

SPECIFICATION FOR APPROVAL

TO : _____

REF. No. _____

APPROVED DATE 	CHECKED DATE 	PREPARED DATE 
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MODEL No. AK2072HB P.S. (AW)

DESCRIPTION: AC FAN (RoHS) REV. F

ID No. _____

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.



ADDACORP.
REGISTERED TO ISO 9001
ISO/TS 16949
CERTIFICATE NO. A8035

ADD A CORPORATION

DATA-SHEET

Engineering

Printed On: 09/11/10

BRUSHLESS AXIAL COOLING FANS

Customer	:		Ref:	(RoHS)
Adda Model No	:	AK2072HB	P.S:	(AW)
Samples attached	:	Piece(s),		
Safety Approval	:	UL,CUL,TUV,CE		TUV:EN60335-1:2002+A1+A11+A12 EN60335-2-80:2003+A1 UL:UL 507 CE:EN 55014-1:2006 EN 55014-2:1997+A1 EN 61000-3-2:2006 EN 61000-3-3:1995+A1+A2
<u>Specifications</u>				
ITEM	SPECIFICATION / CONDITION			
MEASUREMENTS	:	205x205x72	mm	
BEARING TYPE	:	BALL		
RATED VOLTAGE	:	230	VAC ± 10%	
OPERATING VOLTAGE RANGE	:	220	— 240	VAC
OPERATING FREQUENCY	:	50	/ 60	Hz
REAL CURRENT	:	0.32	/ 0.47	Amp
REAL POWER	:	71.30	/ 105.00	Watt
RATED CURRENT	:	0.30	/ 0.49	Amp ± 10%
RATED POWER	:	69.00	/ 112.70	Watt
RATED SPEED	:	2800	/ 3200	RPM ± 10%
AIR FLOW	:	600.000	/ 665.000	CFM (min.: 540.000 / 598.500 CFM)
AIR FLOW	:	16.980	/ 18.819	CMM (min.: 15.282 / 16.937 CMM)
				(min at zero air flow.)
STATIC AIR PRESSURE	:	0.930	/ 0.500	Inch H ₂ O (min.: 0.753 / 0.405 Inch H ₂ O)
STATIC AIR PRESSURE	:	23.622	/ 12.700	mm H ₂ O (min.: 19.133 / 10.287 mm H ₂ O)
				(min at zero air flow.)
NOISE LEVEL	:	72.0	/ 75.4	dB (A) (max.: 76 / 79.4 dB(A))
MOTOR PROTECTION	:	Thermal Protected at 130°C		
LIFE EXPECTANCY	:	50000	Hours at	25°C/ 65%
NET WEIGHT	:	2100	Gram.	
PACKING	:	6	pcs. Per Export Carton.	

Unless otherwise stated, the relative humidity is 65%, and the temperature is 25°C for the standard testing.

Should you have any doubt, please refer to the environmental conditions specified in the acknowledgement document.



ADDA CORPORATION	Model No.: AK2072HB	P.S: (AW)	Page 1/4
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SPECIFICATION

1 · 0 Scope : This documentation defines the mechanical & electrical characteristics 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 Bearing Sys ☐ Oil impregnated sleeve or
☒ Ball Bearing : Japan
☐ Hypro Bearing
☐ one Ball one Sleeve
☒ RoHS

2 · 4 RoHS wire UL 1015 , 20 AWG

2 · 5 Connector ☐ Not included in this fan
☐ Note as : _____

3 · 0 Dimension & construction : All dimension, direction of rotation and air flow, rated characteristics are specified 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.

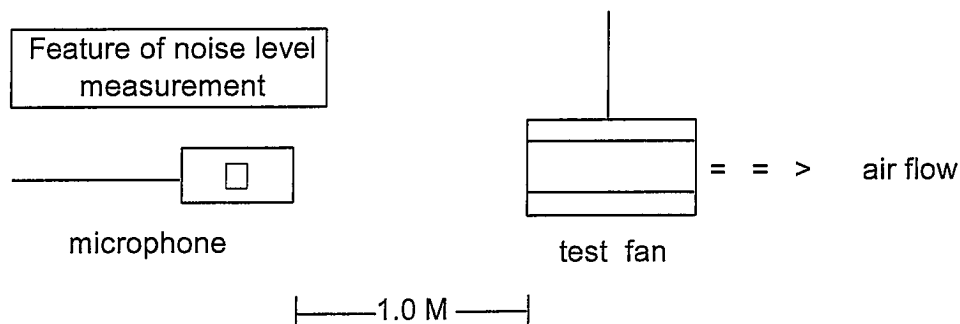
4 · 5 Locked current : Locked current shall be measured with in one minutes or rotor locked , After 30 minutes continuous rotation at rated voltage in clean air.

