

规格承认书

SPECIFICATION FOR APPROVAL

客户 CUSTOMER: AURA-kvadrat LLC

客户料号 PARTS NO.:

承认编号 APPROVAL NO.: GXDC202500120

产品编号 PRODUCTS NO.: GD15050H24B-A21

版本 REV.: A0

产品类型 MODELNO.: DC FAN

样品数量 QTY: 4 PCS

日期 DATE: 2025-05-26

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广州冠协风机制造有限公司

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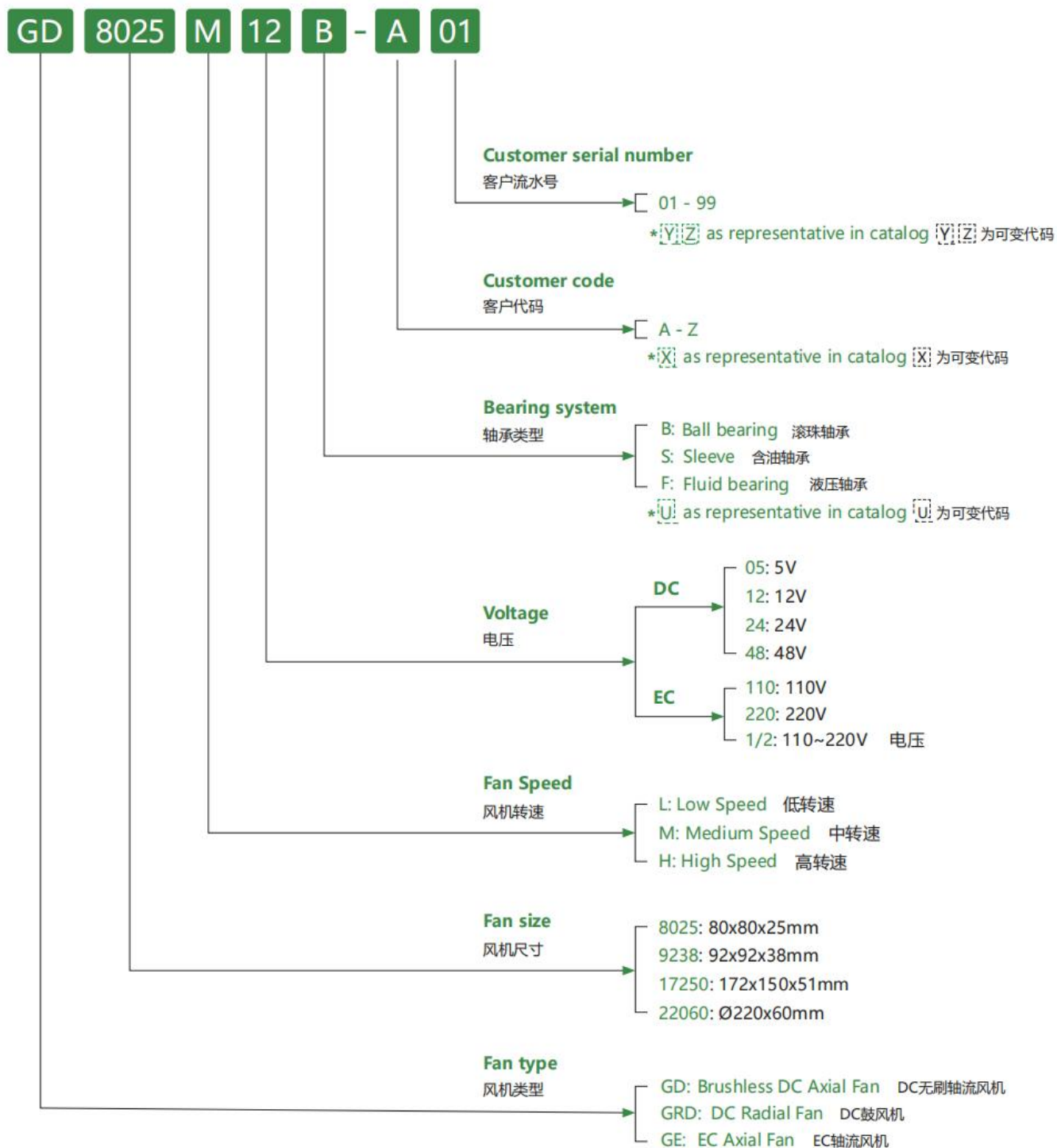
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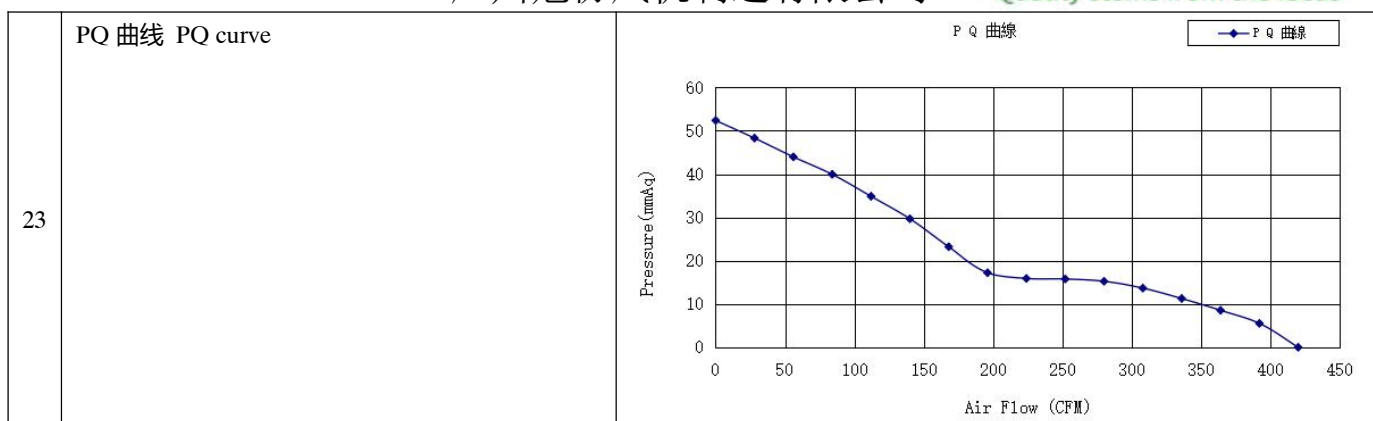
DC&EC Fans Part Numbering System

DC&EC风机型号编码原则



1.0: 一般规格 (General Specification)

项目 Item		规格/条件 Specification/Condition	
1	型号 Model No.	GD15050H24B-A21	
2	外型尺寸 Outline. Dimension	150*150*51mm	
3	工作电压 Operating Voltage	DC 18-26.5V	
4	额定电压 Rated .voltage	DC24V	
5	启动电压 Starting Voltage	DC ≤18V on/off	
6	额定电流 Rated current	4.2A±10%	
7	额定功率 Power consumption	100.8W ±10%	a. 额定电压 Rated .voltage
8	转速 Speed	6000RPM±10%	b.25°C 65% RH c.After testing for 5 minutes
9	风量 Airflow AT ZERO STATIC PRESSURE	714.02m³/h±10% 420.26 CFM±10%	a. 额定电压 Rated .voltage
	静压 Air .Static Pressure AT ZERO AIRFLOW	513.85Pa±10% 52.38mmH₂O±10%	b. AMCA 标准 Standard C. 额定电流 Rated current
10	噪音标准 Noise Level	72.3dB(A)±10%	a. 额定电压 Rated Voltage b. 18dB 无响室 18dB Non-Echo Chamber c. 标准 Standard: CNS 8753 / ISO 3744 d. Test Condition :ISO 7779 e. 距离 Distance: 1.0 M
11	期望寿命 Life expectancy	70000 hrs at temp40 °C Humidity5%-95%	MTTF Mean Time To Failure Conf. Level 90%
12	扇叶数 No.of.Blade	5 叶	
13	极数 No.of.Pole	6 极	
14	运转方向 Rotating Direction	顺时针/运转方向是从标签面看	
15	锁住保护 Lock Protection	1.额定电压堵转 2-3 秒 自动断电 降低内部温升 Auto power off after locked at rated voltage for 2-3 sec. Reduce internal temperature rise 2.自动断电后 2 至 6 秒自动尝试启动 After auto power off, circuit attempt to restart in 2 to 6 sec.	
16	极性保护 Polarity Protection	VCC与GND反接时 不导通 Open circuit when Vcc & GND are exchanged	
17	过压保护 Over voltage protection	无 NO	
18	过流保护 Over current protection	无 NO	
19	恒速功能 fixed constant speed Function	无 NO	
20	软启动 Soft Starting	有 YES	
21	PWM 功能 PWM function	通过输入一个PWM占空比信号控制风扇转速 Enter a PWM duty cycle signal to control fan speed	
22	FG 功能 FG function	有 YES	



