

SPECIFICATION FOR APPROVAL

CUSTOMER:

CUSTOMER PARTS NO.:

DESCRIPTION: AC AXIAL FAN

MODEL NO.: 5E -230B ()

FILE NO.: A5E 0023HB-A1

ISSUE	R&D	QA	REVISION

CUSTOMER APPROVAL

BI-SONIC TECHNOLOGY CO., LTD

HEADQUARTER: 2F-2, NO. 137, LANE 235, PAO CHAIO RD.,

HSIN-TIEN CITY, TAIPEI HSIEN, 231, TAIWAN , R.O.C.

TEL:(02)89192168 FAX:(02)89192169

ITEM	DESCRIPTION	SPEC.	
11	ROTATION	CW VIEW FROM NAME PLATE SIDE	
12	AIR-FLOW DIRECTION	AIR INTAKE OVER THE STRUTS	
13	INSULATION CLASS	CLASS B	
14	LIFE EXPECTANCY	50000 HOURS CONTINUOUS	□
15	SAFETY APPROVAL	UL. CSA.. CE.	

□ LIFE IS DEFINED AS THE TIME MOTOR SPEED DECREASED MORE THAN 30% COMPARED WITH INITIAL VALUE.

3 MECHANICAL

- 3-1. DIMENSIONS----- SEE SECTION 8
- 3-2. FRAME----- METAL CONSTRUCTION WITH ALUMINUM DIE-CASTING.
- 3-3. IMPELLER----- MADE OF METAL MATERIAL SPOT WELDING ON ROTOR SHELL.
- 3-4. COATING ----- CED (CATHONIC ELECTRODEPOSITION COATING WITH EPOXY) COATING ON METAL SURFACE BE CAPABLE OF IMPACT RESISTANT AND ABRASION RESISTANT.
- 3-5. BEARING SYSTEM ----- BALL BEARING
- 3-6. WEIGHT ----- 1000 GRAMS
- 3-7. LEAD WIRE----- 1430 AWG # 20
- 3-8. TYPE OF OUTPUT LEADWIRE
- 3-9. PLASTIC PARTS ----- UNFLAMABLE MATERIAL , MEET UL 94V-0 RATING.

4 ENVIRONMENTAL

- 4-1. OPERATING TEMPERATURE ----- -10 TO +75
- 4-2. STORAGE TEMPERATURE ----- -30 TO +75

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4-3. OPERATING HUMIDITY----- RH 20% 85%

5 PROTECTION

5-1. IMPEDANCE PROTECTION

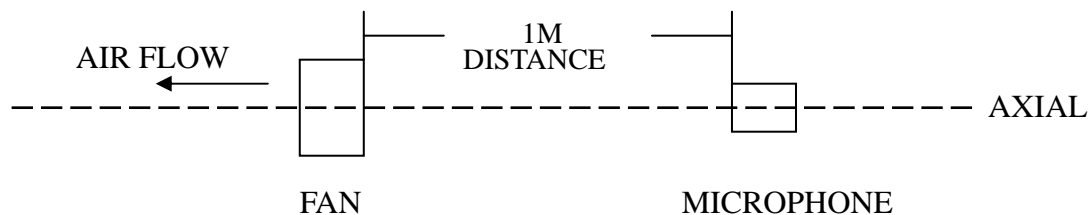
IMPEDANCE OF MOTOR COIL WINDING PROTECTS MOTOR FROM FLAMING IN THE CONDITION OF 72 Hrs LOCKED ROTOR AT RATED VOLTAGE.

