

120mm sq.

San Ace 120AD



General 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 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.

120×120×38mm [Mass : 290g] **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]
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	60,000/60°C

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]
9AD1201H1H	100 to 240	90 to 264	50/60	0.08	4.4	3,250	3.0 106	84 0.34	42	-20 to +75	60,000/60°C

Note: 50/60 Hz compatible.

Set Models

- The set models listed below can be ordered as a single order.

Set configuration items: Fan (without sensor), plug cord, finger guard, screws (with flat washer and spring washer), hex nuts, operation manual

Model Number to Order	Fan Model	Sensor Specifications	Plug Cord Model	Finger Guard Model	Mounting Screws
9U-9AD1201H12	9AD1201H12	Without sensorsensor	489-1635-L10 (Products compliant with Electrical Appliance and Material Safety Law, UL/CSA [c-UL] CERTIFIED)	109-019E	M4 screws (55 mm) x 4, Nuts x 4

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.

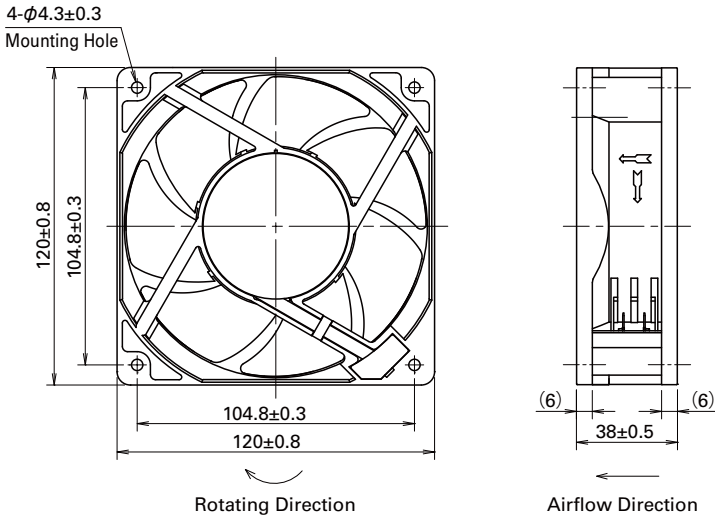
Burnout protection function at locked rotor condition

- Current cutoff system (ACDC fan only)

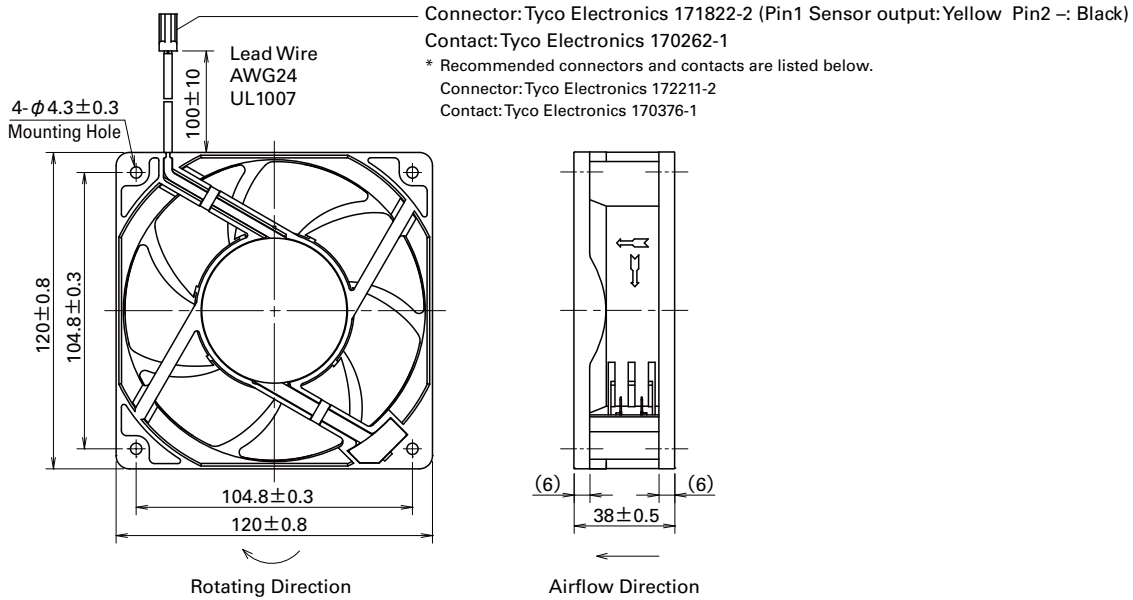
If the fan blades are restricted, the coil current is cut off at regular cycles to prevent overheating of the coil. When the hindrance is removed, the fan restarts automatically.

