



160×160×51 mm

San Ace 160  Only standard fans (without sensors) have acquired CSA certification.

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)
- Motor structure Capacitor motor
- Motor protection function Locked rotor burnout protection, Reverse polarity protection
For details, please refer to p. 547.
- Dielectric strength 50/60 Hz, 1500 VAC, for 1 minute (between input terminal and frame)
- Dielectric strength (with sensor) 50/60 Hz 1500 VAC 1 minute (between AC input terminal and frame)
50/60 Hz 1000 VAC 1 minute (between lead wire conductors and frame)
- Insulation resistance 10 MΩ or more with a 500 VDC megger
- 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)
- Sensor-Purpose lead wire ⊕Brown ⊖Black (Sensor) Yellow
- Mass 1100 g

Specifications

Standard

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]
109-601	100	50/60	37.5/33	0.43/0.35	0.72/0.7	2850/3350	7.2/8.5 254.4/300.4	156.8/166.6 0.63/0.669	56/60	-30 to +60	25000/60°C
109-604	115			0.39/0.31	0.62/0.61						
109-602	200			0.23/0.18	0.36/0.35						
109-603	230			0.21/0.16	0.32/0.31						

with Sensor

For sensor specifications, please refer to p. 550. Sensor specification differs depending on the fan's speed specification.

For a 5 V sensor power supply (ITEM-20), please append "-20" to the end of model number. E.g. 109-641-20

For a 12 V sensor power supply (ITEM-30), please append "-30" to the end of model number. E.g. 109-641-30

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]
109-641	100	50/60	37.5/33	0.43/0.35	0.72/0.7	2850/3350	7.2/8.5 254.4/300.4	156.8/166.6 0.63/0.669	56/60	-10 to +60	25000/60°C
109-644	115			0.39/0.31	0.62/0.61						
109-642	200			0.23/0.18	0.36/0.35						
109-643	230			0.21/0.16	0.32/0.31						

Set Models

Fan, finger guard, plug cord, screws, etc. can be purchased in one package. For details, please refer to p. 594.

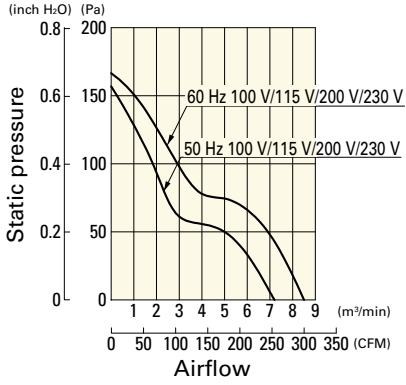
Order no.	Set items					
	Fan	Voltage	Low-speed sensor	Plug cord*	Finger guards	Mounting screws
ST1-109-601	109-601	100 V		489-1618-L10	109-619E	M5×20 mm (4 screws)
ST1-109-604	109-604	115 V		489-1618-L10	109-619E	
ST1-109-602	109-602	200 V		489-1618-L10	109-619E	
ST1-109-603	109-603	230 V		489-1618-L10	109-619E	
ST1-109-641-20	109-641-20	100 V	○ (5 V)	489-1618-L10	109-619E	
ST1-109-641-30	109-641-30		○ (12 V)	489-1618-L10	109-619E	
ST1-109-644-20	109-644-20	115 V	○ (5 V)	489-1618-L10	109-619E	
ST1-109-644-30	109-644-30		○ (12 V)	489-1618-L10	109-619E	
ST1-109-642-20	109-642-20	200 V	○ (5 V)	489-1618-L10	109-619E	
ST1-109-642-30	109-642-30		○ (12 V)	489-1618-L10	109-619E	
ST1-109-643-20	109-643-20	230 V	○ (5 V)	489-1618-L10	109-619E	
ST1-109-643-30	109-643-30		○ (12 V)	489-1618-L10	109-619E	

* PSE compatible.

