交流风机产品规格书

AC FAN PRODUCT SPECIFICATION

名　　称(NAME)：交流离心风机 AC centrifugal fan

型　　号(MODEL)：AB280R5-92-10

版 本 号(VERSION NUMBER)：A/0

编　　制 (MAKE)：王利伟

校　　对 (EDIT)：

审　　核 (CHECKED)：

批　　准(APPROVED)：

客户确认（CUSTOMER APPROVE)：

日　　期(DATE)：

换版记录Describing of Alternations

版本号/Version	换版原因/ Alternations reason	换版内容/ Alternations reason content	姓名/ Name	日期 /Date

1.0 概述/ lntroduction

本规格书主要描述了产品标准、使用环境、技术要求等.

This specification describes the standard 、operation environment、and technic requirements of the product。

2.0 产品标准和安规要求/Requirement of production standard and safety regulations

2.1 本产品符合的标准 / The product satisfy requirements

2.1.1 GB12350《小功率电动机的安全要求》

GB12350《Safety requirments of small power motors》

2.1.2 JBT 10563-2006《一般用途离心通风机通用技术条件要求》

JBT 10563-2006 《General technical requirement for general centrifugal fan》

2.2.3 EN60335-1《家电和类似用途电器的安全要求》

EN60335-1 《Household and similar electrical appliances-safety》

2.2 本产品全部材料符合 RoHS 要求

All material accord with RoHS .

3.0 使用环境/ Operating environment requirements

3.1 工作温度和湿度/ Operating temperature and humidity

工作温度范围：-25℃～+60℃。 工作湿度范围: 5%～95% RH。

Operating temperatures from -25℃ to +60℃, Operating humidity from 5% to 95% RH。

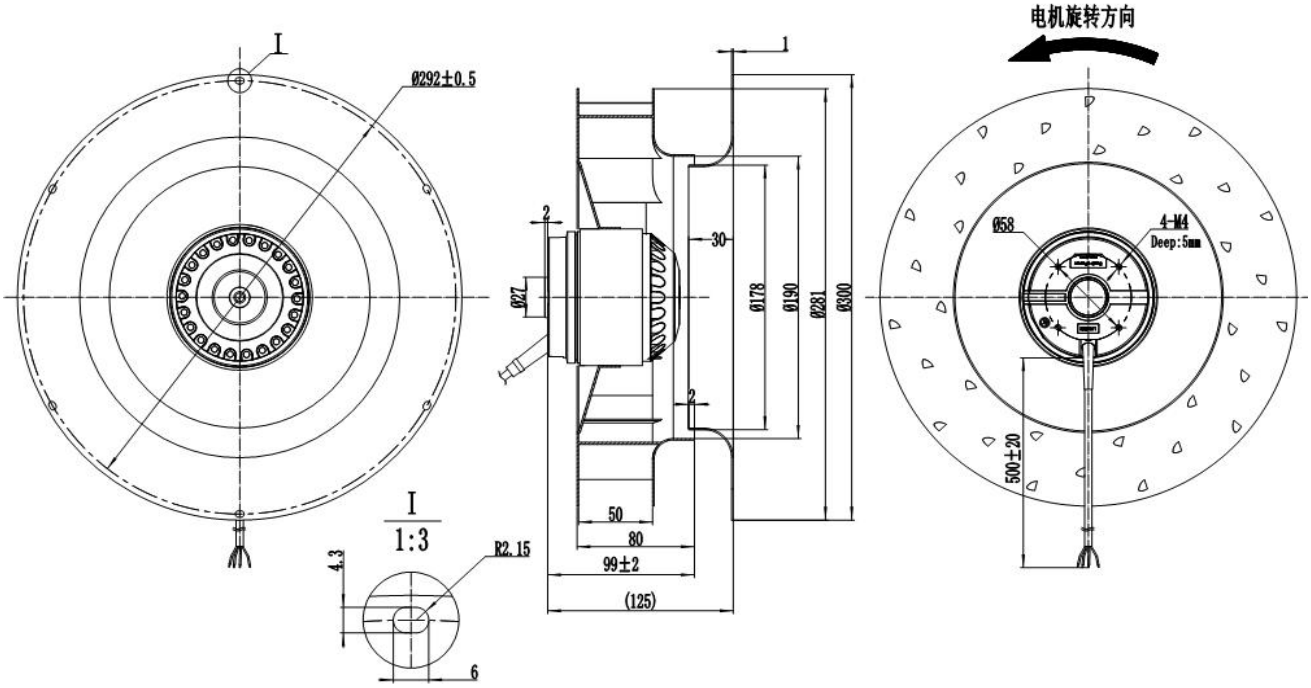
3.2 贮存温度和湿度/Storaging temperature and humidity