4 · 6 Air flow & static pressure : The air flow data and static pressures are determined in accordance with AMCA-210 standard or DIN 24163 specification in a double-chamber testing with



SPECIFICATION

- 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 releessed.
- 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.



SPECIFICATION

7 · 4 Humidity : After 96 hrs, 95 % RH, 40 ± 2 °C 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.

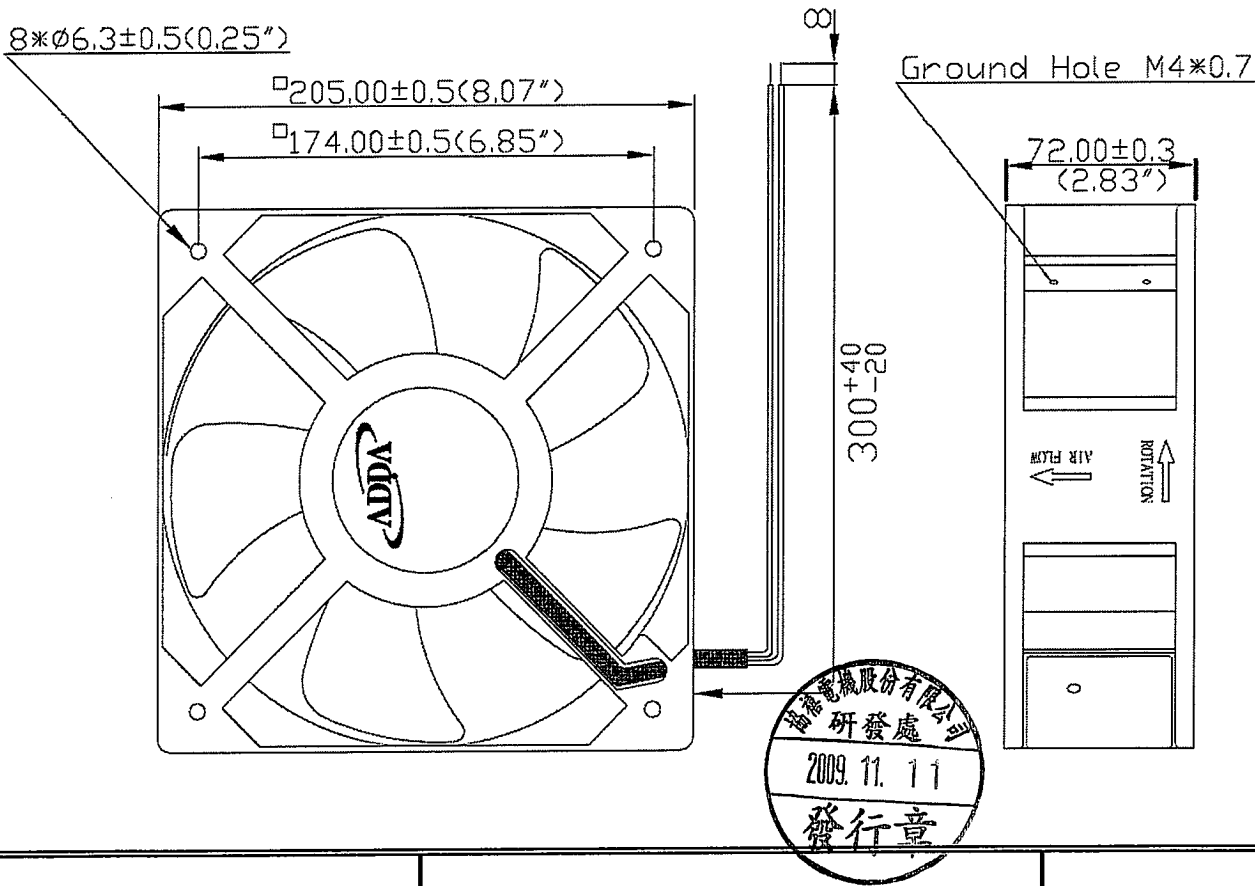
8 · 0 Remark

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 %

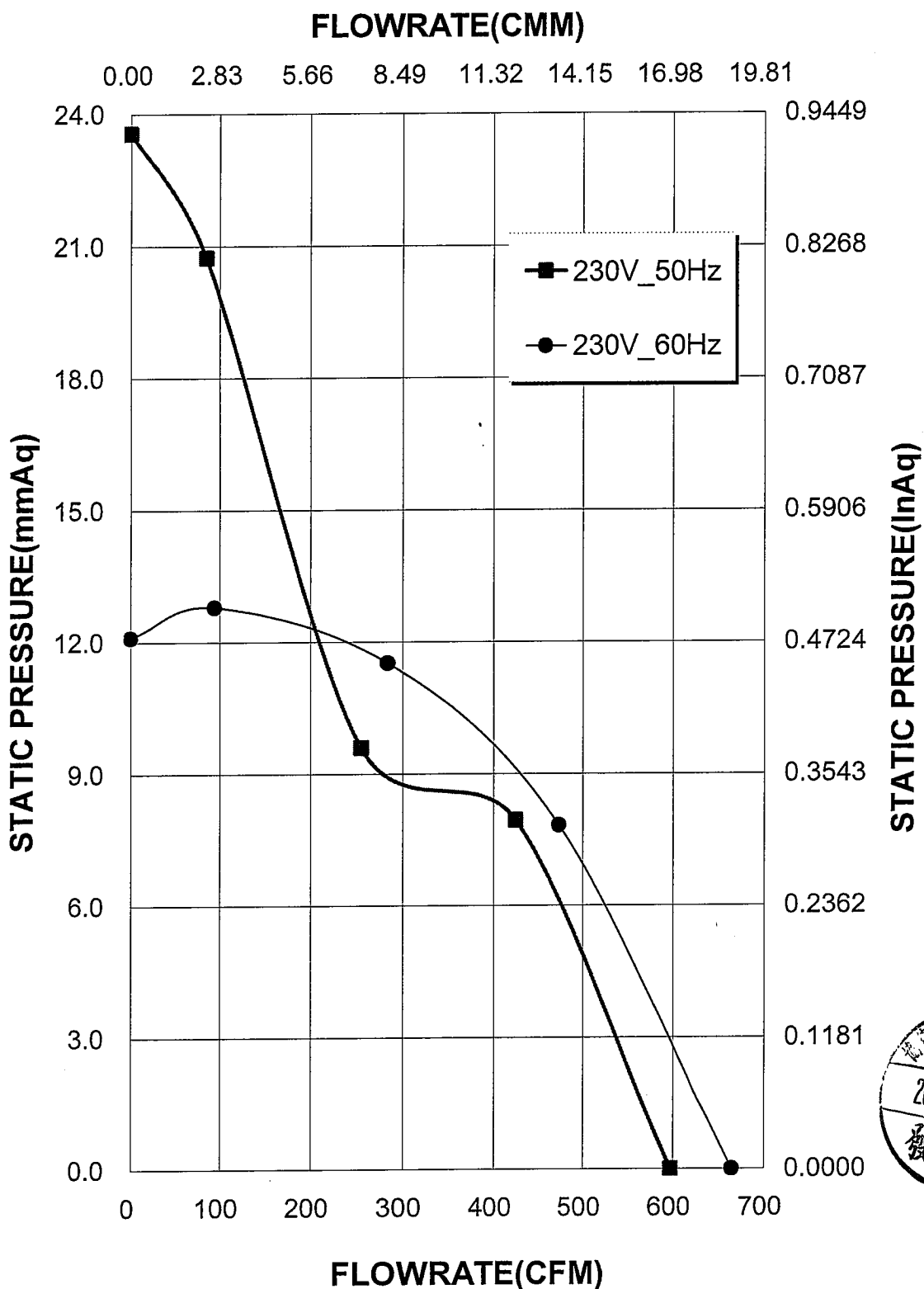
9 · 0 Drawing





MODEL : AK2072HB(AW)

Fan Performance Curve



Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50081257

Blatt Page
0001

Ihr Zeichen Client Reference
12039117/EH

Unser Zeichen Our Reference
ZTW1-IRC- 10002060 004

Ausstellungsdatum
07.04.2006

Date of Issue
(day/mo/yr)

Genehmigungsinhaber License Holder
Adda Corporation
6, East Section, Industry 6 Road
Pingtung City 900
Taiwan

Fertigungsstätte Manufacturing Plant
ZTW1-BIO-10002060 001

Prüfzeichen Test Mark



Geprüft nach Tested acc. to

EN 60335-1:2002+A1+A11
EN 60335-2-80:2003+A1

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Ventilator (AC Fan)

Bezeichnung : AKxxxxyzB
(Type Designation)
xxx steht für : 125, 128, 165, 175, 178, 186, 207
(stands for) 258, 825, 838, 925 oder (or) 938
y steht für : 1 oder (or) 2
(stands for)
z steht für : H, M oder (or) L
(stands for)
Nennspannung : AC 100-120V, 50/60Hz (y=1)
(Rated Voltage) AC 200-240V, 50/60Hz (y=2)
Nennstrom : siehe Anlage
(Rated Current) (see Appendix)

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Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product
fulfills above-mentioned requirements, the production is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland Product Safety GmbH, Am Grauen Stein, D-51105 Köln

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Dipl.-Ing. W. Hsu