

DC Fan

60×60×25 mm

San Ace 60 9RA type   DC
DC Fan 60 mm sq.

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)
Expected life at 40°C is for reference only.
- Motor protection function Locked rotor burnout protection, Reverse polarity protection
For details, please refer to p. 614.
- Dielectric strength 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
- Insulation resistance 10 MΩ min. at 500 VDC (between lead wire conductors and frame)
- Sound pressure level (SPL) A-weighted sound pressure level (SPL) at 1 m away from the air inlet.
- Storage temperature -30 to +70°C (Non-condensing)
- Lead wire  Red  Black  Sensor Yellow  Control Brown
(For models without PWM control, there is no speed control wiring.)
- Mass 70 g

Specifications

The models listed below **have ribs and a pulse sensor with PWM control**. For models without ribs, append "1" to the end of model numbers.

Model no.	Rated voltage [V]	Operating voltage range [V]	PWM duty cycle* [%]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
» 9RA0612P4J001	12	10.8 to 13.2	100	0.35	4.2	7700	1.1 38.8	130 0.52	41	-20 to +70	60000/60°C (90000/40°C)
			30	0.05	0.6	1900	0.27 9.5	8.1 0.03	13		
» 9RA0624P4J001	24	21.6 to 26.4	100	0.18	4.32	7700	1.1 38.8	130 0.52	41		
			20	0.03	0.72	1700	0.24 8.5	6.5 0.02	11		
» 9RA0648P4J001	48	43.2 to 52.8	100	0.1	4.8	7700	1.1 38.8	130 0.52	41	-20 to +70	60000/60°C (90000/40°C)
			20	0.03	1.44	1800	0.25 8.8	7.1 0.03	12		

* PWM frequency is 25 kHz. Models without ratings for 0% PWM duty cycle have zero speed at 0%. When control terminal is open, speed is the same as at 100% duty cycle.

The models listed below **have ribs and a pulse sensor**. For models without ribs, append "1" to the end of model numbers.

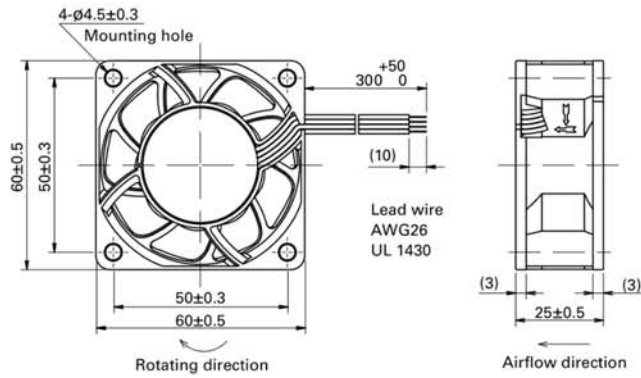
Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min] [CFM]	Max. static pressure [Pa] [inchH ₂ O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
» 9RA0612J4001	12	7 to 13.8	0.35	4.2	7700	1.1 38.8	130 0.52	41	-20 to +70	60000/60°C (90000/40°C)
» 9RA0612G4001			0.15	1.8	5600	0.8 28.2	69 0.28	36		
» 9RA0612S4001			0.1	1.2	4600	0.66 23.3	46 0.18	30		
» 9RA0612H4001		6 to 13.8	0.07	0.84	3800	0.54 19.1	32 0.13	26		
» 9RA0612F4001			0.05	0.6	3200	0.46 16.2	22 0.09	21		
» 9RA0612M4001			0.04	0.48	2600	0.37 13	14.8 0.06	17		
» 9RA0624J4001	24	14 to 27.6	0.18	4.32	7700	1.1 38.8	130 0.52	41		
» 9RA0624G4001			0.08	1.92	5600	0.8 28.2	69 0.28	36		
» 9RA0624S4001			0.06	1.44	4600	0.66 23.3	46 0.18	30		
» 9RA0624H4001		12 to 27.6	0.05	1.2	3800	0.54 19.1	32 0.13	26		
» 9RA0624F4001			0.04	0.96	3200	0.46 16.2	22 0.09	21		
» 9RA0624M4001			0.03	0.72	2600	0.37 13	14.8 0.06	17		
» 9RA0648J4001	48	36 to 55.2	0.1	4.8	7700	1.1 38.8	130 0.52	41		
» 9RA0648G4001			0.06	2.88	5600	0.8 28.2	69 0.28	36		

Note 1: Sensor and control options are available for selection. Refer to the table on pp. 649 to 650.

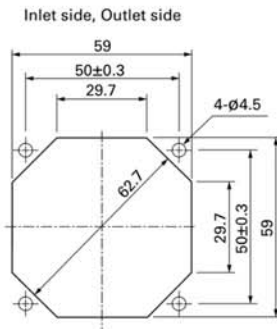
Note 2: The » mark indicates Short LeadTime Service applicable models. See p. 668 for details.

DC
DC Fan 60 mm sq.

■ Dimensions (unit: mm) (With ribs)



■ Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)



■ Options

Finger guards

page: p. 598

Model no.: 109-139E, 109-139H

Resin finger guards

page: p. 605

Model no.: 109-1003G

Resin filter kits

page: p. 606

Model no.: 109-1003F13 (13PPI), 109-1003F20 (20PPI),
109-1003F30 (30PPI), 109-1003F40 (40PPI)