Model 686q1000

AcoustiFLO LLC certifies that the series 686q is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the Certified Ratings Program. Performance and sound is certified for Installation Type A: Free inlet, Free outlet.

Sound power levels shown are in decibels, referenced to 10⁻¹² watts, calculated per AMCA International Standard 301

Ratings do not include the effects of duct end correction.

Power ratings (BHP) exclude bearing and transmission losses.

Values shown are for inlet Lwi and outlet Lwo sound power levels for installation type A: Free inlet, Free outlet.

Performance ratings do not include the effects of appurtenances (accessories).
Model 686q1002

Sound power levels shown include a general purpose, NEMA Premium®, 4 pole, 30hp, TEFC motor operating on a VFD.

AcoustiFLO LLC certifies that the series 686q is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the Certified Ratings Program. Performance and sound is certified for Installation Type A: Free inlet, Free outlet.

Sound power levels shown are in decibels, referenced to 10⁻¹² watts, calculated per AMCA International Standard 301
Ratings do not include the effects of duct end correction.
Power ratings (BHP) exclude bearing and transmission losses.
Values shown are for inlet Lwi and outlet Lwo sound power levels for installation type A: Free inlet, free outlet.
Performance ratings include the effects of exit guide vanes (index setting 2).
Model 686q1800

AcoustiFLO LLC certifies that the series 686q is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the Certified Ratings Program. Performance and sound is certified for installation type A: Free inlet, Free outlet.

Sound power levels shown include a general purpose, NEMA Premium®, 4 pole, 30hp, TEFC motor operating on a VFD.

AcoustiFLO LLC certifies that the series 686q is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the Certified Ratings Program. Performance and sound is certified for installation type A: Free inlet, Free outlet.

Sound power levels shown include a general purpose, NEMA Premium®, 4 pole, 30hp, TEFC motor operating on a VFD.

Performance ratings do not include the effects of appurtenances (accessories).
Sound power levels shown include a general purpose, NEMA Premium®, 4 pole, 30hp, TEFC motor operating on a VFD.

AcoustiFLO LLC certifies that the series 686q is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the Certified Ratings Program. Performance and sound is certified for Installation Type A: Free inlet, Free outlet.

Sound power levels shown are in decibels, referenced to 10^{-12} watts, calculated per AMCA International Standard 301.

Ratings do not include the effects of duct end correction.

Power ratings (BHP) exclude bearing and transmission losses.

Values shown are for inlet Lwi and outlet Lwo sound power levels for installation type A: Free inlet, free outlet.

Performance ratings include the effects of exit guide vanes (index setting 2).
Model 686q1810

AcoustiFLO LLC certifies that the series 686q is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the Certified Ratings Program. Performance and sound is certified for Installation Type A: Free inlet, Free outlet.

Sound power levels shown are in decibels, referenced to 10⁻¹² watts, calculated per AMCA International Standard 301

Ratings do not include the effects of duct end correction.

Power ratings (BHP) exclude bearing and transmission losses.

Values shown are for inlet Lwi and outlet Lwo sound power levels for installation type A: Free inlet, Free outlet.

Performance ratings include the effects of an inlet silencer.

Outlet Area = 4.7 sq. ft.
AcoustiFLO LLC certifies that the series 686q is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the Certified Ratings Program. Performance and sound is certified for Installation Type A: Free inlet, Free outlet.

Sound power levels shown are in decibels, referenced to 10⁻¹² watts, calculated per AMCA International Standard 301

Ratings do not include the effects of duct end correction.

Power ratings (BHP) exclude bearing and transmission losses.

Values shown are for inlet Lwi and outlet Lwo sound power levels for installation type A: Free inlet, Free outlet.

Performance ratings include the effects of an inlet flow concentrator.
Model 686q2000

AcoustiFLO certifies that the series 686q is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the Certified Ratings Program. Performance and sound is certified for Installation Type A: Free inlet, Free outlet. Sound power levels shown are in decibels, referenced to 10^-12 watts, calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction.

