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# AB seires

## Special for 50Hz direct driven type.

- **High Efficiency:** The male rotor has 5 teeth,the female rotor has 6. This tooth combination can improve energy efficiency,and decrease excessive fluid backflow,due to the similar circumference speed ratio of the two rotors.
- **Tightness:** When the internal leakage losses from backflow of the compressed air through the gap between the rotors and the housing is kept as low as possible.
- **Low vibration, long service life:** We use high-precision-manufactures rotors,which guarantee HB Airend long bearing service life and low vibrations.

## Specification

| Rated power | Model | Speed | Air flow | Shaft power | Specific Power Consumption | S.F |
|---|---|---|---|---|---|---|
| KW | | rpm | $m^3$/min | kw | kw/$m^3$/min | |
| 7.5 | AB-077 * | 3420 | 1.0 | 7.3 | 7.4 | 0.97 |
| 11 | AB-077 * | 5200 | 1.5 | 11.0 | 7.2 | 1.00 |
| 15 | AB-130 * | 3420 | 2.0 | 14.6 | 7.2 | 0.97 |
| 18.5 | AB-210 | 2950 | 2.9 | 19.4 | 6.7 | 1.05 |
| 22 | AB-240 | 2950 | 3.5 | 22.7 | 6.4 | 1.03 |
| 30 | AB-350RS | 2950 | 4.7 | 33.1 | 7.1 | 1.10 |
| 37 | AB-420 | 2950 | 6.2 | 38.2 | 6.1 | 1.03 |
| 45 | AB-480R | 2950 | 7.1 | 47.5 | 6.7 | 1.05 |
| 55 | AB-600R | 2950 | 9.1 | 57.6 | 6.3 | 1.05 |
| 75 | AB-780R | 2950 | 11.9 | 73.3 | 6.1 | 0.98 |
| | AB-830 | 2950 | 12.9 | 80.6 | 6.2 | 1.07 |
| 90 | AB-1030R | 2950 | 14.5 | 97.0 | 6.4 | 1.08 |
| 110 | AB-1200R | 2950 | 19.4 | 115.5 | 5.9 | 1.05 |
| 132 | AB-1320 | 2950 | 21.4 | 139.5 | 6.5 | 1.06 |
| 160 | AB-1560 | 2950 | 23.9 | 151.6 | 6.3 | 0.95 |
| | AB-1560R | 2950 | 24.0 | 151.6 | 6.3 | 0.95 |
| 185 | AB-1900R | 2950 | 29.8 | 186.6 | 6.2 | 1.01 |
| 250 | AB-2600 | 2950 | 40.7 | 260.6 | 6.4 | 1.04 |
| 250 | AA-5600 | 1450 | 42.1 | 267.0 | 6.3 | 1.07 |
| 315 | AB-3300 | 2950 | 50.0 | 323.4 | 6.4 | 1.03 |

* Belt driven type

1.Based on pressure 0.8 Mpa

2.Applicable prssure≤1.3 Mpa

3.Air flow rate related to suction condition according to ISO 1217

4.Hanbell reserves the right to modify all the design and specifications. Actual specification may differe from that shown in catalogue due to time lag.

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# AB seires

## Special for 60Hz direct driven type.

- **High Efficiency:** The male rotor has 5 teeth,the female rotor has 6. This tooth combination can improve energy efficiency,and decrease excessive fluid backflow,due to the similar circumference speed ratio of the two rotors.
- **Tightness:** When the internal leakage losses from backflow of the compressed air through the gap between the rotors and the housing is kept as low as possible.
- **Low vibration,long service life:** We use high-precision-manufactures rotors,which guarantee HB Airend long bearing service life and low bibr4ations.

