

YFD

YingFuDa Micro Motor Co Ltd

盈富达微电机有限公司

Product specification

Customer Name _____

Model No. YFD5512-2327-08

Specification No. 2005021

Revision A0

Date issued 2020.5.2

CONFIRMED & ACCEPTED BY CUSTOMER <i>COMPANY, CHOP & SIGNATURE</i>
DATE :

PREPARED BY: YWjiang2/5-20 CHECKED BY: _____ APPROVED BY: _____

Product Specification

Model No: YFD5512-
2327-08

Sample No: 2005021

1. 马达类型: 微型直流马达
2. 标准测试条件:
- 2-1 额定电压: 120.0 VAC Full wave rectification
- 2-2 旋转方向: CCW With +ve voltage applied to +ve terminal , viewed from output
3. 测试条件:
- 3-1 马达放置状态: 马达水平放置.
- 3-2 测试电源: Regulated AC or DC power supply
- 3-3 环境温度与湿度: 一般在 15~35℃及相对湿度 75%的环境下测试
4. 电气特性(启动 30 秒后测试):
- 4-1 空载电流: 0.28A max.
- 4-2 空载功率: 25.5 W max
- 4-3 空载转速: 20600±10% rpm.
- 4-4 负载电流: 1.37±12% A .
- 4-5 负载功率: 145.4±12% W
- 4-6 负载转速: 14600±10% rpm.
- 4-7 测试负载: size 25x66.5 的一字风叶(大约 为 /g-cm.)
- 4-8 性能曲线: 看马达性能曲线图
- 4-9 绝缘电阻: 马达端子与外壳之间,施加 DC500V 电压,绝缘阻值不低于 10MΩ
- 4-10 耐压测试: 马达端子与外壳之间施加一分钟 AC1250V/5mA (50Hz 或 60Hz) 电压
- 4-11 振动值: $\leq 3.5\text{mm/s}$
- 4-12 火花等级: $\leq 1\frac{1}{2}$
5. 机械特性:
- 5-1 外形: 看马达外形图.
- 5-2 虚位: 0.05~0.5 mm
- 5-3 轴突端跳动: 0.05 mm max.at 输出轴 2/3 处,用百分表测量
- 5-4 马达重量: 208g (Approx)
6. 寿命测试:
- 6-1 工作条件: 周期性测试(马达单机测试)
- 6-2 测试电压: 125.0VAC Full wave rectification
- 6-3 负载: 145.0 W max
- 6-4 测试周期及条件: 60 秒开, 60 秒停为一个周期.
- 6-5 要求满足的测试周期: TBD hour min(on time). 完成寿命测试后的空载/负载电流仅供参考

7. 噪音测试: 马达放在在海棉上,拾音器距离马达输出轴 30cm 处,在 无载条件下接入额定电压. 机械噪音不超过 68dB,最大背景噪音小于 30dB

8. 工作环境测试

8.1 高温测试: 马达在+90℃的环境保持 100 小时, 然后室温下放置 24 小时
8.2 低温测试: 马达在-40℃的环境保持 100 小时, 然后室温下放置 24 小时

9. 其它特性:

9-1 绝缘等级: B 级
9-2 ECP Requirement: Motor conform to 2002/95/EC RoHS Directive

10. AQL 标准:

Base on GB/T2828.1-2012 II, AQL as below:

Critical:(致命缺陷) 0

Major:(严重缺陷) 0.65

Minor:(一般缺陷) 1.5

11. Useful hints on the best use of motor:(马达注意事项)

11.1 Mounting your motor:(安装马达)

11.1.1 Most motors provide tapped holes in the motor housing for you to use to motor .Please take care not to use screws so long the motor.with components inside that they can interfere

马达铁壳上有螺孔 ,以便于安装固定马达 ,请注意不要使用过长的螺丝 ,否则会碰撞马达内部的配件 .

11.1.2 Bearing bosses are also used for mounting motors. Please avoid excessive clamping forces on these areas. It is preferable not to use features on the motor such as ventilation holes for locating means. It is possible that these features may change as new or modified tooling is used in the future.Any ventilation holes in the motor should not become blocked in your product consultation with .If adhesives are used to mount your motor care must be taken to avoid any adhesive getting into the bearing areas. Special care must be taken if out gassing adhesives are used since commutator contamination can result and cause a poor performance on the motor.

杯士固定座是用来安装固定马达 ,在这些位置不能加过量的力在杯士座上 ,最好不要使用马达散热孔来固定马达 ,否则会影响马达工作时的散热功能 ,如果使用粘合剂安装马达 ,请注意粘合剂不能沾在杯士上 .特别注意使用粘合剂或需要加热烘干时,不能让污物落在换向器上 ,否则会造成马达的性能变差 .

11.2 Connecting your motor:(连接马达)

Whatever means you are to connect your supply to your motor please take care not to use so much force or heat that you cause distortion to components inside the motor. Please take care the granule of tin and debris drop into the motor housing from ventilation holes.

不论使用何种方式连接马达 ,注意不能用大力撞击或过热使用马达 ,否则会造成马达零件变形 ,请特别注意在使用焊锡的方法时,必须防止锡粒或其它杂物通过散热孔进入马达内部 ,这样会对马达致命破坏 .

11.3 Coupling your motor:(衔接马达)

If you intend to couple a gear or a fan or some other items to your motor shaft during assembly. Always remember that unusual radial and axial loads transmitted to motor from the coupling operation of the motor can have serious effects on the life of the bearings. When press fitting a gear, pulley or anything alike onto motor output shaft. Do put them at right position on a horizontal bench and press insert the shaft by pushing its other end vertically. Don't push the motor end plate.

