

92mm sq.

San Ace 92AD



General Specifications

- Material Frame: Plastics (Flammability: UL94V-0), Impeller: Plastics (Flammability: UL94V-0)
 - Expected Life Refer to specifications (L10:Survival rate: 90% at 60°C, rated voltage, and continuously run in a free air state)
 - Motor Construction Brushless DC motor
 - Motor Protection System Burnout protection at locked rotor condition
 - Dielectric Strength 50/60 Hz, 1,500 VAC, 1 minute (between input terminal and frame, and between sensor output and frame)
 - Insulation Resistance 10MΩ or more at 500VDC megger (between lead conductor and frame)
 - Sound Pressure Level (SPL) ... Expressed as the value at 1m from air inlet side
 - Storage Temperature -30°C to +75°C (Non-condensing)
- * Do not weld directly onto AC input terminals.

92×92×38mm (Mass : 250g) **9AD type** 

Specifications

The model no. below has **ribs and no sensors**. For models without ribs, append "1" to the model no.

| Model No. | Rated Voltage [V] | Operating Voltage Range [V] | Frequency ^(Note) [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 | 3,850 | 1.50 53.0 | 90 0.36 | 40 | -20 to +75 | 60,000/60°C |
| 9AD0901M12 | | | | 0.06 | 3.0 | 3,100 | 1.18 41.7 | 56 0.22 | 33 | | |

Note: 50/60 Hz compatible.

The model no. below has **ribs and low-speed sensors**. For models without ribs, append "1" to the model no.

| Model No. | Rated Voltage [V] | Operating Voltage Range [V] | Frequency ^(Note) [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 | 3,850 | 1.50 53.0 | 90 0.36 | 40 | -20 to +75 | 60,000/60°C |
| 9AD0901M1H | | | | 0.06 | 3.0 | 3,100 | 1.18 41.7 | 56 0.22 | 33 | | |

Note: 50/60 Hz compatible.

Overheating protection function

Protection Functions:

If the fan blades are restricted, an overcurrent occurs and leads to a rise in the fan coil temperature. This can result in reduced performance, damage, or a fire. To prevent this from occurring, SANYO DENKI's fans incorporate an overheating protection function.

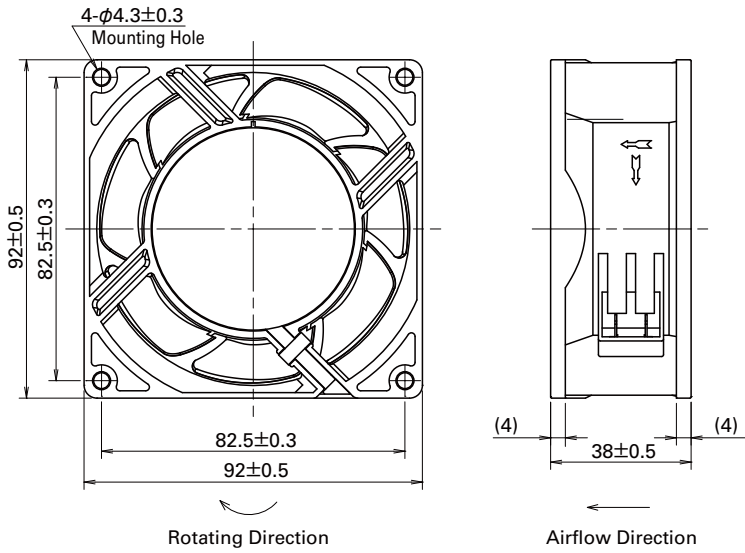
Burnout protection function at locked rotor condition

- Current cutoff system (ACDC fan only)

