

规格承认书

SPECIFICATION FOR APPROVAL

Green Product

客 户 CUSTOMER: _____

客户料号 PART NO: _____

版 次 APPROVAL NO: _____ 1.0 版

产品名称 DESCRIPTION: _____ DC FAN

产品编号 PRODUCTS NO: _____ 14038 12V 6400RPM

产品型号 MODEL NO: _____ DF1403812B2FN

样品数量 Q' TY: _____ 1PCS 日期 DATE: _____ 2024. 07. 23

客户承认用印栏 APPROVED SIGNATURES

PLEASE RETURN ONE COPY WITH YOUR APPROVED SIGNATURES

APPROVED	CHECKED	PREPARED



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表单编号: XH-FM-EG-009 A/0

规格承认书

SPECIFICATION FOR APPROVAL

1. 普通规格 (General Specification)

项目 (Item)		规格/条件 (Specification/Condition)	
1.1	型号 (Model NO.)	DF1403812B2FN	
1.2	外形尺寸 (Outline)	140*140*38 MM	
1.3	额定电压 (Rated Voltage)	DC 12V	
1.4	操作电压 (Operating Voltage Range)	7~13.2V	
1.5	起动电压 (Starting Voltage)	7V	
1.6	额定电流 (Rated Current)	3.3A (MAX 4.16A)	a. 额定电压 (Rated Voltage)
	安规电流 (Safty Current)	5.0A	b. 25° C, 65% RH
1.7	额定电流消耗功率 (Power Consumption)	39.6W (MAX 49.92W)	a. 25° C, 65%RH
1.8	转速 (Speed)	6400±10%R. P. M	b. 自由空气 (Free Air)
1.9	风量 Airflow (At Zero Static Pressure)	304.23 (min. 275.71) CFM	c. 额定电压 (Rated Voltage)
		8.62 (min. 7.81) M³/MIN	b. AMCA标准 (Standard)
1.10	静压 Air Pressure (At Zero Flow)	40.53 (min. 33.29) mm-H₂O	c. 额定电流 (Rated Current)
		1.60 (min. 1.31) inch-H₂O	
1.11	噪音水准 (Noise Level)	72.5dB (A)	a. 额定电压 (Rated Voltage)
1.12	寿命 (Life)	70,000/hrs 40° C	b. 无音室测试 (Measured in a Non-Echo Chamber)
1.13	湿度范围 (Storage Temperature)	10%~90%RH	c. CNS 8753 标准 (Standard)
1.14	防护等级 (Ingress Protection)	黑色保密胶	d. ISO 3744 测试条件 (Test Condition)
1.15	扇叶数 (No. of Blade)	5叶 (Blades)	
1.16	磁极数 (No. of Pole)	8极 (Poles)	
1.17	运转方向 (Rotating Direction)	顺时针	面对風扇铭牌面查看

2. 电气规格 (Electrical Specification)

项目 (Item)		规格/条件 (Specification/Condition)
2.1	风扇旋转锁定 (Fan leaf spins to lock)	在额定电压下锁住扇叶24小时, 当锁定解除后风扇仍能正常运转. (After specified voltage locks fan leaf for 24 hours, will lock to relieve, fan can still operate normally.)
2.2	极性保护 (Polarity Protection)	Vcc与GND反接时, 回路不烧毁. (Circuit is protected when Vcc & GND are exchanged)
2.3	绝缘阻抗 (Insulation Resistance)	10MΩ /裸线与外框间测量, 600VDC/min. (10MΩ /b/W unshielded wire and frame at 600VDC/min)
2.4	绝缘. 耐压 (Dielectric Strength)	5mA MAX/ 导线与外框间测量, 500VAC/min. (5 mA MAX/Measured b/w lead wire (+) and frame at 500VAC/MIN.
2.5	风扇的控制回路 (Fan control circuit)	闭回路 (不能用在闭回路的系统上) Closed loop (cannot be used in closed loop system)

3. 主要材料/零件规格(Main Materials/parts Specification)

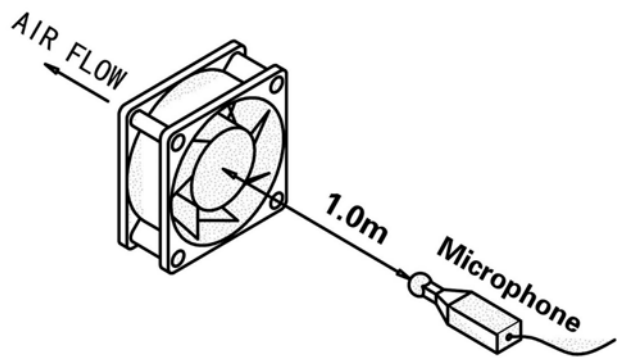
材料/零件 (Materials/Parts)		材质规格 (Specification)	安规编号 (File NO)	备 注 (Remarks)
3.1	外框 (Plastic Material)	14038-B2-PBT-94V0-黑色方框 包柱		
3.2	扇叶 (Blade housing)	14038-B2-PBT-94V0-黑色直五叶		
3.3	绝缘架 (Bobbin)	94-V0 P. B. T		
3.4	轴芯 (stator core)	不锈钢 Stainless steel (SUS420J2)		
3.5	轴承 (Bearing)	B2-双滚珠轴承 Two Ball Bearing		
3.6	橡胶磁铁 (Rubber magnet)	铁锆粉末化合物 Strontium ferrite (BQB14W)		
3.7	矽钢片 (Silicon steel strip)	H18		
3.8	漆包线 (Enamelled copper wires)	MW-1UEW		
3.9	印刷电路板 (Printed Circuit Board)	雙层印刷电路板 Wiring printed Double layer board		
3.10	电源线 (Lead Wire)	UL1430#22AWG: (+) Red, (-) Black. UL1430#24AWG: (FG) Yellow, (PWM) Blue.		
3.11	LED灯	NA		
3.12	IC型号 (IC MODEL)	FU5821T IC		
3.13	连接器 (Connector housing)	4. 20-2*2P白色胶壳		
3.14	贴纸 (Label)	PET		

4. 环境测试 (Environmental Specification)

