Corrosion Resistant Polypropylene Fans from Axair Fans UK

Application Knowledge
Over 25 years of experience in general air movement; including corrosive, explosive and hot fume handling.

Plastic Range: Corrosion Resistant
• 10 basic sizes of fan with single piece moulded, high density polypropylene casing.
• Industry standard round spigot sizes.
• Compact design, easy assembly and direct driven motors.

Stock Facility
Vast selection of fans, fan components, general accessories and controllers.

Customised Build
Fans assembled to order from stock components to create the perfect mechanical and electrical solution for your fume extract installation.

Customer Care
Experience our customer service from enquiry through to delivery and after sales support.

Axair Offers You a Wide Range of Electrical Options Including:
• 230V or 115V single phase motor
• 230/400V three phase direct-on-line or inverter supplied motor
• 400/690V three phase star-delta connection in larger sizes
• Pre-wired electrical isolators
• Motor starters
• Inverter drives
• Fume cupboard alarms
• ATEX motors

Axair Offers You a Wide Range of Mechanical Options Including:
• Choice of handling
• Choice of standard weather pedestals
• Anti-vibration mountings
• Flexible connectors
• Flange pairs
• Dust transformations
• Manual dampers
• Drain hose connectors
• ATEX polypropylene/carbon fans

Axair Fans has over 25 years’ experience in air movement and specialises in polypropylene moulded construction fans, designed to extract and resist the widest range of corrosive fumes in laboratory and industrial extraction.

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For technical information, advice on fan selection or to see our full range of fans and fan accessories in addition to our polypropylene range, visit our website.

www.axair-fans.co.uk
**APPLICATIONS**

- Laboratory Extract
- Environmental Chamber Extraction
- Fume Extract Arms
- Process Fume Extraction

**MOTORS & ACCESSORIES**

**MOTORS**

All polypropylene fans are directly driven by IEC dimensioned electric motors manufactured to BSN4999-EN60034 Standards and are selected on their capacity for:

- Low electro-magnetic vibration
- Dimensional compactness
- Inverter drive compatibility
- Electrical terminal accessibility
- IP55 dust and hosed water protection
- Integrity of surface finish

**ACCESSORIES**

To integrate the fan into your installation, we offer the following accessories:

- Mechanical isolation of the fan from the ductwork by means of chemical resistant flexible duct connectors, attached by quick-release stainless steel band clips.
- Mechanical isolation of the fan from the motor pedestal or base by means of rubber anti vibration mountings of the correct hardness and compression.
- Flange pairs with sockets to fit standard plastic ductwork. These can provide an easy method of disconnecting the fan stack in situations where a flexible connector is impractical.
- Pre-wiring of electrical isolators to the motor terminal to ensure first class electrical work in factory conditions and an isolator on the fan pedestal.
- Fume cupboard ‘low air’ alarms and air speed controls that are modern, sophisticated products requiring no special training to install and commission.
Axair Fans UK Limited

**AXAIR ‘S’ FANS**

The Axair ‘S’ range fans are designed to provide high air flow rate against medium system pressures; typical applications being the extract of corrosive fumes from laboratory fume cupboards and industrial process tanks.

**OUR S FAN RANGE**

- **S15**
- **S20**
- **S25**
- **S30**
- **S35**
- **S50**

**S15 / 125 / METAL PEDESTAL**

The fan shown is mounted on a metal pedestal but is also available with a weather protecting box pedestal. Motor dimensions will vary according to source.

**HOUING DIMENSIONS**

<table>
<thead>
<tr>
<th>Fan ØD</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>L</th>
<th>M</th>
<th>P</th>
<th>Y</th>
<th>Y1</th>
<th>Z</th>
<th>Z1</th>
</tr>
</thead>
<tbody>
<tr>
<td>S15</td>
<td>125</td>
<td>170</td>
<td>240</td>
<td>203</td>
<td>100</td>
<td>32</td>
<td>115</td>
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<td>70</td>
<td>80</td>
<td>380</td>
<td>350</td>
<td>250</td>
<td>410</td>
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</table>

**PEDESTAL DIMENSIONS**

- Available handing & orientation viewed on air inlet

**ELECTRICAL DATA**

<table>
<thead>
<tr>
<th>Model /min kW Motor</th>
<th>SINGLE PHASE</th>
<th>THREE PHASE</th>
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<tbody>
<tr>
<td></td>
<td>V (full load)</td>
<td>A (start)</td>
</tr>
<tr>
<td>S15 /2 2870 0.37 71-2</td>
<td>230 2.3 7</td>
<td>400 12 5</td>
</tr>
<tr>
<td>S15 /4 1450 0.25 71-4</td>
<td>230 2.0 5</td>
<td>400 1.0 5</td>
</tr>
<tr>
<td>S20 /2L 2870 0.55 71-2</td>
<td>230 3.8 9</td>
<td>400 1.5 7</td>
</tr>
<tr>
<td>S20 /2M 1450 0.75 80-2</td>
<td>230 5.1 14</td>
<td>400 1.0 10</td>
</tr>
<tr>
<td>S20 /2H 2870 1.10 80-2</td>
<td>230 7.0 19</td>
<td>400 2.5 14</td>
</tr>
<tr>
<td>S20 /4 1450 0.25 71-4</td>
<td>230 2.0 5</td>
<td>400 1.0 5</td>
</tr>
<tr>
<td>S20 /6 930 0.18 71-6</td>
<td>230 1.9 5</td>
<td>400 0.9 2.5</td>
</tr>
<tr>
<td>S25 /2L 2870 1.50 90-2</td>
<td>230 10.8 28</td>
<td>400 3.7 20</td>
</tr>
<tr>
<td>S25 /2M 2870 2.20 90L-2</td>
<td>230 14.6 63</td>
<td>400 5.1 34</td>
</tr>
<tr>
<td>S25 /2H 2870 3.00 90L-2</td>
<td>230 19.1 99</td>
<td>400 6.9 49</td>
</tr>
<tr>
<td>S25 /4 1450 0.37 71-4</td>
<td>230 3.4 8</td>
<td>400 1.2 5</td>
</tr>
<tr>
<td>S25 /6 930 0.18 71-6</td>
<td>230 1.9 5</td>
<td>400 0.9 2.5</td>
</tr>
<tr>
<td>S30 /4 1450 1.50 90L-4</td>
<td>230 20.5 28</td>
<td>400 3.7 20</td>
</tr>
<tr>
<td>S30 /4L 1450 0.75 90L-4</td>
<td>230 4.9 27</td>
<td>400 2.2 10</td>
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<td>S30 /6 930 0.18 90L-6</td>
<td>230 4.8 16</td>
<td>400 2.2 8.0</td>
</tr>
<tr>
<td>S35 /4 1450 4.00 112M-4</td>
<td>230 8.26Y 58Y</td>
<td>400 11.36 75A</td>
</tr>
<tr>
<td>S35 /4M 1450 5.50 112M-4</td>
<td>230 11.36 75A</td>
<td>400 15.37 25Y</td>
</tr>
<tr>
<td>S35 /6 930 2.20 112M-4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Tabulated current values are approximate and depend on the make and model of each motor. Size the wiring with a built-in safety factor. Set current overload protection to A (Full Load).

- A (Full Load) = Motor full load current - to select wiring and current overload protection.
- A (Start) = Motor starting current - mainly advisory for motors with Y/∆ facility.
- To obtain 230V single phase current multiply 400V (Full Load) by 1.732.
- * Connected 400V direct on line. Y/∆ switching reduces starting current to 1/3 A (Start).

ATEX versions are available on request, please contact us.
S15 / 125 / BOX PEDESTAL

The fan shown is mounted on a weather protecting box pedestal but is also available mounted on a metal pedestal. Motor dimensions will vary according to source.

