



BLAUBERG
Motoren



ZERNTRI-PAC SERIES

CATALOGUE 2022



HORST HAHN

德国博乐监事会主席

Dear colleagues,

BLAUBERG Group of Companies was established in the Kingdom of Bavaria in the South of the German Empire almost 117 years ago.

During this time we have worked our way up from a small chimney manufacturer to a leading ventilation company.

We owe our success due to:

- ~ Innovativeness of the large army of our engineers and designers.*
- ~ Hard work and efficiency of thousands of our employees.*
- ~ A wise policy of hundreds of managers who are running the business in our branch offices worldwide.*

We have created a lot of revolutionary solutions in the of ventilation and have always been one step ahead of the market.

But our main achievement is as follows:

Over a century customers and distributors worldwide have learnt at first hand that BLAUBERG is a reliable partner producing fans of reliable quality.

These are the traditions of the Bavarian land and we scrupulously follow those.

Our customers, moving into a new house, sometimes take a fan bought by their fathers 30 years ago with them.

We certainly would like to offer them our new models, but we are proud of a long service life of our products.

Many of our European colleagues have come to China many years ago with the main purpose to produce cheap goods in your country for the European market.

We have not done that. We have always created and produced all our products by ourselves.

Today we have come to your country for another purpose. We understand that you need our modern, efficient climate control equipment.

In the first stage, we offer only products manufactured at our plants in Europe.

In the nearest future we will build the BLAUBERG-China Plant and will produce ventilation products for you all together.

We hope to find many partners, friends and associates in your country.

Best wishes, Head of the Supervisory Board

HORST HAHN



Blauberg Group manufactures and sells a complete range of hi-tech energy-efficient ventilation equipment offering a balanced mix of innovative technology, contemporary design and traditional German quality.

The group's main products include domestic fans, single-room ventilation units, heat recovery units, industrial fans and air handling units, parts and accessories for customized system configurations as well as bespoke ventilation solutions. Due to our product diversity, we do our best to meet the individual needs of our clients in various countries with the best combination of price and quality.





Blauberg Motoren was born in Munich, Germany, like own direction of fans and motors manufacturing and integral part of Blauberg Group.



Starting with manufacturing AC motors with external rotors for own needs, for now Blauberg Motoren produce wide range of motors and fans with EC and AC technology for clients all around the world. It includes axial fans, backward curved fans, forward curved fans, blowers.

We are proud to be presented in products of our clients — world famous manufactures of ventilation, heat, home appliance and other equipment, and be part of their success.



For now Blauberg Motoren have R&D (research and development) center in Munich (Germany), as well as main testing laboratories for products and factories in Germany (Munich), Ukraine (Kiev) and Poland.

Every day we are working with our passion and respect to technology and engineering to make our products better – more responsive to needs and expectations of our clients.

With traditional German quality, we are focused on developing and improving best one and newest technology – in our own manufacturing and in our products.

FAN MOTORS

THE MOTORS ARE POWERED BY DIRECT OR ALTERNATING CURRENT.

- A direct current motor is powered by a direct power supply.
- An alternating current motor is powered by an alternating power supply.

Alternating current motors are the most widely used motors because the basic electric grid in the country has alternating power supply.

ALTERNATING CURRENT MOTORS HAVE TWO TYPES:

- **Synchronous** electric motors are alternating current motors with a rotor that rotates synchronously with a magnetic field;
- **Asynchronous** electric motors are alternating current motors with the magnetic field frequency exceeding the motor rotation speed.

Asynchronous motors

Nowadays the asynchronous electric motors find wide application.

Asynchronous electric motors consist of two basic components, the stator and the rotor.

The stator is a fixed motor component. On the inner side the stator has some slots for laying of three-phase cable winding that is powered by three-phase current. The rotor is a rotating part of the motor and also has slots for inserting the cable winding. The rotor and the stator are assembled of separate 0.35-0.5 mm thick electrotechnical steel pressed plates.

Separate plates are insulated from each other with a varnish layer. The air gap between the stator and the rotor is kept as low as possible: 0.3-0.35 mm for low capacity machinery and 1.0-1.5 for more powerful machinery.

Depending on the rotor design the asynchronous motors are available in short circuit modification and phased modifications. Short circuit motors are the most widely used motors because of their simple design and easy operation. The three-phase stator winding is inserted inside the slots and consists of a number of interconnected coils. Each coil consists of one or several turns which are insulated against each other and against the slot walls.

THE ASYNCHRONOUS ELECTRIC MOTOR WITH SHORT CIRCUIT ROTOR HAS THE FOLLOWING ADVANTAGES:

- Permanent speed at various loads.
- Resistance to short-term mechanical overloads.
- Easy structure.
- Easy start-up.
- Higher $\cos \phi$ and efficiency compared to electric motors with phased rotor.

The design of the asynchronous electric motor with external rotor is similar to that of the standard asynchronous electric motor.

The only difference is the position of the rotor. The electric rotor motor is located inside the stator winding and the stator with turns is located in the electric motor center. This configuration provides a compact size of the ventilation unit. The electric motor shaft is carried by ball bearings fixed inside the stator and the impeller is fixed in the rotor casing. Such a design provides air cooling of the electric motor which makes it applicable for a wide temperature range. The electric motors are assembled with the impellers and are subjected to static and dynamic balancing in compliance with DIN ISO 1940. The motors have an integrated overheating protection with automatic restart.

All the motors have 100 % controllable speed range. Speed control is performed with a transformer or electronic devices. Explosionproof motors are controlled exclusively by transformers within 25% up to 100% of the rated voltage range. Speed control is performed by voltage change whereas the frequency in the grid remains the same. The electric motor speed is smoothly decreased as power voltage drops or is increased as power voltage rises. The motor can also be controlled with a frequency converter.

ADVANTAGES OF THE ASYNCHRONOUS ELECTRIC MOTOR WITH EXTERNAL ROTOR:

- Long service life.
- Light weight and small overall dimensions.
- Easy assembly and installation.
- Aligned impeller and electric motor.
- Regulated air capacity.
- Low energy demand during start-up.



EC motors

The electric motor with high-efficient EC motor is a synchronous direct current motor driven by an electronic commutating unit (controller). It has no friction and wearing parts as a collector or brushes, unlike the standard motor. The function of these parts is performed with the maintenance-free electronic circuit of the EC controller.

The EC technology is the state-of-the-art method for arrangement of energy saving and high efficient ventilation.

The energy demand of EC motors is by 50% less as compared to standard motors and efficiency reaches 90%.

These new electric motors are featured with high performance, low noise level and controllable total speed range. The electronic EC-controller enables some other smart functions, e.g. fan control according to measured temperature, pressure and other parameters.

A unique software ensures high control accuracy for fans integrated into a single network. Parameters of a single fan integrated into a common network may be centrally corrected to match the ventilation system parameters. All the system parameters are displayed online on a computer. This enables programming individual operation modes of each fan in the system. This technology enables also programming custommade settings to meet individual customer requirements.



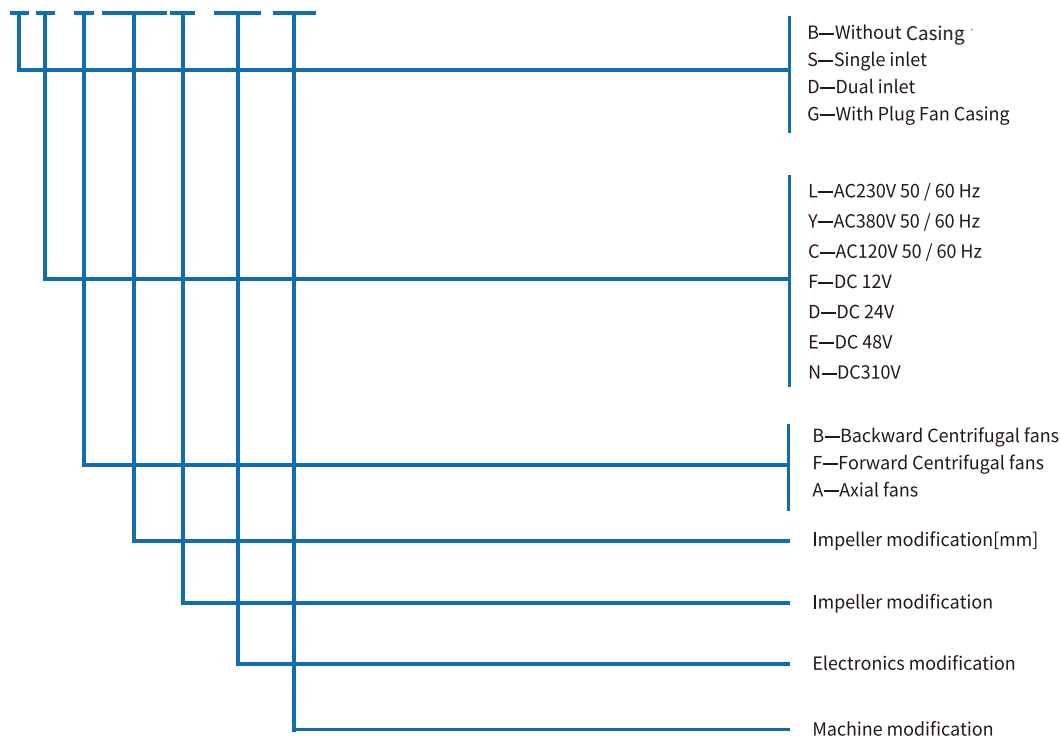
ADVANTAGES OF EC MOTORS:

- Efficient performance at any rotation speed of the fan, including very low speed.
- Low heat emission.
- Small overall dimensions of the unit due to external rotor design.
- Maximum fan rotation speed does not depend on frequency in the grid.
- The fan is suitable for connection both to 50 Hz and 60 Hz power mains.
- High efficiency at low rotation speed.
- Energy demand is by 1/3 less as compared to standard motors.
- Data interchange between PC and fan for parameter setting and control.
- Integration of all fans into a unified system and their centralized control.

TYPE KEY

EC FANS

BL-B190A-EC-00



Ø133 mm PLUG FAN

EC CENTRIFUGAL FAN



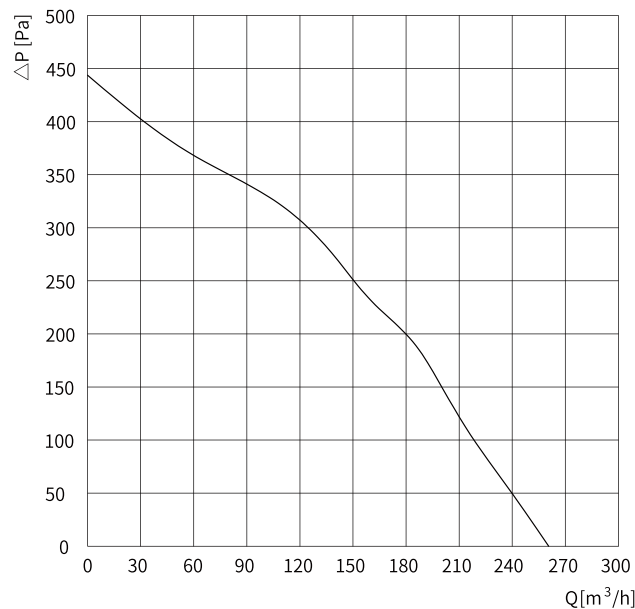
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

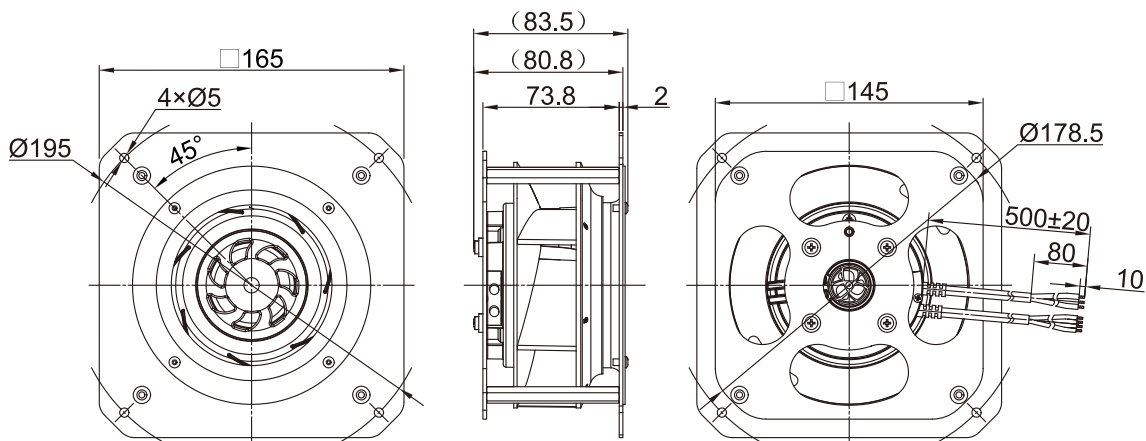


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B133B-EC-M3	230	50/60	3800	30	0.23	63	-25 ... (+60)	E0

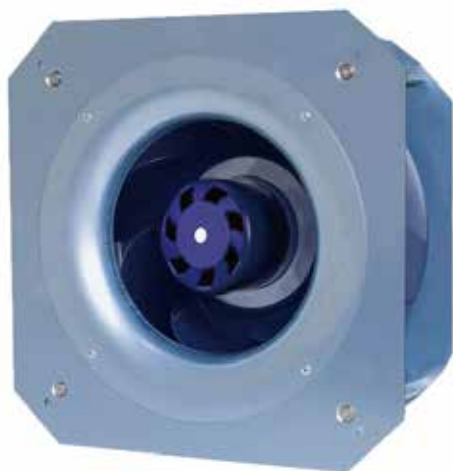


Overall Dimensions



Ø133 mm PLUG FAN

EC CENTRIFUGAL FAN



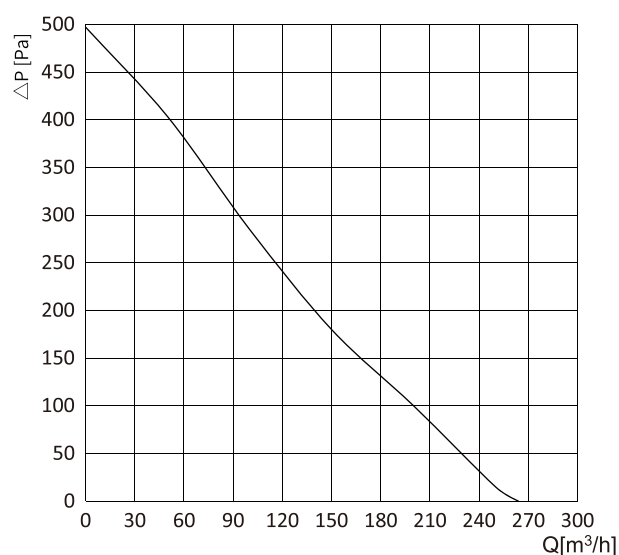
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

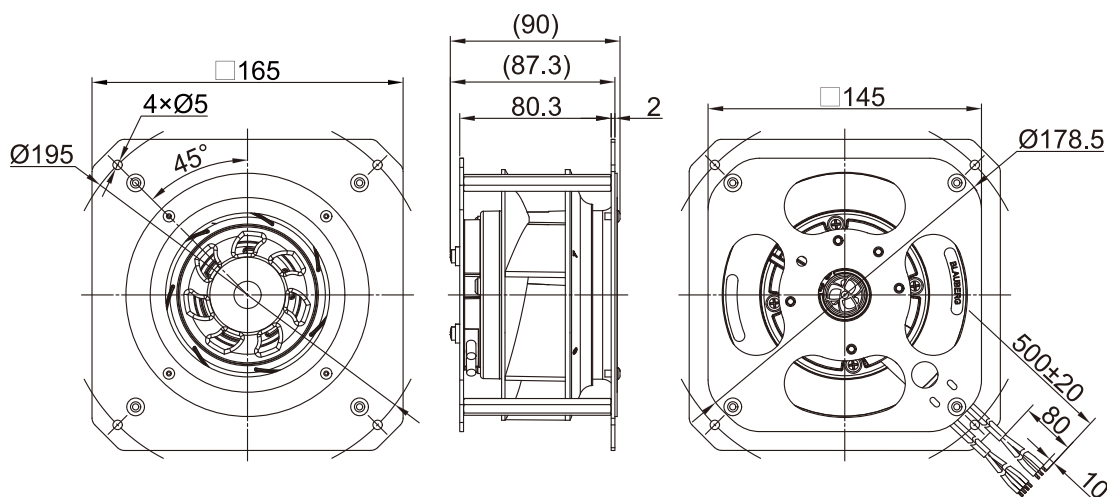


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B133B-EC-M0	230	50/60	4350	32	0.24	67	-25 ... (+60)	E0

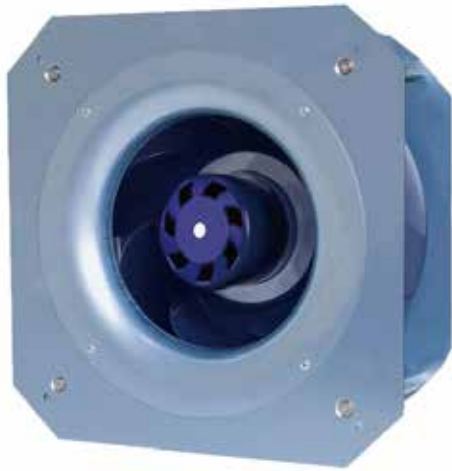


Overall Dimmensions



Ø133 mm PLUG FAN

EC CENTRIFUGAL FAN



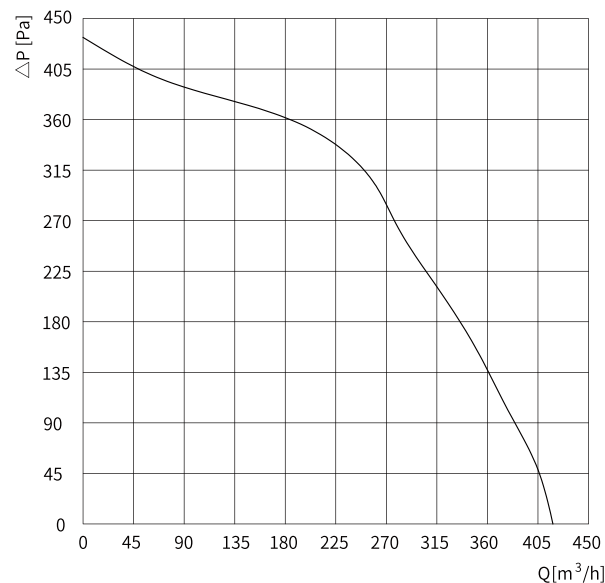
Features

- Speed Control: 0~10V DC /PWM
- Direction of rotation: clockwise, seen on rotor
- Impeller material: PA6+GF
- Type of protection: IP55
- Insulation class: B
- Mode of operation: continuous operation (S1)
- Bearing: ball bearings
- Motor protection: self-resetting TOP wired internally

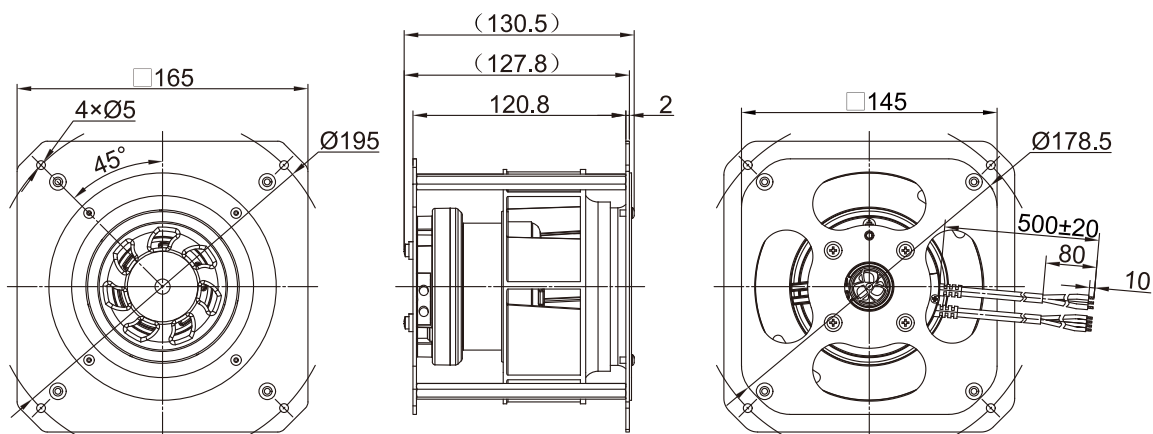


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max [A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B133A-EC-M0	230	50/60	4400	53	0.38	70	-25 ... (+60)	E0

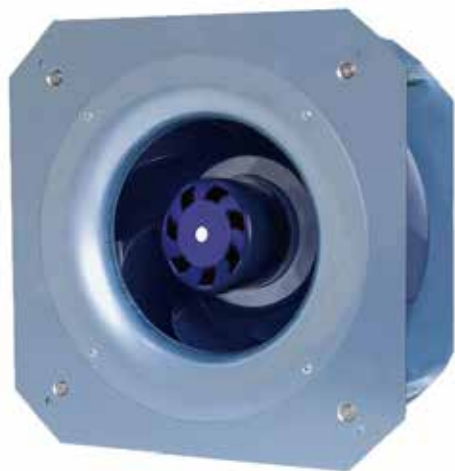


Overall Dimensions



Ø175 mm PLUG FAN

EC CENTRIFUGAL FAN



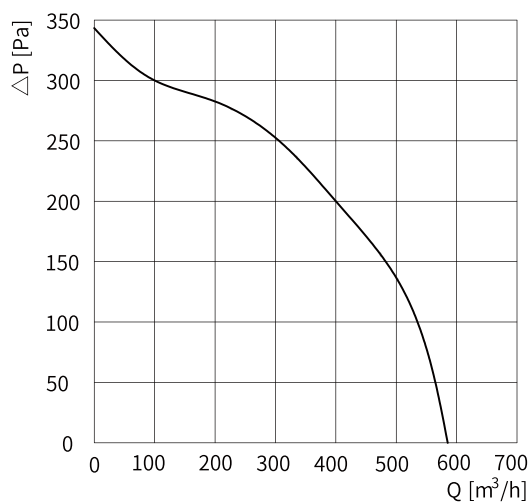
Features

- Speed Control: 0~10V DC /PWM
- Direction of rotation: clockwise, seen on rotor
- Impeller material: PA6+GF
- Type of protection: IP55
- Insulation class: B
- Mode of operation: continuous operation (S1)
- Bearing: ball bearings
- Motor protection: self-resetting TOP wired internally

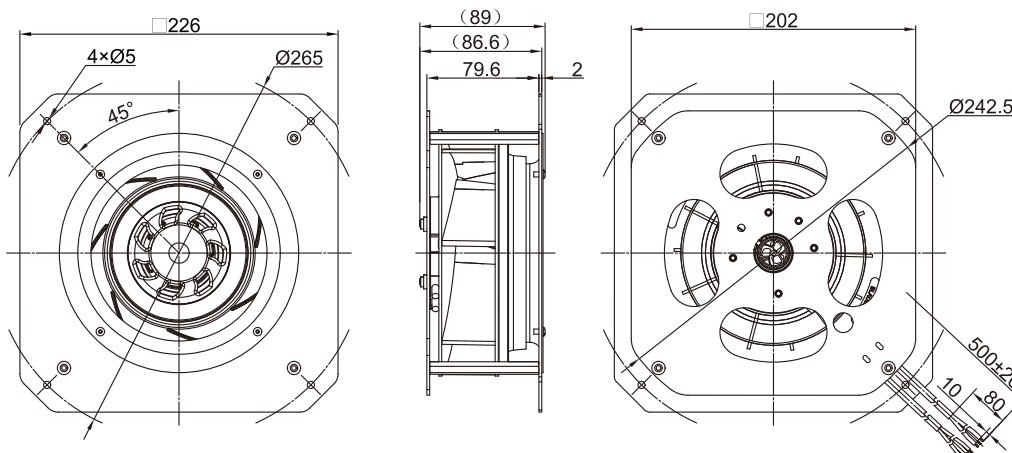


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B175B-EC-M0	230	50/60	3110	49	0.38	67	-25 ... (+60)	E0

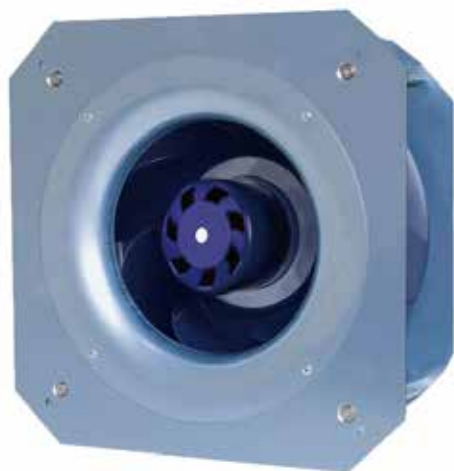


Overall Dimensions



Ø175 mm PLUG FAN

EC CENTRIFUGAL FAN



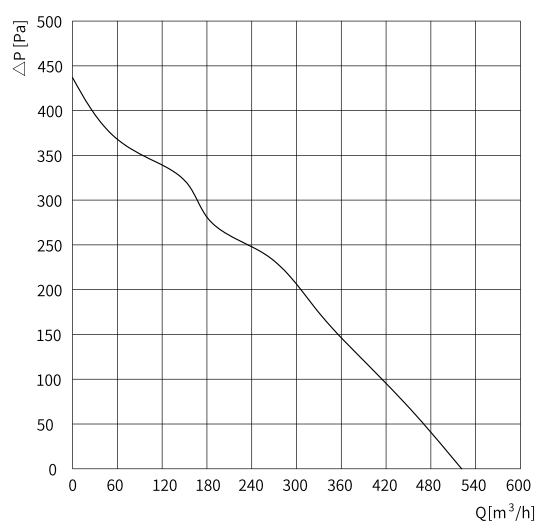
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

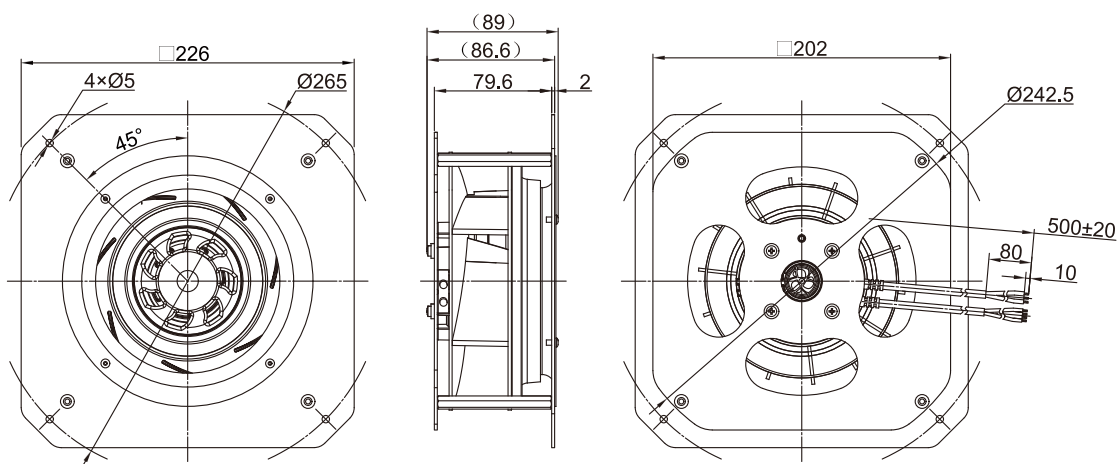


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B175B-EC-M3	230	50/60	2800	55	0.4	65	-25 ... (+60)	E0

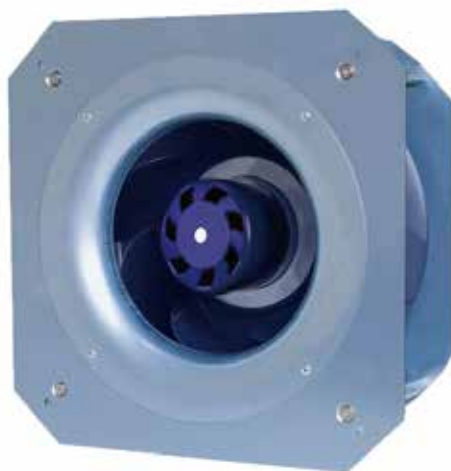


Overall Dimensions



Ø175 mm PLUG FAN

EC CENTRIFUGAL FAN



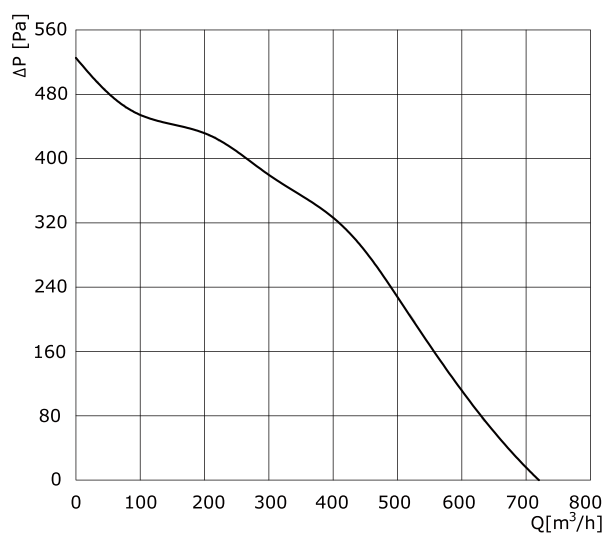
Features

- Speed Control: 0~10V DC /PWM
- Direction of rotation: clockwise, seen on rotor
- Impeller material: PA6+GF
- Type of protection: IP55
- Insulation class: B
- Mode of operation: continuous operation (S1)
- Bearing: ball bearings
- Motor protection: self-resetting TOP wired internally