## Specification

| Rated power | Model | Speed | Air flow | Shaft power | Specific Power Consumption | S.F |
|---|---|---|---|---|---|---|
| KW | | rpm | $m^3$/min | kw | kw/$m^3$/min | |
| 7.5 | AB-077 * | 3420 | 1.0 | 7.3 | 7.4 | 0.97 |
| 11 | AB-077 * | 5200 | 1.5 | 11.0 | 7.2 | 1.00 |
| 15 | AB-130 * | 3420 | 2.0 | 14.6 | 7.2 | 0.97 |
| 18.5 | AB-130 * | 4200 | 2.7 | 18.4 | 6.7 | 0.99 |
| 22 | AB-210 | 3550 | 3.5 | 23.7 | 6.7 | 1.08 |
| 30 | AB-240 | 3900 | 4.7 | 30.0 | 6.3 | 1.00 |
| 37 | AB-350RS | 3550 | 5.8 | 37.5 | 6.5 | 1.01 |
| 45 | AB-420 | 3550 | 7.5 | 46.5 | 6.2 | 1.03 |
| 55 | AB-480R | 3550 | 8.7 | 54.8 | 6.3 | 1.00 |
| 75 | AB-600R | 3550 | 11.1 | 69.3 | 6.2 | 0.92 |
| 90 | AB-780R | 3550 | 14.3 | 89.7 | 6.2 | 1.00 |
| 90 | AB-830 | 3550 | 15.5 | 99.9 | 6.4 | 1.11 |
| 110 | AB-1030R | 3550 | 18.1 | 118.5 | 6.5 | 1.08 |
| 132 | AB-1200R | 3550 | 24.2 | 141.2 | 5.8 | 1.07 |
| 160 | AB-1320 | 3550 | 26.4 | 174.1 | 6.5 | 1.09 |
| 185 | AB-1560 | 3550 | 29.0 | 187.7 | 6.4 | 1.01 |
| 185 | AB-1560R | 3550 | 29.0 | 187.7 | 6.4 | 1.01 |
| 250 | AB-2600,I=0.83 | 3550 | 40.7 | 260.2 | 6.3 | 1.04 |
| 315 | AB-2600 | 3550 | 48.4 | 329.0 | 6.7 | 1.04 |
| 315 | AA-5600 | 1750 | 50.6 | 320.1 | 6.3 | 1.02 |
| 400 | AB-3300 | 3550 | 59.2 | 414.3 | 7.0 | 1.04 |

* Belt driven type

1.Based on pressure 0.8MPa

2.Applicable prssure≤1.3 Mpa

3.Air flow rate related to suction condition according to ISO 1217

4.Hanbell reserves the right to modify all the design and specifications. Actual specification may differe from that shown in catalogue due to time lag.

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# AB+ seires

- **Higher** efficiency more than imagine.
- **Special** for 50Hz direct driven type.
- **Heavy-duty** bearing design.Over 50000 hours life time.
- **The** ultimate industrial appearance design.
- **Low** tip speed,higher volumetric efficiency.

## Specification

| Rated power | Model | Speed | Air flow | Shaft power | Specific Power Consumption | S.F |
|---|---|---|---|---|---|---|
| KW | | rpm | $m^3$/min | kw | kw/$m^3$/min | |
| 11 | AB+-077 * | 3500 | 1.0 | 7.5 | 7.5 | 1.00 |
| 15 | AB+-130 * | 3540 | 2.2 | 15.5 | 7.0 | 1.03 |
| 22 | AB+-240 | 2950 | 3.5 | 22.0 | 6.3 | 1.00 |
| 37 | AB+-420 | 2950 | 6.3 | 38.0 | 6.0 | 1.03 |
| 45 | AB+-480R | 2950 | 7.2 | 45.8 | 6.4 | 1.02 |
| 55 | AB+-600R | 2950 | 9.4 | 55.6 | 5.9 | 1.01 |
| 75 | AB+-780R | 2950 | 12.2 | 73.1 | 6.0 | 0.97 |

* Belt driven type

1.Based on pressure 0.8 Mpa

2.Applicable prssure≤1.3 Mpa

3.Air flow rate related to suction condition according to ISO 1217

4.Hanbell reserves the right to modify all the design and specifications. Actual specification may differe from that shown in catalogue due to time lag.

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# ABL seires

- **Specially** designed for glass,weaving and brewery industry using 3～5bar compressed air, reduce the exhaust pressure resistance and increase efficiency.
- **Equipped** with 15kw～250kw low pressure customer's selection. Lower RPM,big air end and big discharge air volume,ensuring high performance of compressor.

## Specification

| Item \ Model | Pressure | Air flow | Shaft power | Specific Power Consumpton |
|---|---|---|---|---|
| | Mpa | $m^3$/min | kw | kw/$m^3$/min |
| AB-240L | 0.3 | 3.7 | 13.5 | 3.7 |
| | 0.4 | 3.7 | 15.4 | 4.2 |
| | 0.5 | 3.6 | 17.3 | 4.8 |
| AB-350RL | 0.3 | 5.5 | 20.5 | 3.7 |
| | 0.4 | 5.4 | 23.9 | 4.5 |
| | 0.5 | 5.4 | 28.1 | 5.2 |
| AB-420L | 0.3 | 6.3 | 24.1 | 3.8 |
| | 0.4 | 6.3 | 27.5 | 4.4 |
| | 0.5 | 6.3 | 30.4 | 4.9 |
| AB-480RL | 0.3 | 7.2 | 27.2 | 3.8 |
| | 0.4 | 7.1 | 31.1 | 4.4 |
| | 0.5 | 7.1 | 34.4 | 4.9 |
| AB-600RL | 0.3 | 9.3 | 37.7 | 4.1 |
| | 0.4 | 9.1 | 39.7 | 4.4 |
| | 0.5 | 9.3 | 46.9 | 5.1 |
| AB-780RL | 0.3 | 12.1 | 44.7 | 3.7 |
| | 0.4 | 11.9 | 50.6 | 4.3 |
| | 0.5 | 12.1 | 58.0 | 4.8 |
| AB-1030RL | 0.3 | 15.1 | 52.4 | 3.5 |
| | 0.4 | 14.8 | 61.8 | 4.2 |
| | 0.5 | 14.6 | 71.8 | 4.9 |

| Item \ Model | Pressure | Air flow | Shaft power | Specific Power Consumpton |
|---|---|---|---|---|
| | Mpa | $m^3$/min | kw | kw/$m^3$/min |
| AB-1200RL | 0.3 | 19.3 | 69.6 | 3.6 |
| | 0.4 | 19.3 | 81.9 | 4.2 |
| | 0.5 | 19.2 | 92.2 | 4.8 |
| AB-1320L | 0.3 | 22.3 | 89.1 | 4.0 |
| | 0.4 | 22.0 | 97.3 | 4.4 |
| | 0.5 | 21.9 | 111.4 | 5.1 |
| AB-1560L | 0.3 | 24.6 | 91.0 | 3.7 |
| | 0.4 | 24.5 | 106.1 | 4.3 |
| | 0.5 | 24.4 | 120.4 | 4.9 |
| AB-1900RL | 0.3 | 30.8 | 112.8 | 3.7 |
| | 0.4 | 30.7 | 130.7 | 4.3 |
| | 0.5 | 30.6 | 146.9 | 4.8 |
| AB-2600L | 0.3 | 40.8 | 167.3 | 4.1 |
| | 0.4 | 40.5 | 187.9 | 4.6 |
| | 0.5 | 40.2 | 208.4 | 5.2 |
| AB-3300L | 0.3 | 51.2 | 202.0 | 4.0 |
| | 0.4 | 50.9 | 226.0 | 4.4 |
| | 0.5 | 50.6 | 248.6 | 4.9 |

1.Based on 2950 RPM
2.Applicable Prssure 0.3~0.5 Mpa
3.Air flow rate related to suction condition according to ISO 1217
4.Hanbell reserves the right to modify all the design and specifications. Actual specification may differe from that shown in catalogue due to time lag.

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# AD-077/210

## Technical Data

| SIZE | AD-077 | AD-210 |
|---|---|---|
| Pitch circle diameter of the male rotor | 50 | 74.5 |
| Lobe combination | 5/6 | 5/6 |
| L/D | 1.6 | 1.6 |
| Air capacity (ISO 1217 ANNEX) ($m^3$/min) | 0.85-2.2 | 1.98-4.2 |
| Max. Working Pressure (bar) | 13 | 13 |
| Min. Working Pressure (bar) | 5 | 4 |
| Max. input power (KW)(in.8bar) | 15 | 30 |
| Recommended. input power (KW) | 11 | 18.5 |
| Max. male rotor speed (rpm) | 7200 | 4200 |
| Weight (kg) | 93 | 155 |

## FEATURE

- **Efficiency**

The complete machine includes oil gas barrel,filter and the minimum pressure maintaining valve.

HB complete machine has small vibration,low noise and long service life due to our precise tooth design.

HB screw compressor possesses good tightness under the guarantee of high-accuracy manufacture and long-time testing.

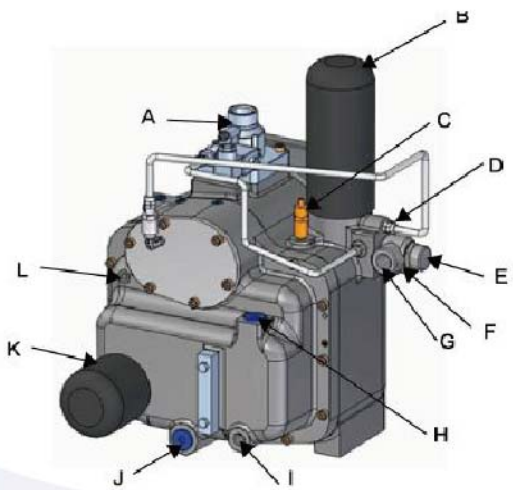
- **Maintenance:**

HB Screw compressors have been designed with the aim of enabling maintenance work with minimum effort. All the components are easy for the user to access and maintain. And we provide maintenance brochure and maintenance tools to guarantee the accurate operation of the compressor.