HOUSING DIMENSIONS

<table>
<thead>
<tr>
<th>Fan</th>
<th>ØD</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>L</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>S15</td>
<td>125</td>
<td>170</td>
<td>240</td>
<td>203</td>
<td>100</td>
<td>32</td>
<td>115</td>
<td>30</td>
<td>70</td>
<td>80</td>
</tr>
</tbody>
</table>

PEDESTAL DIMENSIONS

<table>
<thead>
<tr>
<th>Fan - Motor Rating</th>
<th>Motor</th>
<th>R</th>
<th>U1</th>
<th>U2</th>
<th>V</th>
<th>V1</th>
<th>W</th>
<th>W1</th>
</tr>
</thead>
<tbody>
<tr>
<td>S15 – 0.37-2 &amp; 0.25-4</td>
<td>‘71’ Frame</td>
<td>530</td>
<td>81</td>
<td>369</td>
<td>340</td>
<td>267</td>
<td>410</td>
<td>318</td>
</tr>
</tbody>
</table>

Fans shown above are also available on metal pedestals for indoor installations.

Available handing & orientation viewed on air inlet

SOUND DATA

<table>
<thead>
<tr>
<th>/min</th>
<th>dB(A)</th>
<th>63</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
<th>8000</th>
<th>Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>1450</td>
<td>58</td>
<td>39</td>
<td>52</td>
<td>60</td>
<td>64</td>
<td>64</td>
<td>60</td>
<td>56</td>
<td>48</td>
<td>dB(A)</td>
</tr>
<tr>
<td>2870</td>
<td>75</td>
<td>56</td>
<td>69</td>
<td>77</td>
<td>81</td>
<td>81</td>
<td>77</td>
<td>73</td>
<td>65</td>
<td>dB(A)</td>
</tr>
</tbody>
</table>

Maximum airflow temperature 50°C

ATEX versions are available on request, please contact us.
**S20 / 160 / METAL PEDESTAL**

The fan shown is mounted on a metal pedestal but is also available with a weather protecting box pedestal. Motor dimensions will vary according to source.

**HOUSING DIMENSIONS**

<table>
<thead>
<tr>
<th>Fan ØD</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>L</th>
<th>M</th>
<th>P</th>
<th>Y</th>
<th>Y1</th>
<th>Z</th>
<th>Z1</th>
</tr>
</thead>
<tbody>
<tr>
<td>S20</td>
<td>160</td>
<td>208</td>
<td>303</td>
<td>240</td>
<td>100</td>
<td>57</td>
<td>143</td>
<td>32</td>
<td>84</td>
<td>94</td>
<td>410</td>
<td>350</td>
<td>250</td>
<td>410</td>
</tr>
</tbody>
</table>

**PEDESTAL DIMENSIONS**

<table>
<thead>
<tr>
<th>Fan – Motor Size</th>
<th>Motor</th>
<th>X</th>
<th>X1</th>
<th>X2</th>
</tr>
</thead>
<tbody>
<tr>
<td>S20 – 0,25kW &amp; 0,55kW</td>
<td>'71' frame</td>
<td>300</td>
<td>71</td>
<td>371</td>
</tr>
<tr>
<td>S20 – 0,75kW &amp; 1,1kW</td>
<td>'80' frame</td>
<td>300</td>
<td>80</td>
<td>380</td>
</tr>
</tbody>
</table>

Available handing & orientation viewed on air inlet

**S20 / 160 / BOX PEDESTAL**

The fan shown is mounted on a weather protecting box pedestal but is also available mounted on a metal pedestal. Motor dimensions will vary according to source.

**HOUSING DIMENSIONS**

<table>
<thead>
<tr>
<th>Fan ØD</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>L</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>S20</td>
<td>160</td>
<td>208</td>
<td>303</td>
<td>240</td>
<td>100</td>
<td>57</td>
<td>143</td>
<td>32</td>
<td>84</td>
</tr>
</tbody>
</table>

**PEDESTAL DIMENSIONS**

<table>
<thead>
<tr>
<th>Fan - Motor Rating</th>
<th>Motor</th>
<th>R</th>
<th>U1</th>
<th>U2</th>
<th>V</th>
<th>V1</th>
<th>W</th>
<th>W1</th>
</tr>
</thead>
<tbody>
<tr>
<td>S20 – 0,25 &amp; 0,55</td>
<td>'71' frame</td>
<td>552</td>
<td>81</td>
<td>369</td>
<td>340</td>
<td>267</td>
<td>410</td>
<td>318</td>
</tr>
<tr>
<td>S20 – 0,75 &amp; 1,10</td>
<td>'80'</td>
<td>552</td>
<td>90</td>
<td>360</td>
<td>340</td>
<td>267</td>
<td>410</td>
<td>318</td>
</tr>
</tbody>
</table>

Fans shown above are also available on metal pedestals for indoor installations.

* Choice depends on the make and model selected

Available handing & orientation viewed on air inlet

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Corrosion Resistant Polypropylene Fans

**S20 / 160**

- **Electrical Data**
  - **Model**
    - S20/4: 0.25kW
    - S20/2L: 0.50kW
    - S20/2M: 0.75kW
    - S20/2H: 1.1kW
  - **Supply**
    - 230/1/150
  - **Full Load Start**
    - 400/3/50
  - **1 Phase**
    - 5A
  - **3 Phase**
    - 11A

- **Sound Data**
  - **Max Airflow Temperature** 50°C
  - **SOUND POWER (Lw) in dB(A)**
    - 63 dB(A)
    - 1450 rpm
  - **SOUND PRESSURE at 3m range in dB(A)**
    - 55 dB(A)
    - 2870 rpm

**S25 / 200 / Metal Pedestal**

- **Electrical Data**
  - **Model**
    - S25/4: 0.37kW
    - S25/2L: 1.5kW
    - S25/2M: 2.2kW
    - S25/2H: 3kW
  - **Supply**
    - 230/1/150
  - **Full Load Start**
    - 400/3/50
  - **1 Phase**
    - 71A
  - **3 Phase**
    - 465A

- **Sound Data**
  - **Max Airflow Temperature** 50°C
  - **SOUND POWER (Lw) in dB(A)**
    - 71 dB(A)
    - 1450 rpm
  - **SOUND PRESSURE at 3m range in dB(A)**
    - 465 dB(A)
    - 2870 rpm

**Housing Dimensions**

- **Fan ØD A B C E F G H L M**
  - S25: 200
  - 248
  - 365
  - 310
  - 103
  - 92
  - 164
  - 35
  - 95
  - 105

**Pedestal Dimensions**

- **Fan – Motor Size**
  - S25 - 0.37kW: 71 frame
  - S25 - 1.5kW, 2.2kW & 3kW: 90 frame

- **Motor**
  - X
  - X1
  - X2
  - P
  - Y
  - Y1
  - Z
  - Z1

- **Available handling & orientation viewed on air inlet**
  - RD 180
  - RD 270
  - RD 0
  - RD 90
  - RD 180
  - LG 180
  - LG 270
  - LG 0
  - LG 90
  - LG 180

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**S25 / 200 / BOX PEDESTAL**

The fan shown is mounted on a weather protecting box pedestal but is also available mounted on a metal pedestal. Motor dimensions will vary according to source.

**HOUSING DIMENSIONS**

<table>
<thead>
<tr>
<th>Fan</th>
<th>ØD</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>S25</td>
<td>200</td>
<td>248</td>
<td>365</td>
<td>310</td>
<td>103</td>
<td>92</td>
<td>165</td>
<td>35</td>
<td>95</td>
</tr>
</tbody>
</table>

**PEDESTAL DIMENSIONS**

<table>
<thead>
<tr>
<th>Fan – Motor Rating</th>
<th>Motor</th>
<th>R</th>
<th>U1</th>
<th>U2</th>
<th>V</th>
<th>V1</th>
<th>W</th>
<th>W1</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>S25 - 0,37 - 4</td>
<td>'71' frame</td>
<td>580</td>
<td>81</td>
<td>369</td>
<td>340</td>
<td>267</td>
<td>410</td>
<td>318</td>
<td>100</td>
</tr>
<tr>
<td>S25 - 1,5, 2,2 &amp; 3,0 - 2</td>
<td>'90' frame</td>
<td>610</td>
<td>95</td>
<td>455</td>
<td>340</td>
<td>267</td>
<td>405</td>
<td>330</td>
<td>115</td>
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</tbody>
</table>

Fans shown above are also available on metal pedestals for indoor installations.

