

80×80×20 mm

San Ace 80



General Specifications

- Material Frame: Aluminum, Impeller: Plastic (Flammability: UL 94V-1)
- Expected life 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 Shaded coil motor
- Motor protection function Locked rotor burnout protection, Reverse polarity protection
For details, please refer to p. 616.
- Dielectric strength 50/60 Hz, 1500 VAC, for 1 minute (between lead wire conductors and frame)
- Insulation resistance 10 MΩ min. at 500 VDC
- Sound pressure level (SPL) A-weighted sound pressure level (SPL) at 1 m away from the air inlet.
- Operating voltage range Voltage of each model ±10%
- Storage temperature -30 to +70°C (Non-condensing)
- Lead wire Black, 2 pcs
- Mass 180 g

Specifications

Model no.	Rated voltage [V]	Frequency [Hz]	Input [W]	Current [A]	Locked rotor current [A]	Rated speed [min ⁻¹]	Max. airflow [m ³ /min]	Max. static pressure [Pa]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
109-210	100	50/60	6/5	0.07/0.06	0.07/0.06	2500/3000	0.44/0.53 15.5/18.7	23.5/31.4 0.094/0.126	26/31	-30 to +60	25000/60°C (56000/40°C)
109-213	115			0.06/0.05	0.06/0.05						

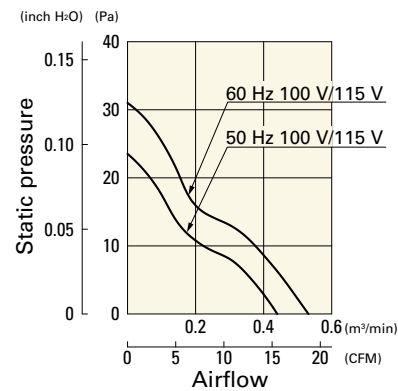
Set Models

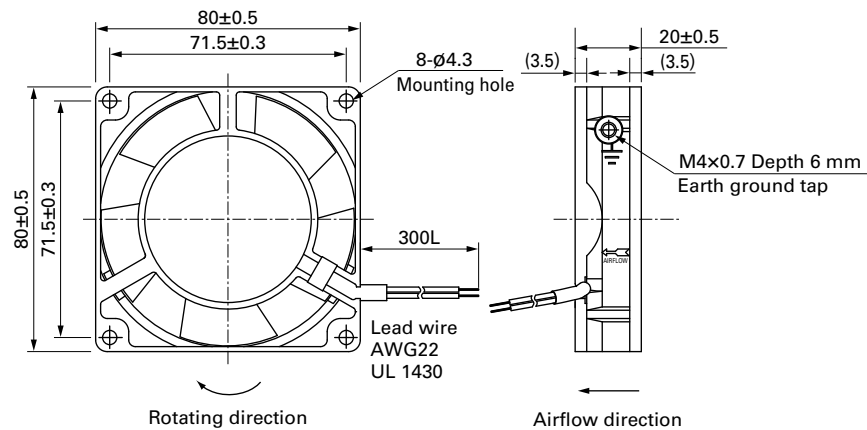
Fan, finger guard, plug cord, screws, etc. can be purchased in one package. For details, please refer to p. 674.

Order no.	Set items					
	Fan (1 pc)	Voltage	Low-speed sensor	Plug cord (1 pc)	Finger guard (1 pc)	Screws with hex nuts (4 pairs)
ST1-109-210	109-210	100 V		Plug cord is not included because of the exposed-lead structure.	109-049E	M4×40 mm
ST1-109-213	109-213	115 V			109-049E	