## Specification

| Model | Pressure | Speed | Shaft power | Air flow | Specific Power Consumption |
|---|---|---|---|---|---|
| | Mpa | Rpm | kW | $m^3$/min | kw/$m^3$/min |
| AD-077 | 0.8 | 3405 | 7.5 | 1.0 | 7.5 |
| | 0.8 | 5138 | 11 | 1.6 | 6.9 |
| AD-210 | 0.8 | 2304 | 15 | 2.4 | 6.3 |
| | 0.8 | 2968 | 18.5 | 3.0 | 6.2 |
| | 0.8 | 3531 | 22 | 3.5 | 6.3 |

### Accessories Table




| | | | |
|---|---|---|---|
| A | Intake control valve | H | Oil plug |
| B | Oil air separator | I | Oil to cooler |
| C | Safety valve | J | Oil drain |
| D | Oil scavenge | K | Oil filter cartridge |
| E | Pressure maintaining valve | L | Temperature probe connection |
| F | Minimum pressure valve | M | Oil from cooler |
| G | Air discharge | N | Oil-sump |

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# AM seires

- **High** Efficiency:IE4 class
- **Slight** Start Current,but High in Start Torque
- **Better** Performance
- **Smaller**,lighter

## Specification

| Power | Motor Parameters | | | Air-End Parameter | S.F |
|---|---|---|---|---|---|
| | Model | IP | Speed | Air flow | |
| kW | Air End | | RPM | $m^3$/min | |
| 7.5 | AM-077 | 23 | 3600 | 1.1 | 1.15 |
| 11 | AM-077 | 23 | 5200 | 1.5 | 1.15 |
| 15 | AM-130 | 23 | 3500 | 2.3 | 1.2 |
| 22 | AM-240 | 23 | 3000 | 3.5 | 1.2 |
| 30 | AM-240 | 23 | 3950 | 4.7 | 1.2 |
| 37 | AM-420 | 23 | 3000 | 6.3 | 1.2 |
| 45 | AM-420 | 23 | 3600 | 7.6 | 1.2 |
| 55 | AM-480R | 23 | 3600 | 8.8 | 1.2 |
| 55 | AM-600R | 23 | 3000 | 9.4 | 1.2 |
| 75 | AM-600R | 23 | 3600 | 11.2 | 1.2 |
| 75 | AM-780R | 23 | 3000 | 12.0 | 1.2 |
| 90 | AM-1030R | 23 | 3000 | 16.1 | 1.2 |
| 110 | AM-1200R | 23 | 3000 | 18.7 | 1.2 |
| 132 | AM-1320 | 23 | 3000 | 21.9 | 1.2 |

1.Based on pressure 0.8 Mpa
2.Applicable Prssure≤1.3 Mpa
3.Air flow rate related to suction condition according to ISO 1217
4.Hanbell reserves the right to modify all the design and specifications. Actual specification may differe from that shown in catalogue due to time lag.

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# Two stage

- **Lower** leakage and lower power consumption than one-stage compressor
- **Advantage** of bearing load,improvement of stability in discharge side clearance.
- **Enhance** cooling strengthen,approaching isothermal compression and reducing power consumption.
- **More** reasonable pressure ratio,higher application pressure
- **Power** saving,highest level energy efficiency,providing positive returns to customers.
- **Lower** occupancy motor S.F. design to provide motor security and longer life-time.
- **Unique** structure design,Using different air end for different efficiency,Enhancing highest efficiency in each stage compressing.

## 50HZ Normal Pressure

| Rated power (kw) | Model | Air flow ($m^3$/min) | Shaft power (kW) |
|---|---|---|---|
| 55 | AB-780A11 | 10.1 | 59.6 |
| 75 | AB-780A22 | 13.0 | 76.1 |
| 90 | AB-1030RA11 | 16.8 | 97.1 |
| | AB-1200RA11 | 19.1 | 108.0 |
| 110 | AB-1560A11 | 20.2 | 115.2 |
| 132 | AB-1900RA11 | 25.6 | 145.6 |
| 160 | AB-2600A44 | 30.0 | 171.0 |
| 200 | AB-2600A33 | 37.6 | 210.9 |
| 220 | AB-3300A11 | 40.0 | 220.0 |
| 250 | AB-5600A11 | 50.0 | 270.0 |
| 315 | AB-5600A22 | 60.9 | 330.1 |

1.Based on pressure 0.8 Mpa and 1490 RPM.
Air flow rate related to suction condition according to ISO 1217
2.Hanbell reserves the right to modify all the design and specifications. Actual specification may differe from that shown in catalogue due to time lag.

