SPECIFICATION

MODEL
K-DC12738-A48-46

1.Sample Specification

ltem		Specification/Condition	
1-1	Part No	PEB1348VHE-A	
1-2	Outline Dimension	127X127X38 mm	
1-3	Rated Voltage	DC:48V	
1-4	Voltage Range	DC:36V~54V	
1-5	Starting Voltage	Max:36DCV(on/off)	
1-6	Rated Current	2.55A+10%	25℃60~80%RH
1-7	Power Consumption	26.4W±10%	25℃60~80%RH
1-8	speed	4600RPM±10%	25℃60~80%RH
1-9	Max.Air flow	200.2CFM±10%(5.66M3/Min)	25℃ 60~80%RH Rated Curreat
1-10	Max.Static Pressure	22.02mm-H20	
1-11	Noise Level	s7.0dB	
1-12	Weight	355g	
1-13	Life Expectancy	70000	Hours(at 25℃ 65%R.H.)
1-14	Waterproof	IP54	
1-15	Samples Requirement	■Engineering Samples	
		□Pre-production Samples	
		□Production Sample	
1-16	Motor Protection	■Polarity Protection	
		■Auto Restart	
1-17	Connection Lead Type	■Wire □Connector	
1-18	Bearing Type	Ball Bearing	
1-19	Material Type	■PBT+30%FIBER	

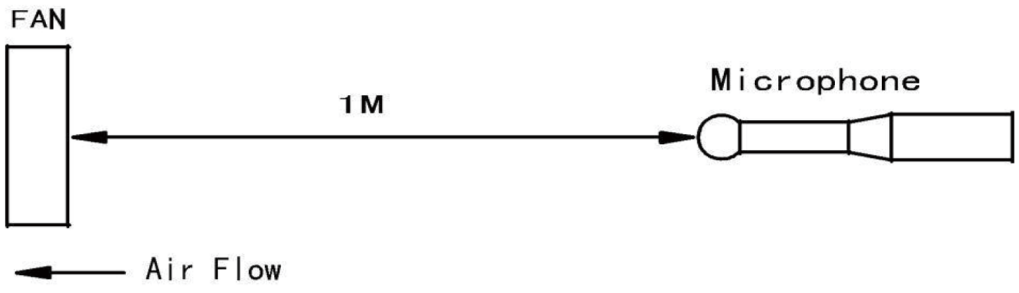
2.Electrical Specification

Item		Specification/Condition
2-1	Dielectric Strength	500V/1mA/2s
2-2	Insulation Resistance	10MQ(Ambient temperature 25℃)
2-3	Temperature Test of Run	△t=<70℃ Rated Voltage
2-4	Locked Rotor Protection	△t=<130℃ Rated Voltage
2-5	Pound resistance	Can withstand the shock from all three axis bu 60a and two times per
2-6	Vibration resistance	Can wi thstand the vilratiow from 5-30Hz,0.04g to 30-500Hz,29 peak
2-7	Lock Test	Locked for at least0.2hrs at raetd voltage,the fans run normally after lock released
2-8	Reversla Voleage Toct	Test with reversal working voltagefor 2minutes,all remain still,but all fans run normally after corrected voltage.

3.Acoustical Noise

Refer to ISO3745 as shown below:Testing Condition:

Fan is hanged in anechoic chamber,Noise is measured at rated voltage in anechoic chamber with microphone at a distance of one meter from the air intake;

