

●本手册所述之产品, 均更新和改进, 可能不致事先通知, 特此声明敬请谅解。
 ●由于印刷的原因产品图实图颜色有差异, 敬请见谅。
 ●浙江莱恩克风机有限公司保留对未手册的最终解释权。

NOTE: This catalogue for reference only.
 We reserve the rights to make any improvements and changes for the products online.



LKT系列离心式空调风机技术手册 The LKT Series Centrifugal Fan



浙江莱恩克风机有限公司
 ZHEJIANG LION KING VENTILATOR CO., LTD.

Megan Chan
 General Sales Manager
 Zhejiang Lion King Ventilator Co., Ltd.

☎ 0086 571 87265221
 ✉ lionking@lktfan.com
 🌐 <http://www.lionkingvent.com>

📍 Add: No. 698, Yunguo Road, Zhangshu, Jiaxing District, Tachiou City, Zhejiang Province, China



浙江莱恩克风机有限公司
 ZHEJIANG LION KING VENTILATOR CO., LTD.

企业理念 Qualification Certificate

诚信立足, 创新发展, 共赢致远.....

Based on Honesty Innovation to Promote Development, Mutual Benefits Lead to Great Future

诚信是莱恩克公司的立身之本, 莱恩克一贯奉行全方位的诚信理念, 倡导企业管理层、员工诚信经营、诚信服务, 倡导社会、客户、合作伙伴和谐发展, 为塑造百年企业打下坚实基础。

创新是莱恩克公司的活力之源, 公司大力倡导创新精神, 积极营造尊重劳动、尊重知识、尊重人才、尊重创造的良好氛围, 在实践中不断推进体制、机制、科技、产品等创新活动, 为社会提供更优质的产品或服务。

共赢是莱恩克公司的致远之道, 公司通过诚信的态度, 务实的作风, 创新的思维, 努力达成企业、员工、客户、合作伙伴、社会多方共赢, 使得企业长远稳定发展。

Honesty is the foundation of LION KING. We consistently pursue good faith as our principle. We advocate our managers and employees operating honestly, and we advocate to develop with society, customers and partners in harmony to make our company to exist more than one hundred years.

Innovation is the source of vitality of LION KING. We advocate innovation, and actively create good atmosphere for innovation, such as respecting talents, respecting knowledge, respecting hardworking, respecting creation. And in practice, we continue to promote innovation of our system, mechanism, technologies and products.

Mutual benefits are the way to lead us to a great future. With honest attitude, pragmatic work style and innovative thinking, we'll try our best to achieve multi-win situation for our company, employees, customers, partners and the society, which will help us for a long-time sustainable development.



产品简介

Product introduction

前向多翼离心式空调风机
 风机流量: 1000m³/h~40000m³/h
 性能: 达到国家1级能效要求

Forward curved multi-blades centrifugal fan
 Air Volume Range: 1000m³/h
 National standard of energy efficiency:
 reach to grade 1 energy efficiency

目录

Contents

LKT系列离心风机产品说明 LKT series centrifugal Fan Instructions	01-07
LKT系列离心风机性能曲线 LKT series centrifugal Fan Performance chart	07-19
LKT系列离心风机外形尺寸 LKT series centrifugal Fan Overall Dimension	20-28



概述 Outline

1 LKT系列离心式空调风机风量从1000m³/h~40000m³/h, 具有高效率、高风量、低噪音等特点, 是各类型中央空调机组、管道式机组及其它暖通、空调、净化、通风设备理想的配套产品。

LKT series centrifugal air-conditioning ventilators volum ranging from 1000m³/h~40000m³/h, they are characterized by compact constitution, high efficiency and low noise. They are the ideal subsidiary equipment for various cabinet central air-conditioning units, tube units and heating, air-conditioning, cleaning and ventilating equipments.

产品型式 Type of Product

3 **1. 旋向**
LKT系列风机可分为左旋(L)和右旋(R)两种旋转方式, 从风机皮带轮一端正视图, 叶轮顺时针旋转的为右旋风机, 此时叶轮被标为左旋风机。皮带轮可左右转向, 因此不受左右方向的限制。

2. 出风口方向
LKT系列风机可按1°分派制成0°、90°、180°、270°四种出风方向。

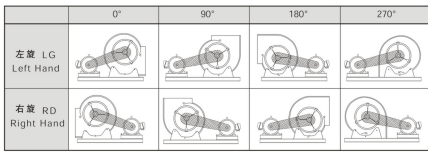
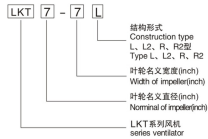


图1 (Fig.1)

产品命名方式 Designation of Products

2 LKT系列风机命名方式由风机系列代号、叶轮名义直径、叶轮名义宽度、结构形式组成。

The nomenclature of LKT series is composed of nominal diameter of impeller and nominal width of impeller.