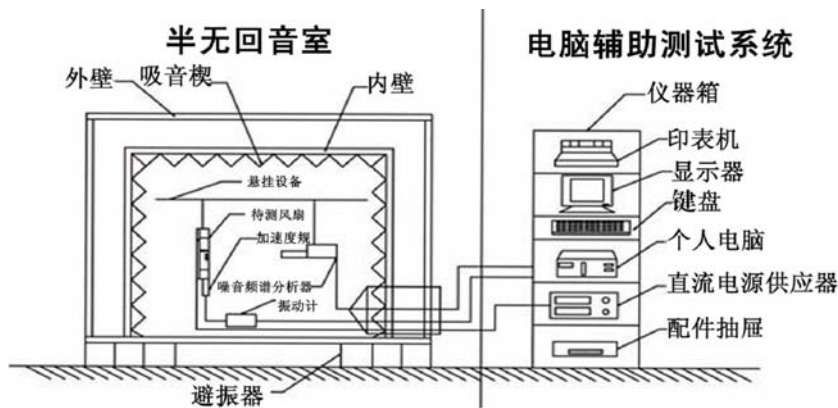
项目 (Item)		规格/条件 (Specification/Condition)
4.1	工作温度/湿度范围 (Operation Temp Range)	温度/Temperature: -10° C ~ +70° C 湿度/Humidity: 10% ~ 90%RH
4.2	保存温度/湿度范围 (Storage Temperature)	温度/Temperature: -40° C ~ +70° C 湿度/Humidity: 10% ~ 90%RH
4.3	耐湿性 (Humidity)	试验后, 电气规格依据MIL-STD 202F Method 103b, 寿命: 96小时; 湿度: 95%; 温度: 40±2° C (Per MIL-STD 202F Method 103b; Life: 96hours; Humidity: 95%RH; Temperature: 40±2° C)
4.4	热冲击 (Thermal Shock)	试验后, 电气规格依据MIL-STD 202F Method 107D (Per MIL-STD 202F Method 107D; Condition D)
4.5	绝缘等级 (Insulation Class)	ULA级 (UL Class A)
4.6	包装耐振动实验 (Packing Vibration Test)	包装后, XYZ三方向施1.1G加速振动30分钟后, 无异状. (Packing Condition: X, Y, Z3diredtions, 1.1G load vibration test for 30 min)
4.7	包装耐冲击实验 (Packing is impulse withstand to Test)	捆包状态下, 高60cm, 1棱角3边6面自然落下, 无异状. (Bundle bale is 60cm high under state, in 1 edge and 3 sides, 6 surfaces fall naturally, is the same as frequently phenomenon occur.)

5. 噪音测试说明 Accoustic sound level test descriptions

以额定电压在噪音实验室中测试背景噪音为7dB(A).At rated voltage in sound proof room Background proof room background noise:7dB(A).

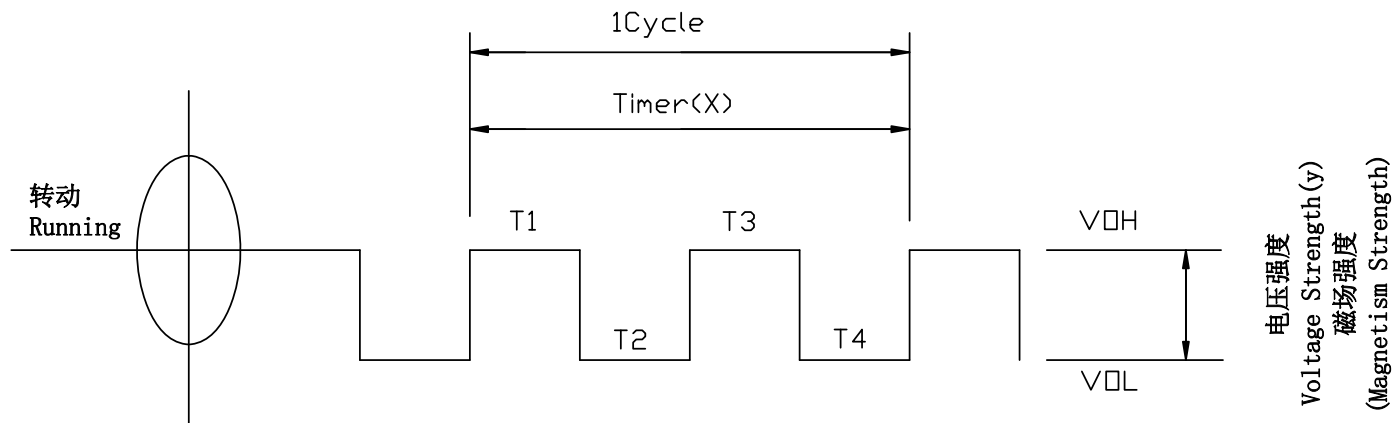


噪音测试方法图示



噪音测试系统图示

6. 转速侦测 RPM detection

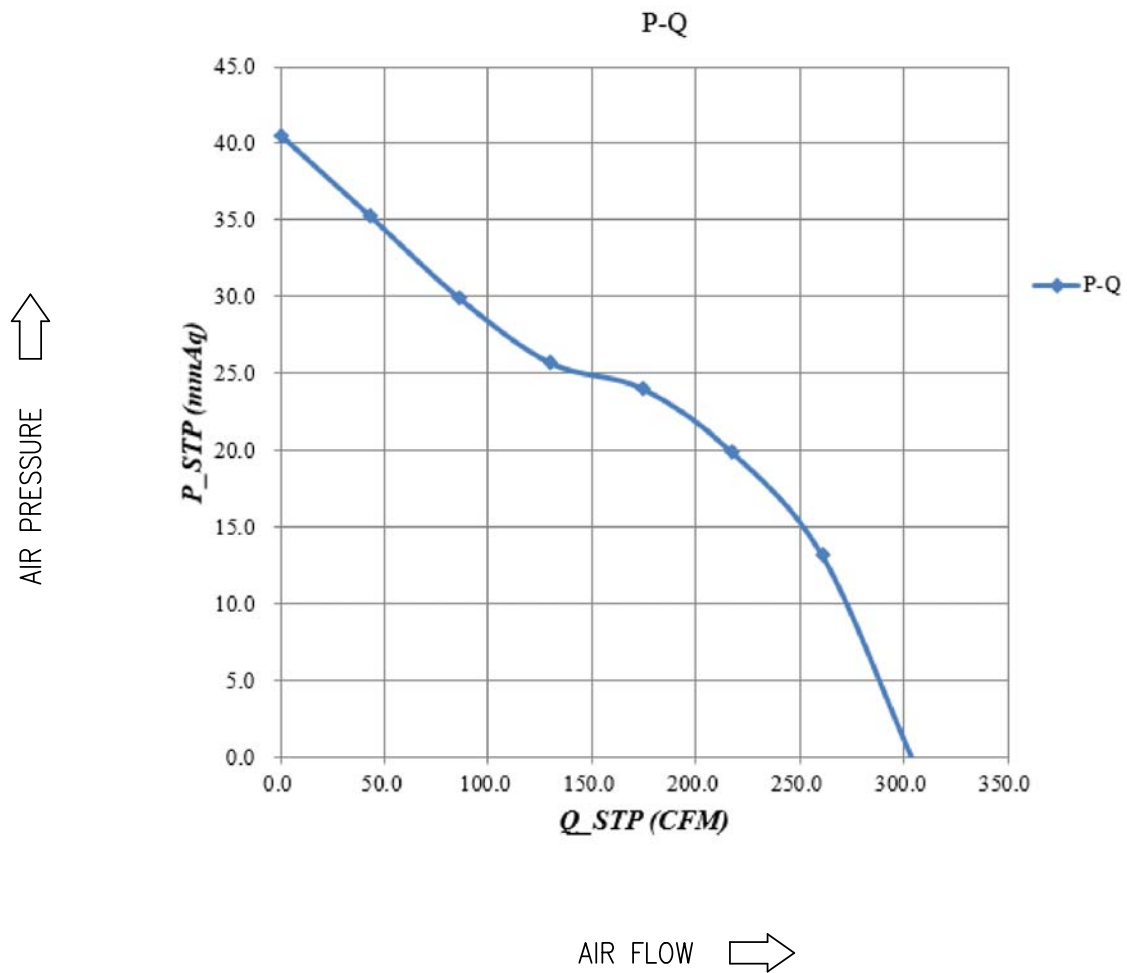


$T=T1+T2=T3+T4$

[说明]

