1. SCOPE

THIS SPECIFICATION DEFINES THE ELECTRICAL AND MECHANICAL CHARACTERISTICS OF THE DC BRUSHLESS AXIAL FAN AND BLOWER FAN.

2. CHARACTERS

No.	ITEM	SPECIFICATION			
2 - 1	Rated Voltage	12.0 V DC			
2 - 2	Starting Voltage	N/A			
2 - 3	Operating Voltage Range	10.8V ~ 13.2 V DC			
2 - 4	Rated Current	Max. 1.50 A Duty cycle =100%			
2 - 5	Rated Power	Max. 18.0 W Duty cycle =100%			
2 - 6	Start Peak Current	N/A In Free Air & At 1 2 V DC			
2 - 7	UL Current On Label	1.50 A			
		(INLET) 8000±10% RPM Duty cycle =100%			
2 - 8	Rated Speed	(OUTLET) 6000±10% RPM Duty cycle =100%			
2-0	Rated Speed	(Testing Speed after Continuous 3 Minutes Operation at			
		Ambient Temperature of 25°C)			
2 - 9	Air Flow	83.39 CFM (Min. 75.05 CFM)			
2-7	(At Zero Static Pressure)	2.36 m ³ /min (Min. 2.13 m ³ /min) Duty cycle = 100%			
2 - 10	Static Pressure	55.95 mm-H ₂ O (Min.45.32 mm-H ₂ O)			
2-10	(At Zero Air Flow)	2.20 inch- H_2O (Min. 1.78 inch- H_2O) Duty cycle =100%			
2 - 11	Sound Pressure Level	63.0 dB(A) [Max. 66.0 dB(A)]			
2 - 12	Product Type	☑ RoHS □ HF			
2 - 13	Life Expectancy	70000 HRS at 40°C, 65% humidity and 90% CL.			
2 - 14	Bearing Type	✓ Two Ball ☐ EBR ☐ Ball And Sleeve			
		✓ Locked Protection ☐ Impedance Protection			
2 15		☐ Hot Swap Protection ☐ Current-Limit			
2 - 15	Protection & Function	✓ Polarity Protection ☐ E-Brake			
		✓ Auto-Restart			
2 - 16	Pole	☐ 4 Pole ☐ 8 Pole ☑ Three Phase			
2 - 17	Signal Output	Frequency Generator (FG)			
2 - 18	Safety Approval	☑ CE ☑ TUV ☑ UL ☑ UKCA			

3. MECHANICAL

No.	ITEM	SPECIFICATION	
3 - 1	DIMENSIONS SEE DIMENSIONS DRAWING		
3 - 2	FRAME	☑ PBT (BLACK) PLASTIC (UL 94V-0)	
		☐ PC PLASTIC (UL 94V-2)	
3 - 3	IMPELLER	☑ PBT (BLACK) PLASTIC (UL 94V-0)	
		□ PC PLASTIC (UL 94V-2)	
3 - 4	WEIGHT	450 GRAMS (REF)	

4. ENVIRONMENTAL

4 - 1	OPERATING TEMPERATURE —	10°C ~ 70°C
4 - 2	STORAGE TEMPERATURE —	40°C ~ 75°C
4 - 3	OPERATING HUMIDITY —	- 5 TO 90% RH
4 - 4	STORAGE HUMIDITY —	- 5 TO 95% RH
4 - 5	DIRECTION OF ROTATION —	- 🗆 CLOCKWISE
		☑ COUNTER-CLOCKWISE
		VIEWED FROM FRONT OF FAN BLADE.
4 - 6	DIELECTRIC STRENGTH —	- 5 mA MAX. AT 500 V AC 60Hz ONE MINUTE [BETWEEN FRAME AND (+)TERMINAL]

4 - 7	INSULATION STRENGTH —	——— 10MEG OHM MIN.AT 500 VDC [BETWEEN FRAME AND (+)TERMINAL]		
4 - 8	DROP TEST —	— IN MINIMUM PACKAGING CONDITION, FAN WITHSTAND EACH ONEDROP OF THREE		
		FACES FROM 30CM DE HEIGHT ONTO 10MM OF WOODEN BOARD		
4 - 9	VIBRATION TEST —	— TEMPERATURE: 25°C ORIENTATION: X, Y, Z POWER: NON-OPERATING		
		VIBRATION LEVEL: 0 gRMS = 3.2 FREQUENCY(Hz) P 10 20 40 800		
		1000 TEST TIME: 2 HRS FOR	0.002	

DIRECTION

DISTANCE OF ONE METER FROM

THE FAN INTAKE.

