



# 92×92×38 mm

San Ace 92AD 9AD type    

## General Specifications

- Material ..... Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)
- 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 structure ..... Brushless DC motor
- Motor protection function ..... Locked rotor burnout protection, Reverse polarity protection  
For details, please refer to p. 573.
- Dielectric strength ..... 50/60 Hz, 1500 VAC, for 1 minute (between input terminal and frame, and between sensor output and frame)
- Insulation resistance ..... 10 MΩ or more with a 500 VDC megger
- Sound pressure level (SPL) ..... At 1 m away from the air inlet
- Storage temperature ..... -30 to +75°C (Non-condensing)
- Mass ..... 250 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 [V]	Operating voltage range [V]	Frequency [Hz]	Rated current [A]	Rated input [W]	Rated speed [min <sup>-1</sup> ]	Max. airflow [m <sup>3</sup> /min] [CFM]	Max. static pressure [Pa] [inchH <sub>2</sub> O]	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 (90000/40°C)
▶▶ 9AD0901M12				0.06	3.0	3100	1.18 41.7	56 0.22	33		

The following sensor and control options are available for selection.

Available for all models. **Pulse sensor**

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 [V]	Operating voltage range [V]	Frequency [Hz]	Rated current [A]	Rated input [W]	Rated speed [min <sup>-1</sup> ]	Max. airflow [m <sup>3</sup> /min] [CFM]	Max. static pressure [Pa] [inchH <sub>2</sub> O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
▶▶ 9AD0901H1H	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 (90000/40°C)
▶▶ 9AD0901M1H				0.06	3.0	3100	1.18 41.7	56 0.22	33		

The following sensor and control options are available for selection.

Available for all models. **Pulse sensor**

The ▶▶ mark indicates Short LeadTime Service applicable models. See p. 626 for details.

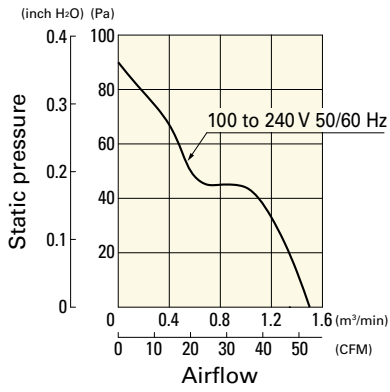
## Set Models

Fan, finger guard, plug cord, screws, etc. can be purchased in one package. For details, please refer to p. 627.

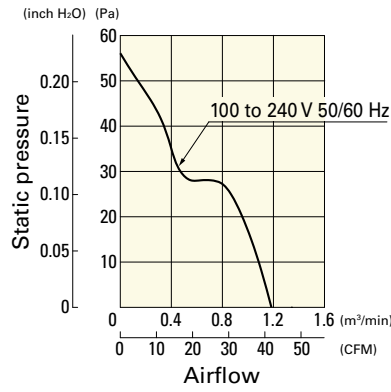
Order no.	Set items					
	Fan	Voltage	Low-speed sensor	Plug cord	Finger guards	Mounting screws
ST1-9AD0901H12	9AD0901H12	100 to 240 V		489-1635-L10	109-099E	M4×55 mm (4 screws)
ST1-9AD0901M12	9AD0901M12			489-1635-L10	109-099E	
ST1-9AD0901H1H	9AD0901H1H		○	489-1635-L10	109-099E	
ST1-9AD0901M1H	9AD0901M1H		○	489-1635-L10	109-099E	

