CUSTOMER: **Ropla** **NO. : TC76008(4)**

DISTRIBUTOR:

(PE48AA1)

APPROVE SHEET

[Compliance with RoHS]

PRODUCT : DC BRUSHLESS FAN

USER P/N: _____

Parts No.: KF0615B2UM011-210R

Printed model number on the stick: KF0615B2UM-R

(SIGNATURE)

JAMICON GROUP

KAIMEI ELECTRONIC CORP.

	CHECKER	DESIGNER

CUSTOMER: **Ropla**
DISTRIBUTOR:
(PE48AA1)

NO. : TC76008(4)

APPROVE SHEET

[Compliance with RoHS]

PRODUCT : DC BRUSHLESS FAN

USER P/N: _____

Parts No.: KF0615B2UM011-210R

Printed model number on the stick: KF0615B2UM-R

(SIGNATURE)

JAMICON GROUP
KAIMEI ELECTRONIC CORP.

	CHECKER	DESIGNER
	经理 李竹董	课长 李波

1. MECHANICAL:

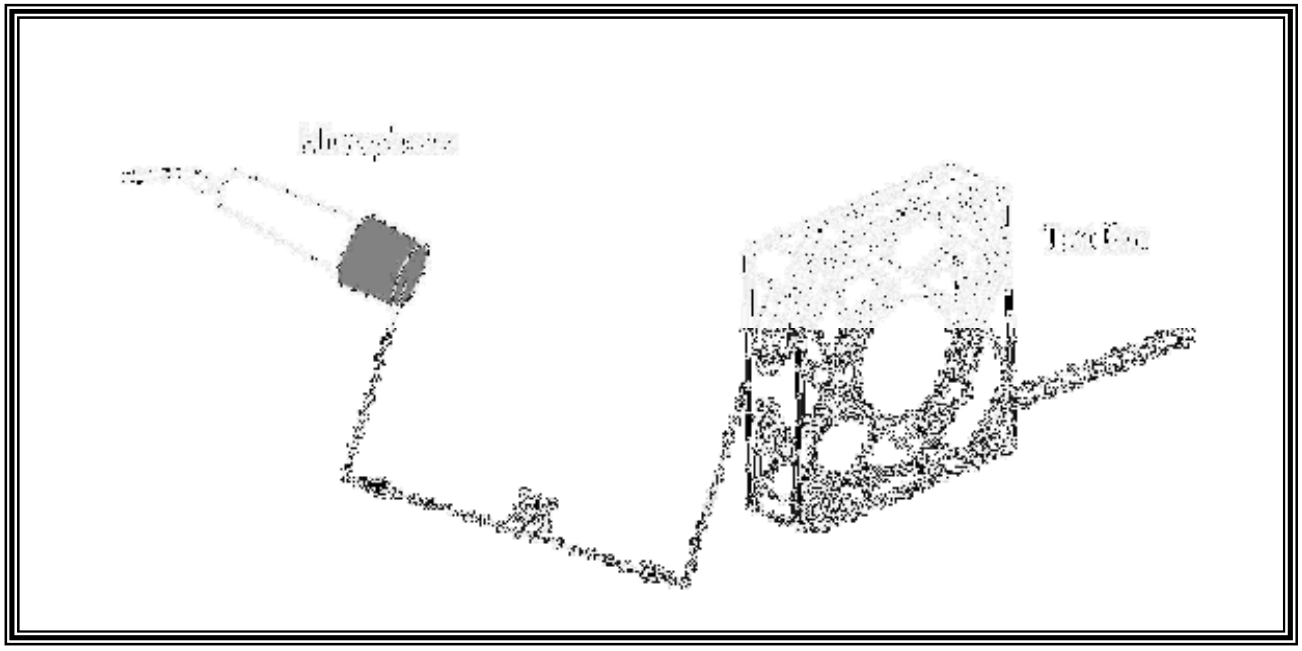
1-01	Dimension	Dimension of fan shall be shown in the outline styling drawing attached.
1-02	Motor	Four-pole motor.
1-03	Frame	Plastic material UL 94V-0 (P.B.T).
1-04	Impeller	Plastic material UL 94V-0 (P.B.T).
1-05	Free drop shock	In minute package condition, the fan should withstand each one drop of three faces from 30cm distance height onto 10 mm thickness of wooden board.