Available handing & orientation viewed on air inlet

**ELECTRICAL DATA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor</th>
<th>Supply Full load</th>
<th>Start</th>
<th>Supply Full load</th>
<th>Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>S25/4</td>
<td>0,37 kW</td>
<td>230/1/50 3.4A</td>
<td>8A</td>
<td>400/3/50 1.2A</td>
<td>5A</td>
</tr>
<tr>
<td>S25/2L</td>
<td>1,50 kW</td>
<td>230/1/50 10.8A</td>
<td>28A</td>
<td>400/3/50 3.7A</td>
<td>20A</td>
</tr>
<tr>
<td>S25/2M</td>
<td>2,20 kW</td>
<td>230/1/50 14.6A</td>
<td>63A</td>
<td>400/3/50 5.1A</td>
<td>34A</td>
</tr>
<tr>
<td>S25/2H</td>
<td>3,00 kW</td>
<td>n/a</td>
<td>n/a</td>
<td>400/3/50 6.9A</td>
<td>49A</td>
</tr>
</tbody>
</table>

**SOUND DATA**

<table>
<thead>
<tr>
<th>/min</th>
<th>dB(A)</th>
<th>63</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
<th>8000</th>
<th>Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>1450</td>
<td>69</td>
<td>52</td>
<td>65</td>
<td>73</td>
<td>77</td>
<td>78</td>
<td>74</td>
<td>70</td>
<td>61</td>
<td>dB(A)</td>
</tr>
<tr>
<td>2870</td>
<td>87</td>
<td>70</td>
<td>83</td>
<td>91</td>
<td>95</td>
<td>96</td>
<td>92</td>
<td>88</td>
<td>79</td>
<td>dB(A)</td>
</tr>
</tbody>
</table>

SOUND POWER (Lw) in dB(A)
SOUND PRESSURE at 3m range in dB(A)

**Maximum airflow temperature 50°C**

ATEX versions are available on request, please contact us.
**S30 / 250 / METAL PEDESTAL**

The fan shown is mounted on a metal pedestal but is also available with a weather protecting box pedestal. Motor dimensions will vary according to source.

**HOUING DIMENSIONS**

<table>
<thead>
<tr>
<th>Fan</th>
<th>ØD</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>L</th>
<th>M</th>
<th>Y</th>
<th>Y1</th>
<th>Z</th>
<th>Z1</th>
</tr>
</thead>
<tbody>
<tr>
<td>S30</td>
<td>250</td>
<td>300</td>
<td>450</td>
<td>373</td>
<td>117</td>
<td>112</td>
<td>198</td>
<td>35</td>
<td>110</td>
<td>120</td>
<td>240</td>
<td>220</td>
<td>198</td>
<td>460</td>
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</table>

**PEDESTAL DIMENSIONS**

<table>
<thead>
<tr>
<th>Fan – Motor Size</th>
<th>Motor</th>
<th>X</th>
<th>X1</th>
<th>X2</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>S30 – all sizes</td>
<td>‘90’ frame</td>
<td>45</td>
<td>90</td>
<td>505</td>
<td>495</td>
</tr>
</tbody>
</table>

Available handing & orientation viewed on air inlet

ATEX versions are available on request, please contact us.

---

**S30 / 250 / BOX PEDESTAL**

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<table>
<thead>
<tr>
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<th>B</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>L</th>
<th>M</th>
<th>Y</th>
<th>Y1</th>
<th>Z</th>
<th>Z1</th>
</tr>
</thead>
<tbody>
<tr>
<td>S30</td>
<td>250</td>
<td>300</td>
<td>448</td>
<td>373</td>
<td>117</td>
<td>112</td>
<td>198</td>
<td>35</td>
<td>110</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PEDESTAL DIMENSIONS**

<table>
<thead>
<tr>
<th>Fan - Motor Rating</th>
<th>Motor</th>
<th>R</th>
<th>U1</th>
<th>U2</th>
<th>V</th>
<th>V1</th>
<th>W</th>
<th>W1</th>
</tr>
</thead>
<tbody>
<tr>
<td>S30 - 0.75 &amp; 1.5 - 4</td>
<td>‘90’ frame</td>
<td>630</td>
<td>95</td>
<td>455</td>
<td>340</td>
<td>267</td>
<td>405</td>
<td>315</td>
</tr>
</tbody>
</table>

Fans shown above are also available on metal pedestals for indoor installations.

Available handing & orientation viewed on air inlet

ATEX versions are available on request, please contact us.
Corrosion Resistant Polypropylene Fans

**S30 / 250**

![Graph showing airflow and pressure for S30/250 fans.]

**SOUND DATA**

<table>
<thead>
<tr>
<th>Min</th>
<th>dB(A)</th>
<th>63</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
<th>8000</th>
<th>Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>930</td>
<td>63</td>
<td>48</td>
<td>61</td>
<td>69</td>
<td>73</td>
<td>74</td>
<td>70</td>
<td>66</td>
<td>57</td>
<td>db(A)</td>
</tr>
<tr>
<td>1450</td>
<td>75</td>
<td>60</td>
<td>73</td>
<td>81</td>
<td>85</td>
<td>86</td>
<td>82</td>
<td>78</td>
<td>69</td>
<td>dB(A)</td>
</tr>
</tbody>
</table>

Sound Power (Lw) in dB(A)
Sound Pressure at 3m range in dB(A)

**ELECTRICAL DATA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor</th>
<th>Supply</th>
<th>Full load</th>
<th>Start</th>
<th>1 Phase</th>
<th>2 Phase</th>
<th>3 Phase</th>
<th>Box Pedestal &amp; Fan Weight (Kg)</th>
<th>Metal Pedestal &amp; Fan Weight (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S30/4</td>
<td>1,5kW</td>
<td>230/1/50</td>
<td>10,5A</td>
<td>28A</td>
<td>400/3/50</td>
<td>3,7A</td>
<td>20A</td>
<td>30</td>
<td>27</td>
</tr>
<tr>
<td>S30/4L</td>
<td>0,75kW</td>
<td>230/1/50</td>
<td>4,9A</td>
<td>27A</td>
<td>400/3/50</td>
<td>2,2A</td>
<td>10A</td>
<td>30</td>
<td>27</td>
</tr>
<tr>
<td>S30/6</td>
<td>0,75kW</td>
<td>230/1/50</td>
<td>4,8A</td>
<td>16A</td>
<td>400/3/50</td>
<td>2,2A</td>
<td>8A</td>
<td>30</td>
<td>27</td>
</tr>
</tbody>
</table>

**S35 / 315 / METAL PEDESTAL**

The fan shown is mounted on a metal pedestal but is also available with a weather protecting box pedestal. Motor dimensions will vary according to source.

![Diagram showing S35/315 fans with metal pedestal.]

**HOUSING DIMENSIONS**

<table>
<thead>
<tr>
<th>Fan</th>
<th>ØD</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>L</th>
<th>M</th>
<th>Y</th>
<th>Y1</th>
<th>Z</th>
<th>Z1</th>
</tr>
</thead>
<tbody>
<tr>
<td>S35</td>
<td>315</td>
<td>370</td>
<td>570</td>
<td>450</td>
<td>130</td>
<td>170</td>
<td>255</td>
<td>60</td>
<td>150</td>
<td>170</td>
<td>350</td>
<td>314</td>
<td>600</td>
<td>540</td>
</tr>
</tbody>
</table>

**PEDESTAL DIMENSIONS**

<table>
<thead>
<tr>
<th>Fan – Motor Size</th>
<th>Motor</th>
<th>X</th>
<th>X1</th>
<th>X2</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>S35 - 4kW, 5,5kW &amp; 2,2kW</td>
<td>‘112’ frame</td>
<td>468</td>
<td>112</td>
<td>580</td>
<td>724</td>
</tr>
<tr>
<td>S35 - 7,5kW</td>
<td>‘132’ frame</td>
<td>468</td>
<td>132</td>
<td>600</td>
<td>822</td>
</tr>
</tbody>
</table>

Available handing & orientation viewed on air inlet

**Euro B.S.**
LG 180
LG 270
LG 270
LG 180

**B.S.**
LG 0
LG 90
LG 90

ATEX versions are available on request, please contact us.

**Maximum airflow temperature 50°C**

ATEX versions are available on request, please contact us.
S35 / 315 / BOX PEDESTAL

The fan shown is mounted on a weather protecting box pedestal but is also available mounted on a metal pedestal. Motor dimensions will vary according to source.

