

The Krube logo is located in the top left corner, enclosed in a white circle with a blue border. The logo itself consists of the word "krube" in a bold, lowercase, sans-serif font, with a small orange and blue graphic element to the right of the 'e'.

krube

SPECIFICATION

**MODEL
K-DC9232-A12-27**

1.General Specification

ITEM		Specification Condition	
1	Part NO.	K-DC9232-A12-27	
2	Dimension	92*92*32mm	
3	Rated Voltage	12VDC	
4	Start-up Voltage	≤7VDC	25°C Switch power ON/OFF
5	Operating Voltage	7-13.5VDC	
6	Rated Speed (range)	2700rpm	±10%
7	Rated Current	0.15A	
8	Rated Power	1.80W	
9	Air Flow	45 CFM	
10	Static Pressure	6.1 mmH2O	
11	Life Expectancy	50000hrs at 25°C	
12	Noise Level	35.5dB-A	
13	No. of Polar	4 Poles	
14	Rotating Direction	Anticlockwise From the direction of impeller surface	

2.Electrical Specification

ITEM		Specification Condition	
1	Locked Rotor Protection	<input type="checkbox"/> Power off after locked at rated voltage for 1 sec after auto power off, circuit attempt restart in 2 to 6sec	
2	Polarity Protection	<input type="checkbox"/> Open circuit when Vcc&GND are exchanged	
		<input type="checkbox"/> Circuit won't be burned within 5 seconds when Vcc&GND are exchanged	
		<input type="checkbox"/> No.Polarity protection	
3	Insulation Resistance	10MΩ between unshielded wire and frame at 500VDC/min	
4	Dielectric Strength	5mA Max / Measured b/w lead wire(+)and frame at 500VAC/min	

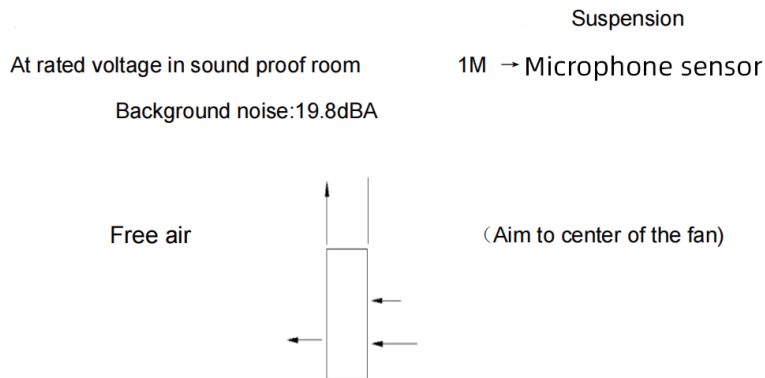
3.Main Materials, Parts Specification

ITEM		Specification Condition			
1	Frame	■ PBT		□ Die-cast aluminum alloy	
2	Impeller	■ PBT		□ Steel	
3	Bobbin	■ PBT of UL94V-0 ROHS			
4	Bearing	■ Two Ball Bearing		□ Sleeve Bearing	
5	Lead wire	■ Black(-)	■ Red(+)	■ Yellow(FG)	1007 24AWG
		□ Blue(PWM)	□ White(RD)	3 wires 300±10mm	
6	Connector	Not have			
7	Tube	Not have			
8	IP Rating	IPxx	IPXX protection verification is focused on motor and PCB, not for power connector and pin housing		