如果马达出力轴端是衔接牙箱、风叶、蜗杆等其它配件,请谨记:如果衔接配件不对称、不平衡会对马达寿命造成严重影响。安装的时候请注意只能施加力在轴枝的轴向方向 , 在其它位置施加力会破坏马达。

11.4 Overloads:(过载、电流超负荷)

Excessive load should not be added on the motor otherwise the motor may be damaged. Don't use the motor under over loaded and locked condition more than 10 seconds.

不可给马达施加过高电压，否则可能损坏马达。在超载或锁定情况下使用，不应超过 10 秒

11.5 Hazardous environments:(环境危害)

The degree of protection against corrosion on motor is satisfactory only for normal environments. There are small sections of the housing in which some bare metal is exposed and is susceptible to corrosion. It is advisable not to store or use the motors in corrosive environment without consultation with ever.

在正常环境下,保证马达不受腐蚀是可以的，但是马达暴露于空气中易受腐蚀影响，建议不要储存或用于易腐蚀的环境中。

11.6 Please bear in mind:(请谨记)

Always remember that YFD motors have a substantial team of Engineers dedicated to the solution of problems of the application of our motors in new products. We are proud of our good working relationship with our customers and we will be most pleased if we can assist you to find a solution to any problem which you may encounter. If you have any concerns about this please consult with YFD motor.

盈富达公司工程部致力为您提供合适使用的马达和解决问题的方法，我们愿意为您建立良好合作关系，我们乐意为您解决使用中各种问题。如有任何疑问，请联系

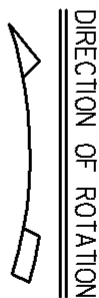
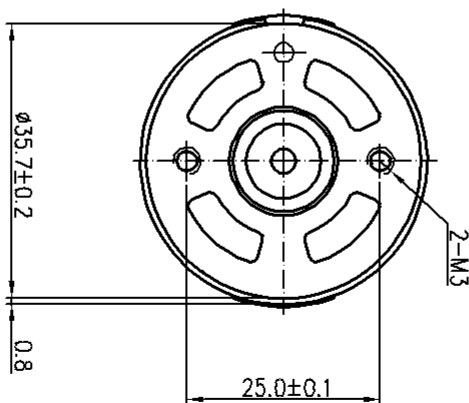
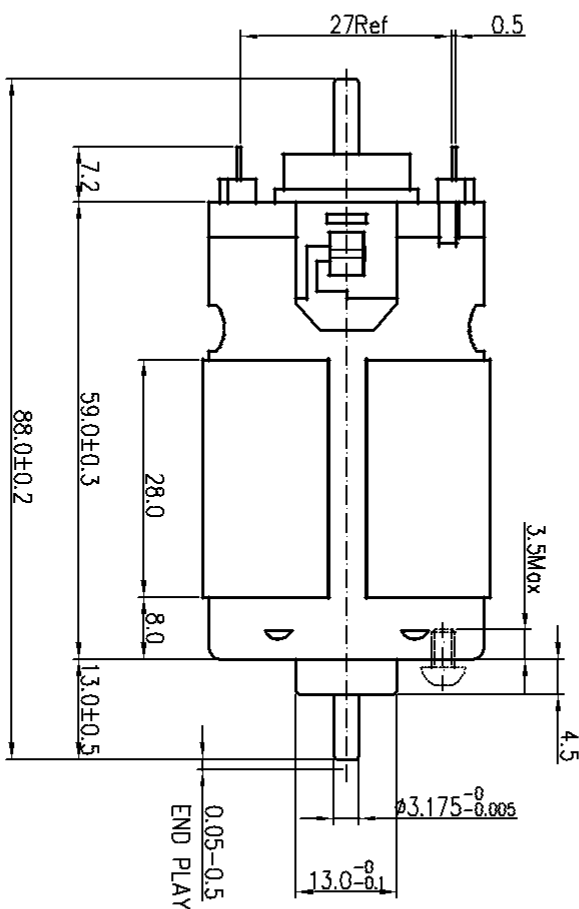
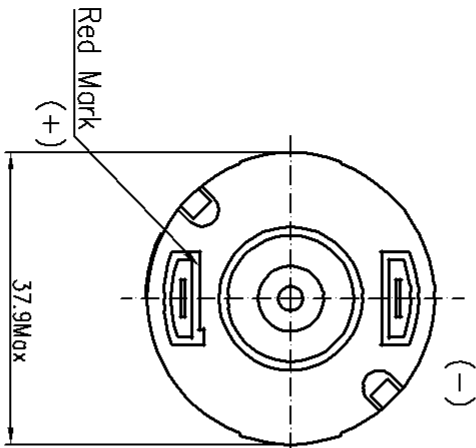
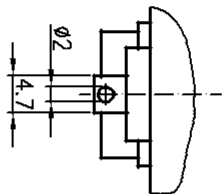
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REMARKS:

- 1) WHEN PRESS FITTING A GEAR,PULLEY OR ANYTHING ALIKE ONTO MOTOR OUTPUT SHAFT, DO PUSH THE OTHER SHAFT END VERTICALLY, DON'T PUSH THE REAR BRACKET
- 2) SOLDERING TEMPERATURE AND TIME MUST BE 360°(3SEC) OR 400°(2SEC).
- 3) MEASURING THE DIMENSION OF THE SHAFT EXTENSION WHEN THE OTHER END OF THE SHAFT IS AGAINST THE REAR BRACKET END.

SERIAL NO :

ISSUE NO :



CONFIRMED & ACCEPTED BY CUSTOMER
Company, Chop & Signature

TITLE: MOTOR OUTLINE

PART NO: YFD5512-2327-08

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DES'D YWjiong2/5-20

CHK'D

APP'D

SCALE 1:1 REV A0

TIME

WAS

DATE

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APP'D

DATE: