

SPECIFICATION FOR APPROVAL

CUSTOMER : AERCO Ltd

CUSTOMER PART NO. : _____

CUSTOMER APPROVED	APPROVED BY 	CHECKED BY 	PREPARED BY 
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MODEL NO. : AA8381HB-AW P.S. _____

DESCRIPTION : _____

SPEC NO. : SA-0120220809011

ISSUE DATE : 2022.08.17

REVISION : A00



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.



ADDA CORPORATION

Revised Record

[illegible]

DATA - SHEET

Engineering

BRUSHLESS AXIAL COOLING FANS

Customer	:	AERCO Ltd.	Ref:	(RoHS)
Adda Model No	:	AA8381HB-AW	P.S:	
Samples attached	:	Piece(s),		
Safety Approval	:	UL,CUL,TUV,CE,UKCA	TUV:EN 60335-1:2012+A11+A13+A14+A2	
			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	
			UKCA: BS EN55014-1:2006+A1+A2	
			BS EN 55014-2:2015	
			BS EN 61000-3-2:2014	
<u>Specifications</u>				
ITEM	SPECIFICATION / CONDITION			
DIMENSIONS	:	80x80x38	mm	
BEARING TYPE	:	BALL		
RATED VOLTAGE	:	115	VAC	
OPERATING VOLTAGE RANGE	:	110	VAC — 120	VAC
OPERATIONG FREQUENCY	:	50	/ 60	Hz
RATED CURRENT	:	0.13	/ 0.10	Amp + 10%
		(Approximately REAL CURRENT 0.14/0.11 Amp)		
RATED POWER	:	15.00	/ 11.50	Watt + 10%
		(Approximately REAL POWER 10.90/8.10 Watt)		
RATED SPEED	:	2400	/ 2800	RPM ± 10%
AIR FLOW	:	24.000	/ 29.600	CFM (min: 21.600 / 26.640 CFM)
AIR FLOW	:	0.680	/ 0.838	CMM (min: 0.612 / 0.754 CMM)
		/ (In free air at rated voltage)		
STATIC AIR PRESSURE	:	0.110	/ 0.166	Inch H ₂ O (min: 0.099 / 0.149 Inch H ₂ O)
STATIC AIR PRESSURE	:	2.794	/ 4.216	mm H ₂ O (min: 2.515 / 3.794 mm H ₂ O)
		/ (In free air at rated voltage)		
NOISE LEVEL	:	31.5	/ 36.2	dB(A) (max.: 35.5 / 40.2 dB(A))
MOTOR PROTECTION	:	Impedance	Protect	
LIFE EXPECTANCY	:	50000	Hours at 40°C	/ 65% RH
NET WEIGHT	:	320	Gram.	(REF)
PACKING	:	60	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. Real Current and Real Power are for reference.				
ADDA CORPORATION		Model No.:	AA8381HB-AW	P.S:
				Page 1/4



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 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 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.

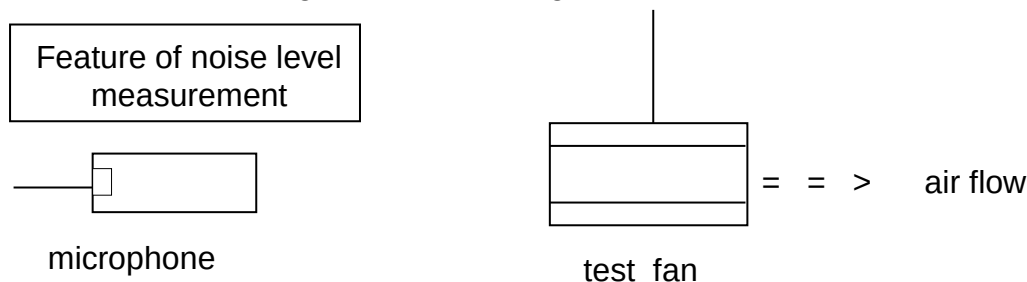
4 · 5 Locked current : Locked current shall be measured with in one minutes or rotor locked , After 30 minutes continuous rotation at rated voltage in clean air.

4 · 6 Air flow & static pressure : The air flow data and static pressures are determined in accordance with AMCA-210 standard in a double-chamber testing with intake-side measurement.



SPECIFICATION

- 4 · 7 Noise level : The measurement of noise level is carried out with reference to ISO7779 in a semi-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.

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.

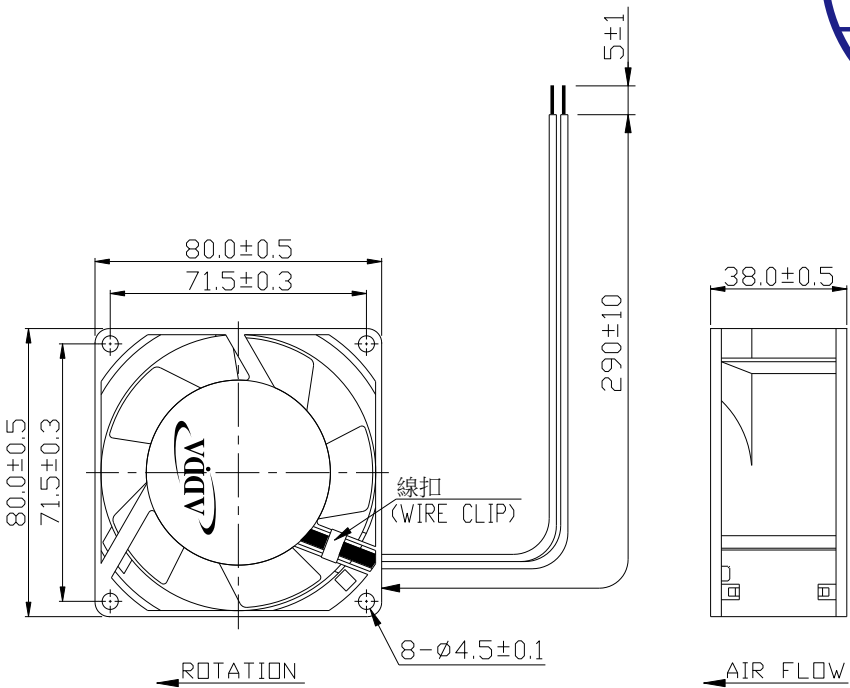
8 · 0 Remark

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



SPECIFICATION

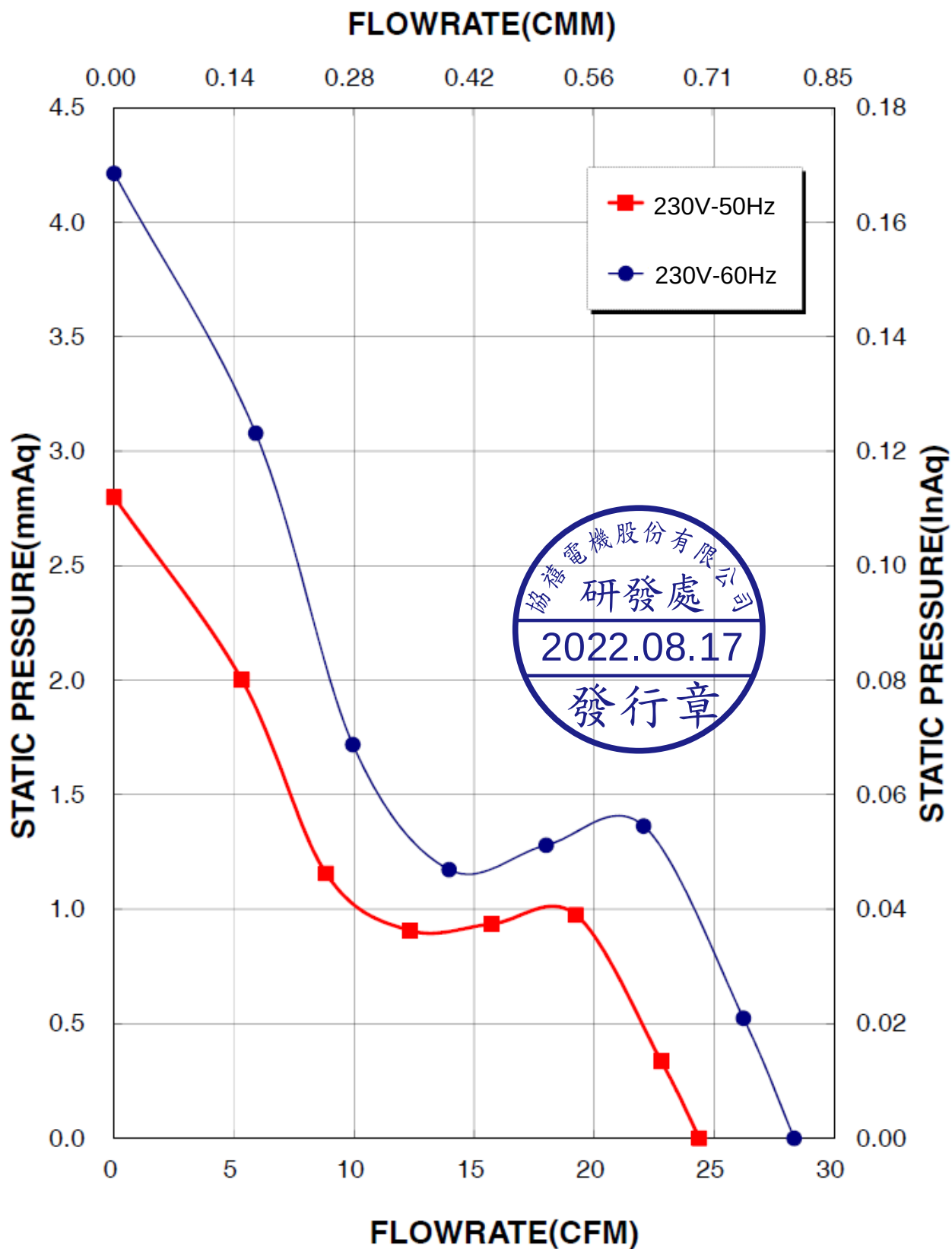
10 · 0 Notes:

- 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 starting from the date of production.





