

一、产品规格要求

PRODUCT SPECIFICATION

项目 (Item)		规格/条件 (Specification/Condition)	
1	型号 (Model No.)	D3115N-05W-B76/X000	
2	外型尺寸 (Outline. Dimension)	80*80*38	
3	工作电压 (Operating Voltage)	DC 12-26.4V	
4	额定电压 (Rated .voltage)	DC 24 V	
5	起动电压 Starting Voltage	DC ≤12V on/off	
6	额定电流 (Rated current)	0.7A	a. 额定电压 (Rated .voltage) b. 25°C 65% RH c. After testing for 5 minutes
7	消耗功率 (Power consumption)	16.8W	
8	转速 (Speed)	7500±10%RPM	
9	风量: (Airflow) (AT ZERO STATIC PRESSURE)	105.5CFM	a. 额定电压 (Rated .voltage) b. AMCA 标准 (Standard) C. 额定电流 (Rated current)
	静压: (Air .Static Pressure) (AT ZERO AIRFLOW)	35.7mmH2O	
10	最大噪音 (Max Noise)	61.5dB (Max;64.5dB)	a. 额定电压 (Rated Voltage) b. 18dB 无响室 (18dB Non-Echo Chamber) c. 标准 (Standard):CNS 8753 / ISO 3744 d. Test Condition :ISO 7779 e. 距离 (Distance): 1.0 M
11	Life expectancy(期望寿命)	70000 hrs at temp40 °C Humidity5%-65%	MTTF (Mean Time To Failure) Conf. Level 90%)
12	扇叶数 (No. of. Blade)	7 叶	
13	极数 (No. of. Pole)	4 极	
14	运转方向 (Rotating Direction)	逆时针	
15	锁住保护 Lock Protection	1. 额定电压堵住2~3秒, 自动断电。降低内部温升 (Auto power off after locked at rated voltage for 2~3 sec. Reduce internal temperature rise) 2. 自动断电后, 2至6秒自动尝试启动。 (After auto power off, circuit attempt to restart in 2 to 6 sec.)	
16	极性保护 Polarity Protection	Vcc与GND反接时, 不导通.	



		(Open circuit when Vcc & GND are exchanged)
17	特殊定制 Special custom	1) PWM信号:输入PWM 信号占空比变化可调节风扇转速 Input PWM signal duty cycle change fan speed can be adjusted 2) FG信号: 用于侦测风扇转速 Used to detect the fan speed

二、主要材料/零件规格

Main Materials/parts Specification

材料/零件 (Materials/parts)		规格 (Specification)			
1	塑料材料/扇叶 外框 (Plastic Material/ Fname Impeller)	PBT 黑色方框 7 叶			
2	轴承 (Bearing Type)	滚珠轴承 (Ball bearing)			
3	引线 (Lead Wire)	XH2.54-4P, 1 黄 2 蓝 3 黑 4 红 UL1007#24#框外 90mm 黑红黄蓝分线			
		黑	红	黄	蓝
		GND	VCC	FG	PWM
4	环保要求 (Environmental Requirement)	<input checked="" type="checkbox"/> ROHS		<input type="checkbox"/> 无卤	<input type="checkbox"/> REACH

三、电性规格

Electrical Specifically

1	绝缘阻抗 Insulation Resistance	10MΩ /裸线与外框间测量, 500VDC/min 10MΩ /between unshackled wire and frame at 500VDC/min
2	绝缘耐压 Dielectric Strength	5Ma Max. /导线与外框间测量, 500VAC/min 5Ma Max. /Measured between lead wire(+)and frame at 500VAC/min
3	防水等级 Waterproof level	IP X0

