

Shattering conventional thinking on AC fans ———
A new kind of AC fan with a built-in AC-DC converter.

ACDC Fan

San Ace 92AD San Ace 120AD

Low Power Consumption

Compared with our conventional product,^{*1}

Power consumption is up to **72%** lower

Long Life

Expected life of our conventional model:
25,000 hours at 60°C

Expected life of our ACDC Fan:

60,000 hours at 60°C

Wide operating temperature range

Operating voltage range

90 to 264 VAC

Lightweight

Compared with our conventional product,

mass reduced by about **1/2**^{*2}

Stable performance

The same cooling performance is achieved at 50 and 60 Hz.
There is no change in performance due to frequency.

No need to prepare a ground cable

Because of the duplex insulation structure,
grounding is not required.

^{*1} Among our own axial fans of equivalent size.

^{*2} For 120 x 120 x 38 mm ACDC fan.



Contributes to saving energy

Reduced fan replacement working hours

Can be used all over the world

SANYO DENKI

 **CBC**
CARLTON-BATES COMPANY
A SUBSIDIARY OF WESCO DISTRIBUTION, INC.

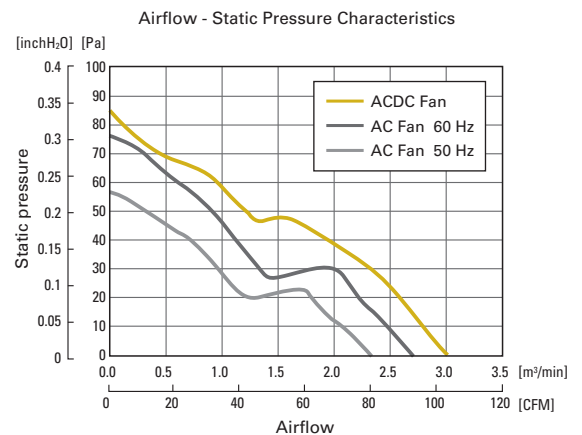
- We want to reduce our device's energy consumption...
- We want to simplify fan maintenance, and reduce fan replacement working hours...
- It is inconvenient to select a different model number for each voltage (100 V and 200 V systems)...
- Preparing the ground wire takes a lot of work...
- We want to switch to a DC fan, but don't have the space to install a DC power supply...

All of these can be resolved by using an **ACDC fan!**

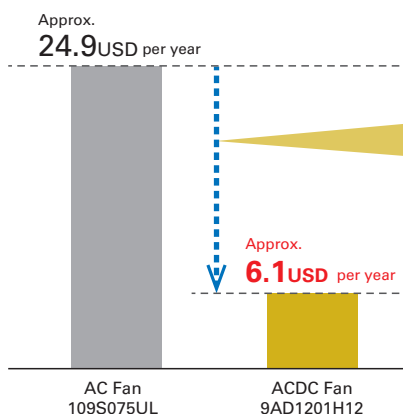
Comparison of our conventional AC fan (120 × 120 × 38 mm, Model number: 109S075UL) and ACDC fan (120 × 120 × 38 mm, Model number: 9AD1201H12)

● Specifications

	AC Fan 109S075UL (50/60 Hz)		ACDC Fan 9AD1201H12
Rated input [W]	18/16	72 to 75% decrease	4.4
Rated speed [min ⁻¹]	2700/3100		3250
Max. airflow [m ³ /min]	2.5/2.9		3.0
Max. static pressure [Pa]	57.9/68.7		84
SPL [dB (A)]	42/45		42
Expected life [h]	25000	2.4 times higher	60000
Mass [g]	550	47% decrease	290



● Electricity charge for one year



Replace a 120 × 120 × 38 mm AC fan
with an ACDC fan of the same size...

