

本公司保留更改样本的权利，恕不另行通知。
INFINAIR reserves the right to make changes to this
catalogue in whole or in part without prior notice.

INFINAIR® 英飞

ISQ

离心式管道风机

Inline Square Centrifugal Fan

- 工作范围：风量可达50,000 m³/h,静压可达900 Pa
- 管道送排风、防爆送排风、消防排烟
- 方形外壳设计，叶轮无蜗壳，安装简便
- “翔欣”系列第四代后倾离心叶轮
- 无需使用消音器的高静压风机



INFINAIR® 英飞

上海诺地乐通用设备制造有限公司
INFINAIR CORPORATION

地址：上海市嘉定区外冈镇清能路55号
Add: NO. 55 Qingneng Road, Waigang Town,
Jiading District, Shanghai
邮编PC：201806
电话TEL：86 21 39185688
售后服务电话：400 821 3316
Http: //www.infinair.com.cn



公司 介绍

秉承绿色环保与智能互联的未来发展理念，英飞风机始终坚持在通风领域，坚持不懈投入研发，并以“可靠便利，节能环保，智能互联”作为我们试图为您创造的核心价值。

成立时间：2003年9月
占地面积：33,000 m²
地址：上海市嘉定区清能路55号

服务网络：
公司的营销和服务网络覆盖全国，包括上海、北京、深圳、吉林、辽宁、天津、山西、河南、陕西、山东、江苏、安徽、浙江、福建、重庆、四川、湖南、湖北、广东、广西、海南、贵州、新疆等地区，为客户提供及时的技术支持和可靠的售后服务。

公司愿景：
成为最值得信任的专业空气运动与控制、调节品牌

公司使命：
提供最可靠、便利的空气运动与控制、调节服务

荣誉资质：
高新技术企业
上海著名商标：**INFINAIR®英飞**
上海名牌产品：英飞风机
SGS ISO 9001、ISO 14001、OHSAS 18001管理体系认证

技术实力：
英飞空气动力实验室，荣获CNAS（中国合格评定国家认可委员会）国家实验室认可
中国大陆首家荣获AMCA（国际空气运动与控制协会）认可的实验室
众多产品具备国际AMCA认证、TUV认证、CE认证，国家防爆及消防认证等

Company Info

INFINAIR is committed to providing high-quality products and friendly services to our customers throughout the world. We strive to consistently meet or exceed our quality standards in the design, manufacturing and distribution of products to our customers. We are also determined to be different in caring our environment through innovative ideas.

Established: September, 2003
Area : 33,000m²
Company Address: 55 Qingneng Road, Jiading District, Shanghai, China PRC.

Sales & Service Office:
Our sales and after-sale service networks promise easy access to customers anywhere in China. They are located in various locations:
Shanghai, Beijing, Shenzhen, Jilin, Liaoning, Tianjin, Shanxi, Henan, Shaanxi, Shandong, Jiangsu, Anhui, Zhejiang, Fujian, Chongqing, Sichuan, Hunan, Hubei, Guangdong, Guangxi, Hainan, Guizhou and XinJiang.

Company Vision:
To be the most trusted brand in ventilation industry.

Company Mission:
Provide reliable, convenient air movement controls, operations and services.

Awards and Achievements:
High-tech Enterprise
Renowned Shanghai trademark: **INFINAIR®英飞**
Shanghai Famous Brand Product : INFINAIR FAN
SGS ISO 9001,ISO 14001 and OHSAS 18001 Management Certificates

Technological Strength:
INFINAIR's Air Movement & Sound Laboratory is the first Air Movement and Control Association (AMCA) accredited laboratory in the mainland of China.
It is also certified by Chinese National Accreditation Service for Conformity Assessment (CNAS).
Most of the INFINAIR's products are tested and certified by many international certification bodies such as AMCA, TUV , CE, CCC, CNEX, etc.



中国合格评定国家认可委员会(CNAS)
国家实验室认可证书



Certificate Issued by Chinese National
AccreditationService for Conformity
Assessment (CNAS)



AMCA（国际空气运动与控制协会）
实验室认可证书
Certificate of AMCA (Air Movement and
Control Association) Accredited Laboratory

英飞智能通风技术

- **智能需求感知**：随荷载变动、环境变化动态确定运行目标。
- **智能工况调整**：变频或EC智能控制技术在智能调速软件的动态控制下，性能紧密贴近真实需求。
- **智能实时通讯**：通过多种通讯技术，链接互联网或局域网，实现与中控系统及移动终端的智能通讯。
- **智能预警**：可靠的传感器提供了故障的早期征兆，实现智能预警，保证系统稳定运行。

飞鹰服务

- **联合研发**：通过与客户共同开发，以及质量的先期策划，来快速提供真正有效的解决方案。
- **配套定制**：我们的定制服务通过渐进明晰的过程，帮助您找到精确的需求。
- **敏捷服务**：遍布全国的英飞售后服务工程师，敏捷提供专业服务。

绿色智能环保技术

- **流场模拟分析技术**：
对叶轮气动模型的性能（风量，风压，功耗，噪音）预测提供模拟计算，不必制作样机而预知性能，快速优化。
- **有限元分析技术**：
针对受力和材料特性进行结构可靠性分析。

英飞仿生技术

- **英飞节能仿生**
鸚鵡螺为什么可以轻松浮动和游走？鸟类是如何以极低的能耗翱翔千里？
- **英飞降噪仿生**
猫头鹰的静音飞行，为什么敏感的老鼠也毫无察觉？
自然界生物在千万年进化过程中，如何节约能量进行迁徙，或者在抓捕猎物的时候做到悄无声息？
仿生技术对于英飞风机的研发，提供了重要的灵感。

英飞智能制造技术

- 智能化生产流水线
- 在线测功、动平衡和通讯检测
- 机器人焊接工艺
- 敏捷的精益生产
- 6Σ体系

认证及检测

- **产品普遍通过国内外认证**：
CCCf,AMCA,TUV,CE, ATEX,UL,RoHS,ErP2015等。
- **产品性能及可靠性检测**：
风量，风压，功率，噪音，
高低温耐久，盐雾，淋雨等。

物联

- 矩阵互联
- 中控互联
- 终端互联



INFINAIR's Intelligent Ventilation Technology

- **Smart Needs Identification**:
It can dynamically adjust the operation target to the changing load and environment.
- **Intelligent Adjustment** :
The use of inverter or EC smart control technology can make the fans achieve best results under the control of the intelligent speed regulation system.
- **Intelligent Real-time Information**:
Individual workstations are linked to the central control system through internet or local area network.
- **Intelligent Detection System**:
Reliable sensors can detect early symptoms and notify the user, ensuring stable operation.

INFINAIR's After-sales Service

- **Joint Research & Development**
The Joint R&D can provide customer the necessary support and guidance during the initial research progress.
- **Customization**
Our products are fully customizable. We are able to satisfy customer requirements on an individual basis.

Green Smart Technology

- **CFD Simulation & Analysis**
A computer-aided air movement simulation model can calculate the efficiency of the fan based on the number of blades, blade angle, width, and sound level.
- **Finite Element Analysis Technology**
To analyze and provide accurate prediction of how material is likely to respond when subjected to structural and/or thermal loads.

INFINAIR's Bionic Technology

- **INFINAIR's Bionic Energy Conservation**
We develop energy saving products by observing behaviors from the animal kingdom. How can birds fly thousands of miles with extremely low energy consumption?
- **INFINAIR's Bionic Sound Reduction**
Why Owls can fly so silently? Even mice are not being able to detect their approach?
The research and development of INFINAIR's products are heavily inspired by the animal evolution over the past millenniums. We have learnt how energy and sound are being able to conserve from their amazing changes.

INFINAIR's Intelligent Fabrication

- Intelligent fabrication process
- Power test, dynamic balancing test and communication test performed on the production line
- Robotic welding technology
- Lean production
- 6Σ system

Certifications and Tests

- **Most of the products are certificated by**:
CCCf, AMCA, TUV, CE, ATEX, UL, RoHS and ErP2015.
- **Performance and Reliability Tests**:
Airflow, Air Pressure, Power, Sound Level, Temperature Durability, Salt Spray and Water Proof Test, etc.

Connectivity

- Matrix Connection
- Central Connection
- Terminal Connection

“翔欣™ ” 第四代叶轮功效

Highlights of the 4th Generation of Wind-Surfer™ wheel

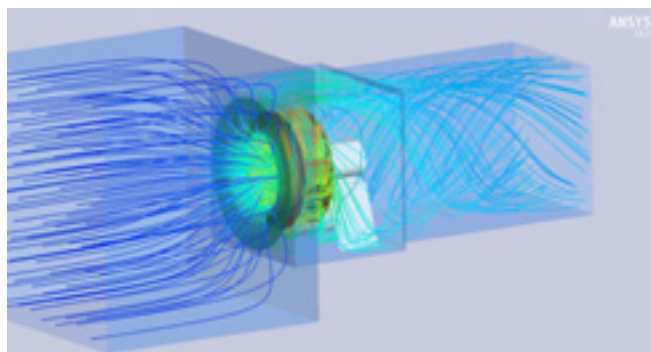
“翔欣™ ” 第四代叶轮

The 4th Generation of Wind-Surfer™ wheel

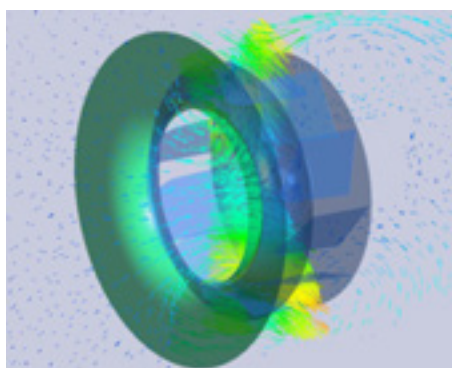
- 优秀的气动特性和声音特性
Excellent sound and air performance
- 高效区宽、不超载
Wide performance range of high efficiency and non-overloading
- 平衡等级高达G2.5（普通产品仅为6.3）
The balance quality grade as high as G2.5 (Just G6.3 for general products)

