

INNOVATIVE TECHNOLOGY
LEADS THE NEW VENTILATION STYLE



Permanent Magnet Ceiling Fan Catalog



Wanshsin Seikou (Hunan) Co., Ltd

Add.: No.158, Jinsha East Road, Ningxiang Hi-tech Industry Park, Changsha City, Hunan Province, China

Tel.: +86-731-84221213

Contact: Ms. Angel (+86 189 3245 8072)

Email: sales@wanshsin.com

SKYPE: +86 189 3245 8072

Wanshsin India PVT LTD.,

Add.: 206, Sundaram Arcade, Science city Road, Sola, Ahmedabad - 380060, Gujarat, India CIN -

U29308GJ2017FTC098600

GSTIN: 24AACW0559P1Z1X PAN - AACW0559P

Tel.: +91 79 48011530

Contact: Mr. Harry (+91-9265684568)





INNOVATIVE TECHNOLOGY
LEADS THE NEW VENTILATION STYLE

COMPANY PROFILE

WANSHSIN

WANSHSIN Seikou (Hunan) Co., Ltd.'s brand "Vomade" is a professional industrial fan product supplier and intelligent ventilation cooling solution provider integrating R&D, production, sales and service. It uses technologically advanced permanent magnet direct driven industrial fans together with intelligent inverters to realize convenient human-computer interaction and precise control. Compared with traditional industrial fans on the market, they are more efficient, energy-saving, and have a higher degree of intelligent automation and safety factor.

Wanshsin takes it as its mission to improve the industrial production environment and create a better life. Committed to leading the smart industrial fan market with advanced technology, relying on 4 R&D centers in Japan, Shenzhen, Changsha and the

headquarters of the company.

The R & D centers have strong strength and mature technology, with an experienced professional R&D team that independently researches and develops permanent magnet motors and servo inverters. Core technology, scientific analysis can be carried out according to customer needs and actual conditions, and efficient and applicable customized installation solutions can be provided.

In the future, Vomade will continue to adhere to the concept of "customer-centric" and the values of "focus, innovation, and sincerity" to provide customers with better products and more considerate services. We look forward to working with you to make life better.



Page 03



R&D STRENGTH

International first-class R&D team

The company's annual R&D investment is 6% of its operating income. There are currently more than 90 research and development personnel. It has successively established the Japan R&D Center, Shenzhen R&D Center, Changsha R&D Center, and Hunan Headquarters Research Institute. The R&D team has a reasonable structure, covering electrical engineering, control engineering, and machinery engineering, power electronic engineering and other complete disciplines.

Advanced design software

Advanced design, analysis and simulation with ANSYS, DSpace,



Parameters		
Model	WF6PM73	
Diameter	MM	7300
Number of Blades	PCS	5
Weight	KG	126
Voltage	V	380
Current	A	3.4
Rated Power	KW	1.5
Maximum Speed	RPM	55
Maximum air volume	m³/min	16200
Covered area	m²	800-1500



PRODUCT PERFORMANCE

"Fresh Air II Generation" is a large-scale multi-functional permanent magnet direct-drive industrial fan newly launched by Womade. This product is a new type of fan based on permanent magnet synchronous motor technology. It is independently developed and manufactured by Womade. It has breakthroughs in the industry and technological advancement. No need to use reducer. The product has a diameter of 7.3 meters, a maximum torque of 300N·m, and a full-load air volume of 16200m³/min, which is more than 30% more than conventional products. It promotes space air circulation with higher efficiency, and achieves the purpose of cooling personnel and improving environmental comfort. Products are widely used in industrial plants, warehousing and logistics parks, convention and exhibition centers, livestock farms, agricultural greenhouses, indoor stadiums, stations, etc.

