

# SUNON

## SPECIFICATION FOR APPROVAL

**CUSTOMER** :  
**DESCRIPTION** : **DC BRUSHLESS FAN**  
**DIMENSIONS** : **120X120X25 mm**  
**MODEL** : **KD1212PTB1-6A**  
**APPROVED NO** :  
**APPROVED BY** :  
(AUTHORIZED)

<b>DAWN.</b>	<i>Yuchen</i> 6/24	<b>CHKD.</b>		<b>APPD.</b>		<b>SPEC.NO</b>	<b>D120019</b>
						<b>ISSUE DATE</b>	<b>07.31.1998</b>
						<b>EDITION</b>	<b>1</b>
						<b>REVISE DATE</b>	<b>06.21.1999</b>
						<b>E.SPEC</b>	<b>ED12016</b>
<b>建準電機工業股份有限公司</b> <b>SUNONWEALTH ELECTRIC MACHINE INDUSTRY CO., LTD.</b> <b>12FL., 120 CHUNG CHENG 1ST RD., TEL:886-7-7163069(41 LINES)</b> <b>KAOHSIUNG, TAIWAN, R. O. C. FAX:886-7-7163086~89</b>							

**DC BRUSHLESS FAN**  
**MODEL: KD1212PTB1-6A**

**CHARACTERISTICS**

- 1. Motor Design** : Patented single-coil DC brushless 6 poles motor design.
- 2. Insulation Resistance** : More than 500M ohm between internal stator and lead wire(+) measured by DC 500V.
- 3. Dielectric Strength** : Applied AC 500V for one minute or AC 600V for 2 seconds between housing and lead wire(+)
- 4. Noise Level** : Measured in an semi-anechoic chamber with background noise level below 15 dB(A). The fan is running in free air with microphone at a distance of one meter from the fan intake.
- 5. Input power, Current & Speed** : Measured after continuous 30 minutes operation at rated voltage in clean air at ambient temperature of 25 degrees C.
- 6. Tolerances** :  $\pm 15\%$  on rated power and current.
- 7. Motor Protection** : Polarity protected & Locked rotor protected.
- 8. Air Performance** : Measured by a double chamber. The value are recorded when the fan speed is stabilized at rated voltage.

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	P A G E	2 O F 6		

**SPECIFICATIONS**

**MODEL: KD1212PTB1-6A**

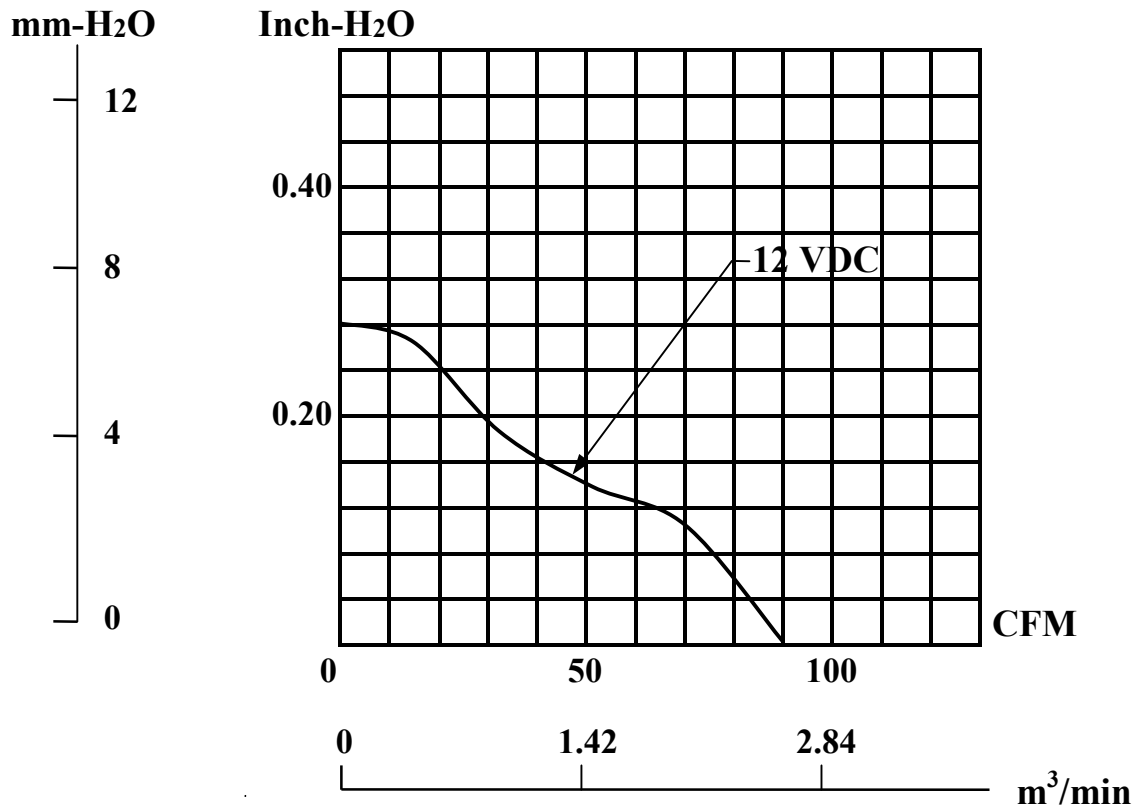
- 1-1. Rated Voltage : 12 VDC**
- 1-2. Operating Voltage Range : 10.2-13.8 VDC**
- 1-3. Starting Voltage : 8 VDC**
- 1-4. Rated Speed : 3100 RPM ± 250 RPM**
- 1-5. Air Delivery : 90 CFM**
- 1-6. Static Pressure : 0.28 Inch-H<sub>2</sub>O**
- 1-7. Rated Current : 0.4 AMP**
- 1-8. Rated Power : 4.8 WATTS**
- 1-9. Noise Level : 44.5 dB(A)**
- 1-10. Direction of Rotation : Counter-clockwise viewed front fan blade**
- 1-11. Operating Temperature : -10 to +70 Deg.C**
- 1-12. Storage Temperature : -40 to +70 Deg.C**
- 1-13. Bearing System : Precise ball bearing system**
- 1-14. Weight : 205g**
- 1-15. Safety : UL/CUR/TUV/CE Approvals**
- 1-16. Vibration : Vibration of acceleration 1.5G and Frequency 5~50~5Hz is applied in the 3 directions(X,Y,Z) for 30 minutes, each Direction at the cycle of 1 minute.**
- 1-17. Locked Rotor Protection : Automatic Restart Capability**

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	P A G E	3 O F 6		

**MODEL : KD1212PTB1-6A**

**PERFORMANCE CURVES**

**STATIC  
PRESSURE**

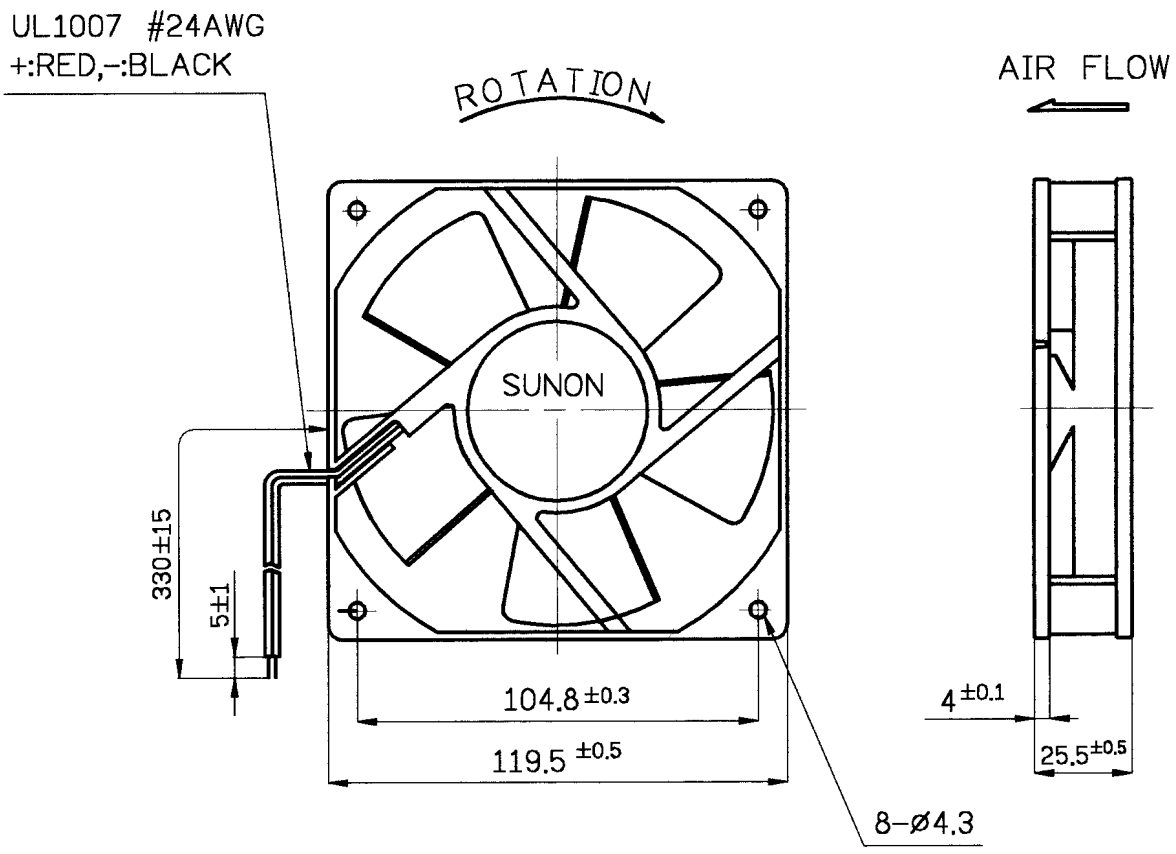


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**MATERIAL**

- 2-1. Frame : Thermoplastic PBT of UL 94V-0
- 2-2. Impeller : Thermoplastic PBT of UL 94V-0
- 2-3. Bobbin : Thermoplastic PBT of UL 94V-0
- 2-4. Lead Wire : UL1007,24AWG,+RED;-BLACK

**DIMENSIONS**



- 1. Air Flow Direction: Label side.
- 2. The Best Mounting Direction: In any orientation.

UNITS : mm

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**Notes**

- 1. SUNON will not guarantee the products if the application of our products is exceeded the limitation which is specified on this specification.
- 2. In case of change of the specification specified on this document, a written notice is requested in advance.
- 3. Please do not touch the impeller with pressure and never bring the fan with lead wire. The bearings and lead wire may be damaged.
- 4. No guarantee on the products against the safety problem or failure caused by powder dust, drop of water or insect.
- 5. If there is any data or related documentation different from this data sheet, this data sheet is the principal reference.
- 6. For the purpose of MIS, please indicate SPEC No. on every order.
- 7. In case of the fan has no polarity protection function, wires with same color (electrode) must be connected together during the assembly. (i.e. red + red, black + black) or the fan will be damaged immediately.
- 8. Please do not use the fan in the environment of corrosive gas or liquid or any detrimental gas.
- 9. Please do not store the fan in the environment of high / low temperature, high humidity or any detrimental gas. Please store the fan within 6 months, every 6 months, there shall be a linkage of electric current to the fan, even though the fan is stored in room temperature.
- 10. While the fan is in operation, please do not lock the fan intentionally for a long period of time, since the continuous stoppage will result in over-heat and thus burn-out of the fan.
- 11. During the installation of the fan, please pay substantial attention to possible noise cause by resonance vibration and vibration.
- 12. During the testing of the fan, please be sure to use finger guard to insure safety.

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