We are always here for you!

We look forward to working with you to create a bright future.
For more detailed product information, please contact your regional sales representative.

FANS-TECH ELECTRIC CO.,LTD.

www.fans-tech.com
ADD:No.9S.Shuncheng Road,Wusha, Daliang
Shunde,Foshan, Guangdong,China
TEL :+86-757-22800688 22915788
FAX:+86-757-22808922 22915757
P.C:528300
Email:market@fans-tech.com

Fans-tech



Fan solutions **for Data Centers**

Become the most reliable and competitive motor and fan supplier across the world.

About Fans-tech

Fans-tech was founded in 2004. The company mainly focuses on the field of intelligent small and medium-sized fans, integrating production, sales, and research. It mainly produces AC/DC/EC Centrifugal fan, Axial fan, Mixed fan, water pumps, and other products. It is one of the strongest technical strength and largest production scale motor fan enterprises in China.

The company is committed to becoming the world's most reliable and competitive provider of electric motors and fans, and has obtained multiple qualifications and honors, such as being a national intellectual property advantage enterprise, being selected multiple times as one of the "Top 500 Manufacturing Enterprises in Guangdong Province", being rated as a "National High tech Enterprise", an excellent manufacturing enterprise in Guangdong Province, and an export famous brand enterprise in Guangdong Province.

VISION

Become the most reliable and competitive motor and fan supplier across the world.

CORE VALUE

Integrity Innovation Win-win

MISSION

Innovative technology unremittingly to create

Higher value for clients

More chances for employees

Greater earnings for shareholder

Better future for society

Requirements for fans in the data center industry



Precision air conditioning fans are a new type of fan that has gradually developed over the past 30 years. They are characterized by high airflow and variable heat loads, and are used in high-precision environments such as large data centers, computer rooms, program switching rooms, satellite mobile communication stations, large medical equipment rooms, laboratories, testing rooms, and precision electronic instrument production workshops. Driven by the trend toward energy conservation, industry customers need a fan with multiple advantages to meet new demands.

Parameter requirements

Storaging Temperature: -40℃ ~ 80℃

Storaging Humidity:5 ~ 95%

Life time:40000H@40℃

Protection:IP55,C5 Corrosion Resistance

Safety regulations, EMC, UL, 6KV Surge

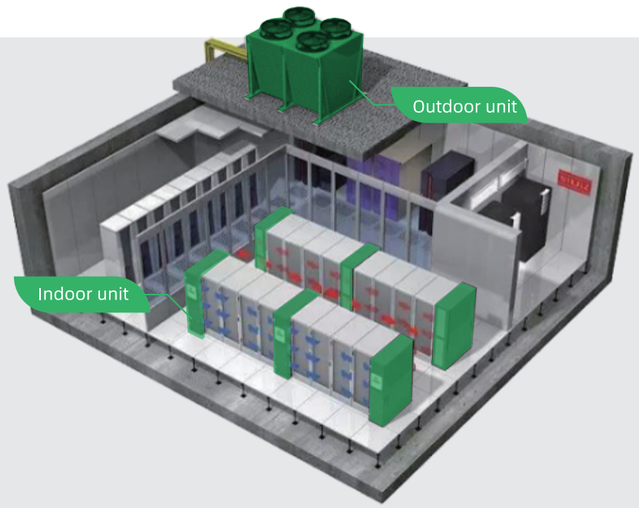
- Suitable for PWM speed control or variable frequency speed control
- If chopper speed control is used, it should be suitable for wide frequency power supply (±3Hz)
- Low speed control resonance fundamental frequency
- High reliability, high efficiency, ERP energy efficiency

High performance

Energy-saving

High and low speed switching

Easy management and maintenance



Fans-tech Solutions

The Fans-tech Precision Air Conditioning Fan Series not only adapts to the industry's characteristics of high airflow and varying heat loads, but also achieves high efficiency and energy savings, making it a wise choice for industry customers.



Large size axial fan

Φ500~Φ910



EC backward centrifugal fan

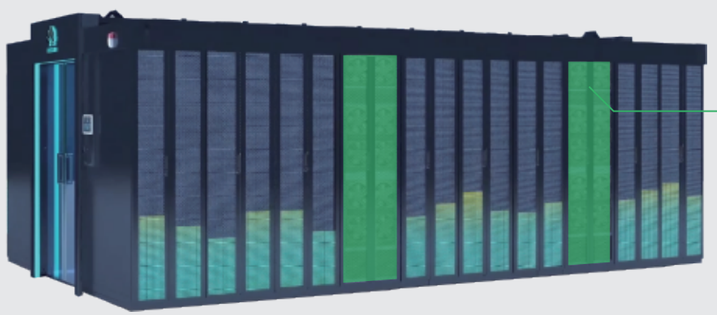
Φ190~Φ630



DC Axial fan

Φ167 Φ180

High energy efficiency	Life time	Protection rating	EMC certification
ERP Energy Efficiency	40000H@40℃(Centrifugal) 60000H@40℃(Axial)	IP54	CCC, CE

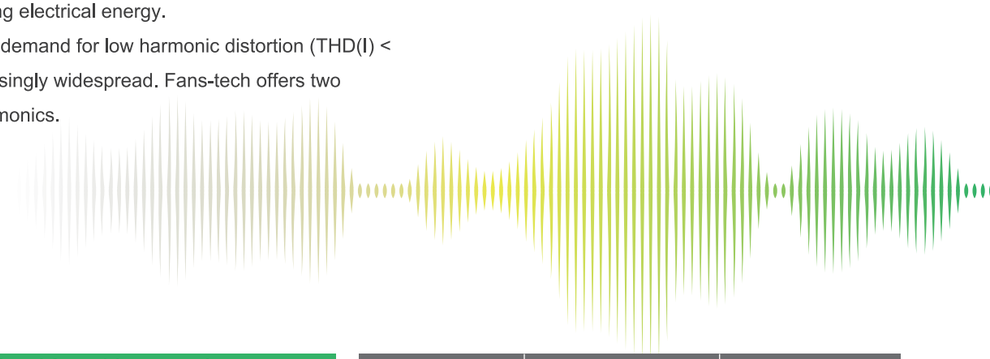


Application of fans in data center

Harmonic mitigation

Harmonic distortion

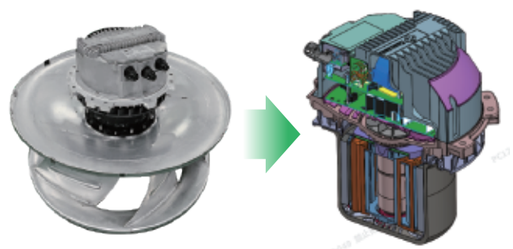
Reducing system capacity, such as transformers, circuit breakers, and cables, accelerates equipment aging, shortens equipment service life, and may even damage equipment, posing risks to production safety and stability, and wasting electrical energy.
In the IDC industry, the demand for low harmonic distortion (THD(I) < 3%) is becoming increasingly widespread. Fans-tech offers two solutions to reduce harmonics.



EC centrifugal fan with external APF electronic control



EC centrifugal fan with internal APF electronic control



Category	External APF	Internal APF
Cost	High	Low
Application Connectivity	Inconvenient	Convenient
Environmental Compatibility	Bad	Good
Size	Large	Small
Impact of failure	Serious	Slight
Fault maintenance	Inconvenient	Convenient
Performance	Low	High
Effect coverage	Small	Large

Fan wall and group control



Energy efficiency up to 60%

Fan wall technology integrates high-efficiency EC fans into ventilation systems, typically in a parallel configuration, with integrated fan group intelligent control providing independent control, polling, timing, remote control, fault recording, and other functions. This provides a one-stop solution for intelligent control of Fan wall, meeting complex and changing ventilation requirements.

Reliable | **Energy-saving** | **Efficient**



⊗ AC Fan Solutions for AHU

It requires a large amount of space
and is not easy to transport or install.

- The variable frequency speed regulation range is narrow.
- Efficiency degrades rapidly.
- The loss in the airflow passage is approximately 70%.

In traditional belt-driven fans, components such as AC motors, impellers, belts, and frequency converters are manufactured separately without mutual optimization.

Once a fault occurs, it needs to be shut down for maintenance.