贮存温度范围：-35℃～+65℃ , 贮存湿度范围: 5%～90% RH。

Storaging temperatures from -35℃ to +65℃; Storaging humidity from 5% to 90% RH。

4.0 机械要求/ Mechanical requirements

4.1 外形图/Dimension drawing



4.2 叶轮/Impeller

叶轮由镀锌板制成，材料符合RoHS。

Impeller made of SPCC, material accord with RoHS。

4.3 电机/Motor

单相交流电机,电机型号WA092R5-02-Q5。

Single-phase AC motor, the motor model is WA092R5-02-Q5.

4.4 平衡/ Balancing

风机在 2500±10%r/min 运转时，每个端面动平衡精度不低于 G6.3，符合标准 JB/T9101 。

At 2500±10%r/min running speed,the residual unbalance of the fan is not less than G6.3(balancing precision grade) in each plane,according with JB/T9101。

4.5 振动/Vibration of the fan

风机振动值≤4.6 mm/s,测试方法按照JB/T 8689标准规定.

Vibration speed virtual value of fans ≤4.6 mm/s, test method accord with JB/T 8689.

4.6 跳动/ Runout of impeller

风轮轴向、径向跳动 ≤0.8mm。

Runout of impeller in axial and radial direction≤0.8mm。

4.7 防护等级/Type of protection

电机的防护等级为IP44。

The protection of motor is IP44。

4.8 寿命/Life time

风机寿命估算值40000小时，（在额定电压、环境温度为40℃、风机全速运转时）

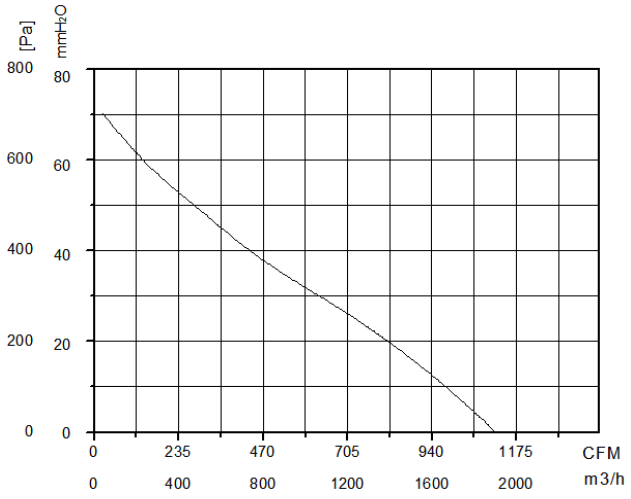
Fan life expectance 40000 hours, determined when at rated voltage,running at full speed, environment temperature of 40 ℃。

5.0 风机性能/Fan performance

5.1 标称参数/Rating data

额定电压/ Vol[V]	频率/ Freq[Hz]	电容/ Cap[μ F]	输入电流/ Current [A] (±10%)	输入功率/ Power [W] (±10%)	转速/ Speed[r/min] (±10%)	风量/ Air flow [m^3/h](± 10%)	噪音/ Noise [LpdB(A)]	绝缘等级 /class
220	50	8/450V	1.0	225	2500	1850	<74	F

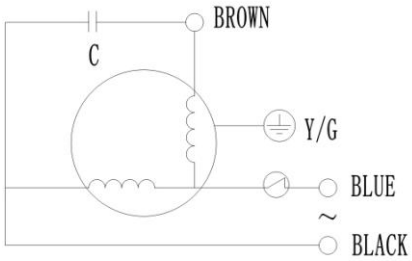
5.2 特性曲线/Performance curve (额定工作电压 220V 时/Rating voltage 220V)



风量-压力曲线

6.0 电气性能/Electrical performance

6.1 接线示意图/View lead connection



6.2 电压范围/Voltage range

风机设计的额定运行电压为220V，可运行的电压范围是176～242V，

The fan is designed to operate at a nominal voltage of 220V but can be operated in the AC supply voltage range of 176 to 242 V.