- 1. 输出波形:方波. Output waveform:square wave.
- 2. 当电压值越高(值), 则输出波形越高.When the voltage is higher(voltagY) then output waveform is higher.
- 3. 当风扇不转动, 则输出波形为一水平线.When the fan is shutdown then output.
- 4. 循环距离越长(值), 则转速越慢.The cyclic distance is longer then the RPM is slower.
- 5. 转速计算公式如下:RPM formula as follows:
 $RPM=60000/X\ (Ms)$

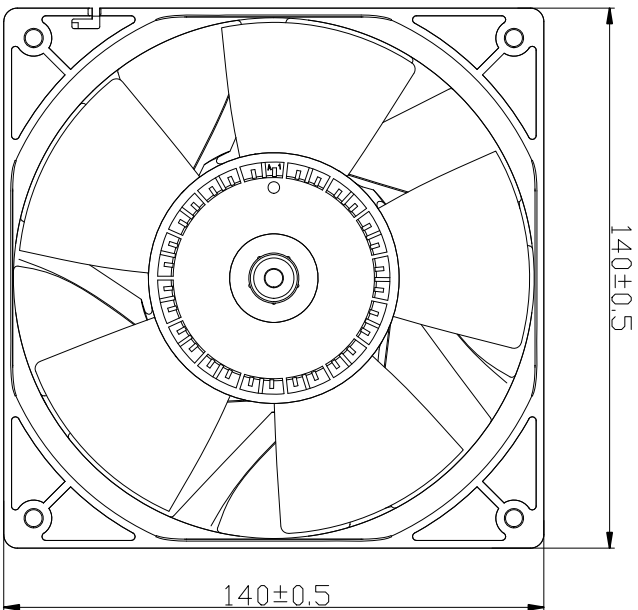
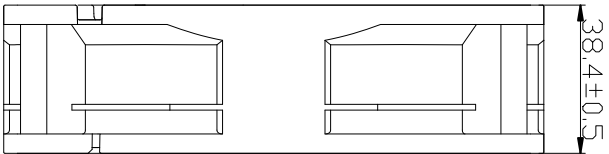
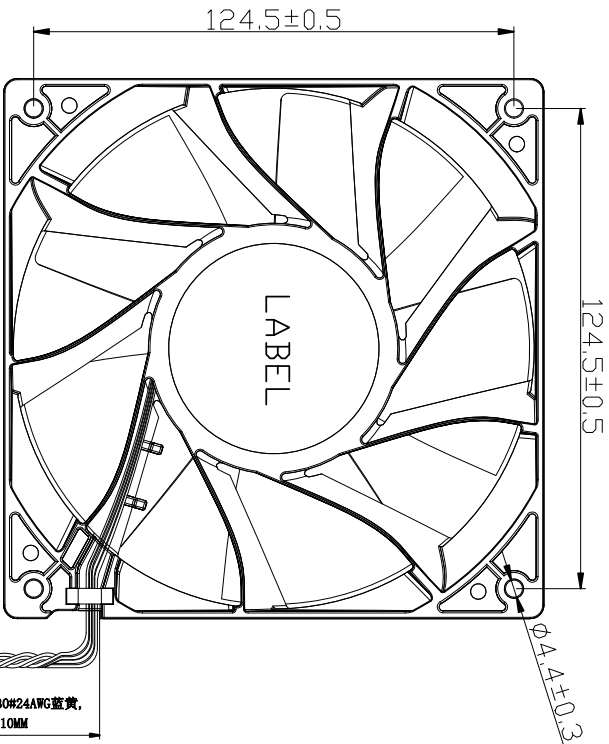
d. P-Q CURVE (TOTAL OUTLETS):100% 8500RPM



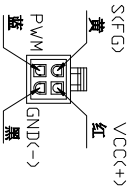
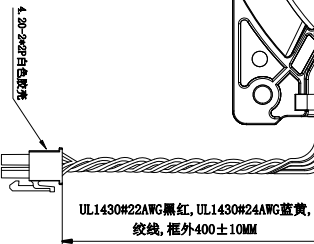
* TEST CONDITION: INPUT VOLTAGE-----OPERATION VOLTAGE
TEMPERATURE-----ROOM TEMPERATURE
HUMIDITY-----65%RH
TEST HOUSING-----SEE DIMENSIONS DRAWING
AVERAGE DATA BASED ON LIMITED SAMPLE QTY

0-10	10-50	50-100	100-	Angles
±0.1	±0.2	±0.3	±0.5	±1°

图号	REV	DESCRIPTION	DRAWN	DATE
-	-		-	-



LABEL: 50MM



ALL MATERIAL TO BE ROHS COMPLIANCE
全部的材质必须是符合ROHS

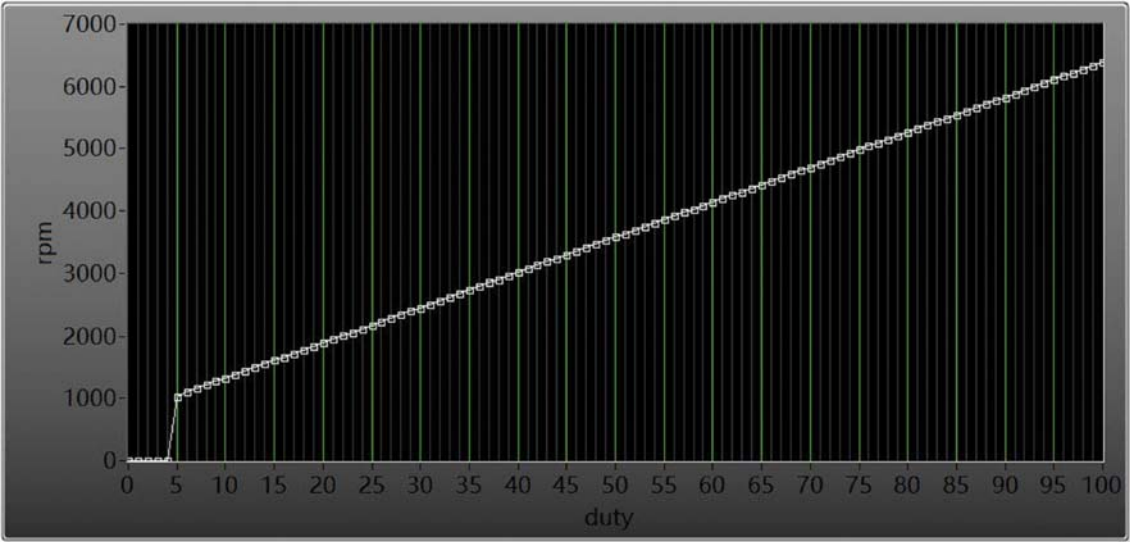
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CHECKED	蒋波				
DRAWN	邓学萍				
DATE:	2024-07-23				
TITLE: 12038 风扇		MODEL NO: DF1203812B2FN			