7.3

DIAMETER

(meter)

55

MAX SPEED

(RPM)

1.5

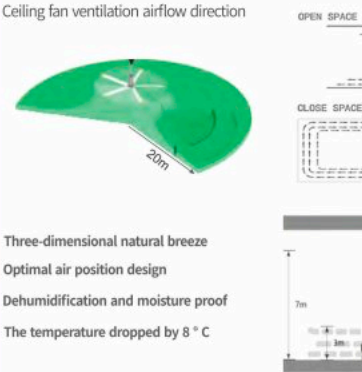
RATED POWER

(KW)

20%

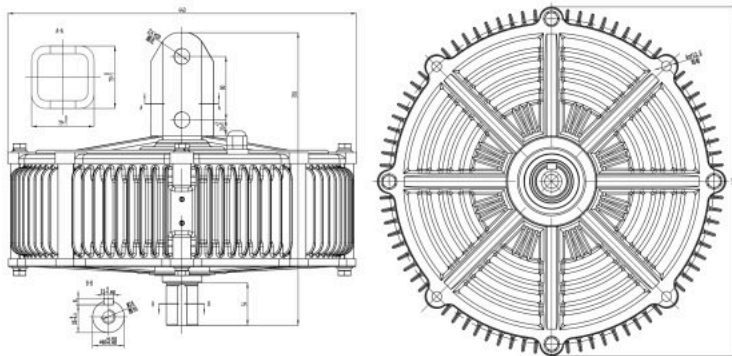
ANNUAL ELECTRICITY SAVINGS

PRINCIPLE OF VENTILATION &



CORE
TECHNOLOGY

Drive System—PM BLAC motor



Supply Voltage (VAC)	Rated Current (A)	Noise (dB)	Rated Speed (r/min)	Max Speed (r/min)	Insulation Grade	Protection Grade
380	3.4	≤55	10~55r/min	55r/min	F	IP56

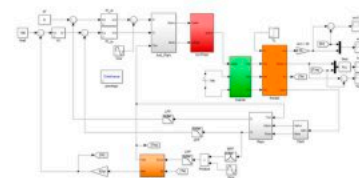
Reduce Installation Space	The motor has a simple structure and does not require a reducer. The height of the permanent magnet synchronous motor is 40% lower than that of the asynchronous motor of the same specification.
Energy	The motor has a high operating efficiency and can output rated torque at a low frequency of 5Hz, which saves 20% of electricity compared to an asynchronous motor of the same specification.
High Torque	Using permanent magnet materials with high magnetic properties and a special built-in tangential rotor magnetic circuit structure, compared with products of the same specification on the market, the magnetic energy utilization rate is higher, the anti-demagnetization effect is stronger, and the motor torque is increased by 20%.
Strong Carrying Capacity	It adopts rubber sealed bearings, excellent grease sealing, with longer lubrication service life. 5 times of the carrying capacity, can carry 1.5 times the overload torque without stalling.
Dissipate Heat	The inner rotor structure with external heat source, the heat source is located on the outer layer, and the heat is directly dissipated to the surrounding air through the casing. And the airflow directly acts on the surface of the heat-dissipating motor to take away heat in time, so that the temperature rise of the motor is very low, and the outer surface temperature rise is less than 20K, which greatly improves the service life of the motor and product stability.
Maintenance-free	Inner-rotor structure, a smaller motor vibration, noise below 55 db, protection class IP56, maintenance-free life

Page 07

CONTROL SYSTEM—INTELLIGENT V

The driving motor and controller are integrated design, the parameter running stability is better.

The vector control strategy without position sensor based on the current feedback can make the motor run stably within the full speed range. Intelligent carrier frequency is selected, and the rated torque can be output at a low frequency of 5 Hz.



The control cabinet adds a dust-proof net and a groove at the bottom from the recessed holes. The surface of the control circuit board is coated with a special anti-interference paint to enhance the anti-interference and corrosion resistance performance. The cabinet is equipped with a guide wire slot, and the electrical wiring is fixed in the guide wire slot to avoid being affected by external factors and ensure the high efficiency and stability of the control system.