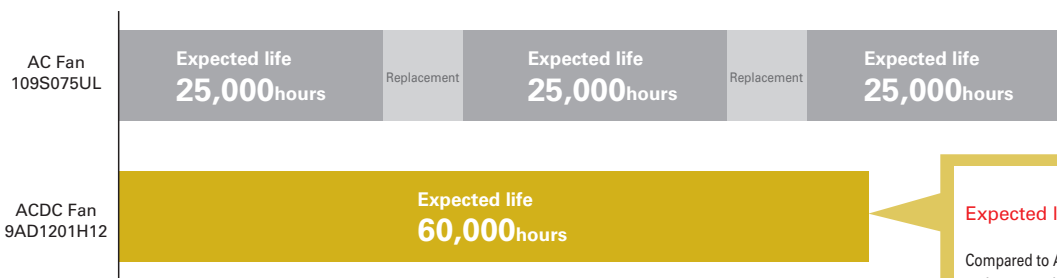
And save approximately

18.8USD per year!

Amount used running 24 hours per day.

Calculated using Tokyo Electric Power Co. commercial electricity rates (1 kWh=0.158USD, tax incl.) as of January 2019.
The actual unit price will vary depending on the power company and monthly power consumption.

● Replacement frequency



Expected life approx **6.8** years

Compared to AC fans of equivalent size,
maintenance labor time and cost can be decreased.

Expected life (90% survival rate for continuous operation
at rated voltage, 60°C)

92×92×38 mm San Ace 92AD 9AD type



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.

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 x 55 mm (4 screws)
ST1-9AD0901M12	9AD0901M12					
ST1-9AD0901H1H	9AD0901H1H		○			
ST1-9AD0901M1H	9AD0901M1H		○			

Plug cord

Products compliant with Electrical Appliance and Material Safety Law, UL/CSA [c-UL] Certified UL FILE No.E43202

Model No.	Power cord length (L) [mm]	Mass (g)
489-1635-L10	1000	38
489-1635-L21	2100	74

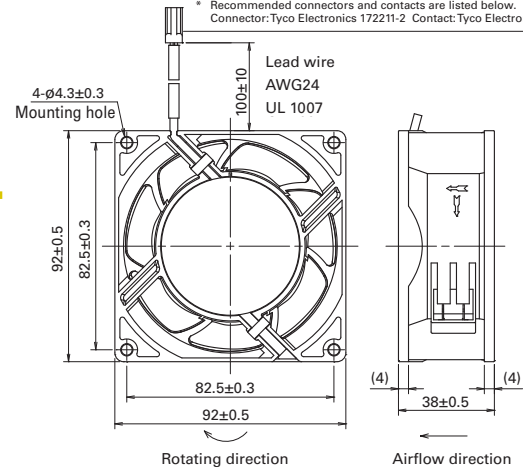
Wiring harness for sensor

Model No.	Mass (g)
489-1636	9

Dimensions (unit: mm)

(With ribs, Low-speed sensor)

Connector: Tyco Electronics 171822-2 (Pin1 Sensor output: Yellow Pin2 -: Black)
Contact: Tyco Electronics 170262-1
* Recommended connectors and contacts are listed below.
Connector: Tyco Electronics 172211-2 Contact: Tyco Electronics 170376-1



120×120×38 mm San Ace 120AD 9AD type



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]
9AD1201H12	100 to 240	90 to 264	50/60	0.08	4.4	3250	3.0 106	84 0.34	42	-20 to +75	60000/60°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 [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]
9AD1201H1H	100 to 240	90 to 264	50/60	0.08	4.4	3250	3.0 106	84 0.34	42	-20 to +75	60000/60°C

Set Models

Fan, finger guard, plug cord, screws, etc. can be purchased in one package.

Model no.	Set items					
	Fan	Voltage	Low-speed sensor	Plug cord	Finger guards	Mounting screws
ST1-9AD1201H12	9AD1201H12	100 to 240 V		489-1635-L10	109-019E	M4 x 55 mm (4 screws)
ST1-9AD1201H1H	9AD1201H1H		○			

Plug cord

Products compliant with Electrical Appliance and Material Safety Law, UL/CSA [c-UL] Certified UL FILE No.E43202

Model No.	Power cord length (L) [mm]	Mass (g)
489-1635-L10	1000	38
489-1635-L21	2100	74

