Slimline Range (SL)

- Performance range up to 0.92m³/s
- Speed control included
- EC Backward curved fans
- Anodised aluminium pentapost frame
- Double skinned Aluzinc panels
- Low profile direct drive units
- 2 Year guarantee

Low profile direct drive Air Handling Unit - Duties from 0.05m³/s to 0.92m³/s

Updated to incorporate modern energy efficient EC motors these units are designed specifically for applications with limited available height such as ceiling voids. Access can be from above or below with heater and motor connections on the left or right hand side.

The casing comprises of an AA25 anodised aluminium frame with high density glass reinforced nylon corners and double skinned Aluzinc panels enclosing 25mm of 60kg/m³ mineral fibre insulation. All panels are retained by proprietary fasteners. All panels are sealed by a purpose designed leak seal gasket fully retained into the aluminium framework.

Specification

Direct driven backward curved centrifugal fans with energy efficient EC motors statically and dynamically balanced to G6.3 for smooth long life operation. All motors incorporate EC motor controls to provide fully variable speed control.

Motors and control electronics are protected to IP44 as a minimum and are suitable for operating in ambient conditions of 40°C and up to 95% RH. Electrical supply is 230/1/50 for all units.

Standard units contain either an electric heater battery or LPHW heater battery (specified at time of order) and an M5 filter. Units are suitable for internal mounting only.

Electric heating units include a simple heater control enabling the off coil temperature to be set and either adjusted by external or internal controls [external controls at additional cost]. LPHW heating controls are by others.

Flexible Connectors

The Flexible Connectors are manufactured from PVC coated Polyester with 30mm flanges to DW142.

Bag Filters

Bag Filters are manufactured from fire retardant synthetic material with galvanised steel frames. The filter grade is M5.

LPHW Heater Batteries

LPHW Heater Batteries are constructed from copper tube, mechanically bonded to aluminium fins with the complete assembly housed in a galvanised steel casing. The coil headers and return bends are totally enclosed within the air handling unit casing. Flow and return connections are located on the same side of the unit and have male B.S.P. thread. LPHW Heater Batteries are pressure tested under water to 250p.s.i.

Electric Heater Batteries

Electric Heater Battery elements are constructed from Nichrome 5 spiral resistance wire surrounded by magnesium oxide powder and sheathed in stainless steel. The elements are carried on a galvanised steel frame. All electric heaters incorporate a thermal cut out device. Electrical connections are via a flush mounted terminal box on the outside of the air handling unit casing.
Unit Dimensions (mm)

<table>
<thead>
<tr>
<th>Unit Ref</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL6-22</td>
<td>1560</td>
<td>660</td>
<td>600</td>
<td>360</td>
<td>300</td>
<td>758</td>
<td>220</td>
<td>480</td>
</tr>
<tr>
<td>SL8-31</td>
<td>1560</td>
<td>810</td>
<td>750</td>
<td>360</td>
<td>300</td>
<td>758</td>
<td>220</td>
<td>480</td>
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</tbody>
</table>

Electrical / Heating Data

<table>
<thead>
<tr>
<th>Unit Ref</th>
<th>Fan Supply</th>
<th>Speed</th>
<th>Max Fan Input W</th>
<th>Heater Supply</th>
<th>Max Heater KW (Electric)</th>
<th>Heater Current Amps</th>
<th>LPHW Heater max Flow l/s/min</th>
<th>Temperature Rise at Max Airflow</th>
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</thead>
<tbody>
<tr>
<td>SL6-22</td>
<td>230/1/50</td>
<td>3220</td>
<td>230</td>
<td>230/1/50</td>
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<td>5.8</td>
<td>22</td>
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<tr>
<td>SL8-31</td>
<td>230/1/50</td>
<td>2600</td>
<td>450</td>
<td>400/3/50</td>
<td>18</td>
<td>25</td>
<td>12.9</td>
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</table>
### Performance Curve

![Performance Curve](image-url)

### Performance Guide

<table>
<thead>
<tr>
<th>Model</th>
<th>Curve Ref</th>
<th>Airflow, m³/s @ Pa</th>
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<tr>
<td>SL6-22</td>
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<tr>
<td></td>
<td></td>
<td>Inlet 64 59 69 62 59 54 52 48 Outlet 66 61 73 65 65 63 57 55</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Breakout 58 53 57 35 35 30 24 24</td>
</tr>
<tr>
<td>SL8-31</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inlet 62 63 70 69 60 63 59 56 Outlet 65 68 73 72 69 66 62 59</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Breakout 57 60 57 42 39 33 29 26</td>
</tr>
</tbody>
</table>

### Sound Data

<table>
<thead>
<tr>
<th>Model</th>
<th>Inlet dBW at 10⁻³W</th>
<th>Outlet dBW at 10⁻³W</th>
<th>Breakout dBW at 10⁻³W</th>
<th>dBA @ 3 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL6-22</td>
<td></td>
<td></td>
<td></td>
<td>35</td>
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<tr>
<td>SL8-31</td>
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</table>
Silencer Dimensions (mm)

<table>
<thead>
<tr>
<th>Unit</th>
<th>Size</th>
<th>Dimensions in mm</th>
<th>Approχ</th>
<th>Wgt kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L</td>
<td>AL</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>SL6-22</td>
<td>1500</td>
<td>1200</td>
<td>360</td>
<td>660</td>
</tr>
<tr>
<td></td>
<td>1800</td>
<td>1500</td>
<td>360</td>
<td>660</td>
</tr>
<tr>
<td></td>
<td>1200</td>
<td>900</td>
<td>360</td>
<td>810</td>
</tr>
<tr>
<td>SL8-31</td>
<td>1500</td>
<td>1200</td>
<td>360</td>
<td>810</td>
</tr>
<tr>
<td></td>
<td>1800</td>
<td>1500</td>
<td>360</td>
<td>810</td>
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</tbody>
</table>

Silencer resistance (Pa) standard length silencer

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<tr>
<th>Unit</th>
<th>Size</th>
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<th>0.2</th>
<th>0.25</th>
<th>0.3</th>
<th>0.35</th>
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<th>0.45</th>
<th>0.5</th>
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<th>0.65</th>
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<td>80</td>
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<td>92</td>
</tr>
<tr>
<td>SL8-31</td>
<td>1.5</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td>11</td>
<td>15</td>
<td>19</td>
<td>24</td>
<td>30</td>
<td>36</td>
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<td>59</td>
<td>77</td>
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<td>120</td>
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</table>

Insertion loss for standard silencers

<table>
<thead>
<tr>
<th>Unit</th>
<th>Length</th>
<th>Size</th>
<th>Octave band mid frequency Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mm</td>
<td>63</td>
<td>125</td>
</tr>
<tr>
<td>SL6-22</td>
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<td>3</td>
<td>.9</td>
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<td></td>
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<td>.12</td>
</tr>
<tr>
<td></td>
<td>1800</td>
<td>.8</td>
<td>.13</td>
</tr>
</tbody>
</table>

Damper Dimensions (mm)

Dampers are supplied with extended spindles - suitable for motorisation as standard.

<table>
<thead>
<tr>
<th>Unit Size</th>
<th>Inlet Damper Ref</th>
<th>Dim in mm</th>
<th>Approx</th>
</tr>
</thead>
<tbody>
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<td>Stock Ref</td>
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<td>D</td>
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<td>SL8-31</td>
<td>57CD-81</td>
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