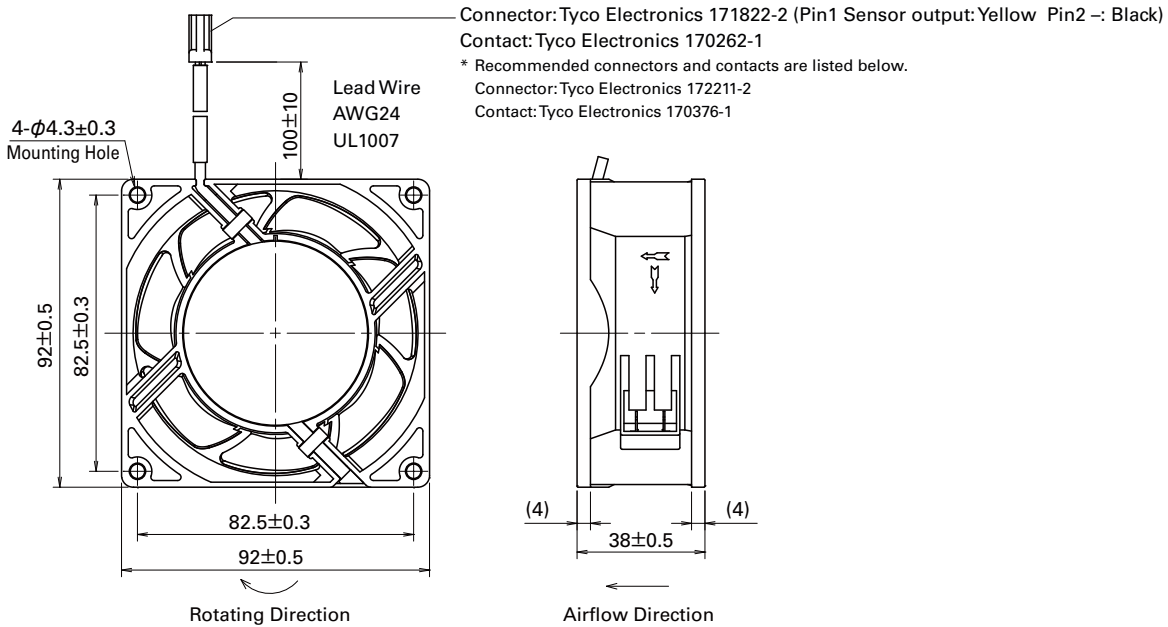
If the fan blades are restricted, the coil current is cut off at regular cycles to prevent overheating of the coil. When the hindrance is removed, the fan restarts automatically.

Dimensions (unit: mm) (With ribs)

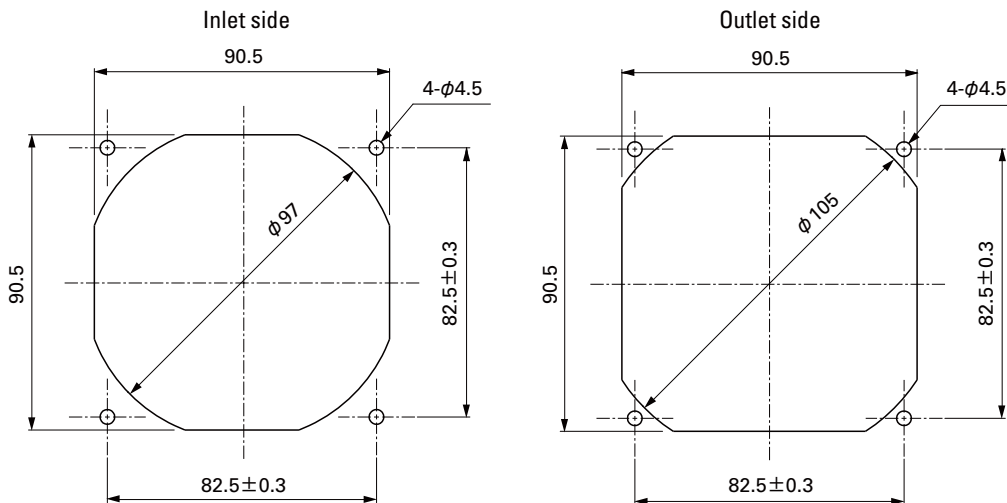
without Sensor



with Low-speed sensor



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



92mm sq.

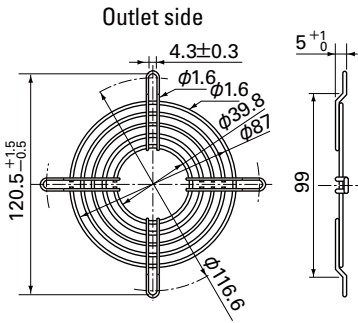
San Ace 92AD

92×92×38mm [Mass : 250g]

Options (unit: mm)