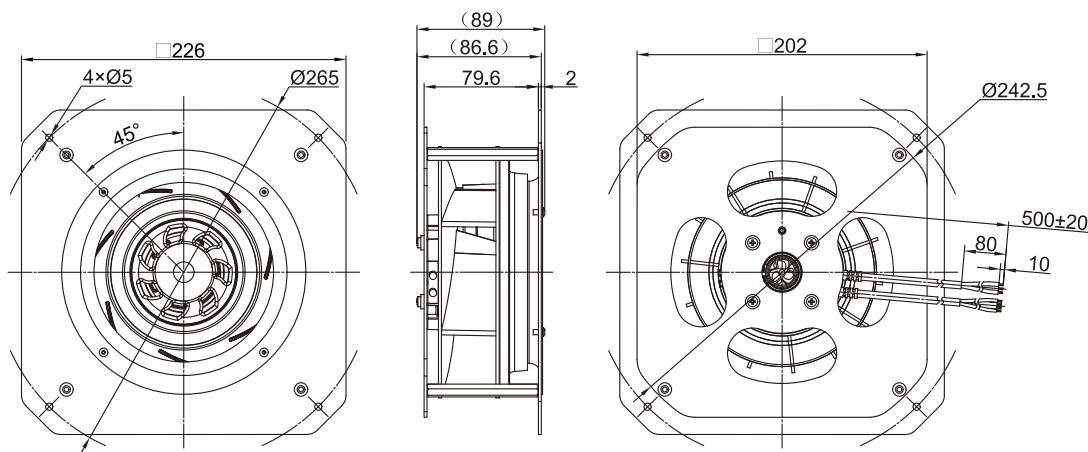


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B175B-EC-M1	230	50/60	3300	85	0.65	72	-25 ... (+60)	E0

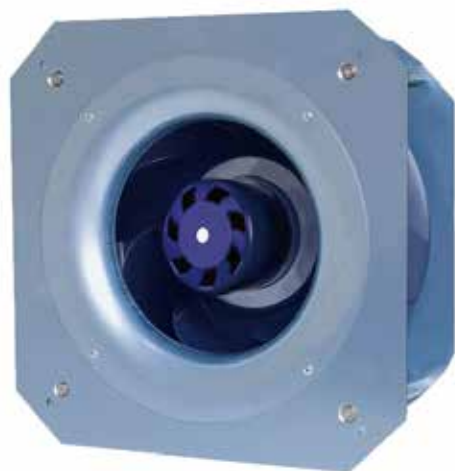


Overall Dimensions



Ø 190 mm PLUG FAN

EC CENTRIFUGAL FAN



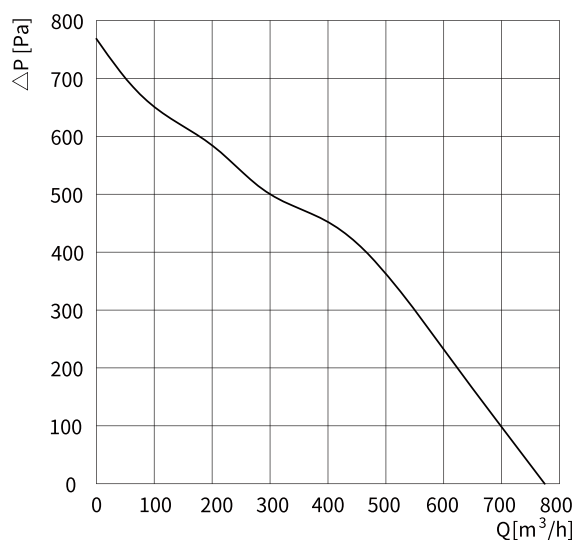
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

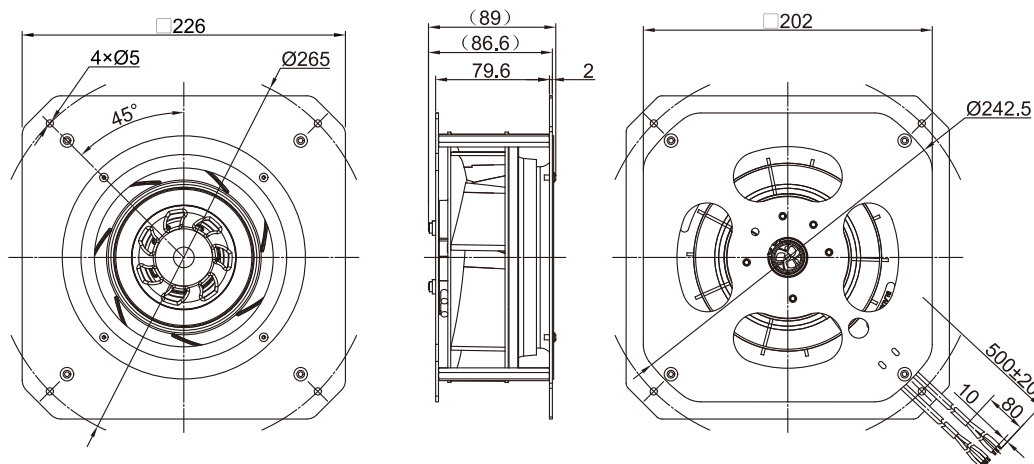


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B190B-EC-M0	230	50/60	3300	87	0.65	65	-25 ... (+60)	E0

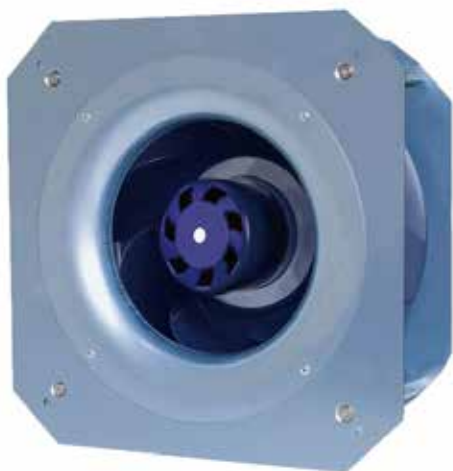


Overall Dimensions



Ø190 mm PLUG FAN

EC CENTRIFUGAL FAN



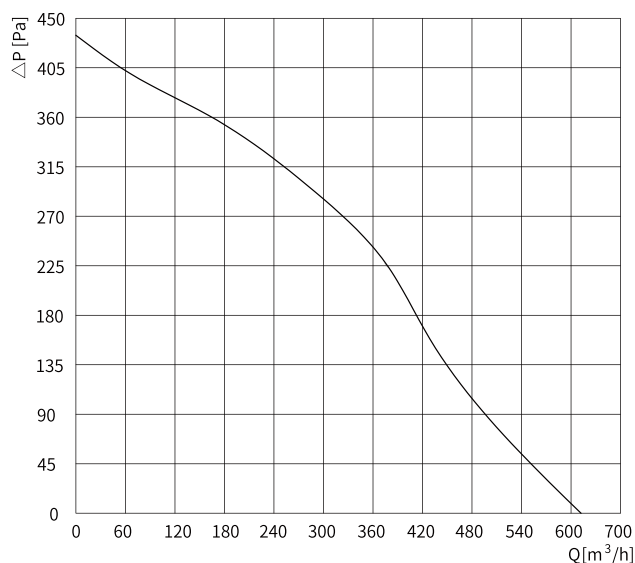
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

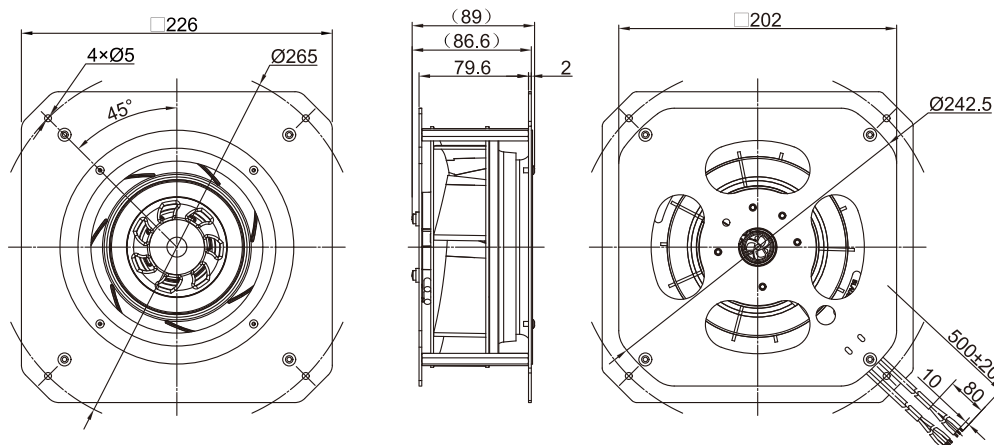


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max [A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B190B-EC-M1	230	50/60	2940	64	0.53	70	-25 ... (+60)	E0

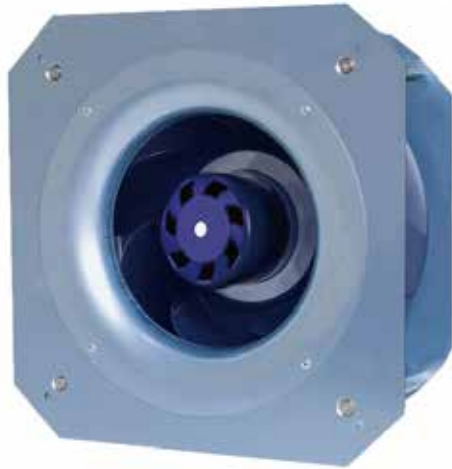


Overall Dimmensions



Ø 190 mm PLUG FAN

EC CENTRIFUGAL FAN



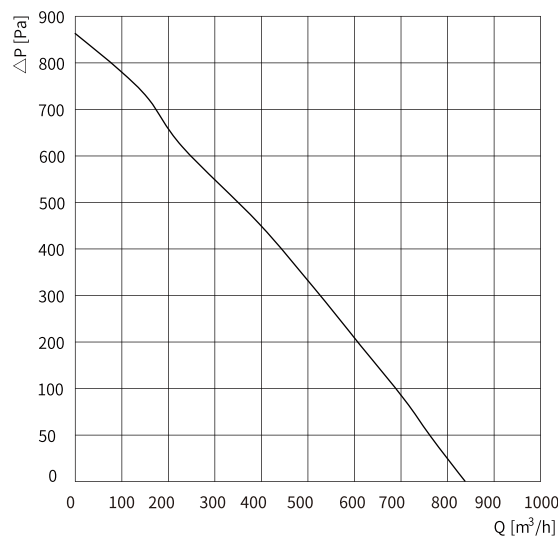
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

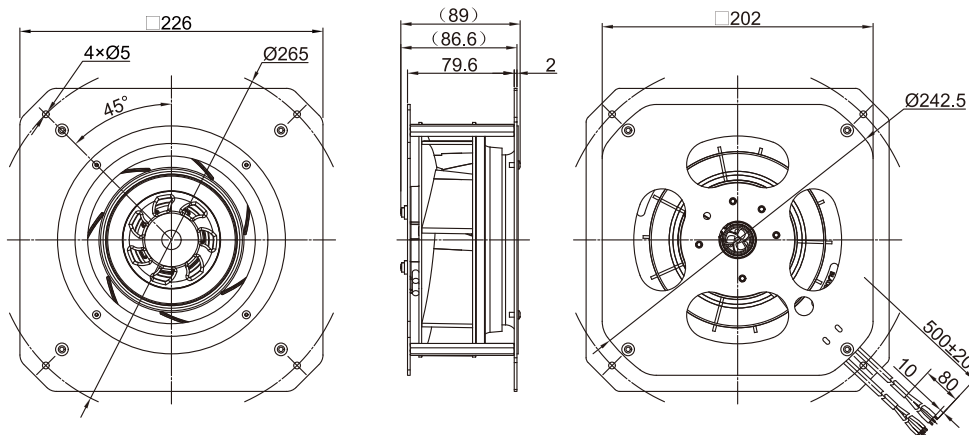


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B190B-EC-M2	230	50/60	3800	115	0.9	65	-25 ... (+60)	E0

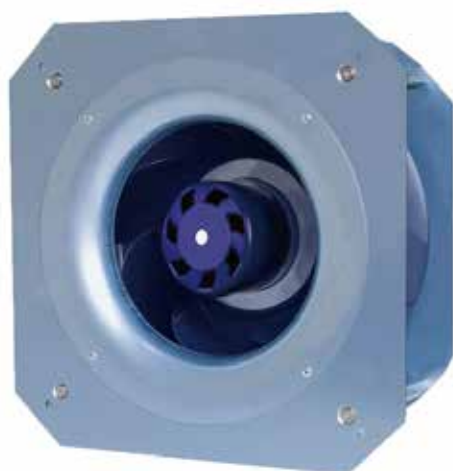


Overall Dimensions



Ø190 mm PLUG FAN

EC CENTRIFUGAL FAN



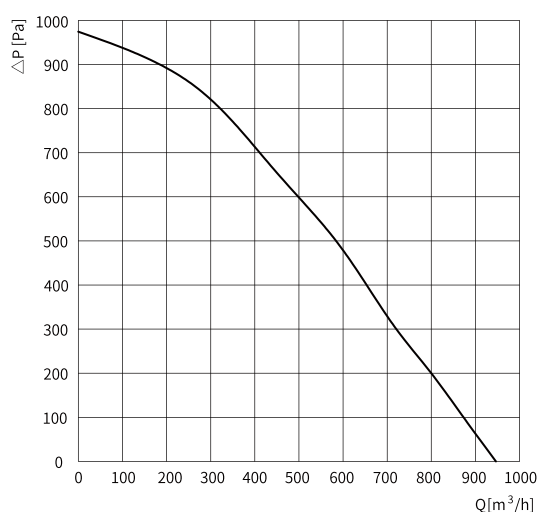
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

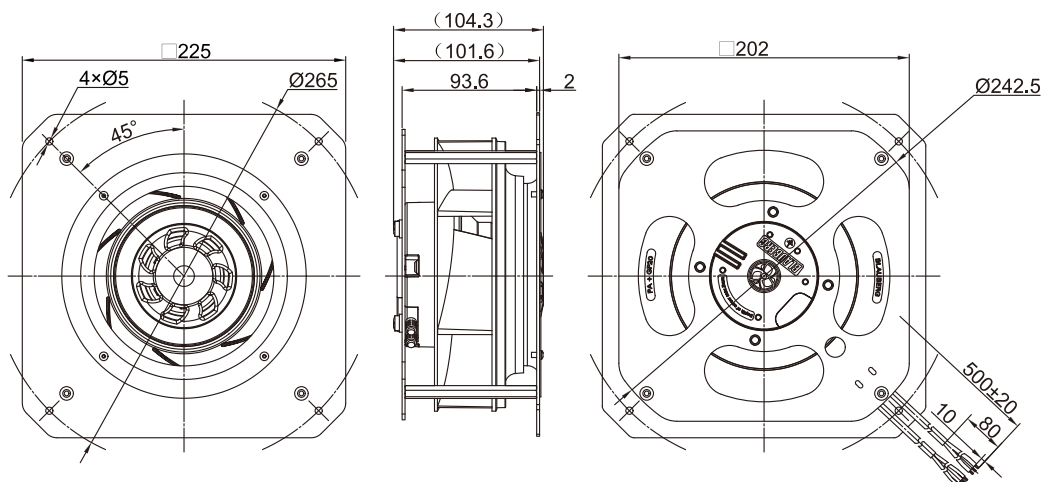


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B190B-EC-M3	230	50/60	4100	170	1.3	72	-25 ... (+60)	E0

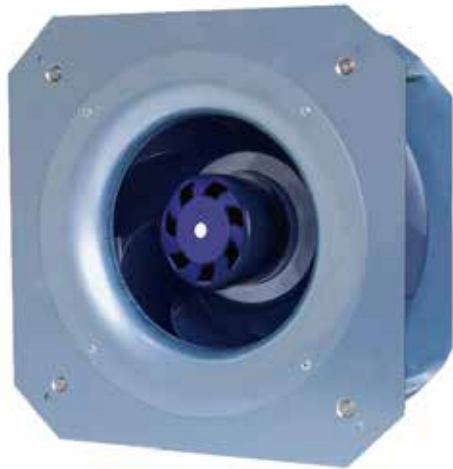


Overall Dimensions



Ø220 mm PLUG FAN

EC CENTRIFUGAL FAN



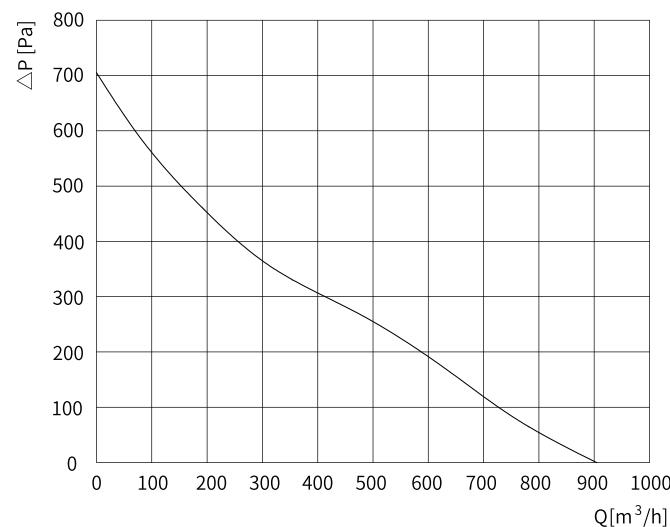
Features

- Speed Control: 0~10V DC /PWM
- Direction of rotation: clockwise, seen on rotor
- Impeller material: PA6+GF
- Type of protection: IP55
- Insulation class: B
- Mode of operation: continuous operation (S1)
- Bearing: ball bearings
- Motor protection: self-resetting TOP wired internally

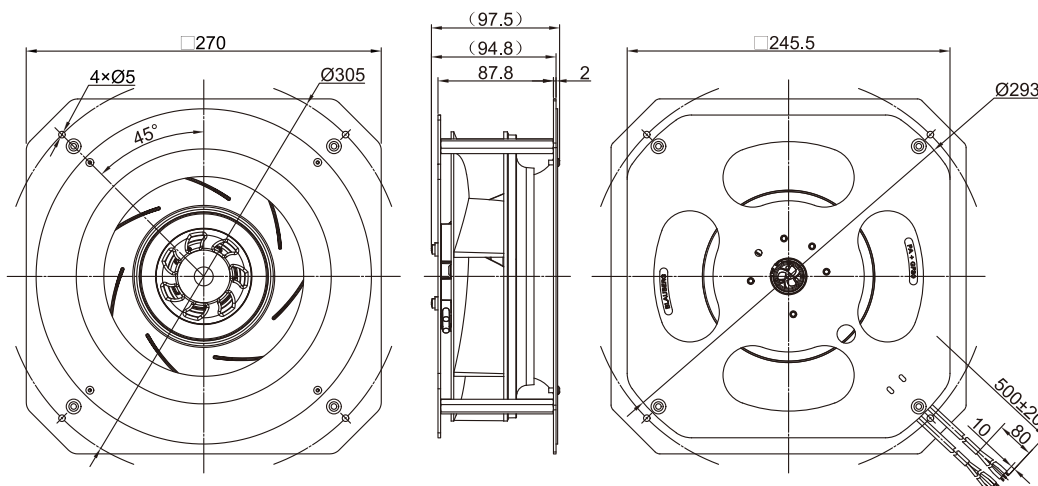


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B220C-EC-M0	230	50/60	2470	86	0.71	68	-25 ... (+60)	E0

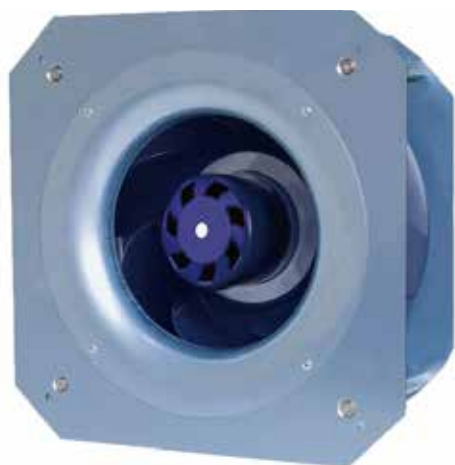


Overall Dimensions



Ø220 mm PLUG FAN

EC CENTRIFUGAL FAN



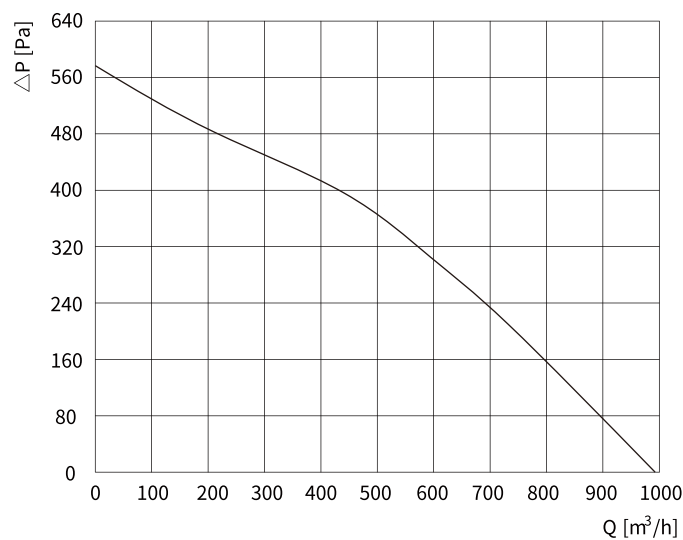
Features

- Speed Control: 0~10V DC /PWM
- Direction of rotation: clockwise, seen on rotor
- Impeller material: PA6+GF
- Type of protection: IP55
- Insulation class: B
- Mode of operation: continuous operation (S1)
- Bearing: ball bearings
- Motor protection: self-resetting TOP wired internally

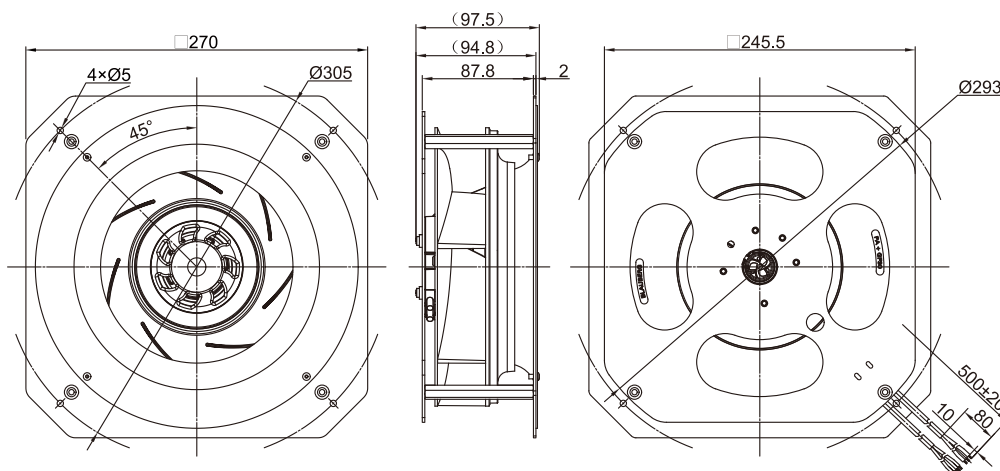


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp. [°C]	Electrical connection
GL-B220C-EC-M2	230	50/60	2800	115	0.90	69	-25 ... (+60)	E0

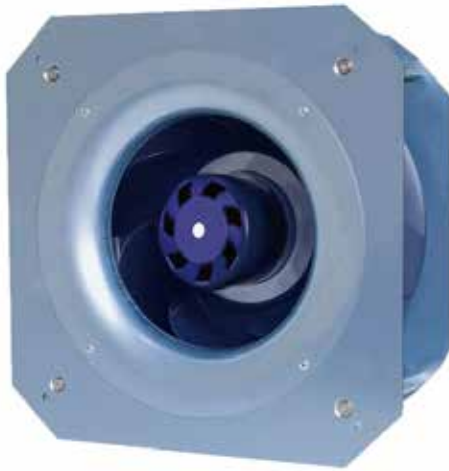


Overall Dimensions



Ø220 mm PLUG FAN

EC CENTRIFUGAL FAN



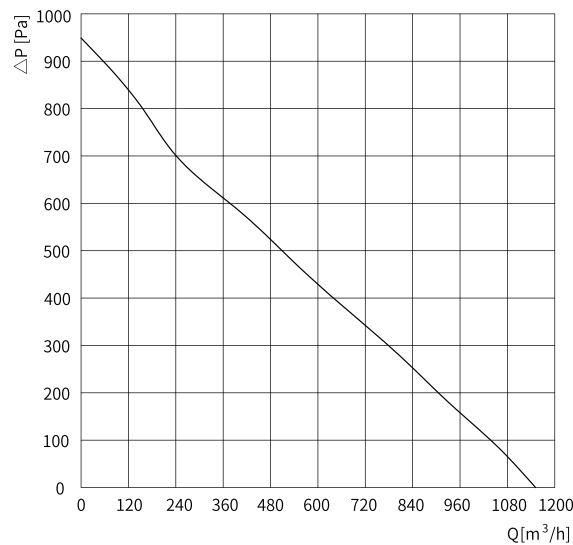
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
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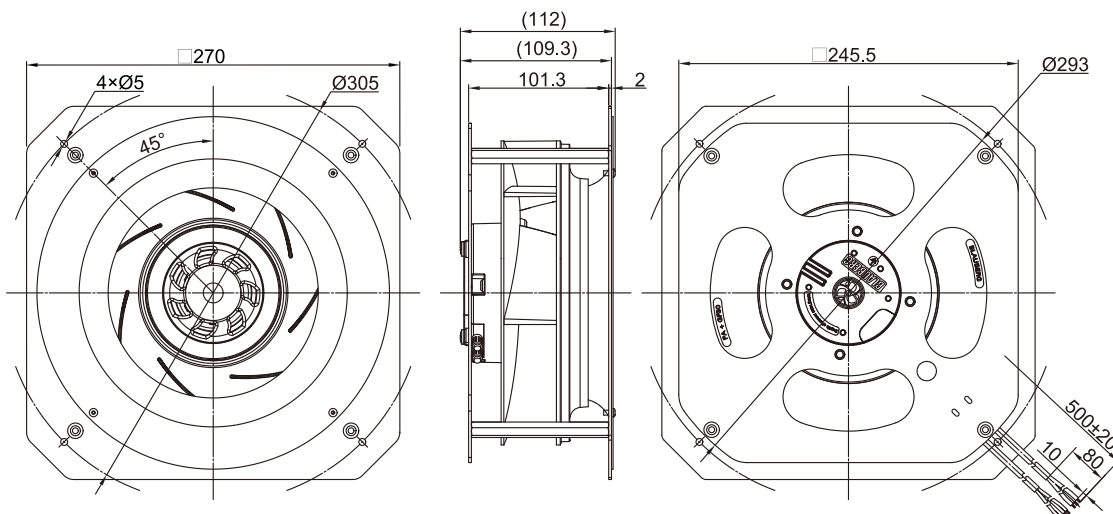


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B220C-EC-M1	230	50/60	3250	168	1.27	70	-25 ... (+60)	E0

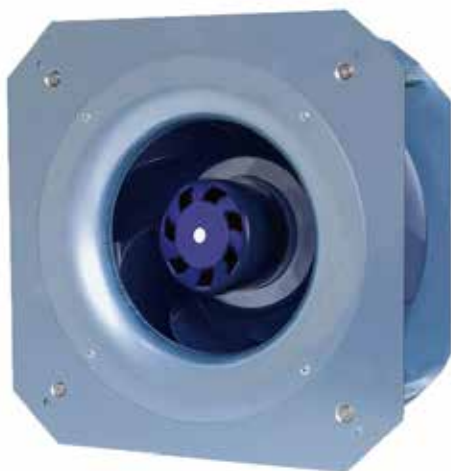


Overall Dimensions



Ø225 mm PLUG FAN

EC CENTRIFUGAL FAN



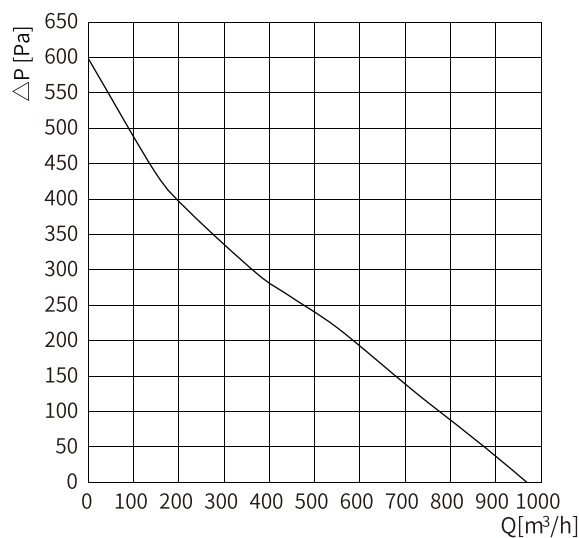
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PP+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

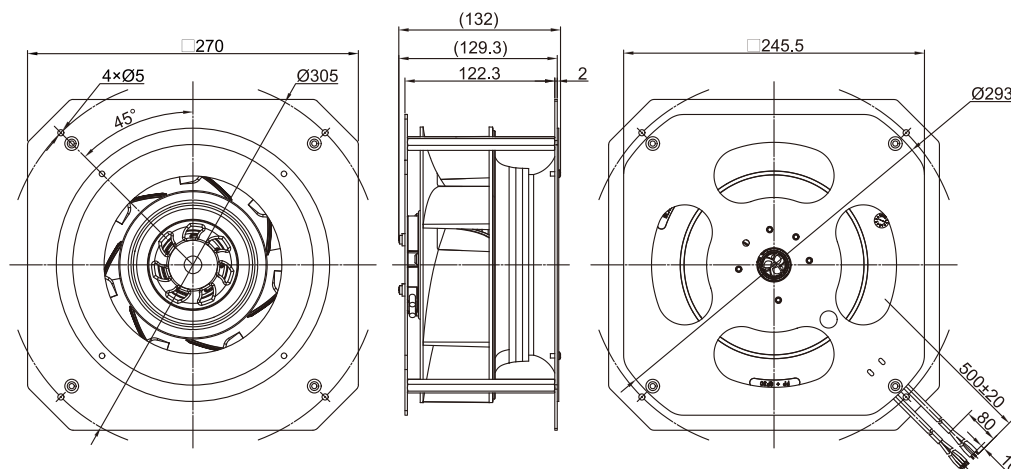


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B225G-EC-M0	230	50/60	2300	85	0.7	65	-25 ... (+60)	E0