空气动力性能设计

Air Performance Design



- 采用CFD流场模拟技术优化设计，反复验证
Optimized design through CFD flow field simulation and repeated tests
- 流道控制：精密配合，对气流约束性强
Flow passages control: airflow regulated well through precise synergy
- 前盘与入口文丘里管符合流场特性
Wheel cone and inlet cone in conformity with flow field characteristics
- 叶片安装角度得以优化
Optimized mounting angle for blades



结构性能设计

Structural Design

- 采用FEA进行应力分析，提升性能
Stress analysis by FEA method for better performance
- 根据规格选择不同的加强结构，提升可靠性
Various additional strengthening for different specifications for greater reliability
- 采用铆接技术，无应力产生
Riveting technology used to avoid stress

工艺先进

Advanced Process

- 入口文丘里管和前盘旋压工艺确保流线气动特性
Wheel cone and inlet cone formed by spinning to ensure good air performance
- 入口文丘里管：取代导流圈，确保气流顺畅
Inlet Cone: replacing the inlet bell to ensure smooth airflow
- 叶片：一次冲压成型确保加工品质
Blades: formed by punching to ensure quality
- 工装：专门夹具确保叶片安装定位精确
Tooling: dedicated fixtures to ensure the precise mounting position of blades

叶轮改进

Wheel Improved

- 持续改进：叶轮已经进入第4代
Continuous Improvement: upgraded to the 4th generation of wheel
- 较3代相比：同等参数性能提升5-10 %
Compared with the 3rd generation: overall performance improved by 5-10 %
- 较3代相比：同等参数噪音下降2-3 dB(A)
Compared with the 3rd generation: overall sound level reduced by 2-3 dB(A)

产品特点

Product Features

性能范围广同时更经济

Wide Performance Range and More Economical

- 翔欣四代离心叶轮，压力范围广，噪音低于第三代产品
The 4th generation of centrifugal Wind-Surfer™ wheel possessing a wider pressure scope and lower sound compared with the 3rd generation
- 叶轮直径可达1米，减少台数，降低前期投资
The wheel diameter as long as one meter, requiring fewer fans and lower primary investment
- 无需蜗壳，风机体积缩小，方便安装
No scroll needed and the fan size reduced, making installation easier

方形设计多出口方向：节省安装费

Square Design with Different Discharge Direction Options: Mounting Costs Reduced

- 标配正方形进风口套接法兰：免“天圆地方”的转接头及法兰圈
Square inlet/outlet flanged sleeve: connector and ring flange now not used
- 节省风管连线费用，缩短施工周期
Lower air duct connection costs and faster installation
- 电机可以在不同位置安装
Different mounting positions available for the motor
- 多出口方向：设计施工更加灵活方便
Different discharge positions: ease of design and installation

解决声音问题的方案：离心管道形式

Sound Solution: Centrifugal Inline Type

- 与轴流 / 混流类的本质区别：转速有效降低20%-30%
Fundamental difference from axial/mixed flow types: speed reduced by 20-30%
- 声压级区间下移10 ~ 15个分贝
Range of sound pressure level down by 10-15 dB(A)
- 从最根本的角度解决了声音的问题
A fundamental solution to sound

AMCA标签：声音和空气动力性能双认证

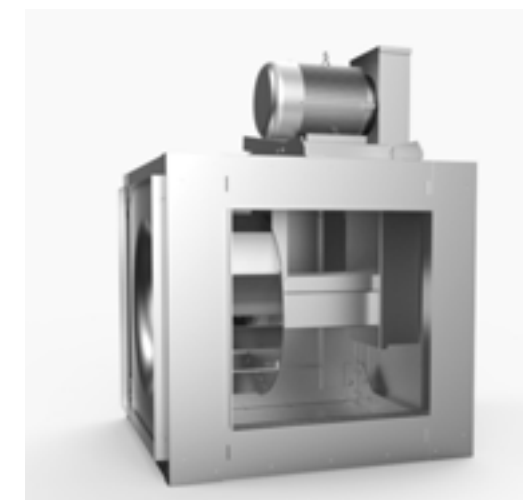
AMCA Seal: for Sound and Air Performance

- ISQ产品性能已经通过AMCA声音和空气动力学认证
ISQ fans certified by AMCA for Sound and Air Performance
- 设备贴有AMCA声音与空气动力性能认证标签
AMCA Seal for Sound and Air Performance tagged on fans

无蜗壳结构

No Scroll

- 空气直接吸入叶轮加压，改善气流组织
Air directly pressurized in wheel and airflow pattern improved
- 直联型不发尘：适用微电子、医药食品工业的洁净室
Direct drive and dust-free: suitable for clean rooms in microelectronics, food and medical industries



可选配件
Optional Accessories

重力式止回风阀
Gravity Backdraft Damper

专业设计的重力式止回风阀含前后接套法兰以及保证叶片正常开启的套箱，独立于风机本体安装。
The professionally designed gravity backdraft damper comprises inlet/outlet flanged sleeves and a box that ensures damper blades start normally. The damper is installed independent of the fan body.

45° 防雨罩（带防鸟网）
45 Degrees Rain Cover (With Bird Screen)

风机室外安装时，能有效防止雨水从进出风口进入风机内部。
When the fan is installed outside, the rain cover can effectively prevent rain infiltration through the inlet or outlet.

电机护罩（仅适用皮带驱动型）
Motor Cover (only for belt drive type)

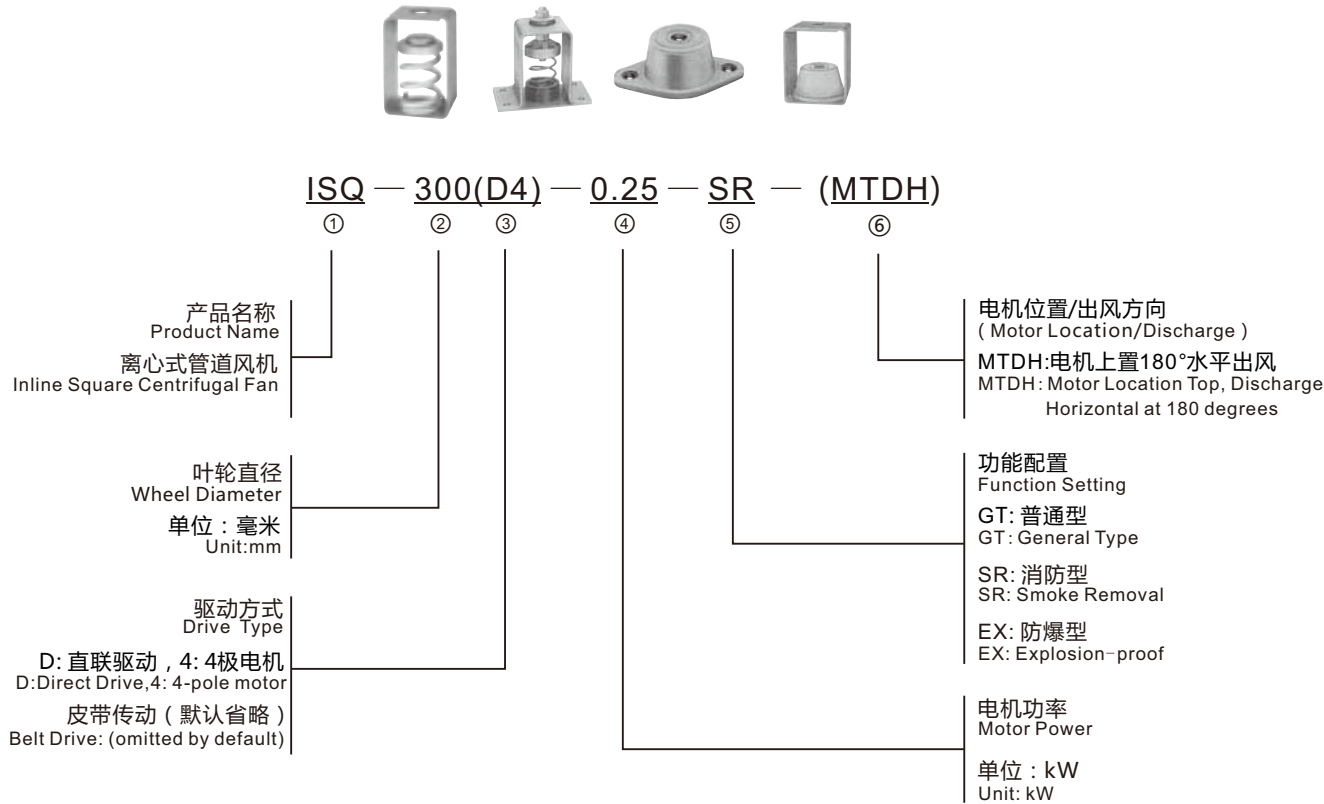
带有通风窗，在保护电机同时及时散发热量，延长电机寿命，并降低电机噪音。
The equipped air window helps to dissipate heat, extend motor life and reduce sound.

消音内衬
Soundproofing Egg Crate Foam Wall Tiles

在风机内壳附加高级消音材料，将风机声压级降低6-8 dB(A)。
Premium-grade acoustical materials are placed on the inner shell of the fan, reducing sound pressure level by 6~8 dB(A).

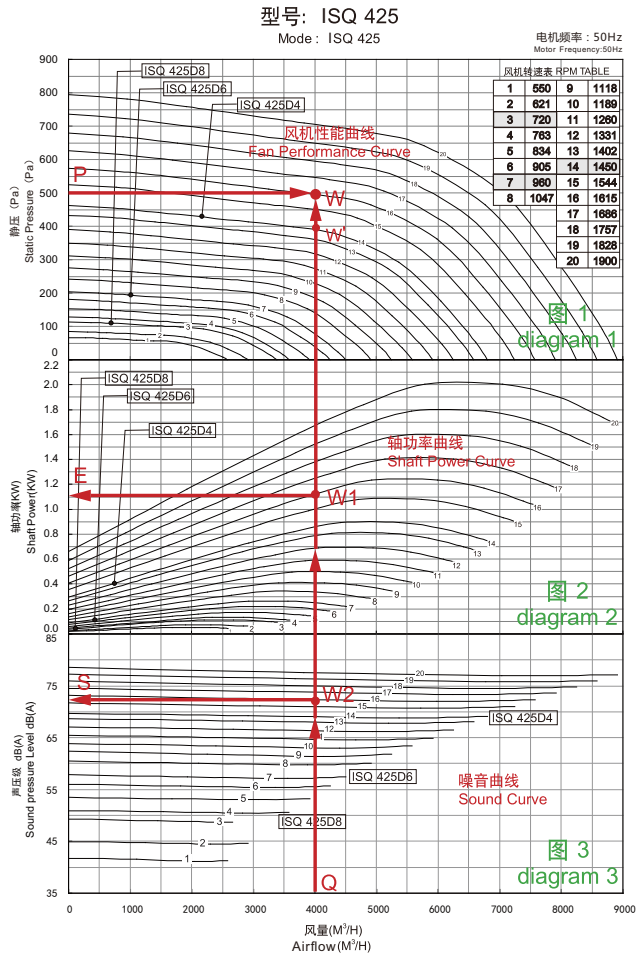
减振器
Vibration Isolators

减振器可选择吊装或落地安装型，材料可选丁氰橡胶或弹簧。
Vibration isolators can be hung or floor-mounted. Neoprene or spring isolators are available.



