

# 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)
- Motor structure ..... Shaded coil 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)
- 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)
- Mass ..... 270 g

## Specifications

| Model no. | Rated voltage<br>[V] | Frequency<br>[Hz] | Input<br>[W] | Current<br>[A] | Locked rotor current<br>[A] | Rated speed<br>[min <sup>-1</sup> ] | Max. airflow<br>[m³/min]      [CFM] |           | Max. static pressure<br>[Pa]                      [inchH₂O] |             | SPL<br>[dB (A)] | Operating temperature<br>[°C] | Expected life<br>[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           |
| 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

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

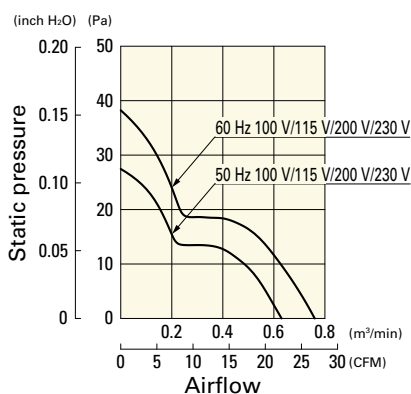
| Order no.   | Set items |         |                  |             |               |                       |
|-------------|-----------|---------|------------------|-------------|---------------|-----------------------|
|             | Fan       | Voltage | Low-speed sensor | Plug cord*  | Finger guards | Mounting screws       |
| ST1-109S050 | 109S050   | 100 V   |                  | 489-016-L10 | 109-049E      | M4×40 mm (4 screws)** |
| ST1-109S053 | 109S053   | 115 V   |                  | 489-016-L10 | 109-049E      |                       |
| ST1-109S051 | 109S051   | 200 V   |                  | 489-016-L10 | 109-049E      |                       |
| ST1-109S054 | 109S054   | 230 V   |                  | 489-016-L10 | 109-049E      |                       |
| ST1-109S030 | 109S030   | 100 V   |                  | 489-016-L10 | 109-049E      |                       |
| ST1-109S033 | 109S033   | 115 V   |                  | 489-016-L10 | 109-049E      |                       |
| ST1-109S031 | 109S031   | 200 V   |                  | 489-016-L10 | 109-049E      |                       |
| ST1-109S034 | 109S034   | 230 V   |                  | 489-016-L10 | 109-049E      |                       |

\* PSE compatible.

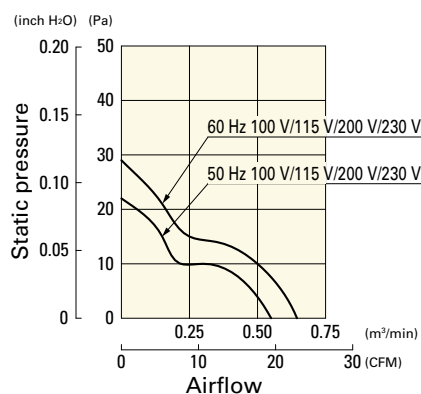
\*\* Though these are 2-hole or 3-hole frame mount types, 4 screws are included for extra.

## Airflow - Static Pressure Characteristics

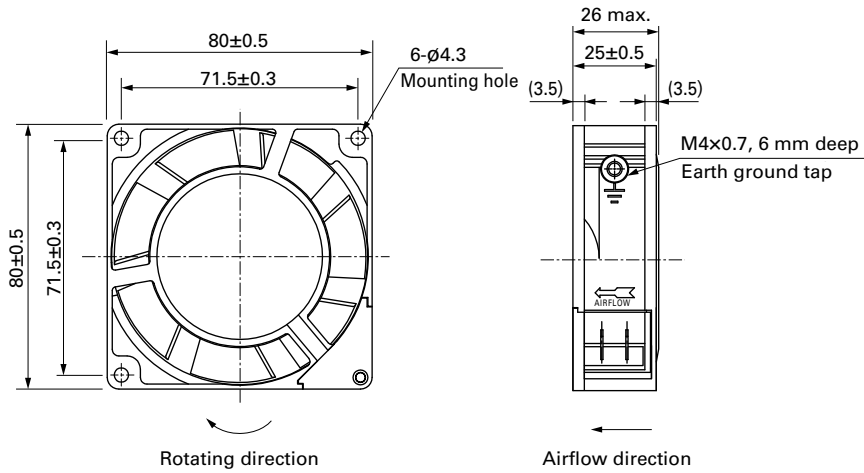
### 109S050, 109S053, 109S051, 109S054



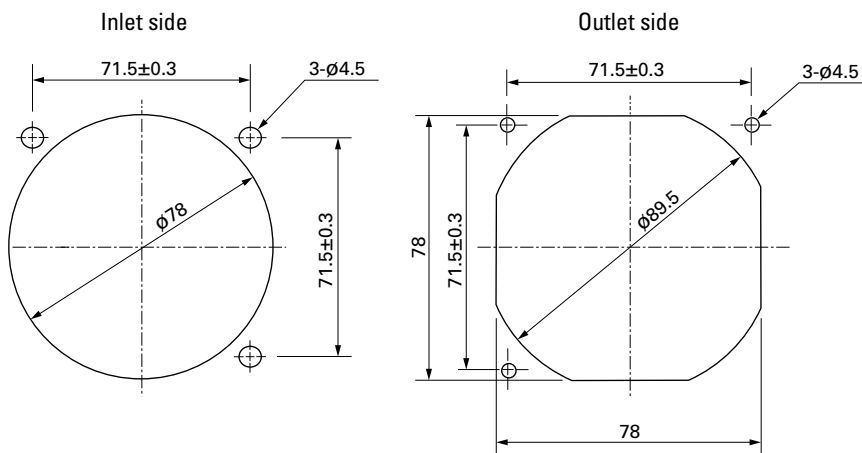
### 109S030, 109S033, 109S031, 109S034



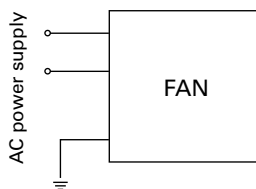
## ■ Dimensions (unit: mm)



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



## ■ Wiring Diagram



## ■ Options

### Finger guards

page: p. 532

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

### Resin finger guards

page: p. 539

Model no.: 109-1002G

### Resin filter kits

page: p. 540

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

### Plug cord

page: pp. 542 to 543

Model no.: 489-016-L10, 489-016-L21, 489-047-L10,  
489-047-L21

AC

AC Fan 80 mm sq.