PWM 机种 占空比 规格表

客户:		机种:DF1403812B2FN		制表日期:2024-07-23		版次:1.0	
启动电压		7V MAX (占空比100%时) 自动重启时间 1~7秒					
额定电压		12V					
PWM频率		300HZ~80KHZ					
占空比		转速 (RPM)		工作电流 (mA)			
0%		不转		-			
50%		3600±10%		800mA (MAX 960mA)			
100%		6400±10%		3300mA (MAX 4160mA)			

1. 转速曲线





File E365488

Vol 1

Auth. Page 1

Issued: 2014-03-03

Revised: 2017-03-16

FOLLOW-UP SERVICE PROCEDURE
(TYPE R)

COMPONENT - FANS, ELECTRIC
(GPWV2,GPWV8)

Manufacturer: SEE ADDENDUM FOR MANUFACTURER LOCATIONS

Applicant: 772190 (Party Site)
(100607-719) SUNGLOW TECHNOLOGY CO LTD
16Th Fl, 57 Rongyao St
Zuoying District
Kaohsiung
813 TAIWAN

Recognized Company: 770578 (Party Site)
(100608-874) Huizhou City Xunshuo Technology Co Ltd (E465463)
BAIGUO GARDON MEIHUA FARM
BOXIN RD
LUOYANG TOWN BOLUO HSIEN
HUIZHOU
GUANGDONG 516121 CHINA

This Follow-Up Service Procedure authorizes the above Manufacturer(s) to use the marking specified by UL LLC, or any authorized licensee of UL LLC, including the UL Contracting Party, only on products when constructed, tested and found to be in compliance with the requirements of this Follow-Up Service Procedure and in accordance with the terms of the applicable service agreement with UL Contracting Party and any applicable Service Terms. The UL Contracting Party for Follow-Up Services is listed on addendum to this Follow-Up Service Procedure ("UL Contracting Party"). UL Contracting Party and UL LLC are referred to jointly herein as "UL."

UL further defines responsibilities, duties and requirements for both Manufacturers and UL representatives in the document titled, "UL Mark Surveillance Requirements" that can be located at the following web-site: <http://www.ul.com/fus> and in the document titled "UL and Subscriber Responsibilities" that can be located at the following website: <http://www.ul.com/responsibilities>. Manufacturers without Internet access may obtain the current version of these documents from their local UL customer service representative or UL field representative. For assistance, or to obtain a paper copy of these documents or the applicable Service Terms, please contact UL's Customer Service at <http://ul.com/aboutul/locations/>, select a location and enter your request, or call the number listed for that location.

The Applicant, the specified Manufacturer(s) and any Recognized Company in this Follow-Up Service Procedure must agree to receive Follow-Up Services from UL Contracting Party. If your applicable agreement is a Global Services Agreement ("GSA") with an effective date of January 1, 2012 or later and this Follow-Up Service Procedure is issued on or after that effective date, the Applicant, the specified Manufacturer(s) and any Recognized Company will be bound to a Service Agreement for Follow-Up Services upon the earliest by any Subscriber of use of the prescribed UL Mark, acceptance of the factory inspection, or payment of the Follow-Up Service fees which will incorporate such GSA, this Follow-Up Service Procedure and the Follow-Up Service Terms which can be accessed by clicking here: <http://www.ul.com/contracts/Terms-After-12-31-2011>. In all other events, Follow-Up Services will be governed by and incorporate the terms of your applicable service agreement and this Follow-Up Service Procedure.



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GUANGDONG 516121 CHINA

Date: 2020/06/01
Subscriber: 100608874
PartySite: 770578
File No: E365488
Project No: 4789449609
PD No: 20026633
Type: R
PO Number:

Subject: **Procedure And/Or Report Material**

The following material resulting from the investigation under the above numbers is enclosed.

Issue

<u>Date</u>	<u>Vol</u>	<u>Sec</u>	<u>Pages</u>	<u>Revised Date</u>
	1		Revised Index Page(s) 2	2020/05/28
2020/05/28	1	10	Add New Proc/Report Sect	

"Legible images may be viewed online"

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Please file revised pages and illustrations in place of material of like identity. New material should be filed in its proper numerical order.

NOTE: Follow-Up Service Procedure revisions DO NOT include Cover Pages, Test Records and Conclusion Pages. Report revisions DO NOT include Authorization Pages, Indices, Section General Pages and Appendixes.

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TPI File

UL INSPECTION CENTER 213

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Volume	Section	Report Date	Product and Model	USR/CNR
1	1	2014-01-07	DC Component Fans, Models DF0401012(X)(Y1)N, DF0602512(X)(Y2)N, DF0701512(X)(Y2)N, DF0702512(X)(Y2)N, DF0802512(X)(Y2)N, DF0902512(X)(Y2)N, DF0922512(X)(Y3)N, DF1202512(X)(Y2)N, DF1203812(X)(Y1)N, DF1402512(X)(Y2)N, DF1802512(X)(Y1)N, DF2003012(X)(Y1)N, DF2303012(X)(Y1)N, DF1202524(X)(Y1)N, where (X) may be SE, B1, B2, RF, FD, PO; (Y1) may be H, M, L; (Y2) may be U, H, M, L; (Y3) may be F, U, H, M, L.	USR/CNR
1	2	2016-05-30	Models DF0801512(X)UN series, where (X) may be SE, B1, B2, RF, FD or PO.	USR/CNR
1	3	2015-12-28	DC fans, Model DF1402512(X)UN-(Y), where (X) may be SE, B1, B2, RF, FD, PO, "-" is optional, (Y) may be 1 or blank.	
1	4	2016-10-11	Low Voltage Component Fans Models: DF0401512(X)HN, DF0401512(X)MN, DF0401512(X)LN, DF0402012(X)HN, DF0402012(X)MN, DF0402012(X)LN, DF0601012(X)HN, DF0601012(X)MN, DF0601012(X)LN, DF0801512(X)HN, DF0801512(X)MN, DF0801512(X)LN, DF1202512(X)HN, DF1202512(X)MN, DF1202512(X)LN, DF1402512(X)HN, DF1402512(X)MN, DF1402512(X)LN, DF1352512(X)HN, DF1352512(X)MN, DF1352512(X)LN, NR(Y)(L); Where (X) maybe SE, B1, B2, RF, FD, PO; (Y) maybe 140, 135; (L) maybe L, P.	USR/CNR
1	5	2018-07-02	Low Voltage Component Fans Models: DF1203812(X)UN, Where (x) may be SE, B1, B2, RF, FD, PO.	USR/CNR
1	6	2018-08-09	Low Voltage Component Fans Models: DF0501012(X)UN, DF0501012(X)HN DF0501012(X)MN, DF0501012(X)LN DF0601012(X)UN, DF1202512(X)FN DF1203812(X)FN, DF1403812(X)FN DF1403812(X)UN, DF1403812(X)HN Where (X) maybe SE, B1, B2, RF, FD, PO	USR/CNR
1	7	2018-12-19	Low Voltage Component Fans Models DF1202512(X)MF, DF2402512(X)MF, DF3602512(X)MF Where (X) maybe SE, B1, B2, RF, FD, PO	USR/CNR