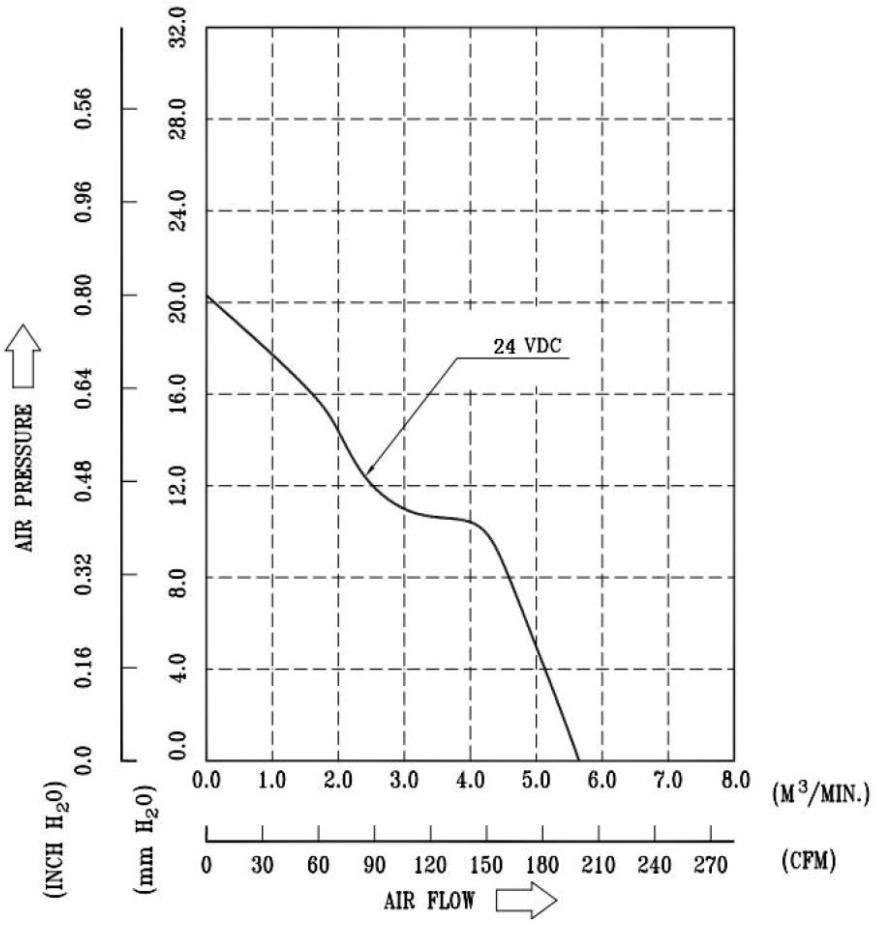


4、 Mechanical Characteristics

4.1 Performance Curve

4.1.1The performance including air flow and air pressure measured in Double Chamber is measured according to AMCA210-85 standard

9. P & Q CURVE:



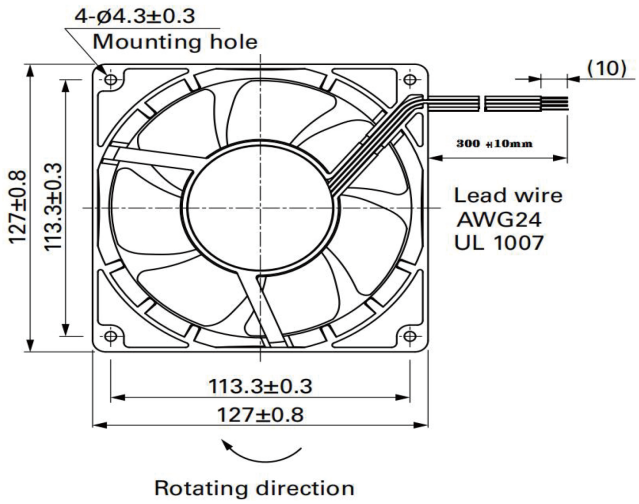
5. Environmental Specification

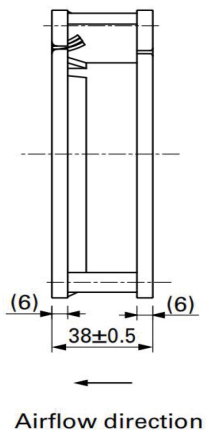
Item	Specification/Condition
Operating Temp. Range	Temperature：-10℃~70℃ Humidity：20%~85%RH
Storage Temperature	Temperature：-40℃~80℃ Humidity：20%~95%RH

6.Main Materials/Parts Specification

No	MAJOR COMPONENTS	MATERIAL OR TYPE	GRADE	UL No
6-1	FAN HOUSING	PBT 70%+FIBER30%		
6-2	FAN BLADE	PBT 70%+FIBER30%	94-VO	
6-3	INSULATOR FRAME	PBT 100%	94-VO	
6-4	SHAFT	STAINLESS STEEL		
6-5	BEARING	BALL		
6-6	PLASTIC MAGNET	STRONTIUM FERRITE		
6-7	ENAMELED WIRE	2 UEW		
6-8	SILICON STEEL STRIP	H 23		
6-9	P.C.B	Single-layer printed circuit		
6-10	HALL IC			
6-11	LEAD WIRES	UL1007 AWG#22 L=300±10mm	94-VO	
6-12	TERMINAL	NO		
6-13	SINK	NO		
6-14	Casing	NO		
6-15	SPRING COIL	YES		