2.0:主要材料/零件规格 (Main Materials/parts Specification)

材料/零件 Materials/parts	规格 Specification
1 材料/ 外框扇叶 Material/ Frame impeller	黑色铝合金框 /PBT 黑色 5 叶
2 轴承 Bearing Type	滚珠轴承 Ball Bearing
3 引线 Lead Wire	UL1007# 18AWG 黑红黄蓝分线框外 300±15MM
4 端子 Connector	无端 4P
	黑 红 黄 蓝
	GND VCC FG PWM
5 环保要求 Environmental Requirement	☒ ROHS

3.0 电性规格 (Electrical Specifically)

1 绝缘阻抗 Insulation Resistance	10MΩ/裸线与外框间测量, 500VDC/min 10MΩ/between unshackled wire and frame at 500VDC/min
2 绝缘耐压 Dielectric Strength	5Ma Max./导线与外框间测量, 500VAC/min 5Ma Max./Measured between lead wire(+)and frame at 500VAC/min
3 防水等级 Waterproof level	无 NO

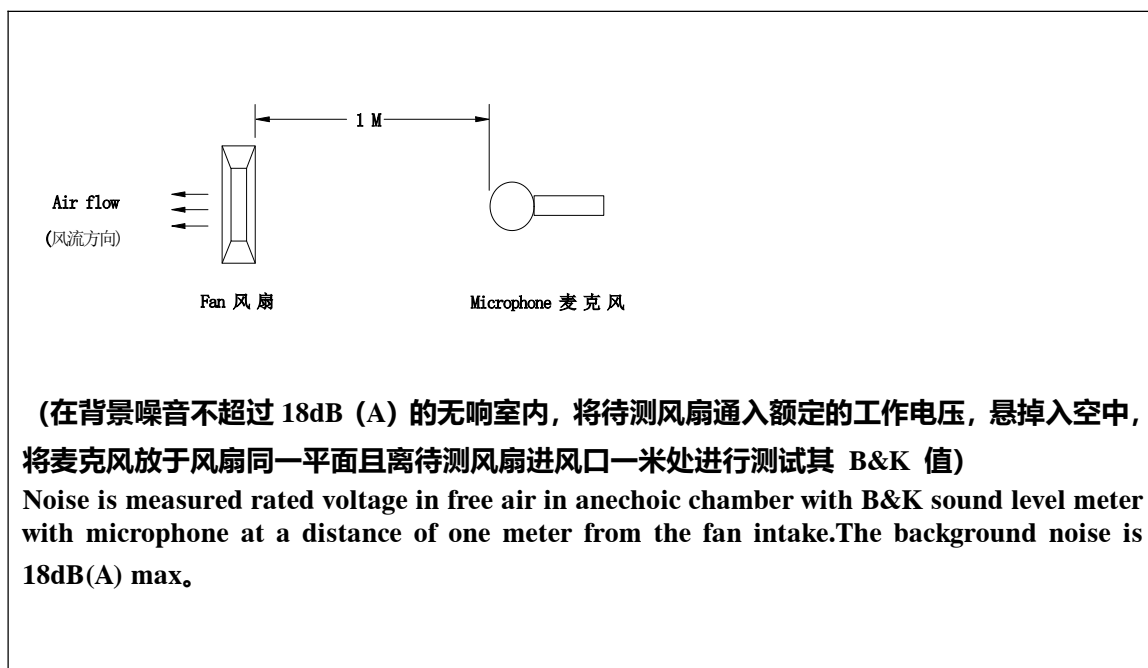
4.0 环境测试 (Environmental Specification)

1 运转温/湿度范围 Operating Temp .Range	温度/Temperature:-30℃ ~ +70℃ 湿度/Humidity:30%~85%RH
2 保存温/湿度范围 Storage Temperature	温度/Temperature:-30℃ ~ +70℃ 湿度/Humidity:30%~85%RH
3 耐湿性 Humidity	电气规格依据 MIL-STD 202F Method 103B 湿度: 95%RH 温度: 40±2℃

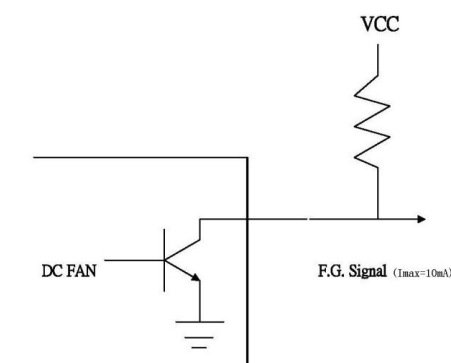
4	热冲击 Thermal Shock	电气规格依据 MIL-STD 202F Method 107D Per MIL-STD 202F Method 107D,Condition D
5	绝缘阶段 Insulation Shock	UL: A 级 UL: Class A
6	包装耐振动试验 Packing Vibration Test	包装后, XYZ 三方向施 1.1G load vibration test for 30min .No serious damage
7	包装耐冲击试验 Packing Shock Proof Test	捆包后, 高 60 公分, 1 棱角 3 边 6 面自然落下, 无严重损坏. 1comer,3edges, 6faces natural drop from 60cm high packing No serious damage

5.0 在无响室额定电压下之噪音测试

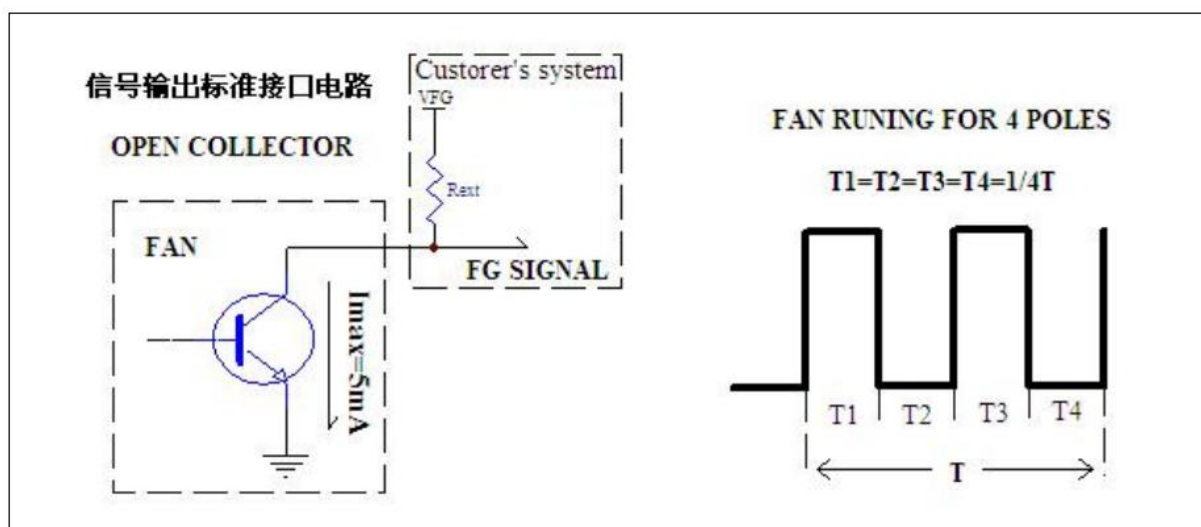
(Noise is measured at rated voltage in anechoic)