样本说明
Catalog Introduction

- 每个型号风机由一组曲线表示不同转速下的性能。
- 粗曲线代表风机为直联型，即叶轮与电机直接连接（直联机型的型号已经在图中单独用箭头标出）。所有直联型号均应在叶轮直径后加字母D以及电机极数。
- 细曲线代表使用皮带连接，通过选择两个皮带轮不同直径配比来得到所需转速，而电机采用2、4、6极的。
- 轴功率曲线显示风机实际耗用的电能。
- 声压级曲线显示距离风机1.5 米的噪音。
- Fans of each model have performances at different speeds described by curves.
- Curves shown in boldface represent fans of direct drive type which means the wheel is directly driven by the motor (models of these fans are shown in arrows). A letter D and the number of motor poles are added to the wheel diameter of all the direct drive fans.
- Curves shown in lightface represent fans of belt drive type. The required wheel RPM is reached through using two pulleys of different diameter ratios. The motor is of two, four and six poles.
- Shaft Power Curve shows the actual power consumption of fans.
- Sound Pressure Level curve shows the sound level 1.5meters from the fan.



所认证的性能基于B类安装方式：自由入口，风管出口。功率参数已经包含传动损失。样本显示的声功率级Lw1A基于301号出版物的B类安装类型：自由进口，风管出口。声功率级参数单位为分贝，以10⁻¹² 瓦为基准根据AMCA301号出版物进行计算，参数不包含风管端部修正。dB(A) 声压级参数基于每个倍频程在1.5 米距离处按照11.5 dB衰减计算。根据规定，AMCA 国际只认证声功率级参数，不认证声压级参数。

曲线选型举例：风量：4,000 m³/h
全压：500 Pa
第一步：自给定的风量(图Q点：4,000 m³/h)出发作垂直线，自给定静压点（图P点：500 Pa）作水平线，其交点（图W点）即为“工作点”，寻找离该点最接近的性能曲线（16号曲线），其转速为1,615 转/分钟。如“工作点”离性能曲线较远，请选择其他型号重复“第一步”直到找到比较接近“工作点”的性能曲线。

第二步：该垂直线与相应转速的轴功率曲线的交点（图W1点），自此交点（图W1点）作水平线与轴功率轴相交，其交点（图E点：约为1.1 kW，即为实际功耗，代表工作所需的电能，根据功率储备系数(选择1.15)计算所需功率应选择1.5 kW电机。

第三步：该垂直线与相应转速的声压级曲线的交点（图W2点），自此交点（图W2点）作水平线与声压级轴相交，其交点（图S点：约为73 dB(A)），即为W工作点的噪音。

第四步：根据上述步骤，该型号初步选定为 ISQ-425-1.5，皮带驱动，转速为1,615 RPM。如果希望更低的功率，可参考较大型号的风机进行比较，但初期投资会增加。

第五步：进一步地，如果需求为4,000 m³/h、400 Pa静压，则容易发现W'点距离14号加粗曲线（代表直联风机，1450 RPM，4极电机）很接近，则按照箭头标明的型号为ISQ-425D4配1.1kW电机，其性价比更高。

备注：储备系数由选型人员根据实际需求自己决定，一般取1.15。

Example: Airflow: 4,000 m³/h Static Pressure: 500Pa

Step One: A vertical line is drawn from the given air airflow (Point Q: 4,000 m³/h) and a horizontal line from the given static pressure (Point P: 500 Pa). The intersection point (Point W) is the operating point. Then find a performance curve closest to Point W (in this case, it is curve 16 at 1,615 RPM as shown). If the operating point is far from the performance curve, please choose other models and repeat the same procedure as above until the right performance curve can be found.

Step Two: From the intersection point (Point W1) between the vertical line and Shaft Power Curve is drawn a horizontal line. Its intersection point with the Shaft Power axis (Point E: about 1.1 kW) represents the actual power consumption. Based on the coefficient of power reserve (1.15), the required power of 1.5 kW is figured out.

Step Three: From the intersection point (Point W2) between the vertical line and Sound Pressure Level curve is drawn a horizontal line. Its intersection point with the Sound Pressure Level axis (Point S: about 73 dB (A)) represents the sound level for the operating point of W.

Step Four: From the above steps, the model of the fan is identified as ISQ-425-1.5 of belt drive type at 1,615 RPM. If fans of lower shaft power are preferred, please refer to larger fans for further comparison. It should be noted that the primary investments for larger fans would increase.

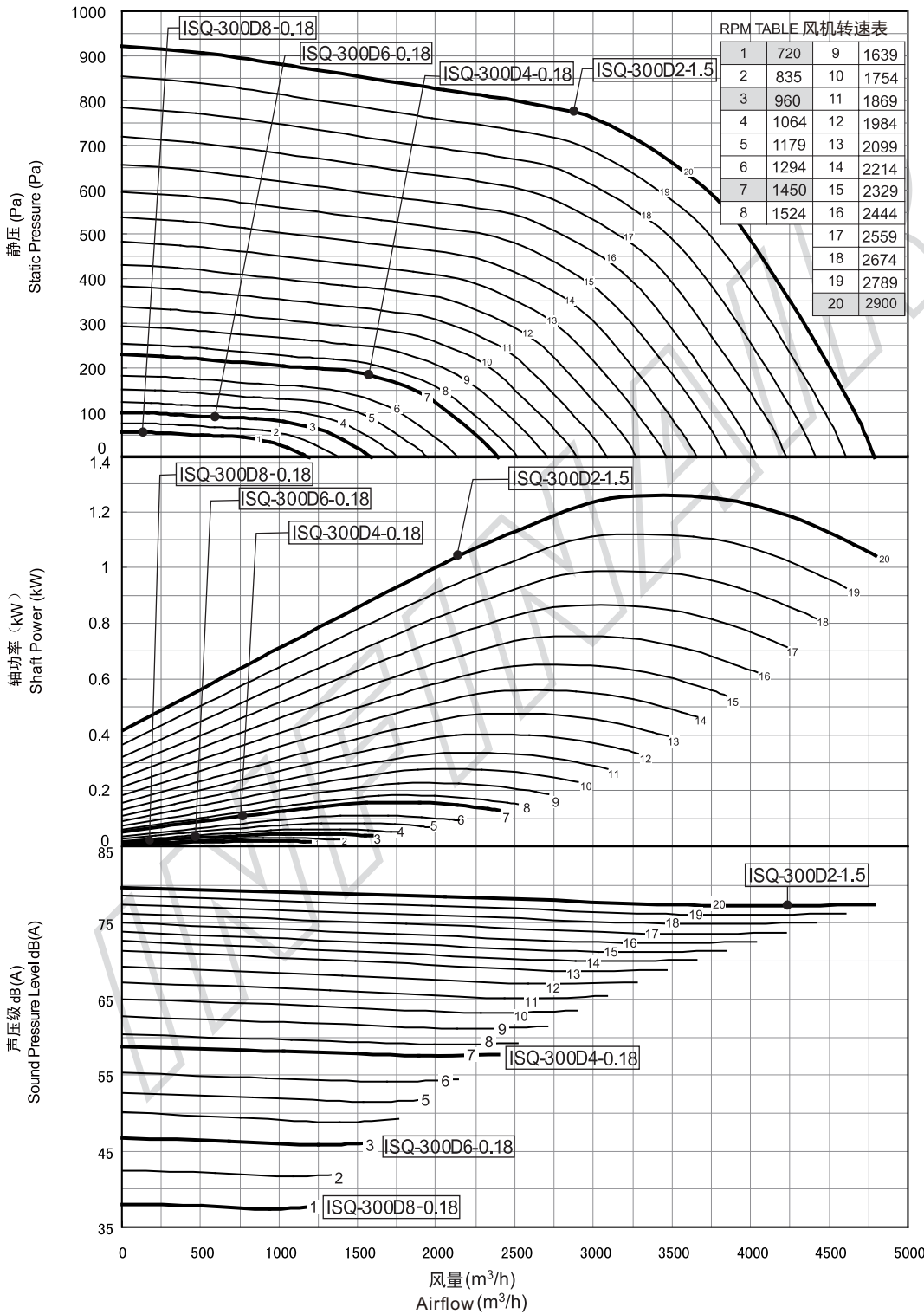
Step Five: If a fan of 4,000 m³/h at 400Pa static pressure is needed, it is easy to know that Point W' is very close to curve 14 shown in boldface (indicating a direct drive fan of 4poles at 1,450 RPM). Then as is shown by the arrow, the ISQ-425D4 fan equipped with a 1.1 KW motor is finally identified, which is a much more cost-effective choice.

Note: The coefficient of power reserve is determined by model selection staff based on actual needs (typically 1.15).

性能曲线
Performance Curve

型号: ISQ-300
Model: ISQ-300

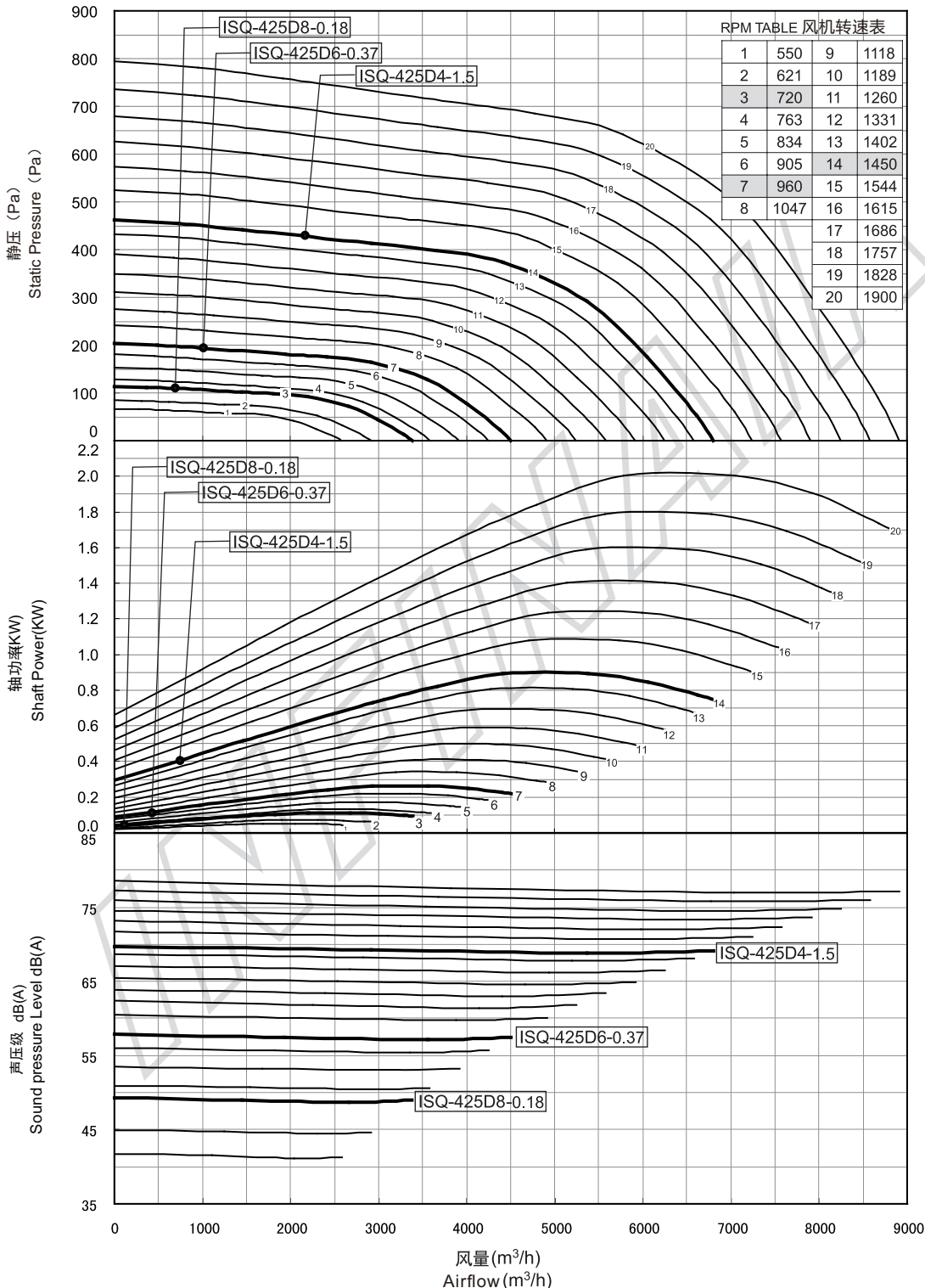
电机频率: 50Hz
Motor Frequency: 50Hz



Performance certified is for installation type B-free inlet, duct outlet. Power rating (kW) includes transmission losses. Values shown are for inlet LwIA sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction. dB(A)A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.

型号: ISQ-425
Model: ISQ 425

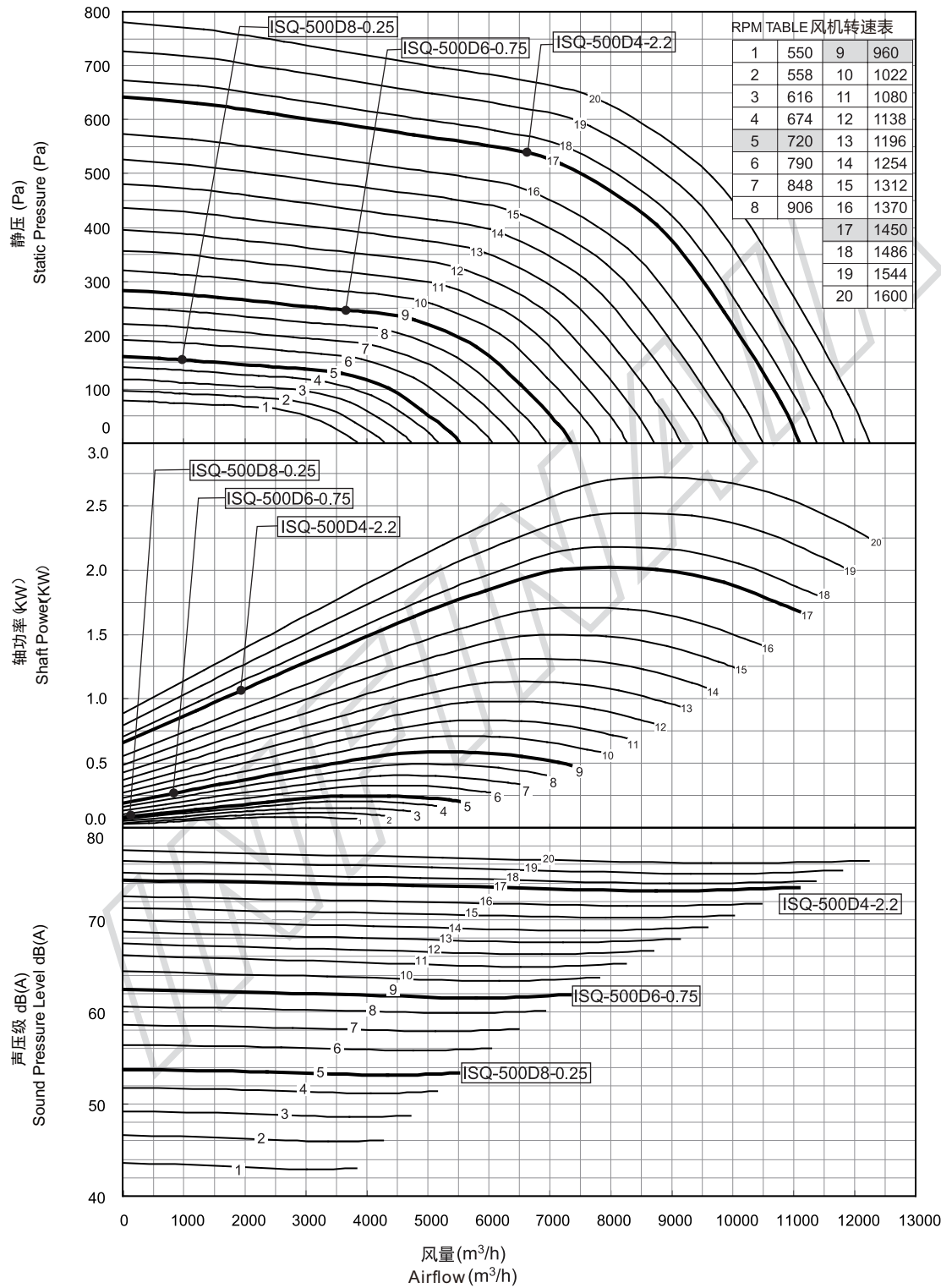
电机频率: 50Hz
Motor Frequency: 50Hz



Performance certified is for installation type B-free inlet, duct outlet. Power rating (kW) includes transmission losses. Values shown are for inlet LwIA sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction. dB(A)A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.

型号: ISQ-500
Model: ISQ-500

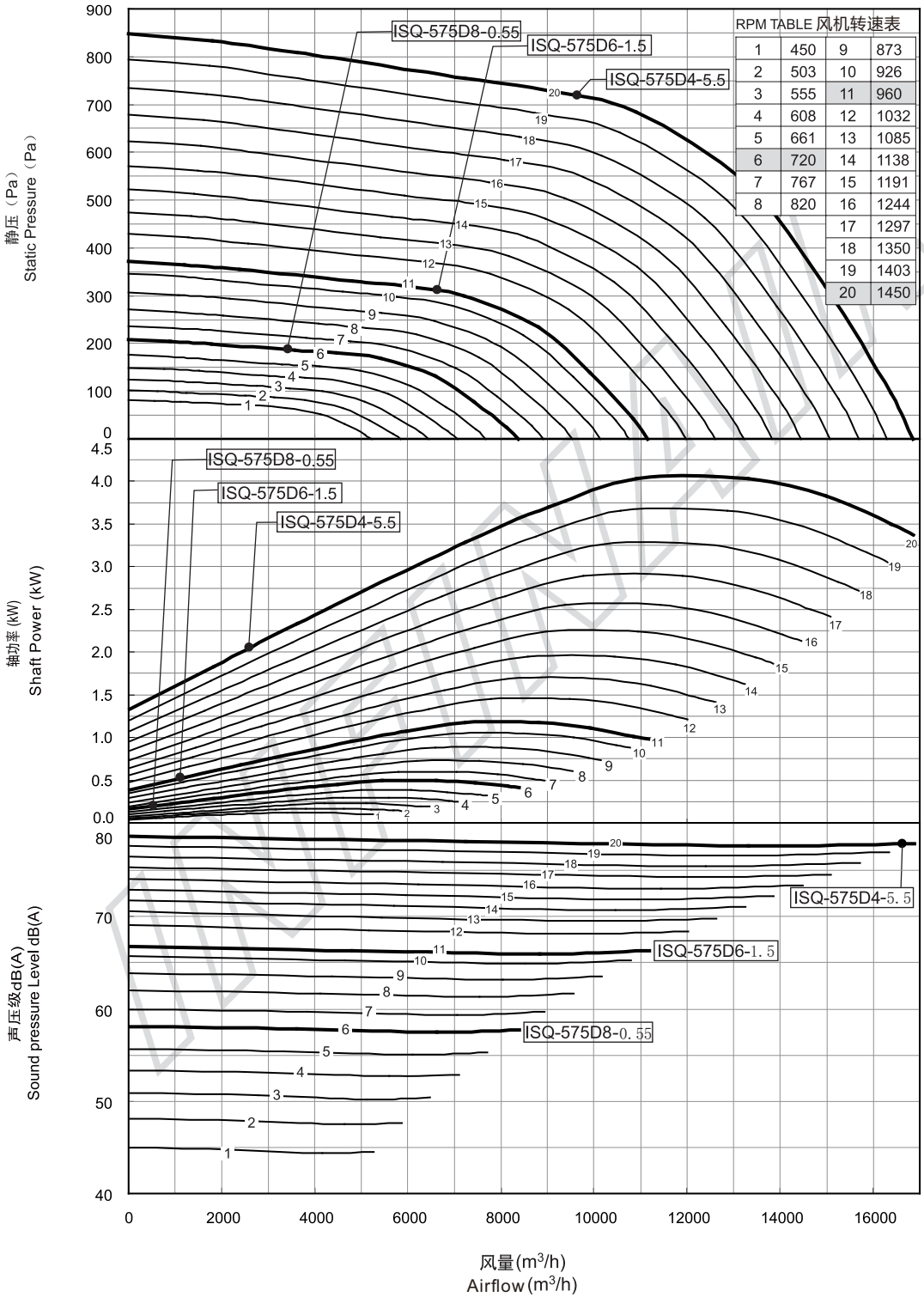
电机频率: 50Hz
Motor Frequency: 50Hz



Performance certified is for installation type B-free inlet, duct outlet. Power rating (kW) includes transmission losses. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction. dB(A)A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.

型号: ISQ-575
Model: ISQ-575

电机频率: 50Hz
Motor Frequency: 50Hz

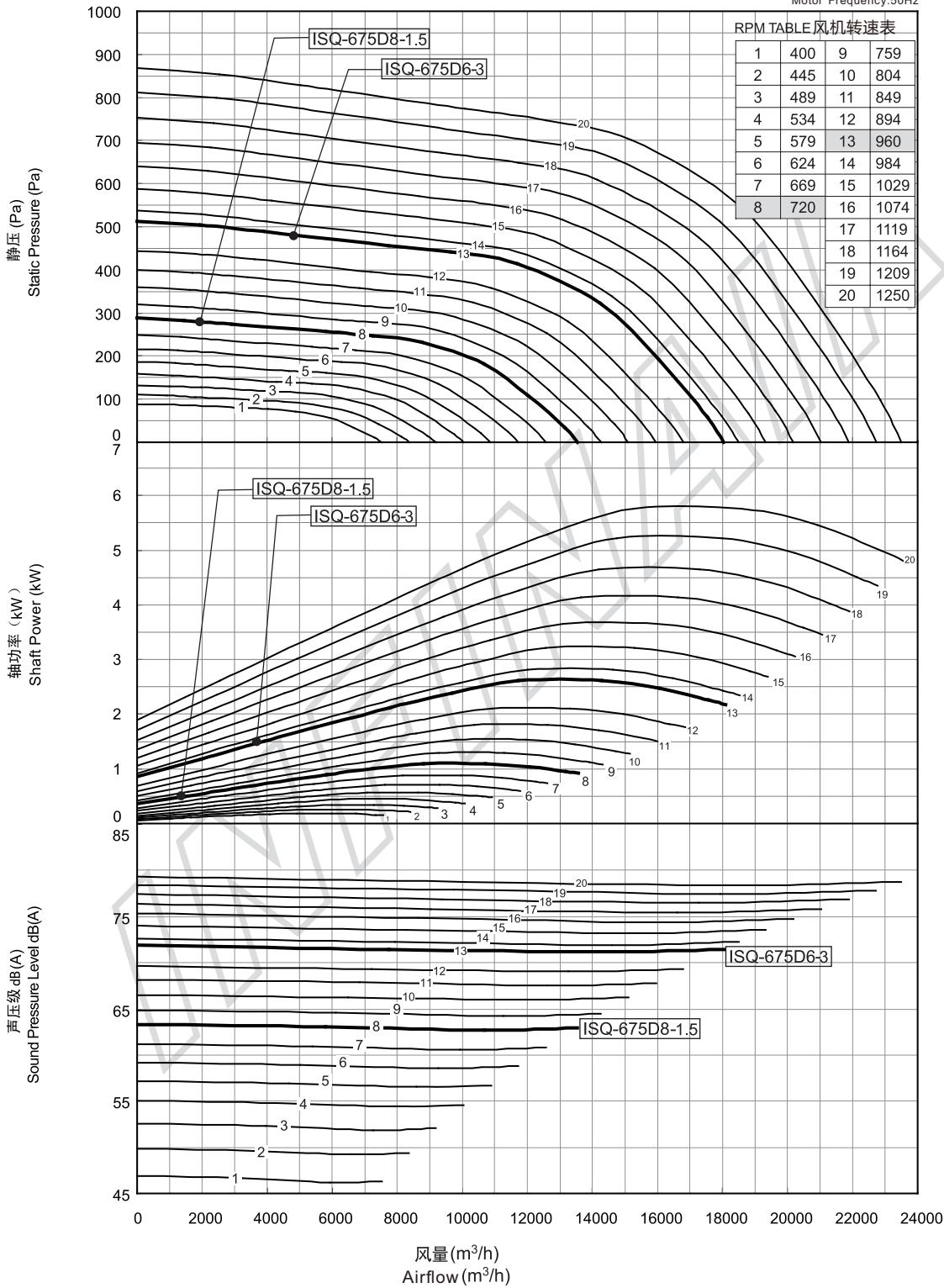


Performance certified is for installation type B-free inlet, duct outlet. Power rating (kW) includes transmission losses. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction. dB(A)A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.

型号: ISQ-675

Model: ISQ-675

电机频率: 50Hz
Motor Frequency: 50Hz

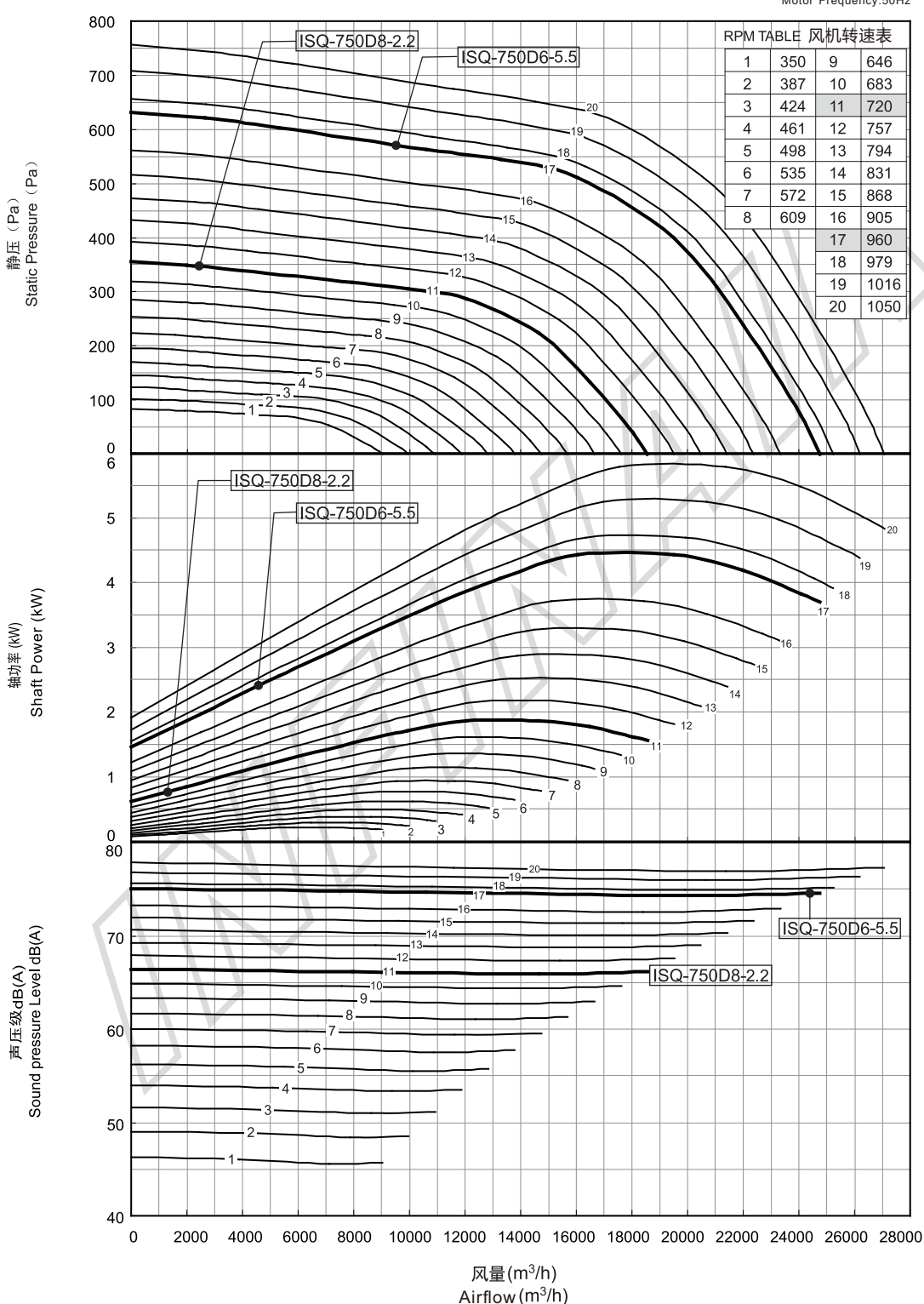


Performance certified is for installation type B-free inlet, duct outlet. Power rating (kW) includes transmission losses. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction. dB(A)A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.

型号: ISQ-750

Model: ISQ-750

电机频率: 50Hz
Motor Frequency: 50Hz

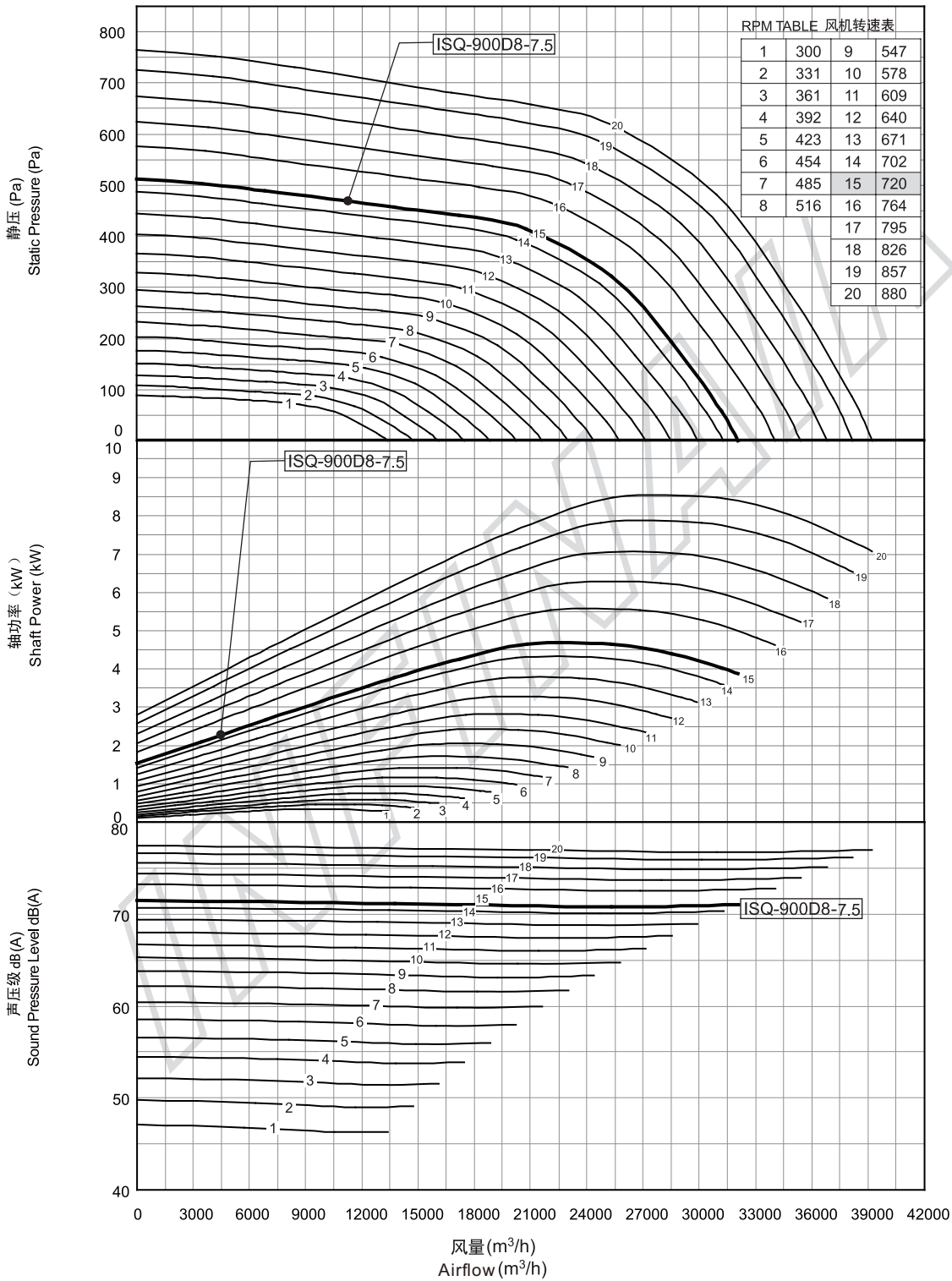


Performance certified is for installation type B-free inlet, duct outlet. Power rating (kW) includes transmission losses. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction. dB(A)A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.

型号: ISQ-900

Model: ISQ-900

电机频率: 50Hz
Motor Frequency: 50Hz

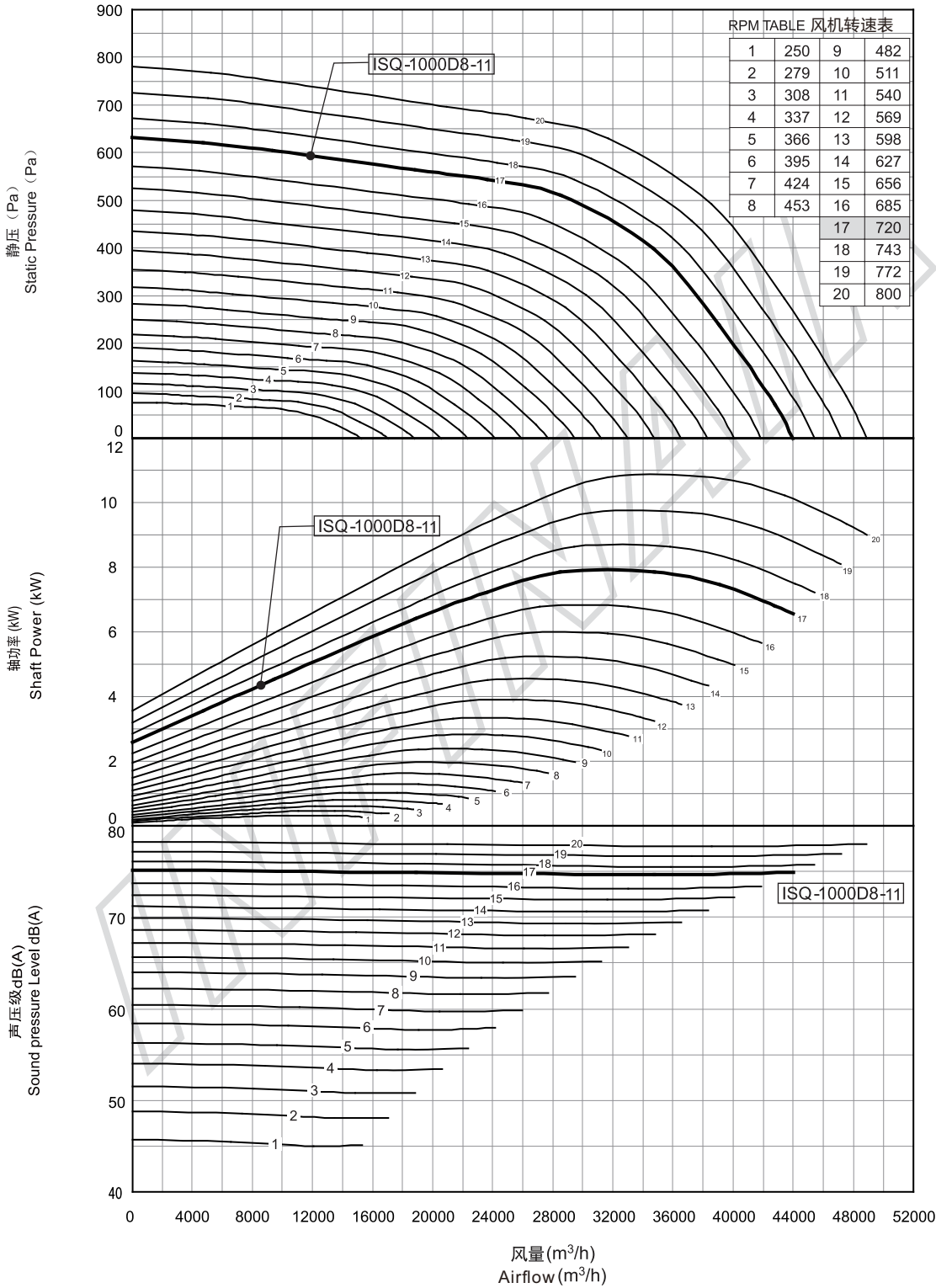


Performance certified is for installation type B-free inlet, duct outlet. Power rating (kW) includes transmission losses. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction. dB(A)-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.

型号: ISQ-1000

Model: ISQ-1000

电机频率: 50Hz
Motor Frequency: 50Hz



Performance certified is for installation type B-free inlet, duct outlet. Power rating (kW) includes transmission losses. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction. dB(A)-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.

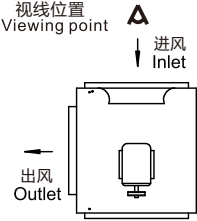
可选出风方向
Different Discharge Direction Options

皮带型 Belt Drive

MTDH 水平出风 Horizontal Discharge	MTDL 左出风 Left Discharge	MTDR 右出风 Right Discharge	MTVTDLR 上进风，左右出风 Top Intake, L&R Discharge
MLDT 上出风 电机左置 Top Discharge, Motor Location Left Side	MRDT 上出风 电机右置 Top Discharge, Motor Location Right Side	MTDLR 左右出风 L & R Discharge	MTVTDLR 下进风，左右出风 Bottom Intake, L&R Discharge
MLDB 下出风 电机左置 Bottom Discharge, Motor Location Left Side	MRDB 下出风 电机右置 Bottom Discharge, Motor Location Right Side	MLDTB 上下出风 电机左置 Top&Bottom Discharge, Motor Location Left Side	MRDTB 上下出风 电机右置 Top&Bottom Discharge, Motor Location Right Side
MRVTDB 上进风，下出风 Top Intake, Bottom Discharge	MTVTDR 上进风，右出风 Top Intake, Right Discharge	MTVTDL 上进风，左出风 Top Intake, Left Discharge	说明：左上角为出风方向/电机位置代码 Note: The codes at the top left corner indicate the discharge and motor location
MLVBDB 下进风，上出风 Bottom Intake, Top Discharge	MTVBDB 下进风，右出风 Bottom Intake, Right Discharge	MTVBDB 下进风，左出风 Bottom Intake, Left Discharge	字母含义 Letter Specification M:Motor T:Top D:Discharge L:Left R:Right H:Horizontal B:Bottom

