SPECIFICATION FOR APPROVAL

MODEL NO. : AA8251MB-AT P.S.

DESCRIPTION :

SPEC NO. : SA-0120110518006

ISSUE DATE : 2018.01.30

REVISION : C

THIS OFFER IS MADE ACCORDING TO YOUR CURRENT INQUIRY. UNLESS OTHERWISE REVISED, THIS SPECIFICATION WILL BE FINAL FOR ALL FUTURE PRODUCTION OF ORDERS FROM YOUR RESPECTED COMPANY

KINDLY STUDY IN DETAILS AND RETURN TO US THE DUPLICATE DULY SIGNED AS YOUR CONFIRMATION OF SAME.

協禧電機股份有限公司 研發處 2018.01.30 發行章

ADDA CORP.
REGISTERED TO ISO 9001
ISO/TS 16949
CERTIFICATE NO.A8035

ADDA CORPORATION

D A T A - S H E E T

Engineering

Printed On: 18/01/30

BRUSHLESS AXIAL COOLING FANS

Customer	:		Ref: (RoHS)
Adda Model No	:	AA8251MB-AT	
Samples attached	:	Piece(s),	
Safety Approval	:	UL,CUL,TUV, CE	TUV:EN 60335-1:2012+A11 EN 60335-2-80:2003+A1+A2 UL:UL 507 CE: EN 55014-1:2006+A1+A2 EN 55014-2:2015 EN 61000-3-2:2014 EN 61000-3-3:2013

Specifications

ITEM		SPECIFICATION / CONDITION								
DIMENSIONS	:	80x80x25			mm					
BEARING TYPE	:	TWO BALL								
RATED VOLTAGE	:	115	VAC							
OPERATING VOLTAGE RANGE	:	110	VAC	–	120	VAC				
OPERATIONG FREQUENCY	:	50	/	60	Hz					
REAL CURRENT	:	0.13	/	0.12	Amp					
REAL POWER	:	13.90	/	11.80	Watt					
RATED CURRENT	:	0.15	/	0.13	Amp	+	10%			
RATED POWER	:	17.30	/	15.00	Watt					
RATED SPEED	:	2050	/	2500	RPM	±	10%			
AIR FLOW	:	15.000	/	19.000	CFM	(min:	13.500	/	17.100	CFM)
AIR FLOW	:	0.424	/	0.537	CMM	(min:	0.382	/	0.483	CMM)
			/	(at zero static pressure)						
STATIC AIR PRESSURE	:	0.075	/	0.118	Inch H_2O	(min:	0.060	/	0.095	Inch H_2O)
STATIC AIR PRESSURE	:	1.905	/	2.997	mm H_2O	(min:	1.543	/	2.427	mm H_2O)
			/	(at zero air flow)						
NOISE LEVEL	:	18.3	/	24.0	dB(A)	(max.:	22.3	/	28.0	dB(A))
MOTOR PROTECTION	:	Impedance		Protect						
LIFE EXPECTANCY	:	50000	Hours	at	40℃	/ 65%	RH			
NET WEIGHT	:	210	Gram.							
PACKING	:	100	pcs. Per Export Carton.							

Unless otherwise stated, the relative humidity is 65%, and the temperature is 25ºC for the standard testing.
Should you have any doubt, please refer to the environmental conditions specified in the acknowledgement document.

SPECIFICATION

1．0 Scope ：This documentation defines the mechanical & electrical charcterists of AC brushless fans.