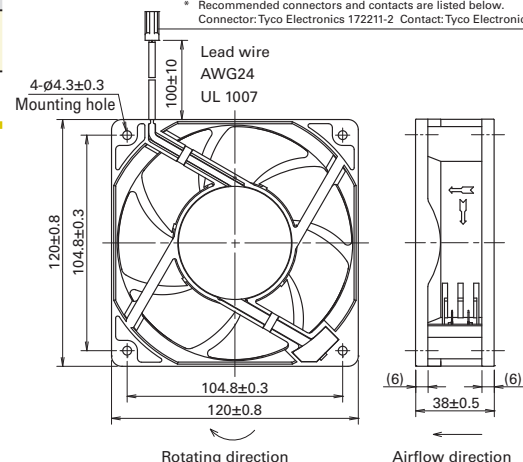
Wiring harness for sensor

Model No.	Mass (g)
489-1636	9

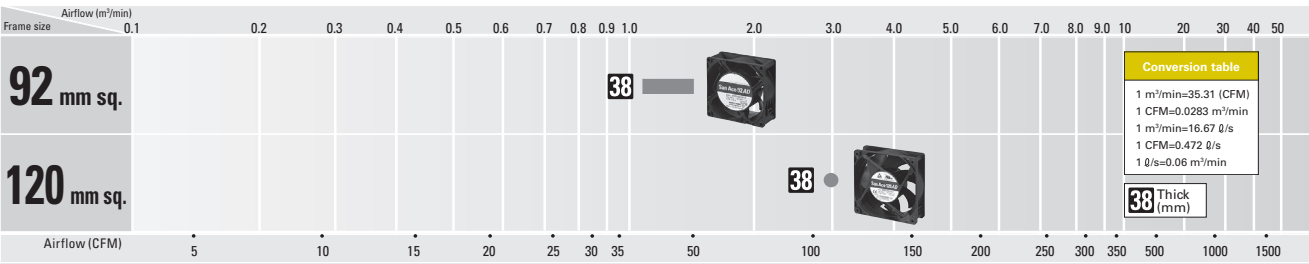
Dimensions (unit: mm)

(With ribs, Low-speed sensor)

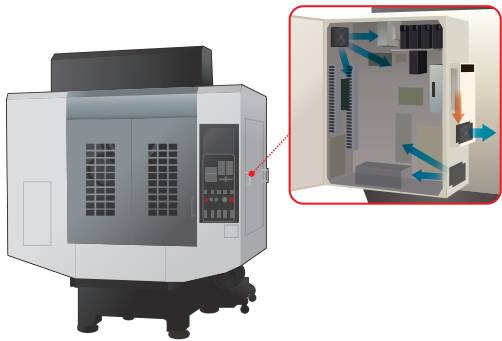
Connector: Tyco Electronics 171822-2 (Pin1 Sensor output: Yellow Pin2 -: Black)
Contact: Tyco Electronics 170262-1
* Recommended connectors and contacts are listed below.
Connector: Tyco Electronics 172211-2 Contact: Tyco Electronics 170376-1



Domain Diagram

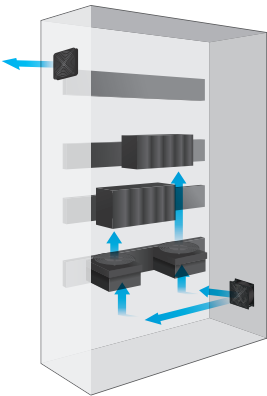


Usage example



Industrial Equipment
Application: Cooling of heat sources,
exhausting heat from equipment housing

Control Panel
Application: Cooling of heat sources, circulating air



**Ideal for cooling industrial machinery
and control panels driven by AC power**

NEW PRODUCTS Ø225 × 99 mm ACDC Fan

Centrifugal
Fan

Splash Proof Centrifugal
Fan



- High Airflow and Static Pressure
Maximum airflow of 23 m³/min and maximum static pressure of 815 Pa.
- Water and Dust Resistance
AC input Splash Proof Centrifugal Fans (IP56 protection rating)
can be used in a variety of environments.

The operating voltage range and expected life differ from those of axial flow fans.
Please contact us for details.

SANYO DENKI CO., LTD.

The names of companies and/or their products specified in this catalog are the trade names, and/or trademarks and/or registered trademarks of such respective companies.
San Ace is a trademark of SANYO DENKI CO., LTD.
Specifications are subject to change without notice.