Finger Guards

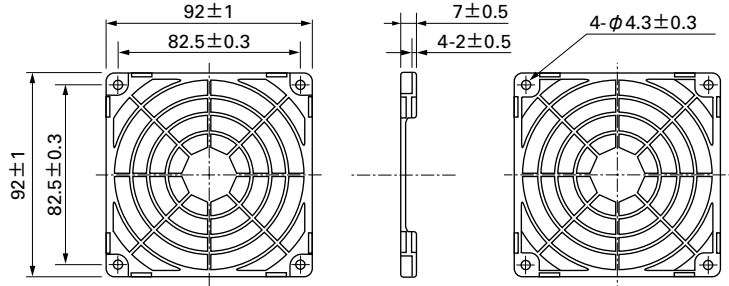
Model : 109-099C Surface treatment : Nickel-chrome plating (silver) Color : Nickel-chrome plating (silver)



Mass : 22g

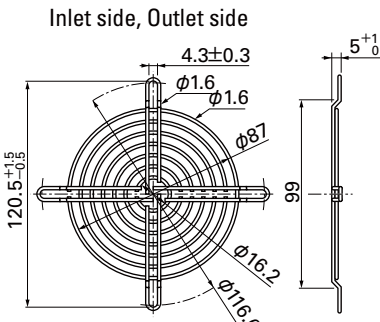
Resin Finger Guards

Model : 109-1001G



Mass : 12g

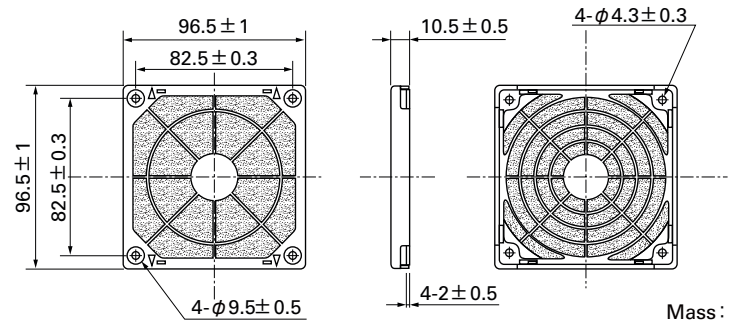
Model : 109-099E Surface treatment : Nickel-chrome plating (silver) Color : Nickel-chrome plating (silver)
Model : 109-099H Surface treatment : Cation electropainting (black) Color : Cation electropainting (black)



Mass : 29g

Resin Filter Kits

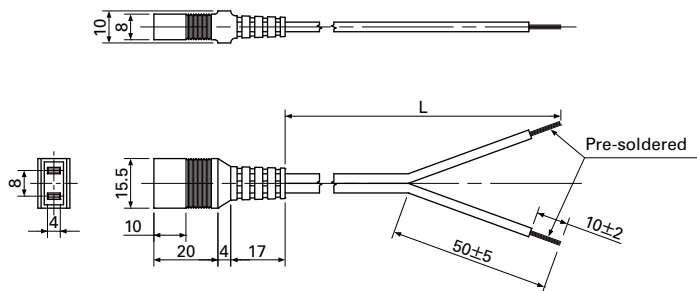
Model : 109-1001F13 (13PPI), 109-1001F20 (20PPI), 109-1001F30 (30PPI), 109-1001F40 (40PPI)



Mass : 25g

Plug Cord

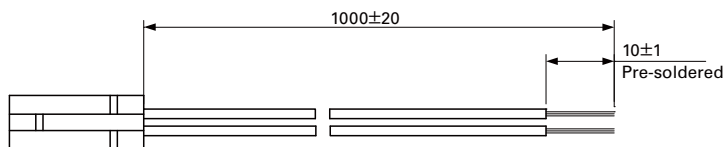
(Products compliant with Electrical Appliance and Material Safety Law, UL/CSA [c-UL] CERTIFIED)
UL FILE No. E43202
Model : 489-1635-L10/489-1635-L21



| Model | Power cord length (L) [mm] | Mass [g] |
|--------------|----------------------------|----------|
| 489-1635-L10 | 1,000 | 38 |
| 489-1635-L21 | 2,100 | 74 |