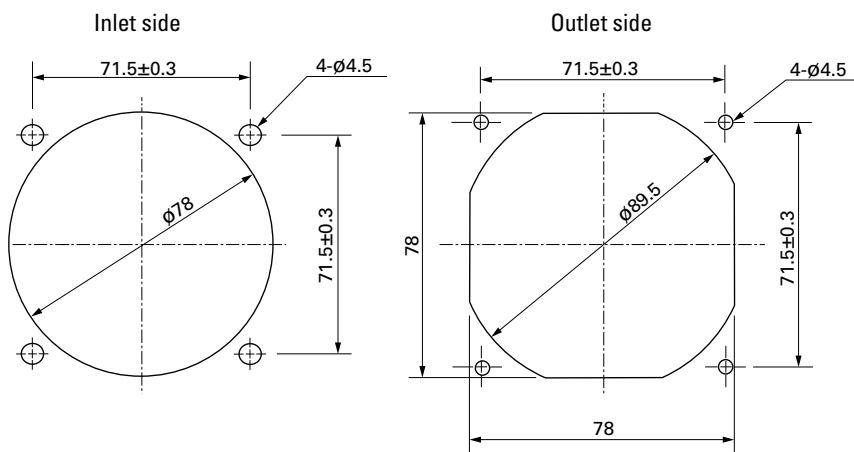
Airflow - Static Pressure Characteristics

109-210, 109-213

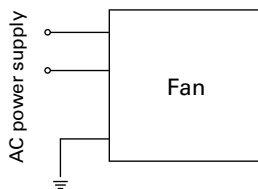




Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)



Connection Schematic



Options

Finger guards

page: p. 598

Model no.: 109-049E, 109-049H

Resin finger guards

page: p. 605

Model no.: 109-1002G

Resin filter kits

page: p. 606

Model no.: 109-1002F13 (13PPI), 109-1002F20 (20PPI),
109-1002F30 (30PPI), 109-1002F40 (40PPI)

80×80×25 mm

San Ace 80 



General Specifications

- Material Frame: Aluminum, Impeller: Plastic (Flammability: UL 94V-1)
- Expected life 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 Shaded coil motor
- Motor protection function Locked rotor burnout protection, Reverse polarity protection
For details, please refer to p. 616.
- Dielectric strength 50/60 Hz, 1500 VAC, for 1 minute (between input terminal and frame)
- Insulation resistance 10 MΩ min. at 500 VDC
- Sound pressure level (SPL) A-weighted sound pressure level (SPL) at 1 m away from the air inlet.
- Operating voltage range Voltage of each model ±10%
- Storage temperature -30 to +70°C (Non-condensing)
- Mass 270 g

Specifications

Model no.	Rated voltage [V]	Frequency [Hz]	Input [W]	Current [A]	Locked rotor current [A]	Rated speed [min ⁻¹]	Max. airflow [m³/min] [CFM]		Max. static pressure [Pa] [inchH ₂ O]		SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
109S050	100	50/60	9/7	0.12/0.1	0.13/0.11	2650/3100	0.63/0.76	22.3/26.9	27.5/38.3	0.11 /0.154	30/33	-30 to +60	25000/60°C (56000/40°C)
109S053	115			0.1 /0.08	0.11/0.09								
109S051	200			0.06/0.05	0.06/0.05								
109S054	230			0.05/0.04	0.05/0.04								
109S030	100			0.12/0.1	0.13/0.11	2350/2700	0.55/0.63	19.4/22.3	21.6/28.4	0.087/0.114	28/30		
109S033	115			0.1 /0.08	0.11/0.09								
109S031	200			0.06/0.05	0.06/0.05								
109S034	230			0.05/0.04	0.05/0.04								

Set Models PSE (Japanese safety standard) compatible

A set of a fan, finger guard, plug cord (PSE compatible), and screws. For details, please refer to p. 674.