- 1. Direction of Rotation**
Series ventilator can be divided into two direction of rotations, left-hand rotation (L) and right hand rotation (R). Viewing from end of motor outlet the impeller rotates clockwise, it is called right hand ventilator. If the impeller rotates anti-clockwise, it is called left hand ventilator. The pulley can adjust its direction, left or right, therefore there is no limitation in directionality.
- 2. Direction of Air Outlet**
According to Fig.1, LKT Series ventilator can be made in four air-outlet directions: 0°, 90°, 180°, and 270°.

3. 结构形式
LKT系列风机可按图2所示制成L型、LK型、R型、RK型、L2型、R2型。



3. Type of structure
According to Fig.2 LKT Series ventilators can be divided into Category L, LK, R, RK Category L2, R2.

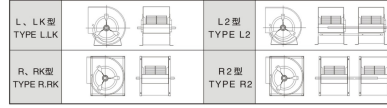


图2 (Fig2)

产品结构 Construction of Product

4 LKT系列风机主要由机壳、叶轮、框架、轴承、轴构成。

1. 机壳
机壳采用优质热镀锌钢板制成, 侧板具有符合空气动力学的外形, 机壳口整体拉成弧形, 确保采用点焊的方式与钢板连成一体。
机壳侧板上预设计了一系列的孔, 以便按用户要求的出风口方向进行安装。

2. 叶轮
叶轮采用优质热镀锌钢板制成, 叶片设计成符合空气动力学的特定形状, 使得效率最高、噪音最低。叶片用销钉固定在中心盘上, 在最大功率连续运转时, 叶轮具备足够的刚度。叶轮出厂前按高于国家标准的内控动平衡等级全面合格。

3. 框架
LKT系列风机框架采用热镀锌钢板切割、折弯制成, TOX连接确保了所要求的尺寸精度和应有的刚度。

LKT series ventilators are mainly consisted of scroll, impeller, frame bearing and shaft.

1. Scroll
The scroll is made of hot galvanizing steel sheet. Its side plate has an outline complying with aerodynamics. The scroll plate fixed to the side plates by means of "electric spot welding". On the side plate of the scroll there are a series of holes drilled in advance for routing nuts to carry out installation according to an outlet direction needed by the customer.

2. Impeller
The impeller is made of high grade hot galvanizing steel sheet and is designed to a special configuration according to aerodynamics to make the efficiency highest and the noise lowest. The impeller is fixed on the middle disk plate and on the end with riveting grippers. The impeller has enough rigidity during continuous rotation with maximum power. Before leaving factory, all impellers have passed all-round dynamic balance test according to the Company Standard which is higher level than National Standard.

3. Frame
The frames for type R ventilators are made of galvanized steel angle iron bars. The cutting and bending of the frame parts, as well as the TOX connections, are formed with the use of molds to assure their high accuracy and the rigidity of the frames.



4. 轴承
LKT系列风机均采用优质深沟球轴承, 并做预润滑处理, 该轴承在加润滑油前已在轴对中。轴承安装在轴承架上, 并没有预润滑。

5. 轴
风机轴采用40Cr或45#钢经粗加工、调质处理及磨削加工制成, 严格控制轴径尺寸公差及形位公差, 每根轴均经过测漏检测。

4. Bearing
LKT series ventilators are made of ball bearings of high quality, which are chosen according to the lowest noise produced. These bearings are air-sealed, with preset lubricating oil, and of automatically alignment. The bearings are assembled on the support end vibration-proof rings assembly provided.

5. Shaft
The shafts are made of 40Cr of C45 carbon steel bars. The shafts are rough machined and then stress relieved before final machining. The shaft diameters are machined to very accurate tolerance levels and they are fully checked to assure precision fits. They are coated after assembly in order to provide corrosion resistance.

风机性能 Performance of Ventilator

5 1. 该技术手册中风机性能均指在标准状态下的性能, 即风机进气状态为:

进气压力 $P_1 = 101.325kPa$
进气温度 $t_1 = 20^\circ C$
进气气体密度 $\rho = 1.29kg/m^3$

若用户实际使用的气体状态或使用的风机转速改变时可按下列关系式换算:

$$\frac{Q_1}{Q_2} = \frac{n_1}{n_2}$$

$$\frac{P_1}{P_2} = \left(\frac{n_1}{n_2}\right)^3 \frac{\rho_1}{\rho_2}$$

$$\frac{N_1}{N_2} = \left(\frac{n_1}{n_2}\right)^3 \frac{\rho_1}{\rho_2}$$

$$\frac{N_{1a}}{N_{2a}} = \left(\frac{n_1}{n_2}\right)^3 \frac{\rho_1}{\rho_2}$$

上述式中:

- 流量 $Q_1(m^3/h)$ 、总功率 $P_1(Pa)$ 、转速 $n_1(r/min)$ 、内功率 $N_{1a}(kW)$ 性能曲线图上查得。
 - 右上角符号 "a" 的即为用户实际使用气体进气状态下所需的性能参数。
 - 上式中除去了角下标的差别。
 - 性能曲线图上的符号 N_{1a} 是指风机的内功率。
 - 风机轴功率: $N_s = N_{1a} / \eta_m$
式中: N_s = 风机轴功率
 η_m = 风机机械效率
- 风机机械效率的取值方法可参照表1。

1. The ventilator performance in this catalogue denotes the performance in standard conditions. It denotes air inlet conditions of ventilator as follows:

Air inlet pressure $P_1 = 101.325kPa$
Air temperature $t_1 = 20^\circ C$
Inlet gas density $\rho = 1.29kg/m^3$

If the practical air inlet conditions of consumer or the speed of the operating ventilator changes, the conversion can be carried out according to the following expression:

$$\frac{Q_1}{Q_2} = \frac{n_1}{n_2}$$

$$\frac{P_1}{P_2} = \left(\frac{n_1}{n_2}\right)^3 \frac{\rho_1}{\rho_2}$$

$$\frac{N_1}{N_2} = \left(\frac{n_1}{n_2}\right)^3 \frac{\rho_1}{\rho_2}$$

$$\frac{N_{1a}}{N_{2a}} = \left(\frac{n_1}{n_2}\right)^3 \frac{\rho_1}{\rho_2}$$

where:

- Volume $Q_1(m^3/h)$, total pressure $P_1(Pa)$, speed $n_1(r/min)$ can be obtained from Performance chart.
 - Asternisk (*) on the upper right corner denotes the performance parameter needed by the customers in practical gas inlet conditions.
 - The difference in relative humidity is omitted from the above-mentioned formulas.
 - The power (N_{1a}) on the performance chart the internal power of the ventilator.
 - Shaft power of ventilator: $N_s = N_{1a} / \eta_m$
where: N_s = Shaft power of ventilator
 η_m = Mechanical efficiency of ventilator
- The value of the mechanical efficiency of ventilator can be obtained from Table 1.



风机传动方式 Way of ventilator driving	η_m
电机直接传动 Electric motor directly driven	1
K-电机轴安全系数	0.98
三角皮带传动 V-belt driven	0.95

表1 (Table1)

- 配套电机的功率: $N = N_s \cdot K$
式中: N = 配套电机的功率
 K = 电机轴安全系数
电机容量安全系数参照表1参照。
 - L2型、R2型双联风机的性能与L型、R型风机轴线上性能比较, 在压力相同情况下, 双联风机的性能比较, 在压力相同情况下, 双联风机的性能比较。
 - 风量 $\times 2$
转速 $\times 1.05$
内功率 $\times 2.15$
噪声 $+3$
4. 本样本中的风机性能按 GB/T 1236-2000 标准检测, 风机轴功率按 GB/T 2988-2008 标准在离进风口1米处测定的压力值换算。

- Power of matching electric motor: $N = N_s \cdot K$
here: N = Power of matching electric motor
 K = Safety coefficient of electric motor capacity
The value of safety coefficient of electric motor capacity can be obtained from Table 2.
- Comparing the performance of the twin ventilator of Category L2 and Category R2 with the performance of Category L and Category R in the chart, in the same condition of pressure, the twin ventilator's performance is as the following:
- Volume $\times 2$
Speed $\times 1.05$
Inner Power $\times 2.15$
Noise $+3$

4. The performance of the sample ventilator is tested in accordance with GB/T 1236-2000. Its noise index is measured according to GB/T 2988-2008 at the point 1 metre from the inlet.

电动机功率 power of electric motor(kW)	K值 value k
≤ 2.2	1.2
≤ 11	1.15
> 11	1.1

表2 (Table2)

皮带传动安装 V-Belt drive installation

- 6** 1. 拆卸风机轴端的保护并检查有无缺口和毛刺;
2. 检查风机和电机轴之间的平行度;
3. 中心距应控制在 $7(d_1 + d_2) \sim a - 2(d_1 + d_2)$, 前侧风机皮带速度应控制在 $(0.15 \sim 0.18)m/s$;
4. 将皮带张紧在轴上, 不要紧, 不要紧, 以免损坏轴承;
5. 用一直尺顶住风机和电机上皮带轮的轴并拧紧;
6. 调整张紧度直至皮带看起来绷紧适度, 风机运行几分钟后, 再调整皮带合适的张紧度;
8. 关闭风机, 移动电机应以调整张紧度, 当风机工作时, 皮带的一侧应处于两个皮带轮连成的一直线, 该的一侧有轻微的张紧。