5-2.THERMO PROTECTION

BUILT-IN THERMOSTAT DEVICE. LIMITS THE TEMPERATURE OF MOTOR COIL FOR OVERHEATING PROTECTION

6 ACOUSTICAL NOISE

6-1. MEASUREMENT SET-UP



6-2. MEASUREMENT PERFORMED IN ANECHOIC TEST CHAMBER UNDER FREE AIR CONDITION

6-3. CHAMBER BACKGROUND NOISE 17dB MAX

6-4. READING TAKEN FROM SPECTRUM ANALYZER

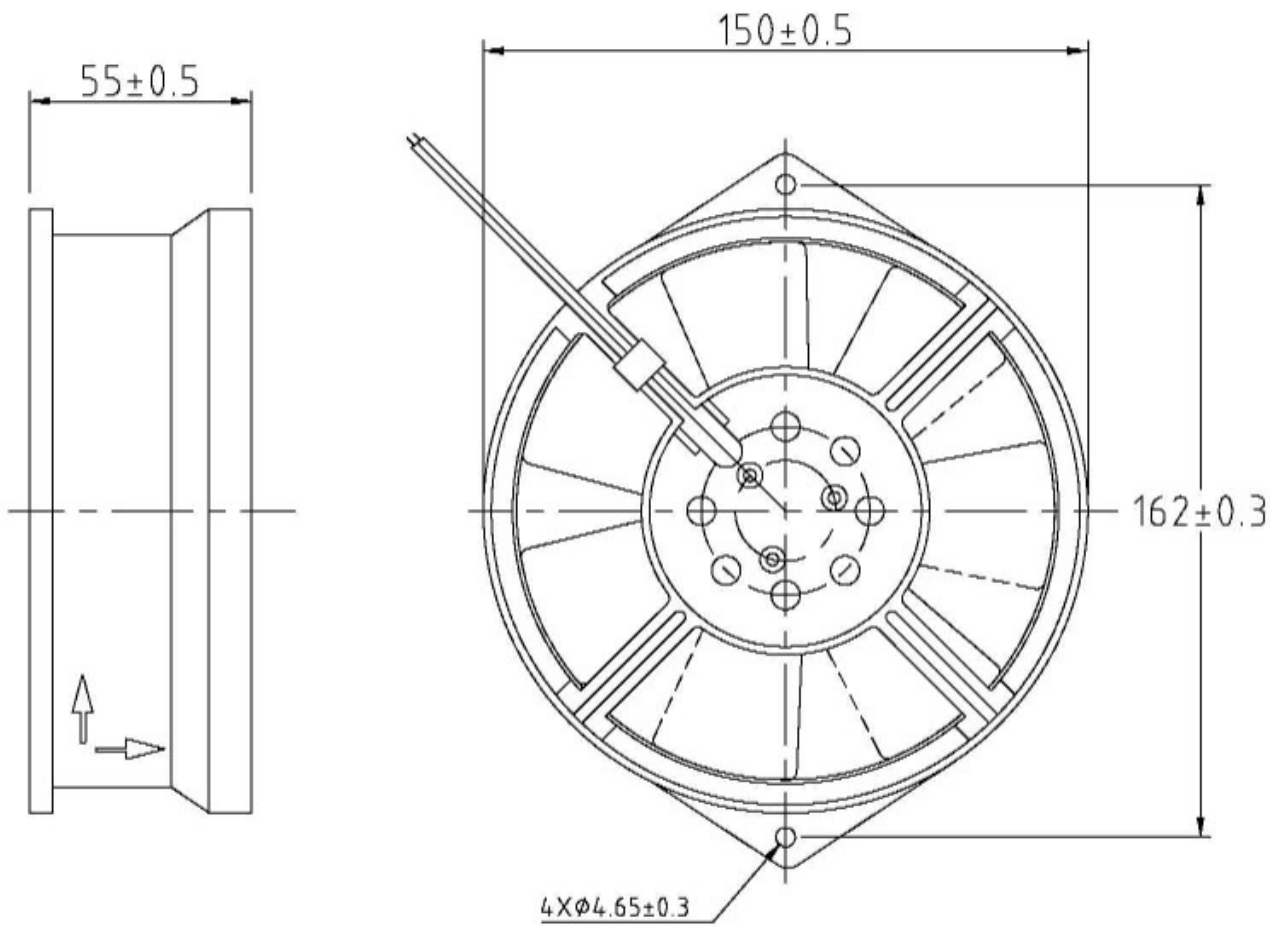
6-5. NOISE DISTRIBUTION CURVE SEE ATTACHED PAGE

