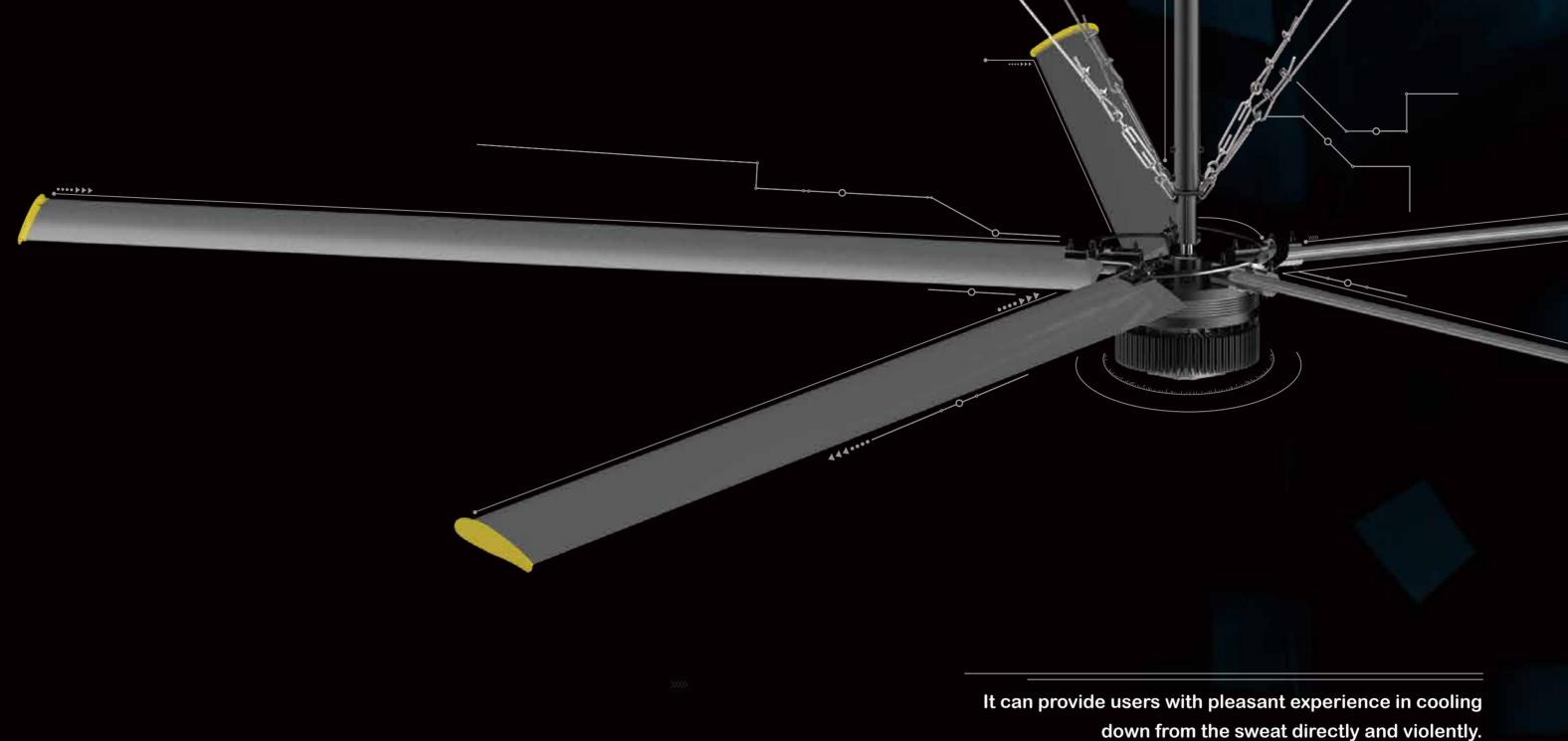


开勒环境科技(上海)股份有限公司 Kale Environmental Technology(Shanghai)Corporation.

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All the time

There exists a piece of brilliant mind

Expecting to develop such a mega fan >>>>>

down from the sweat directly and violently.

You could feel absolutely comfortable and peaceful with such a fan when you focus on your work.

In addition, it can always run quietly and it is maintenance-free.

