

SPECIFICATION FOR APPROVAL

客 戶

CUSTOMER:

客 戶 料 號

CUSTOMER PARTS NO.:

品 名

AC AXIAL FAN

DESCRIPTION:

機種

MODEL NO.: 5E-230B (直焊叶)

檔案序號

FILE NO.: A5E0023HB-A1

核示 ISSUE	研發 R&D	品保 QA	版數 REVISION

客 戶 承 認

CUSTOMER APPROVAL

BI-SONIC TECHNOLOGY CO., LTD

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PERFORMANCE SPECIFICATION

PRODUCT TITLE : AC AXIAL FAN

MODEL NO : 5E-230B 直焊叶

1、SCOPE :

THIS SPECIFICATION DEFINES THE ELECTRICAL AND MECHANICAL CHARACTERISTICS OF THE AC BRUSHLESS AXIAL FLOW FAN·THE FAN MOTOR IS SHADED POLE MOTOR·

2、ELECTRICAL CHARACTERISTICS :

ALL MEASUREMENTS PERFORMED AT 20-30°C ROOM TEMPERATURE &50-70% R.H. UNLESS OTHERWISE SPECIFIED. SPEED MEASURED AFTER CONTINUOUS 10 MINUTE OPERATION AT RATED VOLTAGE IN CLEAN AIR.

ITEM	DESCRIPTION	UNIT	SYMBOL	SPEC.		CONDITION
				50Hz	60Hz	
1	RATED VOLTAGE	VOLTS	V	230	AC	
2	OPERATION VOLTAGE	VOLTS	V	215~245	AC	
3	INPUT CURRENT	AMP	A	0.30MAX	0.28MAX	AT RATED VOLTAGE
4	INPUT POWER	WATTS	W	46MAX	44MAX	AT RATED VOLTAGE
5	ROTATION SPEED	RPM	RPM	2750±10%	3100±10%	AT RATED VOLTAGE FREE AIR
6	ACOUSTICAL NOISE (AVG)	dB(A)	dB(A)	52±10%	56±10%	DETAILS SEE ATTACHED PAGE.
7	MAX. AIR-FLOW	CFM	Q	200±10%	240±10%	TWO-CHAMBER METHODS DETAILS SEE ATTACHED PAGE.
8	MAX. AIR-PRESSURE	mmH ₂ O	P	13±10%	15.5±10%	TWO-CHAMBER METHODS DETAILS SEE ATTACHED PAGE.
9	INSULATION RESISTANCE	MEG. OHM	MΩ	100MΩ MIN. AT 500V DC		BETWEEN FRAME AND LEAD WIRE.
10	DIELECTRIC STRENGTH			WITHSTANDING AT 1500V AC 60Hz. FOR 1 MINUTE		BETWEEN FRAME AND LEAD WIRE.

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A5E0023HB-A1

REVISIONS :

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°C
- 4-2. STORAGE TEMPERATURE ----- -30 TO +75°C

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

5、PROTECTION：

5-1. IMPEDANCE PROTECTION

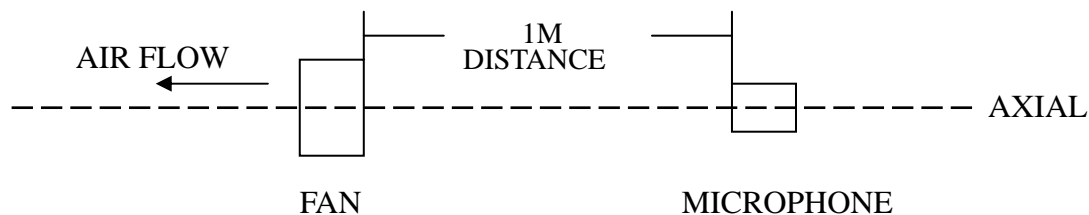
IMPEDANCE OF MOTOR COIL WINDING PROTECTS MOTOR FROM FLAMING IN THE CONDITION OF 72 Hrs LOCKED ROTOR AT RATED VOLTAGE.

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 .