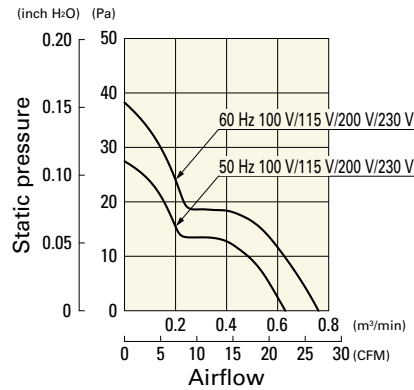
Order no.	Set items					
	Fan (1 pc)	Voltage	Low-speed sensor	Plug cord (1 pc)	Finger guard (1 pc)	Screws with hex nuts (4 pairs) ⁽²⁾
ST1-109S050	109S050	100 V		489-016-L10 ⁽¹⁾	109-049E	M4×40 mm
ST1-109S053	109S053	115 V		489-016-L10 ⁽¹⁾	109-049E	
ST1-109S051	109S051	200 V		489-016-L10 ⁽¹⁾	109-049E	
ST1-109S054	109S054	230 V		489-016-L10 ⁽¹⁾	109-049E	
ST1-109S030	109S030	100 V		489-016-L10 ⁽¹⁾	109-049E	
ST1-109S033	109S033	115 V		489-016-L10 ⁽¹⁾	109-049E	
ST1-109S031	109S031	200 V		489-016-L10 ⁽¹⁾	109-049E	
ST1-109S034	109S034	230 V		489-016-L10 ⁽¹⁾	109-049E	

(1) PSE compatible, but not UL compatible.

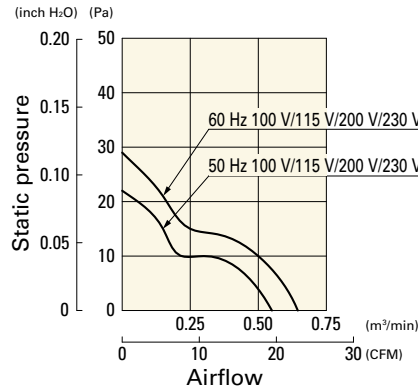
(2) Though these are 2-hole or 3-hole frame mount types, 4 screws are included for extra.

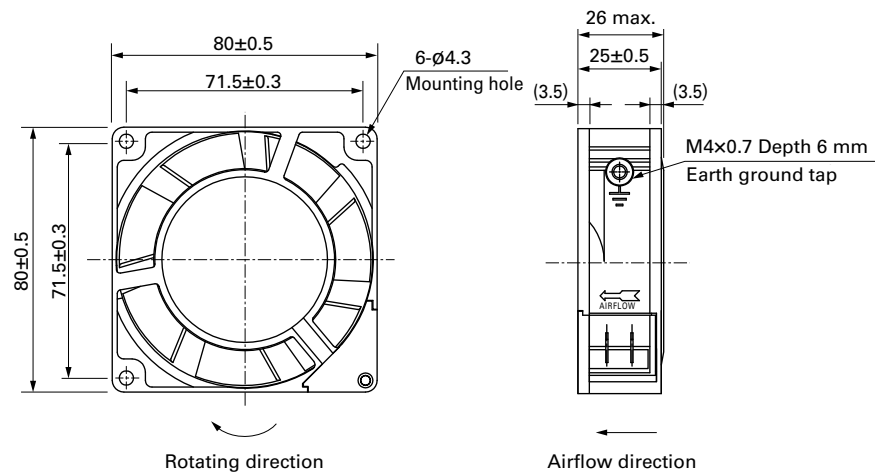
Airflow - Static Pressure Characteristics