6.3 保护/Protection

电机有热保护功能，断开温度:150—160℃,复位温度:95—125℃

This motor with heat protection,cut off temperature: 150—160℃,replacement temperature 95—125℃

6.4 绝缘电阻/Insulation resistance

电机定子绕组在热态或温升试验后，对其机壳绝缘电阻不低于 50MΩ，电机湿热试验后，绝缘电阻不低于 2MΩ

After the motor stator and winding get heated, or after the temperature rise test, its motor housing insulation resistance is not less than 50MΩ, And motor insulation resistance is not less than 2MΩ after humidity heat test.

6.5 电气强度/Electrical stength

定子绕组与机壳间外加 50Hz 近似正弦波的电压 1500V 持续 1min 或 1800V 持续 1S 无击穿闪烁现象(泄露电流小于 5mA)；在潮态时，应承受 1275V，持续 1min 无击穿闪烁现象

With a force from 50Hz,1500V voltage similar like sine wave for a duration of 1 minute,or 1800V continuously For a second, stator winding has no disruptive spark(Current leakage less than 5mA); In the humidity Environment, the motor can withstand 1275V, and no disruptive spark for a minute.

6.6 匝间绝缘试验/Turn to turn test

电机定子绕组应能承受匝间绝缘耐冲击电压试验而无击穿，试验电压(峰值为)2100V

Motor stator winding can withstand turn-to-turn test and Impact resistance voltage test without breakdown impact.Test voltage(peak value) is 2100V.

6.7 温升试验/Temperature rise test

出厂风机在额定工况点下运行（环境温度不超过 40℃的条件下），热稳定后绕组温升（电阻法）不超 95K。

The ex factory fan operates at the rated operating point（ambient temperature not more than 40℃），temperature rise less than 95K.

6.8 堵转试验/Locked rotor test

在标准状态下，将风机堵转 4 个小时，在堵转期间，风机无冒烟、着火现象，堵转结束后，风机在标准状态下运行无异常。

In the standard state,the fan will be locked for four hours,during the lock up period,there is no smoke and fire,after the end of the test,the fan in the standard state without exception.

7.0 质量要求/Quality requests

质量要求符合企业标准 / Quality requests accord with LANGDI standard

8.0 包装和标识/ Packaging and marks

8.1 包装/Packaging

包装必须有确定的尺寸和合适的结构确保风机在运输过程中不会损坏。

The packaging has to be well dimension and structure, so that the fans for on normal transport could not be damaged.

8.2 标识/Marks

制造商名称、产品型号、重量、尺寸等

Markings: Name of manufacturer, type of fan, date of manufacture, weight,Size etc.

9.0 附件/Other requirements on accessory

9.1 电容/Capacitor

■带/Yes 带/Yes, □不带/No, □根据销售订单配备/For Salers'request;

9.2 导风圈/ Inlet cones

■带/ Yes, □不带/ No, □根据销售订单配备/ For Salers'request;

9.3 蜗壳/ Scroll housing

(□有/YES、■没有/NO)

蜗壳材料为/ Scroll housing Material: 型号为/model:

9.4 连接件组件/Annectent parts

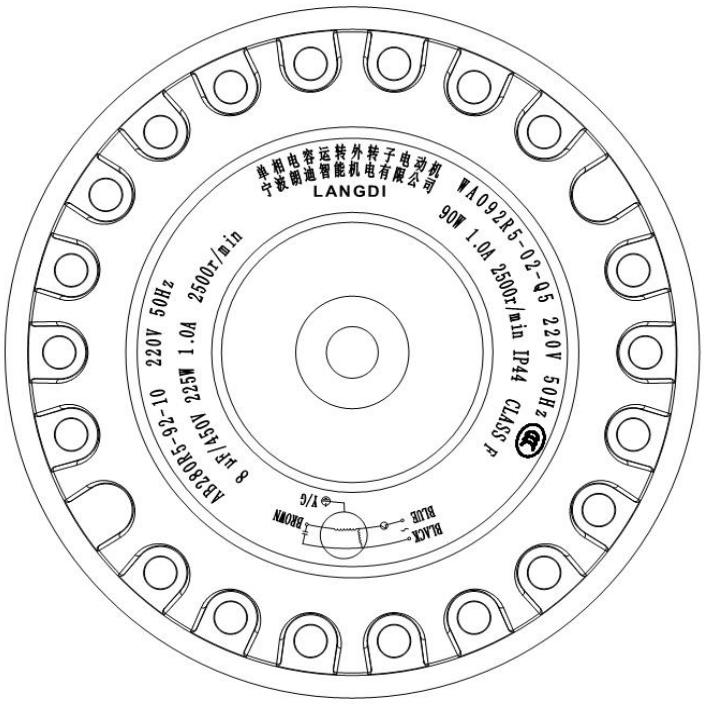
连接器/linker(□有/Yes、■没有/No), 型号为/model:

