Mitsubishi Electric Railway Car Fan “LINEDELIER” is widely used in a variety of railway cars in Japan, including passenger, monorail, and subway cars. It is used in conjunction with the air-conditioning system to improve the cooling effect and is also used alone to deliver cool air, thus improving the air-conditioning of the car. It has a track record of more than 45 years and is used in railway cars in Japan, UAE, and China including Hong Kong.

<Mainly for passenger cabins>
Double Axial Linedelioer
LD-08WAA
- The double axial (wide) type can distribute air to a wide area.

<Mainly for crew cabins>
Single Axial Linedelioer
LD-08WB
- The single axial (compact) type can be installed in a small space such as the ceiling space of a crew cabin.
Linedelier air flow distribution

- Air flow distribution (image)
  
  *The deeper the blue color, the higher the air flow velocity.

Air flow from the oscillating Linedelier turns to the right, then to the left, and then to the right.

- Air flow when the oscillation angle reaches the outermost (leftmost) limit.
  
  *The deeper the red color, the higher the air flow velocity.

Air blown out from the Linedelier is distributed to all corners of the car.

Benefits of the Linedelier

**Implements the air-conditioning of the car and creates a cooling sensation for passengers.**

- Agitation of the air-conditioned air makes the temperature distribution of the car uniform.
- A long shape enables air to be distributed to a wide area.
- Air from the Linedelier creates a cooling sensation for passengers when the air-conditioning is not very effective in a crowded car.
- The Linedelier can be installed by embedding it in the ceiling of the car, so the ceiling surface is neat and the air blown from the Linedelier is not harmful to passengers.

Basic Specifications

**<Double axial type>**

![Diagram of double axial type]

**<Single axial type>**

![Diagram of single axial type]

<table>
<thead>
<tr>
<th>Type</th>
<th>Power consumption (W)</th>
<th>Noise [dB (A)]</th>
<th>Air volume [m³/min]</th>
<th>Air velocity [m/s]</th>
<th>Weight [kg]</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double axial</td>
<td>50</td>
<td>48</td>
<td>13.7</td>
<td>2.5</td>
<td>9</td>
<td>Black (Munsell No. N1.0)</td>
</tr>
<tr>
<td>Single axial</td>
<td>25</td>
<td>47</td>
<td>6.8</td>
<td>2.5</td>
<td>6.7</td>
<td></td>
</tr>
</tbody>
</table>

*Noise was measured just beneath the Linedelier at a distance of 0.7 m in a free air state.

*Air flow velocity was measured just beneath the air flow control plate specified by Mitsubishi at a distance of 0.7 m.

*The characteristic values are typical of the Linedelier and vary depending on the specifications.