- Remove the protective coating from the ends of the fan shaft and assure that the shaft ends are free of nicks and burrs.
- Check fan and motor shafts for parallel and angular alignment.
- The center distance must be controlled as $7(d_1 + d_2) \sim a - 2(d_1 + d_2)$; the belt speed of fan should be more than $0.15m/s$, but less than $0.18m/s$.
- Slide sheaves on to the shafts- do not drive the sheaves on to the shafts as this may result in bearing damage.
- Align fan and motor sheaves with a straight-edge or string, and tighten.
- Place belts over the sheaves with carefull, otherwise the belts will be damaged.
- Adjust the belt tension until the belts appear snug. Run the unit for a few minutes and allow the belts to set properly.
- Switch off the fan, adjust the belt tension by moving the motor base. When in operation, the tight side of the belts should be in a straight line from sheave to sheave and there should be a slight bow on the slack side.



皮带张紧度 Belt tension

7 合适的皮带张紧度对使用寿命至关重要。太紧会使皮带和轴承带来额外的负载，降低它们的使用寿命；太松则会出现打滑现象而产生热量并产生磨损皮带的寿命。

皮带张紧量可通过皮带张紧器或张紧轮调整。量具本身带有一个尺表，根据皮带中心距和橡胶圈固定带张紧力大小。

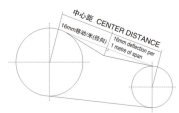
如果张紧皮带张紧量，应调节皮带张紧至风机启动时皮带不出异常叫声为止。如发现短促的叫声也是允许的。

拉紧皮带后，启动风机之前，须重新检查皮带的对齐情况。如有必要则重新调整对齐。新皮带在刚开始使用时可能会有点拉伸，应在运行几小时后重新检查皮带张紧度。

注意：风机长期停止皮带张紧时，在使用时重新调整皮带的张紧度。风机长期停止时每隔一段时间，旋转180°，以防止轴承静态变形。

A proper level of belt tension is required in order to obtain a satisfactory belt life. If the belt tension levels too high, then excessive loads will be imposed on the bearings, and this will reduce the lives of both of these components. If the belt tension level is too low, then the belt will slip. Belt slippage generates a large amount of heat, and this heat will drastically reduce the life of a belt. Belt-tensioning gauges can be used to determine whether the belts are tensioned properly. A chart is normally supplied with the gauge which indicates the ranges of forces required to deflect the belts by a given amount to obtain the proper belt tension level. The required forces are based upon the center distance of the sheaves and the belt cross-section. The belts are properly tensioned when the forces required to deflect the belt are within the specified range. If a belt-tensioning gauge is not available, then the belt should be tightened just enough so that the belt does not squeal when the ventilator is started. A very short period of noise during the starting of ventilator is allowable, but a squeal lasting several seconds or longer is not acceptable. After tensioning the belts and before starting the ventilator, check to make sure that the sheaves are properly aligned. Realign the sheaves if necessary. Note that new belts may stretch a little during initial use, so the belt tension level should be checked after a few days of operation. Note: The belt should be released if the ventilator do not run a long time, and until the fan is to be used over again, the belt tension level must be just again. The rotor should be turned 180 degree at regular intervals when the ventilator don't use in a long time to avoid the static state distortion of the shaft.

中心距固定的皮带张紧量调节
Belt tension indicator applied to mid centre distance.



皮带截面 Belt Section	皮带张紧力范围(磅力/牛顿) 张紧力 Belt Tensioning Force Range (lbf/N) Tensioning Force			
	最小值 Minimum	中间 Middle	最大值 Maximum	平均 Average
SPZ	56-90	13-20	13-20	13-20
SPA	80-122	20-25	20-25	20-25
SPB	140-200	35-45	35-45	35-45
SPC	112-224	45-65	45-65	45-65
A	208-312	65-85	65-85	65-85
B	224-335	85-115	85-115	85-115
S	375-560	115-150	115-150	115-150
A	80-140	10-15	10-15	10-15
B	125-200	20-30	20-30	20-30



轴承润滑 Bearing lubrication

8 风机轴承需要定期检查和润滑。轴承已预先润滑，不必在开始前添加润滑油。若轴承在油膜超过有效期时，可通过加油嘴注入润滑油。

润滑油有效期取决于油脂类型、轴承的转速和工作温度。判断是否定期添加的最好办法是当加油嘴周围有油膜时，应定期添加。如果清除下来的油膜看起来像是新的，可能长换油膜的周期。如果清除下来的油膜比新的厚得多，表明油脂已氧化，应缩短换油膜的周期。

The ventilator bearings are filled with lubricant they come from the factory, so the bearings do not require any additional grease to be supplied before starting the ventilator. The ventilator that are equipped with pillow block bearings are provided with lubrication fittings, and these fittings allow for additional lubrication to be supplied to the bearings at regular intervals. The allowable period of time between lubrication of these bearings depends upon the operating speeds and temperatures of the bearing as well as on the type of grease used. The best way to determine the required frequency of lubrication is to inspect the condition of the grease that is discharged from the seals when new grease is added. If the discharged grease looks similar to the new grease, then a longer period of time between lubrications is possible. If the discharged grease is much darker than the new grease, the this indicates that the grease is being oxidized and more frequent lubrications of the bearings are required.