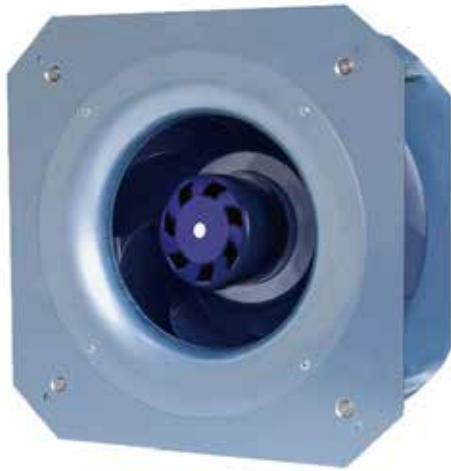


Overall Dimensions



Ø225 mm PLUG FAN

EC CENTRIFUGAL FAN



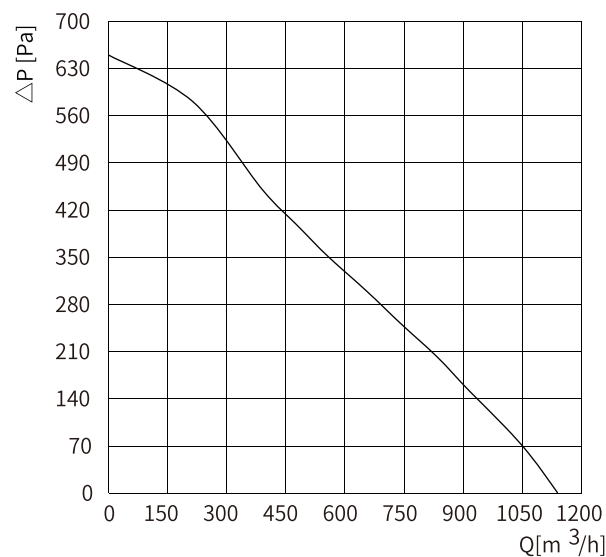
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PP+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

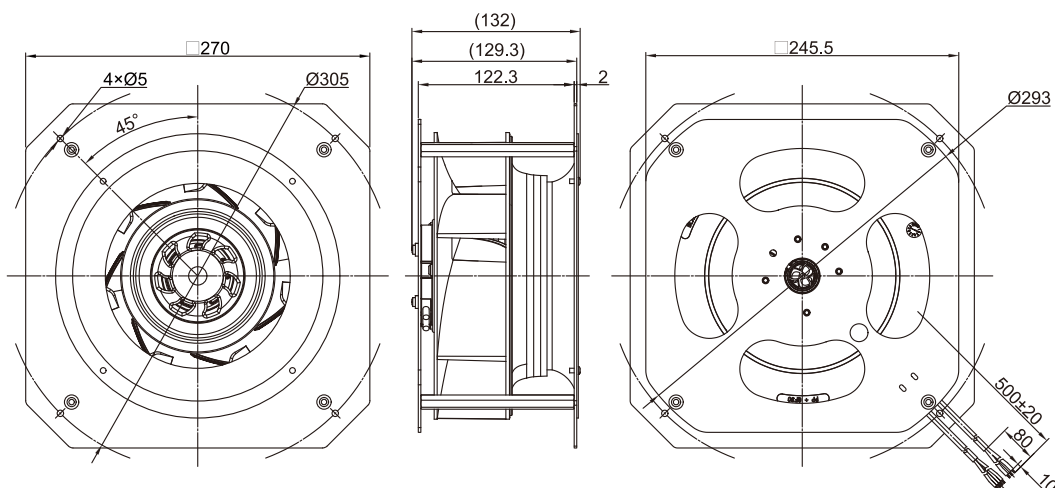


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B225G-EC-M2	230	50/60	2600	115	0.9	67	-25 ... (+60)	E0

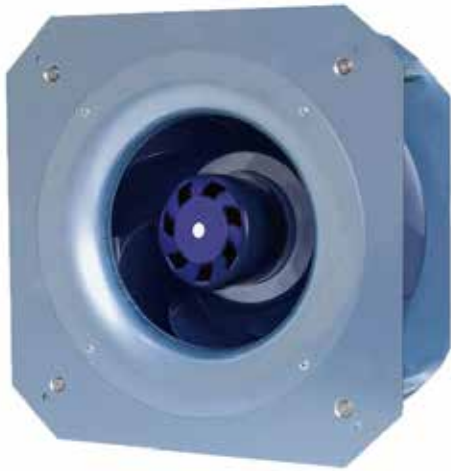


Overall Dimensions



Ø225 mm PLUG FAN

EC CENTRIFUGAL FAN



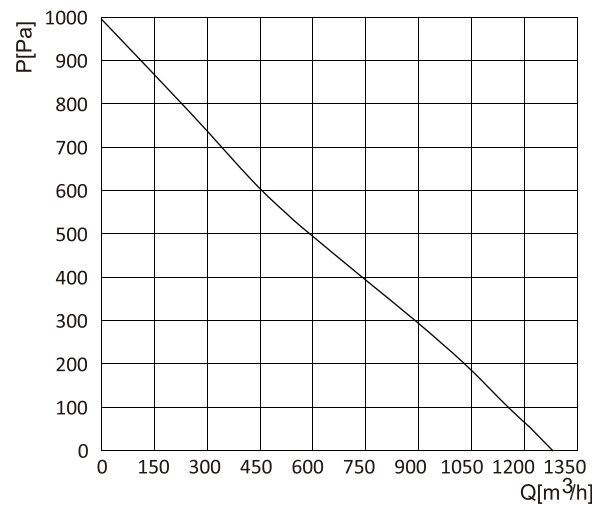
Features

- Speed Control: 0~10V DC /PWM
- Direction of rotation: clockwise, seen on rotor
- Impeller material: PP+GF
- Type of protection: IP55
- Insulation class: B
- Mode of operation: continuous operation (S1)
- Bearing: ball bearings
- Motor protection: self-resetting TOP wired internally

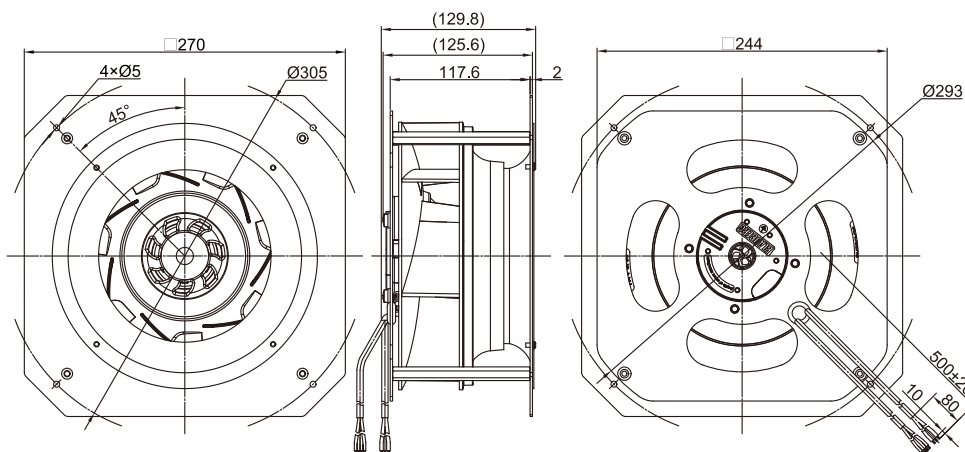


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B225G-EC-M1	230	50/60	3100	170	1.26	70	-25 ... (+60)	E0



Overall Dimensions



Ø225 mm PLUG FAN

EC CENTRIFUGAL FAN



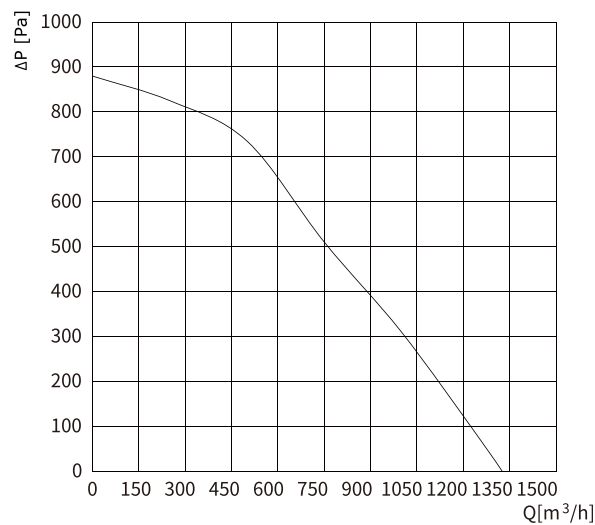
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PP+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

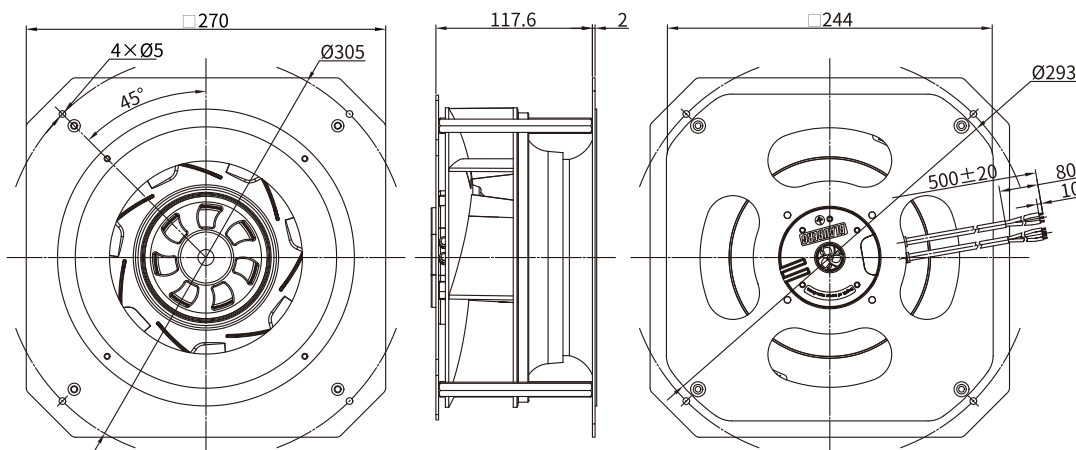


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B225G-EC-M7	230	50/60	3600	230	1.7	71	-25 ... (+60)	E0

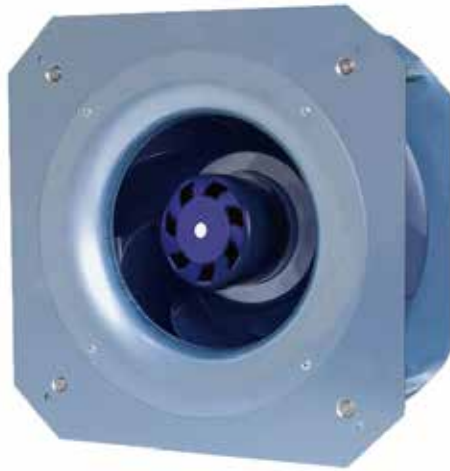


Overall Dimensions



Ø225 mm PLUG FAN

EC CENTRIFUGAL FAN



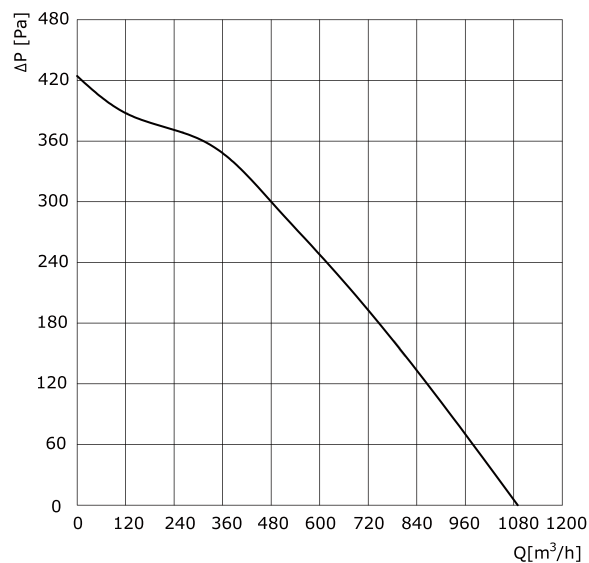
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

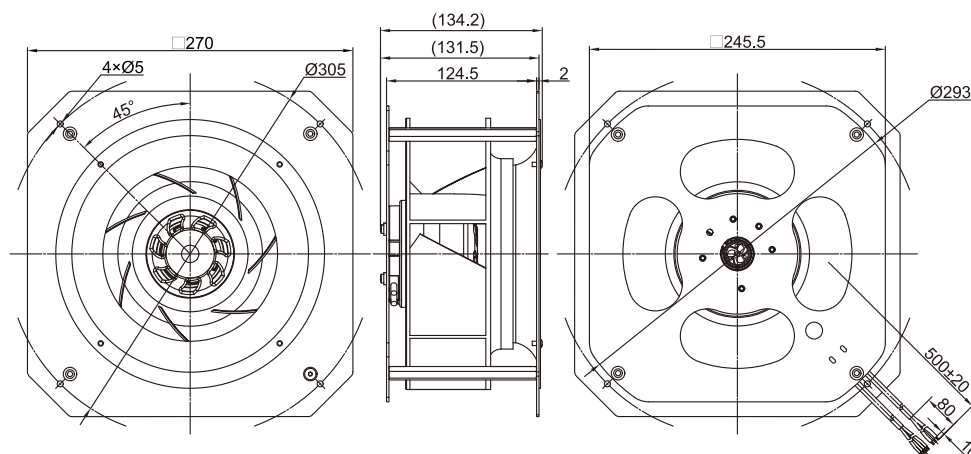


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B225D-EC-M0	230	50/60	2350	85	0.65	65	-25 ... (+60)	E0

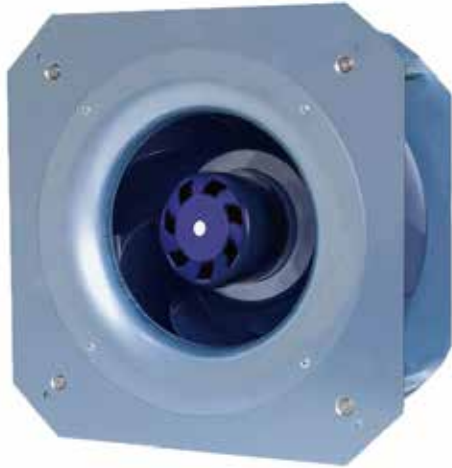


Overall Dimensions



Ø225 mm PLUG FAN

EC CENTRIFUGAL FAN



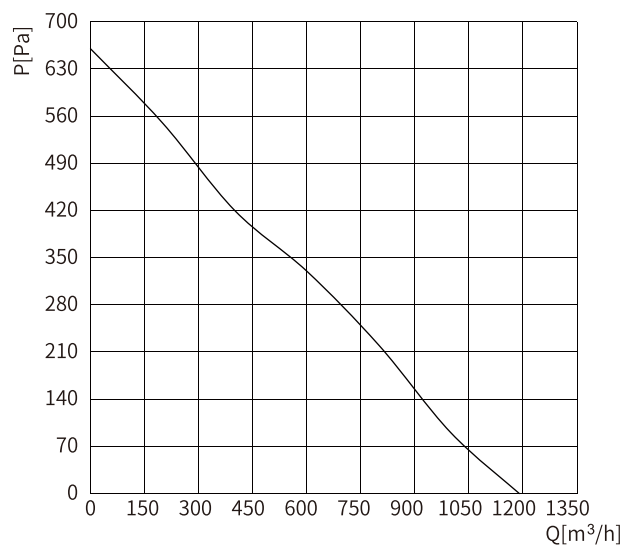
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

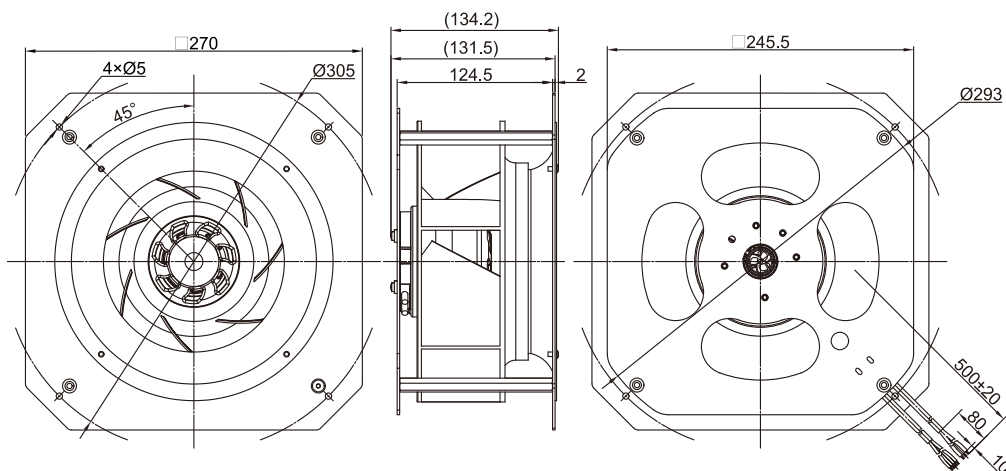


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max [A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B225D-EC-M2	230	50/60	2600	115	0.9	67	-25 ... (+60)	E0

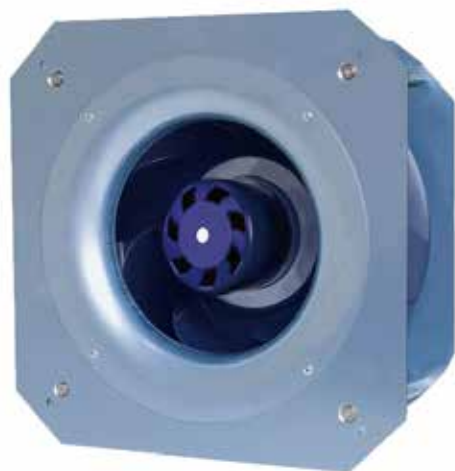


Overall Dimensions



Ø225 mm PLUG FAN

EC CENTRIFUGAL FAN



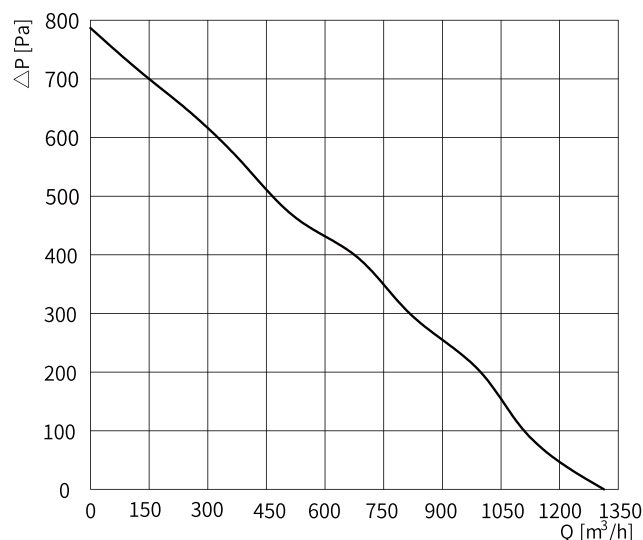
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

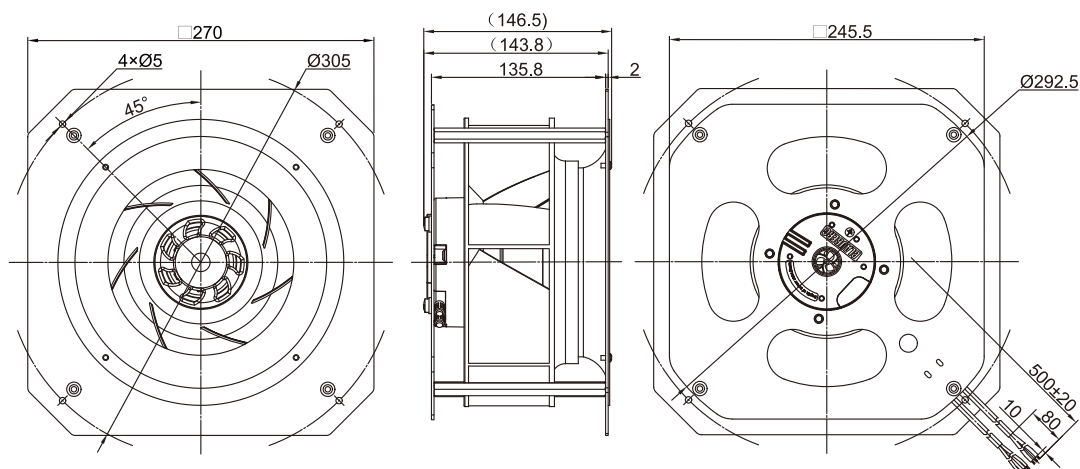


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B225D-EC-M1	230	50/60	2950	168	1.26	70	-25 ... (+60)	E0

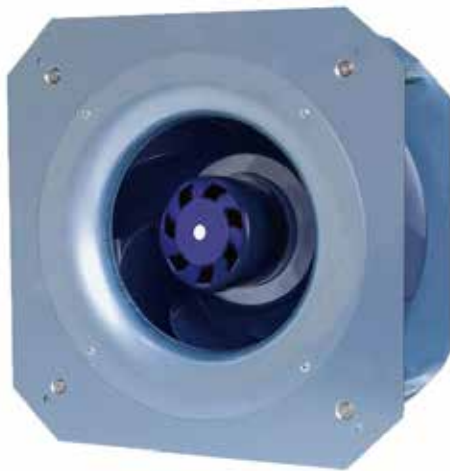


Overall Dimensions



Ø250 mm PLUG FAN

EC CENTRIFUGAL FAN



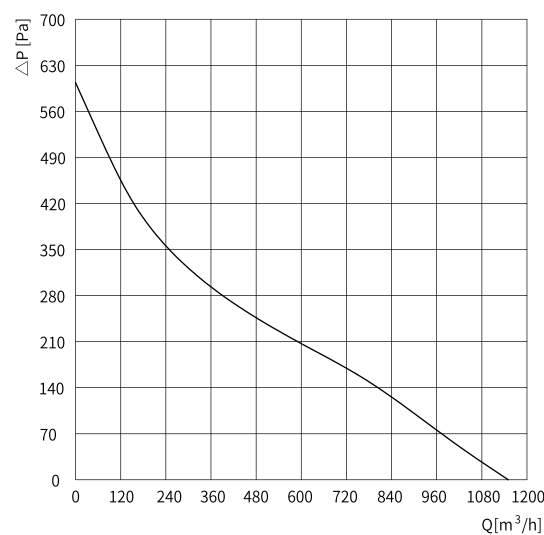
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

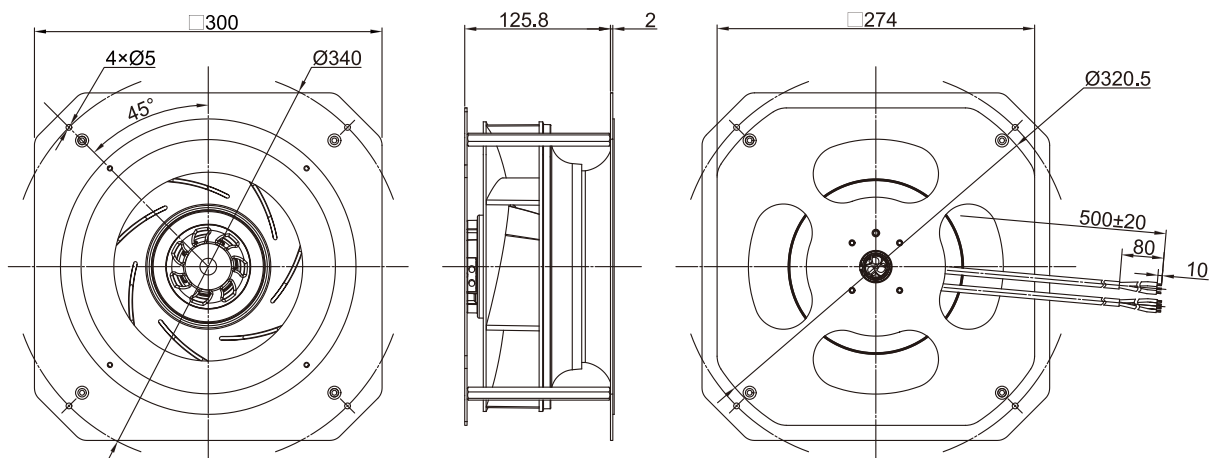


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B250B-EC-M0	230	50/60	1810	85	0.68	62	-25 ... (+60)	E0

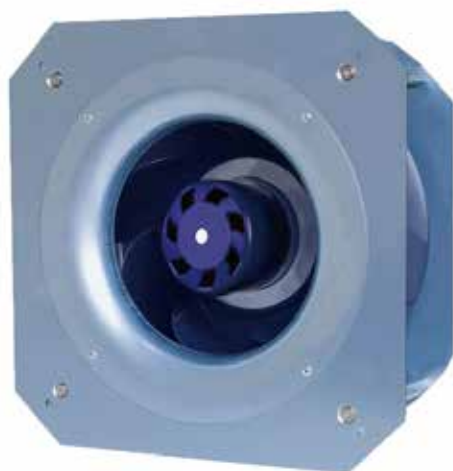


Overall Dimensions



Ø250 mm PLUG FAN

EC CENTRIFUGAL FAN



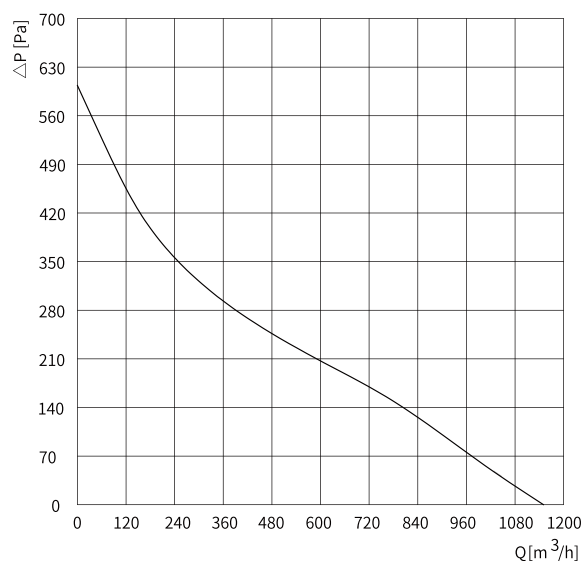
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

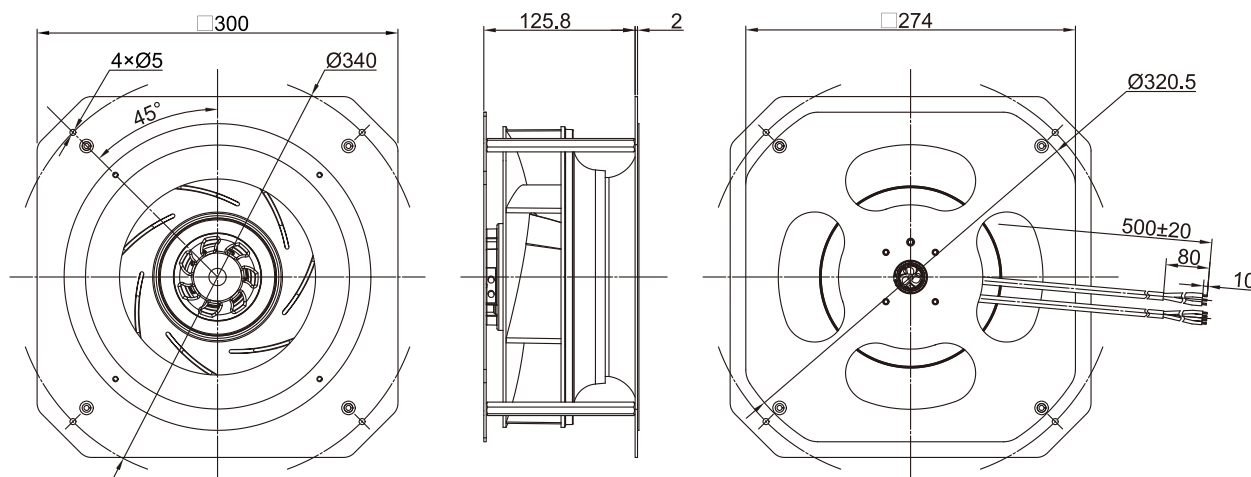


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max [A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B250B-EC-M2	230	50/60	2180	115	0.90	68	-25 ... (+60)	E0

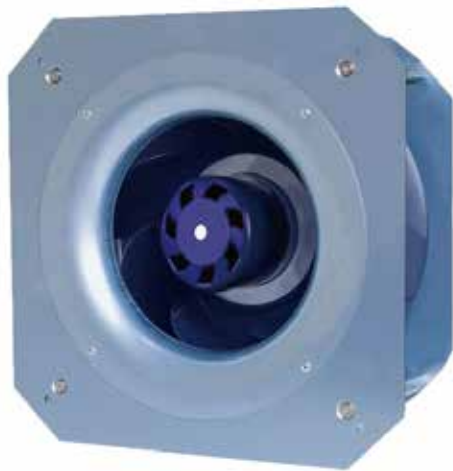


Overall Dimensions



Ø250 mm PLUG FAN

EC CENTRIFUGAL FAN



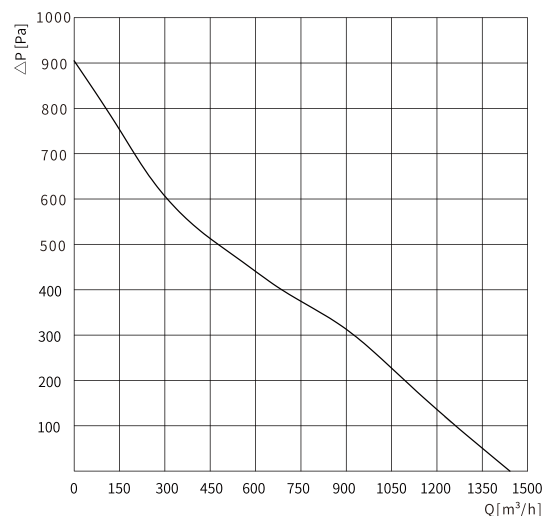
Features

- Speed Control: 0~10V DC /PWM
- Direction of rotation: clockwise, seen on rotor
- Impeller material: PA6+GF
- Type of protection: IP55
- Insulation class: B
- Mode of operation: continuous operation (S1)
- Bearing: ball bearings
- Motor protection: self-resetting TOP wired internally

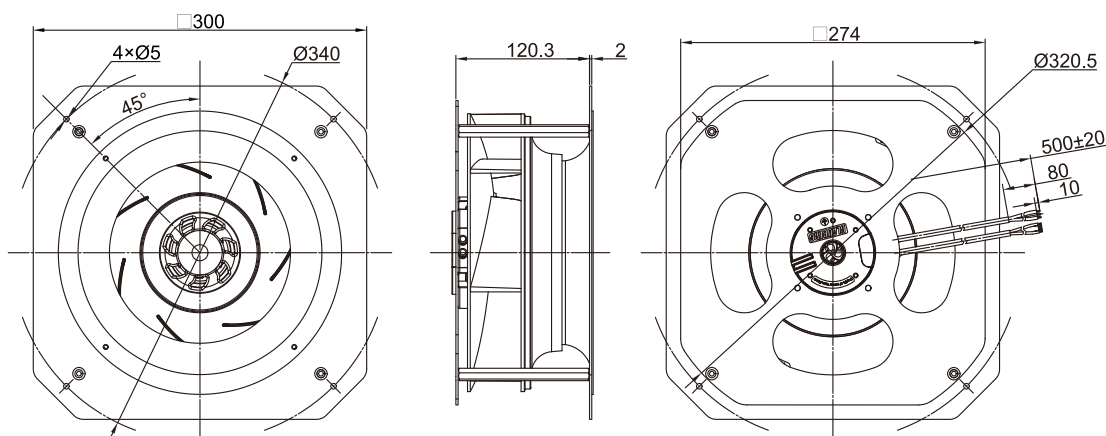


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max [A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B250B-EC-M1	230	50/60	2570	169	1.27	71	-25 ... (+60)	E0