Fan Performance Curve



CERTIFICATE OF COMPLIANCE

Certificate Number E132139
Report Reference E132139-19931020
Issue Date 2020-APRIL-13

Issued to: ADDA CORP
NO 6 E SECTION INDUSTRY 6 RD
PING TUNG
900 TAIWAN



This certificate confirms that representative samples of COMPONENT - FANS, ELECTRIC
See Addendum Page for Models/Product

Have been investigated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

Standard(s) for Safety: U.S. Standard for Electric Fans, UL 507.
Standard for Fans and Ventilators, CSA C22.2 No. 113-10.

Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

Bruce Mahrenholz, Director North American Certification Program
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutus/locations>



CERTIFICATE OF COMPLIANCE

Certificate Number E132139
Report Reference E132139-19931020
Issue Date 2020-APRIL-13

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Component- Electric Fans, Models AA128(A)(B)
(C)-(D), AA838(A)(E)(C)-(F).

(A) may be 1 or 2; (B) may be H, M, L or D;
(C) may be S, X or B; (D) may be AT, PT, AW or PW;
(E) may be H or M; (F) may be AT or AW.



B. Mahlenz

Bruce Mahlenz, Director North American Certification Program
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations>.



Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50039222

Blatt Page
0003

Ihr Zeichen Client Reference
12022300

Unser Zeichen Our Reference
ZTW2-HJL- 11002035 001

Ausstellungsdatum
12.03.2004

Date of Issue
(day/mo/yr)

Genehmigungsinhaber License Holder

Adda Corporation
6, East Section, Industry 6 Road
Pingtung City 900
Taiwan, R.O.C.

Fertigungsstätte Manufacturing Plant

Adda Corporation
6, East Section, Industry 6 Road
Pingtung City 900
Taiwan, R.O.C.

Prüfzeichen Test Mark



Geprüft nach Tested acc. to

EN 60335-1:1994+A1+A2+A11-A16
EN 60335-2-80:1997

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Ventilator (AC Fan)

Wie Blatt (As Page) 01

Ergänzung (Addition)

Bezeichnung : AA838X1X2X3-AX4 series
(Type Designation)

X1 steht für (stands for): 1 oder (or) 2
X2 steht für (stands for): H oder (or) M
X3 steht für (stands for): B, S oder (or) X
X4 steht für (stands for): W oder (or) T

Bemessungsspannung : siehe Anlage
(Rated Voltage) (see Appendix)

Bemessungsstrom : siehe Anlage
(Rated Current) (see Appendix)

Lizenzentgelte - Einheit
License Fee - Unit

ANLAGE (Appendix): 1

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.

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

Tel.: (+49/221)8 06 - 13 71 Fax: (+49/221)8 06 - 39 35 e-mail: Althoff@de.tuv.com

Zertifizierungsstelle

Dipl.-Ing. M. Kröger



Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50039222

Blatt Page
0028

Ihr Zeichen Client Reference	Unser Zeichen Our Reference	Ausstellungsdatum	Date of Issue
12073439	ZTW2-BLL- 11002035 027	02.02.2015	(day/mo/yr)

Genehmigungsinhaber License Holder

Adda Corporation
6, East Section, Industry 6 Road
Pingtung City 900
Taiwan, R.O.C.

Fertigungsstätte Manufacturing Plant

ADDA Electric Machinery Technology
(Kunshan), Co., Ltd.
No. 88, Jiangfeng Road
Zhangpu Town
Kunshan City, Jiangsu Province
P.R. China

Prüfzeichen Test Mark



Geprüft nach Tested acc. to

EN 60335-1:2012+A11
EN 60335-2-80:2003+A1+A2

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Ventilator (AC Fan)

Wie Blatt (As Page) 01

Änderung (Change)

Prüfgrundlage (Test Requirement) : siehe oben
(see above)



ANLAGE (Appendix): 1.14

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.

This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg
Tel.: (+49/221)8 06 - 13 71 e-mail: cert-validity@de.tuv.com
Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety

Dipl.-Ing. M. Kröger

Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50039222

Blatt Page
0032

Ihr Zeichen Client Reference
238038099

Unser Zeichen Our Reference
ZTW2-BLL- 11002035 030

Ausstellungsdatum
30.06.2020

Date of Issue
(day/mo/yr)

Genehmigungsinhaber License Holder

Adda Corporation
6, East Section, Industry 6 Road,
Pingtung City 900
Taiwan, R.O.C.

Fertigungsstätte Manufacturing Plant

ADDA Electric Machinery Technology
(Kunshan), Co., Ltd.
No. 88, Jiangfeng Road
Zhangpu Town
Kunshan City
Jiangsu
P.R. China

Prüfzeichen Test Mark



Geprüft nach Tested acc. to

EN 60335-1:2012+A11+A13+A1+A14+A2
EN 60335-2-80:2003+A1+A2

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Ventilator (AC Fan)

Wie Blatt (As Page) 01

Änderung
(Change)

Prüfgrundlage : siehe oben
(Test Requirement) (see above)



Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.

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TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

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Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety

Zertifizierungsstelle

Dipl.-Ing. M. Kröger