160×40 mm

San Ace B160 9BG type

General Specifications

- Material ····· Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-1)
- Expected life ····· See the table below. (L10 life: 90% survival rate for continuous operation in free air at 60˚C, rated voltage)
- Motor protection function ····· Locked rotor burnout protection, Reverse polarity protection
  For details, please refer to p. 529.
- Dielectric strength ····· 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
- Insulation resistance ····· 10 MΩ or more with a 500 VDC megger (between lead wire conductors and frame)
- Sound pressure level (SPL) ····· At 1 m away from the air inlet
- Storage temperature ····· -30 to +70˚C (Non-condensing)
- Lead wire ····· ⊕Red ⊖Black or Blue (Sensor) Yellow
- Mass ····· 580 g

Specifications

The models listed below **have pulse sensors.**

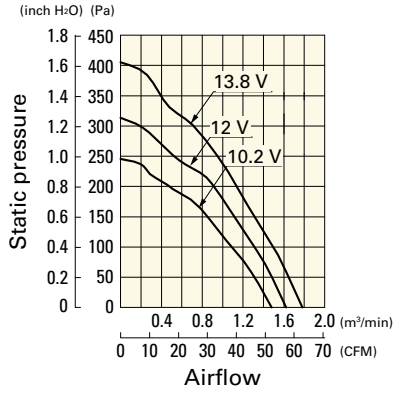
Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min⁻¹]	Max. airflow [m³/min]	Max. airflow [CFM]	Max. static pressure [Pa]	Max. static pressure [inchH₂O]	SPL [dB (A)]	Operating temperature [˚C]	Expected life [h]
109BG12HC1	12	10.2 to 13.8	1.3	15.6	2300	1.62	57.2	313.6	1.259	55	-20 to +60	40000/60˚C
109BG12MC1			0.64	7.68	1800	1.26	44.5	156.8	0.629	50		
109BG24HC1	24	20.4 to 27.6	0.62	14.88	2300	1.62	57.2	313.6	1.259	55		
109BG24MC1			0.31	7.44	1800	1.26	44.5	156.8	0.629	50		

Other sensor specifications are available as options. Refer to the index (p. 542).