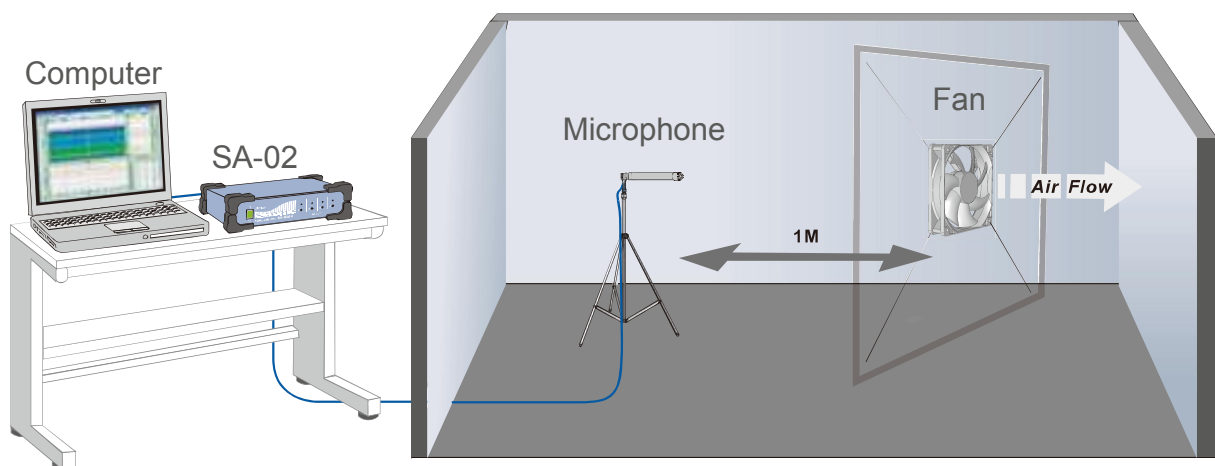
四、环境测试

Environmental Specification

1	运转温/湿度范围 Operating Temp .Range	温度/Temperature:-10℃ - +70℃ 湿度/Humidity:5% - 65%RH
2	保存温/湿度范围 Storage Temperature	温度/Temperature:-40℃ - +75℃ 湿度/Humidity:5% - 65%RH
3	耐湿性 Humidity	电气规格依据 MIL-STD 202F Method 103B 湿度: 65%RH 温度: 40±2℃
4	热冲击 Thermal Shock	电气规格依据 MIL-STD 202F Method 107D Per MIL-STD 202F Method 107D, Condition D
5	绝缘阶段 Insulation Shock	UL: A 种 UL: Class A
6	包装耐振动试验 Packing Vibration Test	包装后, XYZ 三方向施 1.1G load vibration test for 30min .No serious damage
7	包装耐冲击试验 Packing Shock Proof Test	捆包后, 高 60 公分, 1 棱角 3 边 6 面自然落下, 无严重损坏. 1corner, 3edges, 6faces natural drop from 60cm high packing No serious damage

五、噪音测试条件

NOISE TEST CONDITION

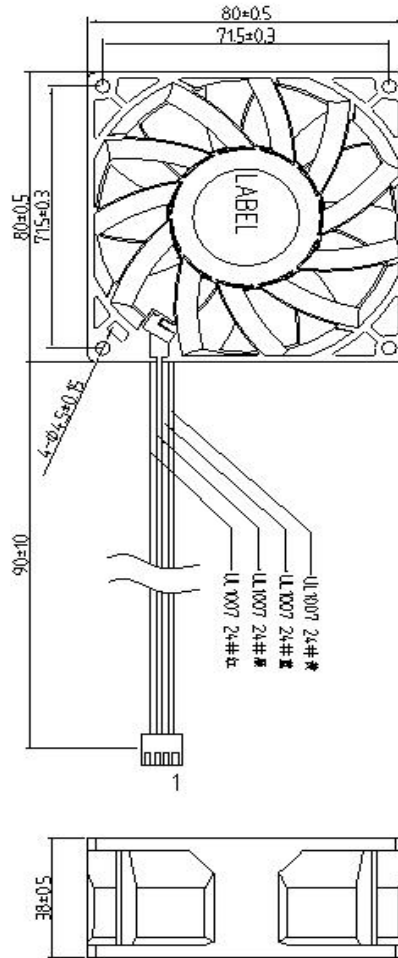


测量系统/Measurement Systems

1. ANECHOIC Room Noise Measurement System
2. Rion SA-02 4-Channel Signal Analyzer, U-57 Microphone
3. Specifications:CNS8753/ISO3744 ,ISO 7779
4. Background Noise: < 18dB(A)

六、产品图纸

PRODUCT DRAWING



尺寸单位：毫米

DIMENSIONS UNIT:MM

Speed Control By PWM Signal.

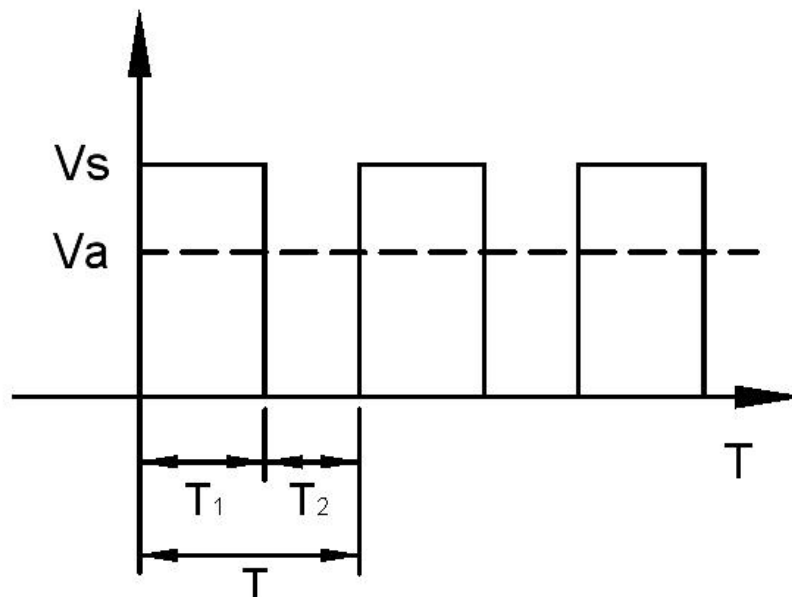
A speed control lead can be provided that will accept a PWM signal from the customer circuit to vary the speed of the fan. The change in speed is linear by changing the Duty-Cycle of the PWM. PWM signal types are standardized as following; Open collector type and pull-up voltage is changed by maximum operating voltage and sink current by consuming current.

