AIR FOIL FAN
BAI “S” SERIES
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Dong Hae Engineering Co., Ltd. is in charge of various projects including apartment building and plant construction during the 25 years of working in the field of HVAC. We hold the best engineers who have high ability and various experiences in each project. We are doing continuous investment on R&D for new technology and product, according to the needs of various construction enterprises.

**Impeller Shape**
- Narrow at the tip and wide at the hub.
- The length of blades is long and narrow.
- The side of blades curves in the rear of rotation direction, (cross section of Airfoil)
- Fewer blades than other product

**Product Features**
- Equal pressure and flow characteristics, very high efficiency.
- Axial design for smooth airflow and pressure.
- Providing a smooth flow at high speed at the time of low noise, through the cross section of airfoil.
- The change of wind pressure by the airflow fluctuation is small, and the change of shaft power is never.
- It adjusts easily air and pressure as installation of Suction Vane damper and manages easily efficient of energy.

**AMCA Seal Information**

Dong Hae Engineering Co., Ltd.
The Air Movement and Control Association (AMCA) International, Inc. is a not-for-profit international association of the world’s manufacturers of related air system equipment—primarily, but not limited to: fans, louvers, dampers, air curtains, airflow measurement stations, acoustic attenuators, and other air system components for the industrial, commercial and residential markets.

The association’s mission is to promote the health and growth of the air movement and control industry consistent with the interest of the public. AMCA International is a valuable resource and a strong means of self-regulation for our industry. People who buy and specify fans, dampers, and louvers need to be aware of the value of the AMCA International seal.

Dong Hae Engineering Co., Ltd. certifies that the Centrifugal Fans shown here in 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 AMCA Certified Ratings Program.

Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses.

주요용도 (Main application)

- 반도체 장비, hume hood 배기용
- Clean room booth 급. 배기용
- A.H.U 등 공조장비
- 건조장치 및 원자력발전소, 국소 환기용
- 지하철 유막 급.배기용, Air washer용
- 기타 일반산업용 강제 송풍장치
- Semiconductor equipment, Hume hood exhaust fan
- Clean room booth supply. exhaust fan
- A.H.U and such air conditioning equipment
- The drying equipment and The nuclear power plant, The local ventilation
- Subway film of oil supply. exhaust fan, Air washer fan
- The diverse general industrial compulsion blower equipment

Fan 구조 (Fan Structure)
How to read Air Performance Data-Typical example

Model Reference  BAI 1000 S

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<tr>
<th>Air Volume</th>
<th>Static Pressure</th>
<th>Fan Speed</th>
<th>Total Efficiency</th>
<th>Shaft Power</th>
<th>Sound</th>
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<td>132 mmAq</td>
<td>1050 rpm</td>
<td>73%</td>
<td>15 kW</td>
<td>93 dB</td>
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Fan Rotation and Discharge

The rotation and discharge of the fan is in accordance with AMCA standard 99-2406-03.

The direction of rotation is determined from the drive side of the fan:

- CW - clockwise rotation
- CCW - center-clockwise rotation

Motor Position

The position of the motor for belt drive centrifugal fan is in accordance with AMCA standard 99-2407-03.

Location of motor is determined by facing the drive side of fan and designating the positions by letters W, X, Y, or Z.
Performance Data BAI 315 S

Wheel Dia: 315mm  \( \rho = 1.2 \text{ kg/m}^3 \)

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data BAI 355 S

Wheel Dia: 355mm  \( \rho = 1.2 \text{ kg/m}^3 \)

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.
Performance Data BAI 400 S

Wheel Dia: 400mm, \( \rho = 1.2 \text{ kg/m}^3 \)

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances/accessories.
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data BAI 450 S

Wheel Dia: 450mm, \( \rho = 1.2 \text{ kg/m}^3 \)

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances/accessories.
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.
Performance Data BAI 500 S

Wheel Dia : 500mm  \( \rho = 1.2 \text{ kg/m}^3 \)

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data BAI 560 S

Wheel Dia : 560mm  \( \rho = 1.2 \text{ kg/m}^3 \)

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.
Performance Data BAI 630 S

Wheel Dia : 630mm

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances/accessories.
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data BAI 710 S

Wheel Dia : 710mm

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances/accessories.
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.
Performance Data BAI 800 S

Wheel Dia: 800mm

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data BAI 900 S

Wheel Dia: 900mm

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.
Performance Data BAI 1000 S

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data BAI 1120 S

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.
Performance Data BAI 1250 S

Wheel Dia : 1250mm

ρ = 1.2 kg/m³

Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses.

The A-weighted sound ratings shown have been calculated per AMCA standard 301.

Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data BAI 1400 S

Wheel Dia : 1400mm

ρ = 1.2 kg/m³

Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses.

The A-weighted sound ratings shown have been calculated per AMCA standard 301.

Values shown are for inlet LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.
**Performance Data BAI 1600 S**

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

**Performance Data BAI 1800 S**

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.
Performance Data BAI 2000 S

- Wheel Dia : 2000mm
- \( \rho = 1.2 \text{ kg/m}^3 \)

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.

Performance Data BAI 2240 S

- Wheel Dia : 2240mm
- \( \rho = 1.2 \text{ kg/m}^3 \)

- Performance certified is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).
- Power rating kW does not include transmission losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301.
- Values shown are for inlet LwiA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.
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<th>BAI 1120S</th>
<th>BAI 1250S</th>
<th>BAI 1400S</th>
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**Motor Base**

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