2．0 Material ：

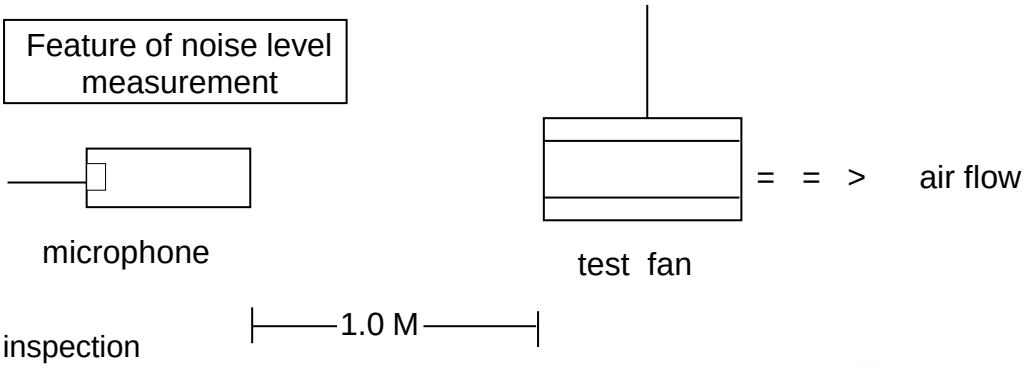
- 2．1 Housing — High quality aluminum die-casting frame flated with black paint.
- 2．2 Fan blade — UL 94V - 0 Glass filled polyester (P.B.T)
- 2．3 RoHS wire — UL 1430 , 22 AWG
- 2．4 Connector — ☐ Not included in this fan
  ☐ Note as : ________________________
  ____

3．0 Dimension & construction : All dimension, direction of rotation and air flow, rated characteristics are specifide in drawing & data-sheet of enclosed.

4．0 Characteristics definition :

- 4．1 Rated current ： Rated current shall be measured after 30 minutes continuous rotation at rated voltage.
- 4．2 Rated speed ： Rated speed shall be measured after 30 minutes continuous rotation at rated voltage.
- 4．3 Start voltage ： The voltages that enable to start the fan by sudden switch on.
- 4．4 Input power ： Input power shall be measured after 30 minutes continuous rotation at rated voltage.
- 4．5 Locked current ： Locked current shall be measured with in one minutes or rotor locked , After 30 minutes continuous rotation at rated voltage in clean air.
- 4．6 Air flow & static pressure ： The air flow data and static pressures are determined in accordance with AMCA-210 standard in a double-chamber testing with intake-side measurement.

4 · 7 Noise level : The measurement of noise level is carried out with reference to CNS8753 in a anechoic chamber with the microphone positioned 1 M from the air intake. Testing fan shall be hung in clear air.



5 · 0 Mechanical inspection

5 · 1 Rotation direction : Clockwise from the front face of the fan. A clear " = = > " (arrow mark) shall be found on the body of housing .

5 · 2 Safe design : All fans have intergrated protection against locked rotor condition so that there can be no damage on winding and / or any electrical components. Restart is automatic as soon as any constraint to running has been released.

5 · 3 Locked rotor protection : No damage shall be found for continuous 72 hours at condition of rotation locked. Restart is automatic as soon as constraint to running has be relessed.

5 · 4 Free drop shock : In minute package condition. The fan should withstand each one drop of three faces from 30 cm distance height onto 10 mm thickness of wooden board

6 · 0 Electrical inspection

6 · 1 Insulation resistance : 100 MΩ or more at 500 V megger.

6 · 2 Dielectric strength : 1 minute at 1500 VAC / 50-60Hz

7 · 0 Environmental

7 · 1 Operating Temperature : - 10℃ ~ + 70℃

7 · 2 Humidity RH : 20 % ~ 85 % (Max)

7 · 3 Storage Temperature : Will satisfy performace standards after 500 hours storage at - 40 ℃ ~ 70 ℃ (normal humidity) with a 24 - hour recovery period at room temperature.

7・4 Humidity ： After 96 hrs, 95 % RH, 40 ± 2 ℃ per MIL - STD - 202F, method 103B, Humidity test, The measured data of insulation resistance & dielectric strength should meet the specification listed in attach.

7・5 Theraml Shock ： After thermal shock test per MIL - STD - 202F, method 107G, condition D, The measured data of insulation resistance & dielectric strength should the specification listed in datasheet.

7・6 Do not place or store the fan in the environment with high/low temperature/humidity. If the fan is stored for more than 6 months, functional test is highly recommended before using.