直联型 Direct Drive

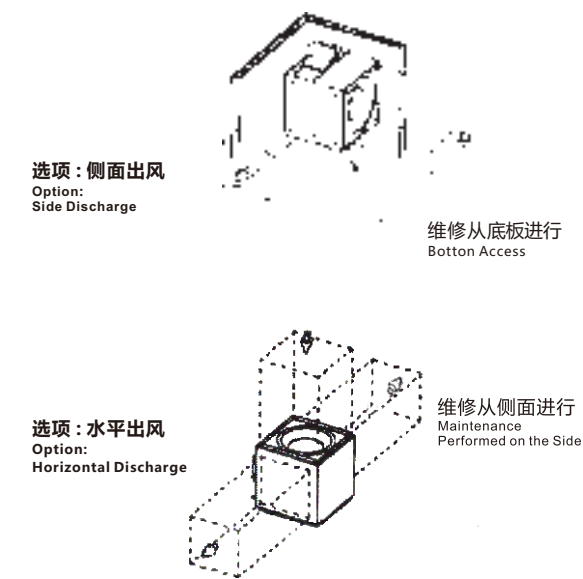
DDH 水平出风 Horizontal Discharge	DDL 左出风 Left Discharge	DDR 右出风 Right Discharge	DVTDLR 上进风，左右出风 Top Intake L&R Discharge
DDT 上出风 Top Discharge	ddb 下出风 Bottom Discharge	DDLRL 左右出风 L & R Discharge	DVBDBLR 下进风，左右出风 Bottom Intake, L&R Discharge
DVTDB 上进风，下出风 Top Intake, Bottom Discharge	DVTDL 上进风，左出风 Top Intake, Left Discharge	DVTDR 上进风，右出风 Top Intake, Right Discharge	
DVBDB 下进风，上出风 Bottom Intake, Top Discharge	DVBDBL 下进风，左出风 Bottom Intake, Left Discharge	DVBDBR 下进风，右出风 Bottom Intake, Right Discharge	DDLR 直联驱动，出风方向左、右 Direct Drive, Left and Right Discharge 字母含义 Letter Specification D:Direct Drive D:Discharge L:Left R:Right H:Horizontal B:Bottom



图例：上进风，右出风（MTVTDR）
安装方式：垂直（竖立/立式）
电机位置：电机顶置
进风方向：上
出风方向：右
注意：电机位置和出风方向为进风口侧观察的结果（如图所示）

Example: Top Intake, Right Discharge (MTVTDR)
Mounting style: Vertical (Erect/Upright)
Motor location: Motor Location Top
Intake: Top
Discharge: Right
Note: The motor location and discharge direction are determined by viewing from the fan inlet end (as shown).

机组尺寸及安装
Unit Size and Installation



风机的固定
Fan Fastening

ISQ系列产品可以用于水平安装，垂直安装，电机可以置于风机侧面、上方或者下方。随机附带安装撑脚，可固定在风机顶部通过丝杆与吊装减振器连接，也可固定在风机底部，直接与座装减振器相连。（减振器与丝杆他方提供）。

The ISQ fan can be installed horizontally or vertically. The motor can be mounted atop, on the sides or at the bottom of the fan. The ISQ fan comes with supporting feet that can be fixed atop the fan and connected with the hanging isolators through screw rods. Also, they can be fixed at the bottom and connected with base isolators. (Users are to supply vibration isolators and screw rods).

改变出风方向

ISQ系列产品允许气流从电机以及相对侧以外的任何一个侧面流出，并能在现场改变出风口方向，将新的出口方向上的检修板拆掉加装法兰，将原出口法兰封住（现场加工板材即可）。

Chang in discharge directions

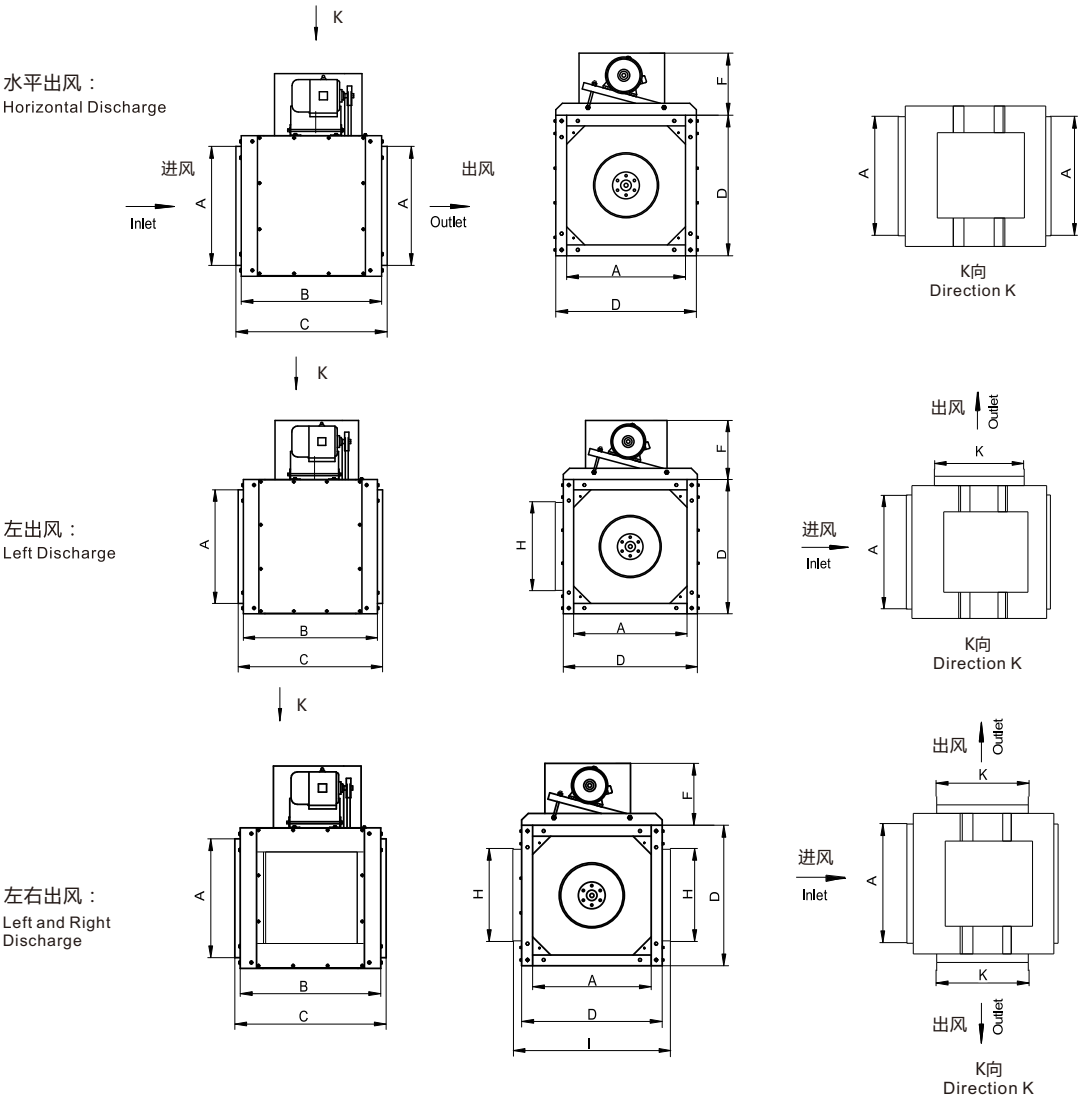
The ISQ fan has discharge positions on any sides except the motor side and its opposite side and the opposite side of the inlet. The discharge directions can be changed onsite. To do this, the access panel of the new desired discharge direction is removed for an added flange and the original discharge flange is sealed (This can be done onsite).



电机重量表
Motor Weight Table

功率(kW) Power (kW)	电机重量 (kg) Motor Weight(kg)			
	2P	4P	6P	8P
0.18	14	13.5	14	16
0.25	14.5	14	14.5	17
0.37	15	14.5	16	24
0.55	15.5	15	17	28
0.75	15	16	22	30
1.1	16	21	24	32
1.5	21	23	32	40
2.2	24	33	41	64
3	33	35	63	78
4	41	41	72	105
5.5	63	65	81	115
7.5	70	76	118	145
11	110	118	145	160
15	122	137	180	235
18.5	142	170	231	290

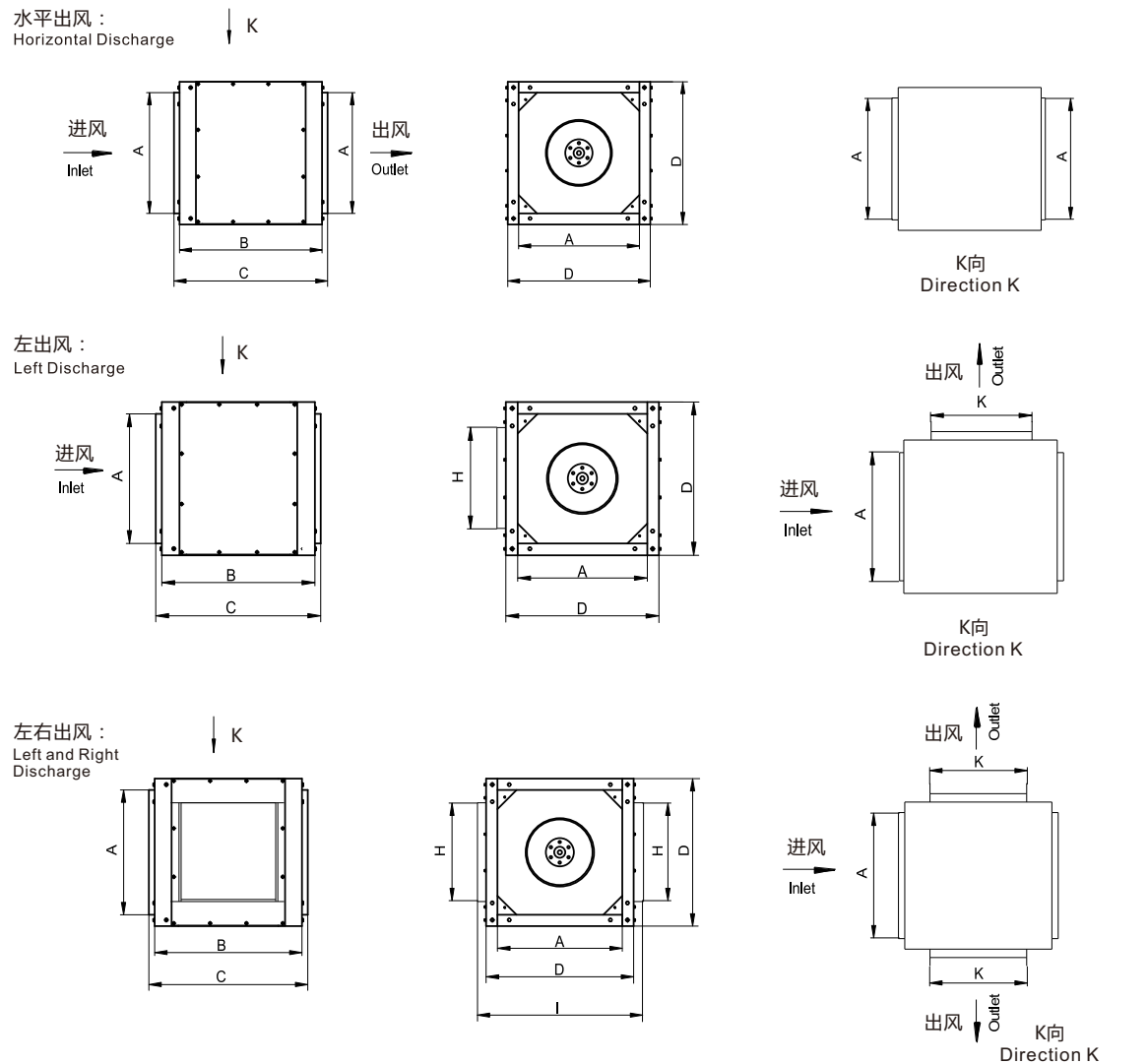
风机尺寸(皮带型)
Fan Size(Belt-Drive)



