Bracket-mounted Centrifugal Fan

270×270×99 mm
San Ace C270 9B1T type 😊 

### General Specifications

- **Material**
  - Motor case: Aluminum (Black coating), Impeller: Plastic (Flammability: UL 94V-0)
  - Bracket: Aluminum, Plastic (Flammability: UL 94V-0)
- **Expected life**
  - See the table below. (L10 life: 90% survival rate for continuous operation in free air at 60°C, rated voltage)
- **Motor protection function**
  - Locked rotor burnout protection, Reverse polarity protection
  - For details, please refer to p. 547.
- **Dielectric strength**
  - 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and motor case)
- **Insulation resistance**
  - 10 MΩ or more with a 500 VDC megger (between lead wire conductors and motor case)
- **Sound pressure level (SPL)**
  - At 1 m away from the air inlet
- **Storage temperature**
  - -30 to +70°C (Non-condensing)
- **Lead wire**
  - Red, Black, Sensor, Yellow, Control, Brown
- **Mass**
  - 1700 g

### Specifications

The models listed below have pulse sensors with PWM control function.

<table>
<thead>
<tr>
<th>Model no.</th>
<th>Rated voltage (V)</th>
<th>Operating voltage range</th>
<th>PWM duty cycle (%)</th>
<th>Rated current (A)</th>
<th>Rated input (W)</th>
<th>Rated speed (rpm)</th>
<th>Max. airflow (m³/min)</th>
<th>Max. static pressure (Pa)</th>
<th>SPL (dB(A))</th>
<th>Operating temperature (℃)</th>
<th>Expected life (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9B1TP24P0H001</td>
<td>24</td>
<td>16 to 36</td>
<td>100</td>
<td>3.2</td>
<td>76.8</td>
<td>3050</td>
<td>17.6</td>
<td>622</td>
<td>530</td>
<td>2.13</td>
<td>-20 to +70</td>
</tr>
<tr>
<td>9B1TP48P0G001</td>
<td>48</td>
<td>36 to 72</td>
<td>100</td>
<td>2.75</td>
<td>132</td>
<td>3850</td>
<td>21.0</td>
<td>742</td>
<td>760</td>
<td>3.05</td>
<td>-20 to +60</td>
</tr>
<tr>
<td>9B1TP48P0H001</td>
<td>100</td>
<td></td>
<td>100</td>
<td>1.6</td>
<td>76.8</td>
<td>3050</td>
<td>17.6</td>
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<td>-20 to +70</td>
</tr>
</tbody>
</table>

* PWM frequency: 25 kHz. Fan does not rotate when PWM duty cycle is 0%.
Max input of 9B1TP24P0H001/9B1TP48P0H001: 160 W, 9B1TP48P0G001: 280 W at rated voltage.

### Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9B1TP24P0H001  With pulse sensor with PWM control function

**PWM duty cycle**

![PWM duty cycle graph](image)

**Operating voltage range**

![Operating voltage range graph](image)

**PWM duty - Speed characteristics example**

![PWM duty - Speed characteristics example](image)
**Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example**

**PWM duty cycle**

![Graph showing PWM duty cycle for airflow and static pressure]

**Operating voltage range**

![Graph showing operating voltage range for airflow and static pressure]

**PWM duty - Speed characteristics example**

![Graph showing PWM duty cycle for fan speed]

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**9B1TP48P0G001** With pulse sensor with PWM control function

**9B1TP48P0H001** With pulse sensor with PWM control function

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**Dimensions (unit: mm)**

![Diagram showing dimensions of the fan]

Centrifugal Fan 270 mm sq.
Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)

Inlet panel side

Reference Diagram for Mounting

Finger guard 109-1146 should be mounted with four holes as in the drawing.

Options

Finger guards    page: p. 536

Model no.: 109-1146