## Medium Pressure

| Pressure MPa | Model | Air flow ($m^3$/min) | Rated power (kw) | Motor speed RPM |
|---|---|---|---|---|
| 2 | AA-1560A22 | 20.0 | 185 | 1800 |
| 2.5 | AA-780A11 | 12.8 | 132 | 1490 |
| 2.5 | AA-1560A11 | 23.0 | 160 | 1800 |
| 3 | AA-2600A11 | 35.0 | 355 | 1800 |
| 4 | AA-780B11 | 12.5 | 160 | 1490 |

1.Air flow rate related to suction condition according to ISO 1217
2.Hanbell reserves the right to modify all the design and specifications. Actual specification may differe from that shown in catalogue due to time lag.

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# Power train 50HZ

- **Higher** concentricity,lower noise,less vibration, quality guarantee of both air end and motor
- **Reducing** customer machine assembly procedure and difficulty and labor cost,increasing producing efficiency.
- **End-motor** integrated can reduce delivery time difference derived from different parts and suppliers.
- **Can be** applied 2nd/4th class motor and 50/60Hz various models,Satisfying customer's different demand.
- **Adapted** with High effieciency motor.

## Specification

| Power | Motor Parameters | | | | Air-End Parameter |
|---|---|---|---|---|---|
| | Model | Pole | Speed | Efficiency | Air flow |
| kW | Air End | | Rpm | | $m^3$/min |
| 7.5 | AC-077M | 2 | 2950 | 88.10% | 1.0 |
| 11 | AC-110M | | | 89.40% | 1.5 |
| 15 | AC-130M | | | 90.30% | 2.2 |
| 22 | AC-240M | | | 92.70% | 3.5 |
| 37 | AC-420M | | | 94.20% | 6.0 |
| 55 | AB-600RM | | | 95.00% | 9.0 |
| 75 | AB-830M | | | 95.20% | 12.7 |
| 55 | AB-1200RM | 4 | 1480 | 95.00% | 9.5 |
| 75 | AB-1560M | | | 95.40% | 12.2 |

1.Special design for 50 Hz
2.Applicable Prssure 0.8 Mpa
3.Air flow rate related to suction condition according to ISO 1217
4.Hanbell reserves the right to modify all the design and specifications. Actual specification may differe from that shown in catalogue due to time lag.

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# Power train 60HZ

- **Higher** concentricity,lower noise,less vibration, quality guarantee of both air end and motor
- **Reducing** customer machine assembly procedure and difficulty and labor cost,increasing producing efficiency.
- **End-motor** integrated can reduce delivery time difference derived from different parts and suppliers.
- **Can be** applied 2nd/4th class motor and 50/60Hz various models,Satisfying customer's different demand.
- **Adapted** with High effieciency motor.

## Specification

| Power | Motor Parameters | | | | Air-End Parameter |
|---|---|---|---|---|---|
| | Model | Pole | Speed | Efficiency | Air flow |
| kW | Air End | | Rpm | | $m^3$/min |
| 7.5 | AB-077M | 2 | 3550 | 90.10% | 1.0 |
| 11 | AB-110M | | | 89.40% | 1.5 |
| 15 | AB-130M | | | 92.50% | 2.3 |
| 22 | AB-210M | | | 92.70% | 3.5 |
| 37 | AB-350RSM | | | 94.20% | 5.7 |
| 55 | AB-480RM | | | 95.00% | 8.5 |
| 75 | AB-650RM | | | 95.20% | 12.2 |
| 37 | AB-650RM | 4 | 1775 | 94.30% | 5.8 |
| 55 | AB-1030RM | | | 95.00% | 8.3 |
| 75 | AB-1320M | | | 95.40% | 12.0 |

1.Special design for 60 Hz
2.Applicable Prssure 0.8 Mpa
3.Air flow rate related to suction condition according to ISO 1217
4.Hanbell reserves the right to modify all the design and specifications. Actual specification may differe from that shown in catalogue due to time lag.