

The logo for Krube, featuring the word "krube" in a bold, lowercase, sans-serif font. The letter "k" is black with a small orange dot above it. The letter "e" is black with a small blue dot above it. The logo is enclosed in a white circle with a blue border.

**krube**

# SPECIFICATION

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**MODEL  
K-EC280-R110**

### 1.General Specification

Item		Specification	Notes
1	Model	K-EC280-R110	
2	Outline Dimension	Φ280X100	
3	Rated Voltage	110VDC	
4	Operating voltage range	77~138VDC	
5	Rated Current	3.5A±10%	At Rated Voltage, 25°C, 65% RH, Free Air
6	Power Consumption	385W±10%	
7	Rotating Speed±10%	3550RPM±5%	
8	Max Airflow±10%	2060(m3/h)	At Rated Voltage AMCA-210-99 Standard
9	Max Static Pressure±10%	1030Pa	
10	Noise Level	80dB(A)	
11	Operation mode	S1	
12	No. of Pole	4Poles	
13	Rotating Direction	Clockwise,viewed from the rotor end.	
14	Structure type	Outer rotor	
15	Motor Type	DC Brushless	
16	Balance	G6.3	
17	Life L <sub>10</sub> at 25°C	>20000/hrs ( Ordinary Humidity )	
18	Insulation	Class B	
19	Weight	4.5Kg	

### 2.Environmental Specification

Item		Specification / Condition
1	Operating Temperature Range	-20°C~+60°C (normal humidity)
2	(Storage Temperature Range)	-20°C~+60°C (normal humidity)

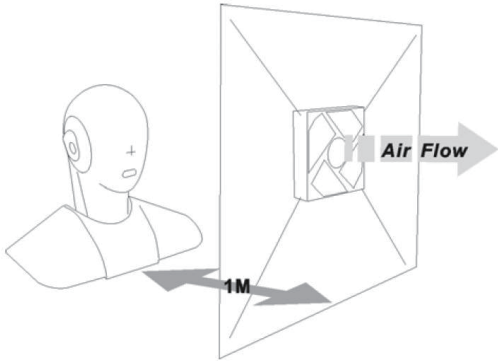
### 3.Main Materials/Parts Specification

Materials/Parts		Specification
1	Housing	N/A
2	Impeller)	galvanized steel sheet)
3	Bearing	NMB/NSK 6001 Z
4	Connector	N/A

## 4. Electrical Specification

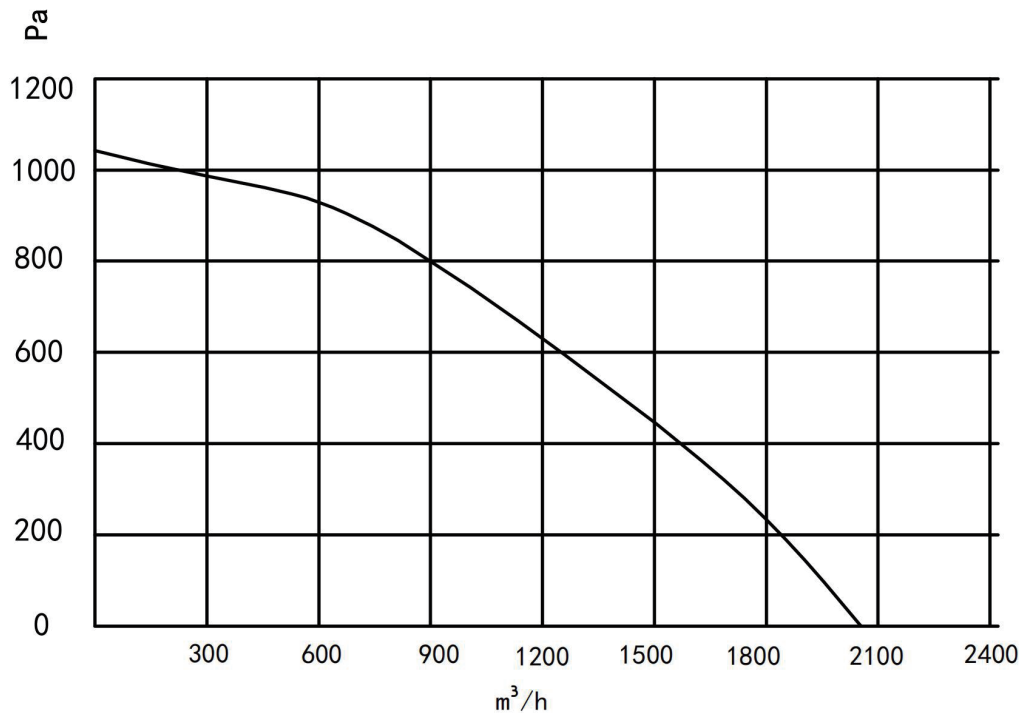
Item	Specification/Condition
1 Locked Rotor Protection)	1.Auto power off after locked at rated voltage for 1 sec. 2.After auto power off, circuit attempt to restart in 2-6 sec.
2 Polarity Protection	Open circuit when Vcc& GND are exchanged. Circuit won't be burned within 5 seconds when Vcc GND are exchanged.
3 Insulation Resistance	10MΩ/Between unshielded wire and frame at 500VDC/min
4 Dielectric Strength	5 mA Max./Measured between lead wire(+) and frame at 500 VAC/min.