AWA14411

NOISE TESTER MODEL:

4-10 SHOCK TEST — - TEMPERATURE: 25 °C ORIENTATION: X, Y, Z **POWER: NON-OPERATING** ACCELERATION: 50G MAX. PULSE: 11 ms HALF-SINE WAVE NUMBER OF SHOCKS: 5 SHOCKS FOR EACH DIRECTION 4-11 NOISE TEST — MEASURED IN A SEMI-ANECHOIC CHAMBER DC FAN WITH BACKGROUND NOISE AIR FLOW MICROPHONE LEVEL BELOW 15 dB(A). THE FAN IS RUNNING IN FREE AIR WITH THE MICROPHONE AT A **1M**

5. NOTES

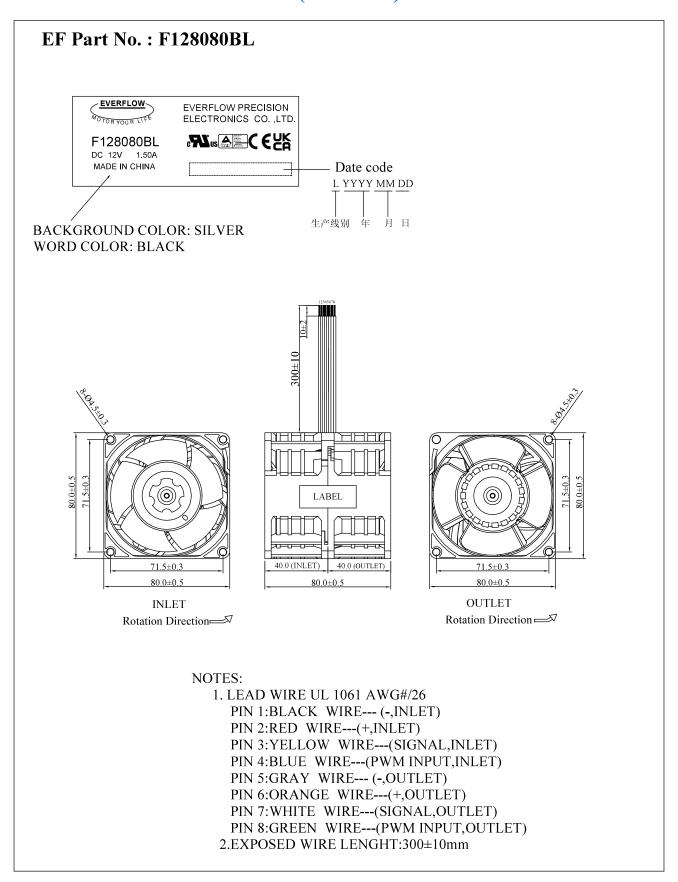
- 5 1 EVERFLOW SHALL NOT GUARANTEE THE PERFORMANCE OF THE PRODUCTS
 IF THE APPLICATION CONDITION FALLS OUTSIDE THE PARAMETERS SET FOR
 THE SPECIFICATION . A WRITTEN REQUEST SHOULD BE SUBMITTED TO
 EVERFLOW PRIOR TO APPROVAL IF DEVIATION FROM THIS SPECIFICATION IS
 REQUIRED.
- 5 2 THE ABOVE STANDARD SHALL BE THE SPECIFIED VALUE AT NORMAL TEMPERATURE(25 °C) AND NORMAL HUMIDITY(60~65%) UNLESS OTHERWISE NOTED.
- 5 3 IT IS VERY IMPORTANT TO ESTABLISH THE CORRECT POLARITY, POSTIVE(+)
 AND NEGATIVE(-), BEFORE CONNECTING THE FAN TO THE POWER SOURCE.

 DAMAGE MAY BE CAUSED TO THE FANS IF CONNECTION IS WITH REVERSE
 POLARITY. THERE IS NO FOOLPROOF METHOD TO PROTECT AGAINST SUCH
 ERROR SPECIFICALLY MENTIONED IN THIS SPEC.
- 5 4 PLEASE EXERCISE CAUTION WHEN MOUNTING THE FAN, AS INCORRECT INSTALLATION MAY RESULT IN EXCESSIVE RESONANCE, VIBRATION, SUBSEQUENT NOISE, AND EVEN DAMAGED SCREW HOLES.
- 5 5 PLEASE EXERCISE CAUTION WHEN HANDLING FANS. DAMAGE MAY BE CAUSED IF PRESSURE IS APPLIED TO THE IMPELLER, OR THE FANS ARE HANDLED BY THE LEAD WIRES OR THE FAN WAS HARD-DROPPED TO THE PRODUCTION FLOOR.
- 5 6 ANY REVISIONS ON THE SPECIFICATION SHALL BE DONE BASED ON MUTUAL DISCUSSION AND AGREEMENT.