Available handing & orientation viewed on air inlet

**Housing Dimensions**

<table>
<thead>
<tr>
<th>Fan</th>
<th>ØD</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>L</th>
<th>Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>S35</td>
<td>315</td>
<td>370</td>
<td>570</td>
<td>450</td>
<td>130</td>
<td>170</td>
<td>255</td>
<td>60</td>
<td>150</td>
<td>180</td>
</tr>
</tbody>
</table>

**Pedestal Dimensions**

<table>
<thead>
<tr>
<th>Fan - Motor Rating</th>
<th>Model</th>
<th>Motor</th>
<th>Supply</th>
<th>Full Load</th>
<th>Start</th>
<th>Box Pedestal &amp; Fan Weight (Kg)</th>
<th>Metal Pedestal &amp; Fan Weight (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S35 - 4kW, 5.5kW &amp; 2.2kW</td>
<td>2,2kW-930/min</td>
<td>400/3/50</td>
<td>5,3A</td>
<td>24A</td>
<td>60</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4kW-1450/min</td>
<td>400/3/50</td>
<td>11,4A</td>
<td>75A</td>
<td>65</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5,5kW-1450/min</td>
<td>400/3/50</td>
<td>11,4A</td>
<td>75A</td>
<td>65</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7,5kW-1450/min</td>
<td>400/3/50</td>
<td>14,7A</td>
<td>96A</td>
<td>102</td>
<td>80</td>
<td></td>
</tr>
</tbody>
</table>

**Electrical Data**

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor</th>
<th>Supply</th>
<th>Full Load</th>
<th>Start</th>
<th>Box Pedestal &amp; Fan Weight (Kg)</th>
<th>Metal Pedestal &amp; Fan Weight (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S35/6</td>
<td>2,2kW-930/min</td>
<td>400/3/50</td>
<td>5,3A</td>
<td>24A</td>
<td>60</td>
<td>55</td>
</tr>
<tr>
<td>S35/4L</td>
<td>4kW-1450/min</td>
<td>400/3/50</td>
<td>11,4A</td>
<td>75A</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>S35/4M</td>
<td>5,5kW-1450/min</td>
<td>400/3/50</td>
<td>11,4A</td>
<td>75A</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>S35/4H</td>
<td>7,5kW-1450/min</td>
<td>400/3/50</td>
<td>14,7A</td>
<td>96A</td>
<td>102</td>
<td>80</td>
</tr>
</tbody>
</table>

**Sound Data**

<table>
<thead>
<tr>
<th>/min</th>
<th>dB(A)</th>
<th>63</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
<th>8000</th>
<th>Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>930 - 2,2kW</td>
<td>75</td>
<td>71</td>
<td>81</td>
<td>83</td>
<td>86</td>
<td>85</td>
<td>85</td>
<td>83</td>
<td>74</td>
<td>dB(A)</td>
</tr>
<tr>
<td>1450 - 4kW, 5,5kW</td>
<td>79</td>
<td>75</td>
<td>85</td>
<td>87</td>
<td>90</td>
<td>89</td>
<td>89</td>
<td>87</td>
<td>78</td>
<td>dB(A)</td>
</tr>
</tbody>
</table>

**Sound Power (Lw) in dB(A)**

Maximum airflow temperature 50°C
Axair Fans UK Limited

Corrosion Resistant Polypropylene Fans

S 50

DIMENSIONS - METAL PEDESTAL INCLUDED

<table>
<thead>
<tr>
<th>A</th>
<th>D</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>K+F</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>600</td>
<td>765</td>
<td>550</td>
<td>1315</td>
<td>740</td>
<td>660</td>
<td>610</td>
<td>1350</td>
<td>1255</td>
<td>515</td>
<td>400</td>
<td>715</td>
<td>620</td>
<td>1020</td>
</tr>
</tbody>
</table>

Available handing & orientation viewed on air inlet

The S50 is only available with a metal pedestal

ELECTRICAL DATA

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor</th>
<th>Supply</th>
<th>Full load</th>
<th>Start</th>
<th>Weight (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S50</td>
<td>5,5kW</td>
<td>400/3/50</td>
<td>11,4A</td>
<td>75A</td>
<td>215</td>
</tr>
</tbody>
</table>

SOUND DATA

<table>
<thead>
<tr>
<th>/min</th>
<th>dB(A)</th>
<th>63</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
<th>8000</th>
<th>Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>930 - 2,2kW</td>
<td>75</td>
<td>71</td>
<td>81</td>
<td>83</td>
<td>86</td>
<td>85</td>
<td>83</td>
<td>83</td>
<td>74</td>
<td>dB(A)</td>
</tr>
<tr>
<td>1450 - 4kW, 5,5kW</td>
<td>79</td>
<td>75</td>
<td>85</td>
<td>87</td>
<td>90</td>
<td>89</td>
<td>89</td>
<td>87</td>
<td>78</td>
<td>dB(A)</td>
</tr>
</tbody>
</table>

SOUND POWER (Lw) in dB(A)
SOUND PRESSURE at 3m range in dB(A)

Maximum airflow temperature 50°C

ATEX versions are available on request, please contact us.
**AXAIRE STORM 'ST' FANS**

STORM ‘ST’ range fans are designed to provide a relatively low air flow rate against elevated system pressures; typical applications being air filtration, local extraction arms, fume scrubbers and chemical stores.

---

**OUR ST FAN RANGE**

- **ST10**
  - PAGE 25
- **ST12**
  - PAGE 28
- **ST14**
  - PAGE 31
- **ST16**
  - PAGE 34

---

**STORM 'ST' RANGE FANS**

**ST10 / 75 / METAL PEDESTAL**

The fan shown has an external rotor motor. Also available with a standard induction motor. Motor dimensions will vary according to source.

---

**ELECTRICAL DATA**

- SINGLE PHASE
- THREE PHASE

<table>
<thead>
<tr>
<th>Model</th>
<th>kW</th>
<th>Motor</th>
<th>V (full load)</th>
<th>A (full load)</th>
<th>A (start)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST10/2</td>
<td>0.12</td>
<td>56-2</td>
<td>230</td>
<td>1.4</td>
<td>2</td>
</tr>
<tr>
<td>ST10/4</td>
<td>0.37</td>
<td>71-2</td>
<td>230</td>
<td>1.3</td>
<td>1.5</td>
</tr>
<tr>
<td>ST10/2/1E</td>
<td>0.07</td>
<td>EM1 (1)</td>
<td>230</td>
<td>0.11</td>
<td></td>
</tr>
<tr>
<td>ST12/2</td>
<td>0.37</td>
<td>71-2</td>
<td>230</td>
<td>2.8</td>
<td>7</td>
</tr>
<tr>
<td>ST12/4</td>
<td>0.25</td>
<td>71-4</td>
<td>230</td>
<td>2.0</td>
<td>5</td>
</tr>
<tr>
<td>ST14/2</td>
<td>1.10</td>
<td>80-2</td>
<td>230</td>
<td>7.0</td>
<td>19</td>
</tr>
<tr>
<td>ST16/2</td>
<td>2.20</td>
<td>90L2</td>
<td>230</td>
<td>14.6</td>
<td>63</td>
</tr>
</tbody>
</table>

**Notes:**
- Tabulated current values are approximate and depend on the make and model of each motor.
- Size the wiring with a built in safety factor. Set current overload protection to A (Full Load).
- A (Start) = Motor starting current - mainly advisory for motors with Y/∆ facility.
- To obtain 230V 3phase current multiply 400V (Full Load) by 1.732.

Available handing & orientation viewed on air inlet.

---

**HOUSING DIMENSIONS**

<table>
<thead>
<tr>
<th>Fan</th>
<th>ØD</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>G</th>
<th>H</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>Y</th>
<th>Y1</th>
<th>Z</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST10</td>
<td>75</td>
<td>115</td>
<td>135</td>
<td>127</td>
<td>158</td>
<td>97</td>
<td>32</td>
<td>48</td>
<td>57</td>
<td>137</td>
<td>120</td>
<td>100</td>
<td>165</td>
<td>135</td>
</tr>
</tbody>
</table>

---

**ATEX versions are available on request, please contact us.**

---

**Axair Fans UK Limited**

- 01782 349430
- sales@axair-fans.co.uk
- www.axair-fans.co.uk

MORE THAN JUST A FAN SUPPLIER | Axair Fans UK Limited
**ST10 / 75 / METAL PEDESTAL**

The fan shown is mounted on a metal pedestal. Motor dimensions will vary according to source.