Overall Dimensions



Ø250 mm PLUG FAN

EC CENTRIFUGAL FAN



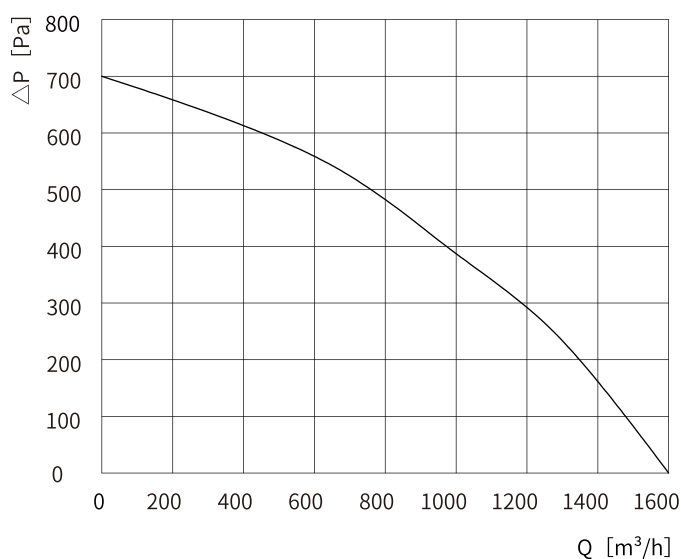
Features

- Speed Control: 0~10V DC /PWM
- Direction of rotation: clockwise, seen on rotor
- Impeller material: PA6+GF
- Type of protection: IP55
- Insulation class: B
- Mode of operation: continuous operation (S1)
- Bearing: ball bearings
- Motor protection: self-resetting TOP wired internally

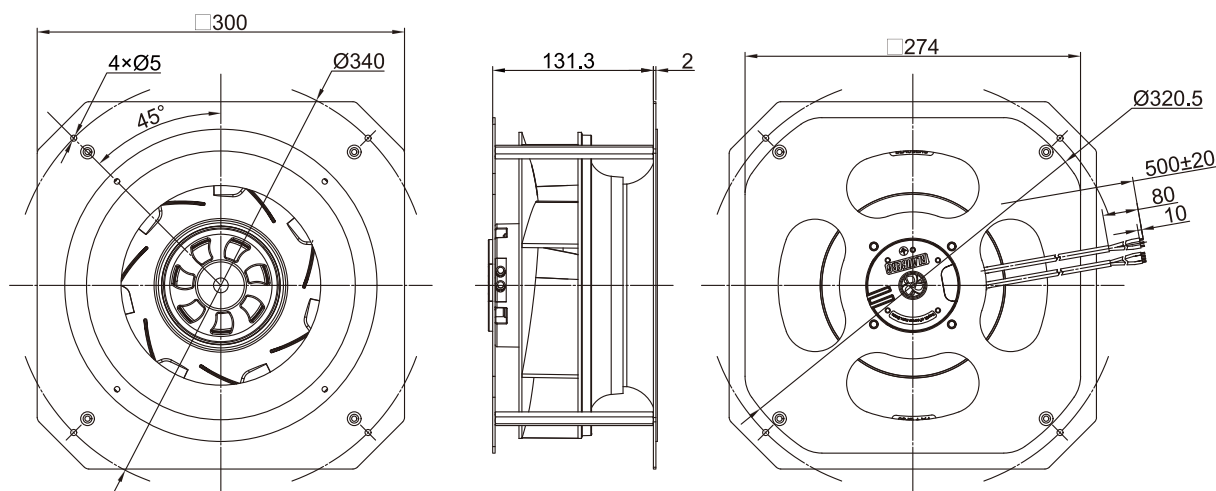


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B250B-EC-M7	230	50/60	2700	230	1.65	71	-25 ... (+60)	E0

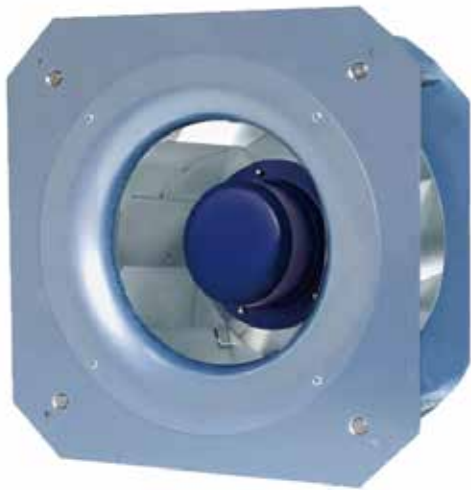


Overall Dimensions



Ø250 mm PLUG FAN

EC CENTRIFUGAL FAN



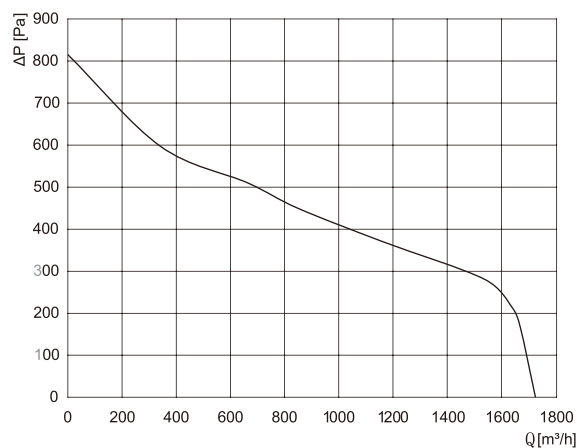
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** galvanized sheet
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

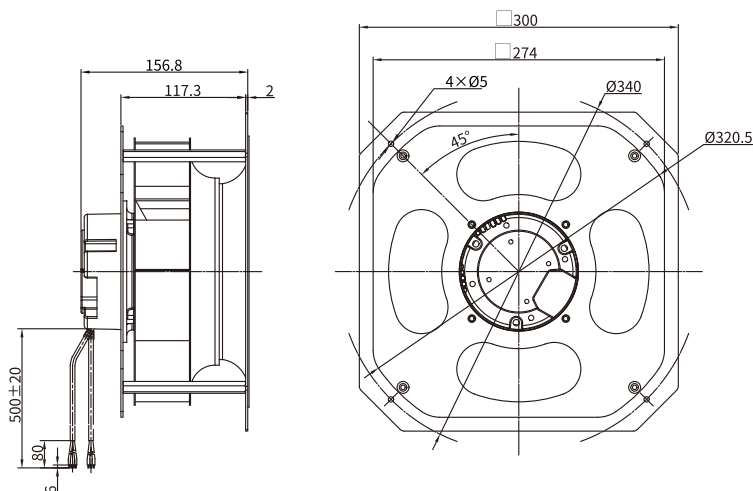


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B250C-EC-M2	230	50/60	2650	182	1.43	75	-25 ... (+60)	E0



Overall Dimensions



Ø250 mm PLUG FAN

EC CENTRIFUGAL FAN



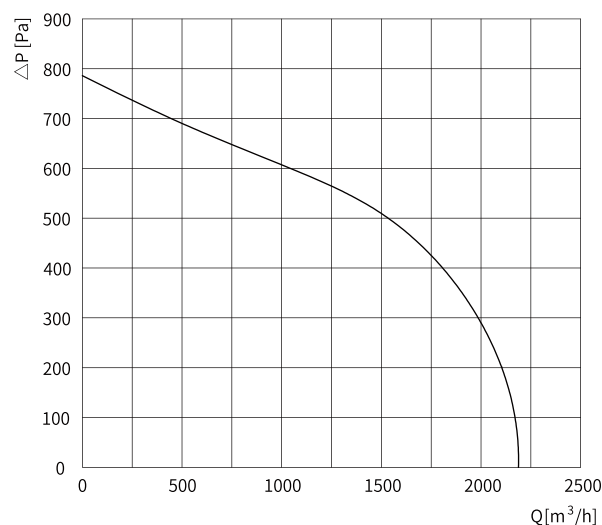
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP44
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

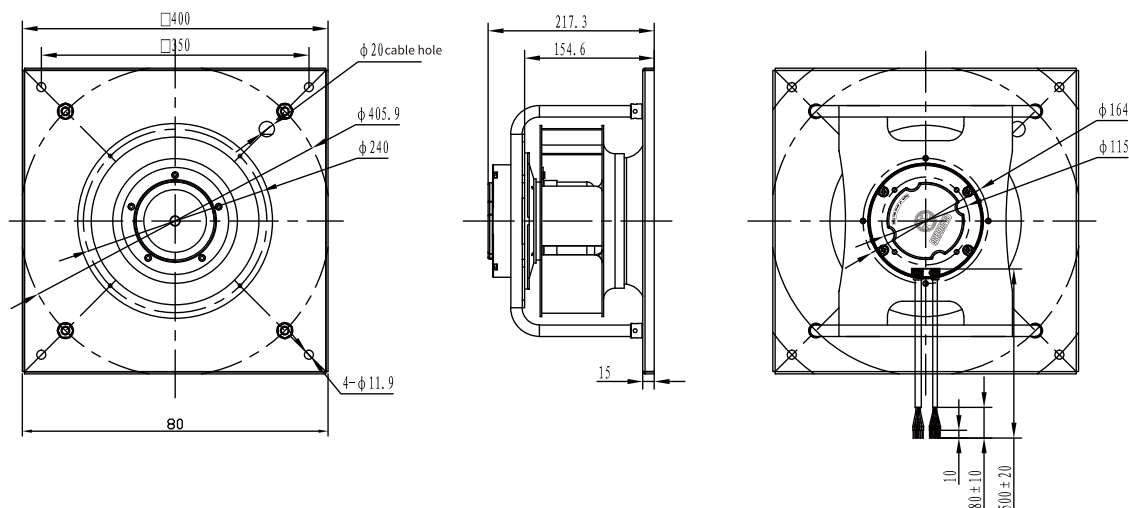


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B250D-EC-04	230	50/60	2990	372	2.81	75	-25 ... (+60)	E0



Overall Dimensions



Ø250 mm PLUG FAN

EC CENTRIFUGAL FAN



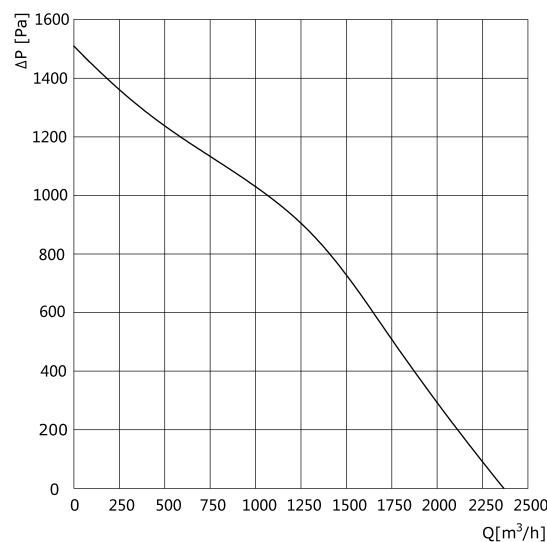
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

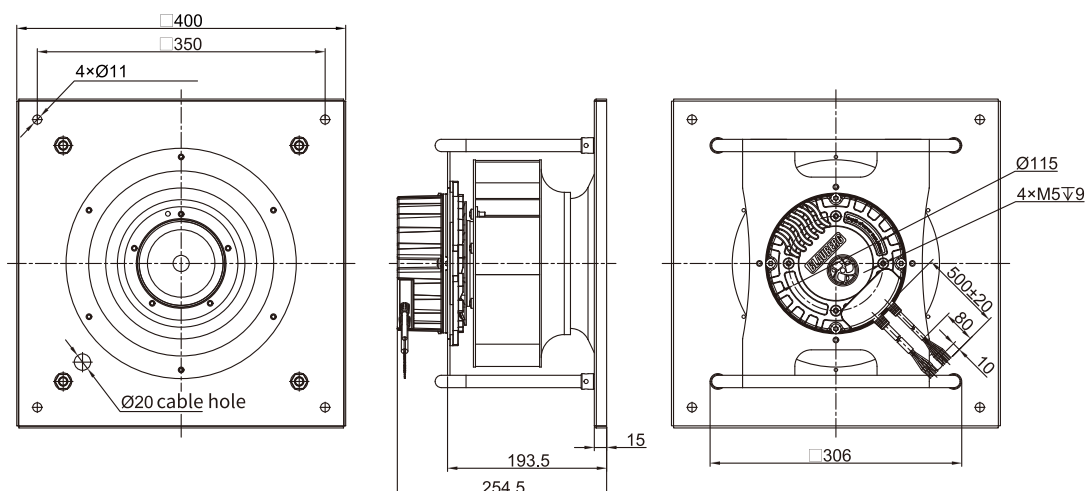


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B250E-EC-05	230	50/60	3650	520	2.50	85	-25 ... (+60)	E0



Overall Dimensions



Ø280 mm PLUG FAN

EC CENTRIFUGAL FAN



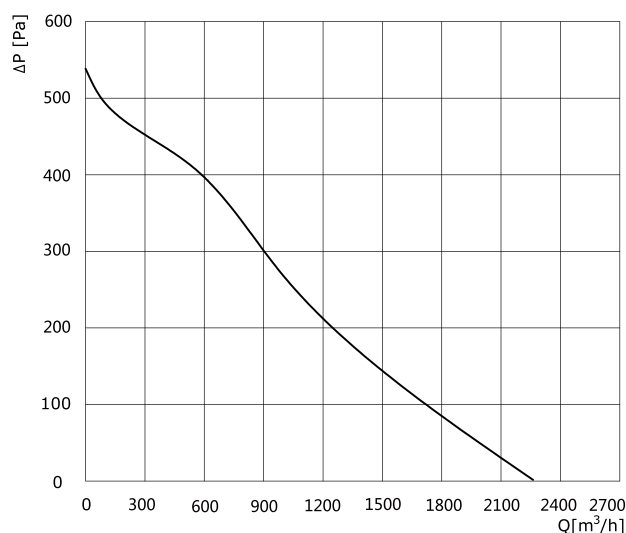
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

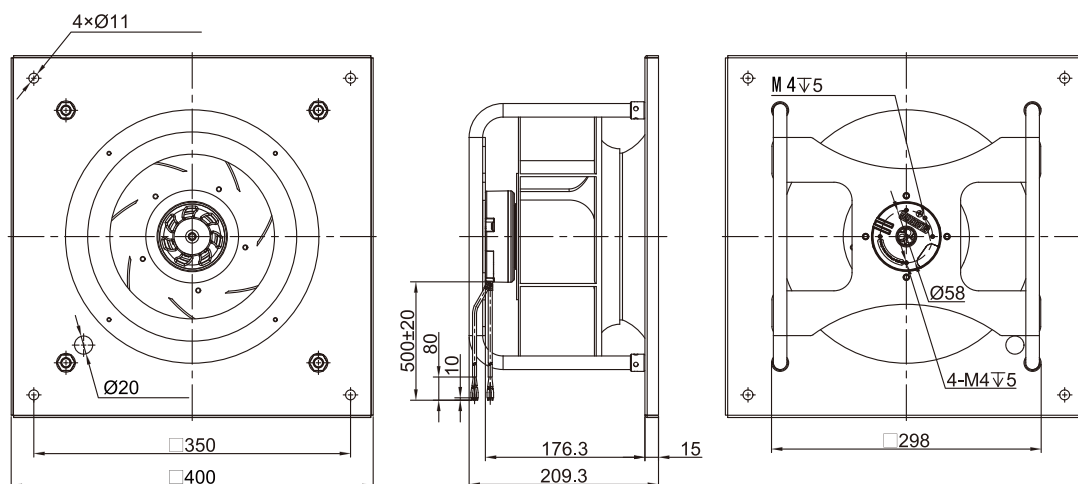


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B280D-EC-01	230	50/60	1710	170	1.2	73	-25 ... (+60)	E0



Overall Dimensions



Ø280 mm PLUG FAN

EC CENTRIFUGAL FAN



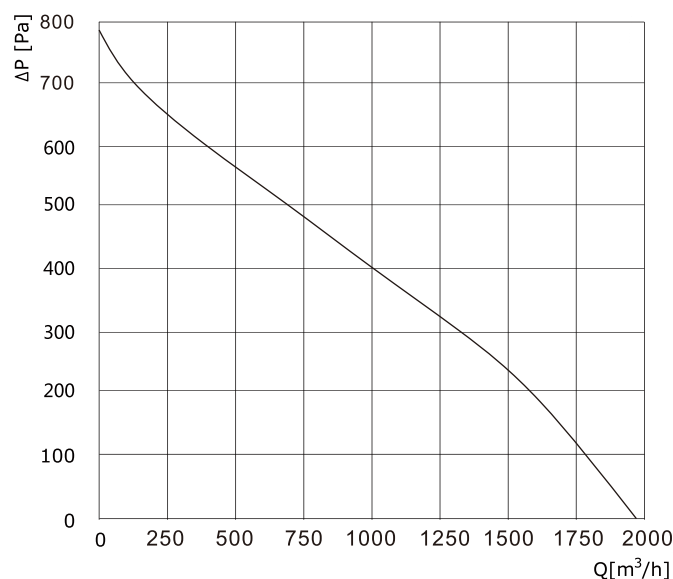
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** galvanized sheet
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

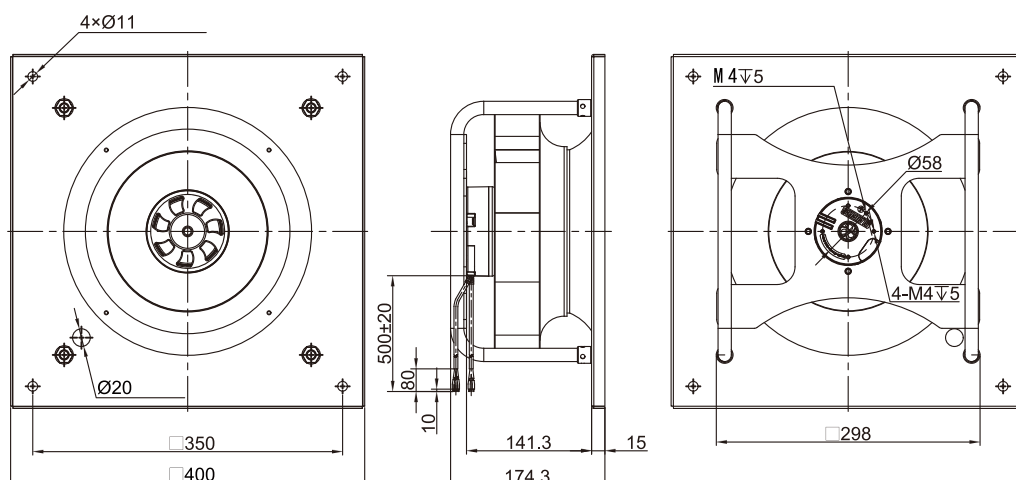


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B280D-EC-07	230	50/60	1950	225	1.60	70	-25 ... (+60)	E0



Overall Dimmensions



Ø280 mm PLUG FAN

EC CENTRIFUGAL FAN



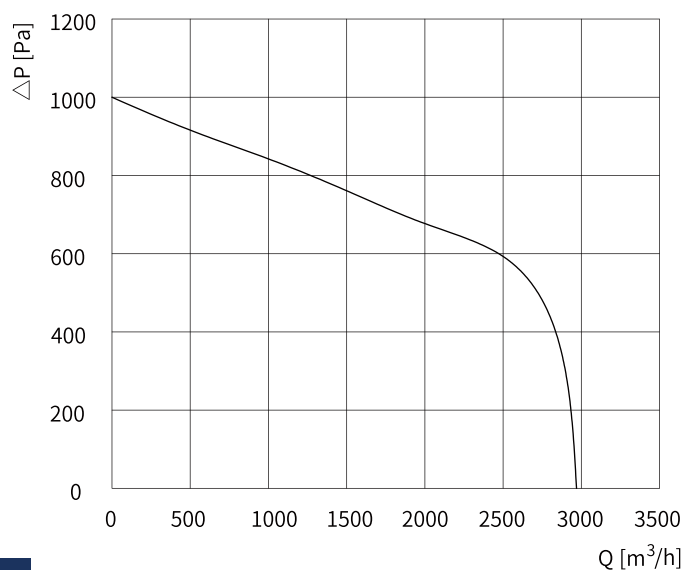
Features

- Speed Control: 0~10V DC /PWM
- Direction of rotation: clockwise, seen on rotor
- Impeller material: aluminum alloy
- Type of protection: IP44
- Insulation class: B
- Mode of operation: continuous operation (S1)
- Bearing: ball bearings
- Motor protection: self-resetting TOP wired internally

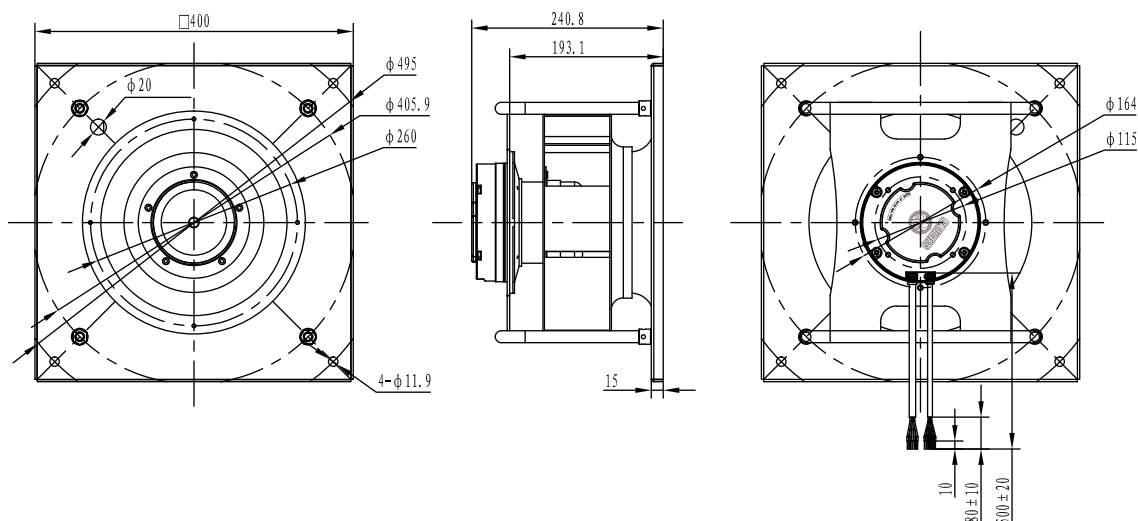


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B280D-EC-02	230	50/60	2740	589	4.29	85	-25 ... (+60)	E0



Overall Dimensions



Ø280 mm PLUG FAN

EC CENTRIFUGAL FAN



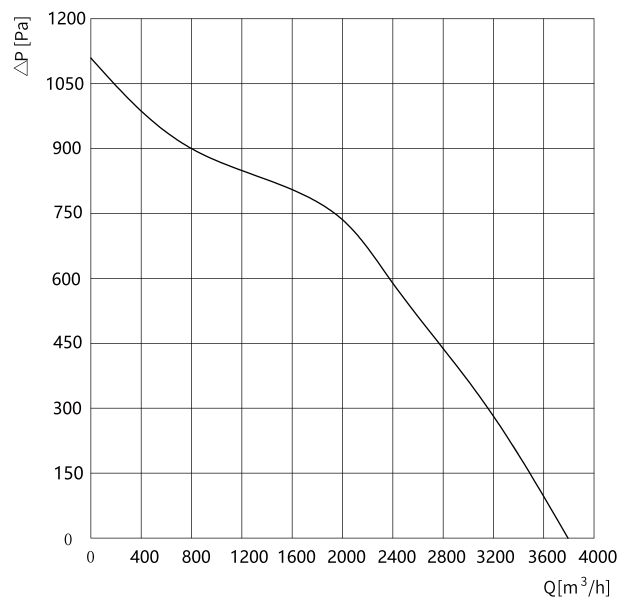
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

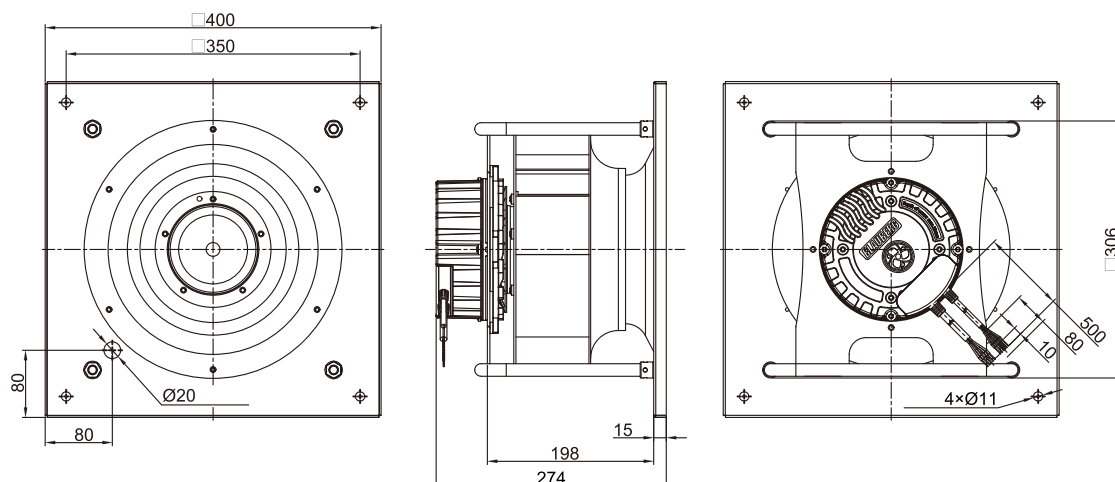


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B280E-EC-05	230	50/60	3270	700	3.1	85	-25 ... (+60)	E0



Overall Dimensions



Ø310 mm PLUG FAN

EC CENTRIFUGAL FAN



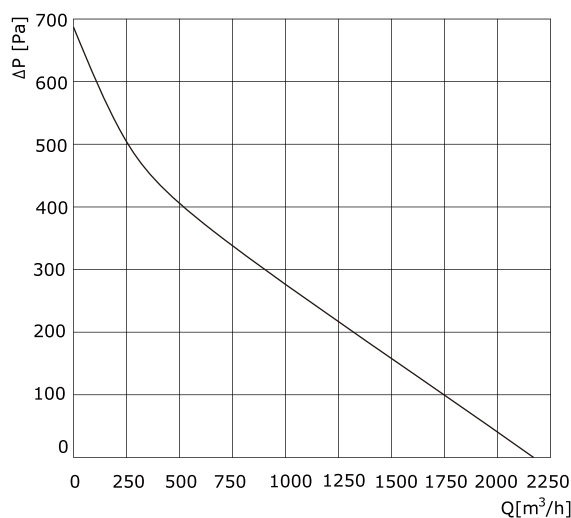
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

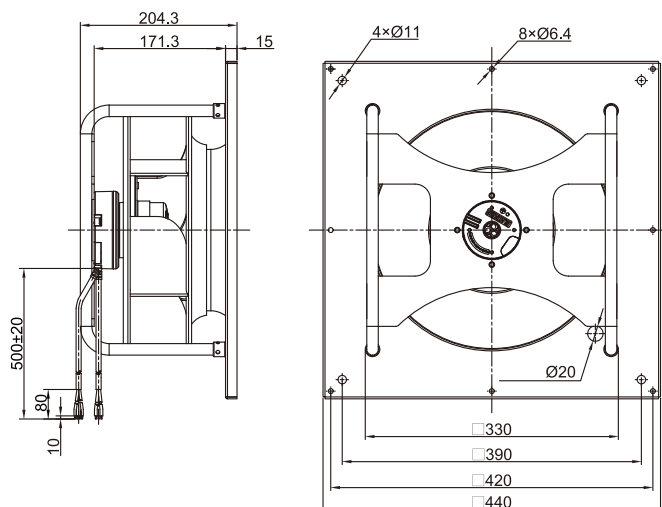


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp. [°C]	Electrical connection
GL-B310C-EC-01	230	50/60	1810	175	1.25	66	-25 ... (+60)	E0



Overall Dimensions



Ø310 mm PLUG FAN

EC CENTRIFUGAL FAN



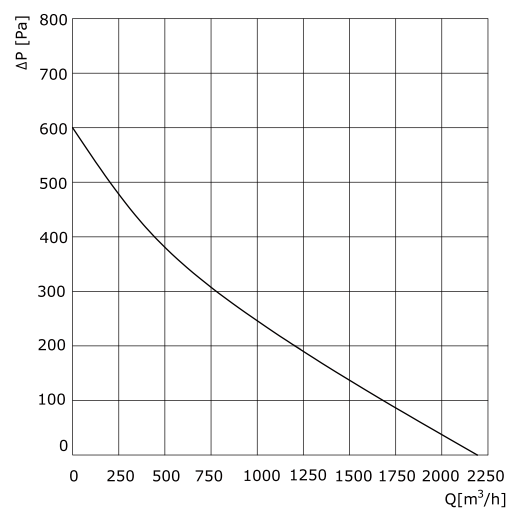
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

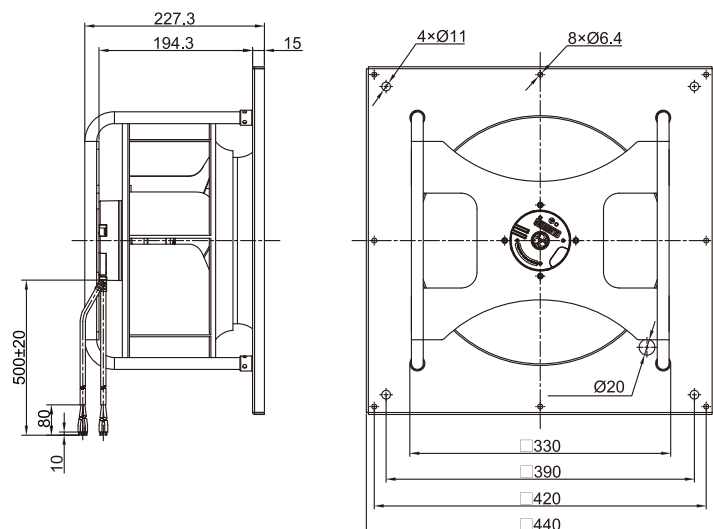


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max [A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B310D-EC-01	230	50/60	1710	175	1.25	72	-25 ... (+60)	E0