- 5 7 PLEASE ENSURE THAT ALL THE FANS ARE STORED ACCORDING TO THE SPECIFIED STORAGE TEMPERATURE LIMITS. DO NOT STORE FANS IN A HIGH HUMIDITY ENVIRONMENT. WE HIGHLY RECOMMEND CONDUCTING PERFORMANCE TESTING BEFORE SHIPPING IF THE FANS HAVE BEEN STORED OVER SIX MONTHS.
- 5 8 NOT ALL FANS ARE PROVIDED WITH THE LOCK ROTOR PROTECTION
 FEATURE. IF YOU IMPAIR THE ROTATION OF THE FANS THAT DO NOT HAVE
 THIS FUNCTION, THE PERFORMANCE OF THOSE FANS SHALL LEAD TO
 FAILURE.
- 5 9 EVERFLOW FANS WITHOUT SPECIAL PROTECTION ARE NOT SUITABLE
 WHERE ANY CORROSIVE FLUIDS ARE INTRODUCED TO THEIR ENVIRONMENT.
- 5 10 IT IS IMPORTANT TO CONSIDER SAFETY WHEN TESTING THE FANS. A
 SUITABLE FAN GUARD SHOULD BE FITTED TO THE FAN TO GUARD AGAINST
 ANY POTENTIAL PERSONAL INJURY.
- 5 11 ALL THE FANS SHALL MEET THE QUALITY INSPECTION UNDER SAMPLING PLAN MIL-STD-105E AS FOLLOWS WITH EXCEPTIONS PERTAINING TO CERTAIN SPECIAL DESIGNS. THERE IS NO GUARANTEE THAT THE PRODUCTS SHALL BE FREE FROM SAFETY PROBLEMS OR FAILURES CAUSED BY DISRUPTION DUE TO DUST, SUBMERSION INTO WATER OR ENCROACHMENT BY INSECTS INTO THE HUB.
- 5 12 ANY ITEM WHICH MAYBE NEEDED TO ADD INTO SPECIFICATION SHALL BE DETERMIND BY CUSTOMER'S PRIOR WRITTEN REQUEST. IF NO SUCH REQUEST IS MADE, FAN SHALL BE BASED ON OUR STANDARD SPECIFICATION.

- 5 13 CUSTOMER SHALL CONFIRM THE COMPATIBILITY AND RELIABILITY OF THE FAN IN THE ACTUAL SETUP OR UNIT APPLICATION. THIS INCLUDES CONFIRMATION ON SET OR UNIT LIFE, ELECTRICAL NOISE, MECHANICAL NOISE, VIBRATION, STATIC ELECTRICITY, ELECTRIC POWER NOISE, DRIFT, ELECTRIC RESONANCE BETWEEN MOTOR AND CONTROL CIRCUIT, MECHANICAL RESONANCE BETWEEN MOTOR AND CHASSIS, IRREGULAR MOVEMENT OF SET DUE TO MOTOR NOISE, IRREGULAR MOVEMENT OF SET IN STRONG ELECTROMAGNETIC FIELD, POTENTIAL DAMAGE CAUSED BY LIGHTNING SURGE AND EARTHING METHOD ETC.
- 5 14 IF ANY ISSUE RELATING TO FAN OCCURS, BOTH PARTIES SHALL DISCUSS ON THIS SPECIFICATION, PROVIDED HOWEVER, THAT OUR GUARANTEE IS ONLY LIMITED TO FANS.
- 5 15 PLEASE BE CERTAIN TO CONNECT AN "4.7 μ F OR GREATER" CAPACITOR TO THE FAN EXTERNALLY WHEN THE APPLICATION CALLS FOR USING MULTIPLE FANS IN PARALLEL TO AVOID ANY UNSTABLE POWER.

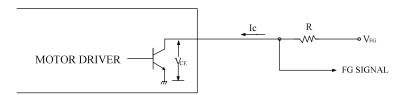
6. DIMENSIONS DRAWING (Unit: mm)



7. FG CHARACTERISTICS & DEFINITION

• FREQUENCY GENERATOR(FG) SIGNAL

SCHEMATIC:



CAUTION:

PLEASE BE CAREFUL THAT REVOLUTION SIGNAL LEAD WIRE SHOULD NOT DIRECTLY HAVE ANY VOLTAGE APPLIED.(IT WOULD DAMAGE INNER CIRCUIT)

SIGNAL SPECIFICATION

OUTPUT TYPE: OPEN COLLECTOR

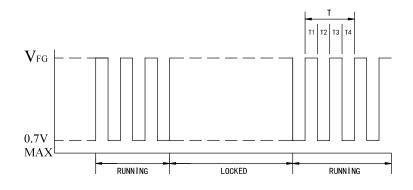
 V_{FG} MAXIMUM VOLTAGE = 5.5 V

IC MAXIMUM CURRENT = 5 mA

LOW LEVEL VOLTAGE = 0.7 V MAX

 $R \geqslant V_{FG} / I_{C}$, WHEN $V_{FG} = 3.3 \text{ V}$, WE RECOMMEND $R = 10 \text{ k}\Omega$

