



SPECIFICATION

MODEL
K-DC17251-A48-40M

1.General Specification

Item		Specification Condition	
1	Part No.	K-DC17251-A48-40M	
2	Dimension	172×150×51mm	
3	Rated Voltage	48VDC	
4	Start-up Voltage	36VDC	
5	Operating Voltage	36~56.5 VDC	a. Rated Voltage b. 25°C c. 65% RH d. Measured after 5 Mins
6	Rated Speed	4000rpm	
7	Rated Current	0.63A	
8	Rated Power	30.2W	
9	Max Airflow	300CFM	a. PQ Measurement Apparatus : (LW9266-SR) b. Standard : AMCA c. Rated Voltage d. Rated Current
		8.52M3/Min	
10	Max Static Pressure	0.976Inch-H ₂ O	
		24.79MM-H ₂ O	
11	Life Expectancy	50000hrs at 40°C	a.L10 at Conf. Level 90% b.Rated Voltage
12	Noise Level	62.0dB	a.Rated Voltage b.Non-Echo Chamber c.Standard:CNS 8753/ISO3744 d.Test Condition:ISO 7779 e.Distance: 1.0M
13	No. of Pole	4 Poles	
14	Waterproof	Three-proof foam paint for motor unit	

2.Electrical Specification

Item		Specification. Condition	
1	Locked Rotor Protection	<input type="checkbox"/> Safety Condition	
		<input checked="" type="checkbox"/> Auto power off after locked at rated voltage for 1sec After auto power off ,circuit attempt restart in 2 to 6sec	
2	Polarity Protection	<input checked="" 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	
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	
5	Special Function	<input checked="" type="checkbox"/> Soft Start	<input type="checkbox"/> Current Limiter

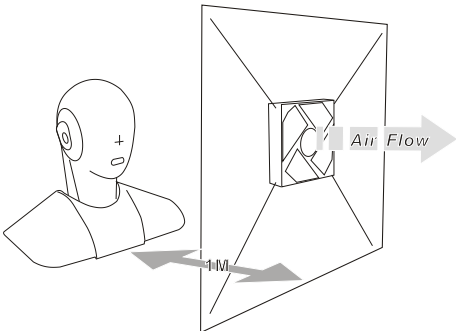

3.Main Materials, Parts Specification

1	Bearing	■ Dual Ball Bearing		□ Sleeve Bearing	
2	Frame	□ PBT of UL94V-0		■ Die-cast Aluminum Alloy	
3	Impeller	■ PBT of UL94V-0		□ Steel	
4	Bobbin	□ PBT of UL94V-0			
5	Lead Wire	■ Red(+)	■ Black(-)	■ Blue (FG)	UL1430 22#
		□ Yellow(PWM)		□ White(RD)	3 wires 300±10mm
6	Connector	NO			
7	Tube	NO			

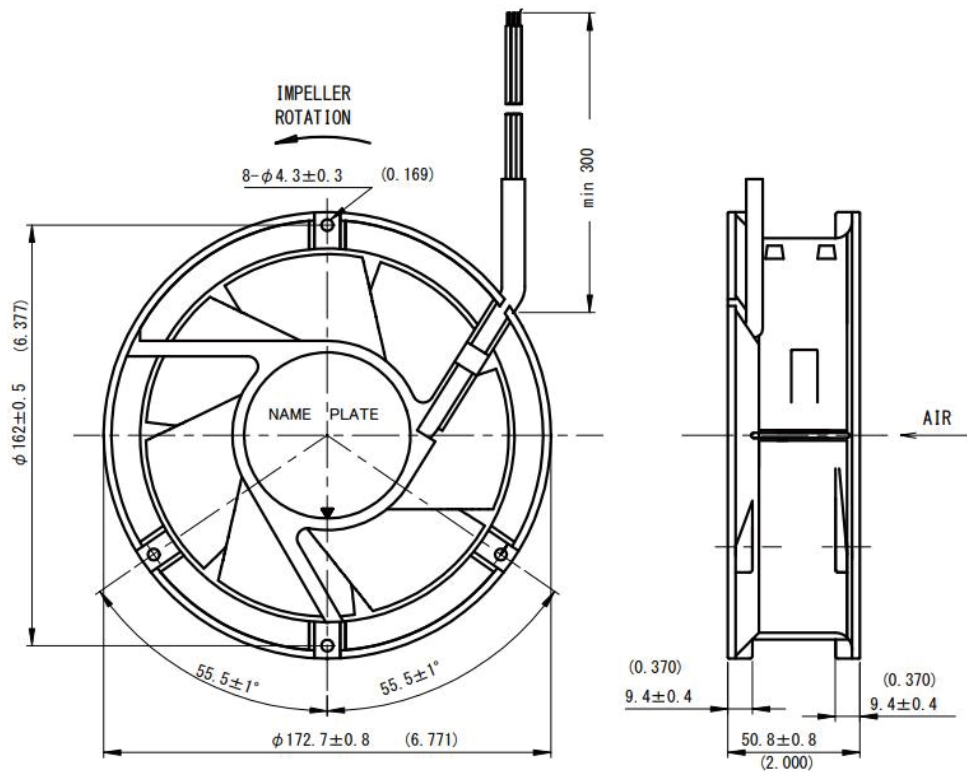
4.Environmental Specification

Item		Specification. Condition
1	Operating Temp. Range	Temperature: -15 °C ~70°C
		Humidity:15%~65% RH (Frost Eliminated)
2	Storage Temp. Range	Temperature: -30 °C ~70°C
		Humidity:15%~65% RH (Frost Eliminated)