Power ratings (BHP) exclude bearing and transmission losses.

Values shown are for inlet Lwi and outlet Lwo sound power levels for installation type A: Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories).
### Model 686q2002

![Sound Performance Graph]

#### Sound Power Levels

<table>
<thead>
<tr>
<th>RPM</th>
<th>Sound Power Level (Lwo)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1790</td>
<td>89 87 88 88 85 82 79 74</td>
</tr>
<tr>
<td>1790</td>
<td>89 86 87 88 84 81 82 73</td>
</tr>
</tbody>
</table>

Sound power levels shown include a general-purpose, NEMA Premium®, 4 pole, 30hp, TEFC motor operating on a VFD.

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**AcoustiFLO LLC certifies that the series 686q is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the Certified Ratings Program. Performance and sound are certified for Installation Type A: Free inlet, Free outlet.**

**Sound power levels shown are in decibels, referenced to 10⁻¹² watts, calculated per AMCA International Standard 301.**

**Ratings do not include the effects of duct end correction.**

**Power ratings (BHP) exclude bearing and transmission losses.**

**Values shown are for inlet Lwi and outlet Lwo sound power levels for installation type A: Free inlet, free outlet.**

**Performance ratings include the effects of exit guide vanes (index setting 2).**
Model 686q2800

AcoustiFLO LLC certifies that the series 686q is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the Certified Ratings Program. Performance and sound is certified for Installation Type A: Free inlet, Free outlet.

Sound power levels shown include a general purpose, NEMA Premium®, 4 pole, 30hp, TEFC motor operating on a VFD.

Outlet Area = 4.7 sq. ft.

AcoustiFLO LLC certifies that the series 686q is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the Certified Ratings Program. Performance and sound is certified for Installation Type A: Free inlet, Free outlet.

Sound power levels shown include a general purpose, NEMA Premium®, 4 pole, 30hp, TEFC motor operating on a VFD.

Outlet Area = 4.7 sq. ft.
Flow (CFM) PSE → peak static efficiency

rpm outlet sound power, Lwo @ PSE
1200 76 76 78 74 74 70 65 57
1790 85 85 85 86 86 79 75 69
2200 95 90 87 94 87 87 88 87

rpm outlet sound power, Lwo @ 0.88PSE
1200 79 77 78 74 73 70 67 58
1790 90 88 85 85 85 80 80 70
2200 97 91 87 94 88 87 90 86

Sound power levels shown include a general purpose, NEMA Premium®, 4 pole, 30hp, TEFC motor operating on a VFD

Model 686q2802

AcoustiFLO LLC certifies that the series 686q is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the Certified Ratings Program. Performance and sound is certified for Installation Type A: Free inlet, Free outlet.

Sound power levels shown are in decibels, referenced to 10⁻¹² watts, calculated per AMCA International Standard 301

Ratings do not include the effects of duct end correction.

Power ratings (BHP) exclude bearing and transmission losses.

Values shown are for inlet Lwi and outlet Lwo sound power levels for installation type A: Free inlet, free outlet.

Performance ratings include the effects of exit guide vanes (index setting 2).
<table>
<thead>
<tr>
<th>CFM</th>
<th>SP</th>
<th>RPM</th>
<th>BHP</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,887</td>
<td>2.87</td>
<td>1,090</td>
<td>3.0</td>
</tr>
<tr>
<td>5,795</td>
<td>4.04</td>
<td>1,292</td>
<td>5.0</td>
</tr>
<tr>
<td>6,633</td>
<td>5.29</td>
<td>1,479</td>
<td>7.5</td>
</tr>
<tr>
<td>7,301</td>
<td>6.41</td>
<td>1,628</td>
<td>10.0</td>
</tr>
<tr>
<td>9,199</td>
<td>10.18</td>
<td>2,051</td>
<td>20.0</td>
</tr>
<tr>
<td>7,057</td>
<td>1.93</td>
<td>1,098</td>
<td>3.0</td>
</tr>
<tr>
<td>8,368</td>
<td>2.72</td>
<td>1,302</td>
<td>5.0</td>
</tr>
<tr>
<td>9,578</td>
<td>3.56</td>
<td>1,490</td>
<td>7.5</td>
</tr>
<tr>
<td>10,542</td>
<td>4.32</td>
<td>1,640</td>
<td>10.0</td>
</tr>
<tr>
<td>12,068</td>
<td>5.66</td>
<td>1,878</td>
<td>15.0</td>
</tr>
<tr>
<td>13,283</td>
<td>6.85</td>
<td>2,066</td>
<td>20.0</td>
</tr>
<tr>
<td>14,308</td>
<td>7.95</td>
<td>2,226</td>
<td>25.0</td>
</tr>
<tr>
<td>15,205</td>
<td>8.98</td>
<td>2,366</td>
<td>30.0</td>
</tr>
</tbody>
</table>