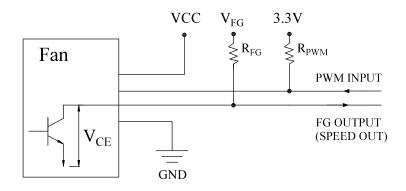
FREQUENCY GENERATOR WAVEFORM



T = T1 + T2 + T3 + T4 = 60/N Sec, WHERE N REPRESENTS RPM

8. PWM CHARACTERISTICS & DEFINITION

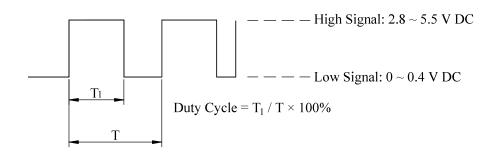
• PWM CIRUIT (FOR REFERENCE)



WHEN $V_{PWM} = 3.3 \text{ V}$, WE RECOMMEND $R_{PWM} = 1 \sim 10 \text{ k}\Omega$

PWM CONTROL SIGNAL INPUT

SIGNAL VOTAGE RANGE: DC 0V ~ 5.5V



- 1. THE FREQUENCY OF PWM SIGNAL SHALL BE ABLE TO ACCEPT 21KHZ-28KHZ.
- 2. AT 100% DUTY CYCLE, THE FAN WILL OPERATE AT MAXIMUM SPEED.
- 3. THE FAN WILL DEFAULT TO OPERATE AT MAXIMUM SPEED WHEN THE SPEED CONTROL INPUT (PWM) IS LEFT UNCONNECTED.

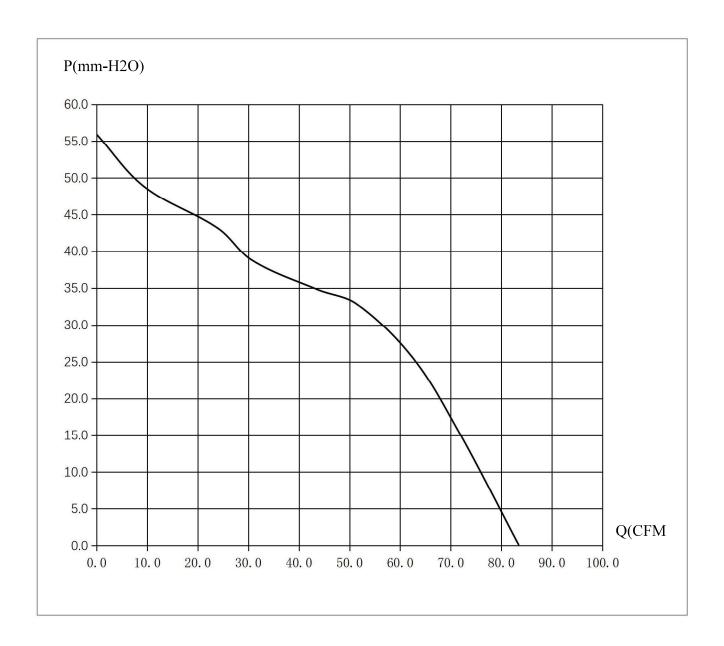
9. P - Q CURVE

TEST CONDITION

INPUT VOLTAGE — OPERATION VOLTAGE (12 V DC)

TEMPERATURE — ROOM TEMPERATURE

HUMIDITY — 65% RH



Certificate Zertifikat



Zertifikat Nr. Certificate No.

Blatt Page

R 50091668

0020

Ihr Zeichen Client Reference

Unser Zeichen Our Reference

Ausstellungsdatum

Date of Issue (day/mo/yr)

P00989074

ZTW1-YML- 10009602 022

13.04.2023

Genehmigungsinhaber License Holder

Everflow Precision Electronic (Dong Guan) Co., Ltd. GeKeng Industrial Zone Heng Li Town Dongguan City

523460 Guangdong

P.R. China

Fertigungsstätte Manufacturing Plant

Everflow Precision Electronic (Dong Guan) Co., Ltd. GeKeng Industrial Zone Heng Li Town Dongguan City 523460 Guangdong

Prüfzeichen Test Mark



Geprüft nach Tested acc. to

EN IEC 62368-1:2020+A11

P.R. China

Zertifiziertes Produkt Certified Product

(Geräteidentifikation) (Product Identification) Lizenzentgelte - Einheit License Fee - Unit

Ventilator (DC Fan)

wie Blatt (as page) 01, Änderung (Change) Bezeichnung (Type Designation):

BX1X2X3X4X5Z, FX1X2X3XX54Z, KX1X2X3X4X5Z, DX1X2X3X4X5Z XX1X2X3X4X5Z, RX1X2X3X4X5Z, SX1X2X3X4X5Z, TX1X2X3X4X5Z

(EVERFLOW)

X1 steht für (stands for): A,B,C,D,05,12,24,48,54

X2 steht für (stands for): 10,12,30,40,50,60,70,75,80,90,92,

120,140

X3 steht für (stands for): 10,15,18,20,25,28,32,38,40,56,80

X4 steht für (stands for): B, D, S

X5 steht für (stands for): L, M, H, U

steht für : 20 Variablen, jede Variable kann A-Z,

(stands for) 0-9, "," oder freibleibend.