2.ELECTRICAL:

2-01	Rated current	Rated current shall be measured after 30 minutes continuous rotation at rated voltage.
2-02	Start voltage	The voltage that enable to start the fan by sudden switch on.
2-03	Rated Speed	Rated speed shall be measured after 30 minutes continuous rotation at rated voltage.
2-04	Input Power	Input power shall be measured after 30 minutes continuous rotation at rated voltage.
2-05	Lock Current	Locked current shall be measured Within one minute at rotor locked, after 30 minutes continuous rotation at rated voltage in clear air.
2-06	Insulation resistance	More than 10M ohm at 500 V.D.C between lead and housing.
2-07	Dielectric strength	Measured 5 mA(max) trip current at 700 V.A.C for 3 sec. between lead and housing.
2-08	Locked motor protection	Designed to meet UL, CUL and TUV.

3.CHARACTERISTICS:

3-01	Air Flow & Static Pressure	The air flow data and static pressures should be determined in accordance with AMCA standard or DIM 24163 specification in a double- chamber testing with intake-side measurement.
3-02	Noise level	The measurement of noise level is carried out with reference to DIM 45635 in an echoic chamber with the microphone positioned 1 M from the air intake. Testing fan shall be hung in clean air.



4.ENVIRONMENTAL:

4-01	Operating temperature	-10℃ to 70℃ (ordinary humidity)
4-02	Storage Temperature	-40℃ to 70℃ (ordinary humidity)
4-03	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.
4-04	Thermal Shock	After thermal shock test per MIL-STD-202F method 107D, Condition D, The measured data of insulation resistance & dielectric strength should the specification

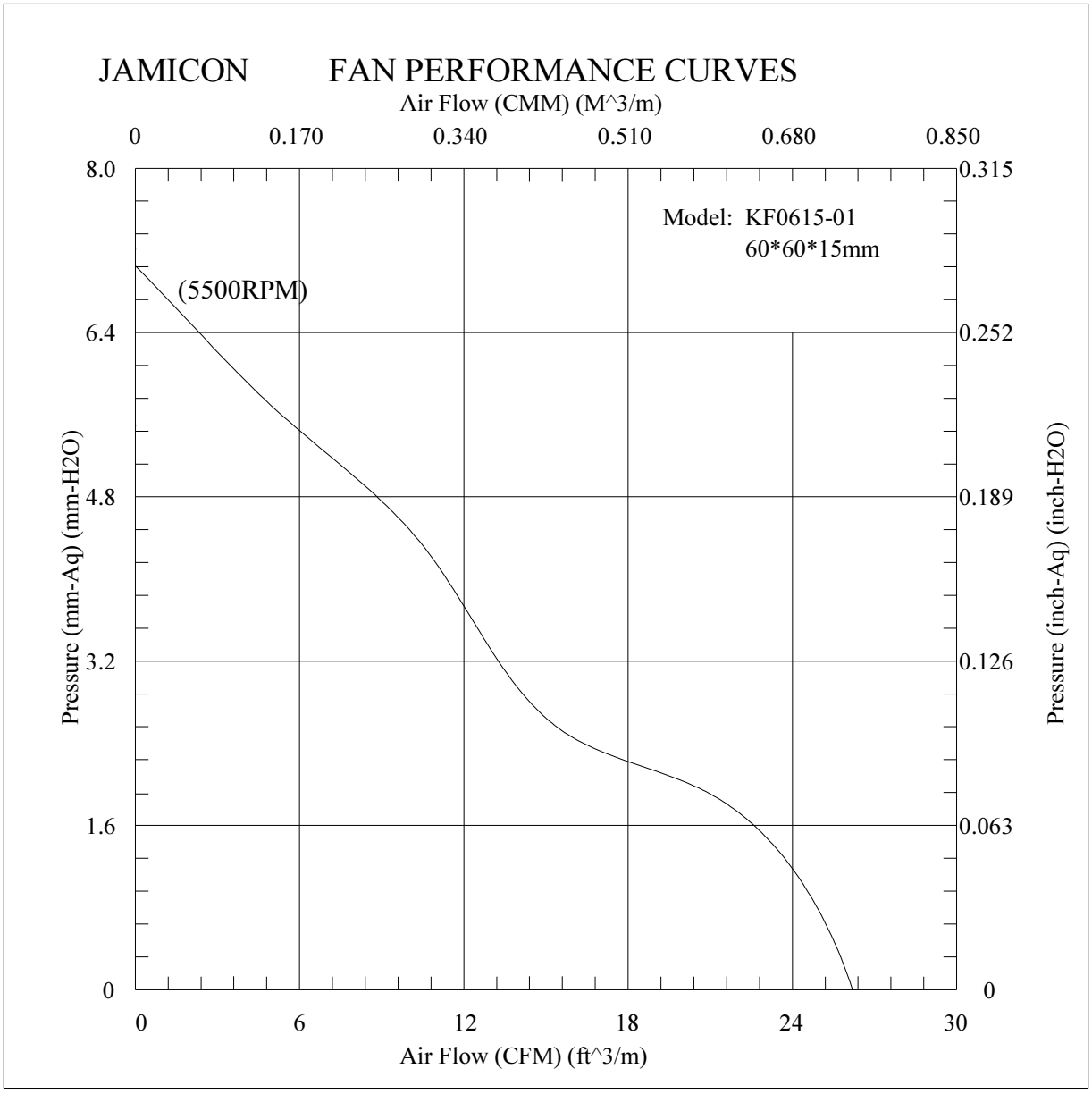
5.DATA-SHEET:
MODEL: KF0615B2UM011-210R
5-1. SPECIFICATION:

NO.	ITEM	SPECIFICATION	UNIT	CONDITION
5-1-01	Dimension	60*60*15	mm	----------
5-1-02	Bearing	Dual Ball	---------	----------
5-1-03	Rated Voltage	24	VDC	----------
5-1-04	Operating Voltage	20.4 ~ 27.6	VDC	----------
5-1-05	Start Voltage	12	VDC	On/off test
5-1-06	Speed	5500	R.P.M	±10%,At rated Voltage
5-1-07	Input Current	0.18	Amp	At rated Voltage
5-1-08	Input Power	4.32	Watt	At rated Voltage
5-1-09	Nominal Power	4.6	Watt	At rated Voltage
5-1-10	Air Flow	26.20	CFM	At 0 Static pressure of rated speed
5-1-11	Static Pressure	0.278	inchH_2O	At 0 air flow of rated speed
5-1-12	Noise	38.5	dBA	At rated speed
5-1-14	Life Expectancy	50,000	Hours	At 25℃&RH65%
5-1-15	Motor protection	Electronic protected		
5-1-16	Polarity protection	It will not damage the fan while reverse input.		
5-1-17	Auto Restart	YES	--------	----------
5-1-18	Speed Signal output	YES(①)	--------	----------
5-1-19	Alarm Signal output	NO	--------	----------
5-1-20	Rotation direction	From the label side	--------	Clockwise
5-1-21	Weight	35	Gram	Per each piece
5-1-22	Safety Certificate	UL,CUL,TUV,CE	--------	----------

5-2. LEAD WIRE:

NO.	ITEM	CONDITION			
5-2-01	AWG NO. &Authorize	26AWG, UL1007			
5-2-02	Color	—	+	Signal	
		Black	Red	White	
5-2-03	Line Length	270±10mm			
5-2-04	Connector	Notes as: Not included in this lead wire.			
5-2-05	Tube	NO			

Note①: Don't direct connect the speed signal output to "+"or "-".


JAMICON FAN PERFORMANCE CURVES
Air Flow (CMM) (M^3/m)
0
0.170
0.340
0.510
0.680
0.850
8.0
6.4
4.8
3.2
1.6
0
0.315
0.252
0.189
0.126
0.063
0
Model: KF0615-01
60*60*15mm
(5500RPM)
Pressure (mm-Aq) (mm-H2O)
Pressure (inch-Aq) (inch-H2O)
0
6
12
18
24
30
Air Flow (CFM) (ft^3/m)

凱美電機股份有限公司

風扇振動噪音性能測試報告

(The Test Report of Fan Vibration and Noise)

風扇型號(Sample Type) : **KF0615B2U-01**

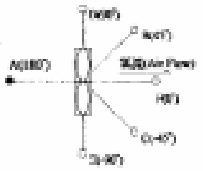
基本規格(Properties) : DC 24V 9葉 4極 5500RPM

測試日期(Test Date) : 2006/1/25 AM 10:37:18

測試編號(Test No.) : (1)

測試條件(Test Conditions)