⊘ EC Fan Solution for AHU

Compact design for minimal space requirements, facilitating effortless transportation and installation.

- Features electronic control with 0-10V stepless speed regulation.
- Exhibits a wide high-efficiency operating range.
- The loss in the airflow passage is approximately 40%.

The EC Fan group represents an integrated system where components are mutually optimized to achieve higher efficiency across a broader operational spectrum while enhancing system durability.

In the event of a fault in one fan, the efficiency of other fans can be dynamically increased during maintenance to maintain the total air volume.

Intelligent control system



1 Configure the fan's communication address, speed, speed ratio, etc. according to customer requirements; at the same time, the interface can be used to understand the fan's operating status, such as actual speed, fan operating status, and fault status.



2 This management system enables three-level control of single fans, groups of fans, and all fans, achieving rapid intelligent control.



3 Real-time monitoring, RS-485 networking, standard MODBUS RTU and TCP/IP protocols, a comprehensive large-scale group control management system, capable of achieving decentralized control and centralized unified management functions, meeting the monitoring needs of large factories for fan equipment.

Advantages of Fan wall modular solutions

Super-large airflow output, high reliability

- Independently developed, optimized air intake characteristics for ideal flow control
- Industry-leading modular design not only provides excellent energy efficiency, but also ensures efficient and reliable system operation

Precise speed control, intelligent control

- The equipment can be started up to achieve 0-100% stepless, smooth, and rapid speed adjustment. Single machine failure does not affect operation, ensuring safety and reliability.

Easy to install, low maintenance costs

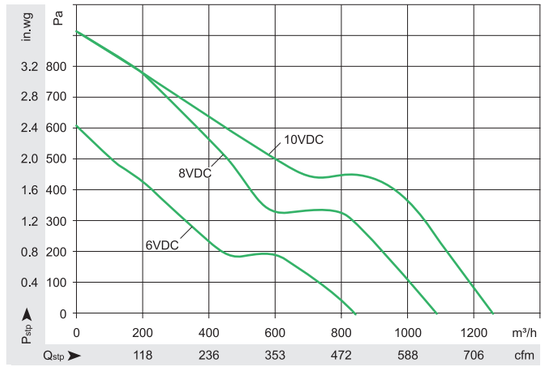
- Easy to transport and install
- Modular design for the entire unit, compact and space-saving, achieving higher air performance and space utilization



ϕ180
DC Axial Fan



AF180F4-059-A00

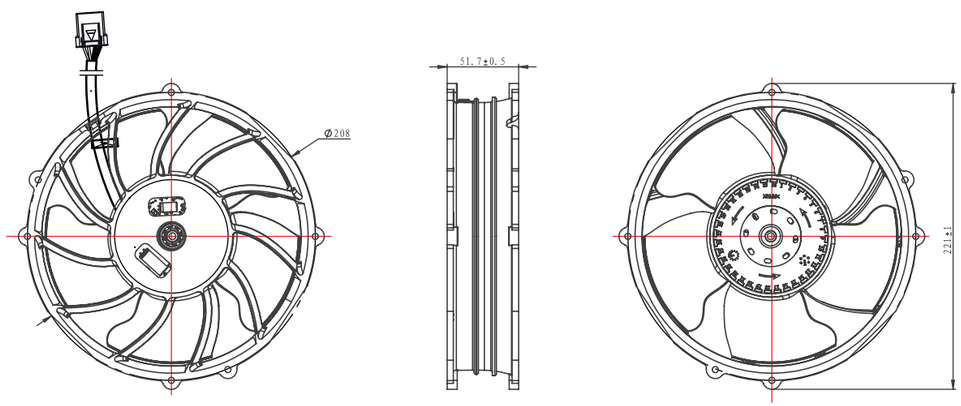


Material: PA66 Plastics
Protection rating: IP20
Insulation rating：F
Operating temperature：-25℃～+60℃
Protection: Features a resettable thermal protection function

Model	Voltage (VDC)	Frequency (Hz)	Airflow (CMH)/(CFM)	Speed (rpm)	Power (W)	Current (A)	Noise (dB(A))
AF180F4-059-A00	48	-	1290	6850	140	2.94	74

Technical data is measured in vented condition; The company reserves the right to revise data resulting from technical changes at its sole discretion, with no obligation to provide advance notice.