(20 variables, each maybe A-Z, 0-9,

"(",")", "-" or blank)

Nennspannung (Rated Voltage): siehe Anlage (see appendix) (Rated Current): siehe Anlage (see appendix) Nennstrom

ANLAGE (Appendix): 1-1.4

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Ka des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderu 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 of the product with the standards and testing requirements as matched have to be considered requirements in countries where the product is going to be marketed have to be considered reproduct in subject to surveillance additionally. The manufacturing of the certified product is subject to surveillance.

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

Zertifizierungsstelle

Dipl.-Ing. (FH) A. Klinker





Everflow Precision Electronic (Dong

Guan) Co., Ltd. Frau Li Juan Chen

Date : 13.04.2023 Our ref. : YML ZTW1 Your ref.: P00989074

GeKeng Industrial Zone Heng Li Town Dongguan City 523460 Guangdong P.R. China

Ref : R TÜV-Mark Approval

Type of Equipment : DC Fan

Model Designation : See Certificate Certificate No. : R 50091668 0020 Report No. : 10009602 022

Dear Frau Li Juan Chen,

The above specified equipment has been tested and found to be in accordance with the relevant requirements.

Please find enclosed your certificate as specified above.

If cancellation of the certificate is submitted by 15 November in a given year, no fee will be charged for the following year.

The certificate is issued with the reservation that the license holder applies all information required in § 6 of the ProdSG related to name and address of the manufacturer or his authorized representative / importer, including their respective contact addresses on the product prior to marketing of the product in the European Economic Area. In case you have a change regarding your involved local representative for the certificate, please inform us in due time.

With kind regards,

Certification Body

Dipl.-Ing. (FH) A. Klinker

Enclosure



TÜV Rheinland Group

Appendix to TÜV approved Certificate No.: R 50091668

Certified Product : DC Fan

Report Number : 10009602 022

Type Designation: BX1X2X3X4X5Z, FX1X2X3XX54Z, KX1X2X3X4X5Z,

DX1X2X3X4X5Z, XX1X2X3X4X5Z, RX1X2X3X4X5Z,

SX1X2X3X4X5Z, TX1X2X3X4X5Z (EVERFLOW)

(X1=A,B,C,D,05,12,24,48,54; X2=10,12,30,40,50,60,70,

75,80,90,92,120,140; X3=10,15,18,20,25,28,32,38,40,56,80;

X4=B,D,S;X5=L,M,H,U; Z=20 variables, each variable may be

A-Z, 0-9, "(",")","-" or blank)

183	R124028BU Z	12	3.50
184	R121225BL Z	12	0.20
185	R121225BM Z	12	0.35
186	R121225BH Z	12	0.50
187	R121225BU Z	12	1.30
188	F548080(B/D/S)L Z	54	0.5
189	F548080(B/D/S)M Z	54	1.2
190	F548080(B/D/S)H Z	54	2.1
191	F548080(B/D/S)U Z	54	3.16
192	F488080(B/D/S)L Z	48	0.5
193	F488080(B/D/S)M Z	48	1.5
194	F488080(B/D/S)H Z	48	2.4
195	F488080(B/D/S)U Z 48		3.5
196	F248080(B/D/S)L Z 24		1
197	F248080(B/D/S)M Z	24	2.7
198	F248080(B/D/S)H Z	24	5.5
199	F248080(B/D/S)U Z	24	7.5
200	F128080(B/D/S)L Z	12	1.5
201	F128080(B/D/S)M Z	12	2.7
202	F128080(B/D/S)H Z	12	6.3
203	F128080(B/D/S)U Z	12	11
204	R123010(B/D/S)L Z	12	0.08
205	R123010(B/D/S)M Z	12	0.12



TÜV Rheinland Group

Appendix to TÜV approved Certificate No.: R 50091668

Certified Product : DC Fan

Report Number : 10009602 022

Type Designation: BX1X2X3X4X5Z, FX1X2X3XX54Z, KX1X2X3X4X5Z,

DX1X2X3X4X5Z, XX1X2X3X4X5Z, RX1X2X3X4X5Z,

SX1X2X3X4X5Z, TX1X2X3X4X5Z (EVERFLOW)

(X1=A,B,C,D,05,12,24,48,54; X2=10,12,30,40,50,60,70,

75,80,90,92,120,140; X3=10,15,18,20,25,28,32,38,40,56,80;

X4=B,D,S;X5=L,M,H,U; Z=20 variables, each variable may be

A-Z, 0-9, "(",")","-" or blank)

206	R123010(B/D/S)H Z	12	0.15
207	R123010(B/D/S)U Z	12	0.18
208	R053010(B/D/S)L Z	5	0.06
209	R053010(B/D/S)M Z	5	0.08
210	R053010(B/D/S)H Z	5	0.12
211	R053010(B/D/S)U Z	5	0.15

TÜVRheinla

Date: April 13, 2023

Certification

Dipl.-Ing. A. Klinker

UL Product iQ®



GPWV2.E236658 - Fans, Electric - Component

Note: We are enhancing our systems and you may notice duplicate entries/missing/outdated data. During this interim period, please contact our Customer Service at https://www.ul.com/about/locations.