6.0 信号及波形 (Frequency Generator 0/P)

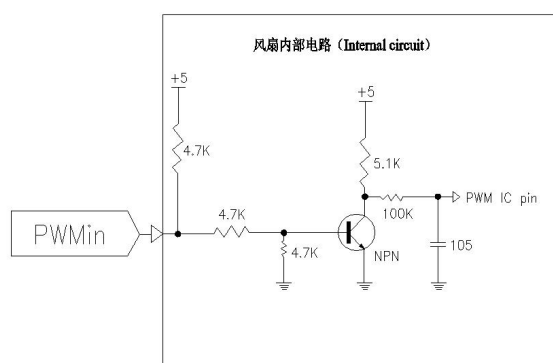


6.1 信号测试方式 (Frequency test mode)

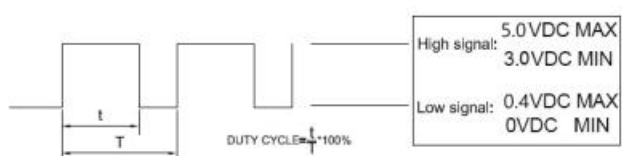


7.0 PWM 信号 (PWM Signal)

7.1 PWM 输入电路



7.2 PWM 输入信号



The frequency to accept 20KHz-30KHz

7.3 转速与 PWM 控制信号(Speed VS PWM control signal) (At 24V T=25°C)

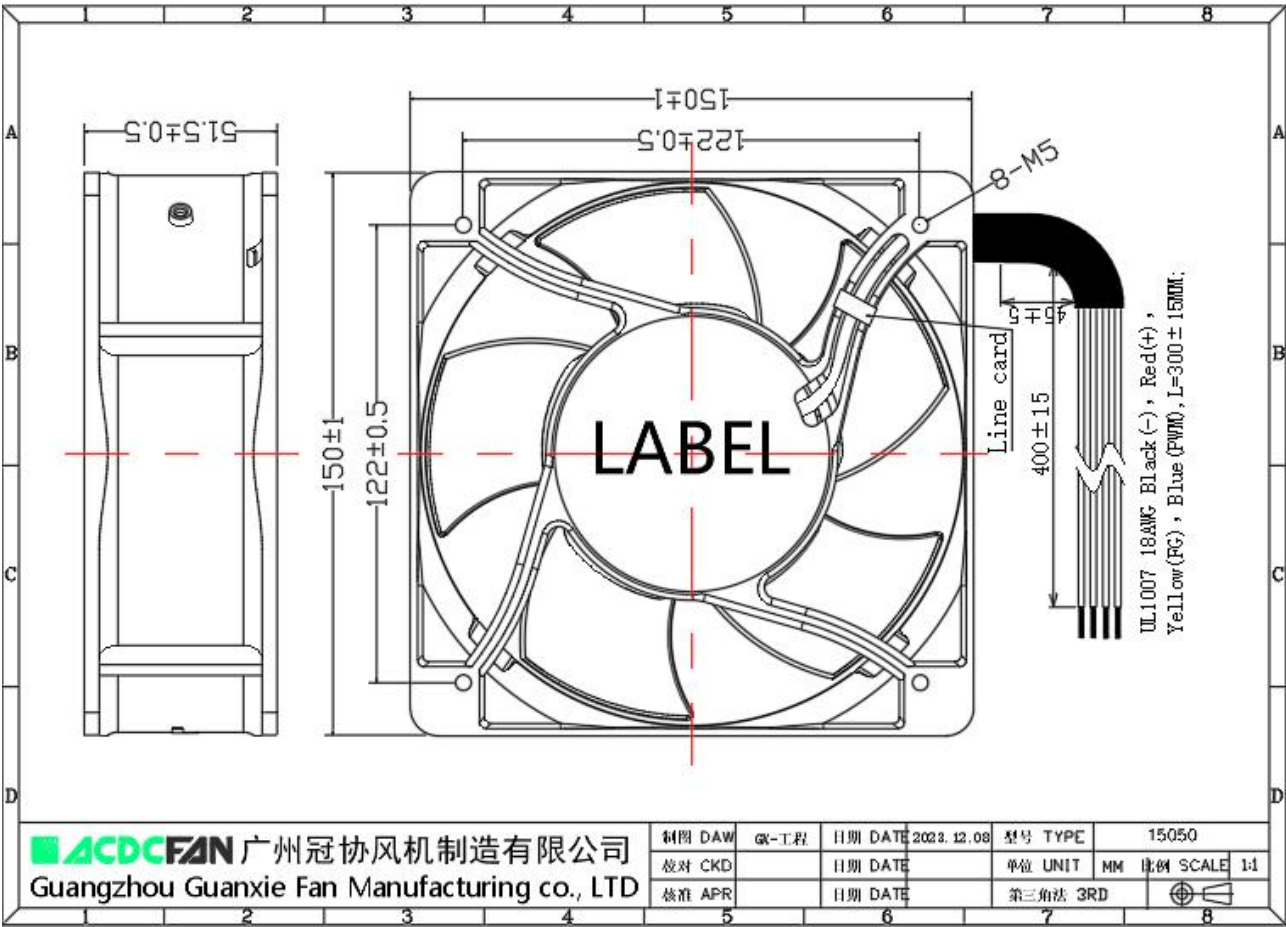
占空比 (%)	0	25	50	75	100
转速 (RPM) $\pm 10\%$	0	2415	3820	5065	6027