Dimensions (unit: mm) (With ribs)

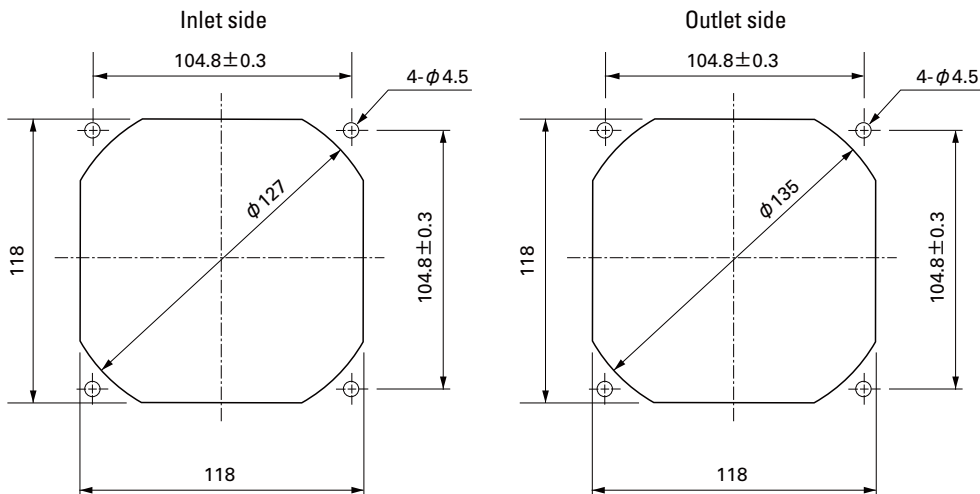
without Sensor



with Low-speed sensor



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



120 mm sq.

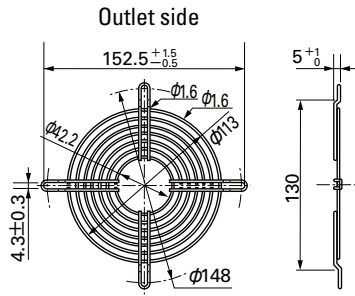
San Ace 120AD

120×120×38mm [Mass : 290g]

Options (unit: mm)

Finger Guards

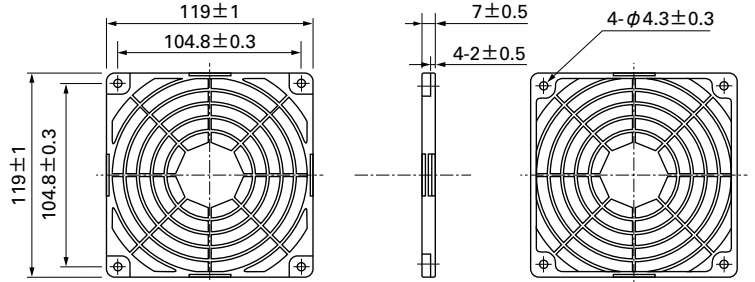
Model : 109-019C Surface treatment : Nickel-chrome plating (silver)
 : 109-019H : Cation electropainting (black)



Mass : 32g

Resin Finger Guards

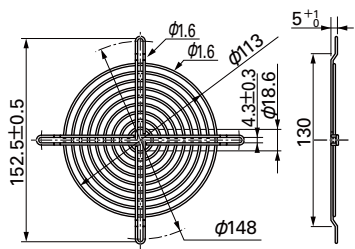
Model : 109-1000G



Mass : 23g

Model : 109-019E Surface treatment : Nickel-chrome plating (silver)
 : 109-019K : Cation electropainting (black)

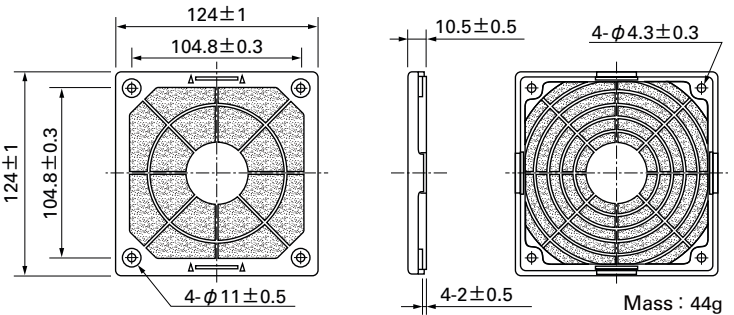
Inlet side, Outlet side



Mass : 42g

Resin Filter Kits

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



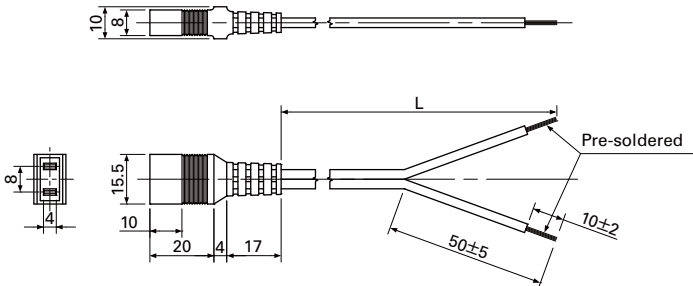
Mass : 44g

Plug Cord

(Products compliant with Electrical Appliance and Material Safety Law, UL/CSA[c-UL] CERTIFIED)