Fans, Electric - Component

EVERFLOW PRECISION ELECTRONIC (DONG GUAN) CO LTD

E236658

GE KENG INDUSTRIAL ZONE
HENG LI TOWN
DONGGUAN, GUANGDONG 523460 China

Marking: Company name or tradename "E236658" , or trademark



flow, and model designation.

Note: For additional marking information, refer to the Guide Information Page.

Model(s): 103142H, 103142L, 103142M, B126013BH, B126013BM, B126013BU, B127015BH, B127015BM, B127015BU

Model(s): (A)121225(C)((x)(Z) Above (A) may be R or F, (C) may be S, D or B, (x) may be U, H, M or L, (Z) stands for 20 variables, each variable maybe A-Z, 0-9, "(",")", "-" or blank.

Model(s): (A)121238(C)(x)(Z) Above (A) may be R or F, (C) may be S, D or B, (x) may be U, H, M or L, (Z) stands for 20 variables, each variable maybe A-Z, O-9, "(",")", "-" or blank.

Model(s): (A)124028(C)(D)(Z) Above (A) may be R, F, T represents screw hold on Frame, (C) may be S, D or B represents Bearing Type, (D) may be L, M, H or U represents Fan Speed, (Z) stands for 20 variables, each variable maybe A-Z, 0-9, "(",")", "-" or blank.

Model(s): (A)124028(C)(x)(Z) Above (A) may be R or F, (C) may be S, D or B, (x) may be U, H, M or L, (Z) stands for 20 variables, each variable maybe A-Z, 0-9, "(",")", "-" or blank.

Model(s): (A)126038(C)(x)(Z) Above (A) may be R or F, (C) may be S, D or B, (x) may be U, H, M or L, (Z) stands for 20 variables, each variable maybe A-Z, 0-9, "(",")", "-" or blank.

Model(s): (A)128038(C)(x)(Z) Above (A) may be R or F, (C) may be S, D or B, (x) may be U, H, M or L, (Z) stands for 20 variables, each variable maybe A-Z, 0-9, "(",")", "-" or blank.

Model(s): (A)128056(C)(x)(Z) Above (A) may be R or F, (C) may be S, D or B, (x) may be U, H, M or L, (Z) stands for 20 variables, each variable maybe A-Z, 0-9, "(",")", "-" or blank.

Model(s): (A)128080(C)(x)(Z) Above (A) may be R or F, (C) may be S, D or B, (x) may be U, H, M or L, (Z) stands for 20 variables, each variable maybe A-Z, 0-9, "(",")", "-" or blank.

Model(s): F128080CDZ C may be B, D or S, D may be L, M, H or U.Z may be A through Z,0 through 9,"(", "),"-" or blank

Model(s): F248080CDZ C may be B, D or S, D may be L, M, H or U.Z may be A through Z,0 through 9,"(", "),"-" or blank

Model(s): F488080CDZ A may be R, F or T, C may be B, D or S, D may be L, M, H or U.Z may be A through Z,0 through 9,"(", "),"-" or blank

Model(s): F548080CDZ C may be B, D or S, D may be L, M, H or U.Z may be A through Z,0 through 9," (", "),"-" or blank

Model(s): R053010CDZ C may be B, D or S, D may be L, M, H or U.Z may be A through Z,0 through 9," (", ")," - " or blank

Model(s): R123010CDZ C may be B, D or S, D may be L, M, H or U.Z may be A through Z,0 through 9,"(", "),"-" or blank

Foodback

Electric Fans - Component, Model(s): (A)128038B(D)(2)(Z), Where (A) may be R, F, T represents screw hold on Frame, (D) may be L, M, H or U represents Fan Speed, (2) may be (2) or blank, (Z) stands for 20 variables, each variable maybe A-Z, 0-9, "(",")", "-" or blank.

Electric Fans - Component, Model(s): (A)129025(C)(D)(E)(Z), Where (A) may be R, F, T represents screw hold on Frame, (C) may be S, D or B represents Bearing Type, (D) may be L, M, H or U represents Fan Speed, (E) may be (2), (3), (4), (5), (6) or blank represents different frames, (Z) stands for 20 variables, each variable maybe A-Z, 0-9, "(",")", "-" or blank.

Electric Fans - Component, Model(s): B053510BU(Z), where (Z) stands for 20 variables, each variable may be A through Z,0 through 9,"(", ")","-" or blank.

Electric Fans - Component, Model(s): B055015BL(Z), where (Z) stands for 20 variables, each variable may be A through Z,0 through 9,"(", ")","-" or blank.

Low Voltage Component Fan, Model(s): (A)124020(C)H(5)(Z), where (A) may be R, F for different numbers of screw holes on frame shapes, (C) may be S, D, B or C for different bearing types, (5) may be (5) or blank, (Z) stands for 20 variables, each variable may be A through Z,0 through 9,"(", ")","-" or blank.