109S050, 109S053, 109S051, 109S054

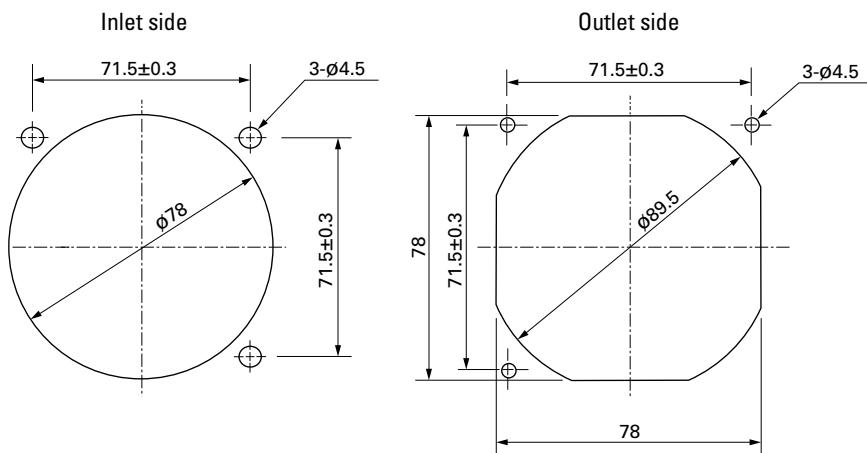


109S030, 109S033, 109S031, 109S034

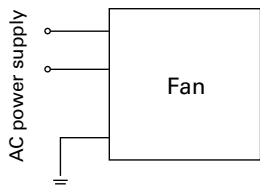




Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)



Connection Schematic



Options

Finger guards

page: p. 598

Model no.: 109-049E, 109-049H

Resin finger guards

page: p. 605

Model no.: 109-1002G

Resin filter kits

page: p. 606

Model no.: 109-1002F13 (13PPI), 109-1002F20 (20PPI),
109-1002F30 (30PPI), 109-1002F40 (40PPI)

Plug cord

page: p. 609 to 610

PSE compatible models

Model no.: 489-016-L10, 489-016-L21

UL/CSA certified models

Model no.: 489-047-L10, 489-047-L21

AC

AC Fan 80 mm sq.

80×80×38 mm

San Ace 80 



General Specifications

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Expected life at 40°C is for reference only.
- Motor structure Shaded coil motor
- Motor protection function Locked rotor burnout protection, Reverse polarity protection
For details, please refer to p. 616.
- Dielectric strength 50/60 Hz, 1500 VAC, for 1 minute (between input terminal and frame)
- Insulation resistance 10 MΩ min. at 500 VDC
- Sound pressure level (SPL) A-weighted sound pressure level (SPL) at 1 m away from the air inlet.
- Operating voltage range Voltage of each model ±10%
- Storage temperature -30 to +70°C (Non-condensing)
- Mass 400 g

Specifications

Model no.	Rated voltage [V]	Frequency [Hz]	Input [W]	Current [A]	Locked rotor current [A]	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]
109-150	100	50/60	9/8	0.13/0.11	0.17/0.15	2700/3150	0.9/1.05 31.8/37.1	31.4/44.1 0.126/0.177	35/39	-30 to +60	25000/60°C (56000/40°C)
109-153	115			0.11/0.1	0.14/0.12						
109-151	200			0.07/0.06	0.09/0.08						
109-154	230			0.06/0.05	0.08/0.07						

Set Models PSE (Japanese safety standard) compatible

A set of a fan, finger guard, plug cord (PSE compatible), and screws. For details, please refer to p. 674.

Order no.	Set items					
	Fan (1 pc)	Voltage	Low-speed sensor	Plug cord (1 pc)	Finger guard (1 pc)	Screws with hex nuts (4 pairs) ⁽²⁾
ST1-109-150	109-150	100 V		489-016-L10 ⁽¹⁾	109-049E	M4×55 mm
ST1-109-153	109-153	115 V		489-016-L10 ⁽¹⁾	109-049E	
ST1-109-151	109-151	200 V		489-016-L10 ⁽¹⁾	109-049E	
ST1-109-154	109-154	230 V		489-016-L10 ⁽¹⁾	109-049E	

- (1) PSE compatible, but not UL compatible.
(2) Though these are 2-hole or 3-hole frame mount types, 4 screws are included for extra.

Airflow - Static Pressure Characteristics

109-150, 109-153, 109-151, 109-154