说明 Instructions

9 在安装前应对风机各部件进行检查，对叶轮、轴和轴承等主要部件应重点检查。若有损坏或松动后再安装使用。

2. 风机安装后应检查机壳内是否有遗留的工具、杂物等。

3. 风机安装后用手或杠杆转动叶轮，检查是否有任何堵塞现象，确认无堵塞现象后方可进行运转。

4. 风机使用电动机驱动是在特定工况下，风机内部加上机械轴头与电机轴安全联轴节，并非出口风道拆卸时所需的功率，因此为防止电机功率运转而烧毁，严禁风机出口风道及进口风道拆卸或添加任何阻力进行空运转。

5. 风管与风机出口之间应采用软连接，接头不得拉得太紧。

6. 风机正式运转前，需检查电机的转向是否符合风机转向的要求。

7. 订货时请注明风机型号、转速、风量、风压、出口风道和转向以及电机型号规格。标准型风机不带皮带，如需法兰在订货时注明。

8. 若需配套皮带、皮带轮、电机、安装底座等配件或其它特殊要求可在订货时提出。

1. Prior to installation, all parts of the ventilator should be inspected. Greatest careful attention should be taken to shaft, bearings and main parts for checking. If there is some damage, recovery should be made, then to install again for use.

2. Check the internal space of the scroll and other casings, tools and other extra matters should not be left inside.

3. After installation, turn its impeller by hand or by means of lever to check for tightness or stops. Make sure that there is no such phenomenon over there, trial operation can be carried out.

4. Matching electric motor power of ventilator denotes internal power plus mechanical loss during driving and safety coefficient of electric motor capacity in special operating condition, it does not denote the power required during full opening of air outlet. Therefore no-load running of ventilator without any applied resistance including connecting pipelines on air-inlet or air-outlet is strictly prohibited in order to avoid burning out of the motor caused by its operation at over rated power.

5. Soft connection between air pipe and ventilator air-outlet should be made. The parts should not be tightened too much.

6. Prior to official operation of ventilator, it is necessary to check the rotating direction of both motor and ventilator for their coordination.

7. During ordering it is necessary to state the type of ventilator, speed, air volume, air pressure, direction of air outlet, rotating direction, type of electric motor and its specifications.

8. If the customer needs matching belts, pulley, electric motor, mountingframe and other parts and requirements, please state at that time.

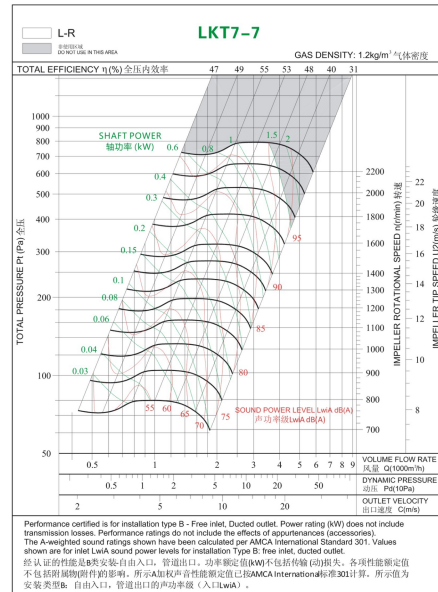
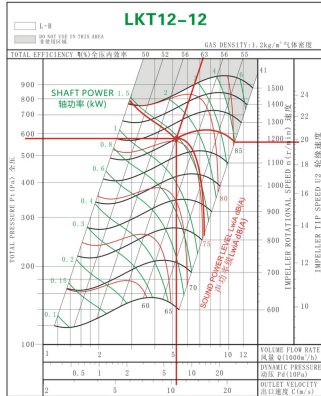


9. 风机在无烟碱等腐蚀性气体、尘粒物质小于150mg/m³的气体及温度小于85℃大于-20℃的气候条件下使用，风机在运输装卸过程中应小心轻放，防止碰撞损坏。

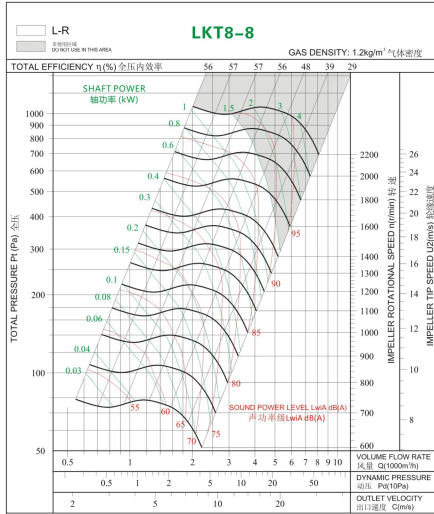
9. This fan is restricted for use in areas where air substances are noncorrosive and non-toxic non-alkaline or where dust particles<150mg/m³ <-20℃ <temperature < 85℃. If special conditions during transportation, load and unload, it is strictly prohibited to shock the ventilators.