You would be fascinated by its appearance every time you take a quick glance.

This piece of mind, finally comes into reality with the introduction of EURUSII.

Let's enjoy it



◆ The world's leading PMSM system technology has started a new era

Power technology as the core source of HVLS products, KALE ENVIRONMENTAL has the expert team of R & D. Besides, KALE ENVIRONMENTAL spares no effort to fully grasp the comprehensive technology, PMSM power and new control system.

KALE ENVIRONMENTAL's PMSM technology adopts high performance magnet steel, unique industrial design. In addition, it perfectly addresses the conflict relationship between power and heating. At present, compared with the earlier technology in the US, the power output is over 20%, and the noise level is reduced by 15%. Furthermore, it is totally maintenance-free, and it has power output stability and anti-interference function. In addition, the overall service life are even more than several times compared to earlier technology in the US.

overall, the achievement of KALE ENVIRONMENTAL's PMSM technology represents that the HVLS industry has been into a new era.

◆ The conception of excellence is throughout the each phase of the product management

KALE ENVIRONMENTAL put substantial emphasis on product practicability and market reputation. Furthermore, KALE ENVIRONMENTAL insists on offering the client the best products in the world with the best production technology, the best industrial design and the advanced management philosophy. The conception of delivering the best products has penetrated in the processes of R&D, manufacturing, sales and offer sole carriers.

ALE ENVIRONMENTAL owns integrated product management system and it can be upgraded with the technological advancements. Simultaneously, KALE ENVIRONMENTAL has established the long-term cooperation and collaboration with National Institute of Material Research, the National Institute of Mechanical and Electrical Research and other research institutions, providing the client with high-perfor-

◆ Providing the client with the systematic service with new standards

In order to reach the international objectives of service systematisation and standardization, KALE ENVIRONMENTAL has set up a global service system through establishing collaborative service network with the international business partners. Up to now, KALE ENVIRONMENTAL has offered service in more than 80 countries. In the domestic market, KALE ENVIRONMENTAL uses branch service system and owns over 20 subsidiaries or branch offices to offer pre-sale service, after-sale service and technical supports. KALE ENVIRONMENTAL responses to customers' requests within 30 minutes, delivering excellent shopping experience to the client and proposing new standards for the service in the HVLS industry. This greatly improves customer satisfaction.

♦ The largest HLVS production base in the world, which represents intelligent production in China

KALE ENVIRONMENTAL endeavours to advance the development of HVLS industry, meeting the requirements of the global growing demands to HVLS. Thus, in Haining, Zhejiang Province, KALE ENVIRONMENTAL has established the world's largest HVLS production base, covering an area of over 60,000 suagre meters. The production capacity is 400,000 pieces, which stands for the intelligent production in China. This is conducive to offering service globally.



Traditional Reduction Gearbox BVe!





Traditional Industrial Reduction Gearbox.....

Bye! Substantial maintenance/

Bye! Intensive noises

Bye! Heavy volume

Bye! High weight

PMSM(Permanent Magnet Synchronous Motor)

is now available...





♦ The advantages of Permanent Magnet Synchronous Motor

PMSM is an electromagnetic device that is produced by a permanent magnet as a medium for the conversion of mechanical energy and electromagnetic energy to each other. In addition, PMSM Permanent magnet synchronous brushless direct drive motor has the characteristics of high control accuracy, high torque density, good torque balance, low noise, small volume, high efficiency, high power factor, low temperature rise and so on.





The adjustable speed range of KALE fans is bigger. Currently, the industrial fans in the market are usually with the diameter of 7.3M blade type and the speed range is usually 20-50 RPM. However, EURUS III series based on PMSM power output system and powerful control technology can have the stepless speed range extended to 5-57RPM, which can provide a wider adjustment range of comfort for the client.

The efficiency of motor drive is increased by 13.6%. The power factor of PMSM is high, so that compared with asynchronous motor, the current of PMSM is smaller, and the stator copper consumption of the corresponding motor is smaller and the efficiency is higher. The motor efficiency of the common asynchronous motor in the market is 78%, the efficiency of the PMSM motor of EURUS III is 86%, and the transmission efficiency of the whole motor is raised by 13.6%.