端子/terminal(□有/Yes、■没有/No), 型号为/model:

9.5 LANGDI 标志/ Logo LANGDI

■要/ Yes, □取消/ No

9.6 铭牌标识/Nameplate drawing:



10.0警示语/Warning:

1 本产品不允许出风口或进风口端无任何风阻情况下使用，否则会存在引起电机内部温度过高的风险。

The products do not allow the outlet or inlet end without any drag use, otherwise it will cause inside the motor temperature is too high risk.

2 本产品仅限于室内使用。不得用于室外，或不加以任何防护的与室外联通使用。

The product is only indoor used. Do not be outdoor used or be used in indoor locations where it drive outside air to room without any protection (such as louver etc.).

3 电机、风机必须在规定的温度和湿度范围内使用，否则可能造成不可预测的损坏。

The fan and motor must be used within the prescribed scope of temperature and humidity otherwise it will cause an unexpected damage.

4 请务必使用铭牌指示的正确电压接入产品，否则会造成风机损坏。

Provide the right voltage according to the nameplate otherwise it will damage the product.

5 电机接线必须按接线图的指示，有接地线要求的产品请务必请务必接上地线，不建议客户使用延长线。所有不按指示的接线都可能造成电机烧坏。

Wiring depends on the wiring diagram and please connect the earth ground if required. We don’t suggest to use the extension cord. And wrong connection may cause the damage of the fan.

6 在移动产品的时候，不得以扇叶为受力点。否则会造成扇叶变形而导致风机运转时振动过大。

Be careful when moving the product.Don’t take the blades as a handle because it will cause the distortion and chatter.

7 请不要自主拆装风机，否则将影响扇叶平衡、防水等效果，甚至引起安全问题。

Do not disassemble the fan arbitrarily. It may hurt the capacity of water tightness and dynamic balance or cause other serious problems.

8 风机的电气连接必须有合适的过流保护器以防止电流过大对产品造成损坏。

The over current protector is necessary in case the damage form over current.

9 带导风圈的风机需按照推荐尺寸设计和安装，否则将影响产品性能。

The fan with inlet ring should be installed follow the requirements or it will affect the Performance.

10 风机请安装在儿童不能接触到扇叶和带电部位的地方，也不允许儿童单独使用本产品。

The fan should keep away from the children especially the blade and electric parts. And the children are not allowed to operate the fan alone.

11 建议客户对我司规格书进行签字回传，若批量生产时客户仍未签字回传，我司默认客户已同意本规格书上的所有内容。

It is recommended that customers sign the specifications and return to our company. If the customers have not signed and returned the specifications to our company at the time of mass production, our company default that the customer has agreed to all the contents of the specifications.

12 未按以上条例安装及使用风机，所造成的机器损坏或者事故，我公司均不承担任何责任，敬请知悉！

Please be informed that we are not responsible for any damage or accident caused by violating above rules to install and operate the fan.

13 我司对本规格书拥有最终解释权。

Our company has the final right to interpret this specification.

11.注意事项/matters of attention:

产品在客户仓库存储时间不宜过长，产品不工作时间达6个月时应让产品通电运转一次（建议运转时间不少于5分钟）。以此，长时间放置不上电运转造成电机质量下降，我公司不承担相关主要责任，但本着诚信合作的理念，我公司可 免费提供相关技术支持活动，因此造成我司规格书范围内的风机/电机产品需要维修或更换所产生的直接费用由双方协商进行。

Product storage time in customer warehouse should not be too long. When the product is not working for 6 month, the product should be operated on electricity once.5 minutes). In this way, the power quality of the motor will be reduced if the power is not placed on the battery for a long time.Our company can provide technical support activities free of charge, thus causing the fan / motor products within our specification to be repaired or replaced directly.The cost is negotiated by both parties.