ADVANTAGES OF THE CONTROL CAB

- reducer, high carrier frequency, low electromagnetic noise, quiet
- Sensorless vector control, with wide speed range
- stabilization accuracy, more stable fan operation
- High reliability, fast cooling, low-speed ventilation, long-term low
- Significant energy saving effect, with an average energy saving of



PRODUCT FEATURES

Personnel Cooling

FRESHAIR II industrial ceiling fans can produce natural breeze blowing on the surface of the human body, then promote the evaporation of sweat, and take away heat to cool the human body. This cooling feeling can reach 4-7 degrees Celsius. At the same time, it can blow the human body three-dimensionally in all directions to maximize the evaporation area.



Natural Ventilation

In a large and wide enclosed space, small fans, air conditioners, negative pressure fans and other ventilation solutions are subject to many restrictions. And the use of large industrial fans can effectively enhance the orderly movement of the airflow field in the space, promote air mixing, and improve air quality, and then get a healthy and comfortable working environment. At the same time, it can also be used with air conditioners, negative pressure fans, etc., to obtain better ventilation and cooling effects.

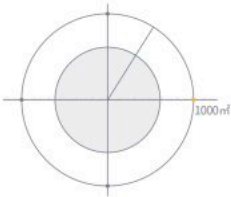
Dehumidification And Moisture Proof

Industrial ceiling fans can promote air mixing in the entire space, so that unpleasant smoke, moisture, etc. can be well dissipated, thereby improving the air quality of the entire room and obtaining a healthy, dry and safe working environment. This can also avoid rot caused by moisture generated by other ventilation solutions.

Energy Saving And Environmental Protection

Compared with central air conditioners, water air conditioners, small fans or other ventilation and cooling equipment, permanent magnet direct-drive industrial large fans have lower energy consumption, longer life, lower maintenance costs, no pollutants during operation, and very good energy saving and environmental protection effect.

PRODUCT ADVANTAGES



High S

Adopt multi and use.
Has indepe hanging str landing firm
The fan reli or power fa not sudden

High E Long \$

Compared v can save mx the bearing

Wide C

The super-li air in a larg

Mainte

Permanent maintenanc

PRODUCT APPLICATIONS

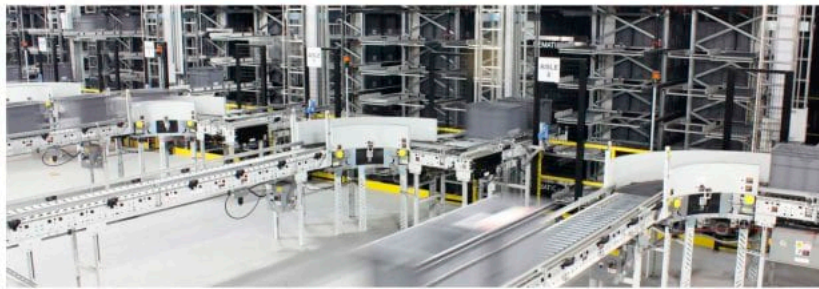
Warehousing and Logistics Industry

The goods are stored in the warehouse, and there are requirements for the ambient temperature and humidity of the warehouse. High temperature may affect the quality of the goods and make the operators irritable and uncomfortable. Humidity may cause the goods to deteriorate and make the sweat of the operators difficult to evaporate. The new air generation solves the problems of personnel cooling and overall ventilation of the environment, ensuring that the temperature and humidity of the warehouse are moderate, and the goods are guaranteed, people feel comfortable.



Machining Workshop

There are many equipment in the machining workshop, which generates high heat and is easy to gather in one place. The solution provided by Vornade helps air circulation in the workshop, helps to discharge heat, and forms a natural comfort. The wind farm achieves the effect of dual ventilation and cooling for personnel and the environment. The improvement of the overall workshop environment can increase the productivity of workers and better ensure the safe and efficient operation of equipment.