Note: USR - United States Standard, Recognized

CNR - Canadian National Standard, Recognized

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Volume	Section	Report Date	Product and Model	USR/CNR
1	8	2019-06-24	DC Component Fans, Models DF0921012 (X) UN, DF0921012 (X) HN, DF0921012 (X) MN, DF0921012 (X) LN, DF0901012 (X) UN, DF0901012 (X) HN, DF0901012 (X) MN, DF0901012 (X) LN, DF0601524 (X) UN, DF0601524 (X) MN, DF0601524 (X) LN, DF0901512 (X) UN, DF0901512 (X) HN, DF0901512 (X) MN, DF0901512 (X) LN, DF0803812 (X) UN DF0803812 (X) HN, DF0803812 (X) MN, DF0803812 (X) LN, DF0921512 (X) HN, DF0921512 (X) MN, DF0921512 (X) LN, DF1203848 (X) UN, DF1203848 (X) HN and DF1203848 (X) MN. Where (X) may be SE, B1, B2, RF, FD, PO.	USR/CNR
1	9	2020-03-11	DF0402812 (X) HN, DF0402812 (X) MN, DF0402812 (X) LN, DF0603812 (X) UN, DF0603812 (X) HN, DF0603812 (X) MN, DF0703812 (X) UN, DF0703812 (X) HN, DF0703812 (X) MN, DF0923812 (X) UN, DF0923812 (X) HN, DF0923812 (X) MN, DF0923812 (X) LN, DF0923824 (X) UN, DF0923824 (X) HN, DF0923824 (X) MN, DF0923824 (X) LN, DF1202512 (X) UN, DF1202512 (X) HN, DF1202512 (X) MN and DF1202512 (X) LN Where (X) may be SE, B1, B2, RF, FD, PO.	USR/CNR
1	10	2020-05-28	DF0602524 (X) UN, DF0602524 (X) HN, DF0602524 (X) MN, DF1102112 (X) HN, DF1102112 (X) MN, DF0802524 (X) HN, DF0802524 (X) MN, DF0405612 (X) HN, DF0405612 (X) MN, DF0405612 (X) LN, DF1402512 (X) HN, DF1402512 (X) MN, DF1402512 (X) LN, DF1402512 (X) DN	USR/CNR
1	11	2020-12-10	DF1803812 (X) (Y) (Z) and DF1803812 (X) (Y) (W), where (X) may be SE, B1, B2, RF, FD or PO; (Y) may be H, M, L or D; (Z) may be letter A through M; (W) may be letter N through Z.	USR/CNR

Note: USR - United States Standard, Recognized
CNR - Canadian National Standard, Recogniz

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Volume	Section	Report Date	Product and Model	USR/CNR
1	12	2021-10-30	DF2002512 (X) (Y2) (Z) , DF0801512 (X) H (Z) , DF0602524 (X) H (Z) , DF0602524 (X) M (Z) , DF0602512 (X) (Y1) (Z) , DF0602524 (X) (Y4) (Z) , DF0401024 (X) H (Z) , DF1203824 (X) (Y3) (Z) , where (X) may be SE, B1, B2, RF, FD or PO; (Y1) may be U, H, M or L; (Y2) may be H, M, L; (Y3) may be U, H, M; (Y4) may be F, U; (Z) may be A-Z.	USR/CNR
1	13	2022-04-19	DF0501505 (X) (Y1) (Z) , DF0501512 (X) (Y2) (Z) , DF0601512 (X) (Y1) (Z) , DF0301005 (X) (Y3) (Z) , DF0701012 (X) (Y3) (Z) , where (X) may be SE, B1, B2, RF, FD or PO; (Y1) may be U, H, M or L; (Y2) may be F, U, H, M or L; (Y3) may be H, M or L; (Z) may be A-Z.	USR/CNR
1	14	2022-06-20	DF1201512 (X) U (Z) , DF1201512 (X) (Y1) (Z) , DF0405612 (X) F (Z) , DF0602512 (X) F (Z) , DF1082512 (X) (Y2) (Z) , DF1082512 (X) (Y1) (Z) , DF1202512 (X) (Y3) (Z) , DF1402512 (X) (Y4) (Z) , DF1203812 (X) S (Z) , where (X) may be SE, B1, B2, RF, FD or PO, (Y1) may be H, M & L, (Y2) may be F or U, (Y3) may be M1 & L1, (Y4) may be L1, D2 & D1, (Z) may be A-Z.	USR/CNR
1	15	2022-08-30	DF0602012 (X) (Y1) (Z) , DF0982712 (X) (Y2) (Z) , DF0808012 (X) (Y2) (Z) , DF0807012 (X) (Y2) (Z) , DF0803812 (X) F (Z) , DF0605612 (X) F (Z) , where (X) may be SE, B1, B2, RF, FD or PO, (Y1) may be U, H, M or L, (Y2) may be F, U, H, M or L, (Z) may be A- Z.	USR/CNR

Note: USR - United States Standard, Recognized

CNR - Canadian National Standard, Recognized

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - DC Fans, Models see "ELECTRICAL RATINGS" for details.

USR indicates investigation to the Standard for Electric Fans, UL 507 - Ninth Edition.

CNR indicates investigation to the Canadian Standard for Fans and Ventilators, CSA C22.2 No. 113 - Ninth Edition.

ELECTRICAL RATINGS:

Model Nos.	Volts, DC	Amperes, A
DF0401012 (X) HN	12	0.24
DF0401012 (X) MN	12	0.16
DF0401012 (X) LN	12	0.10
DF0602512 (X) UN	12	0.60
DF0602512 (X) HN	12	0.26
DF0602512 (X) MN	12	0.16
DF0602512 (X) LN	12	0.12
DF0701512 (X) UN	12	0.40
DF0701512 (X) HN	12	0.25
DF0701512 (X) MN	12	0.16
DF0701512 (X) LN	12	0.12
DF0702512 (X) UN	12	0.60
DF0702512 (X) HN	12	0.30
DF0702512 (X) MN	12	0.24
DF0702512 (X) LN	12	0.14
DF0802512 (X) UN	12	0.60
DF0802512 (X) HN	12	0.34
DF0802512 (X) MN	12	0.24
DF0802512 (X) LN	12	0.18
DF0902512 (X) UN	12	0.60
DF0902512 (X) HN	12	0.40
DF0902512 (X) MN	12	0.24
DF0902512 (X) LN	12	0.18

Note: Above (X) may be SE, B1, B2, RF, FD, PO.

ELECTRICAL RATINGS (CONT'D)

Model Nos.	Volts, DC	Amperes, A
DF0922512 (X) FN	12	0.80
DF0922512 (X) UN	12	0.60
DF0922512 (X) HN	12	0.40
DF0922512 (X) MN	12	0.18
DF0922512 (X) LN	12	0.15
DF1202512 (X) UN	12	0.54
DF1202512 (X) HN	12	0.42
DF1202512 (X) MN	12	0.37
DF1202512 (X) LN	12	0.16
DF1203812 (X) HN	12	0.60
DF1203812 (X) MN	12	0.45
DF1203812 (X) LN	12	0.35
DF1402512 (X) UN	12	0.80
DF1402512 (X) HN	12	0.60
DF1402512 (X) MN	12	0.40
DF1402512 (X) LN	12	0.24
DF1802512 (X) HN	12	0.60
DF1802512 (X) MN	12	0.40
DF1802512 (X) LN	12	0.16
DF2003012 (X) HN	12	0.60
DF2003012 (X) MN	12	0.42
DF2003012 (X) LN	12	0.30
DF2303012 (X) HN	12	0.70
DF2303012 (X) MN	12	0.42
DF2303012 (X) LN	12	0.30
DF1202524 (X) HN	24	0.50
DF1202524 (X) MN	24	0.35
DF1202524 (X) LN	24	0.20

Note: Above (X) may be SE, B1, B2, RF, FD, PO.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Low Voltage Component Fans, Models see "ELECTRICAL RATINGS" for details.