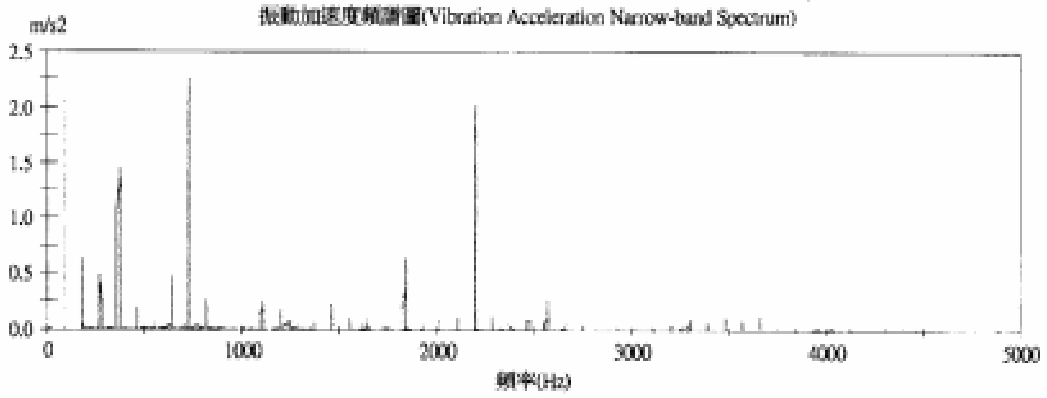
輸入電壓(Input Voltage) :	24 V
量測時間(Measuring Time) :	20 sec
麥克風距離(Mic. Distance) :	100 cm
麥克風角度(Mic. Angle) :	180°
頻域加權(Freq. Weighting) :	A
時域加權(Time Weighting) :	SLOW
背景噪音(Background Noise) :	15.0 dB(A)
溫度(Temperature) :	℃
相對濕度(Relative Humidity) :	%



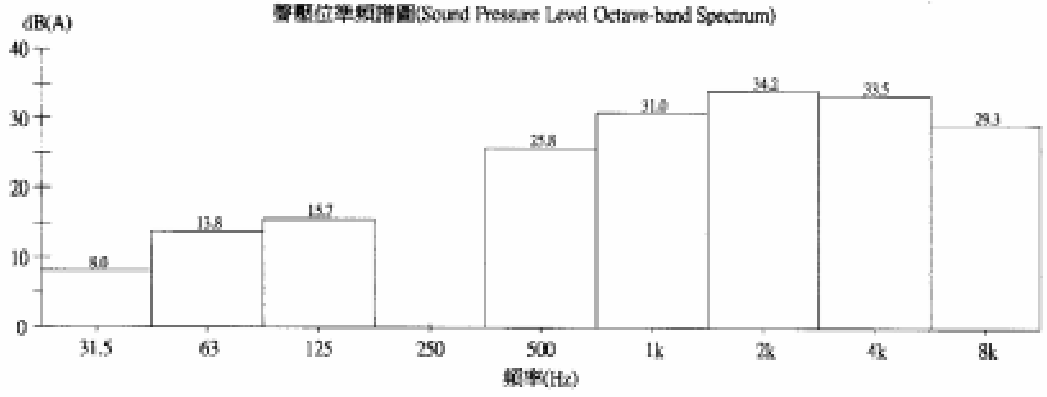
測試結果(Test Results)

電壓(Passing Voltage) :	
電流(Electric Current) :	
消耗功率(Power Dissipation) :	
轉速(Rotation Speed) :	5508 RPM
振動量(Vibration Level) (依據 ISO 2372)	
振動速度(Vib. Velocity) :	3.7 mm/sec RMS
均能聲壓位準(Time-averaged SPL, Leq) (依據 CNS 8753)	
量測點(At Meas. Point) :	38.5 dB(A)
1 米處(At 1m Point) :	38.5 dB(A)
最大聲壓位準(MaxL) :	38.8 dB(A)
最小聲壓位準(MinL) :	37.2 dB(A)

振動加速度頻譜圖(Vibration Acceleration Narrow-band Spectrum)



聲壓位準頻譜圖(Sound Pressure Level Octave-band Spectrum)