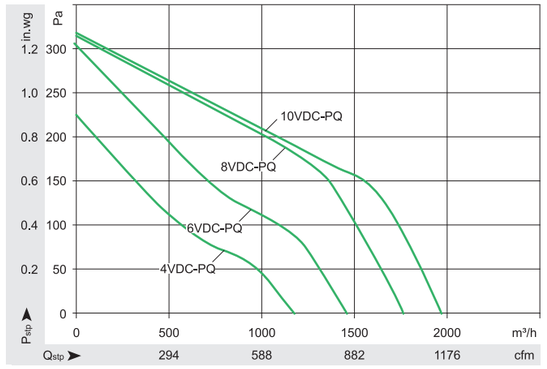
Structure Diagram



ϕ250
DC Axial Fan



AF250F4-059-000

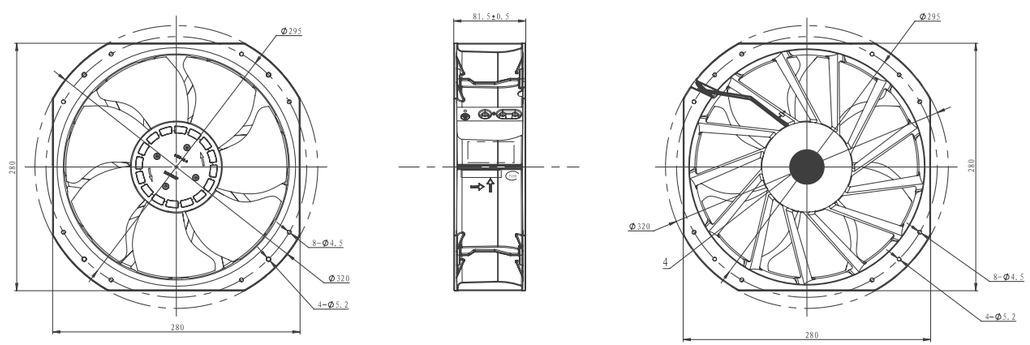


Material: PA66 Plastics
Protection rating: IP20
Insulation rating：F
Operating temperature：-20℃～+60℃
Protection: Features a resettable thermal protection function

Model	Voltage (VDC)	Frequency (Hz)	Airflow (CMH)	Speed (rpm)	Power (W)	Current (A)	Noise (dB(A))
AF250F4-059-000	48	-	1960	3100	91	1.9	70

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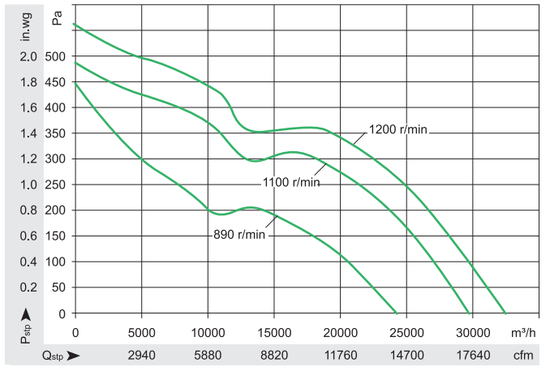
Structure Diagram



ϕ860
EC Axial Fan



AF860F7-150-000

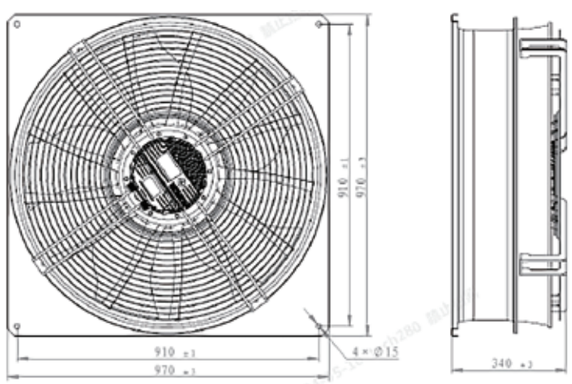


Material: SPCC, Plastics
Protection rating: IP54
Insulation rating：F
Operating temperature：-25℃~+60℃
Protection: Features a resettable thermal protection function

Model	Voltage (VAC)	Frequency (Hz)	Airflow (CMH)	Speed (rpm)	Power (W)	Current (A)	Noise (dB(A))
AF860F7-150-000	3~460	50/60	32000	1200	2027	2.8	88

Technical data is measured in vented condition; The company reserves the right to revise data resulting from technical changes at its sole discretion, with no obligation to provide advance notice.