USR indicates investigation to the Standard for Electric Fans, UL 507 - Ninth Edition.

CNR indicates investigation to the Canadian Standard for Fans and Ventilators, CSA C22.2 No. 113 - Ninth Edition.

ELECTRICAL RATINGS:

Model No.	Volts, DC	Amperes
DF0801512 (X) UN	12	0.5

Above (X) may be SE, B1, B2, RF, FD or PO.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - DC Component Fans, Model DF1402512(X)UN-(Y), Where (X) may be SE, B1, B2, RF, FD, PO, "-" is optional, (Y) may be 1 or blank.

USR indicates investigation to the Standard for Electric Fans, UL 507.

CNR indicates investigation to the Canadian Standard for Fans and Ventilators, CSA C22.2 No. 113.

ELECTRICAL RATINGS:

Model Nos.	Volts, DC	Amperes, A
DF1402512 (X) UN- (Y)	12	0.5

Note: Above (X) may be SE, B1, B2, RF, FD, PO, "-" is optional, (Y) may be 1 or blank.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Low Voltage Component Fans, Models see "ELECTRICAL RATINGS" for details.

USR indicates investigation to the Standard for Electric Fans, UL 507 - Ninth Edition.

CNR indicates investigation to the Canadian Standard for Fans and Ventilators, CSA C22.2 No. 113 - Ten Edition.

ELECTRICAL RATINGS:

Model No.	Volts, DC	Amperes
DF0401512 (X) HN	12	0.17
DF0401512 (X) MN	12	0.12
DF0401512 (X) LN	12	0.08
DF0402012 (X) HN	12	0.25
DF0402012 (X) MN	12	0.16
DF0402012 (X) LN	12	0.1
DF0601012 (X) HN	12	0.26
DF0601012 (X) MN	12	0.12
DF0601012 (X) LN	12	0.08
DF0801512 (X) HN	12	0.3
DF0801512 (X) MN	12	0.18
DF0801512 (X) LN	12	0.14
DF1202512 (X) HN	12	0.42
DF1202512 (X) MN	12	0.37
DF1202512 (X) LN	12	0.16
DF1402512 (X) HN	12	0.6
DF1402512 (X) MN	12	0.4
DF1402512 (X) LN	12	0.24
DF1352512 (X) HN	12	0.6
DF1352512 (X) MN	12	0.45
DF1352512 (X) LN	12	0.35
NR (Y) (L)	12	0.22

Above (X) maybe SE, B1, B2, **RF**, **FD**, **PO** ; (Y) maybe 140, 135; (L) maybe L, P.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - DC Fans, Models see "ELECTRICAL RATINGS" for details.

USR indicates investigation to the Standard for Electric Fans, UL 507.

CNR indicates investigation to the Canadian Standard for Fans and Ventilators, CSA C22.2 No. 113-15.

ELECTRICAL RATINGS:

Model Nos.	Volts, dc	Amperes, A
DF1203812(X)UN	12	2.7

Note: Where (x) may be SE, B1, B2, RF, FD, P0.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - DC Fans, Models see "ELECTRICAL RATINGS" for details.

USR indicates investigation to the Standard for Electric Fans, UL 507.

CNR indicates investigation to the Canadian Standard for Fans and Ventilators, CSA C22.2 No. 113-15.

ELECTRICAL RATINGS:

Model Nos.	Volts, dc	Amperes, A
DF0501012 (X) HN	12	0.14
DF0501012 (X) MN	12	0.1
DF0501012 (X) LN	12	0.08
DF0601012 (X) UN	12	0.3
DF1202512 (X) FN	12	1
DF1203812 (X) FN	12	4.5
DF1403812 (X) FN	12	5
DF1403812 (X) UN	12	4
DF1403812 (X) HN	12	3

Note: Where (x) may be SE, B1, B2, RF, FD, PO.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - DC Fans, Models see "ELECTRICAL RATINGS" for details.

USR indicates investigation to the Standard for Electric Fans, UL 507.

CNR indicates investigation to the Canadian Standard for Fans and Ventilators, CSA C22.2 No. 113-10.

ELECTRICAL RATINGS:

Model Nos.	Volts, dc	Amperes, A
DF1202512(X)MF	12	0.24
DF2402512(X)MF	12	0.35
DF3602512(X)MF	12	0.6

Where (X) maybe SE, B1, B2, RF, FD, PO

Model DF3602512(X)MF are three DF1202512(X)MF connected together.

Model DF2402512(X)MF are two DF1202512(X)MF connected together.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - DC Fans, Models see "ELECTRICAL RATINGS" for details.

USR indicates investigation to the Standard for Electric Fans, UL 507.

CNR indicates investigation to the Canadian Standard for Fans and Ventilators, CSA C22.2 No. 113-18.

ELECTRICAL RATINGS:

Model Nos.	Volts, dc	Amperes, A
DF0921012 (X) UN	12	0.4
DF0921012 (X) HN	12	0.3
DF0921012 (X) MN	12	0.25
DF0921012 (X) LN	12	0.2
DF0901012 (X) UN	12	0.4
DF0901012 (X) HN	12	0.3
DF0901012 (X) MN	12	0.25
DF0901012 (X) LN	12	0.2A
DF0601524 (X) UN	24	0.20
DF0601524 (X) MN	24	0.15
DF0601524 (X) LN	24	0.08
DF0901512 (X) UN	12	0.55
DF0901512 (X) HN	12	0.4
DF0901512 (X) MN	12	0.2
DF0901512 (X) LN	12	0.12
DF0803812 (X) UN	12	3.5
DF0803812 (X) HN	12	2.5
DF0803812 (X) MN	12	1.2
DF0803812 (X) LN	12	0.8
DF0921512 (X) HN	12	0.6
DF0921512 (X) MN	12	0.35
DF0921512 (X) LN	12	0.15
DF1203848 (X) UN	48	1.5
DF1203848 (X) HN	48	1
DF1203848 (X) MN	48	0.5

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - DC Fans, Models see "ELECTRICAL RATINGS" for details.

USR indicates investigation to the Standard for Electric Fans, UL 507.

CNR indicates investigation to the Canadian Standard for Fans and Ventilators, CSA C22.2 No. 113-18.