读图示例 Example of curve Reading

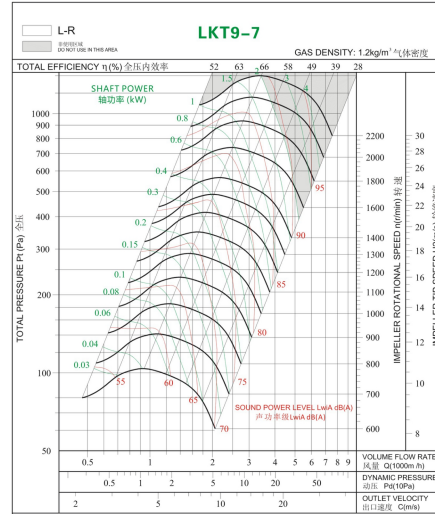
10



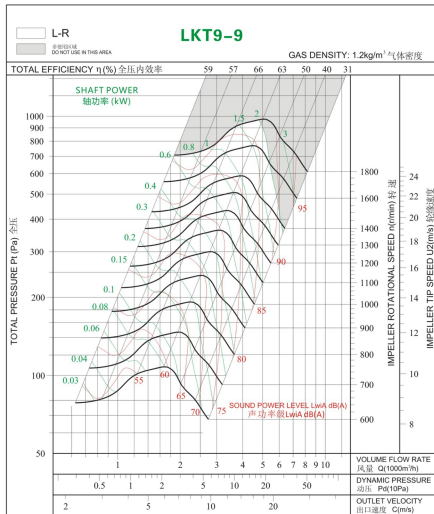
Performance certified for installation type B - Free inlet, Ducted outlet. Power rating (kW) does not include transmission losses. Performance ratings do not include the effects of accessories (accessories). The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LwA sound power levels for installation Type B: free inlet, ducted outlet. 经认证的机型是B类安装自由入口，管道出口。功率额定值(kW)不包括传动(动)损失。各项性能额定值不包括附件的影响。所示A加权声功率性能额定值已按AMCA International标准301计算。所示值为安装类型B：自由入口，管道出口的声功率级(入口LwA)。



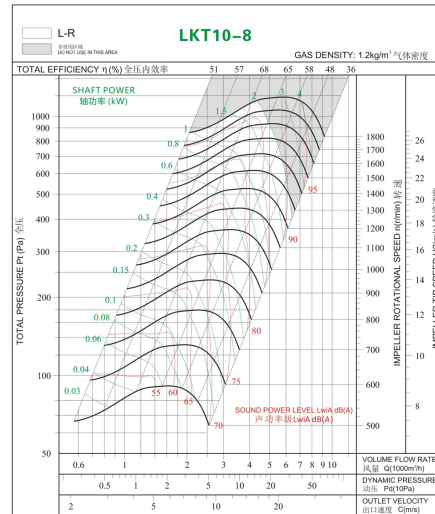
Performance certified for installation type B - Free inlet, Ducted outlet. Power rating (kW) does not include transmission losses. Performance ratings do not include the effects of aperturancs (accessories). The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LWA sound power levels for installation Type B: free inlet, ducted outlet.
经认证的性能是B类安装-自由入口, 管道出口, 功率额定值(kW)不包括传输(动)损失, 各项性能额定值不包括附件的影响, 所示A加权声功率额定值已按AMCA International标准301计算, 所示值为安装类型B: 自由入口, 管道出口的声功率级(入口LWA)。



