

AC Fan

San Ace 120AD 9AD type

■ Features

Low Power Consumption

Power consumption is reduced by approximately 72% compared with our conventional AC fan.*

Long Life

The San Ace 120AD has an expected life of 60,000 hours (approximately 6 years), approximately 2.4 times that of our conventional AC fan.*

Wide Range

A rated voltage range of 100 to 240 VAC allows for usage in both 100 VAC and 200 VAC systems. Rotation speed remains constant even at different input voltages.

* Our conventional AC fan is 120 x 120 x 38 mm "San Ace 120", Model No. 109S072UL at a frequency of 60 Hz.



(Ribless model depicted)

120×120×38_{mm}

■ 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. Air Flow [m ³ /min] [CFM]	Max. Static Pressure [Pa] [inchH ₂ O]	SPL [dB(A)]	Operating Temperature [°C]	Expected Life [h]
9AD1201H12	100 to 240	90 to 264	50/60	0.08	4.4	3,250	3.0 106	84 0.34	42	-20 to +75	60,000

Note: 50/60 Hz compatible.

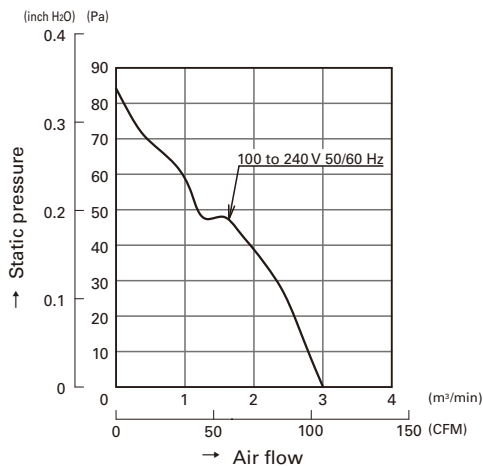
Available options: **Low Speed Sensor**

Please contact us for details on the following specifications: **Pulse Sensor** **Lock Sensor**

■ Common Specifications

- ☐ Material Frame: Plastics (Flammability: UL94V-0), Impeller: Plastics (Flammability: UL94V-1)
- ☐ Expected Life Refer to specifications
(L10: Survival rate: 90% at 60 °C, rated voltage, and continuously run in a free air state)
- ☐ Motor Protection System Burnout protection at locked rotor condition
- ☐ Dielectric Strength 50/60 Hz, 1,500 VAC, 1 minute
(between power terminal and frame or between lead conductor and frame)
- ☐ Sound Pressure Level (SPL) Expressed as the value at 1 m from air inlet side
- ☐ Operating Temperature Refer to specifications (Non-condensing)
- ☐ Storage Temperature -30 °C to +75 °C (Non-condensing)
- ☐ Mass Approx. 290 g

Air Flow - Static Pressure Characteristics

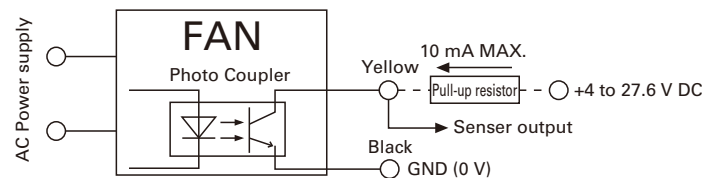


Wiring Diagram

Standard



with Sensor



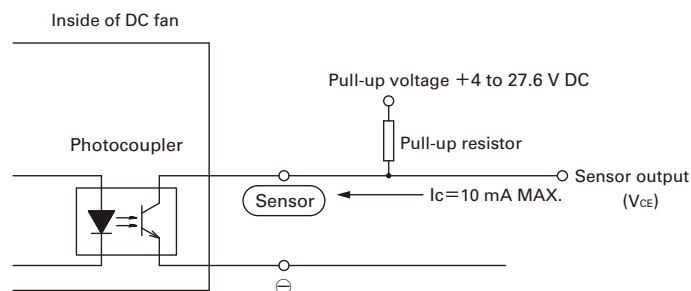
Specifications for Low-speed Sensors

Typical standard model: 9AD1201H1H

Output circuit: Open collector

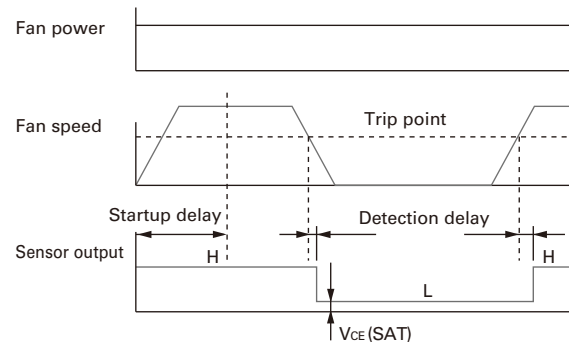
$V_{CE} = +27.6 \text{ V DC MAX.}$

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

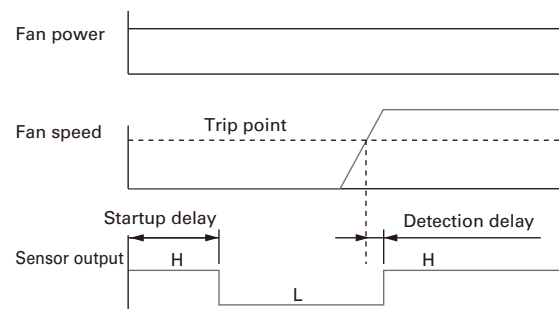


Sensor scheme

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.