5.Noise Measure Condition

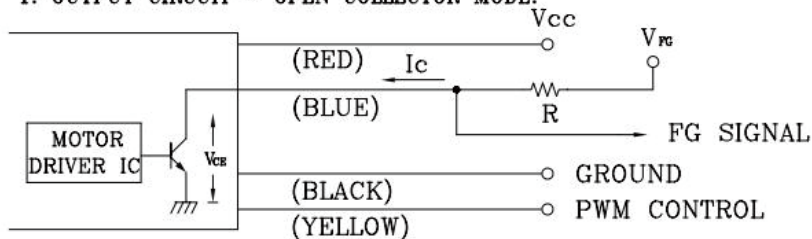
Measurement Systems	
1.ANECHOIC Room Noise Measurement System	
2.Digital Head Measurement System, 16-bit version	
3.Specifications:ISO 3744,ISO 3745,ISO 7779, CNS6753,JIS 8346	
4.Background Noise: < 18dB(A)	
 	

6.Outline Dimension



7.FG Siguna

1. OUTPUT CIRCUIT - OPEN COLLECTOR MODE:



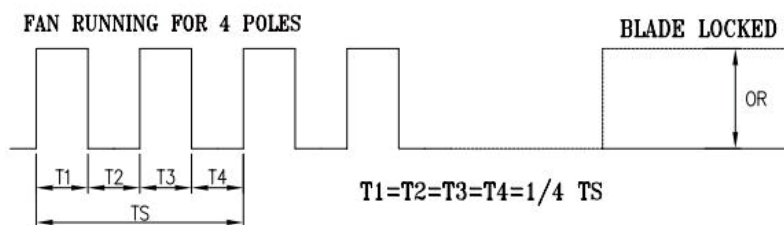
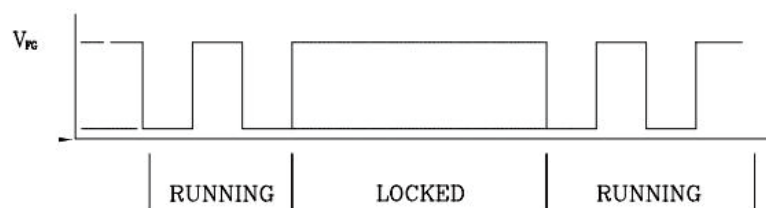
CAUTION: THE FG SIGNAL LEAD WIRE MUST BE KEPT AWAY FROM
" + " LEAD WIRE & " - " LEAD WIRE.

2. SPECIFICATION:

$$V_{FG} = 13.2V \text{ MAX. } I_c = 5mA \text{ MAX.}$$

$$V_{CE} = 0.5V \text{ MAX.} \quad R \geq V_{FG} / I_C$$

3. FREQUENCY GENERATOR WAVEFORM:



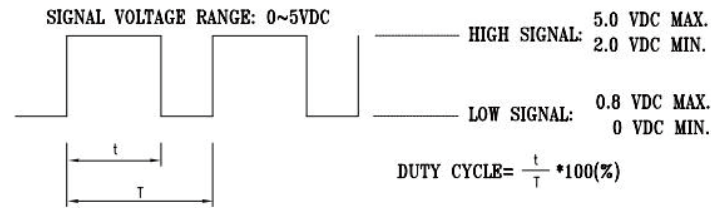
N=R.P.M

$$TS = 60/N(\text{SEC})$$

*VOLTAGE LEVEL AFTER BLADE LOCKED

***4 POLES**

8.PWM function

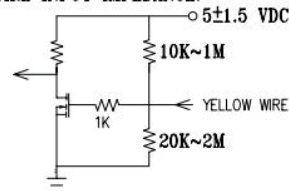


- THE FREQUENCY FOR CONTROL SIGNAL OF THE FAN SHALL BE ABLE TO ACCEPT A 25KHZ.
- THE PREFERRED OPERATING POINT FOR THE FAN IS 25KHZ.
- AT 100% DUTY CYCLE, THE ROTOR WILL SPIN AT MAXIMUM SPEED.
- AT 0% DUTY CYCLE, THE ROTOR WILL SPIN AT STOP.
- WITH CONTROL SIGNAL LEAD DISCONNECTED, THE FAN WILL SPIN AT MAXIMUM SPEED.
- AT 25KHZ 30% DUTY CYCLE ,THE FAN WILL BE ABLE TO START FROM A DEAD STOP.

12. SPEED VS PWM CONTROL SIGNAL:

(AT RATED VOLTAGE & PWM FREQUENCY=25KHZ & TEMPERATURE AT 25DEGREE C)

13. PWM CONTROL LEAD WIRE INPUT IMPEDANCE:



13-1. THE FAN SPEED WILL DEFAULT TO MAXIMUM WHEN THE SPEED CONTROL INPUT IS LEFT UNCONNECTED.

9.Notes

1. We will not guarantee the products if your application exceeds the limitations outlined in this specification.
2. Please do not touch and push fan blade with fingers or others. Fan blade and ball bearings may be damaged. And it caused noise defect.
3. Please avoid operating SFENGDA's products in poisonous material(organic, cyanogens, formalin, phenol, etc.)or corrosive gas environment(H₂S, SO₂, NO₂,etc.)
4. We do not warrant performance safety against accidents caused by dust, water, droplets dew, bugs, etc.
5. 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.
6. Please do not damage this product this product including coil and lead wires while installing or wiring. There may be smoking or fire.
7. Avoid the damage, check the correct voltage and proper polarity before connecting with power.
8. Improper mounting may cause harsh resonance, vibration, and noise. Please mount securely.
9. It is very important to notify that avoid to drop from 60cm height when in any movement or operation, it will impact the balance of blade. Especially ball bearing structure is avoided to drop down.
10. Safety is a top priority. Please furnish guard accessories to prevent injury to personnel.