Page 11

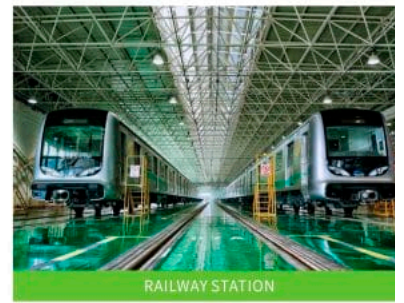
APPLICATIONS



EXHIBITION CENTER



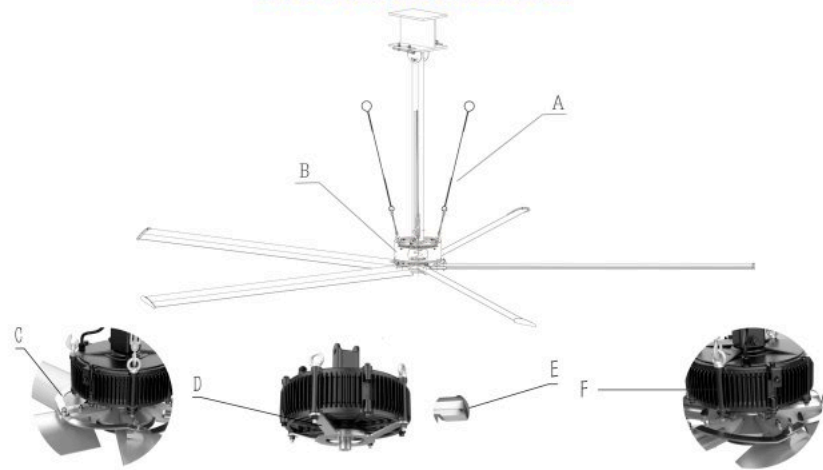
LIVESTOCK FARM



RAILWAY STATION

SAFETY GUARANTEES

SAFETY STRUCTURE DIAGRAM



- A Steel wire zipper
- B Fan body
- C Ring guard
- D Safety fender
- E External plug-in (skeleton)
- F Screw + welding double protection frame

Unexpected situation, safety structure to ensure safety

Electrical and structural protection measures are designed to ensure safety when accidents occur. The details are as follows:

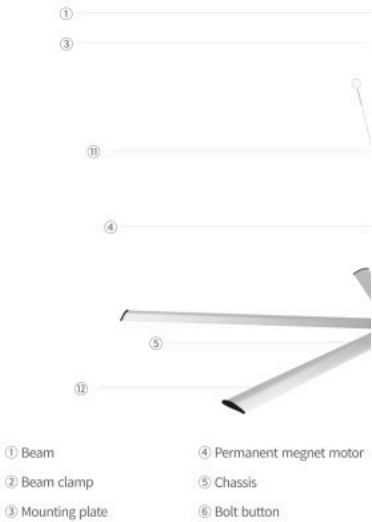
A. Motor shaft failure: There are 7 protective measures, including 4 sets of high-strength fasteners, a lock nut, a cotter pin, and a set of shaft connectors.

B. Bearing fracture failure: the rotor disk will fall on the stator disk as a whole. No parts will fall off within a distance of 10mm.

C. Accidental collision: The force of the fan blade is transmitted to the root plug-in. The worst case is that the root fails. There is still an I-shaped connecting ring to protect it, and no parts will fall off.

The extreme accidents are listed above, so the safety of the whole machine design belongs to the ultra-high safety design, and users can use it with confidence.

INSTA



Installation steps:

- 1.Fixedly connect the plant bean① beam pressure plate② a end of square steel⑪ with installation plate③ through bolts
- 2.The top of the permanent magnet motor④ is fixedly conn bolts;
- 3.Adjust the permanent motor④ with the level tester to kee
- 4.Connect the 4 bolts buckles⑥ with the top of the perman
- 4 steel wire ropes⑧ at one end, and fix one end on the surr
- 5.Install the five frames⑩ in the fifth slot of chassis ⑤, and fi
- 6.Insert 5 blade tail fin assembly⑫ into 5 frames ⑩ ,fix it wit
- with annular plate⑨ to form fan blade assembly
- 7.Hulk the plastic face⑦ is fixed at the bottom of chassis⑤
- 8.All fixed bolts are coated with bolt locking glue.