Overall Dimensions



Ø310 mm PLUG FAN

EC CENTRIFUGAL FAN



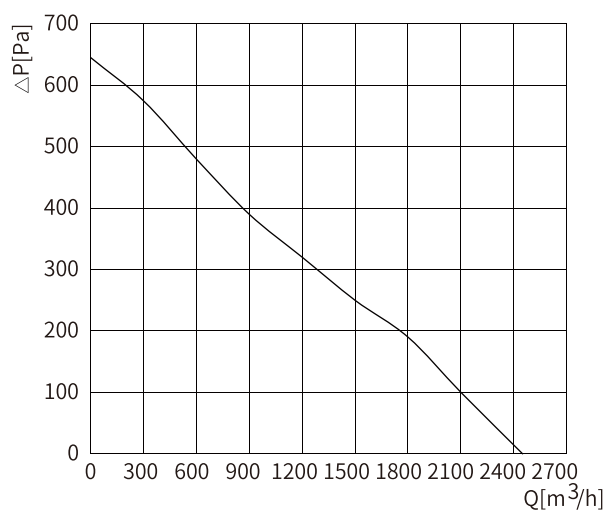
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

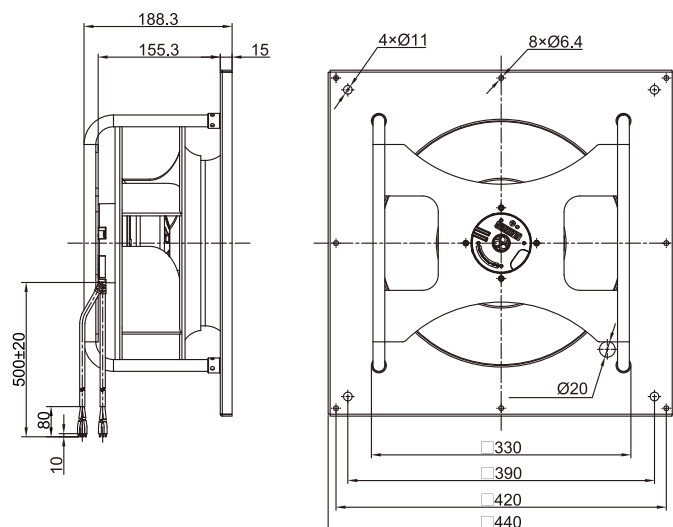


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max [A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B310C-EC-07	230	50/60	2650	225	1.6	70	-25 ... (+60)	E0



Overall Dimensions



Ø310 mm PLUG FAN

EC CENTRIFUGAL FAN



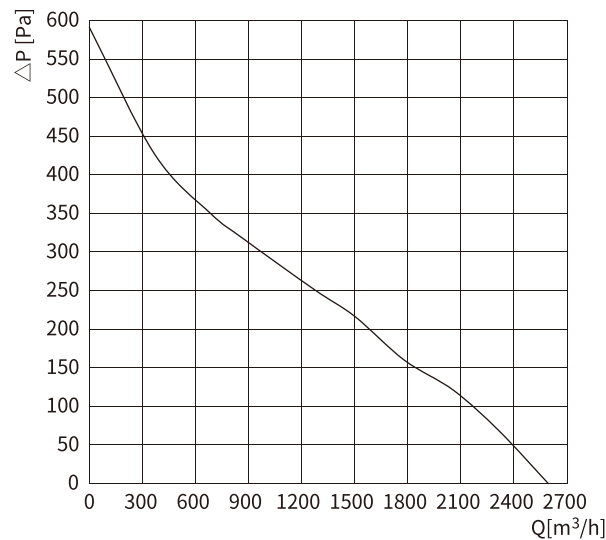
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

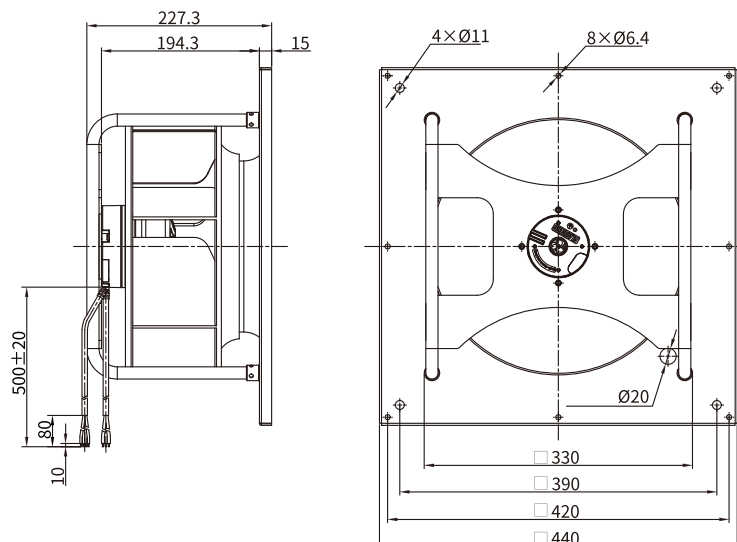


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B310D-EC-07	230	50/60	1500	175	1.3	63	-25 ... (+60)	E0



Overall Dimensions



Ø310 mm PLUG FAN

EC CENTRIFUGAL FAN



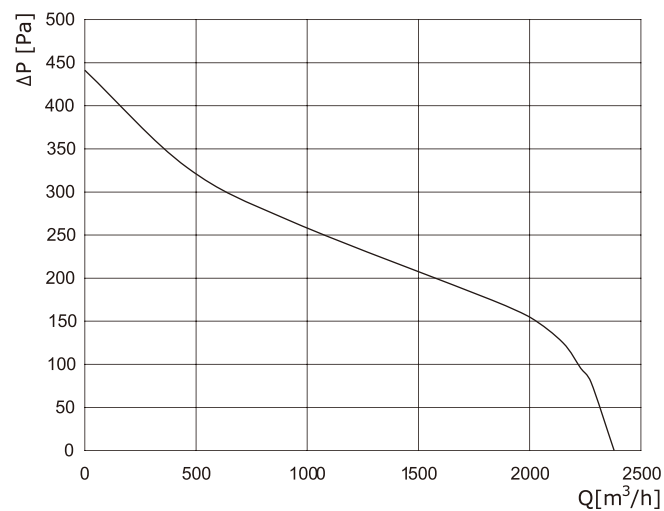
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP44
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

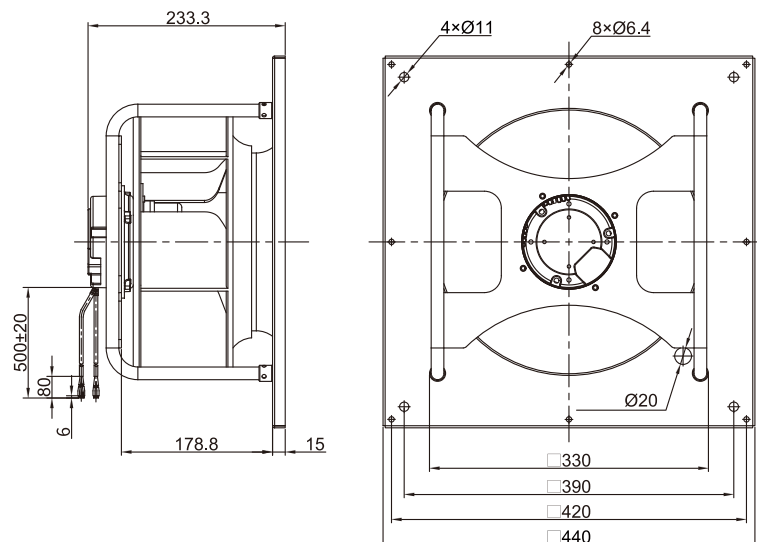


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B310B-EC-04	230	50/60	1410	147	1.19	57	-25 ... (+60)	E0



Overall Dimensions



Ø310 mm PLUG FAN

EC CENTRIFUGAL FAN



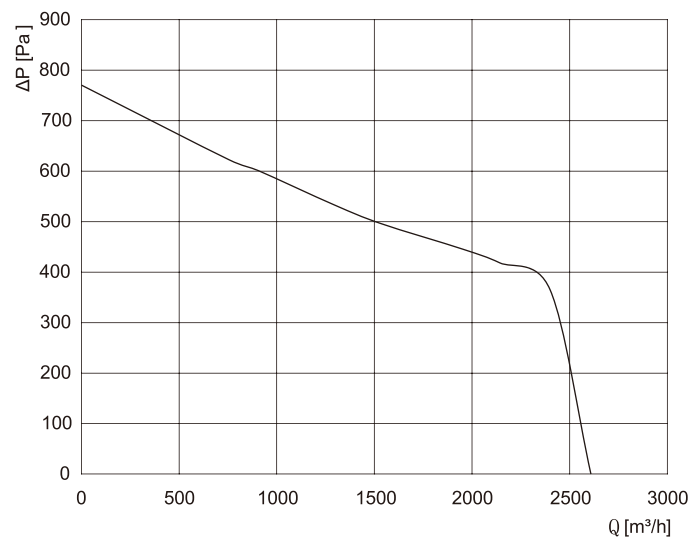
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP44
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

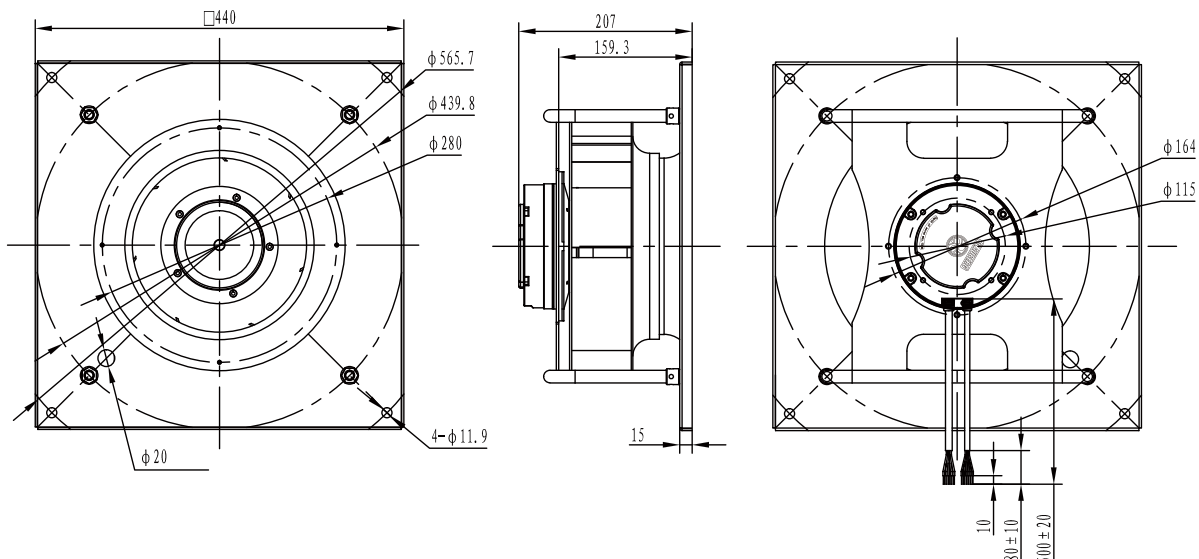


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp. [°C]	Electrical connection
GL-B310A-EC-04	230	50/60	2190	347	2.64	71	-25 ... (+60)	E0



Overall Dimensions



Ø310 mm PLUG FAN

EC CENTRIFUGAL FAN



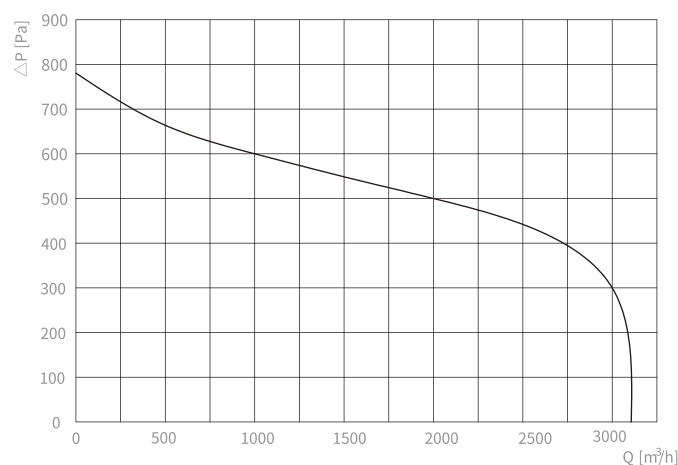
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP44
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

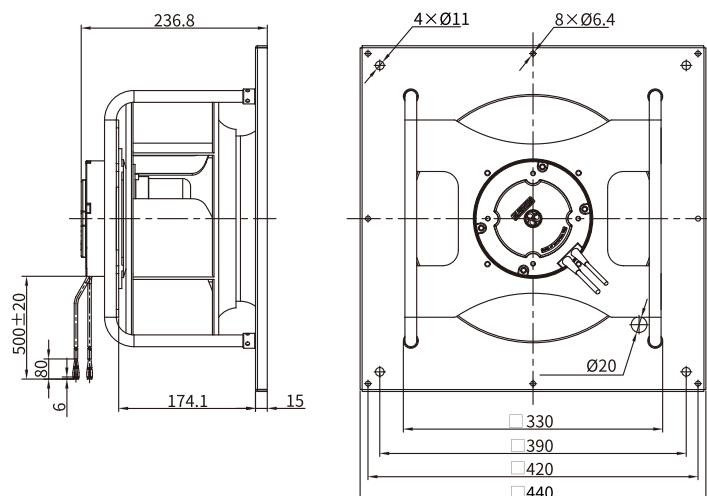


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B310B-EC-02	230	50/60	2160	430	3.2	75	-25 ... (+60)	E0



Overall Dimensions



Ø310 mm PLUG FAN

EC CENTRIFUGAL FAN



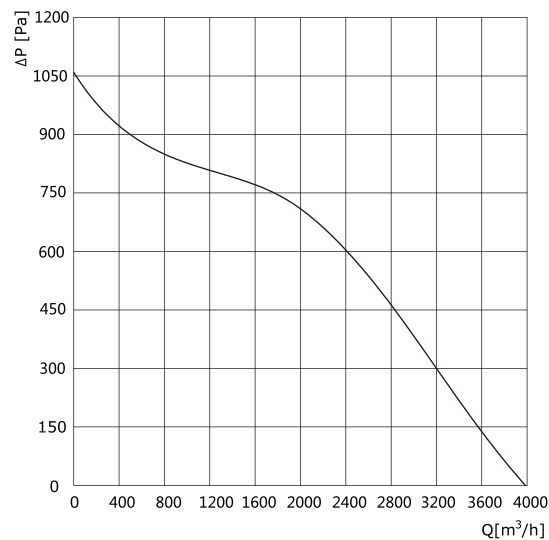
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

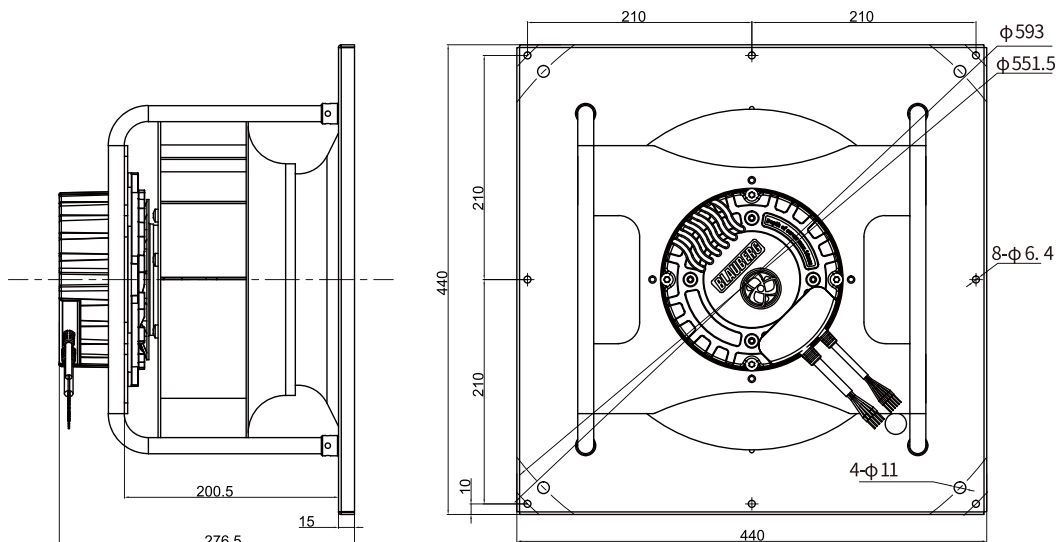


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B310E-EC-05	230	50/60	2960	700	3.1	85	-25 ... (+60)	E0



Overall Dimensions



Ø355 mm PLUG FAN

EC CENTRIFUGAL FAN



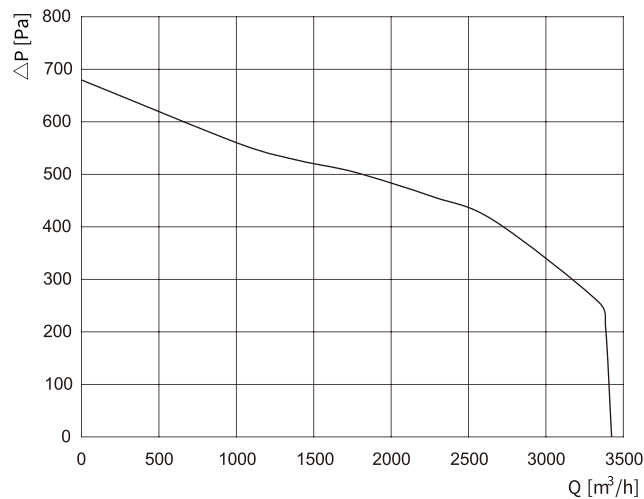
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

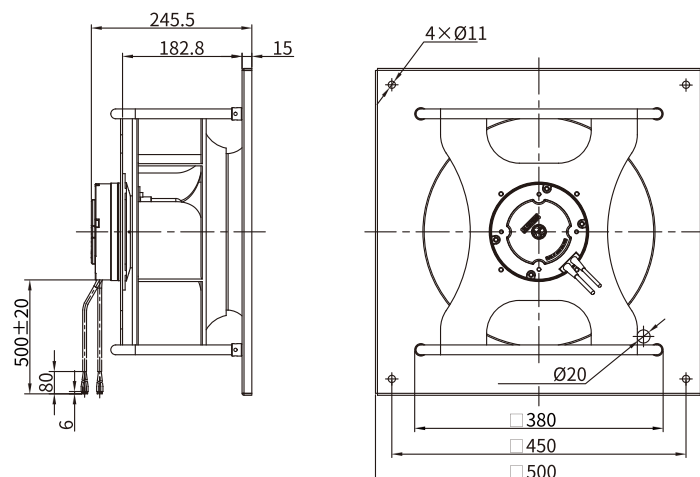


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B355B-EC-02	230	50/60	1530	378	2.85	73	-25 ... (+60)	E0



Overall Dimensions



Ø355 mm PLUG FAN

EC CENTRIFUGAL FAN



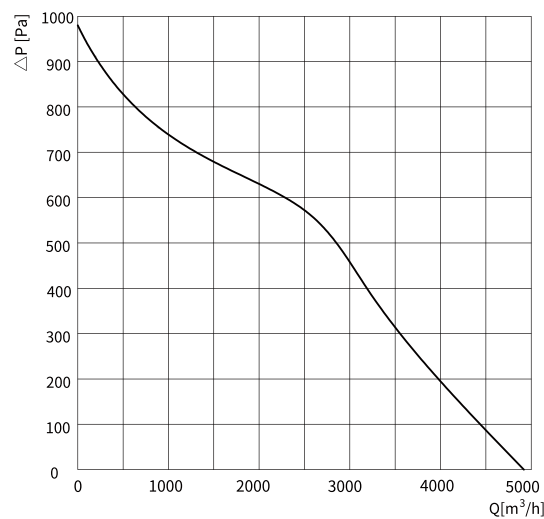
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

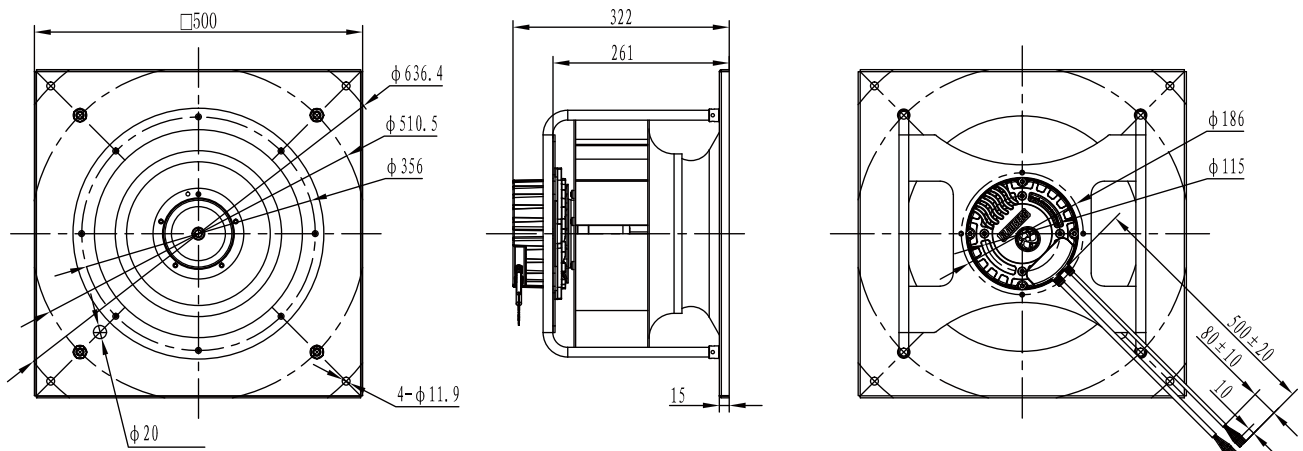


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max [A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B355E-EC-05	230	50/60	2200	700	3.1	85	-25 ... (+60)	E0



Overall Dimmensions



Ø400 mm PLUG FAN

EC CENTRIFUGAL FAN



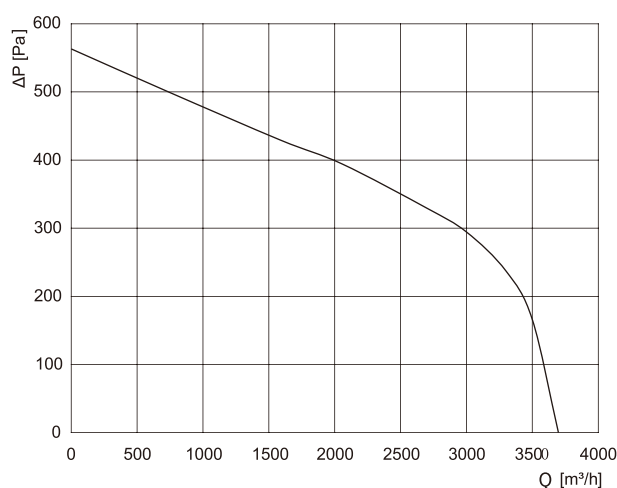
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP44
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

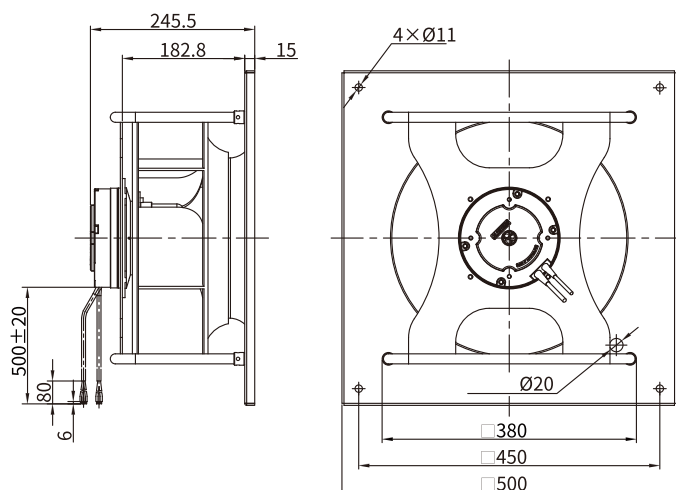


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GL-B400A-EC-02	230	50/60	1180	327	2.48	71	-25 ... (+60)	E0



Overall Dimensions



Ø400 mm PLUG FAN

EC CENTRIFUGAL FAN



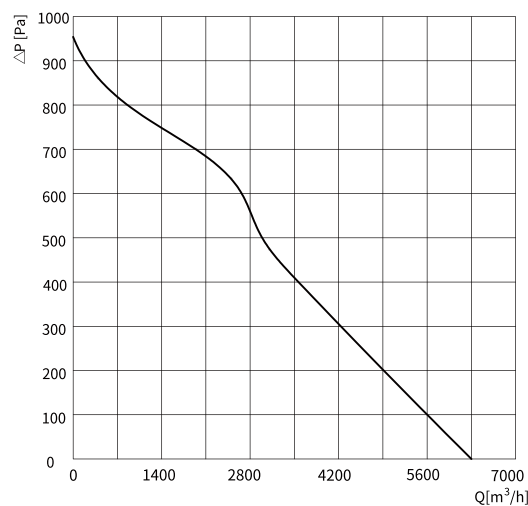
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

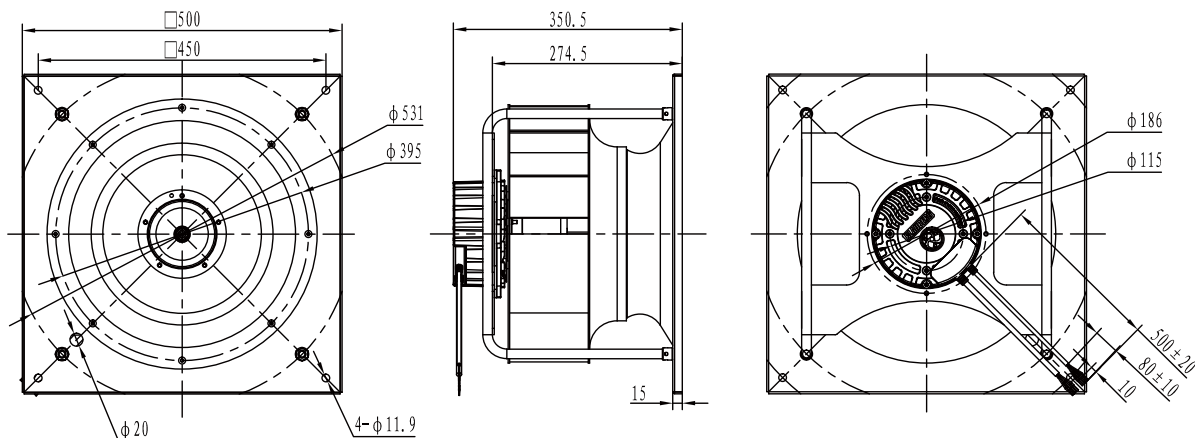


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp. t°[°C]	Electrical connection
GL-B400E-EC-05	230	50/60	1800	700	3.1	85	-25 ... (+60)	E0



Overall Dimensions



Ø450 mm PLUG FAN

EC CENTRIFUGAL FAN



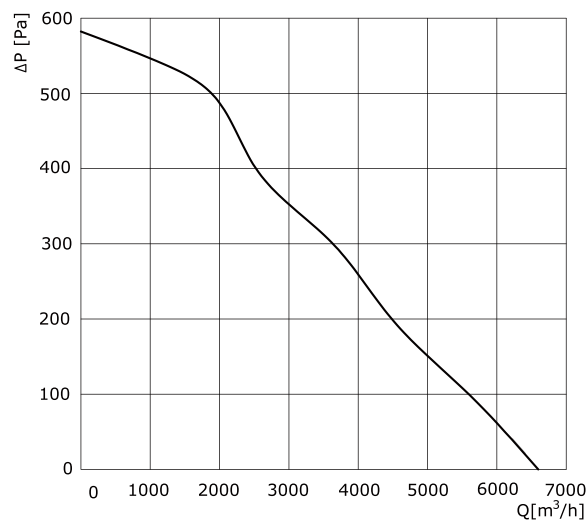
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** aluminum alloy
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

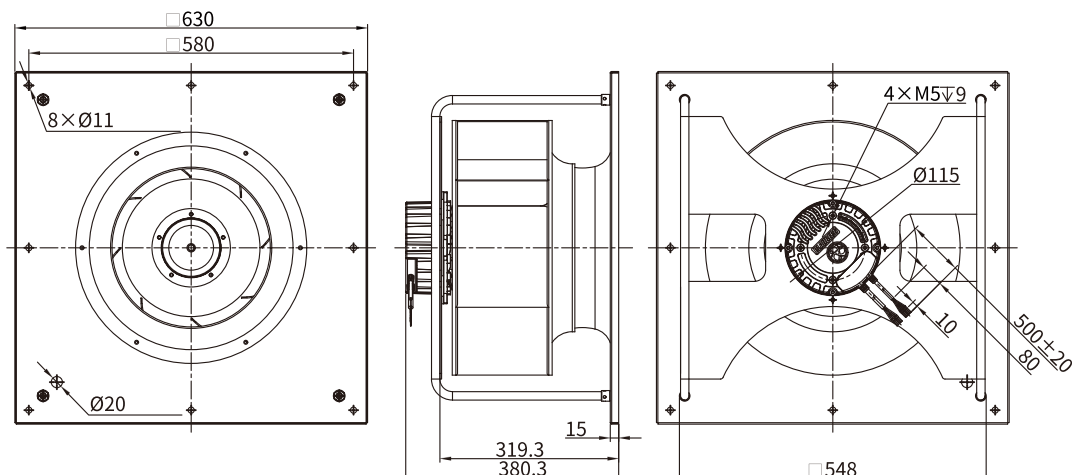


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp. t°C	Electrical connection
GL-B450D-EC-05	230	50/60	1650	700	3.1	70	-25 ... (+60)	E0