7 STATICS PRESSURE VS AIR FLOW CURVE

MEASURED PER TWO CHAMBER METHOD
DATA-CURVE SEE ATTACHED PAGE

8 DIMENSIONS DRAWING

UNIT:mm



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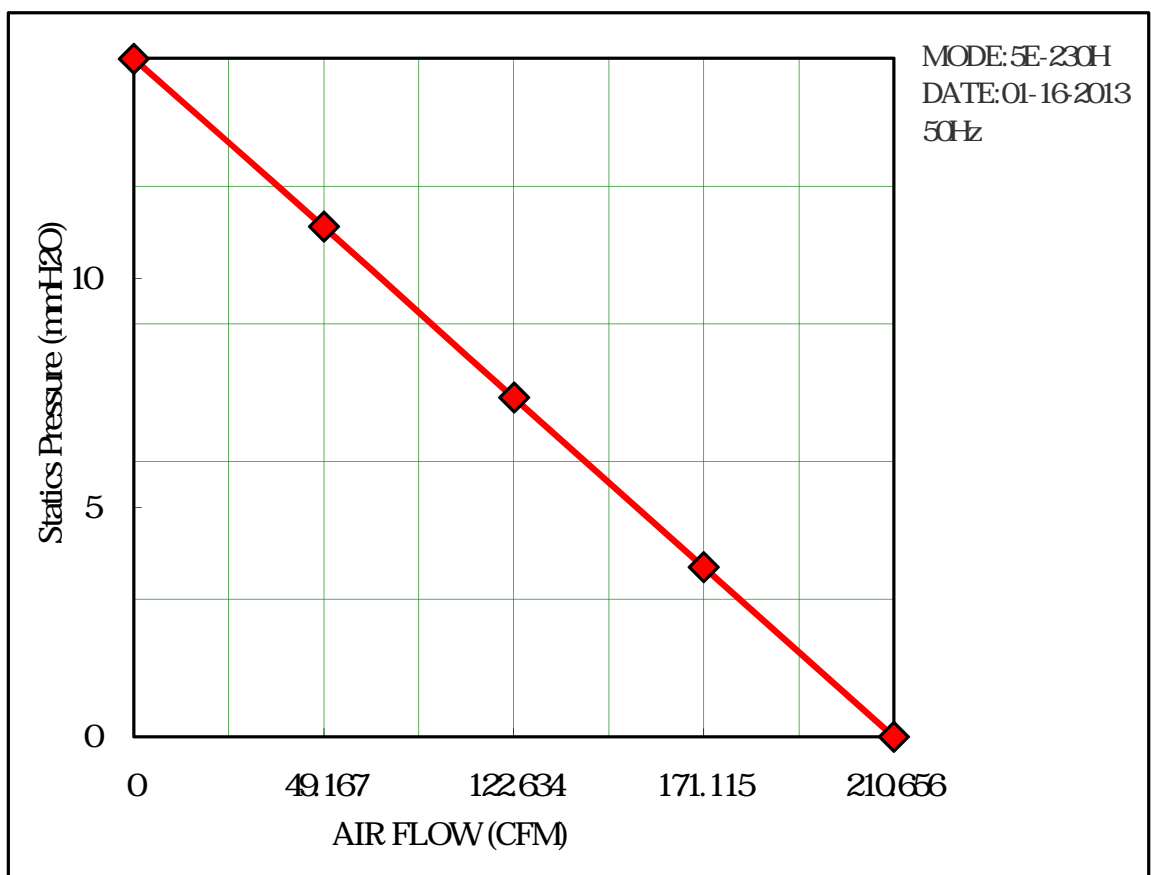
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BI-SONIC FAN PERFORMANCE DATA SHEET

Customer:
 Fan Mode: **5E-230H**
 Testing Method: Constant Voltage
 Testing Voltage:
 Barometric Pressure (cmHg):
 Dry Bulb Temperature (o C): 22
 Relative Humidity (%) 50
 File Name: **50Hz**

Test No: **5E-230H**
 System Setup: outlet Chamber
 Testing Date: **01-16-2013**
 Barometric Density (kg/m³):
 Testing Engineer:
 Remark:

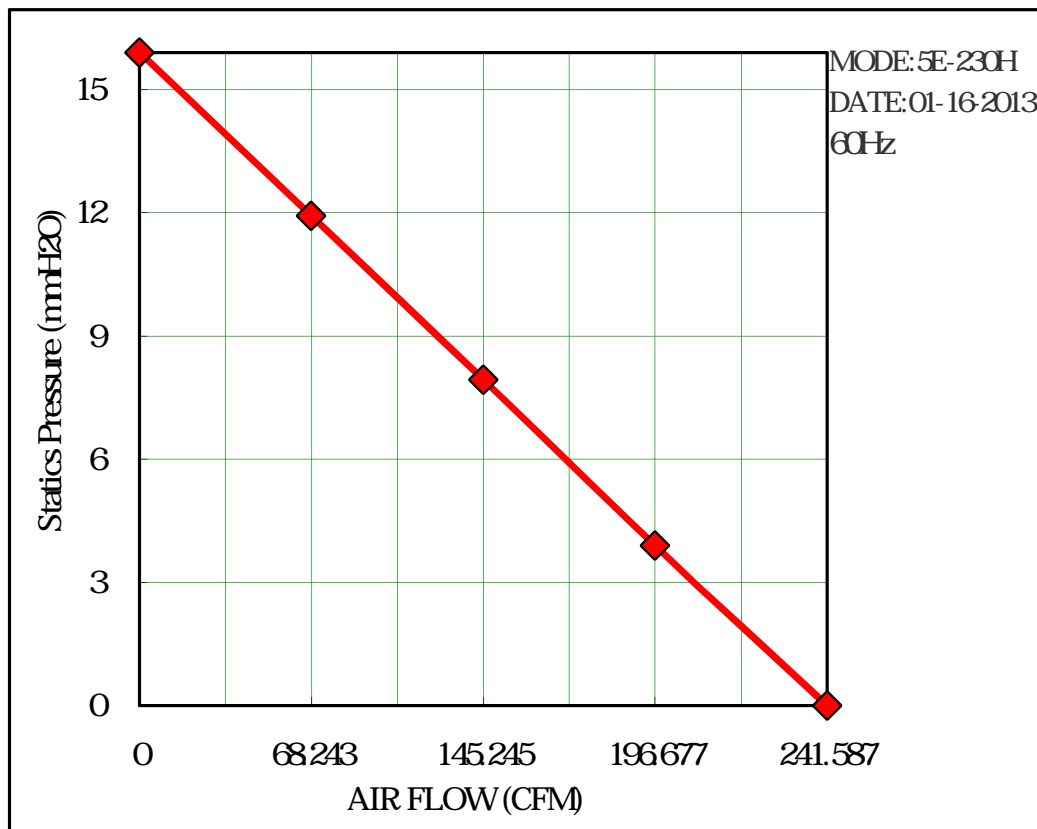
No	CFM	mmAq	inAq	mA	RPM	Watt	
1	0	148	0.601	262	2610	60.26	
2	49.167	11.13	0.453	258	2670	59.34	
3	122.634	7.400	0.301	255	2700	58.65	
4	171.115	3.700	0.141	252	2740	57.96	
5	210.656	0	0	249	2820	57.27	