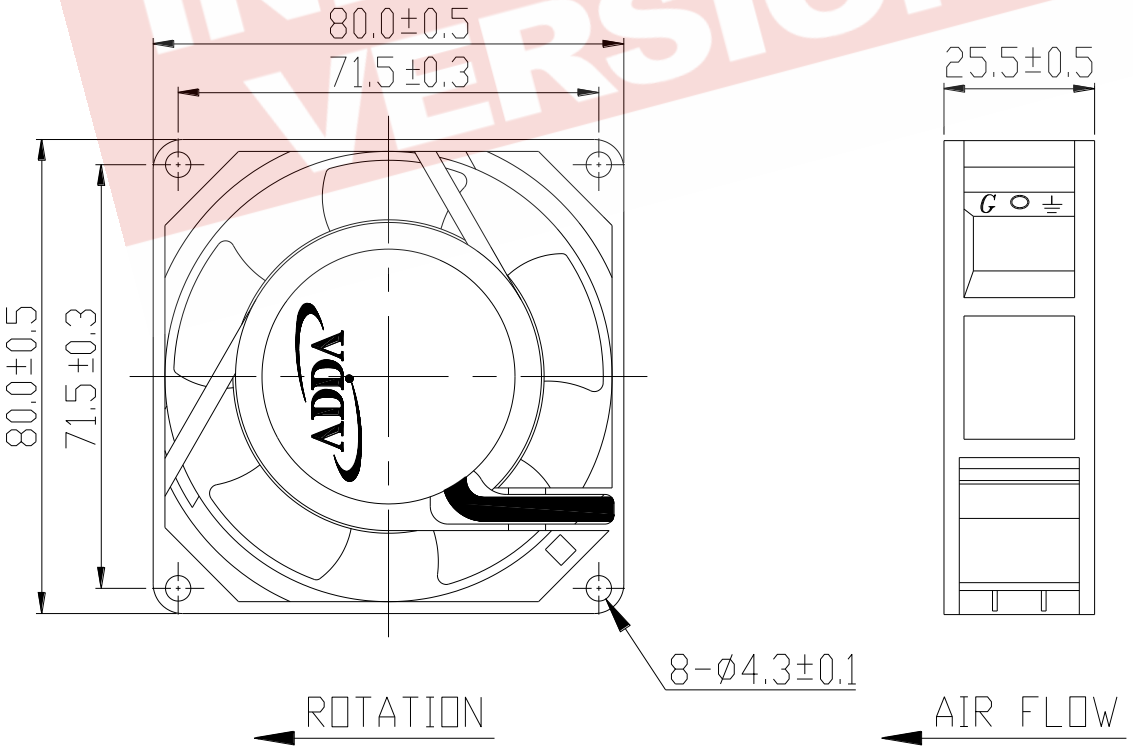
8・0 Remark

8・1 Material and construction are subject to change without advance notice. The changes should be within specification listed in this approved sheet.

8・2 All the fans shall meet the inspection under sampling plan MIL - STD - 105E, The AQL are as follow：