We have an experienced team of electrical, mechanical, and construction engineers who can provide the most reasonable installation plan according to the different building structures. Installation is extremely important, so we formulate and implement strict operating specifications and installation standards. Our professional technology and high requirements will make everything easy for you.

- 01

Customize Installation Plan
- 02

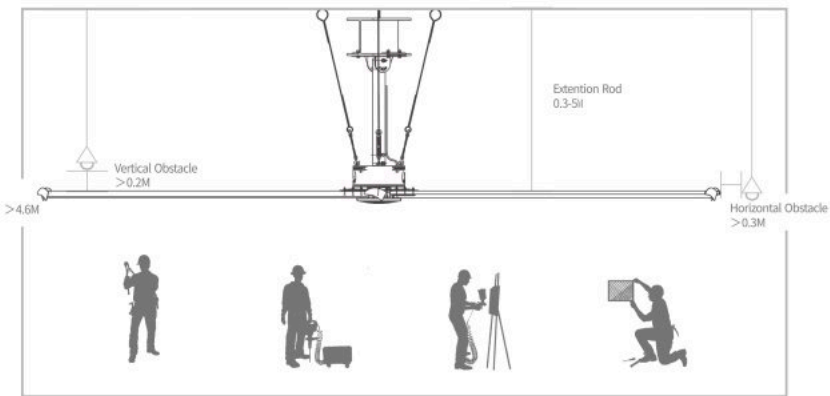
Installation Scientific and Concise
- 03

Professionally Equipped with Lift Truck
- 04

Multi-dimensional Debugging of Level, Height, Balance, etc.
- 05

Fasteners with standards torque to achieve the best tightening
- 06

Air volume and wind speed measured on site after installation



INSTALLATION CONDITIONS

- Distance between the fan and ground >3 m
- Distance between the fan and Obstacles(like travelling crane)>0.3m
- Distance between the fan tail and Obstacles(like lightening) >0.3m
- It can be installed whether the building is a steel structure, a concrete structure, a spherical grid structure or a complex structure;
- Choose safe load-bearing beams during installation, otherwise our company can carry out reconstruction and installation according to the site;
- For special installation places, our company can carry out modification and installation according to the site.

SECURITY STEP

The safety alarm device of the control cabinet has overload and lack safe operation.
Equipped with blade safety connecting piece and shaft connecting p
Fasteners with standards torque anti-loose structure to achieve the t
On-site debugging and testing to ensure the customer's installation e



SECURITY GUARANTEE

Issue the product safety test report and strictly abide by the quality r
100% specifications and noise testing of the shipped products comp
Product safety liability insurance provided;
After-sales responds within 24 hours for any usage problems;
Customized products are welcome.



AFTER-SALES SERVICE



50
SERVICE NETWORK

24
AFTER-SALES SERVICE
HOTLINE AND TECHNICAL
SUPPORT (HOURS)

Wanshin always provides customers with high-quality products and perfect after-sales service. Our company has set up more than 50 service network at home and abroad, and provides 24-hour after-sales service hotline and technical support to ensure that users are provided with thoughtful, convenient, high-quality and Comprehensive after-sales service.

MAIN PARTS



Permanent Magnet Motor
High-efficiency permanent magnet motor with built-in magnet Steel, which is safe, reliable, low vibration and high energy efficiency.



Ba
Made of aviation aluminum with integral hot forming, integrally molded and lathe, the accuracy controlled within \pm



Main Skeleton
2A12 high-strength aluminum alloy, cold forging process and anodizing process.



Mag
N42SH High-performance

The outer surface of the parts is galvanized, and the anti-corrosion ability is strong.



Mounting plate



Internal pressure plate



Outer and inner ring plate



Connecting plate