



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)
 - Motor structure Brushless DC motor
 - Motor protection function Locked rotor burnout protection, Reverse polarity protection
For details, please refer to p. 529.
 - 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 ⁻¹] | Max. airflow [m ³ /min] [CFM] | Max. static pressure [Pa] [inchH ₂ 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 |
| 9AD0901M12 | | | | 0.06 | 3.0 | 3100 | 1.18 41.7 | 56 0.22 | 33 | | |

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 ⁻¹] | Max. airflow [m ³ /min] [CFM] | Max. static pressure [Pa] [inchH ₂ 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 |
| 9AD0901M1H | | | | 0.06 | 3.0 | 3100 | 1.18 41.7 | 56 0.22 | 33 | | |

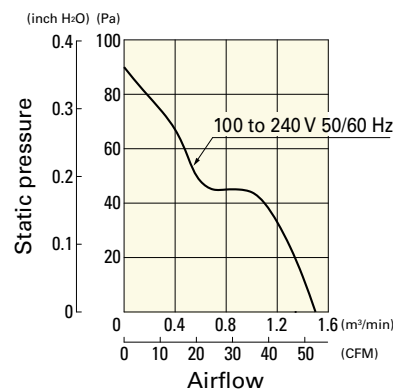
Set Models

Fan, finger guard, plug cord, screws, etc. can be purchased in one package. For details, please refer to p. 574.

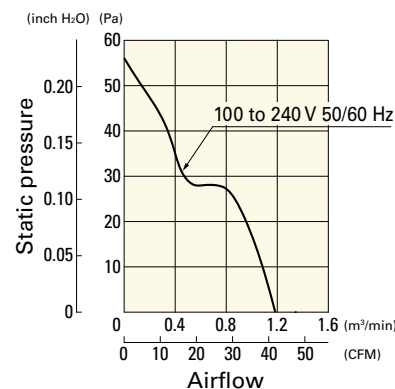
| Order no. | Set items | | | | | |
|----------------|------------|--------------|------------------|--------------|---------------|---------------------|
| | Fan | Voltage | Low-speed sensor | Plug cord | Finger guards | Mounting screws |
| ST1-9AD0901H12 | 9AD0901H12 | 100 to 240 V | | 489-1635-L10 | 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

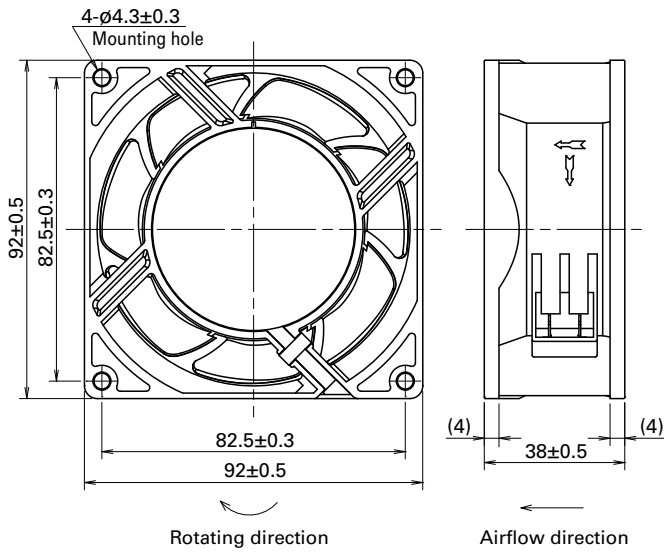


9AD0901M12, 9AD0901M1H

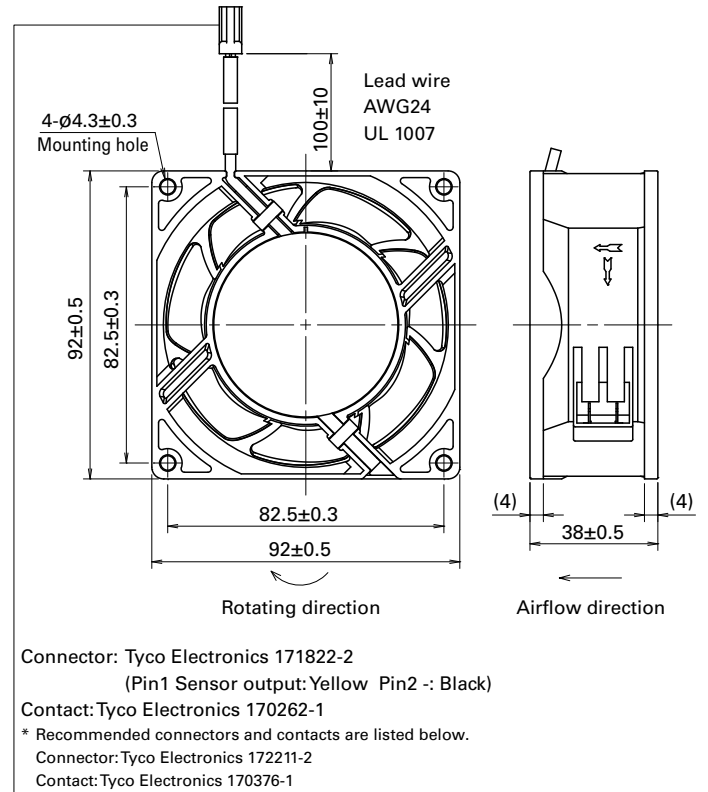


Dimensions (unit: mm) (With ribs)