ELECTRICAL RATINGS:

Model Nos.	Volts, dc	Amperes, A
DF0402812(X)HN	12	2.0A
DF0402812(X)MN	12	1.5A
DF0402812(X)LN	12	0.8A
DF0603812(X)UN	12	2.5A
DF0603812(X)HN	12	1.8A
DF0603812(X)MN	12	1.0A
DF0703812(X)UN	12	1.6A
DF0703812(X)HN	12	0.7A
DF0703812(X)MN	12	0.4A
DF0923812(X)UN	12	4.5A
DF0923812(X)HN	12	2.5A
DF0923812(X)MN	12	1.8A
DF0923812(X)LN	12	1.2A
DF0923824(X)UN	24	2.8A
DF0923824(X)HN	24	1.8A
DF0923824(X)MN	24	1.2A
DF0923824(X)LN	24	0.8A
DF1202512(X)UN	12	0.54A
DF1202512(X)HN	12	0.42A
DF1202512(X)MN	12	0.37A
DF1202512(X)LN	12	0.16A

Note: Where (X) may be SE, B1, B2, RF, FD, P0.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - DC Fans, Models see "ELECTRICAL RATINGS" for details.

USR indicates investigation to the Standard for Electric Fans, UL 507.

CNR indicates investigation to the Canadian Standard for Fans and Ventilators, CSA C22.2 No. 113-18.

ELECTRICAL RATINGS:

Model Nos.	Volts, dc	Amperes, A
DF0602524 (X) UN	24	0.35
DF0602524 (X) HN	24	0.2
DF0602524 (X) MN	24	0.16
DF1102112 (X) HN	12	0.55
DF1102112 (X) MN	12	0.4
DF0802524 (X) HN	24	0.24
DF0802524 (X) MN	24	0.16
DF0405612 (X) HN	12	3.2
DF0405612 (X) MN	12	2.4
DF0405612 (X) LN	12	1.8
DF1402512 (X) HN	12	0.6
DF1402512 (X) MN	12	0.4
DF1402512 (X) LN	12	0.24
DF1402512 (X) DN	12	0.14

Note: Where (X) may be SE, B1, B2, RF, FD, PO.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - Low Voltage Component Fans, Models see "ELECTRICAL RATINGS" for details.

USR indicates investigation to the Standard for Electric Fans, UL 507.

CNR indicates investigation to the Canadian Standard for Fans and Ventilators, CSA C22.2 No. 113.

ELECTRICAL RATINGS:

Model Nos.	Volts, dc	Amperes, A
DF1803812(X)H(Z)	12	0.6
DF1803812(X)M(Z)	12	0.45
DF1803812(X)L(Z)	12	0.35
DF1803812(X)D(Z)	12	0.15

Model Nos.	Volts, dc		Amperes, A	
	Fan	LED	Fan	LED
DF1803812(X)H(W)	12	5	0.6	0.29
DF1803812(X)M(W)	12	5	0.45	0.29
DF1803812(X)L(W)	12	5	0.35	0.29
DF1803812(X)D(W)	12	5	0.15	0.29

Note: above (X) may be SE, B1, B2, RF, FD or P0; (Z) may be letter A through M; (W) may be letter N through Z.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - Low Voltage Component Fans, Models see "ELECTRICAL RATINGS" for details.

USR indicates that this product has been judged on the basis of the requirements in the United States Standard as indicated in the Test Record.

CNR indicates that this product has been judged on the basis of the requirements in the Canadian Standard as indicated in the Test Record.

ELECTRICAL RATINGS:

Model No.	Volts, DC	Amperes
DF2002512 (X) H (Z)	12	0.60
DF2002512 (X) M (Z)	12	0.42
DF2002512 (X) L (Z)	12	0.30
DF0801512 (X) H (Z)	12	0.45
DF0602524 (X) H (Z)	24	0.60
DF0602524 (X) M (Z)	24	0.20
DF0602512 (X) U (Z)	12	0.60
DF0602512 (X) H (Z)	12	0.26
DF0602512 (X) M (Z)	12	0.16
DF0602512 (X) L (Z)	12	0.12
DF0602524 (X) F (Z)	24	0.80
DF0602524 (X) U (Z)	24	0.60
DF0401024 (X) H (Z)	24	0.15
DF1203824 (X) U (Z)	24	3.00
DF1203824 (X) H (Z)	24	2.00
DF1203824 (X) M (Z)	24	1.50

Note: Above (X) may be SE, B1, B2, RF, FD or PO; (Z) may be A-Z.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - Low Voltage Component Fans, Models see "ELECTRICAL RATINGS" for details.

USR indicates that this product has been judged on the basis of the requirements in the United States Standard as indicated in the Test Record.

CNR indicates that this product has been judged on the basis of the requirements in the Canadian Standard as indicated in the Test Record.

ELECTRICAL RATINGS:

Model No.	Volts, DC	Amperes
DF0501505 (X) U (Z)	5	0.35
DF0501505 (X) H (Z)	5	0.3
DF0501505 (X) M (Z)	5	0.18
DF0501505 (X) L (Z)	5	0.12
DF0501512 (X) F (Z)	12	0.45
DF0501512 (X) U (Z)	12	0.35
DF0501512 (X) H (Z)	12	0.25
DF0501512 (X) M (Z)	12	0.20
DF0501512 (X) L (Z)	12	0.12
DF0601512 (X) U (Z)	12	0.60
DF0601512 (X) H (Z)	12	0.45
DF0601512 (X) M (Z)	12	0.30
DF0601512 (X) L (Z)	12	0.16
DF0301005 (X) H (Z)	5	0.35
DF0301005 (X) M (Z)	5	0.25
DF0301005 (X) L (Z)	5	0.12
DF0701012 (X) H (Z)	12	0.35
DF0701012 (X) M (Z)	12	0.24
DF0701012 (X) L (Z)	12	0.14

Note: Above (X) may be SE, B1, B2, RF, FD or PO; (Z) may be A-Z.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - Low Voltage Component Fans, Models see
"ELECTRICAL RATINGS" for details.

ELECTRICAL RATINGS:

Model No.	Volts, DC	Amperes
DF1201512 (X) U (Z)	12	0.54
DF1201512 (X) H (Z)	12	0.45
DF1201512 (X) M (Z)	12	0.37
DF1201512 (X) L (Z)	12	0.24
DF0405612 (X) F (Z)	12	4.50
DF0602512 (X) F (Z)	12	1.50
DF1082512 (X) F (Z)	12	1.00
DF1082512 (X) U (Z)	12	0.60
DF1082512 (X) H (Z)	12	0.42
DF1082512 (X) M (Z)	12	0.37
DF1082512 (X) L (Z)	12	0.24
DF1202512 (X) M1 (Z)	12	0.20
DF1202512 (X) L1 (Z)	12	0.18
DF1402512 (X) L1 (Z)	12	0.25
DF1402512 (X) D2 (Z)	12	0.20
DF1402512 (X) D1 (Z)	12	0.18
DF1203812 (X) S (Z)	12	8.00

Note: (X) may be SE, B1, B2, RF, FD or PO, (Z) may be A-Z or blank.

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - Low Voltage Component Fan, DF0602012(X)(Y1)(Z), DF0982712(X)(Y2)(Z), DF0808012(X)(Y2)(Z), DF0807012(X)(Y2)(Z), DF0803812(X)F(Z), DF0605612(X)F(Z), where (X) may be SE, B1, B2, RF, FD or PO, (Y1) may be U, H, M or L, (Y2) may be F, U, H, M or L, (Z) may be A-Z.