8.0 商标 (Label Marking)

	型号/Model	GD15050H24B-A21
	额定电压/Voltage	24VDC
	额定电流/ Current	4.2A
	轴承类型/Bearing System	滚珠/Ball
	标签尺寸/Label Size	Φ 60mm
	商标颜色/Label Color	绿色/Green
	安规/Safety Approval	CE

商标参数仅供参考，具体参数以实际为准。
(The trademark parameters are for reference only, and specific parameters are subject to actual conditions.)

9.0 外形尺寸 (Outline Dimension)



FAN INSTALLATION INSTRUCTIONS/风扇安装说明

1. IN CASE OF USING BOLT-NUT FASTENERS, THE FLATNESS OF CHASSIS MATING SURFACES SHOULD BE KEPT BELOW 0.1MM.

在使用螺栓螺母紧固件时，底盘配合表面平整度应小于 0.1mm.

2. IN CASE OF USING BOLT-NUT FASTENERS, THIS MODEL WAS DESIGNED TO BE INSTALLED BY FASTENING AT EITHER INLET OR OUTLET FLANGE ONLY, FIGURE(a). IN CASES OF THE BOLT TO BE APPLIED TO THE NUT MUST NOT EXCEED: 在使用螺栓螺母紧固件的情况下，该模型设计为安装紧固在法兰进口或出口，如图(a),在适用于螺栓的情况下不得超过如下要求:

