SINGLE SUCTION

SIROCCO FAN

BSI “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**
  - 날개 깊이가 짧고 꼭대가 낮다.
  - 날개의 끝이 회전방향으로 국소를 이루고 있다.
  - 날개의 세부가 다 기중보다 많다.
  - The length of blades is short and broad.
  - The tip of blades curves in rotation direction.
  - A lot of blades than other product

- **Product Features**
  - 타 기중에 비해 설계만적이 적고, 대용량, 저정압이다.
  - 저속운전으로 저소음 및 낮은 진동으로 운전상태가 정상이다.
  - 습관 변동에 의한 풍압의 변화는 적다.
  - Vane Damper의 설치로서 고장 및 정밀 조정이 용이해서, Position에 따라 효율적인 에너지 관리가 용이하다.
  - 기준시정 정립 이후 운전시 온도가 급격히 상승한다.
  - Compared with other centrifugal fans, installation area is small and large air, low pressure.
  - Driving at low speed, not generating unpleasant noise, vibration, and offering the optimum operation.
  - The change in the wind pressure by the airflow fluctuation is small.
  - It adjusts easily air and pressure as installation of Vane damper and manages easily efficient of energy by position.
  - Power rises suddenly at the time of driving below standard pressure.

- **AMCA Seal Information**
  - AMCA Seal 정보 (AMCA Seal Information)
  - 국제 공기 유동 및 제어 협회(AMCA)는 세계 공조 시스템 설비 제조업체의 비영리 협회입니다. 또한, AMCA 협회는 신뢰성, 성능, 주기성 시장의 편, 투명, 안전, 에어 퀄리티, 공기 측정 장비, 온도 감소기 등의 다른 공조 시스템 구성요소도 포함합니다.
  - 협회의 목표는 공기 유동 및 제어 산업의 변화와 공공의 이해와 상점을 충진하는 것입니다. AMCA는 공조산업을 위해 자체 규정을 제시합니다. 보안, 안전, 리소스 관리는 AMCA 국제 인증의 의미를 인식하고 있을 필요가 있습니다.
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.

**Main application**

- Underground parking supply, exhaust fan, Machine room, generator room, electricity room supply, exhaust fan,
- Firefighting smoke control supply, exhaust fan,
- The inside use of Air conditioning and heating A.H.U, subway ventilation
- The diverse local exhaust fan

**Fan Structure**

![Yangdokjiri Type (S TYPE)](image1)

![Punjokjiri Type (SP TYPE)](image2)
**How to read Air Performance Data-Typical example**

**Model Reference**  
**BSI 560 S**

<p>| | | | | | |</p>
<table>
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<tr>
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<td><strong>Static Pressure</strong></td>
<td><strong>Fan Speed</strong></td>
<td><strong>Total Efficiency</strong></td>
<td><strong>Shaft Power</strong></td>
<td><strong>Sound</strong></td>
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<tr>
<td>263 CMM</td>
<td>58 mmAq</td>
<td>810 rpm</td>
<td>53%</td>
<td>6.2 kW</td>
<td>93 dB</td>
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</table>

**팬 회전과 토출방향 (Fan Rotation and Discharge)**

팬의 회전과 토출방향은 AMCA 표준 99-2406-03에 따릅니다.  
회전 방향은 팬의 구동 측으로부터 결정됩니다.

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

**모터 위치 (Motor Position)**

벤트 구동 원심형 팬의 모터 방향은 AMCA 표준 99-2407-03에 따릅니다.  
모터 위치는 팬의 구동측 면과 지정된 위치인 W,X,Y,Z로 결정됩니다.

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 BSI 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 BSI 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 BSI 400 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 BSI 450 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 BSI 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 BSI 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 **BSI 630 S**

![Diagram of BSI 630 S Performance Data]

- 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 **BSI 710 S**

![Diagram of BSI 710 S Performance Data]

- 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 BSI 800 S

Wheel Dia : 800mm  \( \rho = 1.2 \text{ kg/m}^3 \)

- 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 BSI 900 S

Wheel Dia : 900mm  \( \rho = 1.2 \text{ kg/m}^3 \)

- 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 **BSI 1000 S**

Wheel Dia: 1000mm  \( \rho = 1.2 \text{ kg/m}^3 \)

- 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 LwA 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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Performance Data **BSI 1120 S**

Wheel Dia: 1120mm  \( \rho = 1.2 \text{ kg/m}^3 \)

- 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 LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.
Performance Data **BSI 1250 S**

**Wheel Dia:** 1250mm  
\( \rho = 1.2 \ \text{kg/m}^3 \)

- 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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Performance Data **BSI 1400 S**

**Wheel Dia:** 1400mm  
\( \rho = 1.2 \ \text{kg/m}^3 \)

- 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 BSI 1600 S

Wheel Dia: 1600mm

- 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 BSI 1800 S

Wheel Dia: 1800mm

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

Performance Data **BSI 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 LwA sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.
### OVERALL DIMENSION - BSI “S” SERIES

<table>
<thead>
<tr>
<th>Fan Model</th>
<th>BSI 315S</th>
<th>BSI 355S</th>
<th>BSI 400S</th>
<th>BSI 450S</th>
<th>BSI 500S</th>
<th>BSI 560S</th>
<th>BSI 630S</th>
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