Critical	AQL = 0.25 %
Major	AQL = 1.00 %
Minor	AQL = 2.50 %

9・0 Drawing



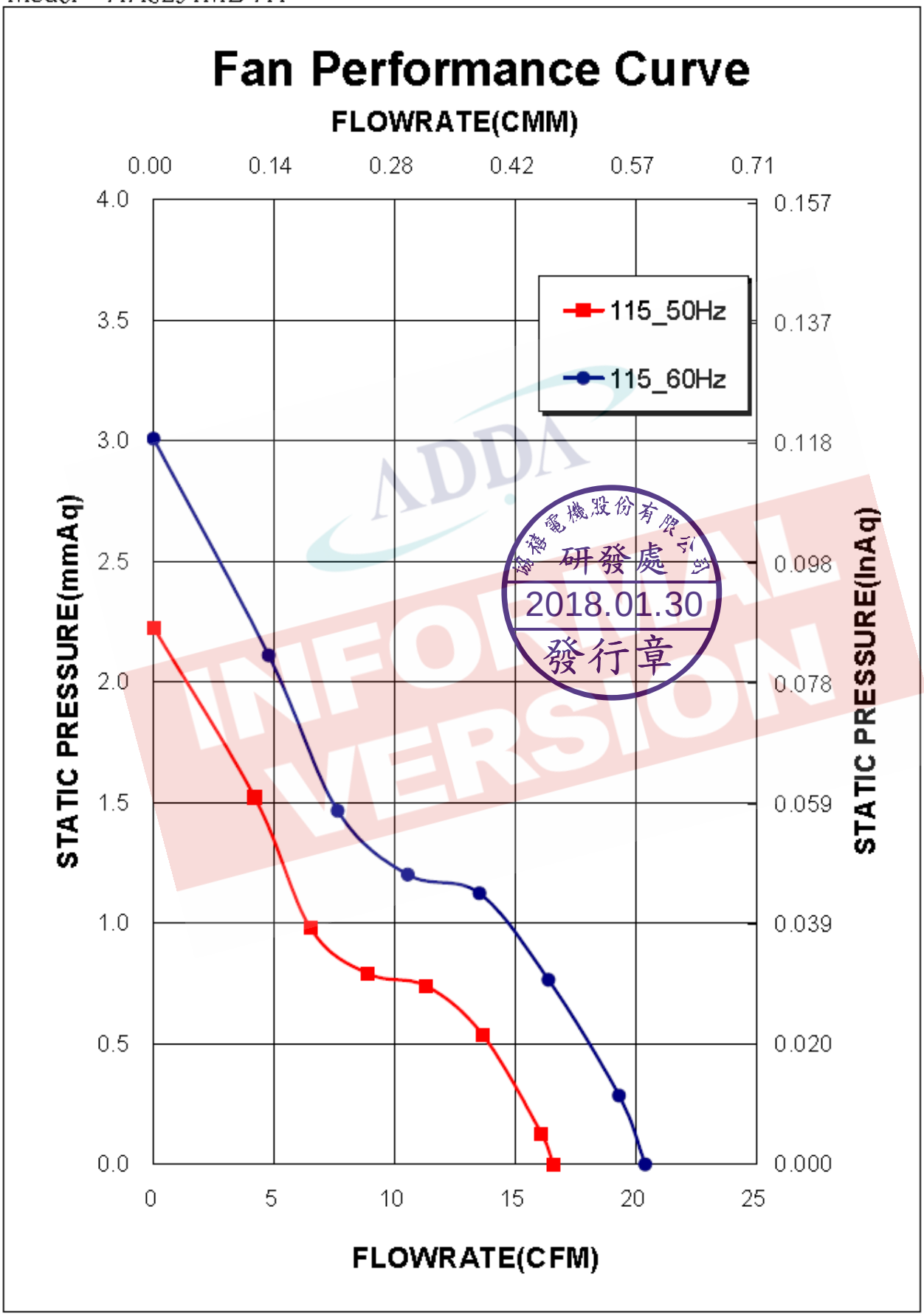
10．0 Notes:

10.1 Please do not touch and push Fan Blade with fingers or others, fan blade and ball bearings may be damaged and it causes noise defect.
10.2 Do not carry the fan by its lead wires.
10.3. Every specific fan is designed for its certain application (project). Therefore, if you want to use this fan in other application (project), please inform ADDA first so that we can confirm whether there is any issue which might be incurred from the reason of this different application (project) or not.
10.4 The "Life Expectancy" of this fan has not been evaluated for use in combination with any end application. Therefore, the Life Expectancy in the Test Reports (L10 and MTTF Report) that relate to this fan is for reference only and shall not construe any kind of warranty of ADDA to the life of any specific fan,either expressed or implied.
10.5 The period of product warranty, unless otherwise agreed by ADDA in written, shall be 12 months staring from the date of production.

協禧電機股份有限公司 研發處 2018.01.30 發行章

協禧電機股份有限公司風扇測試報告

Model：AA8251MB-AT



Mouser Electronics

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ADDA:
AA8251MB-AT-LF