*PWM signal function design is decided by customer.

$$T = T_1 + T_2, \quad \alpha = T_1 / T$$

α : Duty-Cycle

$$V_a = \alpha \times V_s$$



Digital PWM speed control position

PWM input voltage high----- $V_{IH} = 3V \sim 5.5V$

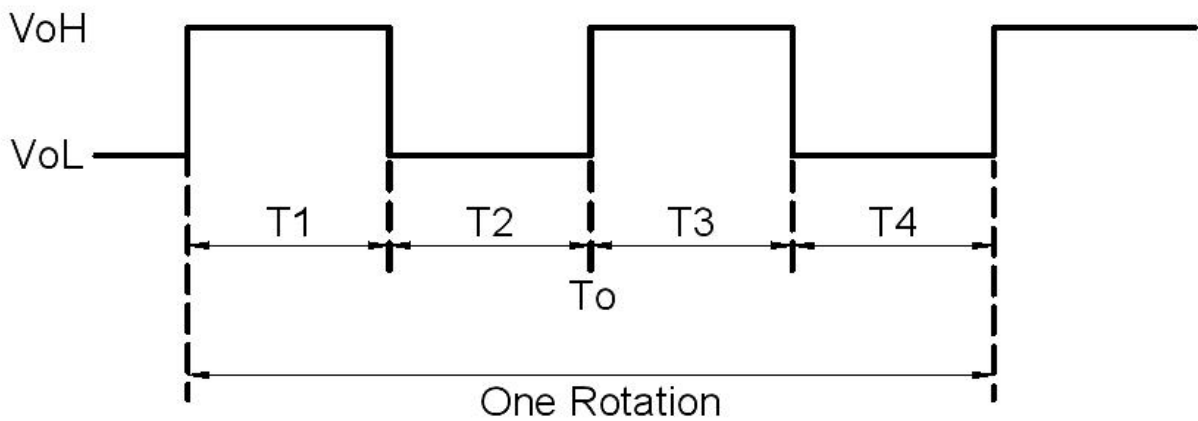
PWM input voltage low----- $V_{IL} = 0V \sim 0.5V$

PWM input frequency----- $F_{PWM} : 18KHZ \sim 30KHZ$

Pulse Sensor (FG)

Pulse sensors are used for detecting the rotational speed of the fan motor.