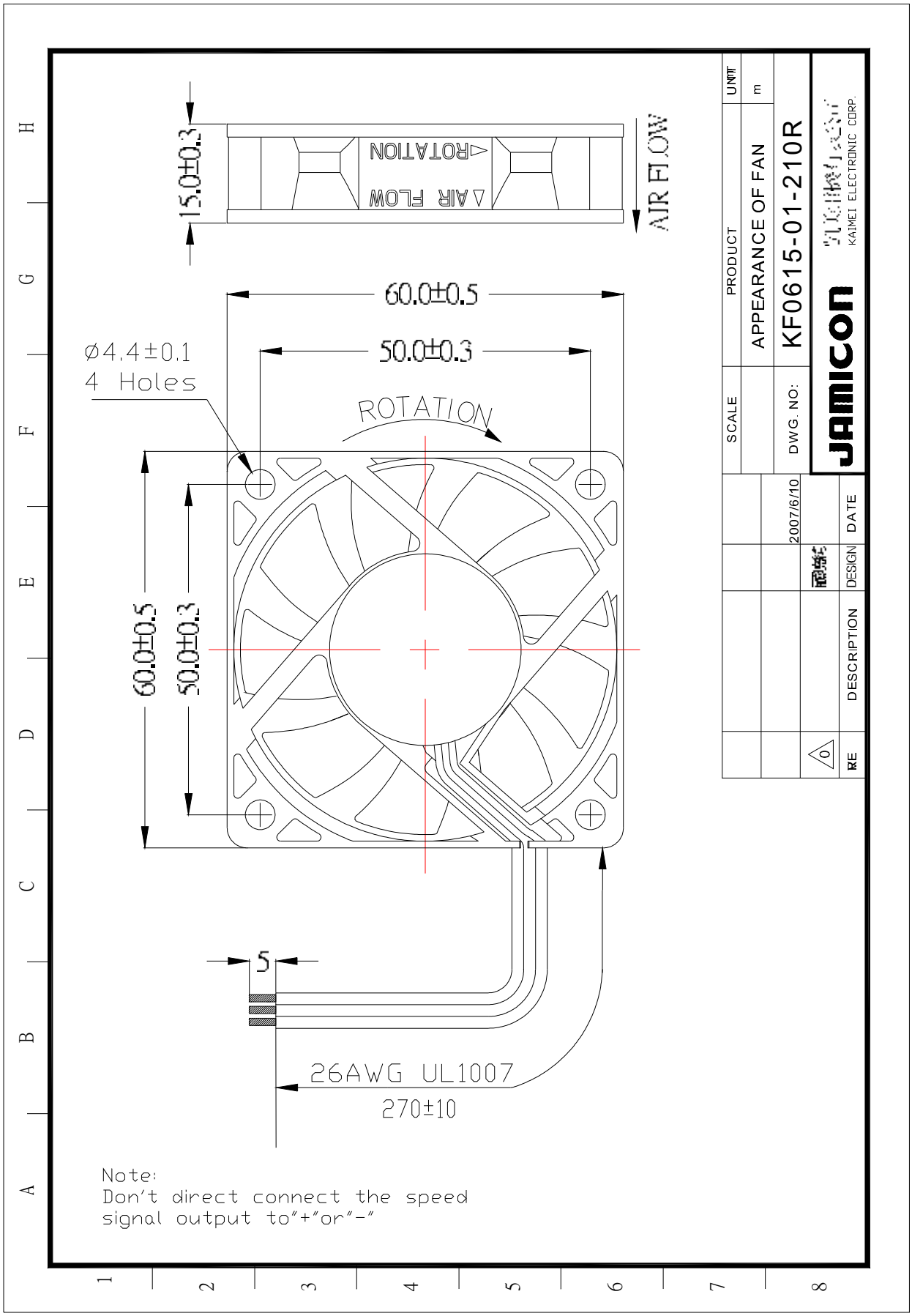


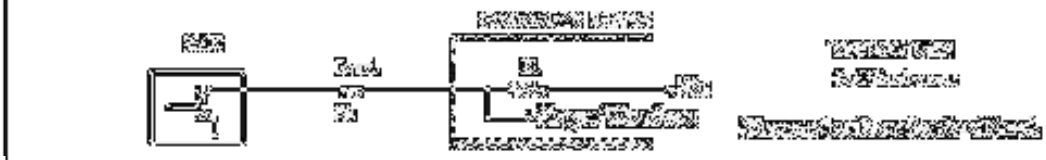
審核人員 : _____

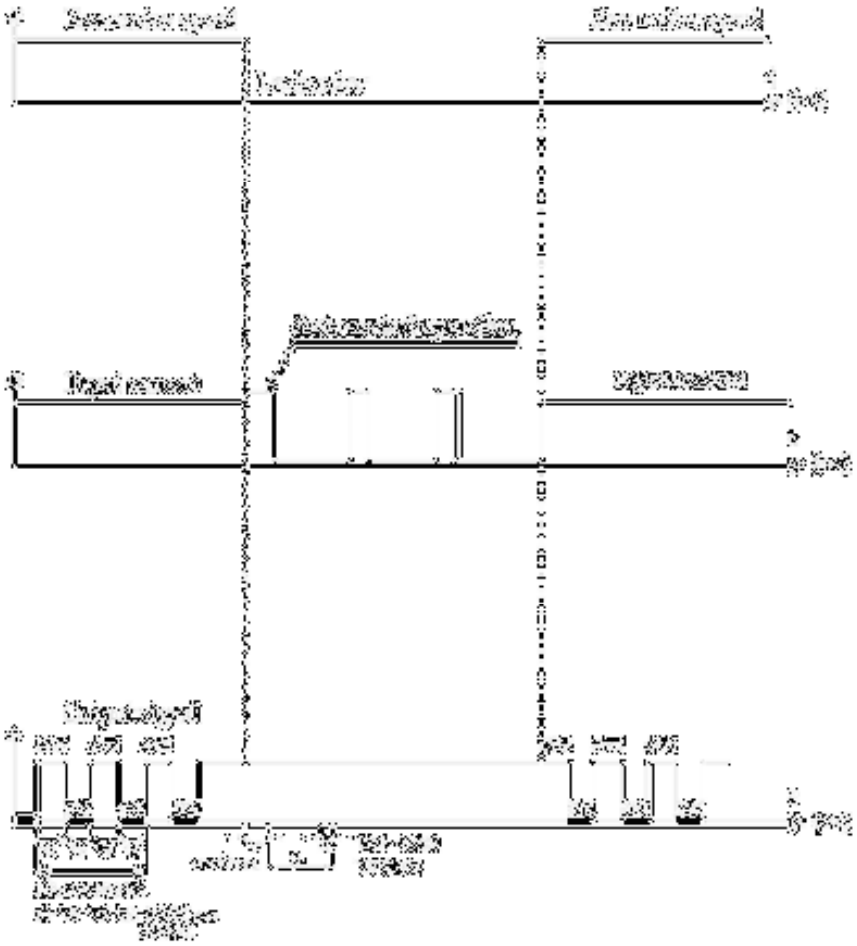
操作員 : 簽章 : _____

系統開發(Developer) : 工業技術研究院 機械工業研究所(MIRL/ITRI)

2006/1/25 PM 01:01:13 列印


15.0±0.3
AIR FLOW
AIR FLOW
ROTATION
60.0±0.5
50.0±0.3
ø4.4±0.1
4 Holes
ROTATION
60.0±0.5
50.0±0.3
5
26AWG UL1007
270±10
Note:
Don't direct connect the speed
signal output to"+"or"-"
UNIT
m
PRODUCT
APPEARANCE OF FAN
SCALE
DWG. NO:
KF0615-01-210R
JAMICON
KAIMEI ELECTRONIC CORP.
RE
DESCRIPTION
DESIGN
DATE
2007/6/10





GPWV2.E156480
Fans, Electric - Component

[illegible]

Fans, Electric - Component

[illegible]

KAIMEI ELECTRONIC CORP E156480

[illegible]

AC fans, [illegible]

[illegible]

[illegible]

[illegible]

DC fans [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

GPWV8.E156480
Fans, Electric Certified for Canada - Component

Fans, Electric Certified for Canada - Component

KAIMEI ELECTRONIC CORP

AC fans

DC fans

AC component fans.

DC Component fans.

AC component fans.

ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Product Service

CERTIFICATE

No. B 06 06 38493 016

Holder of Certificate: **Kaimei Electronic Corp.**
S1,13F,Sec.1,Hsin-Tai-Wu Rd.,
Hsichih, Taipei Hsien
TAIWAN

Certification Mark:

Product: **Component fan**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. See also notes overleaf.