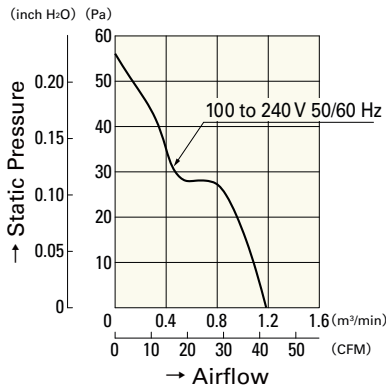
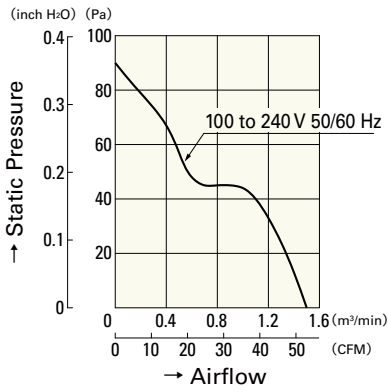
Wiring Harness for Sensor

Model : 489-1636



Mass : 9g

Airflow - Static Pressure Characteristics



9AD0901H12

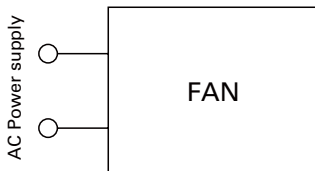
9AD0901H1H

9AD0901M12

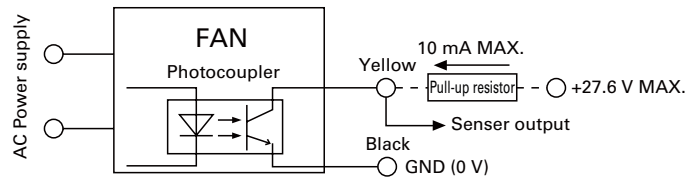
9AD0901M1H

Wiring Diagram

Standard



with Sensor

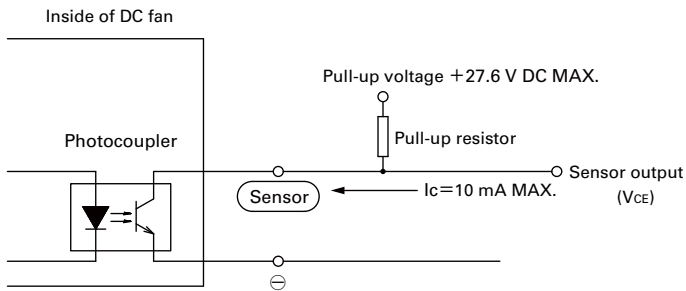


Specifications for Low-speed Sensors

Typical standard model: 9AD0901H1H

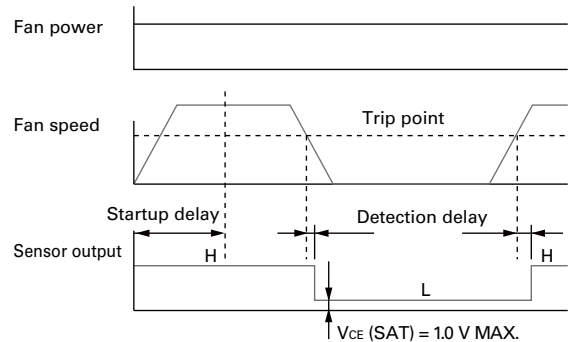
Output circuit: Open collector

$V_{CE} = +27.6 \text{ V DC MAX.}$
 $I_C = 10 \text{ mA MAX. [} V_{CE}(\text{SAT}) = 1.0 \text{ V MAX.]}$

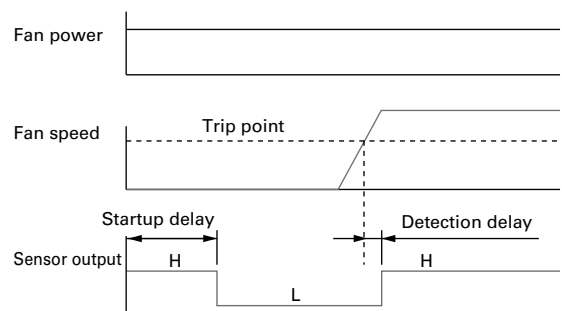


Sensor scheme

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.



9AD0901H1H

Startup delay: $18 \pm 3 \text{ sec.}$

Detection delay: 3 sec. MAX.

Trip point: $1,700 \text{ min}^{-1}$

9AD0901M1H

Startup delay: $36 \pm 3 \text{ sec.}$

Detection delay: 3 sec. MAX.

Trip point: 850 min^{-1}