Control system

Advantages in technology



◆ Control system protection level IP55 Design of bending seal

The control box of the sealed design greatly enhances the service life of electrical components. The features of dust-proof and waterproof meet the outdoor conditions, which can adapt to the rainy humid environment. In addition to this, the overall operation of the system and the feature of debugging without unpacking contribute to preventing misuse of electric shock risk. Furthermore, relative to the control system of the common market, EURUS III tends to have longer service life and it is safer and more reliable.

◆ Anti-electromagnetic interference Design

The EMI suppression algorithm is designed to effectively suppress the conducted electromagnetic interference (Conducted EMI) and radiated electromagnetic interference (Radiated EMI). As a result, it is possible to use a wider environment to make users more comfortable. It can be used normally in bad environment (such as high voltage fluctuation of power grid) and climate conditions.

◆ Voltage single-phase 220V

The power supply is convenient (both 380V & 220V are applicable), and the electrical components are generally capable of withstanding voltage grade. 220V is a lower voltage. Compared with 380V voltage condition, it has more stability, slower aging, longer service life and higher working safety.



◆ Amazing! Maximum torque 260N.m, air volume increases 30%

EURUSIII adopts the latest PMSM technology and unique external rotor torque design. Compared with the traditional asynchronous motor, this product can eliminate the friction energy consumption of gear reducer. Maximum torque reaches 260N.m, while a greater advantage is that it can output more stable air flow, making the EURUSIII full volume reached 888000m3/h, which beyond the common market volume of more than 30% products. Once launched, it can be highly evaluated by the market.



Different from gear technol regular climbing demolition job) in of electromagnetic induction, doubt of maintenance

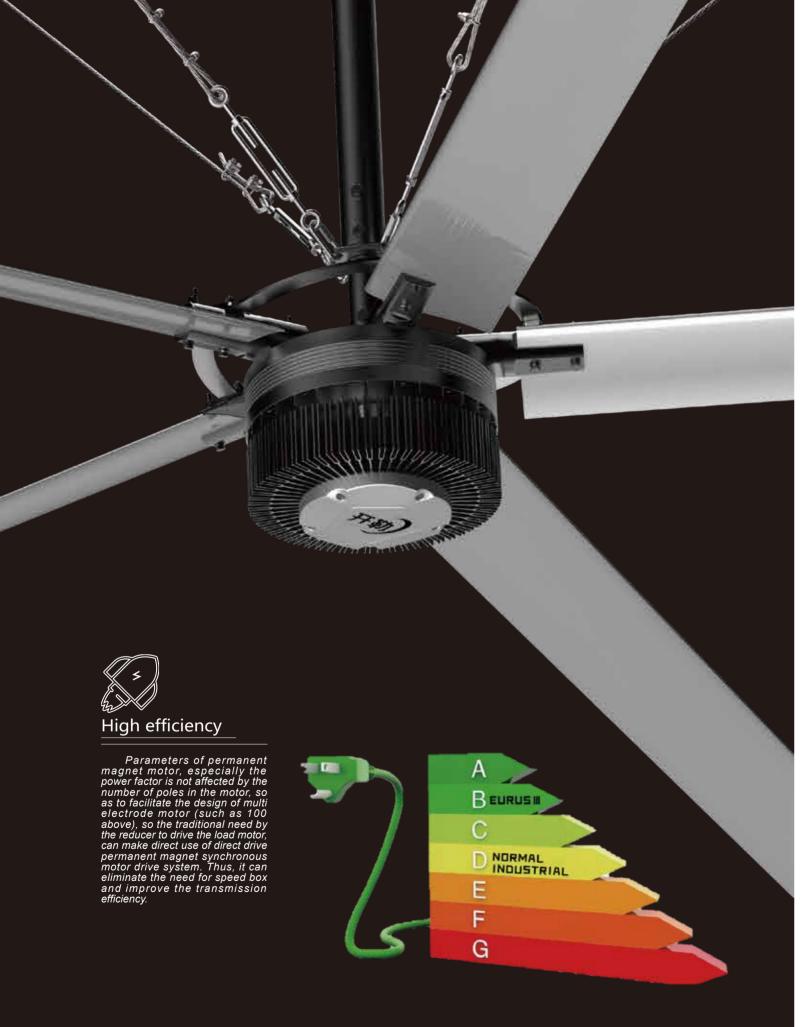
Different from gear technology products using regular replacement of lubricating oil in gearbox (need regular climbing demolition job) in the current market, EURUS III series PMSM motor, based on the principle of electromagnetic induction, double bearing transmission, completely sealed, truly free maintenance.