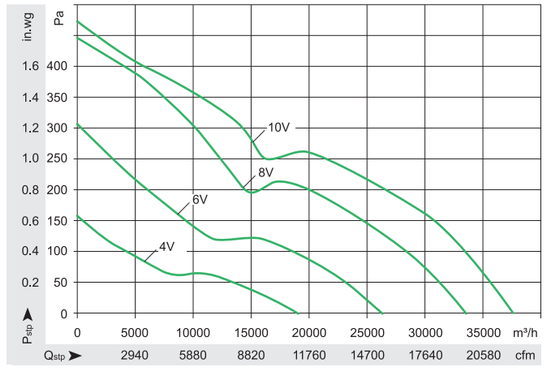
Structure Diagram



ϕ910
EC Axial Fan



AF910F7-150-000

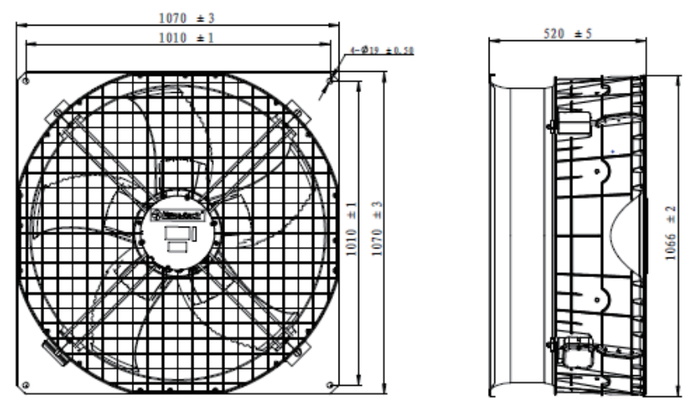


Material: SPCC, Plastics
Protection rating: IP54
Insulation rating：F
Operating temperature：-30℃~+60℃
Protection: Features a resettable thermal protection function

Model	Voltage (VAC)	Frequency (Hz)	Airflow (CMH)	Speed (rpm)	Power (W)	Current (A)	Noise (dB(A))
AF910F7-150-000	3~460	50/60	37200	1055	1845	2.6	87

Technical data is measured in vented condition; The company reserves the right to revise data resulting from technical changes at its sole discretion, with no obligation to provide advance notice.

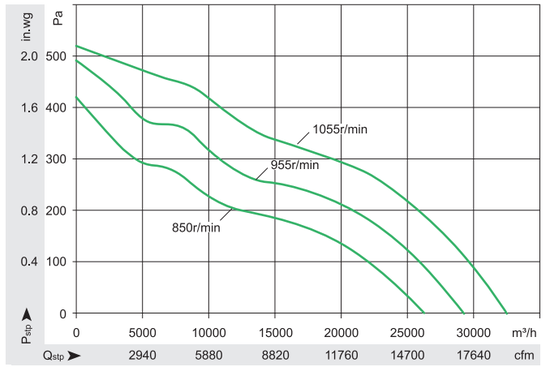
Structure Diagram



ϕ910
EC Axial Fan



AF910F7-150-003

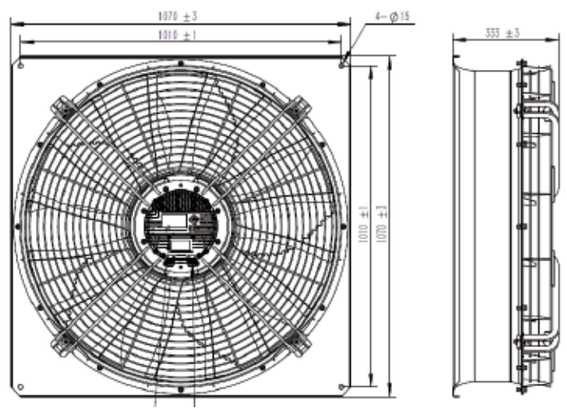


Material: SPCC, Plastics
Protection rating: IP54
Insulation rating: F
Operating temperature: -25℃ ~ +60℃
Protection: Features a resettable thermal protection function