BI-SONIC FAN PERFORMANCE DATA SHEET

Customer: Fan Mode: 5E-230H Testing Method: Constant Voltage Testing Voltage: Barometric Pressure (cmHg): Dry Bulb Temperature (o C): 22 Relative Humidity (%) 50 File Name: 60Hz	Test No: 5E-230H System Setup: outlet Chamber Testing Date: 01-16-2013 Barometric Density (kg/m ³): Testing Engineer: Remark:
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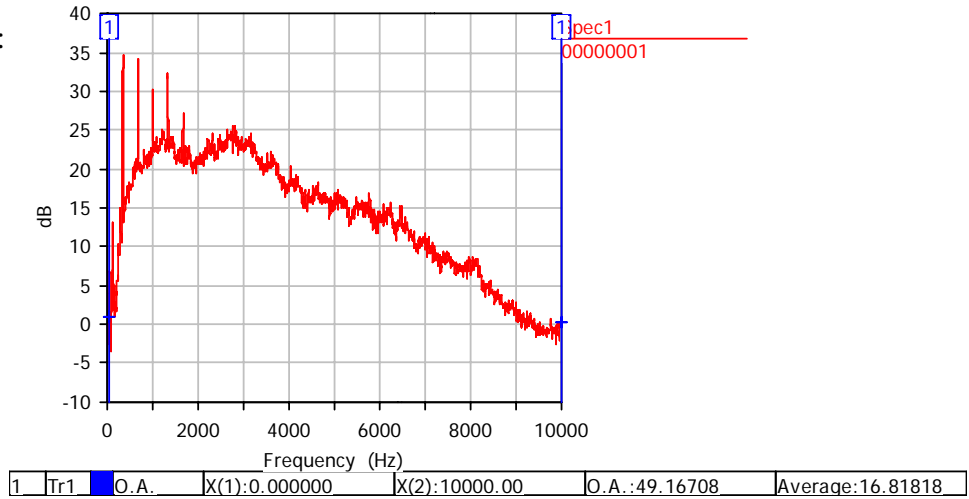
No	CFM	mmAq	inAq	mA	RPM	Watt	
1	0	15.900	0.646	250	2720	57.50	
2	68.243	11.92	0.485	232	2980	53.36	
3	145.245	7.940	0.322	228	3020	52.44	
4	196.677	3.890	0.156	220	3120	50.60	
5	241.587	0	0	208	3280	47.84	



BI-SONIC TECHNOLOGY CORP NOISE TEST REPORT

MODEL NO : <u>5E-230 50Hz</u>	TEST PURPOSE	<u>Evaluation</u>
SAMPLING : <u>1 PCS</u>		<u>IPQC</u>
		<u>QA</u>

MODEL NO:
 TEST FREQ
 10KHz
 TEST SENS
 0dBA
 TRIG SENS
 0/128
 Y AXIS UP
 20
 Y AXIS LW
 -20
 AVERAGE



ANALYSIS : -----

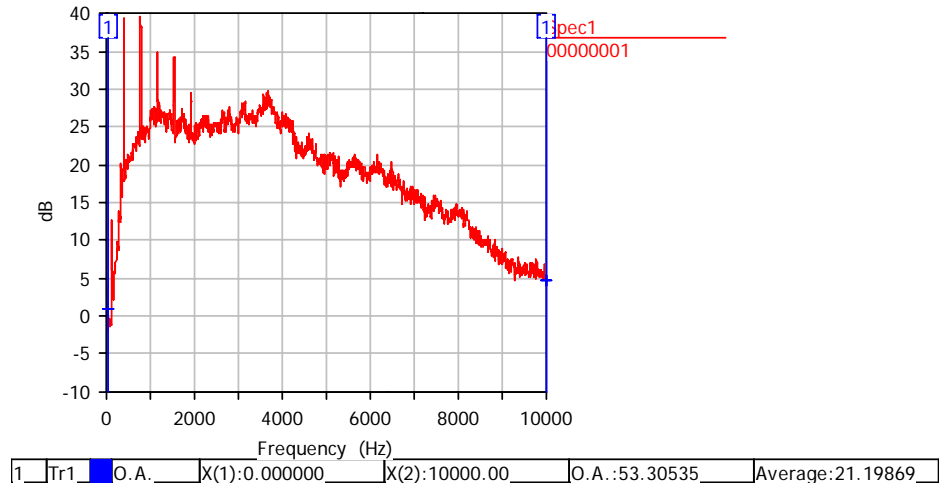
(1)Background Noise: 17dB(A)
(2)FFT Analyzer
(3) Sound Pressure Level Meter
 NO.5E-230 50Hz

Reporter : Sophia yang
Date : 2013/01/16

BI-SONIC TECHNOLOGY CORP NOISE TEST REPORT

MODEL NO : <u>5E-230 60Hz</u>	TEST PURPOSE	Evaluation
SAMPLING : <u>1</u> PCS		IPQC
<u>60Hz</u>		QA

MODEL NO:
 TEST FREQ
 10KHz
 TEST SENS
 0dBA
 TRIG SENS
 0/128
 Y AXIS UP
 20
 Y AXIS LW
 -20
 AVERAGE



ANALYSIS : -----

(1)Background Noise: 17dB(A)
(2)FFT Analyzer
(3) Sound Pressure Level Meter
 NO.5E-230 60Hz

Reporter : Sophia yang
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