Overall Dimensions



Ø133 mm PLUG FAN

DC CENTRIFUGAL FAN



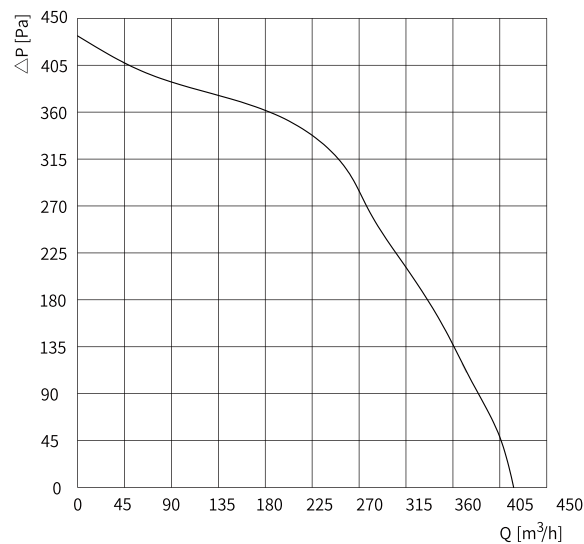
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

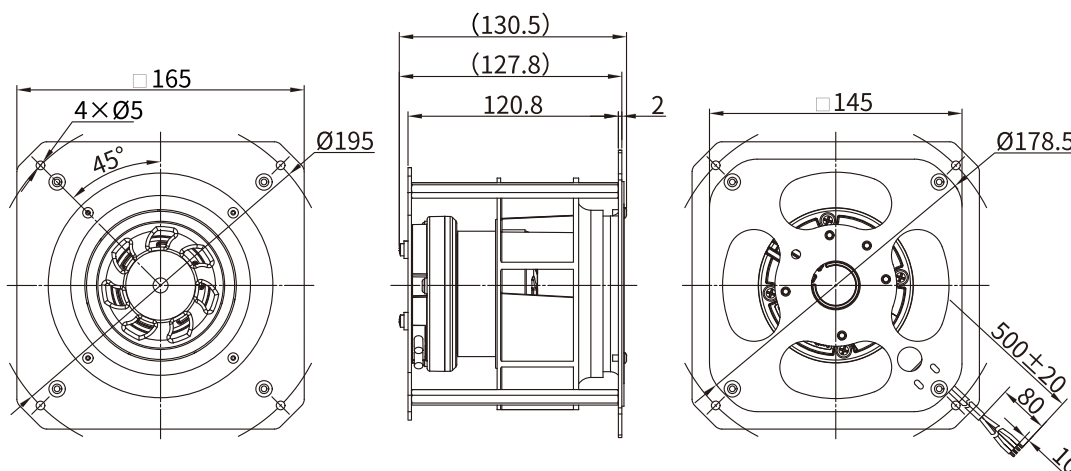


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B133A-EC-M0	24	-	4400	53	2.20	70	-25 ... (+60)	D
GE-B133A-EC-M0	48	-	4400	53	1.20	70	-25 ... (+60)	D



Overall Dimensions



Ø133 mm PLUG FAN

DC CENTRIFUGAL FAN



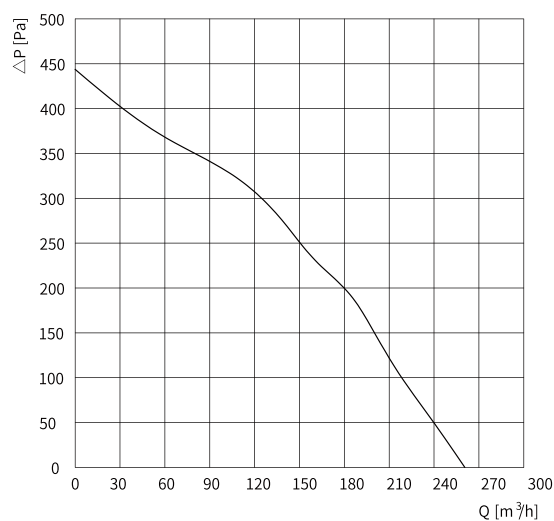
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

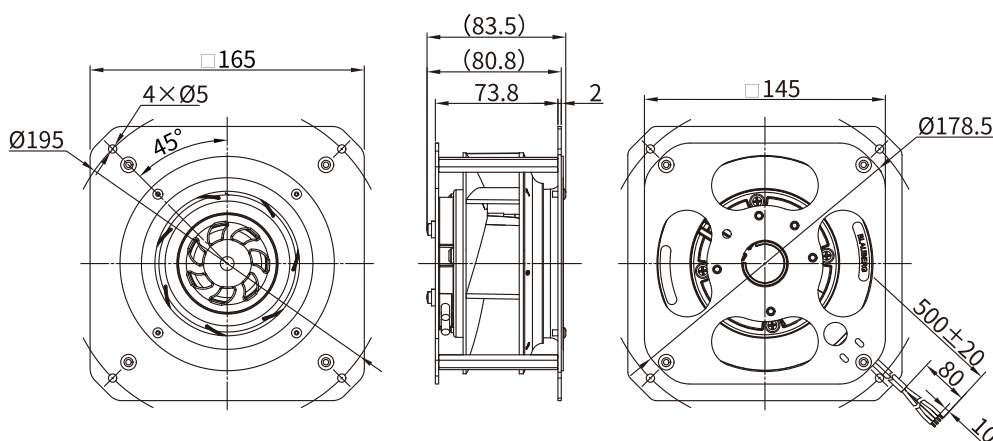


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B133B-EC-M3	24	-	3800	30	1.30	63	-25 ... (+60)	D
GE-B133B-EC-M3	48	-	3800	30	0.65	63	-25 ... (+60)	D

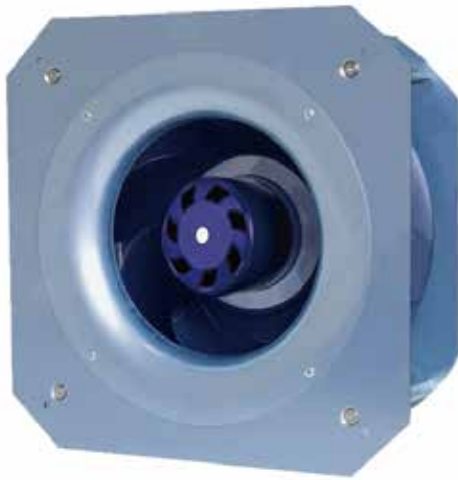


Overall Dimensions



Ø175 mm PLUG FAN

DC CENTRIFUGAL FAN



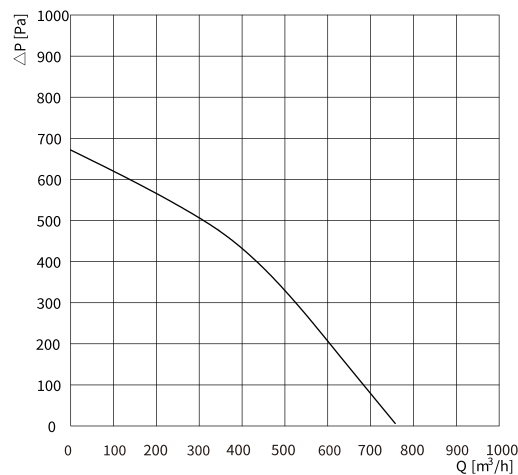
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

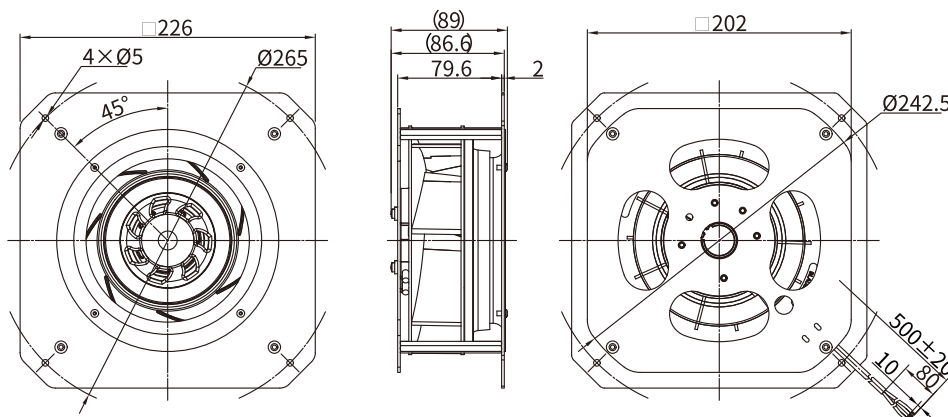


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max [A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B175B-EC-M0	24	-	4000	95	4.20	72	-25 ... (+60)	D
GE-B175B-EC-M0	48	-	4000	95	2.10	72	-25 ... (+60)	D

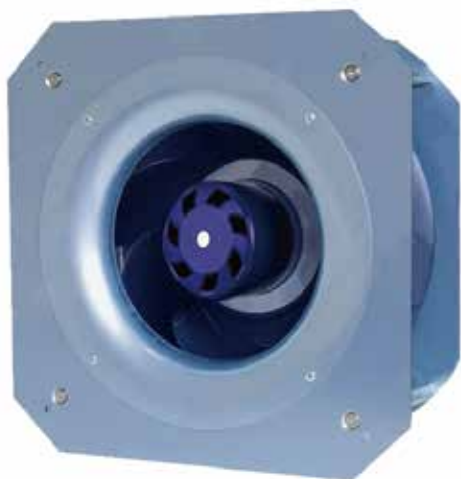


Overall Dimensions



Ø190 mm PLUG FAN

DC CENTRIFUGAL FAN



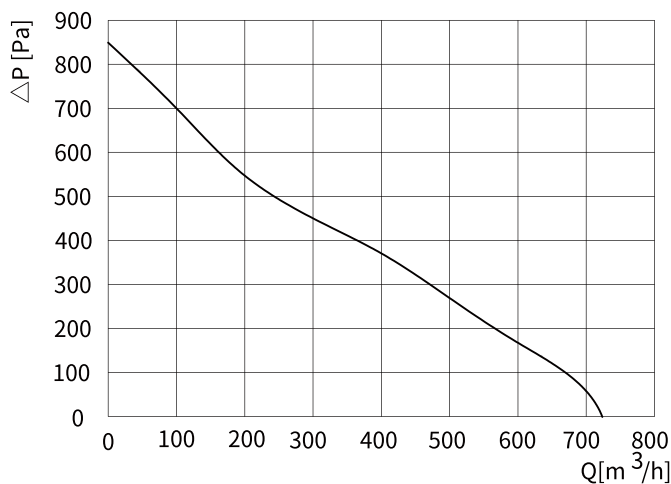
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

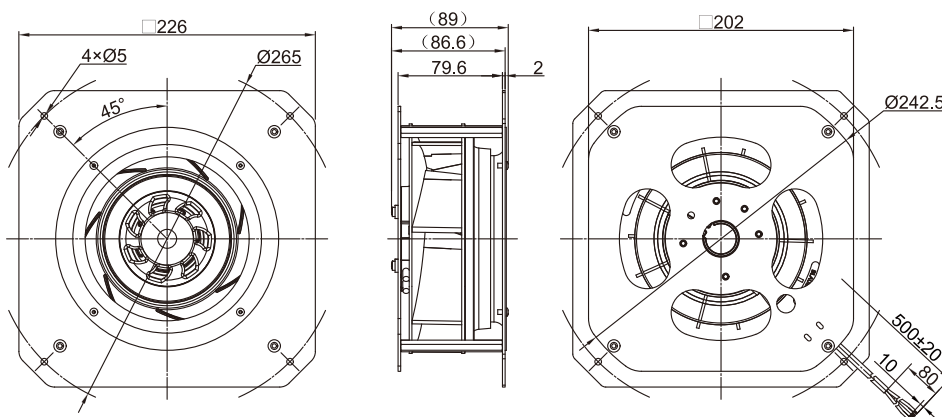


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B190B-EC-M0	24	-	3400	85	3.90	68	-25 ... (+60)	D
GE-B190B-EC-M0	48	-	3400	85	1.95	68	-25 ... (+60)	D

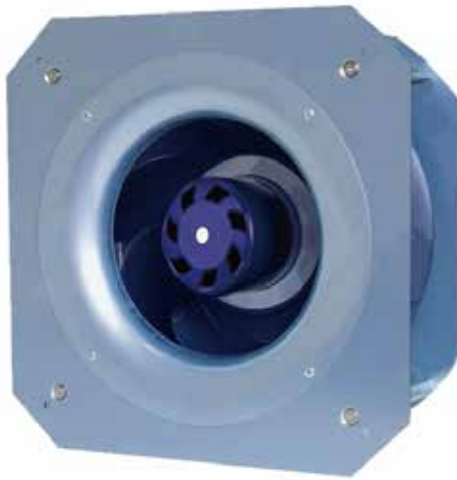


Overall Dimensions



Ø 190 mm PLUG FAN

DC CENTRIFUGAL FAN



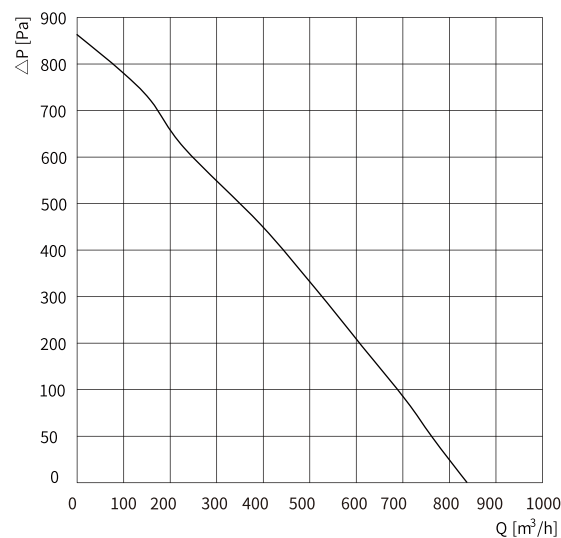
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

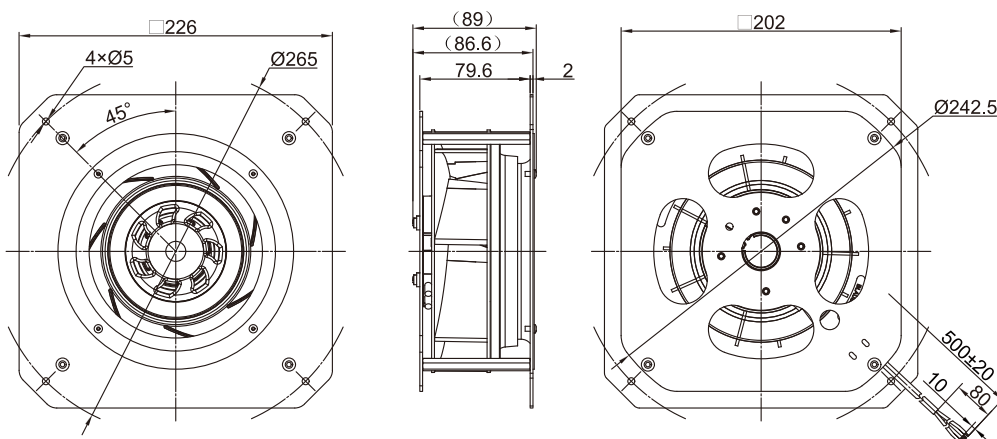


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B190B-EC-M2	24	-	3800	115	4.80	71	-25 ... (+60)	D
GE-B190B-EC-M2	48	-	3800	115	2.40	71	-25 ... (+60)	D

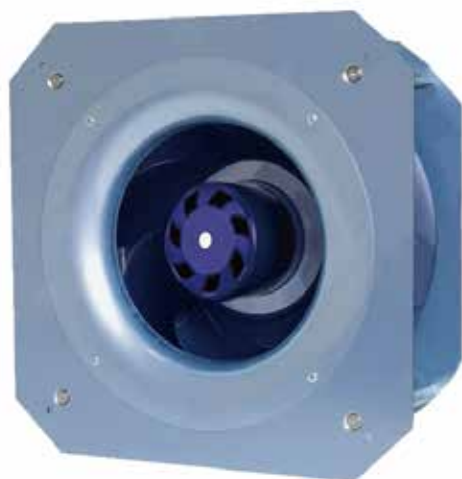


Overall Dimensions



Ø 190 mm PLUG FAN

DC CENTRIFUGAL FAN



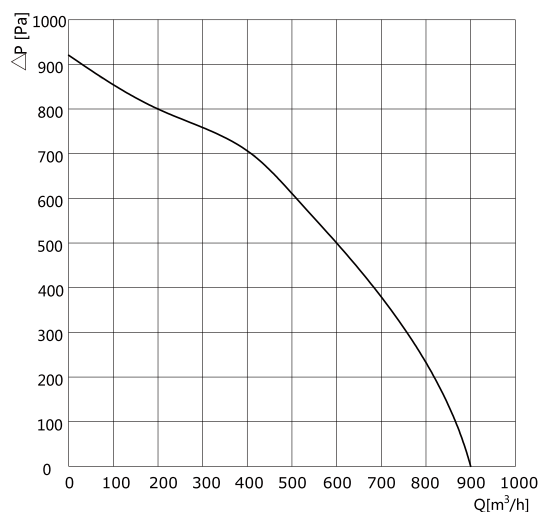
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

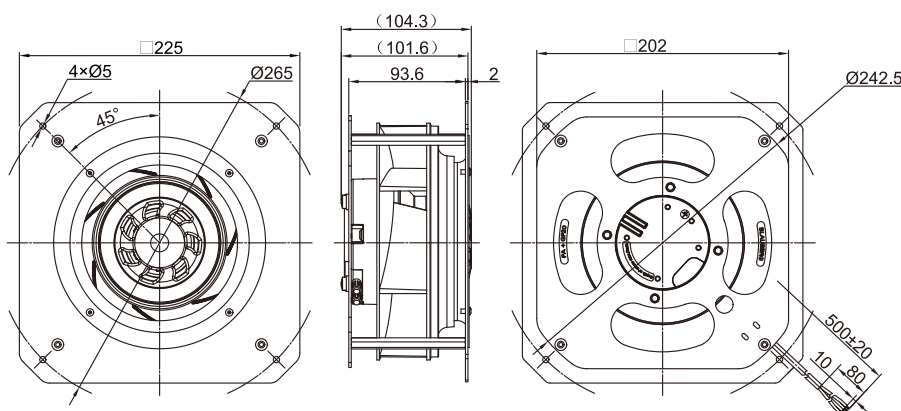


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B190B-EC-M3	24	-	4000	150	6.30	72	-25 ... (+60)	D
GE-B190B-EC-M3	48	-	4000	150	3.20	72	-25 ... (+60)	D

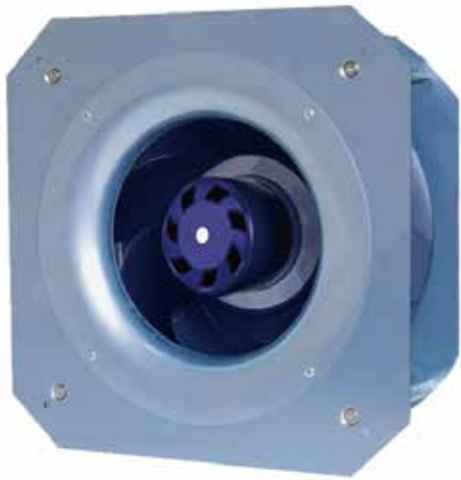


Overall Dimensions



Ø220 mm PLUG FAN

DC CENTRIFUGAL FAN



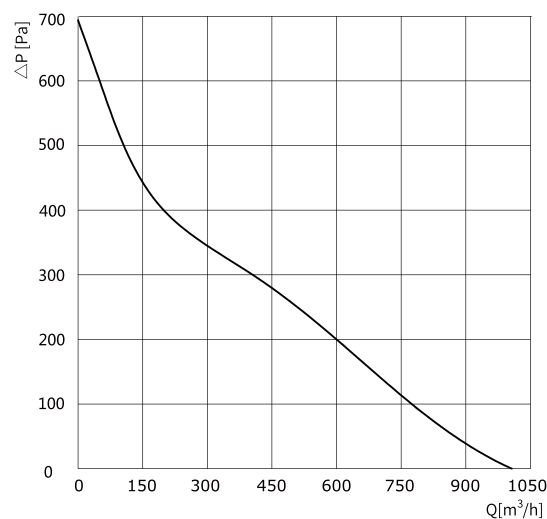
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

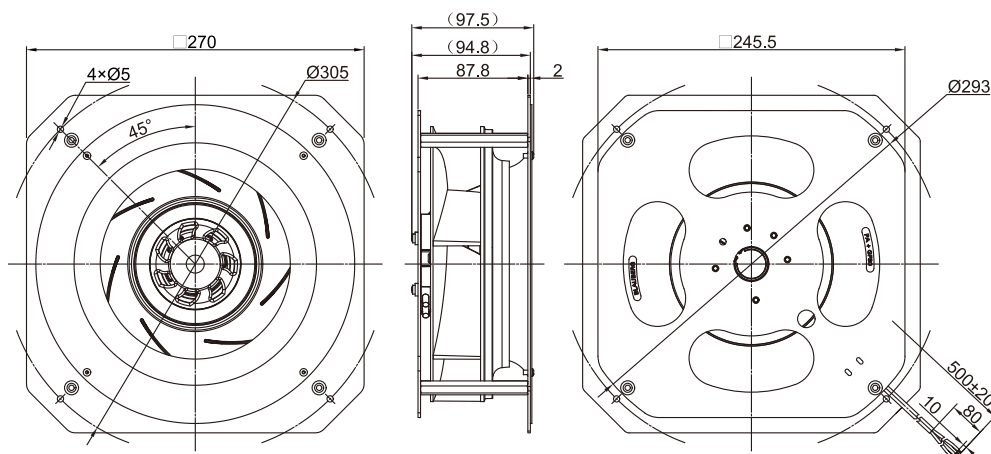


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B220C-EC-M0	24	-	2650	95	4.00	71	-25 ... (+60)	D
GE-B220C-EC-M0	48	-	2650	95	2.00	71	-25 ... (+60)	D

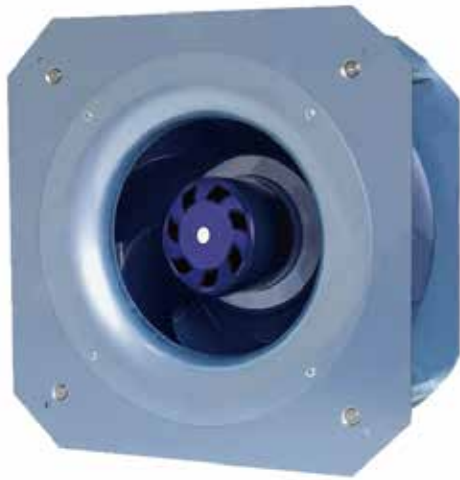


Overall Dimensions



Ø220 mm PLUG FAN

DC CENTRIFUGAL FAN



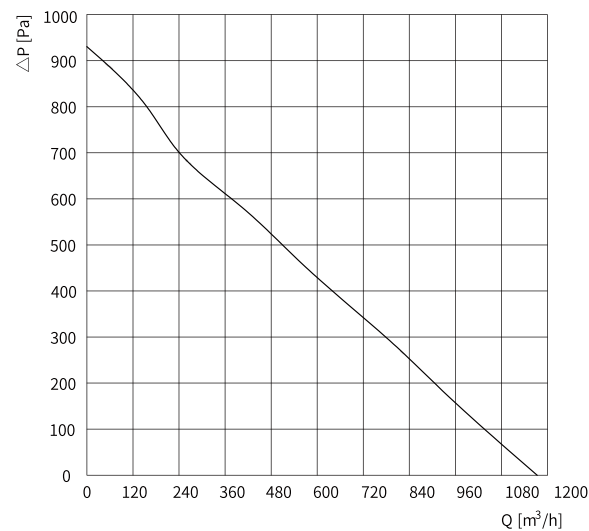
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

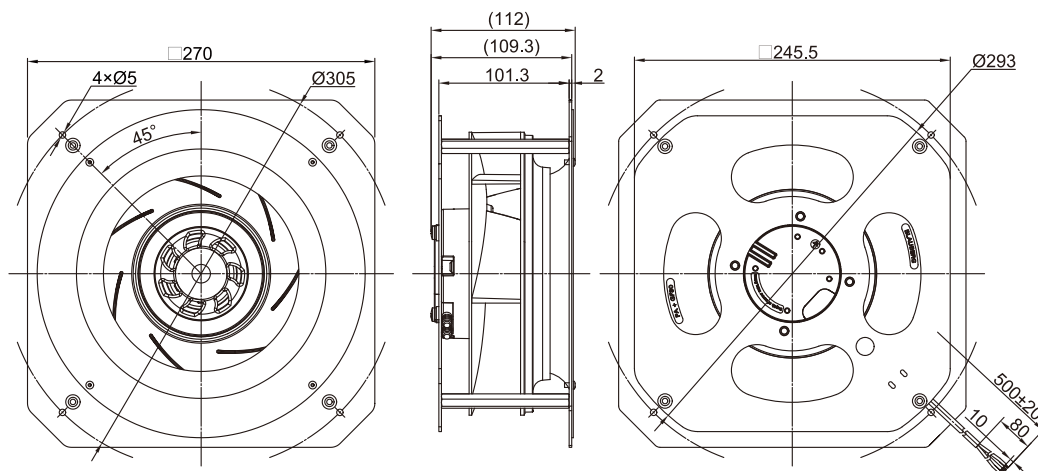


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B220C-EC-M1	24	-	2700	150	6.30	72	-25 ... (+60)	D
GE-B220C-EC-M1	48	-	2700	150	3.15	72	-25 ... (+60)	D

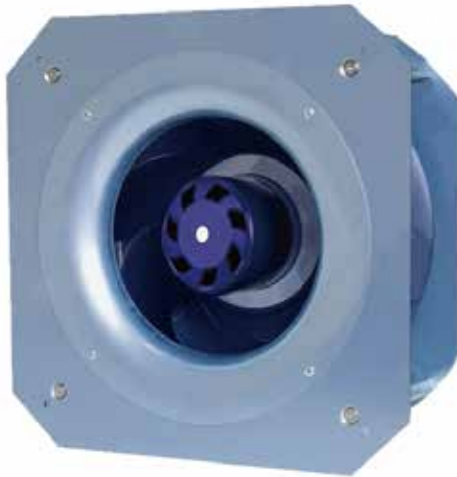


Overall Dimensions



Ø220 mm PLUG FAN

DC CENTRIFUGAL FAN



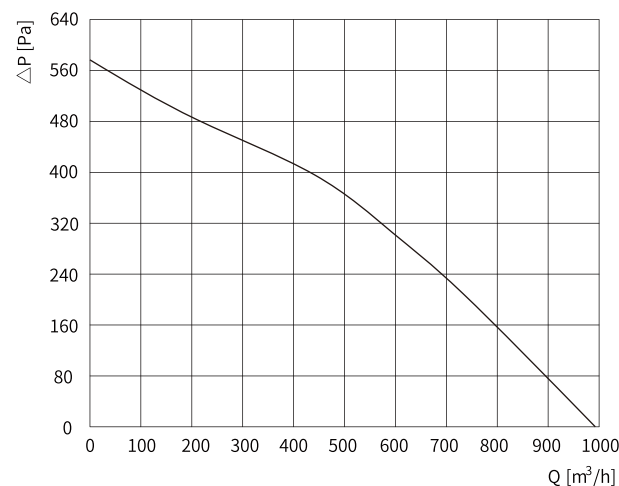
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

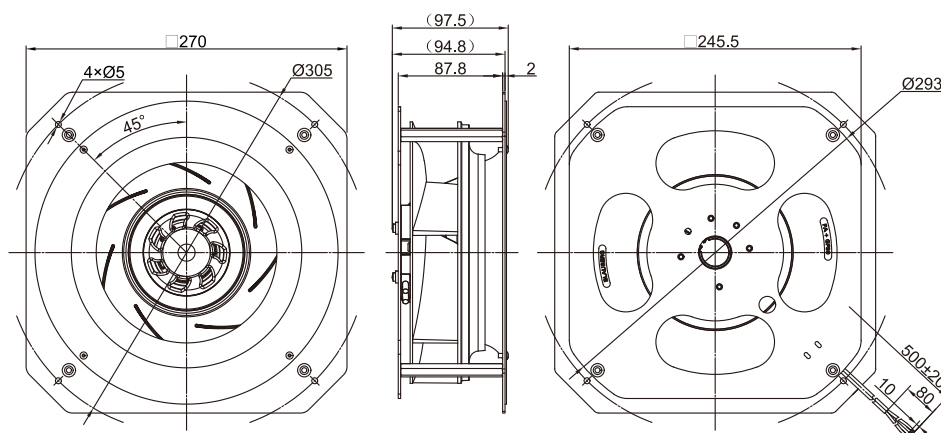


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B220C-EC-M2	24	-	2800	115	4.80	69	-25 ... (+60)	D
GE-B220C-EC-M2	48	-	2800	115	2.40	69	-25 ... (+60)	D

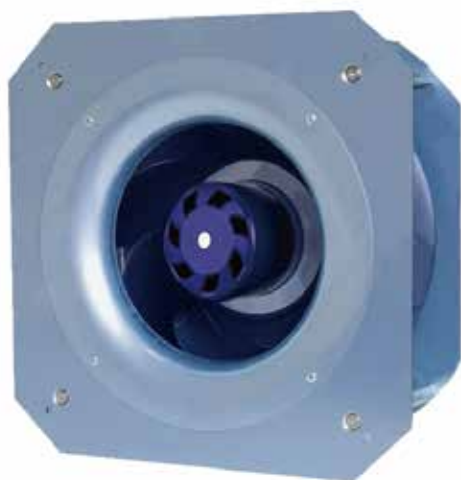


Overall Dimensions



Ø225 mm PLUG FAN

DC CENTRIFUGAL FAN



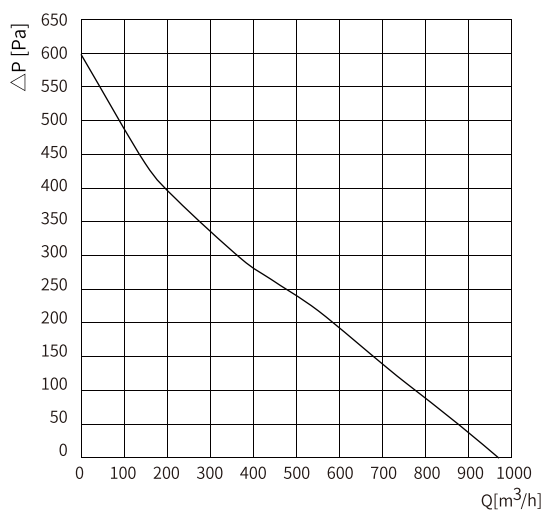
Features

- Speed Control: 0~10V DC /PWM
- Direction of rotation: clockwise, seen on rotor
- Impeller material: PP+GF
- Type of protection: IP55
- Insulation class: B
- Mode of operation: continuous operation (S1)
- Bearing: ball bearings
- Motor protection: self-resetting TOP wired internally