Airflow - Static Pressure Characteristics

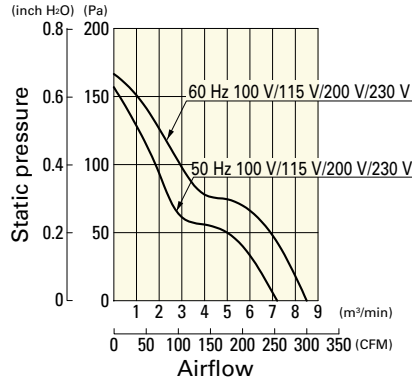
Standard

109-601, 109-604, 109-602, 109-603



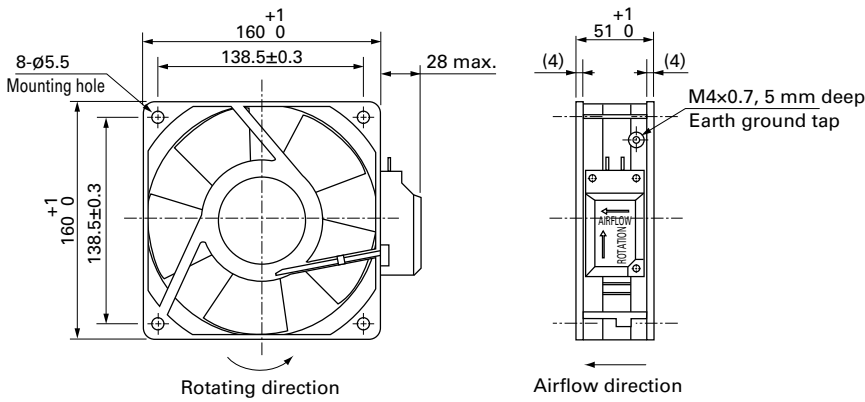
with Sensor

109-641, 109-644, 109-642, 109-643

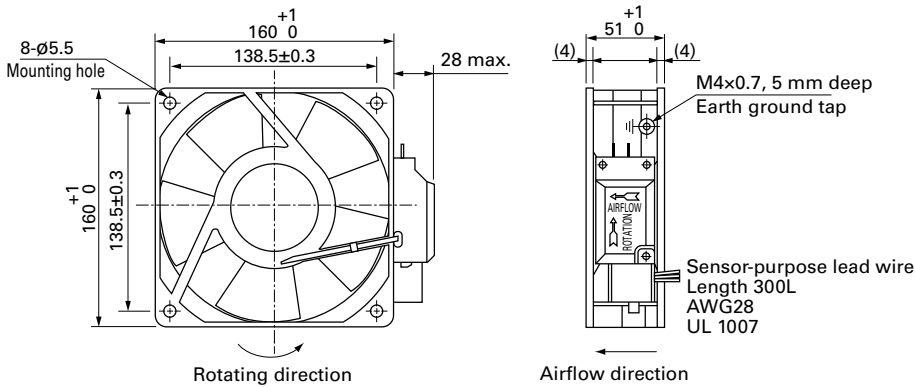


Dimensions (unit: mm)

Standard

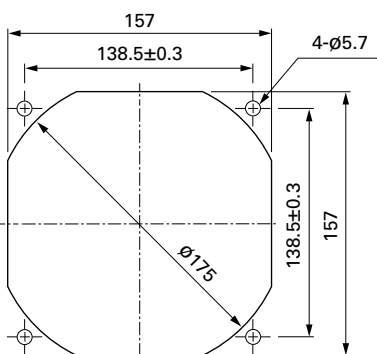


with Sensor



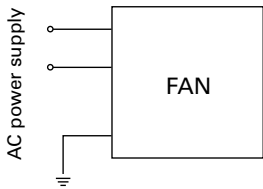
Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)

Inlet side, Outlet side



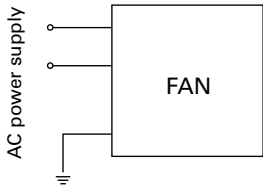
Wiring Diagram

Standard

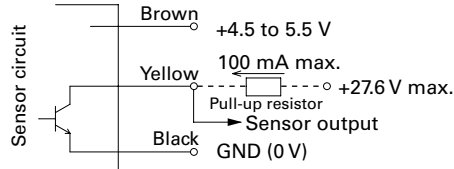


with Sensor

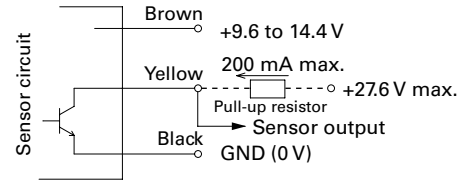
For fan power supply



For sensor circuit
5 V (ITEM-20)



12 V (ITEM-30)



GND (Black) should be shared in case that power supply for sensor circuit (Brown) and that for sensor pull-up (Yellow) are separated.

Options

Finger guards

page: p. 533

Model no.: 109-619E, 109-619H, 109-620

Plug cord

page: pp. 542 to 543

Model no.: 489-084-L10, 489-084-L21, 489-086-L10,
489-086-L21, 489-1618-L10, 489-1618-L21,
489-1618-L28, 489-1619-L10, 489-1619-L21

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [AC Fans](#) category:

Click to view products by [Sanyo Denki](#) manufacturer:

Other Similar products are found below :

[F1238H24B-FHR](#) [G9225S05B2-FSR](#) [A2D200-AA04-41](#) [A2E165-AA17-01](#) [AD0912HB-A7BGL](#) [1500-FAN-01](#) [25.001.1856.0](#)
[25.320.1353.1](#) [25.320.4753.1](#) [25.320.5453.1](#) [25.330.1353.1](#) [25.330.4853.1](#) [25.330.5153.1](#) [25.330.5353.1](#) [25.340.1053.1](#) [25.350.5253.0](#)
[25.600.4053.0](#) [272DL-2LP11-000](#) [A2D210-AB10-05](#) [A2D250-AE22-06](#) [A2E170-AF23-01](#) [F1238S24BT-FSR](#) [23241-3](#) [25.000.1856.0](#)
[25.000.2056.0](#) [25.010.1856.0](#) [25.332.2453.1](#) [25.340.0453.1](#) [25.345.5353.0](#) [281DY-1LP14-000B](#) [298DM-2LP11-000](#) [298DS-2LP11-000A](#)
[344DY-1LP11-000](#) [39.703.0253.0](#) [USTF1203224VHW](#) [3G2C7MC224](#) [W2S130-AA03-43](#) [W2S130-AA25-97](#) [8856N](#) [A4D315-AC20-02](#)
[A2E170-AF23-11](#) [W2S130-AB03-09](#) [8550A](#) [8560N](#) [8880A](#) [S4D300-AR34-17](#) [S2E250-AE31-08](#) [AD0405HB-G73\(9T\)](#) [CENT-2000-FFTM](#)
[CENT-2000-RFTM](#)