120×120×38 mm





General Specifications

· Material Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-1) 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 structure Brushless DC motor · Motor protection function Locked rotor burnout protection For details, please refer to p. 599.

· Sound pressure level (SPL) At 1 m away from the air inlet · Storage temperature -30 to +75°C (Non-condensing)

· Mass 290 g Do not solder wires directly to AC input terminals.

Specifications

The models listed below have ribs and no sensors. For models without ribs, append "1" to the end of model numbers.

	Model no.	Rated voltage	Operating voltage range	Frequency	Rated current	Rated input	Rated speed	Max. a	airflow	Max. sta	ic pressure	SPL	Operating temperature	Expected life
		[V]	[V]	[Hz]	[A]	[W]	[min ⁻¹]	[m³/min]	[CFM]	[Pa]	[inchH ₂ 0]	[dB (A)]	[°C]	[h]
	9AD1201H12	100 to 240	90 to 264	50/60	0.08	4.4	3250	3.0	106	84	0.34	42	-20 to +75	60000/60°C (90000/40°C)

The models listed below have ribs and low-speed sensors. For models without ribs, append "1" to the end of model numbers.

	Model no.	Rated voltage	Operating voltage range	Frequency	Rated current	Rated input	Rated speed	Max. a	airflow	Max. sta	tic pressure	SPL	Operating temperature	Expected life
	Widuel IId.	[V]	[V]	[Hz]	[A]	[W]	[min ⁻¹]	[m³/min]	[CFM]	[Pa]	[inchH ₂ 0]	[dB (A)]	[°C]	[h]
	9AD1201H1H	100 to 240	90 to 264	50/60	0.08	4.4	3250	3.0	106	84	0.34	42	-20 to +75	60000/60°C
2	SAD IZUIN IN	100 to 240	90 10 204	30/00	0.00	4.4	3230	3.0	100	04	0.34	42	-20 10 +75	(90000/40°C)

Note 1: Sensor and control options are available for selection. Refer to the table on p. 641.

Note 2: The ∑ mark indicates Short LeadTime Service applicable models. See p. 654 for details.

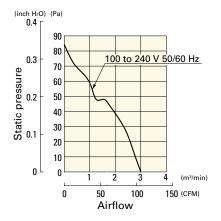
Set Models

Fan, finger guard, plug cord, screws, etc. can be purchased in one package. For details, please refer to p. 655.

Order no.	Set items									
order no.	Fan	Voltage	Low-speed sensor	Plug cord	Finger guards	Mounting screws				
ST1-9AD1201H12	9AD1201H12	100 to 240 V		489-1635-L10	109-019E	M4×55 mm (4 screws)				
ST1-9AD1201H1H	9AD1201H1H	100 to 240 V	0	489-1635-L10	109-019E	MI4X33 IIIII (4 SCI EWS)				

Airflow - Static Pressure Characteristics

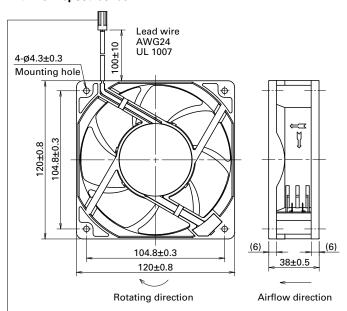
9AD1201H12, 9AD1201H1H



without Sensor

4-ø4.3±0.3 Mounting hole 104.8±0.3 120 ± 0.8 (6)_ (6) 104.8±0.3 38±0.5 120±0.8 Rotating direction Airflow direction

with Low-speed sensor



Connector: TE Connectivity 171822-2

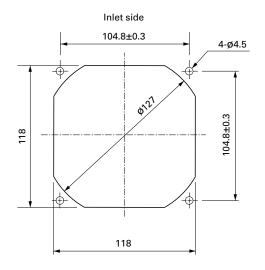
(Pin1 Sensor output: Yellow Pin2 -: Black)

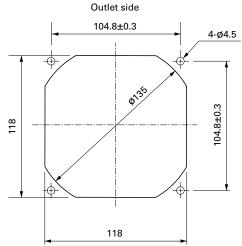
Contact: TE Connectivity 170262-1

Note: Recommended connectors and contacts are listed below.

Connector: TE Connectivity 172211-2 Contact: TE Connectivity 170376-1

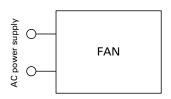
Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)



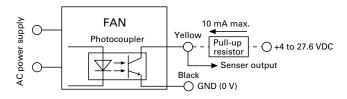


Wiring Diagram

without Sensor



with Low-speed sensor



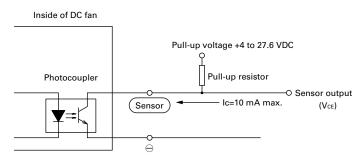
Specifications for Low-speed Sensors

Model No.: 9AD1201H1H

Output circuit: Open collector

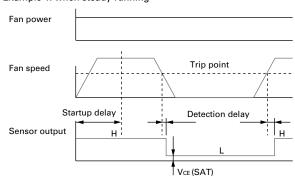
VcE=+27.6 VDC max.

Ic=10 mA max. [VcE (SAT)=1.0 V max.]

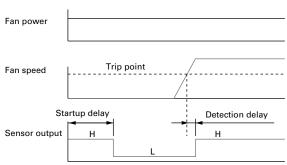


Sensor scheme

Example 1: when steady running



Example 2: when the rotor is locked when the fan motor is turned on and released after the start-up delay time.



Startup delay: 18±3 s Detection delay: 3 s max. Trip point: 1700 min-1

Options

Finger guards

page: p. 585

Model no.: 109-019C, 109-019H, 109-019E, 109-019K

Resin filter kits

Model no.: 109-1000F13 (13PPI), 109-1000F20 (20PPI),

page: p. 592

109-1000F30 (30PPI), 109-1000F40 (40PPI)

Wiring harness for sensor

page: p. 595

Model no.: 489-1636

Resin finger guards page: p. 591

Model no.: 109-1000G

Plug cord page: p. 595

Model no.: 489-1635-L10, 489-1635-L21

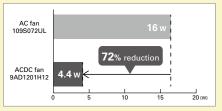
Features of the San Ace 120AD 9AD type ACDC Fan

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