Test report no.: 012104128101

Date, 2006-06-30

Page 1 of 3

TÜV SÜD Product Service GmbH · Zertifizierstelle · Ridlerstrasse 65 · 80339 München · Germany

Attachment to the Certificate **No. B 06 06 38493 016**

Taiwan

The input ratings description of the models are as below:

Model-S	DC Ratings	Model-H	DC Ratings
KF0510S1Lxyz	12Vdc, 0.8W	KF0510S1Lxyz	5Vdc, 0.7W
KF0510S1Mxyz	12Vdc, 1.0W	KF0510S3Mxyz	5Vdc, 1.1W
KF0510S1Hxyz	12Vdc, 1.9W	KF0510S5Hxyz	5Vdc, 1.1W
KF0510C1Lxyz	12Vdc, 0.8W	KF0510B5Lxyz	5Vdc, 0.6W
KF0510C1Mxyz	12Vdc, 1.0W	KF0510B5Mxyz	5Vdc, 0.9W
KF0510C1Hxyz	12Vdc, 1.6W	KF0510B5Hxyz	5Vdc, 1.1W
KF0510B1Lxyz	12Vdc, 0.7W	KF0510C5Lxyz	5Vdc, 0.6W
KF0510B1Mxyz	12Vdc, 0.8W	KF0510C5Mxyz	5Vdc, 0.9W
KF0510B1Hxyz	12Vdc, 1.6W	KF0510C5Hxyz	5Vdc, 1.1W
KF0510H1Lxyz	12Vdc, 0.7W	KF0510H5Lxyz	5Vdc, 0.6W
KF0510H1Mxyz	12Vdc, 0.8W	KF0510H5Mxyz	5Vdc, 0.9W
KF0510H1Hxyz	12Vdc, 1.6W	KF0510H5Hxyz	5Vdc, 1.1W
KF0510F1Lxyz	12Vdc, 0.7W	KF0510F5Lxyz	5Vdc, 0.6W
KF0510F1Mxyz	12Vdc, 0.8W	KF0510F5Mxyz	5Vdc, 0.9W
KF0510F1Hxyz	12Vdc, 1.6W	KF0510F5Hxyz	5Vdc, 1.1W
KF0510b2Lxyz	24Vdc, 1.3W	KF0615b5Vxyz	5Vdc, 0.6W
KF0510b2Mxyz	24Vdc, 1.5W	KF0615b5Exyz	5Vdc, 0.9W
KF0510b2Hxyz	24Vdc, 1.7W	KF0615b5Lxyz	5Vdc, 1.3W
		KF0615b5Mxyz	5Vdc, 2.4W
KF0615b1Vxyz	12Vdc, 0.8W		
KF0615b1Exyz	12Vdc, 1.0W	KF0615b2Vxyz	24Vdc, 1.2W
KF0615b1Lxyz	12Vdc, 1.3W	KF0615b2Exyz	24Vdc, 1.4W
KF0615b1Mxyz	12Vdc, 1.9W	KF0615b2Lxyz	24Vdc, 1.7W
KF0615b1Hxyz	12Vdc, 2.3W	KF0615b2Mxyz	24Vdc, 2.3W
KF0615b1Sxyz	12Vdc, 2.5W	KF0615b2Hxyz	24Vdc, 3.0W
KF0615b1Uxyz	12Vdc, 3.1W	KF0615b2Sxyz	24Vdc, 3.2W
		KF0615b2Uxyz	24Vdc, 4.6W

Differences

KF	05	10	S	1	L	xyz
A	B	C	D	E	F	G

A – Series Number
"KF" : series name

B – Frame dimension
"05" : 50 x 50 mm
"06" : 60 x 60 mm

C – Frame thickness
"10" : 10 mm
"15" : 15 mm

D – Bearing type
It can be S, B, C, H or F
"S" : Sleeve bearing
"B" : Dual Ball bearing
"C" : Ball + Sleeve bearing
"H" : High temperature and life sleeve bearing
"F" : Free Wheel Bearing

E – Input voltage
It can be 5, 1 or 2
"5" : 5 Vdc
"1" : 12 Vdc
"2" : 24 Vdc

F – Fan speed
It can be S, H, M, L or E
"U" : Ultra High Speed
"S" : Super High speed
"H" : High speed
"M" : Middle speed
"L" : Low speed
"E" : Extra Low speed
"V" : Very Low Speed

G – Marketing Code
xyz can be three alphanumeric code combination of blank, "-", 0-9 and A-Z

Date: 2006-06-30

Testing Laboratory

Bill Lin

Bill Lin

CE

SPORTON LAB.

Certificate No: EC2D2008-01

CERTIFICATE

EQUIPMENT: DC FAN
MODEL NO. : JFX1X2X3X4X5X6X7X8, KFX1X2X3X4X5X6X7X8
APPLICANT : Kaimei Electronic Corp.
13th Fl., No. 81, Sec. 1, Hsin Tai Wu Road, Hsichih,
Taipei, Taiwan, R.O.C.