## Airflow - Static Pressure Characteristics

### 9AD0901H12, 9AD0901H1H

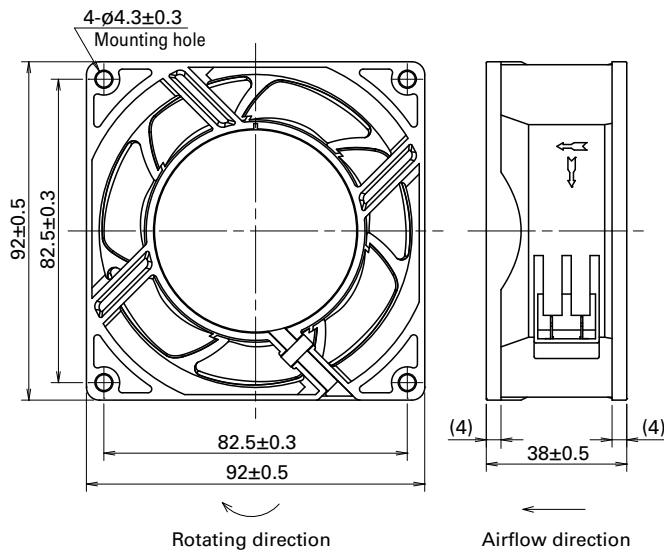


### 9AD0901M12, 9AD0901M1H

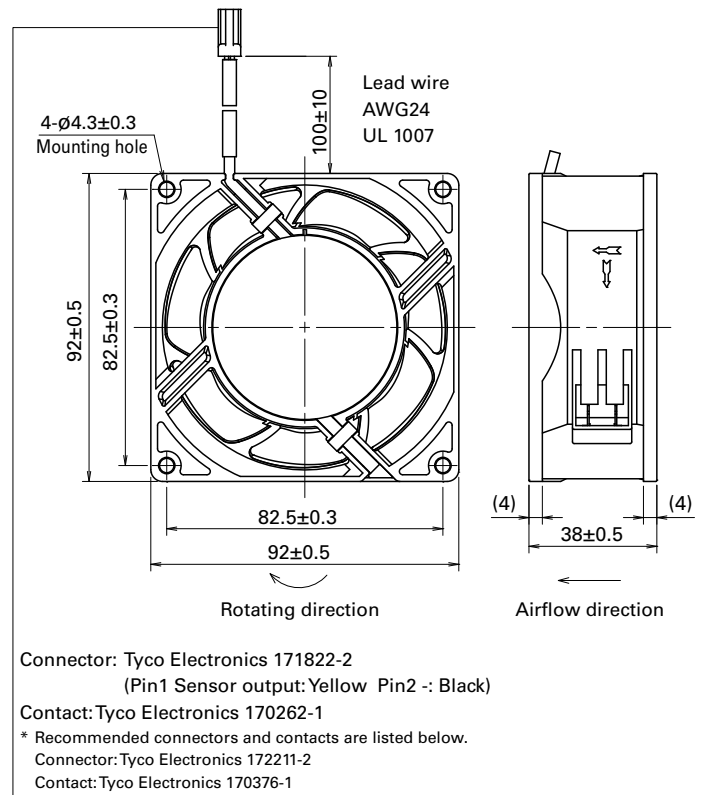


## Dimensions (unit: mm) (With ribs)

### without Sensor

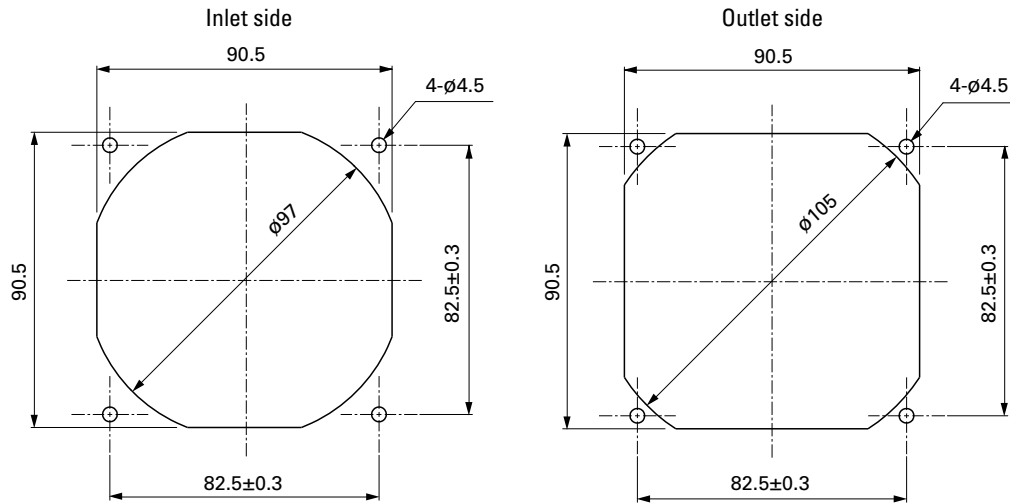


### with Low-speed sensor



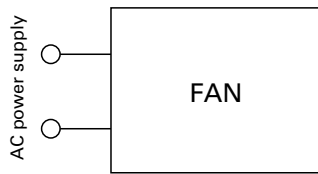
ACDC Fan 92 mm sq. AC

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

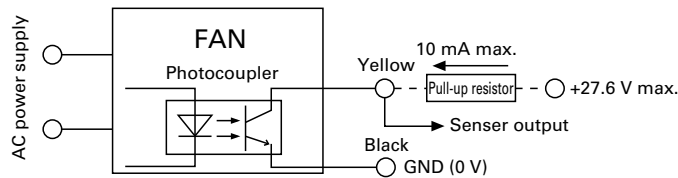


## Wiring Diagram

### without Sensor

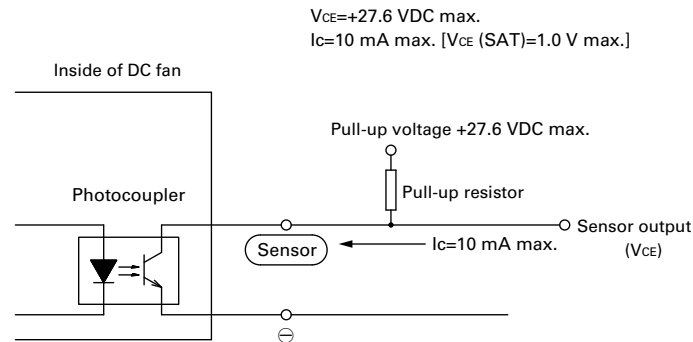


### with Low-speed sensor



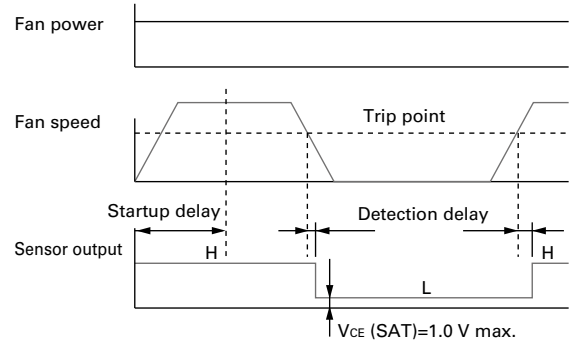
## Specifications for Low-speed Sensors

Typical standard model: 9AD0901H1H  
Output circuit: Open collector

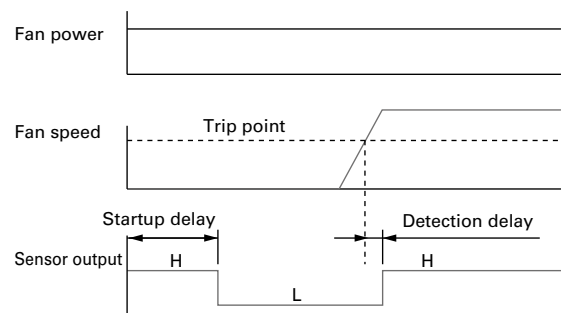


### Sensor scheme

#### 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.



#### 9AD0901H1H

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

#### 9AD0901M1H

Startup delay: 36 ± 3 s  
Detection delay: 3 s max.  
Trip point: 850 min<sup>-1</sup>

## Options

### Finger guards

page: p. 558

Model no.: 109-099C, 109-099E, 109-099H

### Resin finger guards

page: p. 565

Model no.: 109-1001G

### Resin filter kits

page: p. 566

Model no.: 109-1001F13 (13PPI), 109-1001F20 (20PPI),  
109-1001F30 (30PPI), 109-1001F40 (40PPI)

### Plug cord

page: p. 569

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

### Wiring harness for sensor

page: p. 569

Model no.: 489-1636

## Features of the San Ace 92AD 9AD type ACDC Fan

Low power consumption

Long life

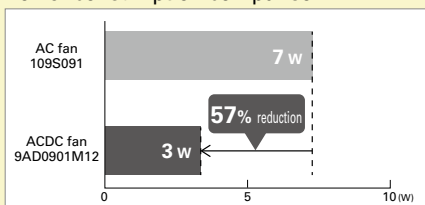
Wide voltage range

(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