Low Voltage Component Fan, Model(s): (A)124020(C)L(5)(Z), where (A) may be R, F for different numbers of screw holes on frame shapes, (C) may be S, D, B or C for different bearing types, (5) may be (5) or blank, (Z) stands for 20 variables, each variable may be A through Z,0 through 9,"(", ")","-" or blank.

Low Voltage Component Fan, Model(s): (A)124020(C)M(5)(Z), where (A) may be R, F for different numbers of screw holes on frame shapes, (C) may be S, D, B or C for different bearing types, (5) may be (5) or blank, (Z) stands for 20 variables, each variable may be A through Z,0 through 9,"(", ")","-" or blank.

Low Voltage Component Fan, Model(s): (A)124020(C)U(5)(Z), where (A) may be R, F for different numbers of screw holes on frame shapes, (C) may be S, D, B or C for different bearing types, (5) may be (5) or blank, (Z) stands for 20 variables, each variable may be A through Z,0 through 9,"(", ")","-" or blank.

Low Voltage DC Components Fan, Model(s): (A)124056(Y)(X)(Z) Above (A) may be R or F, (Y) may be S, B, D or C, (X) may be U, H, M or L,(Z) stands for 20 variables, each variable maybe A-Z, 0-9, "(",")", "-" or blank.

Low Voltage DC Components Fan, Model(s): F056025BH(+) Where (+) can be any seven combination of digit or letter.

Low Voltage DC Components Fan, Model(s): R248025BM(+) Where (+) can be any seven combination of digit or letter.

Last Updated on 2023-04-21

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CE Certificate of Conformity

Certification number: TH2302237-C04-C01

Report number: TH2302237-C04-R01

Shenzhen Tian Hai Test Technology Co., Ltd. hereby declares that testing has been completed and reports have been generated for:

Applicant:

EVERFLOW PRECISION ELECTRONIC (DONG GUAN) CO LTD

Address:

GE KENG INDUSTRIAL ZONE HENG LI TOWN DONGGUAN, GUANGDONG, 523460,

CN

Manufacturer:

EVERFLOW PRECISION ELECTRONIC (DONG GUAN) CO LTD

Address:

GE KENG INDUSTRIAL ZONE HENG LI TOWN DONGGUAN, GUANGDONG, 523460

CN

Product:

DC FAN

Model:

See the model lists below

And, in accordance with the following applicable directives:

2014/30/EU Electromagnetic Compatibility (EMC)

This product has been assessed against the following applicable standards:

EN 55032:2015+A1:2020

Standard(s):

EN 55035:2017+A11:2020

Therefore, Shenzhen Tian Hai Test Technology Co., Ltd. hereby acknowledges that the applicant may issue a DECLARATION of CONFORMITY and apply the CE marking in accordance with European Union Rules.

Attestation by:

Thomas Wong

Date of Issued: 2023-03-02

F,A3 BLDG,The Silicon Valley Power intelligent terminal industrial park,Guan Ian street,Longhua district,Shenzhen
Tel:+86-755-86615100 Fax:+86-755-86615105 http://www.tianhaitest.com



	5					
2	Zy.	77,	F128080(B/D/S)L Z	12	1.5	8000+6000
	119	8080 Series	F128080(B/D/S)MZ	12	2.7	10000+8000
	117	29	F128080(B/D/S)HZ	12	6.3	13000+11000
	5		F128080(B/D/S)UZ	12	J 11 J	15500+14000
	7	3010 Series	R123010(B/D/S)LZ	<u>3</u> 12	0.08	6500
X	120		R123010(B/D/S)MZ	12	0.12	9000
	120		R123010(B/D/S)HZ	12	0.15	12000
		<u></u>	R123010(B/D/S)UZ	12	0.18	14500
<		3010 Series	R053010(B/D/S)LZ	5 ,6	0.06	6000
	121		R053010(B/D/S)MZ	5	0.08	7000
			R053010(B/D/S)HZ		0.12	8000
	~	E. E.	R053010(B/D/S)UZ	F 5	0.15	9500

Z stands for 20 variables, each variable may be A through Z,0 through 9,"(", ")","-" or blank. The variable (Z) is for marketing purpose only.







Certificate of Conformity

Certification number: TH2302238-C07-C01

Report number: TH2302238-C07-R01

Shenzhen Tian Hai Test Technology Co., Ltd. hereby declares that testing has been completed and reports have been generated for:

Applicant:

EVERFLOW PRECISION ELECTRONIC (DONG GUAN) CO LTD

Address:

GE KENG INDUSTRIAL ZONE HENG LI TOWN DONGGUAN, GUANGDONG, 523460, CN

Manufacturer:

EVERFLOW PRECISION ELECTRONIC (DONG GUAN) CO LTD

GE KENG INDUSTRIAL ZONE HENG LI TOWN DONGGUAN, GUANGDONG, 523460,

Address:

CN

Product:

DC FAN

Model:

See the model lists below

Tested

BS EN 55032:2015+A11:2020

according to:

BS EN 55035:2017+A11:2020

The submitted products have been tested by us with the listed standards.