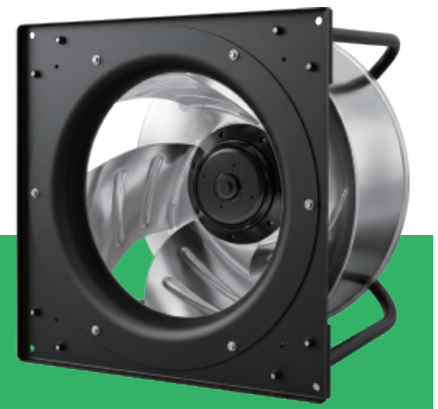
Model	Voltage (VAC)	Frequency (Hz)	Airflow (CMH)	Speed (rpm)	Power (W)	Current (A)	Noise (dB(A))
AF910F7-150-003	3~460	50/60	32500	1055	1900	2.5	87

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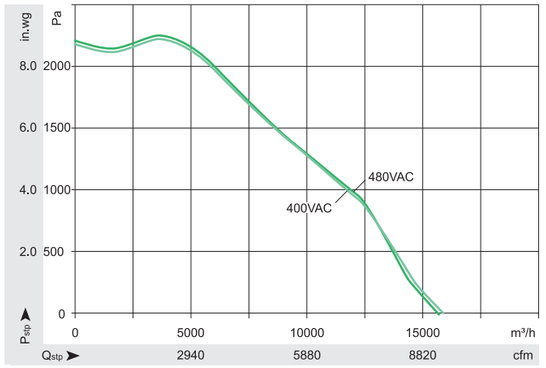
Structure Diagram



ϕ500
EC Backward centrifugal fan



SC500F5-150-006

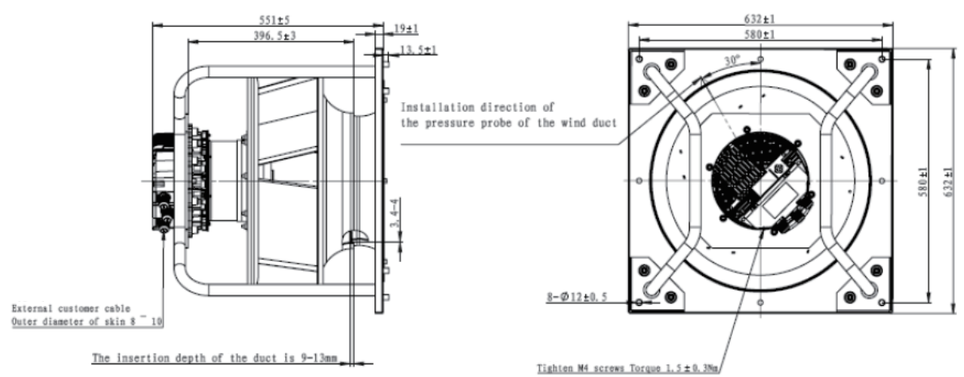


Material: Aluminum alloy
Protection rating: IP55
Insulation rating: F
Operating temperature: -25℃ ~ +40℃
Protection: locked-rotor protection, current limit protection, shutdown protection for under-voltage and over-voltage conditions, and soft-start functionality.

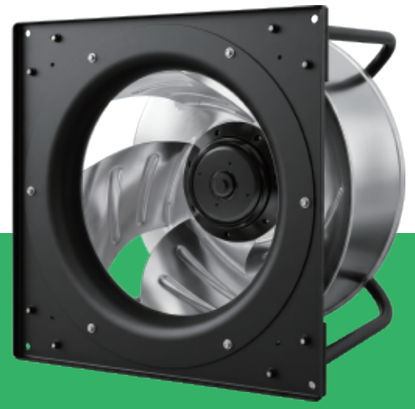
Model	Voltage (VAC)	Frequency (Hz)	Airflow (CMH)	Speed (rpm)	Power (W)	Current (A)	Noise (dB(A))
SC500F5-150-006	3~380-480	50/60	15600	2650	4200	7.1-5.9	86

Technical data is measured in vented condition; The company reserves the right to revise data resulting from technical changes at its sole discretion, with no obligation to provide advance notice.