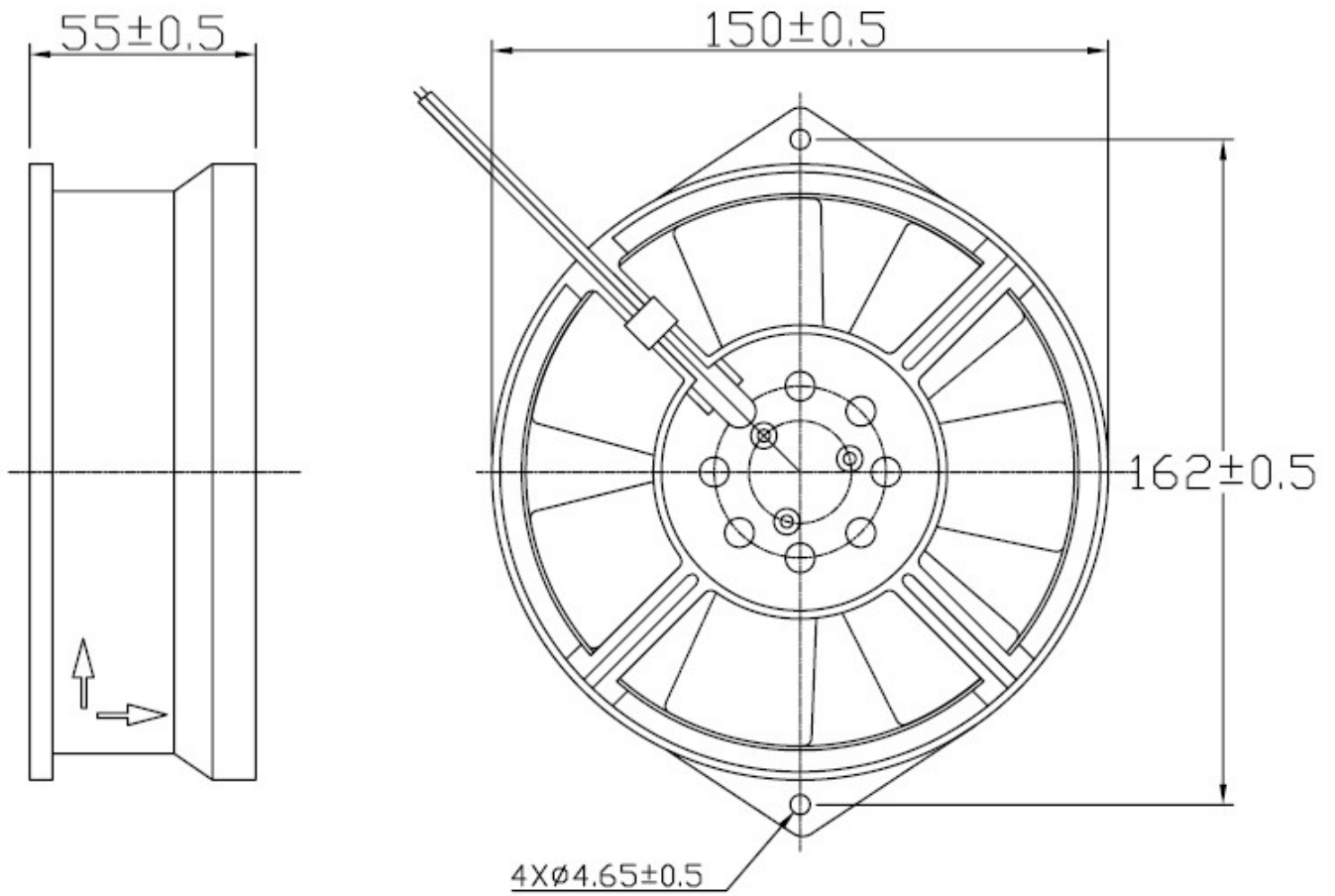
6-5. NOISE DISTRIBUTION CURVE SEE ATTACHED PAGE .

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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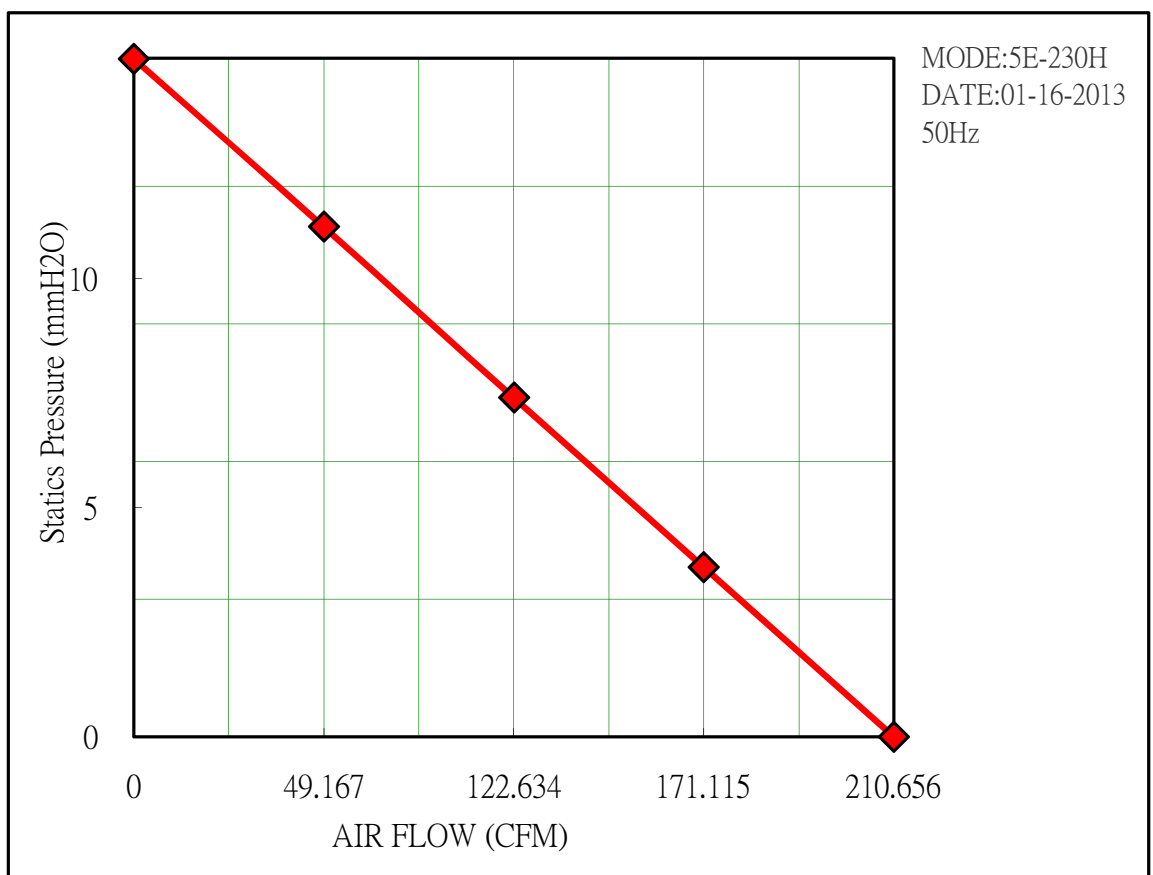
REVISIONS：

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: 直焊葉

No	CFM	mmAq	inAq	mA	RPM	Watt	
1	0	14.8	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/m³):
 Testing Engineer:
 Remark: 直焊葉

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	