**HOUSING DIMENSIONS**

| Fan | ØD | A  | B  | C  | E  | G  | H  | L  | M  | N  | P  | Y  | Y1 | Z  | X  | X1 | X2 |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| ST10 | 75 | 115| 135| 127| 158| 97 | 48 | 57 | 285| 350| 250| 260| 56 | 56 | 112|

Available handing & orientation viewed on air inlet

The ST10 is only available on a metal pedestal

**ELECTRICAL DATA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor /min</th>
<th>Supply</th>
<th>Full Load</th>
<th>Start</th>
<th>Supply</th>
<th>Full Load</th>
<th>Start</th>
<th>Weight (Kgs) 1 Phase</th>
<th>Weight (Kgs) 3 Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST10/2</td>
<td>0,12kW</td>
<td>2870</td>
<td>230/1/50</td>
<td>1,4A</td>
<td>2A</td>
<td>400/3/50</td>
<td>0,5A</td>
<td>6A</td>
<td>10</td>
</tr>
<tr>
<td>ST10/4</td>
<td>0,09kW</td>
<td>1450</td>
<td>230/1/50</td>
<td>1,0A</td>
<td>1,5A</td>
<td>400/3/50</td>
<td>0,4A</td>
<td>1A</td>
<td>10</td>
</tr>
</tbody>
</table>

**Maximum airflow temperature 50°C**

**ATEX versions are available on request, please contact us.**
**ST12 / 90 / METAL PEDESTAL**

The fan shown is mounted on a metal pedestal but is also available with a weather protecting box pedestal. Motor dimensions will vary according to source.

**ST12 / 90 / BOX PEDESTAL**

'ST' Fan shown is mounted on a weather protecting box pedestal but is also available mounted on a metal pedestal. Motor dimensions will vary according to source.

---

**HOUSING DIMENSIONS**

<table>
<thead>
<tr>
<th>Fan</th>
<th>ØD</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>G</th>
<th>H</th>
<th>L</th>
<th>M</th>
<th>P</th>
<th>Y</th>
<th>Z</th>
<th>Z1</th>
<th>X</th>
<th>X1</th>
<th>X2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST12</td>
<td>90</td>
<td>145</td>
<td>175</td>
<td>163</td>
<td>212</td>
<td>130</td>
<td>45</td>
<td>72</td>
<td>380</td>
<td>350</td>
<td>250</td>
<td>410</td>
<td>350</td>
<td>300</td>
<td>71</td>
<td>371</td>
</tr>
</tbody>
</table>

Available handing & orientation viewed on air inlet

---

**HOUSING DIMENSIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>ØD</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>G</th>
<th>H</th>
<th>L</th>
<th>Q</th>
<th>R</th>
<th>U1</th>
<th>U2</th>
<th>V</th>
<th>V1</th>
<th>W</th>
<th>W1</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST12</td>
<td>90</td>
<td>145</td>
<td>175</td>
<td>203</td>
<td>212</td>
<td>130</td>
<td>45</td>
<td>82</td>
<td>530</td>
<td>315</td>
<td>260</td>
<td>200</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Available handing & orientation viewed on air inlet

---

ATEX versions are available on request, please contact us.
**ST12 / 90**

---

**ELECTRICAL DATA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor</th>
<th>Supply</th>
<th>Full Load</th>
<th>Start</th>
<th>Supply</th>
<th>Full Load</th>
<th>Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST12/2</td>
<td>0.37kW</td>
<td>230/1/50</td>
<td>2,8A 7A</td>
<td>400/3/50</td>
<td>1,2A 6A</td>
<td>14 12</td>
<td>15 13</td>
</tr>
<tr>
<td>ST12/4</td>
<td>0.25kW</td>
<td>230/1/50</td>
<td>2A 5A</td>
<td>400/3/50</td>
<td>1A 5A</td>
<td>14 12</td>
<td>15 13</td>
</tr>
</tbody>
</table>

---

**SOUND DATA**

<table>
<thead>
<tr>
<th>/min</th>
<th>dB(A)</th>
<th>63</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
<th>8000</th>
<th>Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>2870</td>
<td>75</td>
<td>56</td>
<td>69</td>
<td>77</td>
<td>81</td>
<td>81</td>
<td>77</td>
<td>73</td>
<td>65</td>
<td>dB(A)</td>
</tr>
<tr>
<td>*1450</td>
<td>70</td>
<td>52</td>
<td>65</td>
<td>73</td>
<td>77</td>
<td>77</td>
<td>74</td>
<td>70</td>
<td>71</td>
<td>dB(A)</td>
</tr>
</tbody>
</table>

---

**SOUND POWER (Lw) in dB(A)**

**SOUND PRESSURE at 3m range in dB(A)**

* Estimated figures

**Maximum airflow temperature 50°C**

---

**ST14 / 125 / METAL PEDESTAL**

The fan shown is mounted on a metal pedestal but is also available with a weather protecting box pedestal. Motor dimensions will vary according to source.

---

**HOUSING DIMENSIONS**

```
<table>
<thead>
<tr>
<th>Fan</th>
<th>ØD</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>G</th>
<th>H</th>
<th>L</th>
<th>M</th>
<th>P</th>
<th>Y</th>
<th>Y1</th>
<th>Z</th>
<th>Z1</th>
<th>X</th>
<th>X1</th>
<th>X2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST14</td>
<td>125</td>
<td>188</td>
<td>232</td>
<td>227</td>
<td>218</td>
<td>170</td>
<td>55</td>
<td>83</td>
<td>393</td>
<td>350</td>
<td>250</td>
<td>410</td>
<td>350</td>
<td>300</td>
<td>80</td>
<td>380</td>
<td></td>
</tr>
</tbody>
</table>
```

Available handing & orientation viewed on air inlet

---

ATEX versions are available on request, please contact us.
ST14 / 125 / BOX PEDESTAL

'ST' Fan shown is mounted on a weather protecting box pedestal but is also available mounted on a metal pedestal. Motor dimensions will vary according to source.

**HOUSING DIMENSIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>ØD</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>G</th>
<th>H</th>
<th>L</th>
<th>Q</th>
<th>R</th>
<th>U1</th>
<th>U2</th>
<th>V</th>
<th>V1</th>
<th>W</th>
<th>W1</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST14</td>
<td>125</td>
<td>188</td>
<td>232</td>
<td>227</td>
<td>218</td>
<td>55</td>
<td>55</td>
<td>93</td>
<td>85</td>
<td>365</td>
<td>260</td>
<td>200</td>
<td>330</td>
<td>260</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Available handing & orientation viewed on air inlet.

ATEX versions are available on request, please contact us.
**ST16 / 160 / METAL PEDESTAL**

The fan shown is mounted on a metal pedestal but is also available with a weather protecting box pedestal. Motor dimensions will vary according to source.

**ST16 / 160 / BOX PEDESTAL**

'ST' Fan fan shown is mounted on a weather protecting box pedestal but is also available mounted on a metal pedestal. Motor dimensions will vary according to source.