Output Waveform

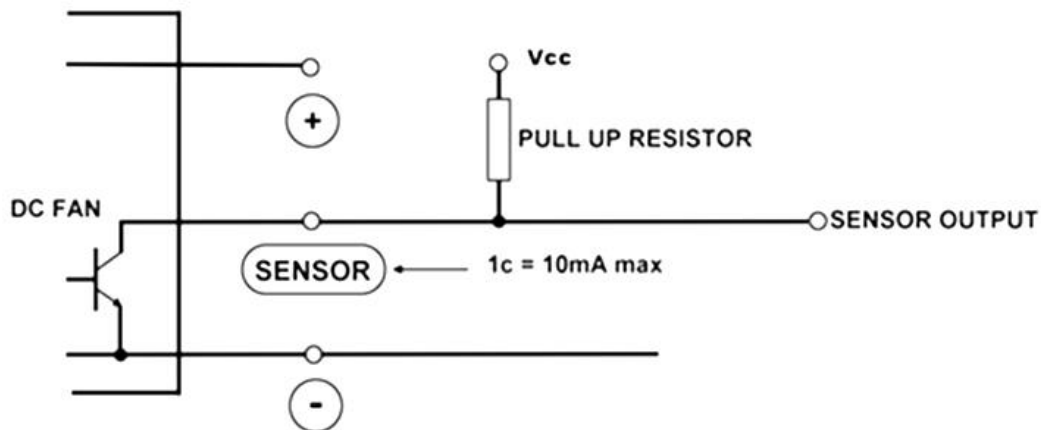


$$T_{1-4} \approx (1/4) T_o = 60/4 N(s)$$

$N = \text{Fan Rotational Speed (min } \quad)$

Output Circuit

Open Collector

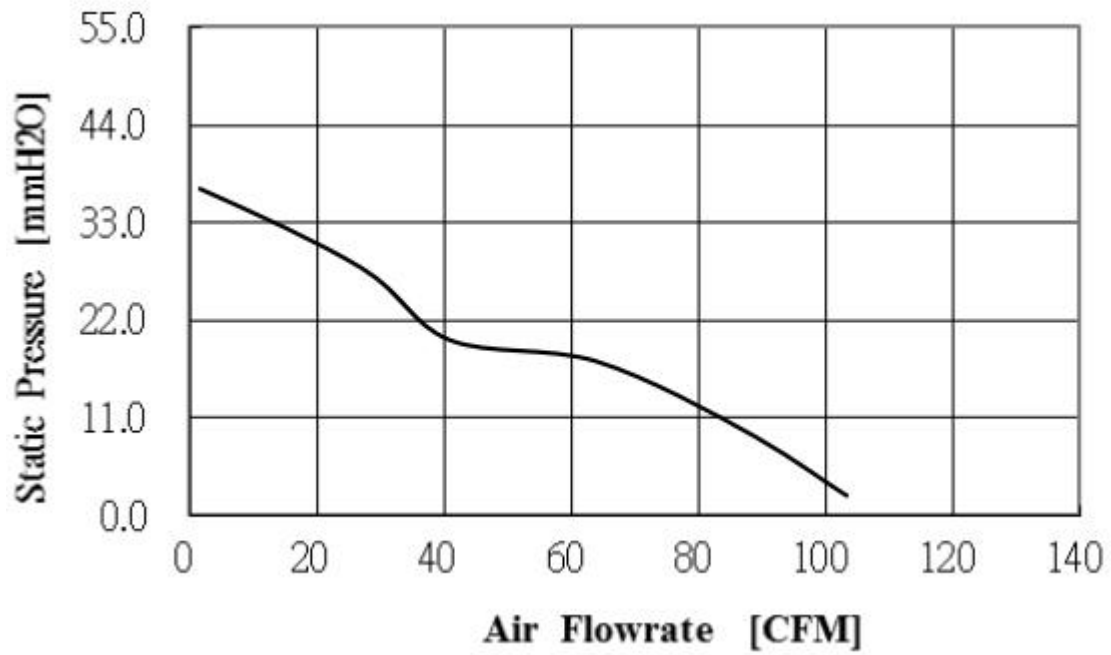


If fan locks on VH, signal stays locked. If fan locks on VL, signal stays at VL for a few hundred MS, then moves to VH.

Vcc : Rated Voltage

七、风扇输出曲线图

Fan output curves of





八、注意事项 NOTE

1. 我们提供的产品应在规格书指定的条件内使用，如果您的应用超出规格极限，我们对此不保证产品质量。
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. 除非事先通知我们所需求参数，否则出货产品与此份规格书一致，未在此份规格书中指定的参数与贵公司最终承认的样品相同。
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. 不适当的安装可能产生刺耳的共振，振动和噪音，安装时，请不要在安装点用力过度或用力不均以免造成振动或噪音。在安装点装置减振器，可有效降低噪音及振动。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. 建议安装风扇保护罩，以免对人员造成意外伤害。
Please use fan guards to avoid personal accidental injuries.
5. 除非IP等级中有特殊说明，否则该款风扇只能在正常环境下操作。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. 请避免将产品接触有毒物质 如：（有机物、氰、福尔马林、苯酚等）。以及在腐蚀性气体环境中使用 如：（硫化氢、二氧化硫、二氧化氮等）。Please avoid operating products in poisonous material (organic, cyanogens, formalin, phenol, etc.) or corrosive gas environment (H₂S, SO₂, NO₂, etc.)
7. 当风扇在灰尘环境中使用时，请在风扇进风口处安装过滤装置以延长风扇使用寿命。Please use filters to clean the air-intake in very dusty air environments for extended fan life.
8. 在保证产品性能及寿命不变，或者得以提升的条件下。除非事先约定，我们保留使用同等规格多种来源零件的权利，原材料和结构的变更不做预先通知。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. 请确保风扇在规定的温湿度储存环境中，如果风扇存储6个月以上，我们建议客户测试风扇功能后再使用。
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. 确定在连接和断开连接器之前关掉电源，避免产生电子零件短路。Make sure to turn off the power before connection or disconnecting the connectors. This may cause short of electronic parts.
11. 请不要碰触扇叶和拉扯线材，以免损坏轴承及导线。此外，静电可能损坏内部的风扇组件 Please do not touch the impeller and never carry the fan the lead wires. The bearings and the lead wires may be damaged. Additionally, static electricity may damage the intenal ciruits of the fan

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