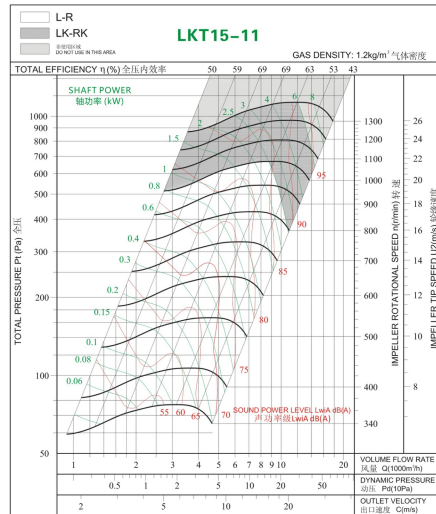
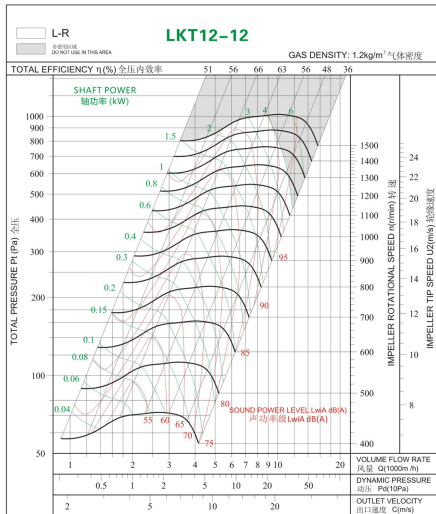
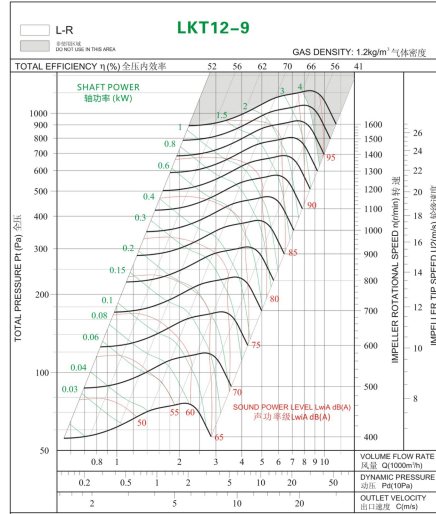
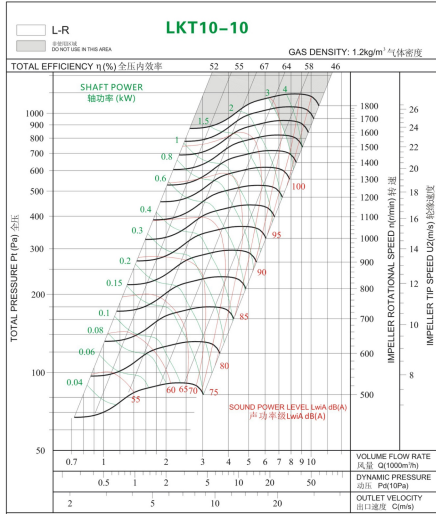
Performance certified for installation type B - Free inlet, Ducted outlet. Power rating (kW) does not include transmission losses. Performance ratings do not include the effects of aperturancs (accessories). The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LWA sound power levels for installation Type B: free inlet, ducted outlet.
经认证的性能是B类安装-自由入口, 管道出口, 功率额定值(kW)不包括传输(动)损失, 各项性能额定值不包括附件的影响, 所示A加权声功率额定值已按AMCA International标准301计算, 所示值为安装类型B: 自由入口, 管道出口的声功率级(入口LWA)。

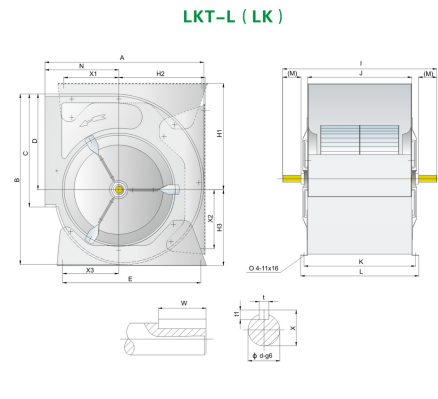
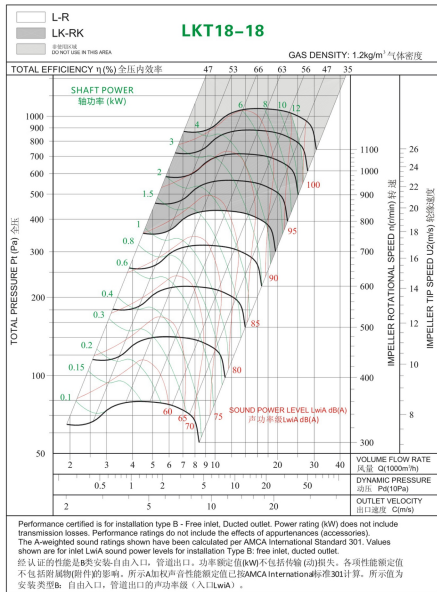
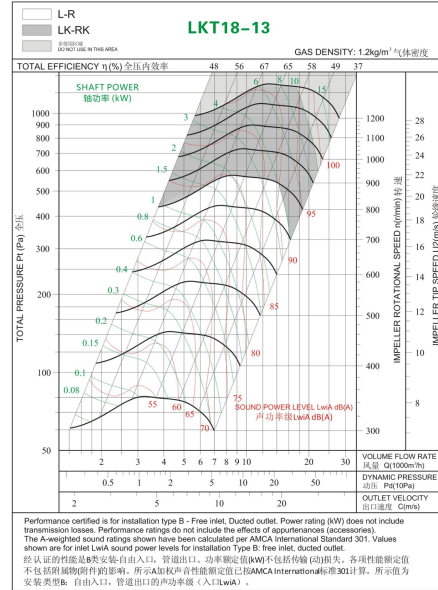
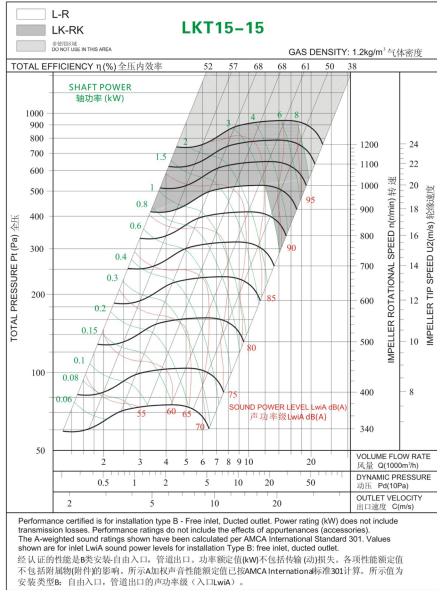