UL FILE No. E43202

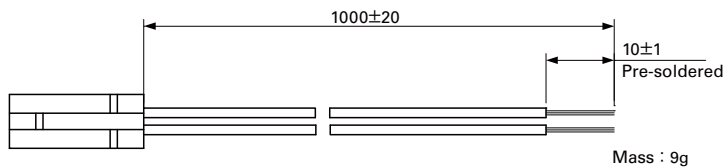
Model : 489-1635-L10/489-1635-L21



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

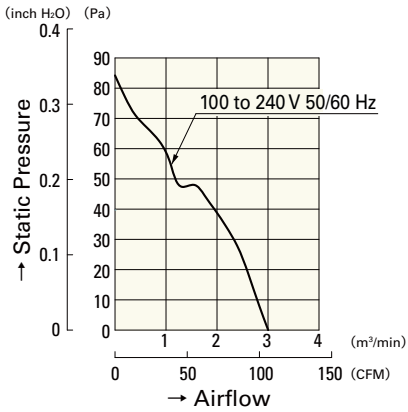
Wiring Harness for Sensor

Model: 489-1636



Mass : 9g

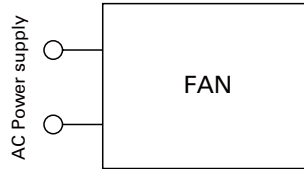
Airflow - Static Pressure Characteristics



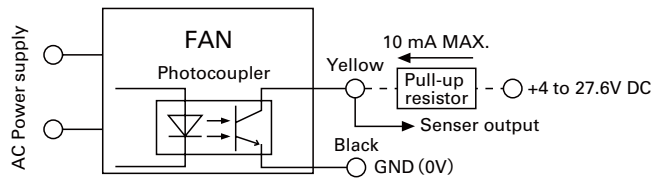
9AD1201H12
9AD1201H1H

Wiring Diagram

without Sensor



with Low-speed sensor

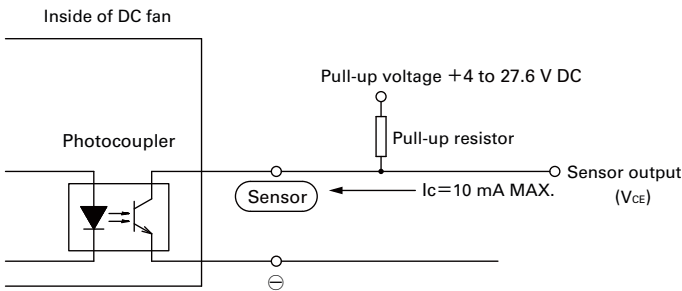


Specifications for Low-speed Sensors

Model No.: 9AD1201H1H

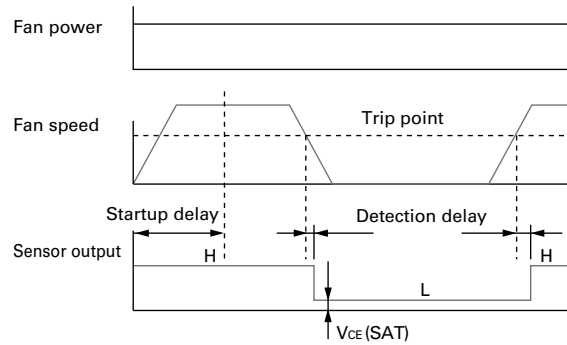
Output circuit: Open collector

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

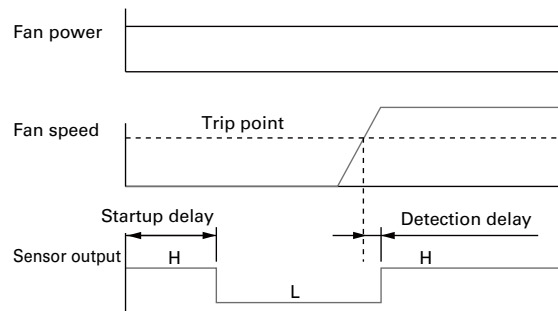


Sensor scheme

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