单位(Unit):mm	A	B	C	D	F	H	K	G	I	重量(Weight)
ISQ300	403	500	550	470	530(max)	325	325	495	520	37
ISQ425	553	650	700	650	530(max)	455	455	675	700	61
ISQ500	654	780	830	750	530(max)	505	505	775	800	89
ISQ575	754	880	950	850	635(max)	555	555	885	920	112
ISQ675	904	950	1020	1000	700(max)	605	605	1035	1070	145
ISQ750	1004	980	1050	1100	700(max)	605	605	1135	1170	165
ISQ900	1174	1070	1170	1270	700(max)	705	705	1320	1370	225
ISQ1000	1304	1175	1275	1400	700(max)	805	805	1450	1500	261

- 注：1.重量不包含电机。
2.上进风，下出风/下进风，上出风的尺寸参考**水平出风尺寸**。
3.右出风/上出风，电机左置/上出风，电机右置/下出风，电机左置/下出风，电机右置/上进风，左出风/上进风，右出风/下进风，右出风/下进风，左出风的尺寸参考**左出风尺寸**。
4.上下出风，电机左置/上下出风，电机右置/上进风，左右出风/下进风，左右出风的尺寸参考**左右出风尺寸**。
1.Motor is not included in the Weight above.
2.The dimensions of Top Intake, Bottom Discharge/Bottom Intake and Top Discharge refer to **Dimensions of Horizontal Discharge**.
3.The dimensions of Right Discharge /Top Discharge, Motor Location Left / Top Discharge, Motor Location Right / Bottom Discharge, Motor Location Left/ Bottom Discharge, Motor Location Right /Top Intake, Left Discharge / Top Intake, Right Discharge/ Bottom Intake, Right Discharge/ Bottom Intake, Left Discharge refer to **Dimensions of Left Discharge**.
4.The dimensions of Top and Bottom Discharge, Motor Location Left / Top and Bottom Discharge, Motor Location Right / Top Intake, Left and Right Discharge/Bottom Intake, Left and Right Discharge refer to **Dimensions of Left and Right Discharge**.

风机尺寸(直联型)
Fan Size(Direct-drive)



单位(Unit):mm	A	B	C	D	H	K	G	I	重量(Weight)
ISQ300D	403	580	630	470	325	405	495	520	32
ISQ425D	553	710	760	650	455	515	675	700	55
ISQ500D	654	780	830	750	505	505	775	800	75
ISQ575D	754	880	950	850	555	555	885	920	101
ISQ675D	904	950	1020	1000	605	605	1035	1070	122
ISQ750D	1004	1030	1100	1100	605	655	1135	1170	150
ISQ900D	1174	1230	1330	1270	705	865	1320	1370	224
ISQ1000D	1304	1309	1409	1400	805	940	1450	1500	310

注：1.重量不包含电机。
2.上进风，下出风 / 下进风，上出风的尺寸参考**水平出风尺寸**。
3.右出风 / 上出风 / 下出风 / 下进风，左出风 / 下进风，右出风 / 上进风，左出风 / 上进风，右出风的尺寸参考**左出风尺寸**。
4.上进风，左右出风 / 下进风，左右出风的尺寸参考**左右出风尺寸**。
1.Motor is not included in the Weight above.
2.The dimensions of Top Intake, Bottom Discharge/Bottom Intake, Top Discharge refer to **Dimensions of Horizontal Discharge**.
3.The dimensions of Right Discharge/ Top Discharge/ Bottom Discharge / Bottom Intake, Left Discharge/ Bottom Intake, Right Discharge/Top Intake, Left Discharge/Top Intake, Right Discharge refer to **Dimensions of Left Discharge**.
4.The dimensions of Top Intake, Left and Right Discharge/ Bottom Intake, Left and Right Discharge refer to **Dimensions of Left and Right Discharge**.

产品技术标准
Product Specifications

第一节：品质标准
离心式管道风机应按照空气运动与控制协会第210和300标准进行检测并通过其认证，每台风机出厂时均应贴有AMCA空气动力特性和声音的特许认证标签。生产企业应当通过ISO 9001:2008认证。
Section 1: Quality Standards
Inline Square Centrifugal Fan shall be tested and certified in accordance with AMCA Standard 210 & 300. AMCA Seal for Sound and Air Performance shall be tagged on each fan before leaving the factory. The manufacturer shall be certified by ISO 9001:2008.

第二节：风机类型
风机类型应为管道离心风机，并采用铝制后倾离心式叶轮直接面对来风方向。叶轮进口文丘里管截面应呈圆弧形确保风机入口文丘里管过渡顺畅。每个叶轮均经过动态平衡，达到AMCA 204标准G2.5平衡等级。

Section 2: Fan Type
The fan shall be centrifugal inline type, with an aluminum backward inclined centrifugal wheel directly facing incoming air. The wheel cone shall have a curved section to ensure smooth air movement. Each wheel should be subject to static and dynamic balancing tests up to AMCA 204- G2.5 balance quality grade.

第三节：风机外壳
材料：风机外壳应为镀锌钢板材（选项：冷轧钢板，静电环氧喷涂）制成，其厚度应足以保证能够承受驱动机构和电机的重量。
外型：其外型应基本为方型，配有方型进出口套接法兰以避免制作方 / 圆转接头。壳体设计应允许不同的出口方向。在风机的左右两侧均应设置较大的检修门，保证无须拆卸风管即可维修或更换电机。

Section 3: Fan Housing
Material: The fan housing shall be constructed of galvanized steel sheets(Option: cold roll steel sheet finished with electrostatic epoxy coatings) .It shall be thick and strong enough to support the drive mechanism and motor.
Shape: The housing shall be a square one equipped with square flanged sleeves to avoid square/ round connectors. The housing design shall allow different discharge directions. On the left and right sides, there shall be sizable access doors so that motor maintenance and replacement can be performed without the need to remove the air ducts.

第四节：驱动装置（仅适用于皮带驱动的类型）
轴：风机轴应通过均质炉进行热处理达到硬度HB370等级，其表面应进行坚膜防腐处理，并且连同叶轮进行整体动平衡。其设计运行速度应至少超过风机最大运行速度 25%。
皮带轮：皮带轮的尺寸应当按照驱动功率的150%选型， 皮带轮应当是铸铁的，键连接到轴上。皮带轮应当配有退拔形式的轴套进行固定以便于拆卸。
轴承：应采用两个轴承支撑风机轴，以避免振动直接施加于电机之上。在样本公布的最大转速下，轴承寿命为（L-10）80, 000 小时。轴承类型应是永久密封的，可润滑的带座型滚珠金属轴承。
支撑：驱动装置应当使用厚的经过粉末涂装防腐的钢板支撑。皮带松紧应通过可调节电机底座进行，其设计应确保风机轴与电机轴的平行度。

Section 4: Drive Mechanism (For belt drive type only)
Shaft: The shaft shall be heat treated through homogenizing furnace to the hardness level of HB370, and the hard film shall be applied on the surface to avoid corrosion. The shaft shall also be subject to balancing tests together with the wheel. The design speed of the shaft shall be at least 25% more than the maximum running speed of the fan.
Pulley: Fan pulleys shall be sized for a minimum of 150% of the driving power. Pulleys shall be cast iron, keyed and securely attached to the wheel and motor shaft. Conical type bushings shall be equipped for easy removal of the pulleys.
Bearing: Two bearings shall be used to support the shaft to avoid vibrations directly coming onto the motor. The bearing L10 rating life shall be 80, 000 hours at the maximum operating speed specified in the catalog. The bearing shall be of permanently sealed type and metal pedestal ball bearing that can be lubricated.
Drive Support: Drive mechanism shall be supported by thick steel sheet finished with powder coatings to avoid corrosion. The belt tension can be adjusted through the adjusting bolt at the motor base. The design shall make sure the fan shaft and motor shaft is always parallel.

第五节：电机
电机应与风机负载精密配合，防护等级IP55，绝缘等级 F。电机轴承应为滚珠轴承并免润滑。

Section 5: Motor
The motor shall match the fan load precisely. It shall be IP55 rated with Class F Insulation. The motor bearing shall be lubrication-free ball type.

第六节：铭牌
永久固定的铝制标牌上应标有清晰可辨的风机编号，型号和产品序号（即每台机器的唯一身份证明），从而可保证客户方便地查询配件的历史记录。
Section 6: Nameplate
A permanently fixed aluminum nameplate shall clearly display the fan number, product model and serial number (a unique ID for each fan) so that the parts used can be traceable by customers.

第七节：可接受供应商
可接受供货商的资信等级为AAA级，英飞或类似产品，设计基于英飞ISQ型号。

Section 7: Qualified Suppliers
Qualified suppliers shall be assigned a credit rating of “AAA”. **INFINAIR**® or similar products supplied are designed based on Model ISQ of **INFINAIR**®.