Sound power levels shown include a general purpose, NEMA Premium®, 4 pole, 30hp, TEFC motor operating on a VFD.
### Model 686q2820

**Technology Advacned Air Handling Systems**

<table>
<thead>
<tr>
<th>RPM</th>
<th>CFM</th>
<th>SP</th>
<th>BHP</th>
<th>CFM</th>
<th>SP</th>
<th>RPM</th>
<th>BHP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200</td>
<td>6,978</td>
<td>2.00</td>
<td>1,098</td>
<td>3.0</td>
<td>8,263</td>
<td>1.52</td>
<td>1,138</td>
</tr>
<tr>
<td>1790</td>
<td>8,273</td>
<td>2.82</td>
<td>1,302</td>
<td>5.0</td>
<td>9,796</td>
<td>2.14</td>
<td>1,349</td>
</tr>
<tr>
<td>2200</td>
<td>9,470</td>
<td>3.69</td>
<td>1,491</td>
<td>7.5</td>
<td>11,214</td>
<td>2.80</td>
<td>1,544</td>
</tr>
</tbody>
</table>

### Sound Power Levels

- **.9psp → 90% peak static pressure**
  - Static Efficiency = 73.2%
- **PSE → peak static efficiency**
  - Static Efficiency = 74.5%

<table>
<thead>
<tr>
<th>RPM</th>
<th>CFM</th>
<th>SP</th>
<th>RPM</th>
<th>BHP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200</td>
<td>6,978</td>
<td>2.00</td>
<td>1,098</td>
<td>3.0</td>
</tr>
<tr>
<td>1790</td>
<td>8,273</td>
<td>2.82</td>
<td>1,302</td>
<td>5.0</td>
</tr>
<tr>
<td>2200</td>
<td>9,470</td>
<td>3.69</td>
<td>1,491</td>
<td>7.5</td>
</tr>
</tbody>
</table>

- **0.98PSE→ (2% below PSE)**
  - Static Efficiency = 73.3%
- **0.89PSE→ (11% below PSE)**
  - Static Efficiency = 66%

<table>
<thead>
<tr>
<th>RPM</th>
<th>CFM</th>
<th>SP</th>
<th>RPM</th>
<th>BHP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200</td>
<td>6,978</td>
<td>2.00</td>
<td>1,098</td>
<td>3.0</td>
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<tr>
<td>1790</td>
<td>8,273</td>
<td>2.82</td>
<td>1,302</td>
<td>5.0</td>
</tr>
<tr>
<td>2200</td>
<td>9,470</td>
<td>3.69</td>
<td>1,491</td>
<td>7.5</td>
</tr>
</tbody>
</table>

### Performance Ratings

- Ratings do not include the effects of duct end correction.
- Power ratings (BHP) exclude bearing and transmission losses.
- Values shown are for inlet Lwi and outlet Lwo sound power levels for installation type A: Free inlet, Free outlet.
- Performance ratings include the effects of an inlet flow concentrator.

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**Sound power levels shown are in decibels, referenced to 10⁻¹² watts, calculated per AMCA International Standard 301.**

**Outlet Area = 4.7 sq. ft.**