Performance certified for installation type B - Free inlet, Ducted outlet. Power rating (kW) does not include transmission losses. Performance ratings do not include the effects of aperturancs (accessories). The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LWA sound power levels for installation Type B: free inlet, ducted outlet.
经认证的性能是B类安装-自由入口, 管道出口, 功率额定值(kW)不包括传输(动)损失, 各项性能额定值不包括附件的影响, 所示A加权声功率额定值已按AMCA International标准301计算, 所示值为安装类型B: 自由入口, 管道出口的声功率级(入口LWA)。



Performance certified for installation type B - Free inlet, Ducted outlet. Power rating (kW) does not include transmission losses. Performance ratings do not include the effects of aperturancs (accessories). The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LWA sound power levels for installation Type B: free inlet, ducted outlet.
经认证的性能是B类安装-自由入口, 管道出口, 功率额定值(kW)不包括传输(动)损失, 各项性能额定值不包括附件的影响, 所示A加权声功率额定值已按AMCA International标准301计算, 所示值为安装类型B: 自由入口, 管道出口的声功率级(入口LWA)。





注: 尺寸单位为毫米 Note the size unit is mm

Dim	A	B	C	D	E	F	G	H	I	J	K	L	M	N	X	T	U	V	W	d	W1	H3	X1	X2	X3
L077-N	112	107.5	228	192	160	160	253	289	319	35.5	152	225.5	6	6	30	20	215	185	155	80	80	80	80	80	80
L078-N	145	140	296	216	190	190	400	287	317	347	41.5	164	225.5	6	6	30	20	230	204	174	90	90	90	90	90
L079-N	189	187	363	235	200	190	430	324	354	384	45.5	176	225.5	6	6	30	20	236	195	174	100	100	100	100	100
L080-N	239	237	444	299	250	250	490	353	383	413	51.5	190	225.5	6	6	30	20	242	195	184	110	110	110	110	110
L081-N	295	293	544	369	300	300	560	426	456	486	59.5	204	225.5	6	6	30	20	248	195	184	120	120	120	120	120
L082-N	355	353	664	449	350	350	640	509	539	569	69.5	218	225.5	6	6	30	20	254	195	184	130	130	130	130	130
L083-N	419	417	804	539	400	400	760	593	623	653	81.5	232	225.5	6	6	30	20	260	195	184	140	140	140	140	140
L084-N	487	485	964	639	450	450	880	697	727	757	93.5	246	225.5	6	6	30	20	266	195	184	150	150	150	150	150
L085-N	559	557	1144	769	500	500	1000	811	841	871	107.5	260	225.5	6	6	30	20	272	195	184	160	160	160	160	160
L086-N	635	633	1334	909	550	550	1120	923	953	983	121.5	274	225.5	6	6	30	20	278	195	184	170	170	170	170	170
L087-N	715	713	1534	1059	600	600	1240	1035	1065	1095	135.5	288	225.5	6	6	30	20	284	195	184	180	180	180	180	180
L088-N	799	797	1744	1209	650	650	1360	1147	1177	1207	151.5	302	225.5	6	6	30	20	290	195	184	190	190	190	190	190
L089-N	887	885	1964	1369	700	700	1480	1259	1289	1319	167.5	316	225.5	6	6	30	20	296	195	184	200	200	200	200	200
L090-N	979	977	2194	1529	750	750	1600	1371	1401	1431	183.5	330	225.5	6	6	30	20	302	195	184	210	210	210	210	210