**HOUSING DIMENSIONS**

| Fan | ØD | A  | B  | C  | E  | G  | H  | L  | M  | P  | Y  | Y1 | Z  | Z1 | X  | X1 | X2 |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| ST16 | 160 | 235 | 288 | 278 | 262 | 205 | 40 | 60 | 97 | 465 | 415 | 450 | 90 | 540 |

Available handing & orientation viewed on air inlet

**HOUSING DIMENSIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>ØD</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>G</th>
<th>H</th>
<th>L</th>
<th>Q</th>
<th>R</th>
<th>U1</th>
<th>U2</th>
<th>V</th>
<th>V1</th>
<th>W</th>
<th>W1</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST16</td>
<td>160</td>
<td>235</td>
<td>288</td>
<td>278</td>
<td>262</td>
<td>205</td>
<td>40</td>
<td>60</td>
<td>107</td>
<td>572</td>
<td>95</td>
<td>455</td>
<td>365</td>
<td>300</td>
<td>400</td>
<td>330</td>
</tr>
</tbody>
</table>

Available handing & orientation viewed on air inlet

ATEX versions are available on request, please contact us.
Corrosion Resistant Polypropylene Fans

**ST16 / 160**

### ELECTRICAL DATA

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor</th>
<th>Supply</th>
<th>Full load</th>
<th>Start</th>
<th>Supply</th>
<th>Full load</th>
<th>Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST16/2</td>
<td>2.2kW</td>
<td>230/1/50</td>
<td>14.6A</td>
<td>63A</td>
<td>400/3/50</td>
<td>5A</td>
<td>34A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SOUND DATA

- **SOUND PRESSURE at 3m range in dB(A)**
- **SOUND POWER (Lw) in dB(A)**

<table>
<thead>
<tr>
<th>/min</th>
<th>dB(A)</th>
<th>63</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
<th>8000</th>
<th>Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>2870</td>
<td>84</td>
<td>65</td>
<td>78</td>
<td>86</td>
<td>90</td>
<td>90</td>
<td>86</td>
<td>82</td>
<td>74</td>
<td>dB(A)</td>
</tr>
</tbody>
</table>

- **Maximum airflow temperature 50°C**

### ACCESSORIES

To facilitate the effective installation of our corrosion resistant polypropylene fans, Axair supply a wide range of high quality accessories including AV mounts, starters, relays, inverters and weather cowls.

See the full range by using the guide below:

**OUR ACCESSORIES RANGE**

- **PAGE 38**
  - ANTI VIBRATION MOUNTS
  - ELECTRICAL STARTER & OVERLOAD RELAY
  - ELECTRICAL ISOLATORS
- **PAGE 40**
  - FLEXIBLE CONNECTORS
  - INVERTERS
  - PVC FITTINGS & SCROLL DRAIN
- **PAGE 43**
  - MOTOR WEATHER COWL
  - STACK SUPPORT
  - PEDESTAL & WALL BRACKET

ATEX versions are available on request, please contact us.
Axair Fans has a range of accessories to help make installation of our polypropylene fans easier.

Within our range of accessories we have two types of Anti Vibration mountings to suit fans on weather pedestals and metal pedestals. The weather pedestal mounts are designed to fit under the pedestal. The metal pedestal mounts are designed to fit between the pedestal and the feet of the electric motor.

They are available as a kit of parts which includes 4 Anti Vibration Mounts, bolts, nuts, washers and basic fitting instructions.

**WHY USE AV MOUNTS?**

Our range of Anti vibration mounts are designed to isolate the fan from the mounting frame or floor and can be used with our ‘S’ and ‘ST’ ranges of fans. If you need any additional information please do not hesitate to contact the office.

These type of mounts may not be suitable for ATEX installations.

As part of our accessories range we can offer a motor starter fitted with an overload relay.

Available as a remote type fitted with a reset button. This type is intended to work in conjunction with a switch sited away from the starter i.e in a fume cupboard.

We can also offer a starter with a start and stop button to be mounted near to the equipment. The starter would be supplied with the overload relay to suit the fan motor kW rating.

**WHY USE A STARTER AND RELAY?**

Fitting a starter and an overload relay will help protect the motor from overloading. It works by measuring current drawn by the motor and will not allow it to go higher than the set current. If it does the overload will trip and then need to be reset.

The electrical isolator we offer is prewired to the fan motor. It is to be sited as near to the fan as possible to allow the electrics to be shut off if attention is required on the fan or motor.
FLEXIBLE CONNECTORS

Our flexible connectors are designed to fit the ‘S’ and ‘ST’ range of fans and suit both the fans inlet and discharge spigots.

There are two types of flexible connector in our range. The straight type which has the same connection size at both ends and the taper type which have different sizes at each end.

For details see our data sheets.

WHY USE FLEXIBLE CONNECTORS?
Flexible connectors are supplied as a kit which includes one sleeve and two stainless steel fixing clips and basic fitting instructions.

Flexible connectors are designed to isolate the fan from the connecting ductwork. The tapered type may be used to match different diameters.

INVERTERS

WHY USE AN INVERTER?
Installing an inverter allows the user to control the speed of the fan motor to match the actual ventilation needs. Reducing the speed of a motor will reduce the amount of energy needed to power it, which in turn will cut your costs.

- Reduce strain on the motor and any related components.
- Lower maintenance therefore lower costs.
- Easier to stop the system when needed.
- Reduced energy consumption.
PVC DUCT FITTINGS

- Gravity dampers also known as backdraft dampers. Only suitable for certain applications.
- Reducers or tapers to fit the inlet or discharge of the fan.
- Volume control dampers to help achieve the required duty.

- Socket flanges to fit the inlet or discharge of the fan.
- Scroll drain, to be fitted at the lowest point of the fan scroll to allow water to run away. Thread size 3/8” BSP, hose connection 12mm Ø. Fan housing predrilled and tapped to hose connector.

The above fittings are intended to help with the equipment needed to install the fan. All parts shown above are sized to connect to the fan.

MOTOR WEATHER COWL

The motor cover or cowl is designed to provide increased weather protection for IP55 motors. It can be fitted to new fans from the factory or retro fitted to existing fans already on site.

The cowl is offered as a motor shelter and is not intended to replace the successful weather protecting pedestal we have supplied for many years. It is offered as a rain cover to help protect the fan motor.

FEATURES OF THE WEATHER COWL

- Mounts directly onto the pedestal
- Available in Three sizes
- Easy assembly
- Suitable for new or existing projects

WE HAVE THE FOLLOWING IN OUR RANGE:

- Gravity dampers also known as backdraft dampers. Only suitable for certain applications.
- Reducers or tapers to fit the inlet or discharge of the fan.
- Volume control dampers to help achieve the required duty.
STACK SUPPORT

This galvanised steel stack support is designed to support the discharge stack and comes as three parts making it a versatile addition.

FEATURES OF THE STACK SUPPORT
- One size fits all
- Made to support the discharge stack to 1.5m
- Bolts straight onto the new pedestal
- Galvanised steel construction

PEDESTAL AND WALL BRACKET

METAL PEDESTAL

FEATURES OF THE METAL PEDESTAL
- Suitable for both indoor and outdoor installations
- Two sizes available
- 3mm thick galvanised folded mild steel
- Fixing holes for removable weather cowl

WALL BRACKET

FEATURES OF THE METAL WALL BRACKET
- Metal pedestal as above with an additional piece of sheet metal to create a flat base.
- Fixing holes
- Two sizes available
LABORATORY AIRFLOW CONTROLS & MONITORS

EN 14-175 & ROHS COMPLIANT

Fume cupboard standards recommend that an airflow indicator should be incorporated to show unambiguously, the correct functioning of the fume cupboard airflow. Axair Fans has a range of digital airflow controls to enable the user to easily check the system. We also supply airflow controls with alarms suitable for safety cabinets if required.

OUR RANGE LABORATORY OF AIRFLOW CONTROLS AND MONITORS

<table>
<thead>
<tr>
<th>PAGE 48</th>
<th>PAGE 49</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE A AND C LED &amp; DIGITAL CONTROLS</td>
<td>SPECIFICATIONS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAGE 50</th>
<th>PAGE 51</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMENSIONS</td>
<td>TECHNICAL INFORMATION</td>
</tr>
</tbody>
</table>

GENERAL DESCRIPTION

Labair Airflow Controls and Monitors are for use with fume cupboards and chemical cabinets. Available in A and C versions, these range from a basic airflow alarm to an airflow sash high alarm. Version C includes a control output for extract and make up fans.

SCHEMATIC DIAGRAMS AND OPERATING PRINCIPLES

WHY USE ON AIRFLOW CONTROL?

When the fume extract fan is running, it causes negative pressure inside the fume cupboard. If the sash is lowered, the negative pressure increases causing air to be drawn faster through the sash opening. Conversely, if the sash is raised the negative pressure reduces and air velocity reduces.

The Labair sensor detects this change in velocity and sends a signal to the control which is used to produce a visual indication of velocity through the sash.