2.1 FLANGE TYPE FRAME/法兰式扇框: 4.5 Kgf-cm [FIGURE/图(c)]

2.2 RIB TYPE FRAME/包柱扇框: 7.5 Kgf-cm [FIGURE/图(d)]

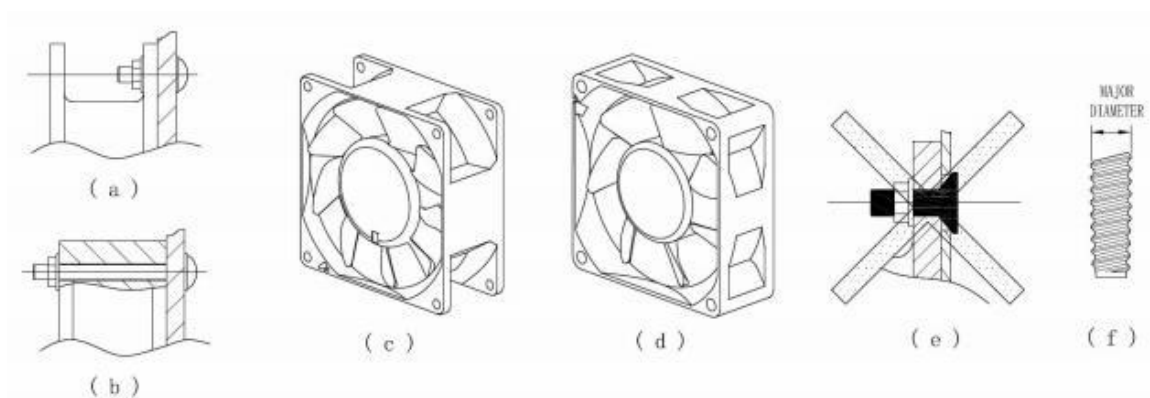
3. IN CASE OF USING SELF-TAPPING SCREWS, THE DIMENSIONAL DETAILS OF THE SELF-TAPPING SCREWS RECOMMENDED ARE SHOWN IN TABLE(A). EACH FASTENER HOLE SHOULD ONLY BE TIGHTENED ONCE, REPEATED LOCKING MAY BE SLIDING PHENOMENON. IN ADDITION, THE TORQUE TO BE APPLIED TO THE SELF-TAPPING SCREWS MUST NOT EXCEED THE VALUES STATED IN TABLE(1). 在使用自攻螺钉的情况下，自攻螺钉推荐的详细尺寸见表(表一),每个紧固孔只应拧紧一次或可能发生滑丝。此外施加力矩的自攻螺丝不得超过(表一)的规定值.
4. THE COUNTERSUNK PART OF FASTENER HEAD SHOULD NOT INTERFERE WITH THE FRAME OR THERE WOULD BE A RISK OF BREAKAGE (FIGURE e). FASTENER HEAD WITH FLAT INNER SURFACE, i.e. NO COUNTERSUNK, IS RECOMMENDED. 紧固件的沉头部分不应干涉框架或有破损的危险(图 e),建议采用平头(即无沉头)的螺丝.

TABLE (1)

MOUNTING HOLE DIAMETER 安装孔直径	SCREW SPEC 螺纹规格	MAJOR DIAMETER[FIG.(f)] 螺纹规格		RECOMMENDED MAX.TORQUE 推荐的最大扭矩(单位 Kgf-cm)	
		MAX.	MIN.	FLANGE TYPE FRAME	RIB TYPE FRAME
Φ3.5	M4.0x1.41	4.0	3.85	4.5	7.5
Φ4.3	M4.8x1.59	4.8	4.65	5.5	7.5
Φ4.5	M5.0x1.59	5.0	4.85	5.5	7.5

NOTE: 1.REFERENCE STANDARD JIS B 1122/参考标准.

- 2.A LOWER TORQUE THAN THE RECOMMENDED VALUE SHOULD BE USED IF SLIPPAGE IS OBSERVED.如果发现出现滑牙现象，应使用低于推荐值的扭矩 .



注意事项 (NOTES)

- 1 Before use, make sure the supply voltage to meet the use of the product range, line-powered load exceeds the maximum power consumption of this product 120%. And the voltage is stable without clutter**
(使用前, 确认供电电压能满足本产品的使用范围, 供电电路负载超过本产品的最大功耗的 120%。且电压是稳定不含杂波干扰)
- 2 Please when ventilator circular telegram normal work do not use the hand to bump touches fan blade border**
(请在风扇通电正常运转时不要用手碰触扇叶边沿)
- 3 Please do not touch the impeller and never carry the fan the lead wires. The bearings and the lead wires may be damaged. Additionally, static electricity may damage the internal circuits of the fan**
(请不要碰触扇叶和拉扯线材, 以免损坏轴承及导线。此外, 静电可能损坏内部的风扇组件)
- 4 Please do not use the fan in the environment of corrosive gas or liquid.**
(请不要将风扇置于腐蚀的气体和液体中)
- 5 Please do not store the fan in the environment of high humidity. Please avoid storage of the fan over 6 months. For long term storage, please connect power to the fan shortly every 6 months even though the fan is stored in room temperature.**
(请不要将风扇储存在高湿度的环境中, 请尽量避免将风扇储存期超过 6 个月。如果要长期储存, 请将其在室温的环境下。且每隔 6 个月须上电源让风扇短时间运转。)