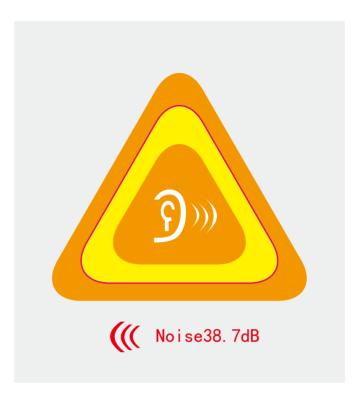


Free of maintenance

No deceleration box No need to be replaced regularly

Marianana







The noise level is lower. On the market, the common asynchronous motor decelerator integrated machine noise comes from the excitation noise of the motor shell and the friction of the reducer gear, usually the noise level is above 50dB. The application of the EURUS III series of PMSM motors solved these problems and reduced the noise index of the EURUS III series to 37.8dB. for the first time.





The EURUS ${\rm III}$ series has a more compact overall volume and lower installation space requirements. The EURUS ${\rm III}$ series host height is only 0.36M, and the common product installation space is more than 1.2M while the EURUS ${\rm III}$ series only needs 0.86M.

More ingenious





EURUS II A stunning appearance!!!

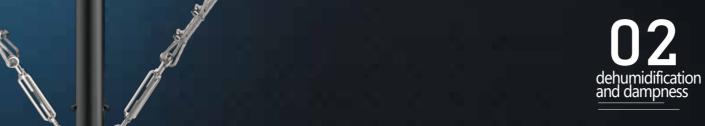
♦ The application areas of EURUSⅢ

EURUS III owns a wide range of diverse application areas. The super large air volume and coverage area will bring comfortable natural breeze and can make the working environment change in positively ways at once. It can not only directly cool the human body, but also bring the whole field ventilation and excellent dehumidification and moisture removal effect.

EURUS III

This series of product developed by KALE is based on the development of the PMSM (permanent magnet synchronous motor) model of permanent magnet synchronous motor fan technology. The maximum diameter can be up to 7.3 meters. The product combines aerodynamic technology, transmission dynamics, PWM control technology, mechanical mechanics, simulation technology, communication control, industrial design and other comprehensive disciplines. It can promote the circulation of air flow in high efficiency, achieve the purpose of lowering the temperature of personnel, and greatly improve the environmental comfort.

- Industrial application | Workshop / logistics storage warehouse |
 Sports industry | gym / gymnasium / indoor sports field / training room |
 Recreation & Entertainment | Large Amusement Park/Zoos & Arboretums/Children' s playground |
 Traffic hub | Railway Station / high speed railway station / car station / subway station / terminal |
 Commercial sites | Exhibition Center / 4S store / major professional product distribution market / large shopping mall and supermarket |
 Other areas | the front office / Villa / canteen / Museum / large outdoor business lease of the office building...
- ◆ Wind speed 1-4m/s speed regulation ◆ Reduce the temperature at 5-8 degrees centigrade ◆ The wind is comfortable and soft ◆ Can Eliminate odors
- ◆ The air volume is up to 888000m3/h ◆ Stereoscopic natural breeze effect ◆ Air circulation in a large environment ◆ Can effectively dilute smoke and dust
- Dehumidification and dampness