Labair A and C give both a visual and audible alarm for low velocity whilst the Labair C can also send a signal to the fan speed controller to maintain a constant velocity, irrespective of the sash height.
**TYPE A AND C LED & DIGITAL CONTROLS**

**Overall View**
- Front plate / fascia
- Customisable resin sticker
- Digital display (Non-existent on LED version)
- 1 green LED lit up: Signifies Airflow OK
- Flashing red LED for alarm: Signifies air speed too low
- Sash high LED Starts flashing when sash position switch has been tripped

**C Series Controller**
- Audible alarm and led visual
- VAV control system to inverter or damper
- Digital display of air velocity in meter per second (m/s) or feet per minute (digital version only)
- 3 push buttons: fan on/off, light on/off & alarm mute
- Factory precalibrated
- High precision numerical airflow sensor
- Sash high contact
- Alarm relay, battery back up optional
- Available in vertical or horizontal configuration (version A/LED only)
- White colour

**A Series Controller**
- All in one/multifunctional unit
- Fast and simple installation
- Attractive design
- Audible alarm and led visual
- VAV control system to inverter or damper
- Digital display of air velocity in meter per second (m/s) or feet per minute (digital version only)
- 3 push buttons: fan on/off, light on/off & alarm mute
- Factory precalibrated
- High precision numerical airflow sensor
- Sash high contact
- Alarm relay, battery back up optional
- Available in vertical or horizontal configuration (version A/LED only)
- White colour

**FEATURES**
- Energy savings: only the lowest amount of air is exhausted
- User comfort: low air speeds ensure reduced noise level
- Flexibility: fan speed can be adjusted at any moment
- Simple wiring: the VAV system and inverter derive their power from 230V single phase
- Factory pre-calibrated
- Re-calibration possible

**OPTIONS**
- Surface Box mounting: Plastic enclosure to mount the face plate and to avoid profile cutting the service panel
- Alarm Relay: A remote alarm can be triggered from a relay on the controller pcb
- Battery Back up: Red LED alarm is still functional up to 12 hours when unit loses power
- Custom resin stickers: Customisable resin stickers with logo, address, etc.

**BENEFITS**
- Energy savings: only the lowest amount of air is exhausted
- User comfort: low air speeds ensure reduced noise level
- Flexibility: fan speed can be adjusted at any moment
- Simple wiring: the VAV system and inverter derive their power from 230V single phase
- Factory pre-calibrated
- Re-calibration possible

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>AirControl Standard</th>
<th>AirControl Digital</th>
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<tbody>
<tr>
<td>A: 819700</td>
<td>C: 819703</td>
<td>A: 819701</td>
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<tr>
<td>C: 819704</td>
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<table>
<thead>
<tr>
<th>Display-Visual</th>
<th>AirControl Standard</th>
<th>AirControl Digital</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1 Green LED for right air speed</td>
<td>1 Green LED for right air speed</td>
</tr>
<tr>
<td></td>
<td>1 Red LED flashing for alarm</td>
<td>1 Red LED flashing for alarm</td>
</tr>
<tr>
<td></td>
<td>No digital display</td>
<td>3 digit display with velocity reading</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Units</th>
<th>N/A</th>
<th>meter per second (m/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>0 - 2.00 m/s</td>
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<table>
<thead>
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<th>Display Range</th>
<th>N/A</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Alarm Setpoint</th>
<th>Standard: below 0.39 m/s</th>
<th>Standard: below 0.39 m/s</th>
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</table>

<table>
<thead>
<tr>
<th>Alarm Delay</th>
<th>Selectable: 15s or 30s</th>
<th>Selectable: 15s or 30s</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Analog Output</th>
<th>A: N/A</th>
<th>C: 0-10V</th>
<th>A: N/A</th>
<th>C: 0-10V</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Alarm Indicator</th>
<th>1 red LED flashing and audible buzzer</th>
<th>1 red LED flashing and audible buzzer</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Alarm Mute</th>
<th>Yes, optional</th>
<th>Yes, optional</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Light On/Off</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan On/Off</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alarm Relay</th>
<th>Yes, optional</th>
<th>Yes, optional</th>
</tr>
</thead>
</table>

| Battery Back up | Yes, optional | Yes, optional |

| Sash High Input | Audible and orange flashing LED indicate sash position switch has been tripped | Audible and orange flashing LED indicate sash position switch has been tripped |

| Mounting       | Rush or surface box (option) | Flush or surface box (option) |

| Calibration    | Factory pre-calibrated @ 0.5m/s, Re-calibration possible | Factory pre-calibrated @ 0.5m/s, Re-calibration possible |

| Power Requirement | 12Vdc (Power supply included) | 12Vdc (Power supply included) |

| Orientation     | Vertical/Horizontal | Vertical Only |

| Monitor Dimensions | Front fascia: 210L x 90W x 10D mm Surface box: 205L x 85W x 14D mm | Front fascia: 210L x 90W x 10D mm Surface box: 205L x 85W x 14D mm |

**Axair Fans UK Limited**

- 01782 349430
- sales@axair-fans.co.uk
- www.axair-fans.co.uk

**MORE THAN JUST A FAN SUPPLIER**

**Axair Fans UK Limited**
DIMENSIONS

MONITOR & MOUNTING BOX

All dimensions in mm

TECHNICAL INFORMATION

With over 25 years of experience in air movement, we appreciate that products and components used must perform to their optimum level.

This section includes a series of guides and installation instruction to assist with corrosion fan applications, maintenance and general installation of our fans and accessories.

PRODUCT ORDER CODING

PAGE 52

PEDESTAL INSTALLATION INFORMATION

PAGE 53
### PRODUCT ORDER CODING GUIDE

#### Model Abbreviation
- **S**: SEAT fan
- **ST**: STORM fan

#### Model Number

<table>
<thead>
<tr>
<th>Scroll Housing 'Handing'</th>
<th>Clockwise rotation on the fan inlet</th>
<th>Anti-clockwise rotation on the fan inlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>LG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RD</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Motor & Impeller Rotational Speed
- **2**: 2 pole or 2870/min
- **4**: 4 pole or 1450/min
- **6**: 6 pole or 930/min

#### Motor Power (if applicable)
- **L**: Low
- **M**: Medium
- **H**: High

#### Electrical Supply
- **1**: Single phase electrical supply
- **3**: Three phase electrical supply

#### ATEX Flameproof
- **XN**: Ex e where stated
- **XD**: Ex d where stated

#### Pedestal
- **S**: Standard steel pedestal for indoor and sheltered installations
- **B**: Weather protecting polypropylene box pedestal

### INSTALLATION DIAGRAMS

#### ATTACHING THE MOTOR TO A WEATHER PROTECTING PEDESTAL

With the motor feet pointing vertically upwards check that the fan housing is correctly handed.

Before attaching the pedestal to the motor:
1. Make a note of the motor full load current for the appropriate supply voltage.
2. Wire the electrical cable to the motor.
3. Insert the hexagon headed bolts through the holes in the motor feet.
4. Press the barbed washers onto the screw threads to secure the bolts in position.

With the fan inlet pointing upwards, guide the bolts through the holes in the top of the pedestal.

Fasten the motor feet to the pedestal using the stainless steel washers, spring washers, and nuts.

The pedestal must be fastened to a horizontal surface or bracket.

Anti-vibration mountings of the turret type are recommended to be fitted to each underside corner of the pedestal base.
ATACHING ANTI-VIBRATION MOUNTINGS TO A STEEL PEDESTAL

Place the motor feet on the pedestal to identify the set of 4 holes to be used to attach the motor.

Fit the four a.v. bobbin mountings to the motor mounting holes and secure with the stainless steel plain washers, spring washers, and nuts.

Place the motor feet onto the a.v. bobbin mounting threads and secure with the stainless steel plain washers, spring washers, and nuts.

Fasten the four corners of the pedestal feet directly to the mounting base.

INSTALLATION DIAGRAMS

INSTALLATION INSTRUCTIONS ‘S’ & ‘ST’ RANGE POLYPROPYLENE FANS

DELIVERY
Inspect the carton and its contents for signs of damage. Check that the contents are exactly as ordered for the project. Any discrepancies should be reported immediately to the supplier.