This Attestation of Compliance is issued according to the Great Britain legislation Electromagnetic Compatibility Regulations 2016. It confirms that the listed product complies with all essential requirements of the Regulations and applies only to the sample and its technical documentation submitted to Shenzhen Tian Hai Test Technology Co.,Ltd. for testing.

After preparation of the necessary technical documentation (which must be kept for up to 10 years after the product is placed on the GB market) as well as the UK Declaration of Conformity, the required UKCA marking can be affixed on the product. Other relevant Regulations have to be observed.

Attestation b

Thomas Wong

F,A3 BLDG,The Silicon Valley Power intelligent terminal industrial park,Guan Ian street,Longhua district,Shenzhe



5	The same of the sa				
75/1	77,	F248080(B/D/S)UZ	24	7.5	17000+15000
TR	8080 Series	F128080(B/D/S)L Z	12	1.5	8000+6000
119		F128080(B/D/S)MZ	12	ر 2.7	10000+8000
5		F128080(B/D/S)HZ	12	6.3	13000+11000
24		F128080(B/D/S)UZ	₹ 12 ×	11 2	15500+14000
34	3010 Series	R123010(B/D/S)LZ	12	0.08	6500
120		R123010(B/D/S)MZ	12	0.12	9000
120		R123010(B/D/S)HZ	<u></u>	0.15	12000
		R123010(B/D/S)UZ	12 6	0.18	14500
2	3010 Series	R053010(B/D/S)LZ	5	0.06	6000
121		R053010(B/D/S)MZ	5	0.08	Z 7000 X
121		R053010(B/D/S)HZ	7 5	0.12	8000
,	7,	R053010(B/D/S)UZ	5	<u>^</u> 0.15	9500
				/ _	1.0

Z stands for 20 variables, each variable may be A through Z,0 through 9,"(", ")","-" or blank. The variable (Z) is for marketing purpose only.





Certificate of Conformity

Certification number: TH2302238-C08-C01 Report number: TH2110138-C08-R01 Shenzhen Tian Hai Test Technology Co.,Ltd. hereby declares that testing has been completed and reports have been generated for:

Applicant:

EVERFLOW PRECISION ELECTRONIC (DONG GUAN) CO LTD

Address:

GE KENG INDUSTRIAL ZONE HENG LI TOWN DONGGUAN, GUANGDONG,

Address:

523460, CN

Manufacturer:

EVERFLOW PRECISION ELECTRONIC (DONG GUAN) CO LTD

Address:

GE KENG INDUSTRIAL ZONE HENG LI TOWN DONGGUAN, GUANGDONG,

523460, CN

Product:

DC FAN

Model:

See attachment

Rating:

See attachment

Tested according

to:

BS EN IEC 62368-1:2020+A11:2020

The submitted products have been tested by us with the listed standards.

This Attestation of Compliance is issued according to the Great Britain legislation Electrical Equipment (Safety)Regulations 2016. It confirms that the listed product complies with all essential requirements of the Regulations and applies only to the sample and its technical documentation submitted to Shenzhen Tian Hai Test Technology Co.,Ltd. for testing.

After preparation of the necessary technical documentation (which must be kept for up to 10 years after the product is placed on the GB market) as well as the UK Declaration of Conformity, the required UKCA marking can be affixed on the product. Other relevant Regulations have to be observed.

UK

Attestation by

Thomas Wong

Date of Issued: 2023-02-28

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118	8080 Series	F248080(B/D/S)LZ	24	F 1	8000+6000
		F248080(B/D/S)MZ	24	2.7	12000+10000
110		F248080(B/D/S)HZ	24%	5.5	15000+13000
.5	5	F248080(B/D/S)UZ	24	√° 7.5	17000+15000
2	8080 Series	F128080(B/D/S)LZ	2 12	1.5	8000+6000
119		F128080(B/D/S)MZ	12	2.7	10000+8000
112		F128080(B/D/S)HZ	12	6.3	13000+11000
	5	F128080(B/D/S)UZ	5 12	11 🖑	15500+14000
	3010 Series	R123010(B/D/S)LZ	12 9	0.08	6500
120		R123010(B/D/S)MZ	12	0.12	9000
120		R123010(B/D/S)HZ	12	0.15	12000
		R123010(B/D/S)UZ	12	0.18	14500
4	3010 Series	R053010(B/D/S)LZ	5	0.06	6000
421		R053010(B/D/S)MZ	5 .	0.08	
121		R053010(B/D/S)HZ	K 5 K	0.12	8000
		R053010(B/D/S)UZ	5 5	0.15	9500

Z stands for 20 variables, each variable may be A through Z,0 through 9,"(", ")","-" or blank. The variable (Z) is for marketing purpose only.