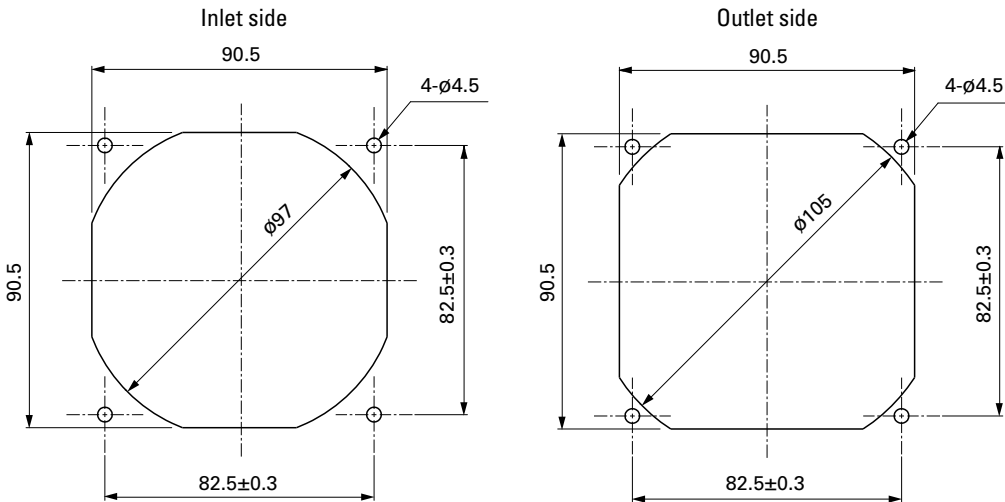
without Sensor



with Low-speed sensor

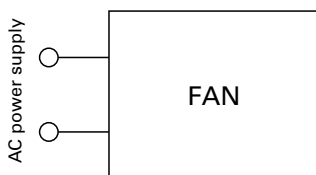


Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)

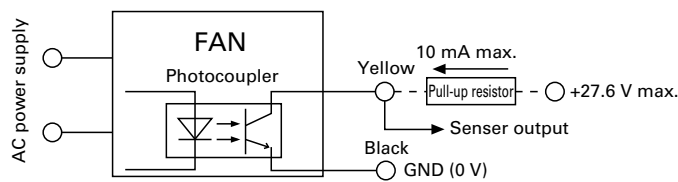


Wiring Diagram

without Sensor



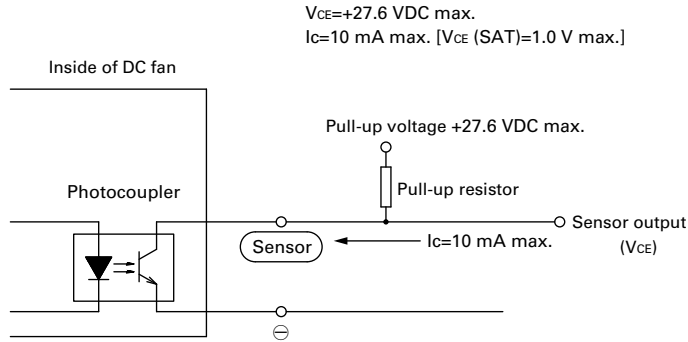
with Low-speed sensor



Specifications for Low-speed Sensors

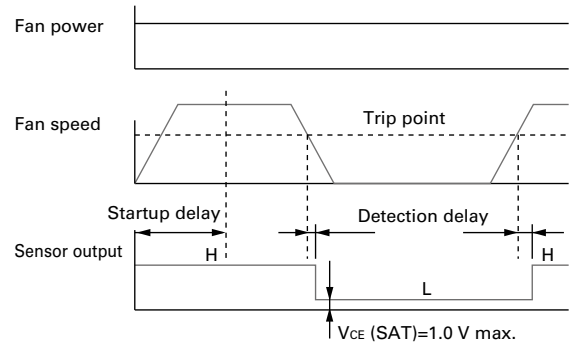
Typical standard model: 9AD0901H1H

Output circuit: Open collector

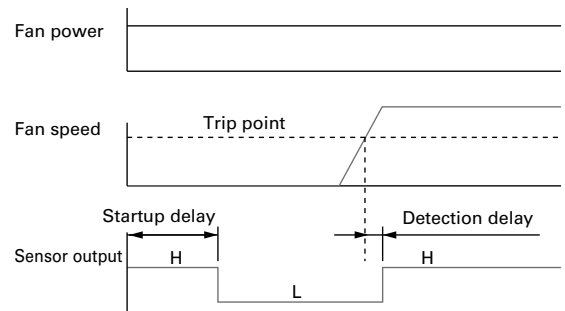


Sensor scheme

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⁻¹

9AD0901M1H

Startup delay: 36±3 s

Detection delay: 3 s max.

Trip point: 850 min⁻¹

Options

Finger guards

page: p. 513

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

Resin filter kits

page: p. 521

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

Wiring harness for sensor

page: p. 524

Model no.: 489-1636

Resin finger guards

page: p. 520

Model no.: 109-1001G

Plug cord

page: p. 524

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