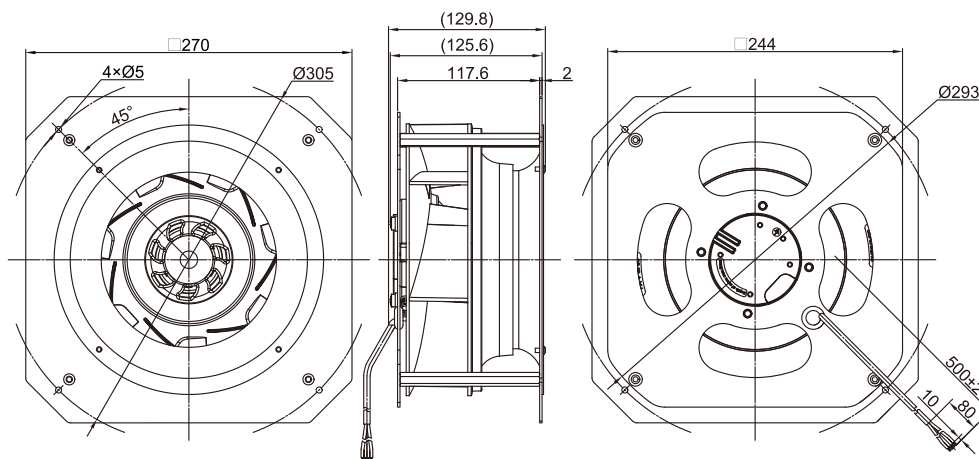


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B225G-EC-M0	24	-	2700	85	3.6	65	-25 ... (+60)	D
GE-B225G-EC-M0	48	-	2700	85	1.8	65	-25 ... (+60)	D

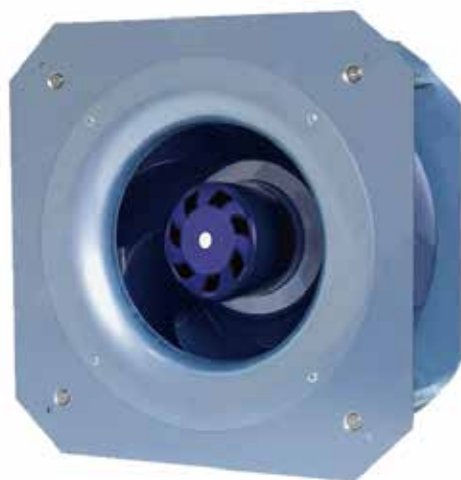


Overall Dimensions



Ø225 mm PLUG FAN

DC CENTRIFUGAL FAN



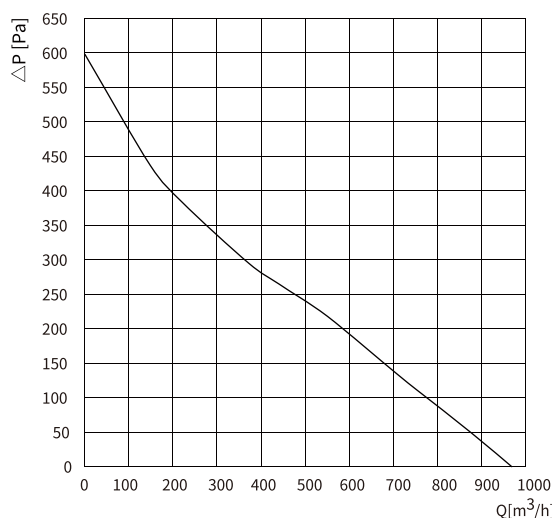
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PP+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

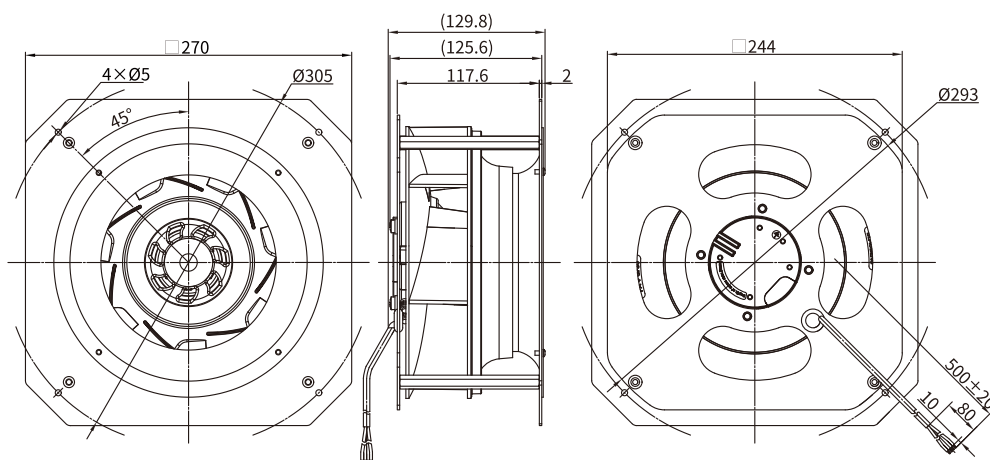


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B225G-EC-M2	24	-	2800	115	4.80	67	-25 ... (+60)	D
GE-B225G-EC-M2	48	-	2800	115	2.40	67	-25 ... (+60)	D

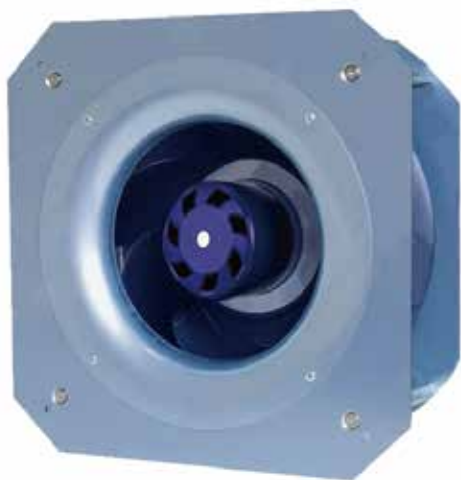


Overall Dimensions



Ø225 mm PLUG FAN

DC CENTRIFUGAL FAN



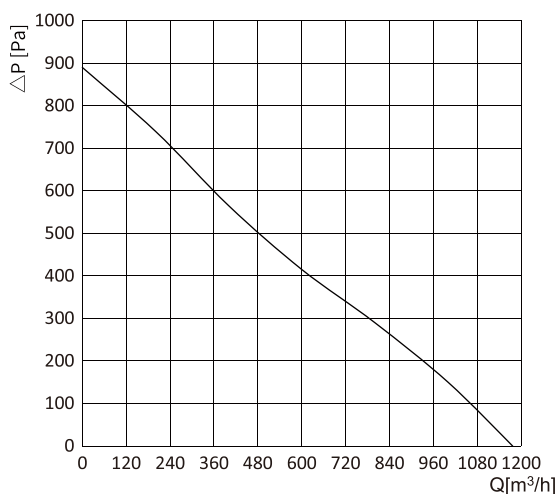
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PP+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

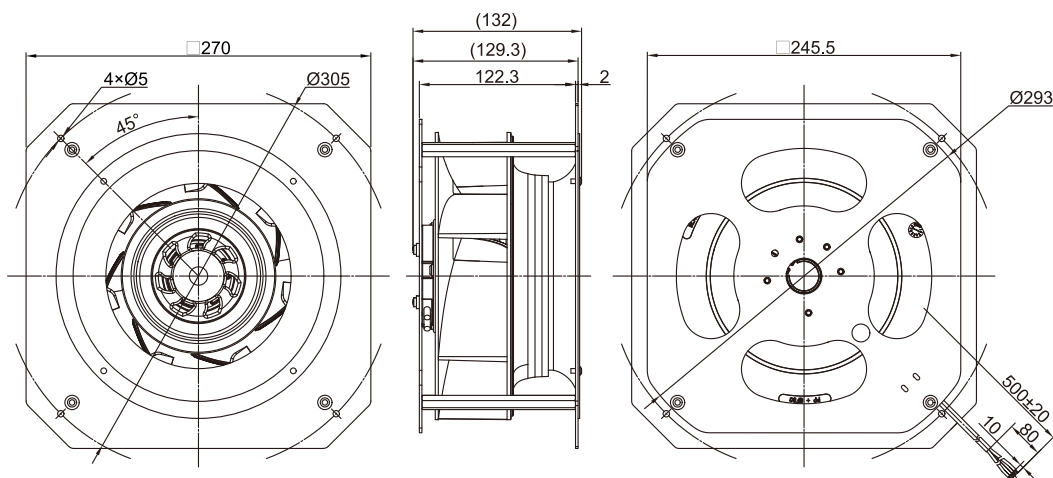


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B225G-EC-M1	24	-	2970	150	6.4	68	-25 ... (+60)	D
GE-B225G-EC-M1	48	-	2970	150	3.2	68	-25 ... (+60)	D



Overall Dimensions



Ø225 mm PLUG FAN

DC CENTRIFUGAL FAN



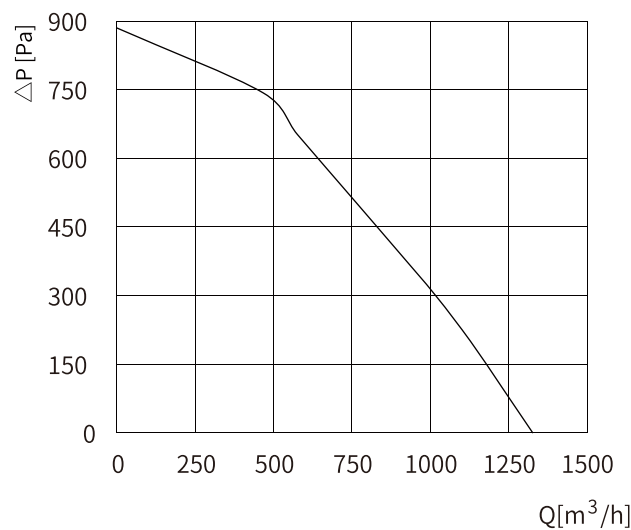
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PP+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

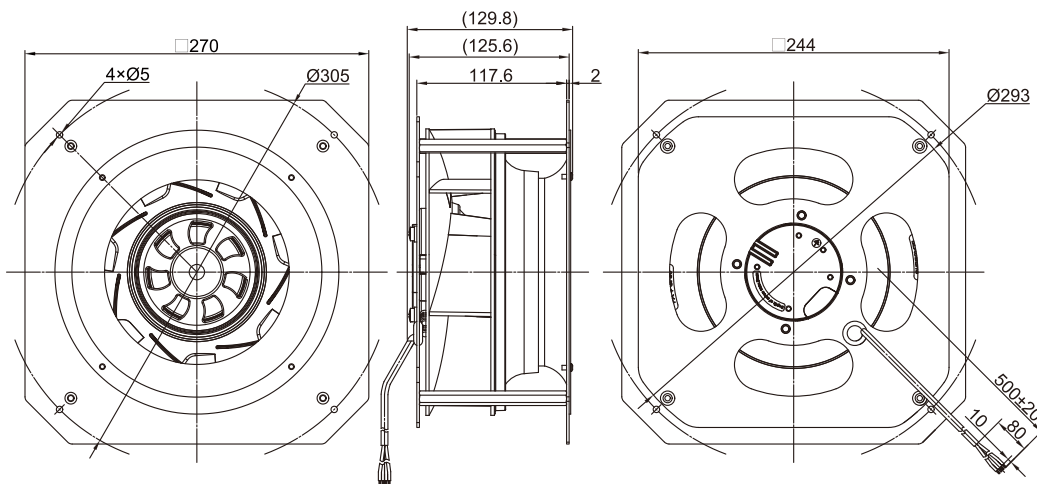


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max [A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B225G-EC-M7	24	-	3600	230	9.60	71	-25 ... (+60)	D
GE-B225G-EC-M7	48	-	3600	230	4.80	71	-25 ... (+60)	D

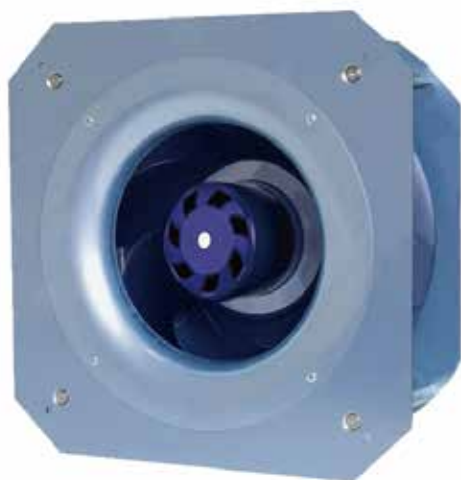


Overall Dimensions



Ø250 mm PLUG FAN

DC CENTRIFUGAL FAN



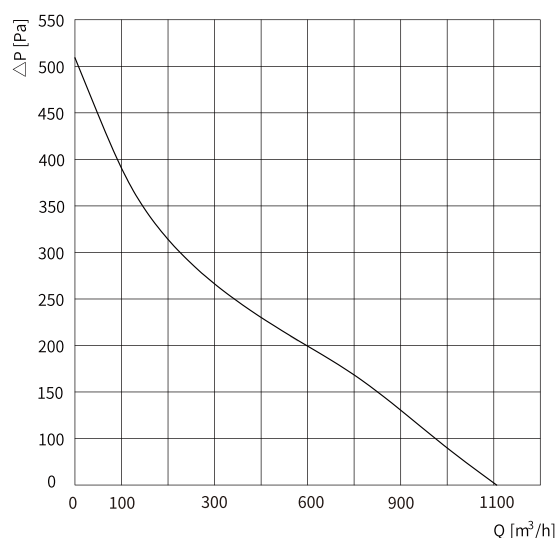
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

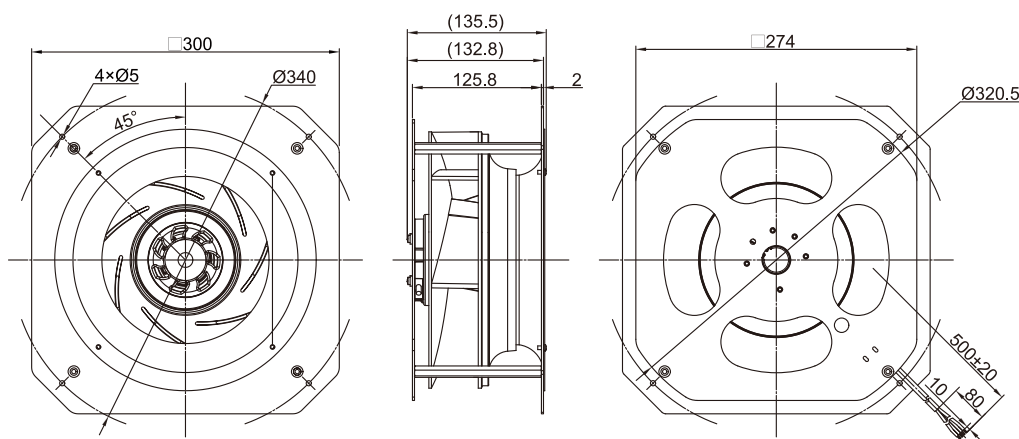


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B250B-EC-M0	24	-	1950	95	4.00	69	-25 ... (+60)	D
GE-B250B-EC-M0	48	-	1950	95	2.00	69	-25 ... (+60)	D

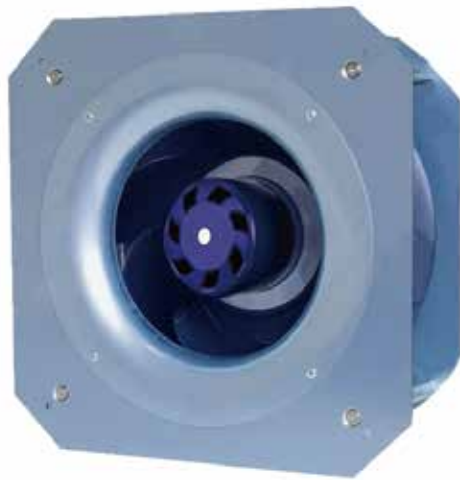


Overall Dimensions



Ø250 mm PLUG FAN

DC CENTRIFUGAL FAN



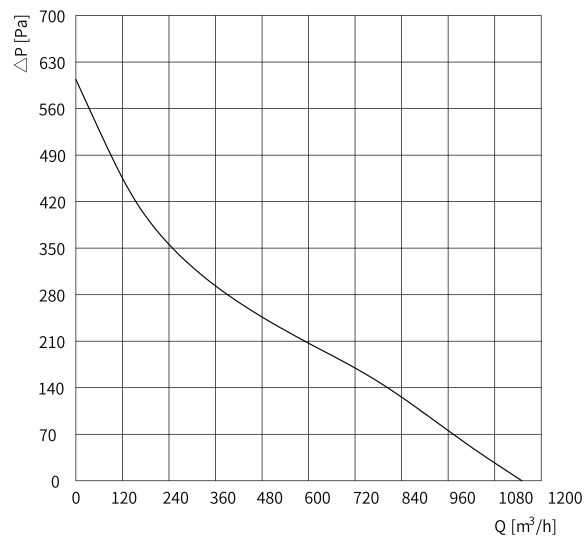
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

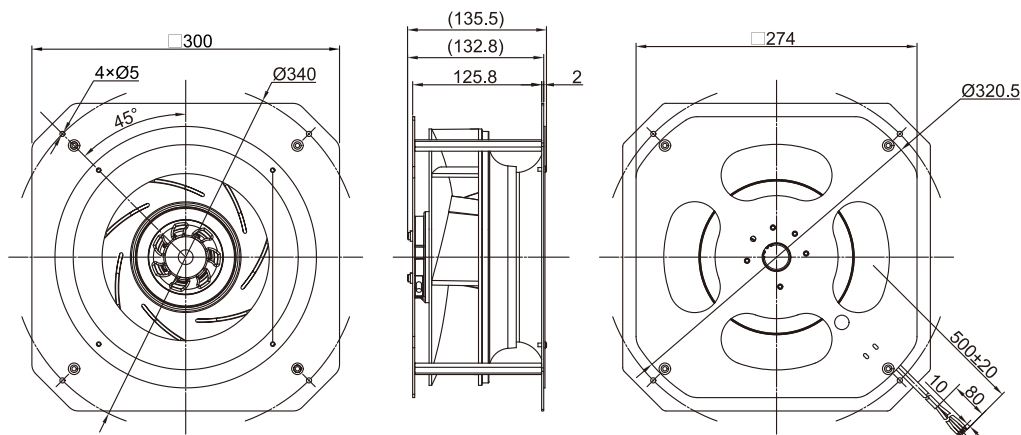


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B250B-EC-M2	24	-	2180	115	4.80	68	-25 ... (+60)	D
GE-B250B-EC-M2	48	-	2180	115	2.40	68	-25 ... (+60)	D

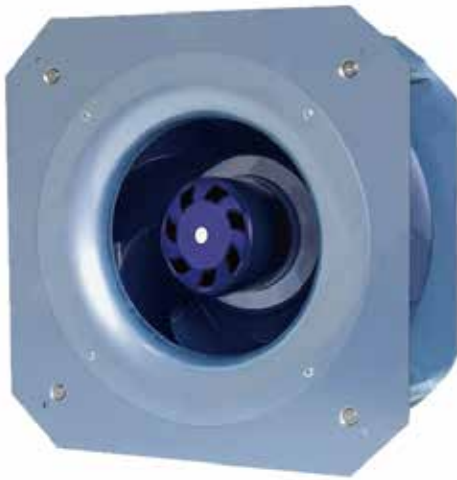


Overall Dimensions



Ø250 mm PLUG FAN

DC CENTRIFUGAL FAN



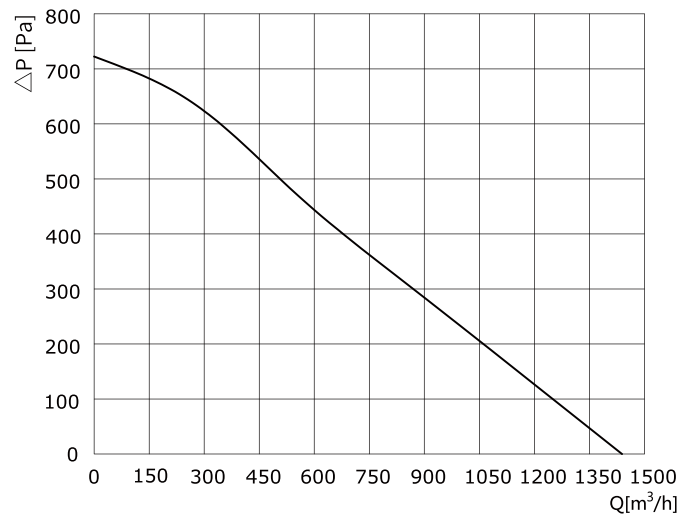
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

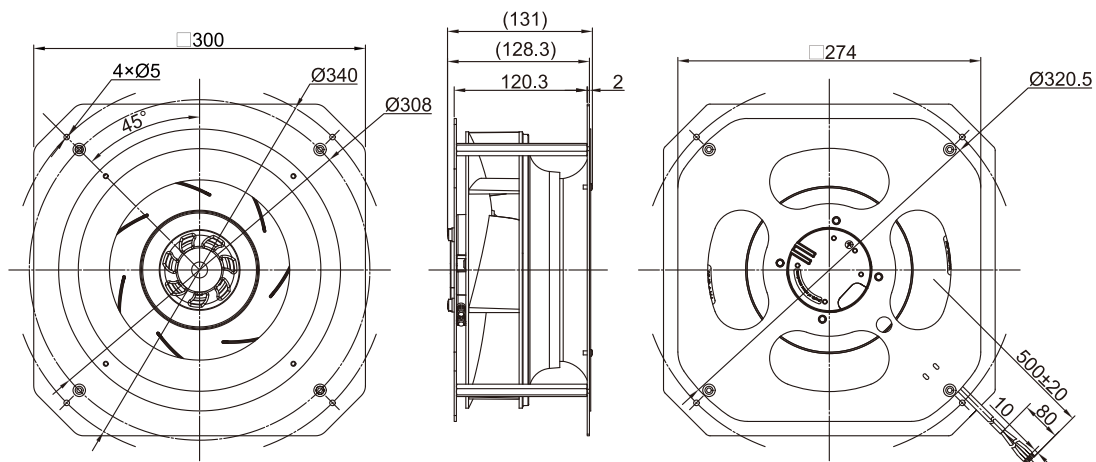


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B250B-EC-M1	24	-	2250	150	6.40	72	-25 ... (+60)	D
GE-B250B-EC-M1	48	-	2250	150	3.20	72	-25 ... (+60)	D



Overall Dimensions



Ø250 mm PLUG FAN

DC CENTRIFUGAL FAN



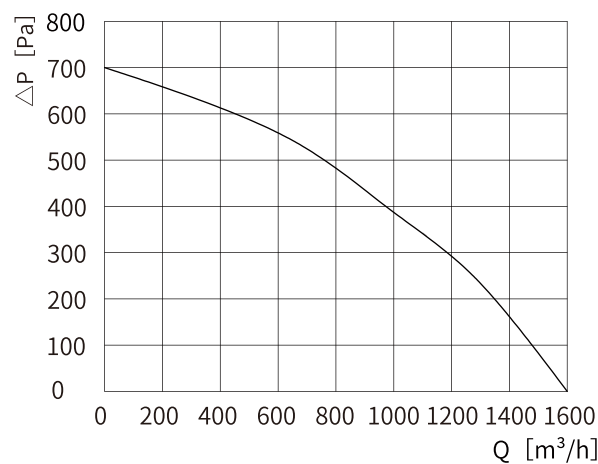
Features

- Speed Control: 0~10V DC /PWM
- Direction of rotation: clockwise, seen on rotor
- Impeller material: PA6+GF
- Type of protection: IP55
- Insulation class: B
- Mode of operation: continuous operation (S1)
- Bearing: ball bearings
- Motor protection: self-resetting TOP wired internally

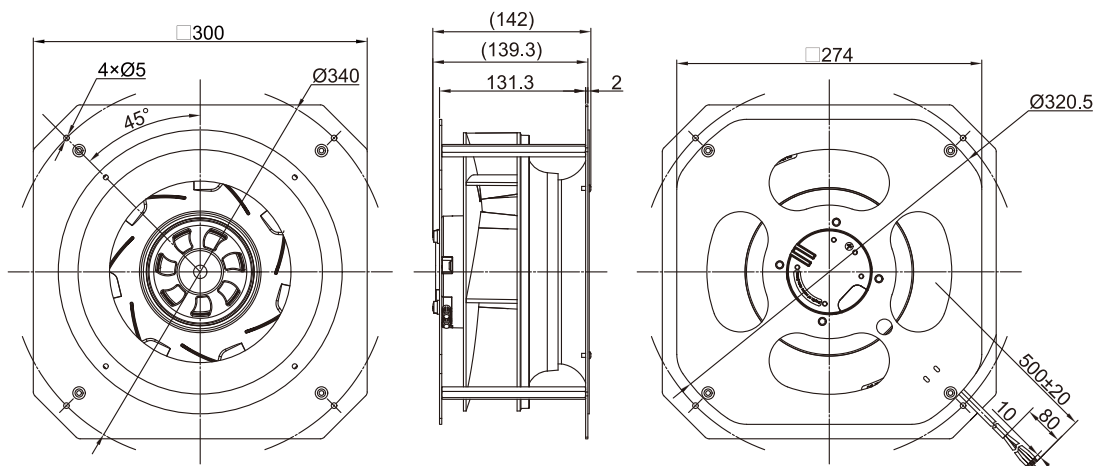


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Electrical connection
GD-B250B-EC-M7	24	-	2700	230	9.60	71	-25 ... (+60)	D
GE-B250B-EC-M7	48	-	2700	230	4.80	71	-25 ... (+60)	D



Overall Dimensions



Ø133 mm PLUG FAN

AC CENTRIFUGAL FAN



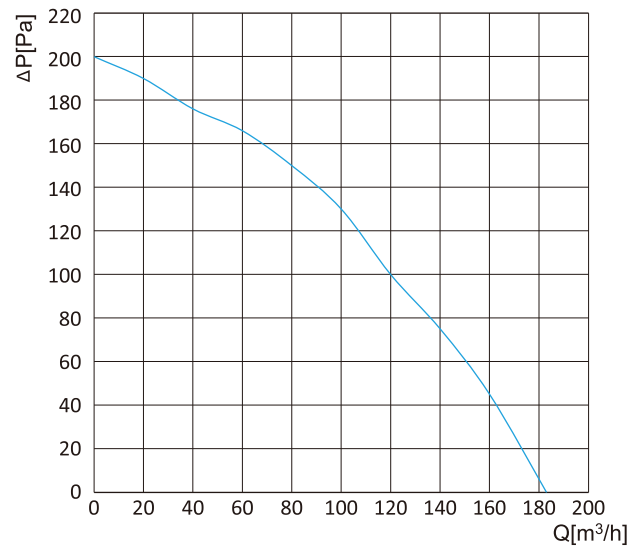
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

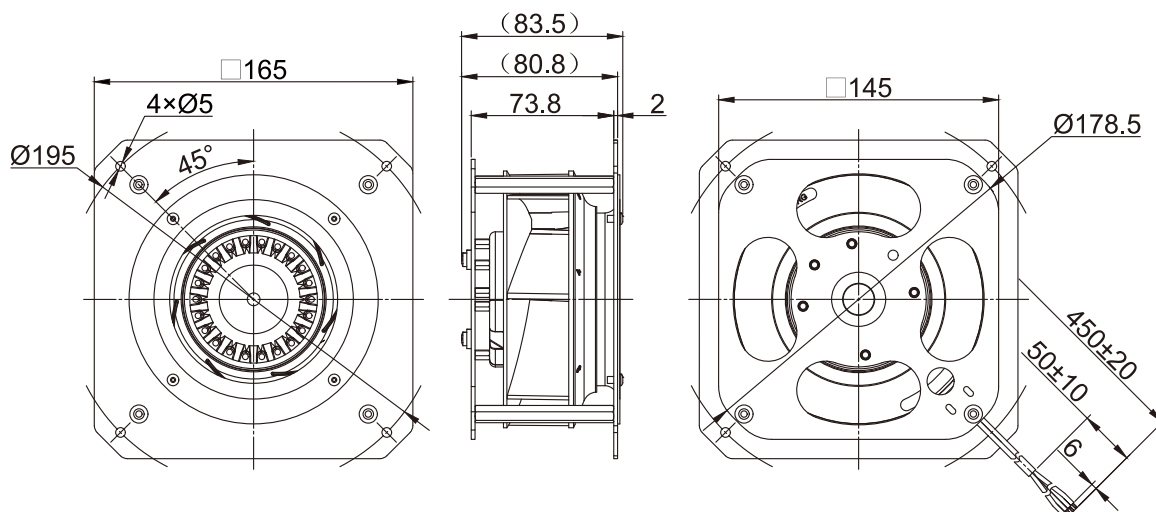


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp. [°C]	Capacitance
GL-B133B-2E-A01-M1	230	50	2650	30	0.15	65	-25 ... (+60)	1.0µF/450V



Overall Dimensions



Ø190 mm PLUG FAN

AC CENTRIFUGAL FAN



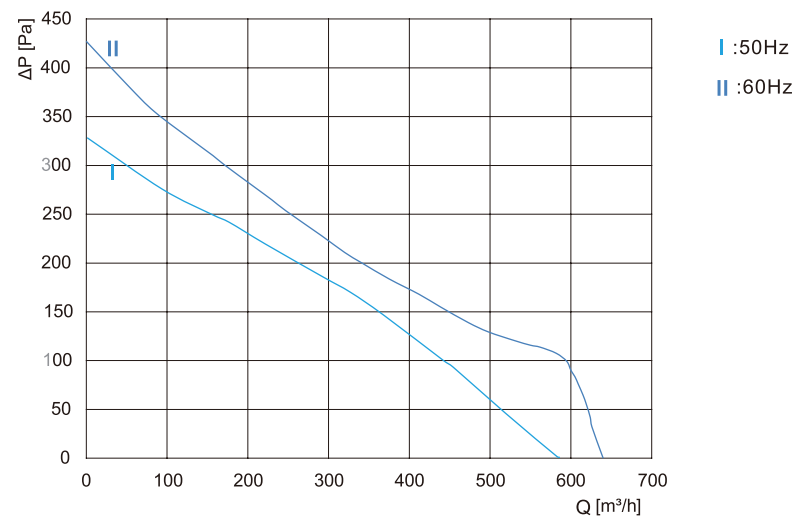
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