## 5. Noise Measure Condition



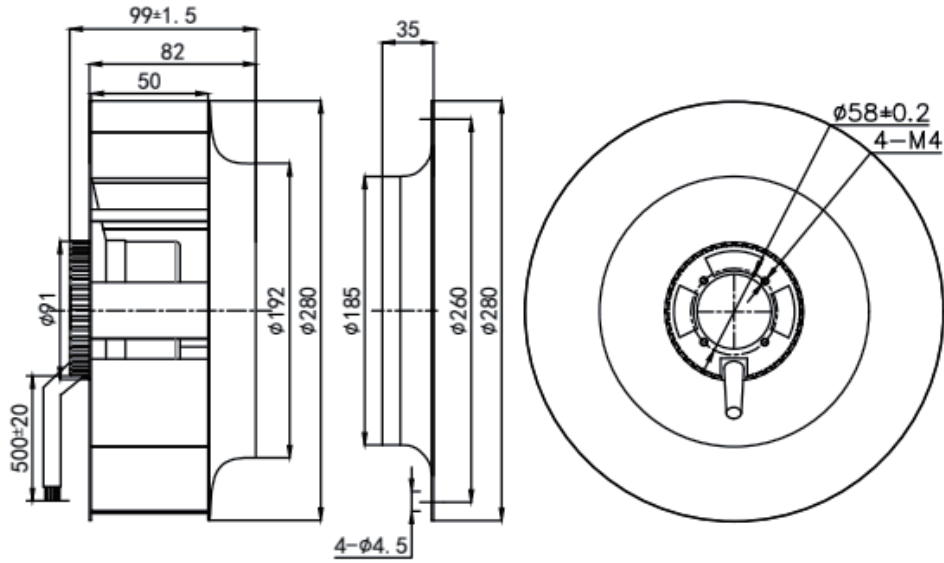
Measurement Systems:
1.ANECHOIC Room Noise Measurement System.
2.Digital Head Measurement System, 16-bits version.
3.SQlab III, Mobile Multichannel Analysis System.
4.Specifications:ISO 374, ISO 374, ISO 779, CNS 6753, JIS 8346
5.Background Noise: < 17dB(A)

## 6. Airflow Performance



## 7.Product Drawing

UNIT: mm

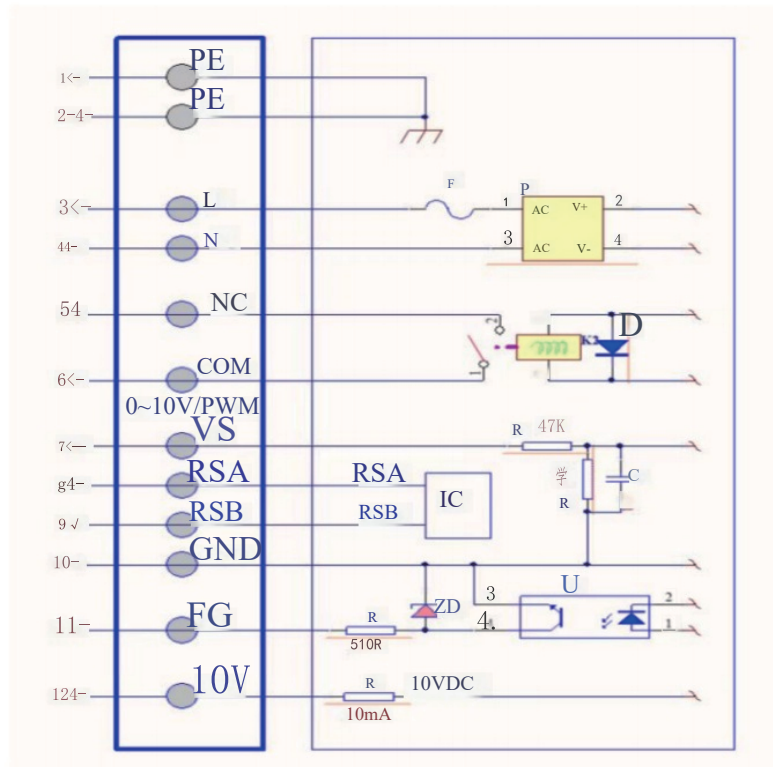


## 8.Connection

### External Wiring Diagram

Color	Brown	Black	Yellow-Green	Red	Blue	Yellow	White	Green	Purple
Function	L	N	PE	+10 VDC Input	GND	0-10VDC PWM	FG	RS485A	RS485B

### Speed control(0-10VDC) circuit diagram



**Notes:**

1.1 Please do not touch and push Fan Blade with fingers or others, fan blade and bearings may be damaged and it causes noise defect.

1.2 Do not carry the fan by its lead wires.

1.3 Please don't install this fan in series with 2x voltage inputs. For example, if a single fan rated at 115VAC (12VDC), then don't install two of them in series with 230VAC (24VDC) input.

1.4 Fans are not suitable to be used in an environment that contains aggressive or corrosive fluids.

1.5 Always ensure that fan is stored according to the storage temperatures specified.

Do not store in an environment with a high humidity level.

If the fans were stored for longer than 6 months, it is highly recommended to apply functional testing before shipping.

1.6 During installation, caution should be taken when mounting the fan. Incorrect mounting can cause excess resonance, vibration and noise.

1.7 During testing it is important to consider safety at all times.

A suitable guard should be fitted to the fan to prevent personal injury.

1.8 Unless otherwise stated, all tests are carried out at relative temperature and humidity conditions of 25°C, 65%RH.