STORAGE
Protect fan motors from extremes of temperature, high humidity, damp conditions, and rain water. Motors that have been in damp or wet conditions must be dried-out by passing a low current through the windings or by energising anti-condensation heaters where fitted. The winding insulation resistance between phases and from each phase to earth should be at least 10MΩ.

APPLICATIONS
Ventilation of air-diluted corrosive fumes or flammable vapours from Fume Cupboards, Fume Hoods, Fume Extraction Arms, Chemical Stores, Chemical Tanks, Process Equipment.

LIMITATIONS TO USE
Polypropylene is highly resistant to corrosive substances but advice must be sought concerning its suitability for use with particular fumes, their concentrations and temperatures. In general, ‘S’ & ‘ST’ Range fans will not endure air-stream temperatures above 50°C; neither should they handle dust or other airborne materials. They must not be installed in ambient temperatures above 40ºC or in designated Flameproof Zones unless they are ATEX certified models.

MECHANICAL PRECAUTIONS
Flexible duct connectors secured by stainless band clips should be used to isolate fan vibration from and correct slight misalignment with the ventilation ductwork. Do not fit solid connectors to the fan inlet, it is not designed to take weight. In non-ducted applications, fans should be equipped with finger guards. Locate anti-vibration mountings between the motor feet and steel pedestal, or beneath a polypropylene BOX pedestal, and then secure them with corrosion resistant fasteners. Rubber A.V. Mountings should only be used in compression. The fan should run without excessive electromagnetic vibration or mechanical imbalance. The fan discharge position may be adjusted by removing the screws securing the motor mounting plate to the fan housing, then indexing the scroll to a new angular location and re-fitting the screws, taking care to ensure that the ‘O’ ring seal remains in place.

DO NOT REVERSE THE SCROLL HOUSING – THE IMPELLERS ONLY WORK ONE WAY!

WEATHER PROTECTION
Standard motors are dust and hosed-water protected to IP55 classification, but are not ‘weather protected’. No motor manufacturer provides a warranty for IP55 motors installed outdoors unless a ventilated cover or weather-protecting BOX pedestal has been fitted. All cables and wires entering the motor terminal box should pass through liquid-tight glands compression-sealed to the cable outer sheath. Cables should loop downwards from the gland to take water away from the seal. A hose connector should be fitted to the scroll housing at its lowest point to enable water to drain safely away.
**INSTALLATION INSTRUCTIONS ‘S’ & ‘ST’ RANGE POLYPROPYLENE FANS**

**ELECTRICAL CONNECTION**

Fan impeller rotation must be in the direction of the arrow symbol moulded into the scroll housing. The motor should be connected in accordance with the diagram contained in its terminal box, then wired to a local Isolator. All terminal post nuts should be tightened to provide solid and vibration resistant electrical connection. First switch-on should be brief enough to establish correct direction of impeller rotation. Single phase motors are normally pre-connected in the terminal box for correct rotation. Three phase motors can run in the wrong direction when first switched-on, in which case they must be corrected by reversing any two of the three phase supply leads.

**ELECTRICAL PROTECTION**

The fan motor has no in-built thermal protection devices, unless specified, and must therefore be wired via a Motor Starter fitted with an Overload Relay set at the motor full-load current. If the Relay ‘trips’ the Starter check that a) the relay is correctly set, b) the ventilation system is sufficiently damped c) the motor is correctly connected in the terminal box, d) a three phase motor is not ‘single-phasing’ e) the current is below nameplate full load. Where PTC thermistors are specified and fitted to the motor they should be connected to a thermostar relay or to a frequency inverter that has the necessary terminals.

**ELECTRIC MOTORS MUST NOT BE OVER-CURRENT PROTECTED USING FUSES.**

When controlling a fan by frequency Inverter, the motor terminals must be correctly linked in either STAR or DELTA to suit the three phase voltage output from the inverter. All relevant instructions contained in the Inverter manual should be meticulously followed. Inverter controlled flameproof motors must be fitted with thermistors for connection to the inverter to provide over-temperature cut-out.

**RESPONSIBILITY**

The above instructions are issued for general guidance. The installation contractor bears the ultimate responsibility for determining that the work is carried-out by a qualified technician observing local regulations, and that the fan receives adequate protection from adverse electrical, mechanical, thermal and environmental conditions.

**SAFETY NOTES**

Safety Notes for Seat polypropylene centrifugal fans for applications in a potentially explosive atmospheres.

The following safety instructions refer to the installation, use and maintenance of polypropylene centrifugal fans to be used in classified (zone 2) explosive areas.

Centrifugal fans are suitable for group EXII cat 3G (Zone 2) installation, to be used in classified zones with the presence of gas (zone 2, group II, IIB or IIC category 3G) dependant on the application. They are designed and constructed in accordance to the General Requirements of ATEX 2014-34 directive, in accordance to norm EN 1127-1, EN 13463-1. The fan is marked in accordance with the ATEX 2014-34-EU Directive.

Electric motors fitted onto centrifugal fans are subjected to appropriate certification in accordance with ATEX Directive and they are suitable for use in classified zones (zone 2) with presence of gas, groups II, IIB or IIC protection EEEx, temperature classes T3, T4, T5 & T6 depending on the application. The technical characteristics of the fan (airflow, pressure, rpm, efficiency, etc.) are on individual fan data sheets.

Motor electrical data is shown on the motor nameplate.

**MARKING**

The fan assembly (fan + motor assembled together) CE @ II 3 G II, IIB or IIC – T3, T4, T5, or T6. Maximum air temperature should be checked with fan manufacturer.

**GENERAL REQUIREMENTS**

Before the installation please read carefully the installation and maintenance instructions. The installation and maintenance of the centrifugal fans must be done in accordance to the plant and maintenance classified area with the presence of explosive gases and/or other national norms/standards).

Electric motors to be coupled with centrifugal fans must have the following requirements:

1. Subject to separate ATEX certification,
2. Suitable to be used in the classified zone and with the existing substance (gas group)
3. Temperature class (gas) suitable with the existing substances and environment of the installation area.

For motor safety requirements please refer to the motor maintenance, use, and safety instructions. Motors must not be opened when in use. Centrifugal fans must be earthed through appropriate connections (anti-loosening and anti-rotation device).

All maintenance operations must be performed in accordance with the instructions detailed in the maintenance manual.
SAFETY NOTES

WARNINGS
The fan inlet if not coupled with a duct must be installed with a protection grid IP20, to protect the impeller against contact with external bodies and/or dirt. If the fan is duct mounted it is necessary to have the appropriate protection devices in accordance regulations.

Earthing of the conductive areas of the motor/casing is made through the external earthing. Check ATEX regulations for details. The fan should be checked for wear, damage or build up of dust/dirt. Ensure the fan is running correctly i.e. no vibration or any abnormal noises.

If on inspection the fan is not operating as normal the fan should be stopped. Then try to identify the origin of the problem and contact the installer.

If the fan is to work in conjunction with an Inverter speed controller the thermistor connections must be used. They need to be connected to the inverter if it has thermistor connections or a thermistor relay.

POLYPROPYLENE FAN SPECIFICATIONS

APPLICATIONS
Suitable for operation in corrosive applications including plating, fume handling and lab hood exhaust systems etc.

HOUSINGS: PP
Single block strong high density UV treated and recyclable polypropylene (PPH) with no welded joint. Reversible and rotatable to any of the 8 standard discharge positions by 45° increments. All fan mounting hardware in stainless steel.

IMPELLER: PP
Forward curved centrifugal type impeller made of injection molded PPH. Fan wheel supplied with motor shaft bushing and hub cap constructed of PPH. Wheels electronically and dynamically balanced to ISO 1940, ISO 90-600.

MOTOR SUPPORT
Several options: no stand, metal stand, polypropylene motor pedestal or roof unit kit.

MOTORS
Direct drive, asynchronous, single or three phase, IP55, Single speed three phase 230/400 V - 50/60 Hz, single phase 230 V - 50 Hz.

TEMPERATURE RESISTANCE
PPH casing and wheel recommended up to 50°C.
Lowfield Drive
Centre 500
Wolstanton
Newcastle-Under-Lyme
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