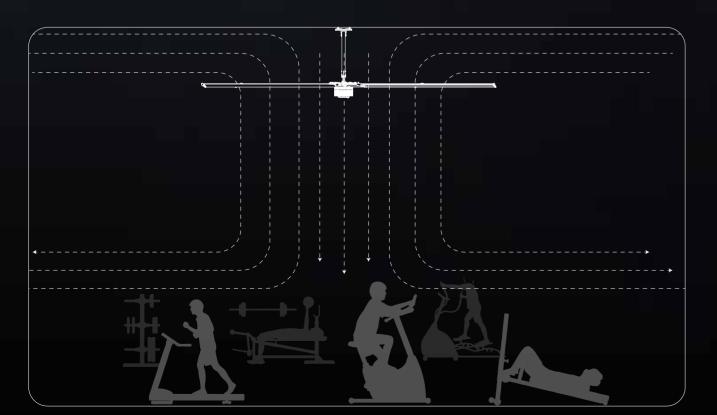


Eurus III promotes the whole space air mixing, and can eliminate the smoke and moisture with good dispersion and absorption, so as to improve indoor air quality and obtain a healthy, dry and safe working environment. In addition, it can avoid the noises produced by other ventilation schemes and the decay of wet air.

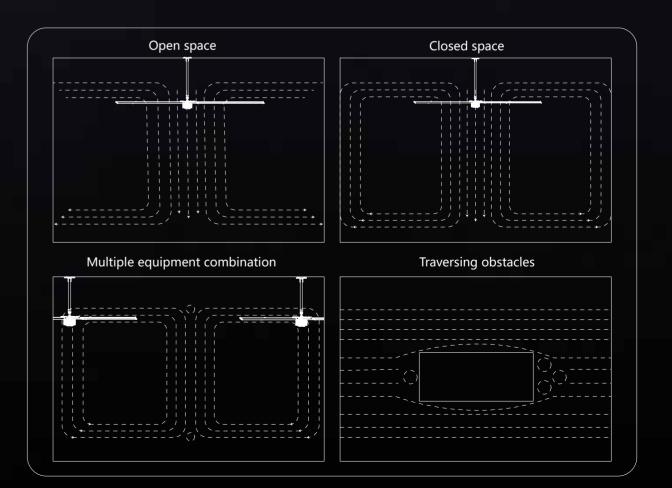
♦ Introduction of EURUS **III** functions

Body cooling

The natural breeze from KALE fans in the human body can promote the evaporation of the sweat to cool down the heat. As a result, the body temperature can be effectively cooled down. Usually, this temperature can reach 4-7 degrees centigrade. The natural wind blowing KALE fans is more comfortable because on the one hand, the body of a full range of three-dimensional blowing let the body to reach the maximum evaporation area, another reason is that human has accumulated on the natural wind experience in nature, once the wind speed changes the natural breeze, the body will naturally feel cool and comfortable.



In the large and wide enclosed space, the ventilation plan is greatly limited. The roof negative pressure fan doesn't play any role in the air in every corner and the ground, and this is precisely the location of personnel and equipment. With the industrial energy saving fan scheme, the problem can be solved. The industrial energy saving fan can effectively enhance the orderly movement of the air flow field in the space, and will promote the whole space air mixing, cooperate with the roof fan, improve the air quality, and get a healthy, comfortable and safe working environment.



EURUS Ⅲ

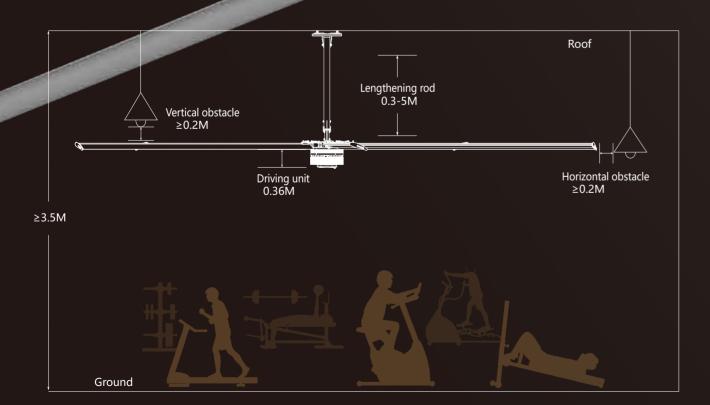
♦ Installation conditions and product parameters

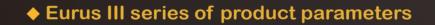
Installation conditions

Kale Environmental Corporation has a number of engineers who have rich experience in electrical, mechanical and architectural areas. In view of the different structural stress analysis, we can provide the most reasonable installation plan; for all kinds of buildings, we have the installation conditions for installation construction.