USR indicates evaluation to the US Safety Scheme. Details of standard and version refer to Test Record.

CNR indicates evaluation to the Canadian Safety Scheme. Details of standard and version refer to Test Record.

ELECTRICAL RATINGS:

Model Nos.	Volts, V DC	Amperes, A
DF0602012(X)U(Z)	12	0.80
DF0602012(X)H(Z)	12	0.48
DF0602012(X)M(Z)	12	0.26
DF0602012(X)L(Z)	12	0.12
DF0982712(X)F(Z)	12	0.80
DF0982712(X)U(Z)	12	0.60
DF0982712(X)H(Z)	12	0.45
DF0982712(X)M(Z)	12	0.30
DF0982712(X)L(Z)	12	0.15
DF0808012(X)F(Z)	12	14.0
DF0808012(X)U(Z)	12	10.5
DF0808012(X)H(Z)	12	8.0
DF0808012(X)M(Z)	12	6.0
DF0808012(X)L(Z)	12	4.0
DF0807012(X)F(Z)	12	14.0
DF0807012(X)U(Z)	12	10.5
DF0807012(X)H(Z)	12	8.0
DF0807012(X)M(Z)	12	6.0
DF0807012(X)L(Z)	12	4.0
DF0803812(X)F(Z)	12	5.0
DF0605612(X)F(Z)	12	6.5

Note: above (X) may be SE, B1, B2, RF, FD or PO, (Z) may be A-Z.



Product Service

CERTIFICATE

No. B 098135 0007 Rev. 00

Holder of Certificate: **HUIZHOU CITY XUNSHUO TECHNOLOGY CO.,LTD**

BaiGuo Gardon, Meihou Farm
Boxin Road, IuoYang Town, Boluo Hsien
516199 Huizhou city, Guangdong
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:



Product: **Component fan
(DC 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. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

Test report no.: 612101917801

Valid until: 2024-04-21

Date, 2019-04-23


(Watson Yang)



Product Service

CERTIFICATE

No. B 098135 0007 Rev. 00

Model(s):

1) DF04010, 2) DF05010, 3) DF06010, 4) DF07010, 5) DF07015,
6) DF07025, 7) DF12025, DF24025, DF36025, 8) DF06025,
9) DF1203812, 10) DF1403812 Series

Difference

DF	040	10	05	SE	H	N
X1	X2	X3	X4	X5	X6	X7

X1 - Fan Type

"DF": DC Fan

X2 - Frame Dimension

"040": 40mm x 40mm

"050": 50mm x 50mm

"060": 60mm x 60mm

"070": 70mm x 70mm

"120": 120mm x 120mm

"140": 140mm x 140mm

"240": 120 mm x 240 mm (Consist of two 120 mm)

"360": 120 mm x 360 mm (Consist of three 120 mm)

X3 - Frame Thickness

"10": 10mm

"15": 15mm

"25": 25mm

"38": 38mm

X4 - Input Voltage

"05": 5Vdc; "12": 12Vdc

X5 - Bearing Type: (X) can be SE, B1, B2, RF, FD, PO

"SE": Sleeve type

"B1": One ball bearing

"B2": Two ball bearing

"RF": Rifle bearing

"FD": Fluid Dynamic Bearing

"PO": POM Bearing

X6 - Motor Speed

"F": highest speed; "U": Ultra high speed

"H": High speed; "M": Middle speed

"L": Low speed; "D": Ultra low speed

X7 - Series No.

Can be A-Z or blank

Brand Name:

COOLER MASTER, MARTECH

Parameters:

Rated input voltage:	See below
Rated input current:	See below
Protection class:	III
Max. ambient temperature:	40 °C
Degree of protection	
against ingress of liquids:	IPX0

Remark: When installing, all requirements of below mentioned test standards must be fulfilled.



Product Service

CERTIFICATE

No. B 098135 0007 Rev. 00

The ratings & model description of the models are as below:

Model-#	DC Ratings	Model-#	DC Ratings
DF0401005(X)LN	5 V dc, 0.16 A	DF0401012(X)LN	12 V dc, 0.10 A
DF0401005(X)MN	5 V dc, 0.18 A	DF0401012(X)MN	12 V dc, 0.16 A
DF0401005(X)HN	5 V dc, 0.22 A	DF0401012(X)HN	12 V dc, 0.24 A
DF0401005(X)UN	5 V dc, 0.28 A	DF0401012(X)UN	12 V dc, 0.30 A
DF0501005(X)LN	5 V dc, 0.12 A	DF0501012(X)LN	12 V dc, 0.08 A
DF0501005(X)MN	5 V dc, 0.18 A	DF0501012(X)MN	12 V dc, 0.10 A
DF0501005(X)HN	5 V dc, 0.24 A	DF0501012(X)HN	12 V dc, 0.14 A
DF0501005(X)UN	5 V dc, 0.30 A	DF0501012(X)UN	12 V dc, 0.18 A
DF0601005(X)LN	5 V dc, 0.10 A	DF0601012(X)LN	12 V dc, 0.12 A
DF0601005(X)MN	5 V dc, 0.16 A	DF0601012(X)MN	12 V dc, 0.20 A
DF0601005(X)HN	5 V dc, 0.24 A	DF0601012(X)HN	12 V dc, 0.26 A
DF0601005(X)UN	5 V dc, 0.30 A	DF0601012(X)UN	12 V dc, 0.30 A
DF0701005(X)LN	5 V dc, 0.11 A	DF0701505(X)LN	5 V dc, 0.11 A
DF0701005(X)MN	5 V dc, 0.16 A	DF0701505(X)MN	5 V dc, 0.24 A
DF0701005(X)HN	5 V dc, 0.20 A	DF0701505(X)HN	5 V dc, 0.30 A
DF0701005(X)UN	5 V dc, 0.30 A	DF0701505(X)UN	5 V dc, 0.36 A
DF0701512(X)UN	12 V dc, 0.40 A	DF0702512(X)UN	12 V dc, 0.60 A
DF0701512(X)HN	12 V dc, 0.25 A	DF0702512(X)HN	12 V dc, 0.30 A
DF0701512(X)MN	12 V dc, 0.16 A	DF0702512(X)MN	12 V dc, 0.24 A
DF0701512(X)LN	12 V dc, 0.12 A	DF0702512(X)LN	12 V dc, 0.14 A
DF1202512(X)FN	12 V dc, 1 A	DF1203812(X)FN	12 V dc, 4.5 A
DF1202512(X)MF	12 V dc, 0.24 A	DF1203812(X)UN	12 V dc, 2.7 A
		DF1203812(X)HN	12 V dc, 0.6 A
DF0602512(X)UN	12 V dc, 0.6 A		
DF0602512(X)HN	12 V dc, 0.26 A	DF1403812(X)FN	12 V dc, 5 A
DF0602512(X)MN	12 V dc, 0.16 A	DF1403812(X)UN	12 V dc, 4 A
DF0602512(X)LN	12 V dc, 0.12 A	DF1403812(X)HN	12 V dc, 3 A
DF2402512(X)MF	12 V dc, 0.35 A		
DF3602512(X)MF	12 V dc, 0.6 A		

Tested according to: EN 62368-1:2014

Production
Facility(ies):

098135

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