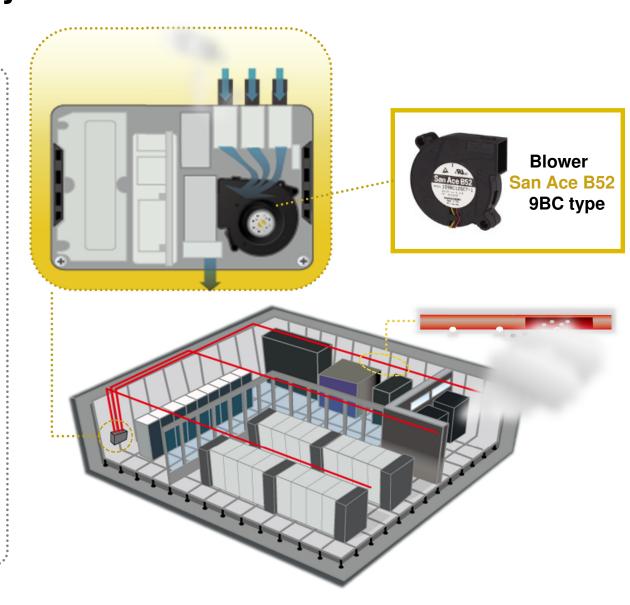
Description

Smoke detection systems can detect small amounts of smoke before fire or harmful substances spread, preventing property and equipment damage, and protecting human life.

Fans mounted to these systems facilitate smoke detection by continuously pulling in and pushing air through a piping network installed at various places in a facility.

If a fire occurs in a key facility such as a warehouse, refrigerator, or tunnel, the resulting damage would have a detrimental effect on human life due to the loss of goods and transportation disruption. Therefore, it is necessary to detect smoke quickly and accurately.

For these reasons, smoke detection systems require fans with high static pressure capable of drawing in smoke from a large area to ensure reliable detection.



SANYO DENKI Proposal

■ 109BC12GC7-1 / Blower / 52 x 15 mm / 12 VDC / PWM control function / 40,000 h @ 60°C / 1 unit Purpose: Air is powerfully drawn into sampling pipes to quickly detect smoke and gas.

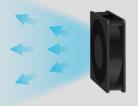
Features

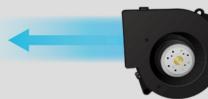
■ Shape and flow of air

Blowers are thinner than axial fans because their inlets and outlets are perpendicular rather than opposite each other. Also, since their outlets are in shaped like a duct, air can be discharged locally.

Axial fanDischarged air spreads

BlowerDischarged air is straight





■ High static pressure

Ducts in the outlet help create straight airflow with high static pressure.

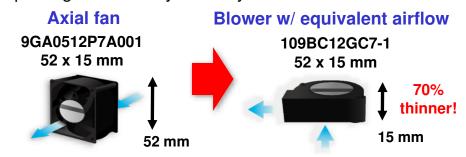
	Appearance	Structure
Axial fan	DISSET AS	Outlet
Blower		Outlet

Merits

■ Improved device reliability and space efficiency

Blowers are 70% thinner than axial fans, allowing for device downsizing and space saving.

Blowers discharge air locally so they can send air collected from the piping network directly to the detection sensor, improving the reliability of the system.

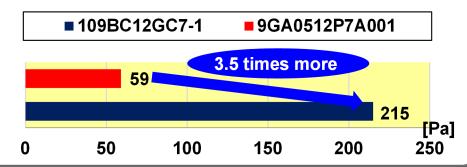


Blowers have a central inlet for drawing in air and an outlet for expelling it at a right angle. Switching to Blowers frees additional space once taken up by axial fans.

■ Improved device performance

By using a high static pressure Blower, air can be drawn in quickly through piping networks from multiple locations at greater distances, realizing performance enhancements of the entire system.

Static pressure comparison



SANYO DENKI AMERICA, INC.