We know that installation is essentially important. Therefore, in the process of operation, there are strict operational rules and installation standards. Our professional technology and high requirements will eliminate all your doubts.

- Installation scheme is customised;
- Lift truck installation is well equipped;
- ◆ Level, height, balance debugging, rich experience;
- Balance test and run smoothly;
- ◆ The fastener has the torque standard to achieve the best fastener;
- Installation process is brief and easy to learn;
- ◆ The integrated test of wind speed can be done after installation if needed.





Technical specifications	16ft(4.9m)	18ft(5.5m)	20ft(6.1m)	24ft(7.3m)
Model	HVLS-D6AAA49	HVLS-D6AAA55	HVLS-D6AAA61	HVLS-D6AAA73
Full load	12650m³/min	13350m³/min	13750m³/min	14800m³/min
Speed range	5-75RPM	5-70RPM	5-62RPM	5-57RPM
Weight of fan' s main structure	106kg	114kg	120kg	135kg
Maximum motor power	1.8Kw	1.8Kw	1.8Kw	1.8Kw
Full load current	8Amps/220V	8Amps/220V	8Amps/220V	8Amps/220V

Note: 1, Weight calculation: the weight of the product does not include the control box, the top connection component and so on. 2, Size: the above product size is standard, other specifications and sizes can be customized. 3, Noise: sound level meter distance motor 1m, electromagnetic noise 40dB (A) below. 4, packing: standard wooden box packing. 5. Input power supply: single phase 220V optional



Company Profile<<<

The introduction of kale

KALE is a professional manufacturer specializing in HVLS super large energy-saving fan, a pioneer in the industry. KALE is dedicated to provide professional and efficient solutions of air circulation and people cooling for users.

KALE is a professional and enthusiastic team. KALE insists in innovation and improvement all the time, and has a very strict standard to the products. KALE constantly makes breakthrough on all aspects: from efficiency to noise, from exterior look to safety, from motor to control system, KALE always updates the record of the industry, and hopes we become the NO.1 in the industry of the world. In fact, KALE has achieved the leadership in many aspects.

Apart from achieving the first place in domestic market share, the largest production scale and the most extensive service network, KALE is always making great efforts to surpass the best.

Vision: Dominating in the HVLS Industry in the World Mission: Effectively serve the client and take good care of the employees Values: Sincerity, mutual trust, brave responsibility, act in good faith.

Headquarter Building



Sales Center, Operation Center. Finance Center company operation & product sale Minhang Dist., Shanghai Tel: 021-5768 5070

Production Center, Purchase Center products manufacture and supply Haining City, Zhejiang Province

Factory in Haining



Company elegant demeanour



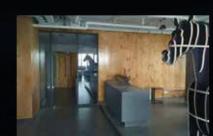












Qualifications & Certificates

Obtained ISO9001 quality assurance system in 2010

Obtained utility patents in 2011



Obtained "High-tech Enterprise" title in 2013



Obtained "Little Giant" title in 2014



Good news coming.....

Our positioning: World-class

Regarding the positioning, we are very clear to our positioning, that is to become the first preference partner of our customers. The reason why we can effectively implement this strategy is mainly due to the fact that:

We have the high quality products and solutions with the most advanced technology in the world, we have a wide range of networks to provide various kinds of fast service, and have the ability and qualification to provide high quality and certificated HVLS products on the global scale. We are very proud of the achievements we have obtained, and we are very pleasant to work together to expand the leading position in the global scope of Kale Environmental.



KALE FANS®

HUAZHUANG

WEİTE

Typical Clients

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Kale fans have applied in a substantial number of well-known international corporations including Amazon, Coco Cola, DHL, P&G, SIMENS, Volkswagen and Wal-Mart. In addition to more than 170 enterprises of FORTUNE 500 who are using Kale's products, numerous leading companies in the domestic market are served by Kale Environmental such as JD.COM, SUNING, SF-EXPRESS and XIAOMI TECH. This indicates that Kale fans have successfully applied in a wide range of industries and have earned great reputation from a variety of clients across the globe.



Kale Environmental has exported to more than 80 countries in Asia, America, Africa and Europe.

Main Sales Network







