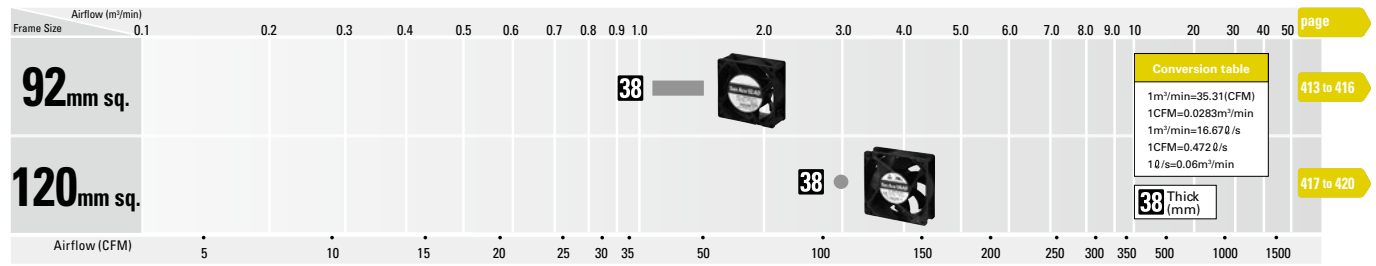


ACDC Fan

This fan works while internally converting AC power into DC power, providing the superior performance of a DC fan with the flexibility of AC input.

Domain Diagram



Model Numbering System

Not every combination of the following codes or characters is available. Contact us for an available combination.

9AD	09	01	H	1	2	
Type name / frame material 9AD / Plastics	Frame size 09: 92×92mm 12: 120×120mm	Voltage 100V to 240V	Speed code H, M	Frame thickness 1: 38mm thick	Sensor specifications 2: Without a sensor H: With a low-speed sensor	Frame form Nil: Plastics frame: Ribbed frame 1: Plastics frame: Ribless frame

How to Read Specifications

ACDC Fan											AC		
Model No.	① Rated Voltage [V]	② Operating Voltage Range [V]	③ Frequency [Hz]	④ Rated Current [A]	⑤ Rated Input [W]	⑥ Rated Speed [min ⁻¹]	⑦ Max. Airflow [m ³ /min] [CFM]		⑧ Max. Static Pressure [Pa] [inchH ₂ O]		⑨ SPL [dB(A)]	⑩ Operating Temperature [°C]	⑪ Expected Life [h]
9AD0901H12	100 to 240	90 to 264	50/60	0.08	4.5	3,850	1.50	53.0	90	0.36	40	-20 to +75	60,000/60°C
9AD0901M12				0.06	3.0	3,100	1.18	41.7	56	0.22	33		

- ① Rated Voltage This is the necessary voltage to drive the fan.
Single-phase 100 VAC to 240 VAC are also available.
- ② Operating Voltage Range ... The voltage range over which fan operation is guaranteed. 50/60Hz compatible.
- ③ Frequency This is a frequency of alternating current(AC). The frequencies of 50Hz and 60Hz are existing in Japan.
- ④ Rated Current The current value during the fan's rated operation without load.
- ⑤ Rated Input The input value during the fan's rated operation without load.
- ⑥ Rated Speed The rotating speed during the fan's rated operation without load.
- ⑦ Max. Airflow The maximum air volume that the fan can output during rated operation
(according to the company's dual-chamber device).
The volume of air generated by the fan in a given time period.
- ⑧ Max. Static Pressure The maximum static pressure value that the fan can output during rated operation
(according to the company's dual-chamber device).
The static pressure is the fan's force to propel air by overcoming the resistance of the device that uses the fan when it propels air.
- ⑨ SPL "SPL" is Sound Pressure Level. The noise level during the fan's rated operation.
Please refer to the technical material section for the method used to measure the noise level.
- ⑩ Operating Temperature The temperature range over which fan operation is guaranteed (Non- condensing)
- ⑪ Expected Life The fan's expected operating life when the fan operates continuously at the rated voltage at a temperature of 60° C and at relative humidity of 90%.
Please refer to the technical material section for the expected operating life.

ACDC Fan Common Specifications

- Material** Frame, Impeller: Plastics * For details, refer to the appropriate page.
- Expected Life** Varies for each model
(L10:Survival rate:90% at 60°C , rated voltage,and continuously run in a free air state)
- Motor Construction** Brushless DC motor
- Motor Protection System** .. Burnout protection at locked rotor condition
- Dielectric Strength** 50/60Hz 1500VAC 1minute
(between input terminal and frame, and between sensor output and frame)
- Insulation Resistance** 10M Ω or more at 500VDC megger (between lead conductor and frame)
- Sound Pressure Level(SPL)** .. Expressed as the value at 1m from air inlet side
- Operating Voltage Range** .. Varies depending on models.
- Lead Wire** For details, refer to the appropriate page.

Overheating protection function

Protection Functions
 If the fan blades are restricted, an overcurrent occurs and leads to a rise in the fan coil temperature. This can result in reduced performance, damage, or a fire. To prevent this from occurring, SANYO DENKI's fans incorporate an overheating protection function.

Burnout protection function at locked rotor condition

- Current cutoff system (ACDC fan only)
 If the fan blades are restricted, the coil current is cut off at regular cycles to prevent overheating of the coil. When the hindrance is removed, the fan restarts automatically.