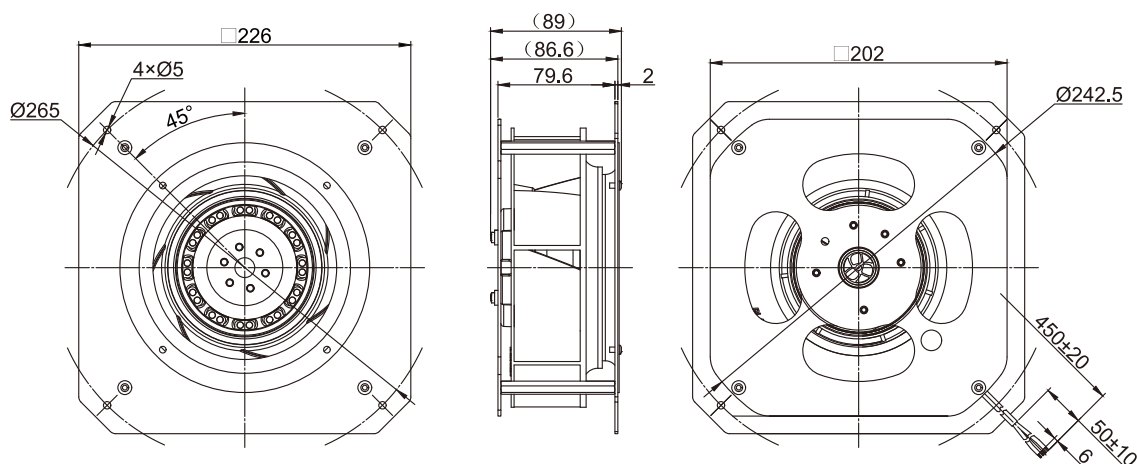


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Capacitance
GL-B190A-2E-A01-01	230	50	2430	65	0.30	62	-25 ... (+60)	1.5µF/400V
	230	60	2530	80	0.35	64	-25 ... (+60)	1.5µF/400V



Overall Dimensions



Ø220 mm PLUG FAN

AC CENTRIFUGAL FAN



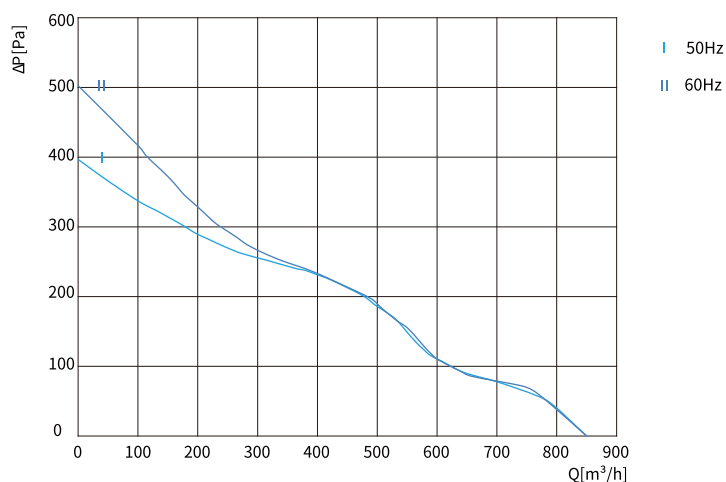
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protecyion:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

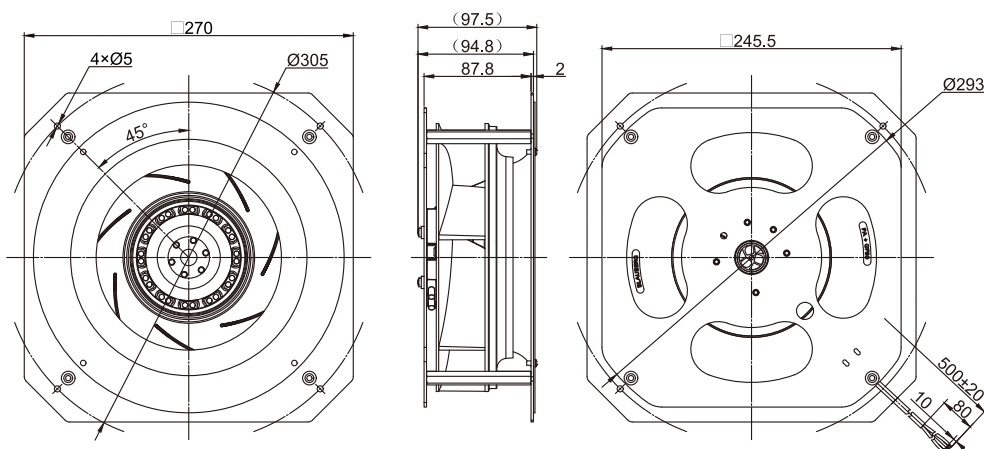


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp. [°C]	Capacitance
GL-B220B-2E-A01-M1	230	50	2110	94	0.42	69	-25 ... (+60)	2µF/400V
	230	60	2210	108	0.47	70	-25 ... (+60)	2µF/400V



Overall Dimmensions



Ø220 mm PLUG FAN

AC CENTRIFUGAL FAN



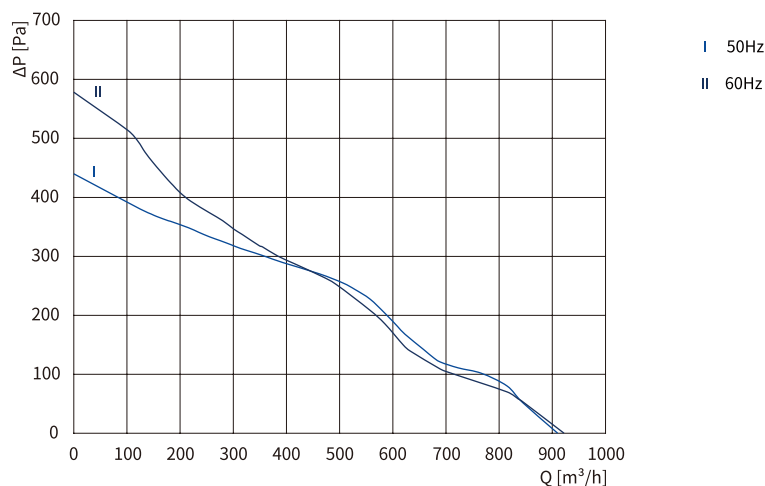
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

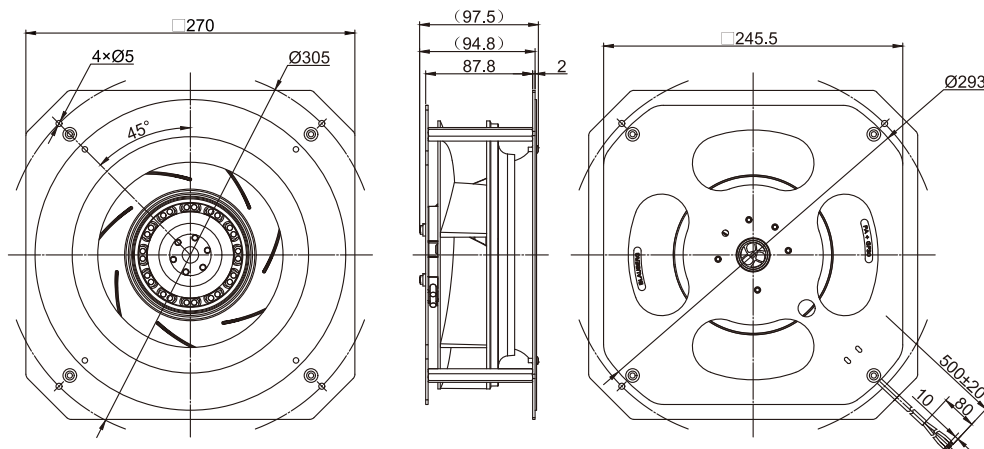


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Capacitance
GL-B220B-2E-B01-M1	230	50	2360	106	0.47	70	-25 ... (+60)	2µF/400V
	230	60	2350	130	0.57	71	-25 ... (+60)	2µF/400V



Overall Dimensions



Ø225 mm PLUG FAN

AC CENTRIFUGAL FAN



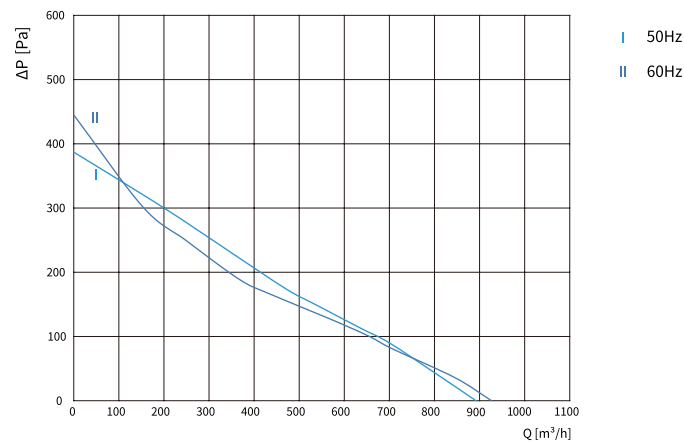
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

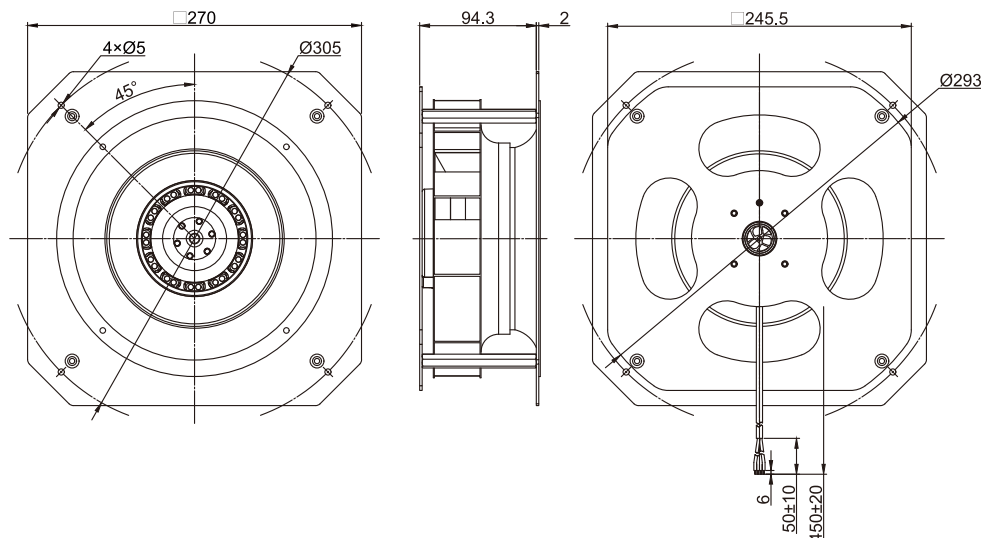


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Capacitance
GL-B225A-2E-A01-M1	230	50	2150	92	0.41	70	-25 ... (+60)	2µF/450V
	230	60	2100	109	0.48	71	-25 ... (+60)	2µF/450V



Overall Dimensions



Ø225 mm PLUG FAN

AC CENTRIFUGAL FAN



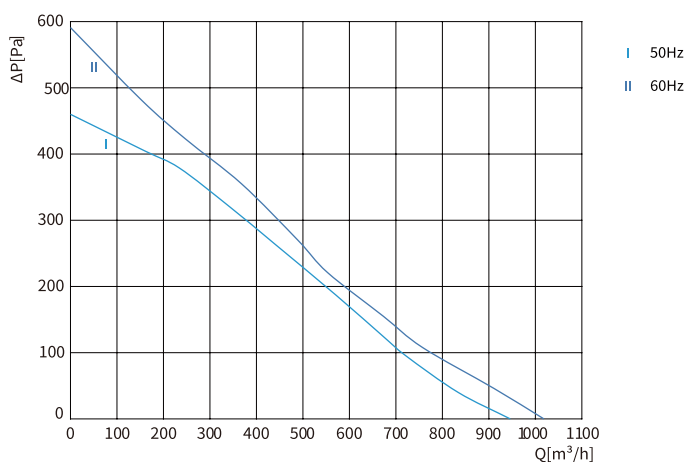
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

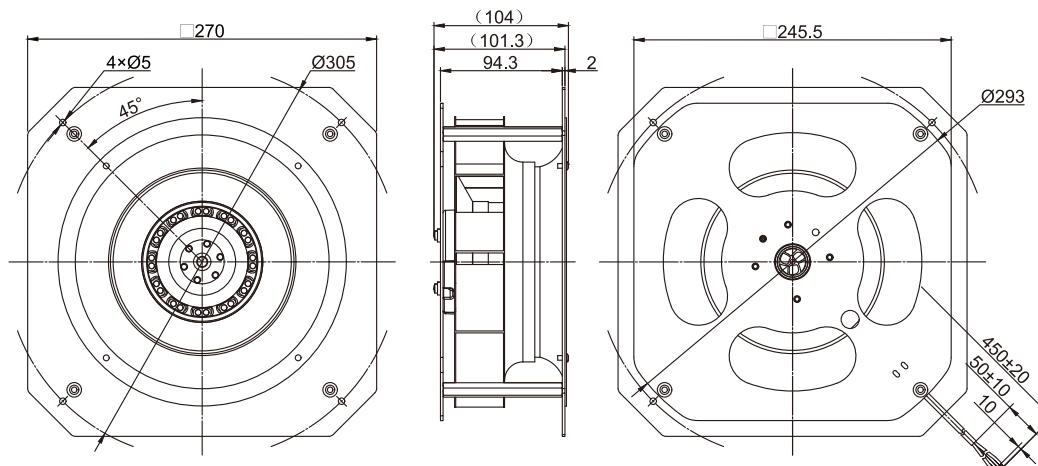


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Capacitance
GL-B225A-2E-C01-M1	230	50	2550	108	0.49	74	-25 ... (+60)	3.5µF/450V
	230	60	2620	150	0.66	76	-25 ... (+60)	3.5µF/450V



Overall Dimensions



Ø225 mm PLUG FAN

AC CENTRIFUGAL FAN



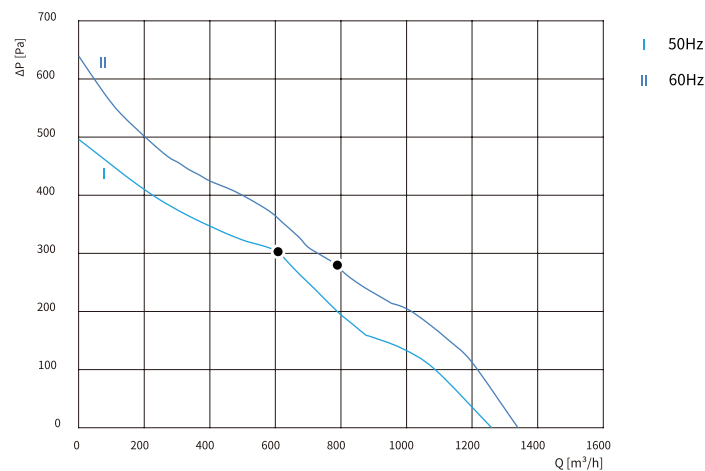
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

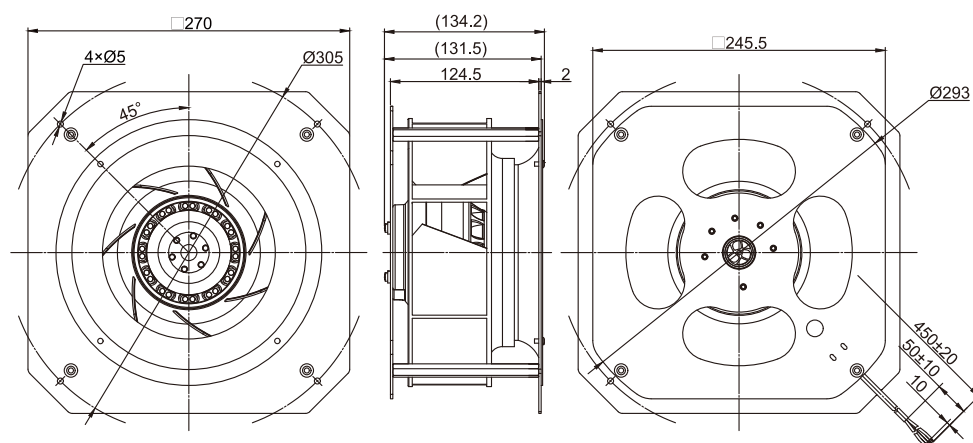


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Capacitance
GL-B225B-2E-C01-M1	230	50	2480	129	0.57	69	-25 ... (+60)	4µF/400V
	230	60	2600	182	0.80	71	-25 ... (+60)	4µF/400V



Overall Dimensions



Ø225 mm PLUG FAN

AC CENTRIFUGAL FAN



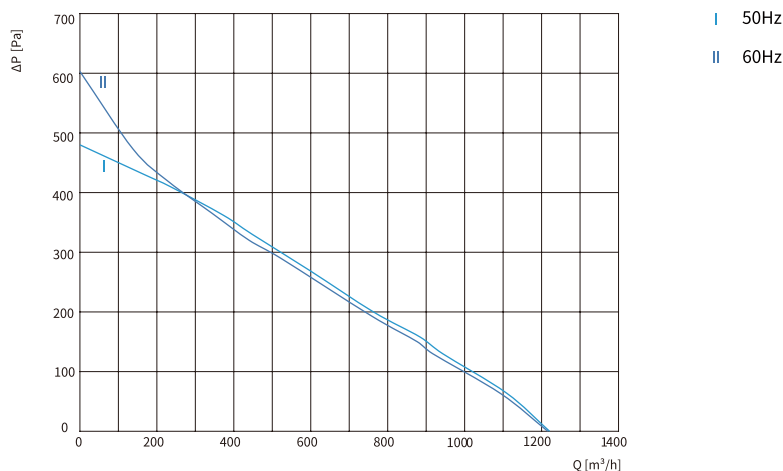
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

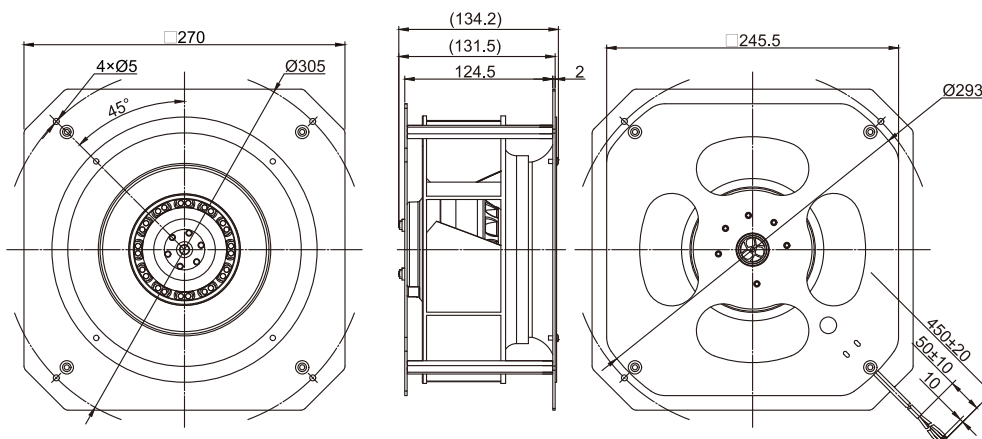


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Capacitance
GL-B225C-2E-C01-M1	230	50	2350	153	0.66	70	-25 ... (+60)	4µF/450V
	230	60	2240	195	0.85	71	-25 ... (+60)	4µF/450V



Overall Dimensions



Ø250 mm PLUG FAN

AC CENTRIFUGAL FAN



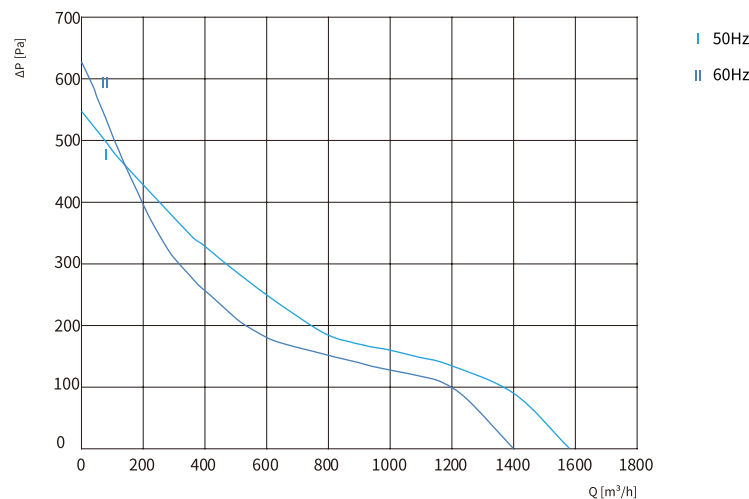
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

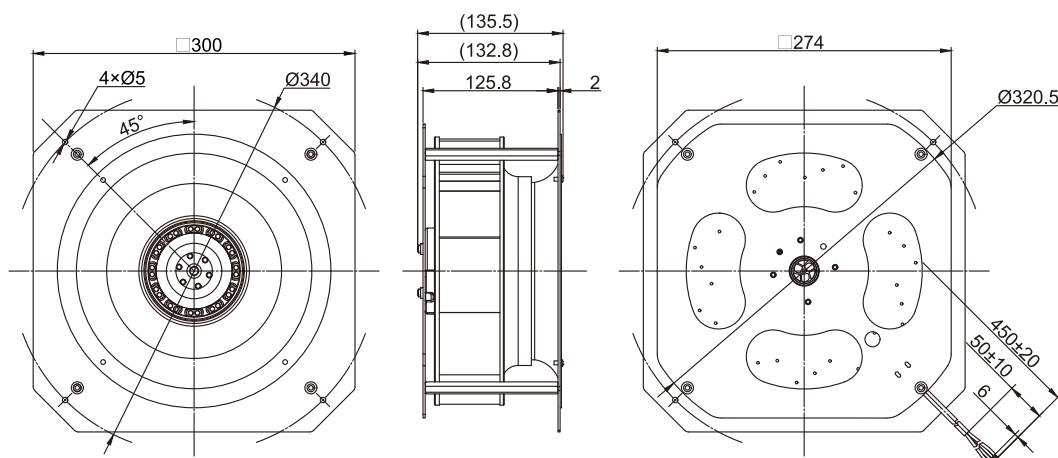


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp. [°C]	Capacitance
GL-B250A-2E-C01-M1	230	50	2240	188	0.83	70	-25 ... (+60)	3µF/450V
	230	60	1980	212	0.93	69	-25 ... (+60)	3µF/450V



Overall Dimensions



Ø250 mm PLUG FAN

AC CENTRIFUGAL FAN



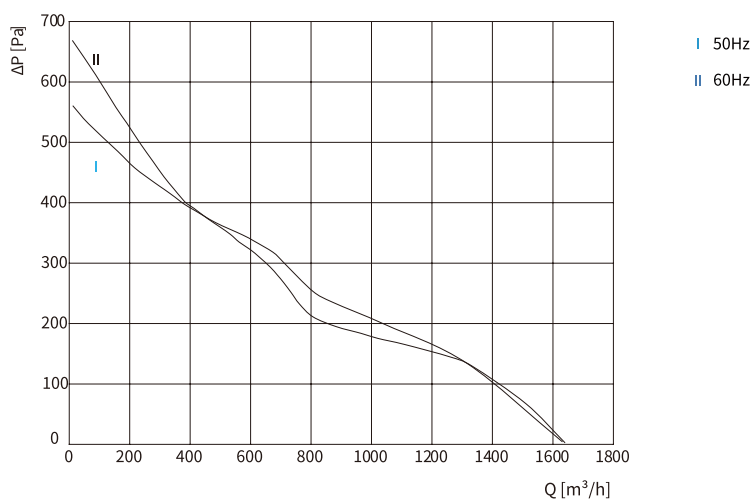
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

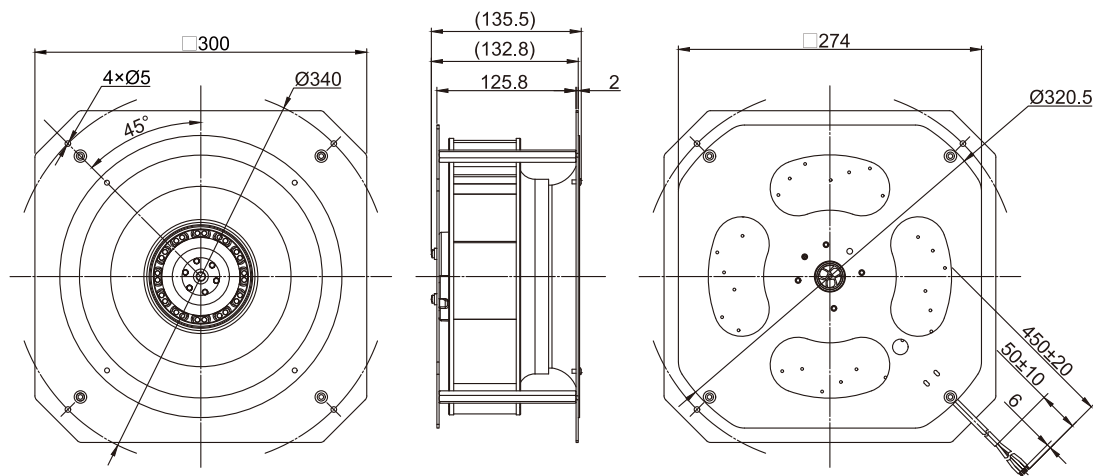


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Capacitance
GL-B250A-2E-D01-01	230	50	2230	195	0.85	72	-25 ... (+60)	4µF/450V
	230	60	2170	241	1.05	70	-25 ... (+60)	4µF/450V



Overall Dimensions



Ø280 mm PLUG FAN

AC CENTRIFUGAL FAN



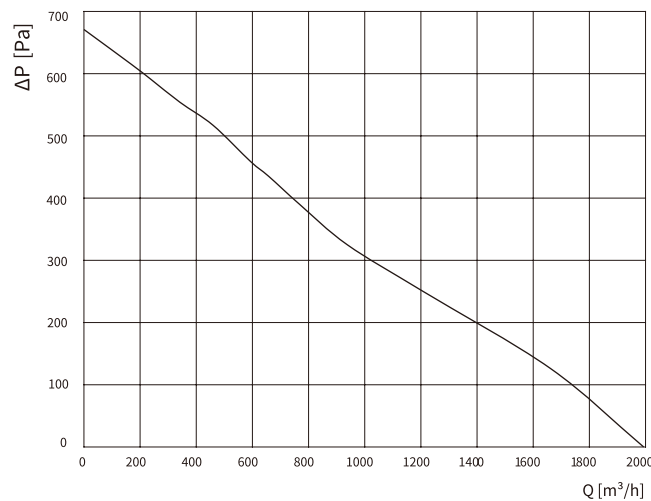
Features

- **Speed Control:** 0~10V DC /PWM
- **Direction of rotation:** clockwise, seen on rotor
- **Impeller material:** PA6+GF
- **Type of protection:** IP55
- **Insulation class:** B
- **Mode of operation:** continuous operation (S1)
- **Bearing:** ball bearings
- **Motor protection:** self-resetting TOP wired internally

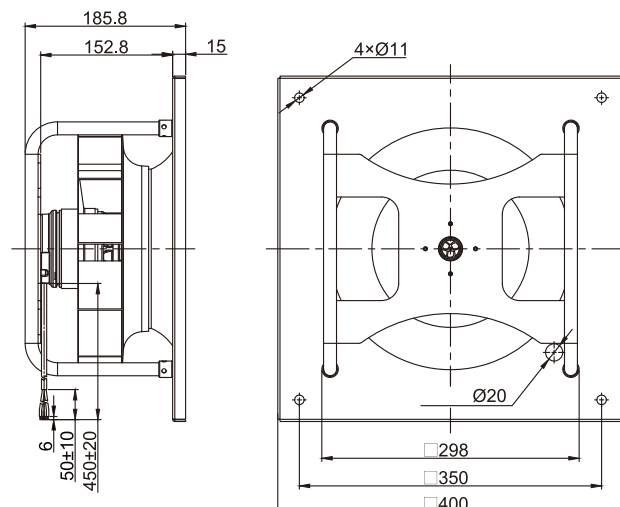


Technical data

Model	Nominal voltage[V]	Frequency [Hz]	Speed [RPM]	Power input max[W]	Current max[A]	Sound pres level [dB(A)]	Perm.amb. temp.[°C]	Capacitance
GL-B280A-2E-D01-01	230	50	2330	305	1.33	78	-25 ... (+60)	6µF/450V



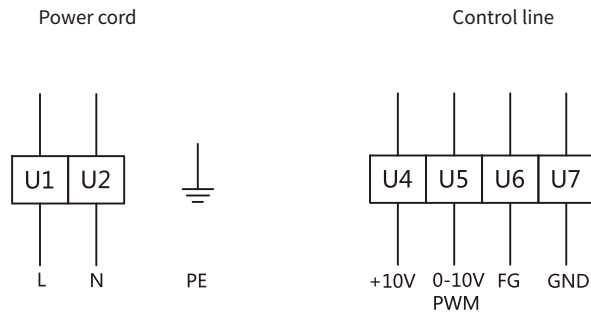
Overall Dimensions



Electrical Connection

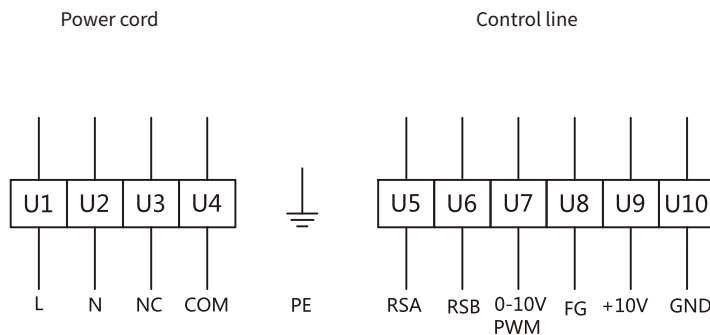
"E0"

- U1 Brown
- U2 Blue
- PE Yellow Green
- U4 Red
- U5 Yellow
- U6 White
- U7 Blue



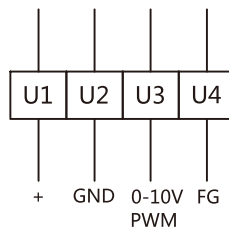
"E1"

- U1 Brown
- U2 Black
- U3 White
- U4 Grey
- PE Yellow Green
- U5 Brown
- U6 Grey
- U7 Yellow
- U8 White
- U9 Red
- U10 Blue



"D"

- U1 Red
- U2 Blue
- U3 Yellow
- U4 White



"E2"

- PE Yellow Green
- U0 Blue
- U1 Brown
- U2 Black
- U3 White
- U4 Green
- U5 Brown
- U6 Grey
- U7 Yellow
- U8 White
- U9 Red
- U10 Blue

