# 92×92×38 mm



# San Ace 92AD 9AD type 🛕 📢 ( 😭

### General Specifications

· Material ...... Frame: Plastic (Flammability: UL 94V-0), Impeller: Plastic (Flammability: UL 94V-0)

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 For details, please refer to p. 599.

· 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	Operating voltage range	Frequency	Rated current	Rated input	Rated speed	Max. a	irflow	Max. sta	tic pressure	SPL	Operating temperature	Expected life
	Model IIO.	[V]	[V]	[Hz]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
<b>1</b>	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
<b>1</b>	9AD0901M12	100 to 240	30 10 204	30/00	0.06	3.0	3100	1.18	41.7	56	0.22	33	-20 (0 +75	(90000/40°C)

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	Operating voltage range	Frequency	Rated current	Rated input	Rated speed	Max. a	irflow	Max. stat	ic pressure	SPL	Operating temperature	Expected life
	Model IIo.	[V]	[V]	[Hz]	[A]	[W]	[min <sup>-1</sup> ]	[m³/min]	[CFM]	[Pa]	[inchH <sub>2</sub> 0]	[dB (A)]	[°C]	[h]
<b>0</b>	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
<b></b>	9AD0901M1H		90 10 204	30/60	0.06	3.0	3100	1.18	41.7	56	0.22	33	-20 (0 +/5	(90000/40°C)

Note 1: Sensor and control options are available for selection. Refer to the table on p. 641.

Note 2: The mark indicates Short LeadTime Service applicable models. See p. 654 for details.

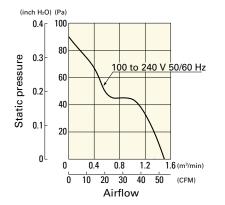
#### Set Models

Fan, finger guard, plug cord, screws, etc. can be purchased in one package. For details, please refer to p. 655.

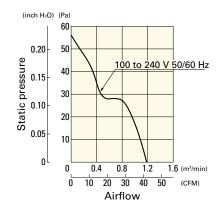
Order no.	Set items										
Order no.	Fan	Voltage	Low-speed sensor	Plug cord	Finger guards	Mounting screws					
ST1-9AD0901H12	9AD0901H12			489-1635-L10	109-099E						
ST1-9AD0901M12	9AD0901M12	100 to 240 V		489-1635-L10	109-099E	MALEE mm (A corouga)					
ST1-9AD0901H1H	9AD0901H1H	100 to 240 V	0	489-1635-L10	109-099E	M4×55 mm (4 screws)					
ST1-9AD0901M1H	9AD0901M1H		0	489-1635-L10	109-099E						

## Airflow - Static Pressure Characteristics

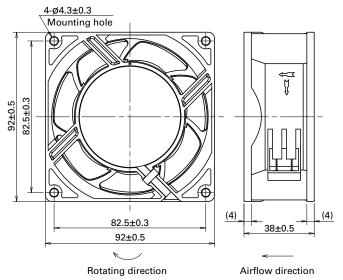
### 9AD0901H12, 9AD0901H1H



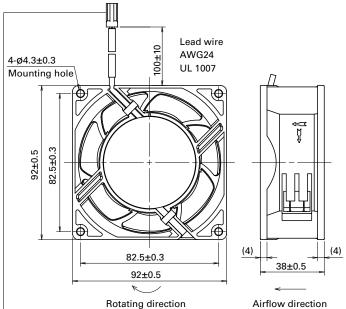
# 9AD0901M12, 9AD0901M1H



#### without Sensor



#### with Low-speed sensor



Connector: TE Connectivity 171822-2

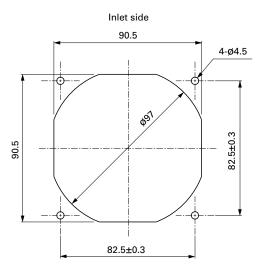
(Pin1 Sensor output: Yellow Pin2 -: Black)

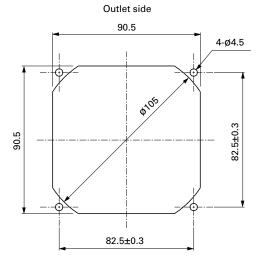
TE Connectivity 170262-1 Contact:

Note: Recommended connectors and contacts are listed below.

Connector: TE Connectivity 172211-2 Contact: TE Connectivity 170376-1

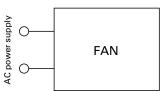
# Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)



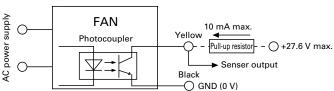


# Wiring Diagram

# without Sensor



# with Low-speed sensor



# Specifications for Low-speed Sensors

Typical standard model: 9AD0901H1H

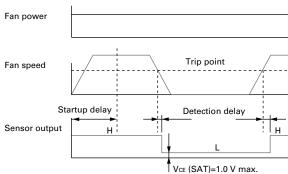
Output circuit: Open collector

VcE=+27.6 VDC max. Ic=10 mA max. [VcE (SAT)=1.0 V max.] Inside of DC fan Pull-up voltage +27.6 VDC max. Photocoupler Pull-up resistor O Sensor output Ic=10 mA max. Sensor (VcE)

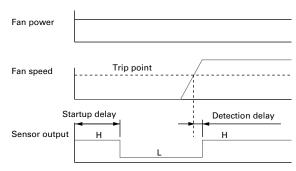
 $\Theta$ 

#### 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

page: p. 591

# Options

Finger guards page: p. 584

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

Resin filter kits page: p. 592

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

Wiring harness for sensor page: p. 595

Model no.: 489-1636

Resin finger guards

Model no.: 109-1001G

Plug cord page: p. 595

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

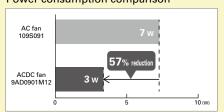
# Features of the San Ace 92AD 9AD type ACDC Fan

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