SPORTON LAB.

I HEREBY **CERTIFY THAT:**

THE MEASUREMENTS SHOWN IN THIS TEST REPORT WERE MADE IN ACCORDANCE WITH THE PROCEDURES GIVEN IN **EUROPEAN COUNCIL DIRECTIVE 89/336/EEC.** THE EQUIPMENT WAS **PASSED** THE TEST PERFORMED ACCORDING TO **EUROPEAN STANDARD**
EN 55022:1998/A1:2000/A2:2003 Class B,
EN 61000-3-2:2000/A1:2001, EN 61000-3-3:1995/A1:2001 and
EN 55024:1998/A1:2001/A2:2003 (IEC 61000-4-2:1995/A2:2000,
IEC 61000-4-3:2002, IEC 61000-4-4:1995/A2:2001,
IEC 61000-4-5:1995/A1:2000, IEC 61000-4-6:1996/A1:2000,
IEC 61000-4-8:1993/A1:2000, IEC 61000-4-11:1994/A1:2000). THE TEST WAS CARRIED OUT ON **Jan. 11, 2007** AT **SPORTON INTERNATIONAL INC.** LAB.

Castries Huang

Castries Huang
Supervisor

SPORTON INTERNATIONAL INC. 6F, No.106, Sec.1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien , Taiwan, R.O.C.

ACCORDING TO **EUROPEAN STANDARD**
EN 55022:1998/A1:2000/A2:2003 Class B,
EN 61000-3-2:2000/A1:2001, EN 61000-3-3:1995/A1:2001 and
EN 55024:1998/A1:2001/A2:2003 (IEC 61000-4-2:1995/A2:2000,
IEC 61000-4-3:2002, IEC 61000-4-4:1995/A2:2001,
IEC 61000-4-5:1995/A1:2000, IEC 61000-4-6:1996/A1:2000,
IEC 61000-4-8:1993/A1:2000, IEC 61000-4-11:1994/A1:2000).

More detail information of Model NO.:

X1 means for Width x Width = 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B, 0C, 12, 15
Where 02=25x25, 03=30x30, 04=40x40, 05=50x50, 06=60x60, 07=70x70, 08=80x80, 09=92x92, 0A=20x20, 0B=35x35, 0C=45X45, 12=120x120, 17= ϕ 172 or 172x150 mm

X2 means for thickness = 06, 07, 09, 10, 12, 15, 20, 25 or 25.4, 32, 38, 51
Where 06= 6, 07=7, 09=9 or 10, 10= 10, 12=12, 15=15, 20=20, 25= 25 or 25.4, 32=32, 38=38, 51=51 mm

Where the cross list for X1&X2 as the following:
0A10, 0206, 0207, 0210, 0306, 0307, 0310, 0B06, 0B07, 0B10, 0406, 0407, 0409, 0410, 0412, 0415, 0420, 0425, 0C07, 0C10, 0509, 0510, 0512, 0515, 0520, 0525, 0610, 0615, 0620, 0625, 0638, 0710, 0715, 0720, 0725, 0815, 0820, 0825, 0832, 0838, 0925, 0932, 0938, 1225, 1232, 1238, 1738, 1751

X3 means for bearing type = S, B, H, C
Where S=Sleeve, B= 2 Ball, C= 1Ball or 1Ball+Sleeve

X4 means for rated voltage =1 (12V), 2 (24V), 3 (32V), 4(48V), 5(5V), A(3V), B (25.5V), C(42V), D(18V), E(15V)

X5 means for rotation speed =T, U, S, H, M, L, E, V or 7, 6, 5, 4, 3, 2, 1, 0.
Where T or 7 means speed higher than U or 6 speed code,
U or 6 means speed higher than S or 5 speed code,
S or 5 means speed higher than H or 4 speed code,
H or 4 means Standard-high speed code,
M or 3 means Middle speed code,,
L or 2 means Low speed code,
E or 1 means speed lower than L speed code,
V or 0 means speed lower than E speed code.

X6, X7, X8 means the internal code to distinguish the wiring, frame and blade type or the dimension of the screw hole and or the color of the above material and also for special printing characters on the label requested by the client.

Castries Huang Jan. 18, 2008
Castries Huang
Supervisor