8.Picture&Outline Dimension





NOTE:

LEAD WIRE: UL1007 AWG#22 L=300±10wm

RED WIRE.....(+)

YELLOW WIRE.....(PWM)

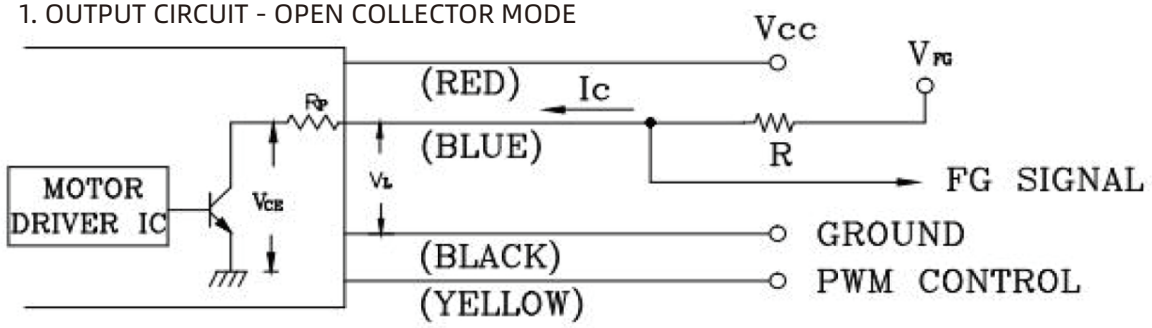
BLUE WIRE.....(FG)

BLACK WIRE.....(-)

10.0Functional description

10.1 FG（Alarm output）connection Diagram

1. OUTPUT CIRCUIT - OPEN COLLECTOR MODE



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

2. SPECIFICATION: Ic =10mA MAX. V =1.5 V MAX.

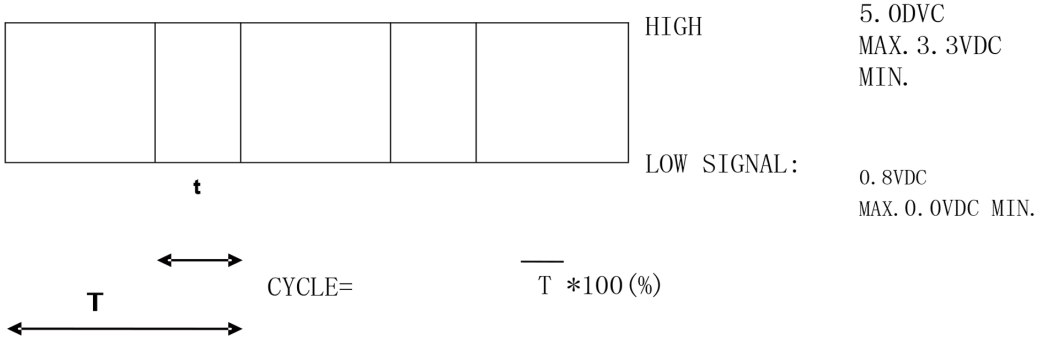
Vce(sat)=0.5V MAX. Vra =60 V MAX.