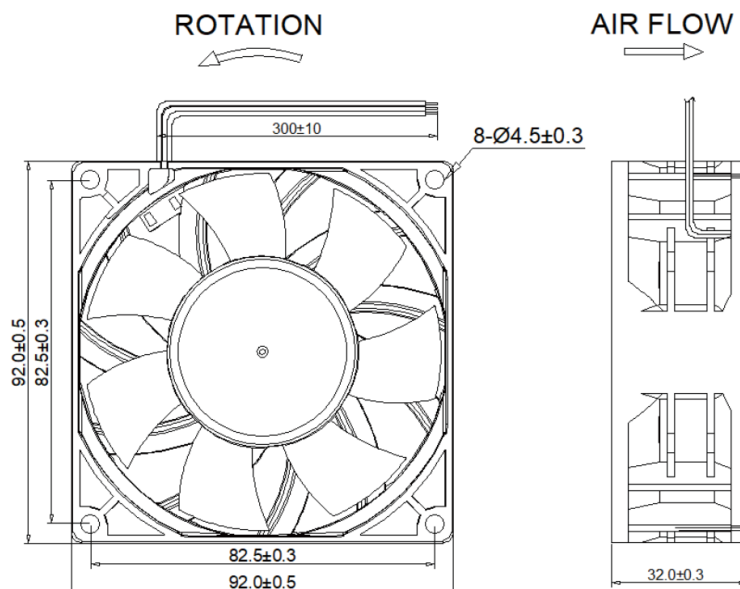
4.Environmental Specification

ITEM		Specification Condition
1	Operating temperature	-20°C~70°C
2	Storage temperature	-30°C~75°C
3	Operating Humidity	15% TO 90% RH
4	Storage Humidity	15% TO 95% RH
5	Drop Test	1 corner,3 edges,6 faces natural drop from 60cm high test for 30 min
6	Vibration test	packing condition:X,Y,Z 3 directions,1.1g load vibration test for 30 min

5.Noise Test Condition

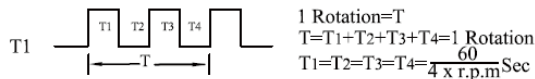


6.Outline Dimension



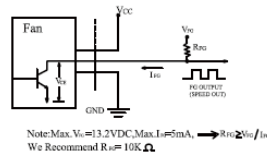
7.FG

- 4 Pole Motor: Fan with 4 pole motor.



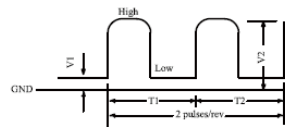
FG(Frequency Generator)Signal External Circuit:

Open-collector output for rotation frequency detection



FG(Frequency Generator)Type Output Waveform:

- 1.Motor Rotating Condition (at 25 °C, $V_{cc} = 5\text{VDC}$)



V_1 : within 0.7V when I_{FG} less Than 3mA

V_2 : V_{FG} , FG signal output voltage, maximum rating: 13.2VDC

Duty = $T_1 / (T_1 + T_2) \times 100 = 50 \pm 20\%$ (measured between $0.3 * V_2 \sim 0.7 * V_2$)

$V_1 \sim V_2$ rise time: less than 1.0ms

$V_2 \sim V_1$ fall time: less than 1.0ms

Rotation Speed (RPM) = $(60/2) \times f_{FG} = 30 \times f_{FG}$

f_{FG} : frequency of FG output waveform(Hz)

- 2.Motor locked condition (at $V_{cc} = 12 \text{ VDC}$)

Output is fixed at low or high when motor is locked.

8.Note

1. Our products should be used within the specification appointed condition, so we will not guarantee this product quality if your application exceeds the limitations outlined in this specification.
2. Product will be shipped in accordance with this specification unless we has been previously notified of parameters requiring exception , if parameters which are not specified in this specification.
3. Improper mounting may cause harsh resonance,vibration and noise. Please mount this fan motor properly without applying excessive or uneven force at the mounting points to avoid vibration and noise. Dampers at the mounting points can reduce noise and vibrations greatly.
4. Please use fan guards to avoid personal accidental injuries.
5. Unless this fan motor is specified for use in abnormal environments designated by IP rating level, this fan is designed to operate under normal environmental conditions.
6. Please avoid operating fans products in poisonous material(organic,cyanogens, formalin, phenol, etc.)or corrosive gas environment(H_2S , SO_2 , NO_2 ,etc.)
7. Please use filters to clean the air-intake in very dusty air environments for extended fan life.
8. Unless prior agreement,We reserve the right to use components with equivalent specifications from multiple sources, so material and construction are subject to change without advance notice.
9. Always ensure that fans are stored according to the storage temperatures specified. Do not store in a high humidity environment. If the fans are stored for more than 6 months, we recommend functional testing before using.
10. Make sure to turn off the power before connection or disconnecting the connectors. This may cause short of electronic parts.