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

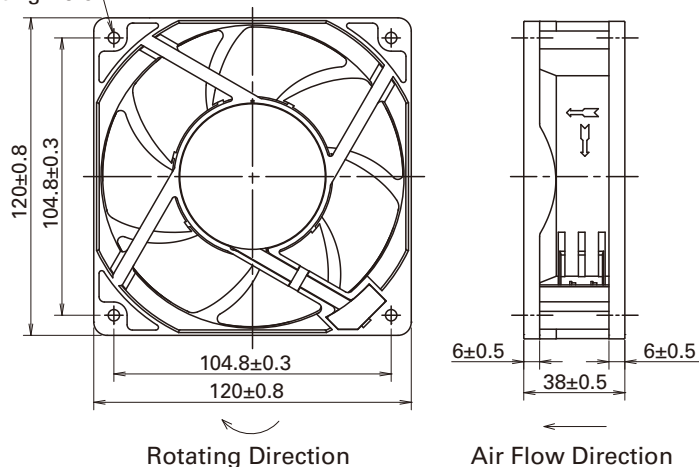
Detection delay: 3 sec. MAX.

Trip point: 1700 min^{-1}

Dimensions (unit : mm) (With ribs)

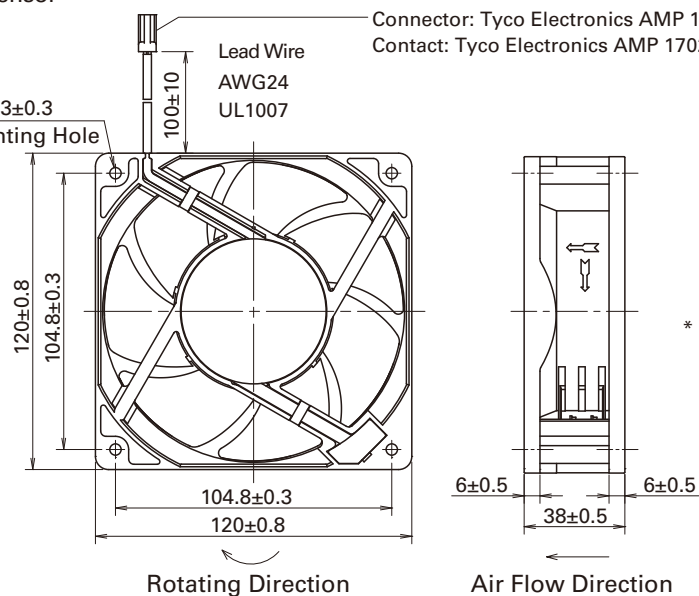
Standard

4- $\phi 4.3 \pm 0.3$
Mounting Hole



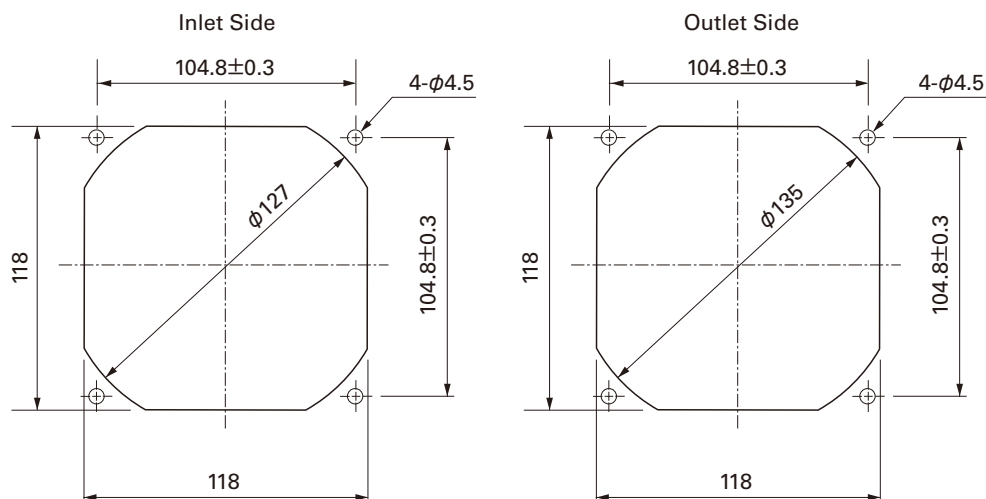
with Sensor

4- $\phi 4.3 \pm 0.3$
Mounting Hole

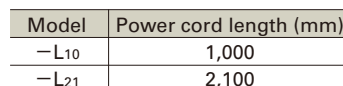


* Recommended connectors and contacts are listed below.
Connector: Tyco Electronics AMP 172211-2
Contact: Tyco Electronics AMP 170376-1

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



Model: 489-1635-L₁₀, 489-1635-L₂₁



Model: 109-1000F13 (13PPI), 109-1000F20 (20PPI), 109-1000F30 (30PPI), 109-1000F40 (40PPI)