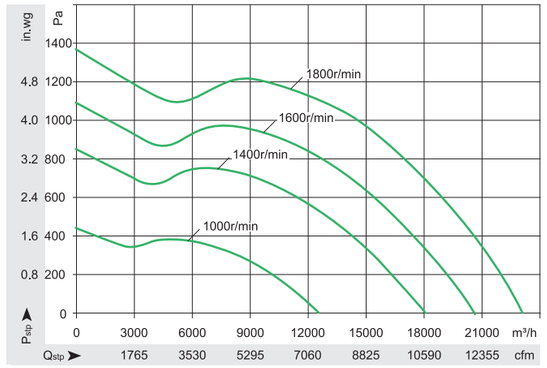
Structure Diagram



ϕ560
EC Backward centrifugal fan



SC560F5-150-008

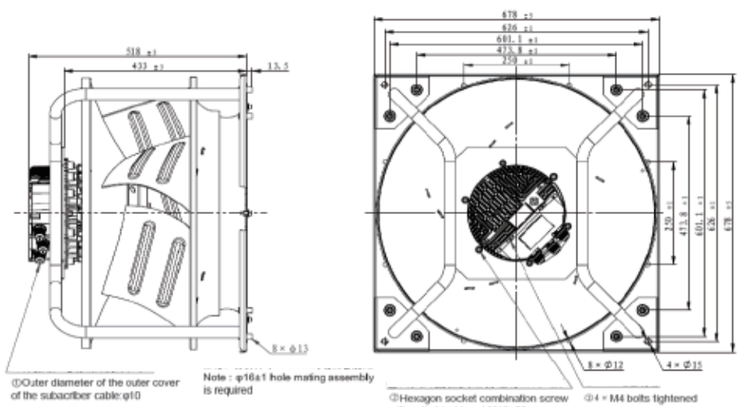


Material: Aluminum alloy
Protection rating: IP55
Insulation rating：F
Operating temperature：-25℃～+55℃
Protection: locked-rotor protection, current limit protection, shutdown protection for under-voltage and over-voltage conditions, and soft-start functionality.

Model	Voltage (VAC)	Frequency (Hz)	Airflow (CMH)	Speed (rpm)	Power (W)	Current (A)	Noise (dB(A))
SC560F5-150-008	3~380-480	50/60	23000	1800	4600	7.7	92

Technical data is measured in vented condition; The company reserves the right to revise data resulting from technical changes at its sole discretion, with no obligation to provide advance notice.

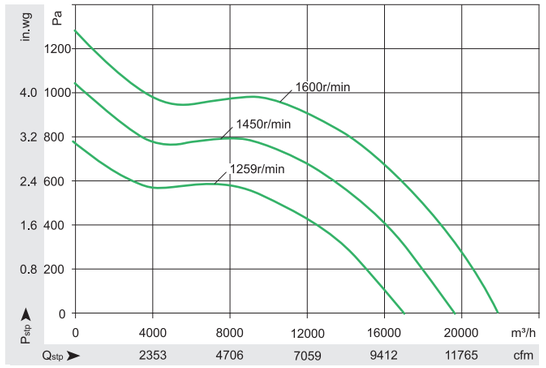
Structure Diagram



ϕ630
EC Backward centrifugal fan



SC630F5-150-A01



Material: Plastics
Protection rating: IP54
Insulation rating：F
Operating temperature：-25℃～+40℃
Protection: locked-rotor protection, current limit protection, shutdown protection for under-voltage and over-voltage conditions, and soft-start functionality.

Model	Voltage (VAC)	Frequency (Hz)	Airflow (CMH)	Speed (rpm)	Power (W)	Current (A)	Noise (dB(A))
SC630F5-150-A01	3~380	50/60	21900	1600	2700	5.0	87

Technical data is measured in vented condition; The company reserves the right to revise data resulting from technical changes at its sole discretion, with no obligation to provide advance notice.

Structure Diagram