R ≥ Vc/lc Re≤100 ohm

3. FREQUENCY GENERATOR WAVEFORM

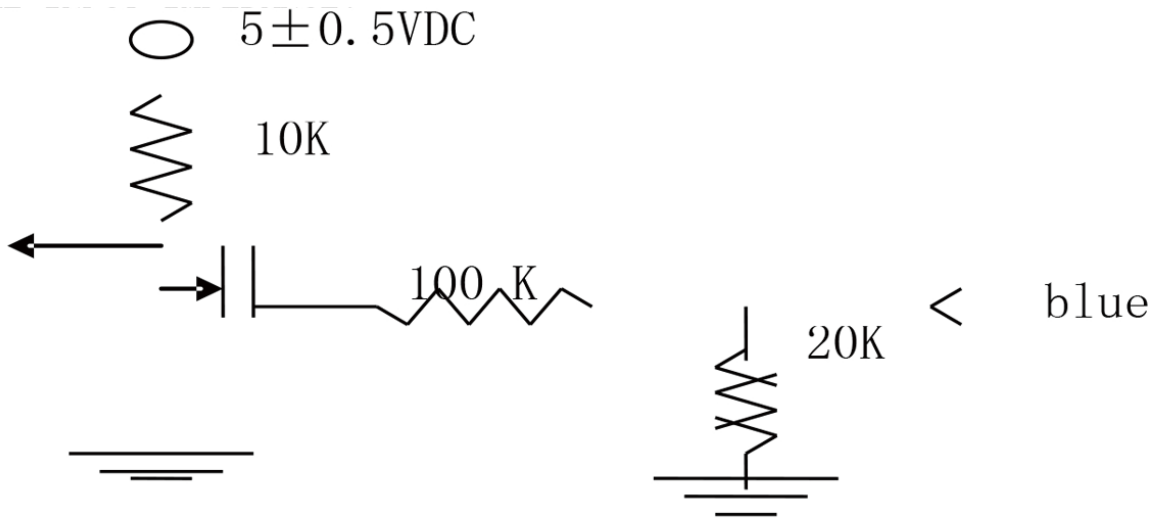
10.2.PWM CONTROL SIGNAL PWM

SIGNAL VOLTAGE RANGE：0.0～+5.0VDC



- THE FREQUENCY FOR CONTROL SIGNAL OF THE FAN SHALL BE ABLE TO ACCEPT 16K～32 KHZ.
- THE PREFERRED OPERATING POINT FOR THE FAN IS 25K HZ.
- AT 100% DUTY CYCLE,THE ROTOR WILL SPIN AT MAXIMUM SPEED.
- AT 0% DUTY CYCLE,THE ROTOR WILL STOP.
- WHEN CONTROL SIGNAL LEAD DISCINNECTED,THE FAN WILL MAXIMUM SPEED.
- AT 25K 3%～5% DUTY CYCLE,THE FAN WILL BE ABLE TO START FROM A DEAD STOP.
- THE FAN SPEED CONTROL IS CLOSED-LOOP.

10.3.PWM CONTROL LEAD WIRE INPUT IMPEDANCE



1. THE FAN SPEED WILL DEFAULT TO MAXIMUM WHEN THE SPEED CONTROL INPUT IS LEFT UNCON
2. ABSOLUTELY NO INTERNAL PULL-UP.NECTED.

The above data are for reference only. Any change will be notified separately

Notes

1.We provide 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.Unless prior agreement， we reserves the right to use components with equivalent specifica tions from multiple sources,so material and construction are subject to change without advance notice.this changes should be within this specification here above.

3.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 specifi cation will be identical to the final sample which has been approved by your company.

4. Unless otherwise specified, marking measurement and tests are on room temperature,power supply provide rated voltage tolerance must not over ±0.1VDC.

5. Except some special designs， During use against caused by dust， water，droplets，dew, supply provide rated voltage tolerance must not over ±0.1VDC.degradation, safety problem even product failures.

6. The impeller and the motor are combinedto maintain good balance before this product leave factory, Do not separate the impeller fromthe motor when you use,This may cause vibration and decrease the operation life.

7. Do not put your finger or any other part of your body in to this product when the fan in running You may get injured, never put an object into the fan, it may damage the fan.

8.Always observe the operating conditions and the environmental requirements indicated in this catalog (such as operating voltage range,operation temperature range,and power connection points)when operation the product.

9.Please handle and installthis product carefully， Hitting or dropping or extruding with fingers or other objects this product may damage holders or bearings.Resulting in strange noise and vibration during equipment operation.

10.Make sure to turn off the power before connection or disconnecting the connectors. This may cause short of electronic parts.

11. Improper mounting may cause harsh resonance, vibration, and noise.Please mount securely.

12. Always ensurethat products are stored according to the storage temperatures and humidity specified.Do not storein such as high temperature and high humidity and where there is cor rosive gas environment, If theproducts are stored for more than 6 months,we recommend functional testing before using.