Airflow - Static Pressure Characteristics

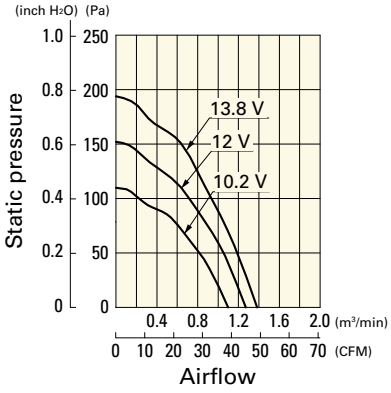
109BG12HC1 With pulse sensor

Operating voltage range



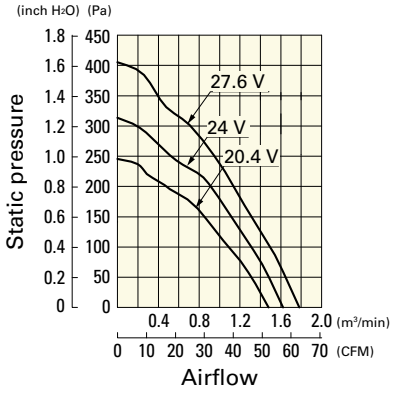
109BG12MC1 With pulse sensor

Operating voltage range



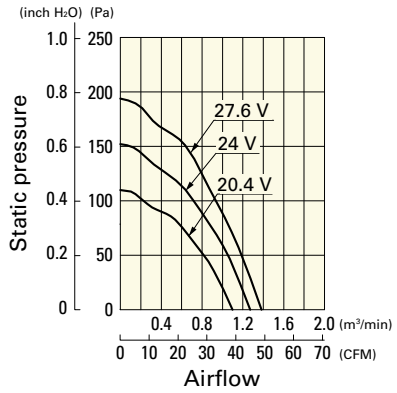
109BG24HC1 With pulse sensor

Operating voltage range

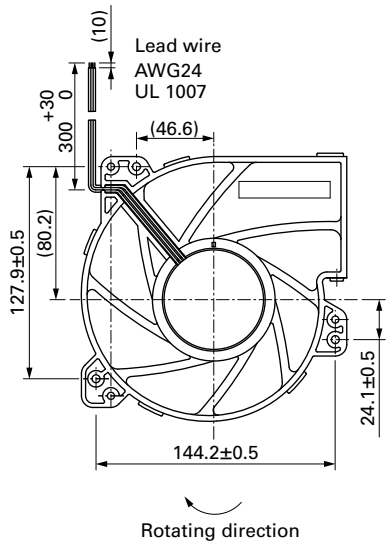


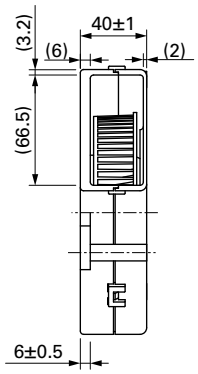
109BG24MC1 With pulse sensor

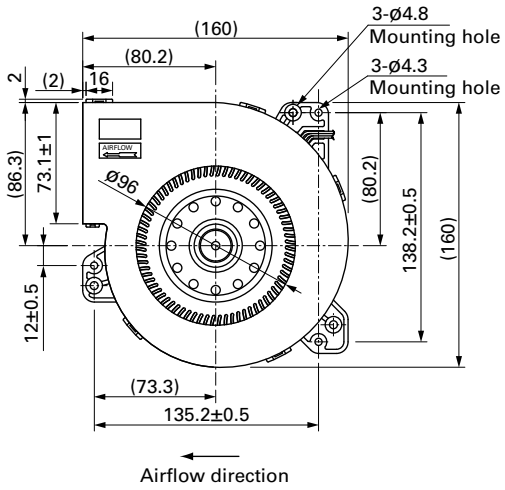
Operating voltage range



Dimensions (unit: mm)







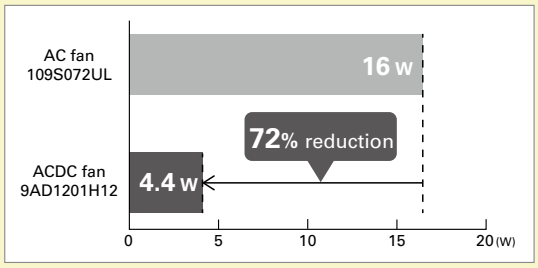
ACDC Fan

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.

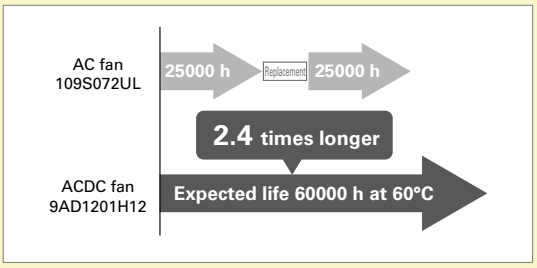
Low power consumption | Long life | Wide voltage range (Compared with our existing AC fan with equal size.)

With AC input, the same level of energy saving and long life as a DC fan can be achieved.
The maintenance effort can be reduced too.

Power consumption comparison



Expected life comparison



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 size	Voltage	Speed code	Frame thickness	Sensor specifications	Frame form

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

How to Read Specifications (ACDC fan)

Model no.	Rated voltage [V]	Operating voltage range [V]	Frequency [Hz]	Rated current [A]	Rated input [W]	Rated speed [min⁻¹]	Max. airflow [m³/min]	Max. airflow [CFM]	Max. static pressure [Pa]	Max. static pressure [inchH₂O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9AD0901H12	100 to 240	90 to 264	50/60	0.08	4.5	3850	1.5	53.0	90	0.36	40	-20 to +75	60000/60°C
9AD0901M12				0.06	3.0	3100	1.18	41.7	56	0.22	33		

Rated voltage ····· This is the necessary voltage to drive the fan. Single-phase 100 to 240 VAC are also available.
Operating voltage range ····· The voltage range over which fan operation is guaranteed.
Frequency ····· This is a frequency of alternating current (AC). The frequencies of 50 Hz and 60 Hz are existing in Japan.
Rated current ····· The current when the fan is operating at rated voltage (at free air).
Rated input ····· The power value when the fan is operating at rated voltage (at free air).
Rated speed ····· The speed when the fan is operating at rated voltage (at free air).
Max. airflow ····· The maximum airflow that the fan can generate during rated operation (measured with our double chamber measuring device). Airflow is the volume of air generated by the fan per unit of time.
Max. static pressure ····· The maximum static pressure value that the fan can produce during rated operation (measured with our double chamber measuring device). Static pressure indicates a fan's ability to move air against resistance due to the internal structure of the device to which the fan is installed.
SPL ····· SPL stands for Sound Pressure Level. The noise level during the fan's rated operation. Please refer to the technical material section for the measurement method.
Operating temperature ····· The temperature range over which fan operation is guaranteed (Non- condensing).
Expected life ····· Service life hours that 90% of bearings will survive without failing when continuously operated at the rated voltage and 60°C temperature. For more information, please refer to the technical material section.