

SPECIFICATION FOR APPROVAL

CUSTOMER: ARCERA EU

MODEL NO: 6028 (AC Fan)

PART NO: FA6B60-A1041E2AL

DATE: 2012.05.22

| CUSTOMER APPROVAL | | | |
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Taiwan

ACT-RX TECHNOLOGY CORPORATION TEL: 886-2-82421111

2F, No.192, Lian Cheng Road, Zhonghe Dist.,

New Taipei City 235, Taiwan (R.O.C.) FAX: 886-2-82452200

| Approved | QC | Checked | Checked | Prepared |
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CONTENTS

| 1. | <u>SCOPE</u> | 3 |
|-----|--------------------------------|----|
| 2. | <u>ELECTRICAL</u> | 3 |
| 3. | MATERIAL | 4 |
| 4. | MECHANICAL | 4 |
| 5. | EXPECTED LIFE SPAN (MTTF) | 4 |
| 6. | NOISE MEASUREMENT | 5 |
| 7. | RELIABILITY | 6 |
| 8. | PRODUCT LABEL | 6 |
| 9. | PERFORMANCE CHART | 7 |
| 10 | . <u>ASSEMBLY DIAGRAM</u> | 8 |
| 11. | ORDERING AND OPERATING REMARKS | 9 |
| 12 | FAN PACKING DATA | 10 |



1. SCOPE

This document is a specification defining the electrical and mechanical characteristics of the product.

2. ELECTRICAL

Standard operating condition is 25°C, 65%RH ambient, unless otherwise specified.

| | Item | Specification | Test Condition |
|---|-----------------------|---|--|
| 1 | Rated Voltage | 100V ~ 240V | AC power supply |
| 2 | Rated Current | 0.3 Amp (Typical) | AC power supply at Rated Voltage This is for Safety Regulation. |
| 3 | Starting Voltage | 100V (Min.) | AC power supply |
| 4 | Insulation Resistance | 10MΩ (Min.) | |
| 5 | Speed | 4000 RPM ±10% | Measured at 5 minutes after starting under 25±5°C, 65± 5%RH ambient |
| 6 | Acoustical Noise | 32.5 dB(A) (measurement tolerance ± 2 dBA) | Measured at typical speed with an acoustic microphone 1 meter away from the fan intake in a test chamber with background noise level below 18dB(A) under ISO-3745 Standard, refer to NOISE MEASUREMENT ITEM 7. |
| 7 | Static Pressure | 4.79 mm-H ₂ O (0.188 inch-H ₂ O) | Refer to PERFORMANCE CHART ITEM 9 at zero airflow. This measurement is performed AMCA 210-99 Standard. |
| 8 | Air Flow | 16.88 CFM (0.48CMM) | Refer to PERFORMANCE CHART ITEM 9 at zero static Pressure. This measurement is performed AMCA 210-99 standard. |
| 9 | Direction of rotation | Counter- anticlockwise | AC power supply, viewed from impeller. |



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3. MATERIAL

| Impeller | | PBT UL94-V0 | |
|-----------|---|-------------|--------------------|
| Frame | | PBT UL94-V0 | |
| Bobbin | | PBT UL94-V0 | |
| Lead Wire | ∇1 : Grey | UL 3266 | |

4.MECHANICAL

| Dimensions | L * W * H =60*60*28.3 (mm) |
|--------------------------------------|--|
| Weight | 70 grams |
| Standard operating temperature range | -10 °C ~ 75 °C |
| Standard storage temperature | -20 °C ~ 80 °C |
| | ☐ Two Ball Bearing |
| | One Ball One Sleeve Bearing |
| Bearing system | ☐ Sleeve Bearing |
| | ◯ Alloy Sleeve with Ceramic Shaft |
| | Ceramic Bearing with Ceramic Shaft |

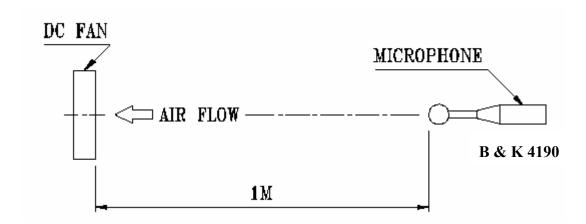
5.EXPECTED LIFE SPAN (MTTF)

| At a standard operating condition of 25 $\pm5^{\circ}$ C, 65 $\pm5^{\circ}$ RH ambient, the expected life(expressed and expressed life). |
|--|
| as Mean Time To Failure) of products are evaluated under MIL-STD-781 Standard as |
| below: |
| ☐ Two Ball Bearing: 65000 hrs, Continuous operating under 25°C 65%RH |

□ One Ball One Sleeve Bearing: 50000 hrs, Continuous operating under 25°C 65%RH
 □ Sleeve Bearing: 30000 hrs, Continuous operating under 25°C 65%RH
 ☑ Alloy Sleeve with Ceramic Shaft: 300000 hrs, Continuous operating under 25°C 65%RH
 □ Ceramic Bearing with Ceramic Shaft: 500000 hrs, Continuous operating under 25°C 65%RH
 □ Ceramic Bearing with Ceramic Shaft: 500000 hrs, Continuous operating under 25°C 65%RH



6. NOISE MEASUREMENT:



Noise is measured under Rated Voltage in free air in the anechoic chamber with B & K Nexus 4350 conditioning amplifier, with B & K 4190 microphone at a distance of one meter from the fan intake. The background noise is 18dBA max under the ISO-3745 Standard.

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7. RELIABILITY

| | Item | Specification | Test Condition |
|---|-------------------|---|--|
| 1 | Locked Rotor Test | Flameproof and damage free | Rotor locked for 72 hrs with Rated Voltage |
| 2 | Balance Test | No protruding beyond the circle within 10 seconds | The fan runs in a circle, scaled by fan radius plus 20mm, on a perfectly smooth plate for 10 seconds under the ISO 1940 G6.3 grade Standard. |

8. PRODUCT LABEL



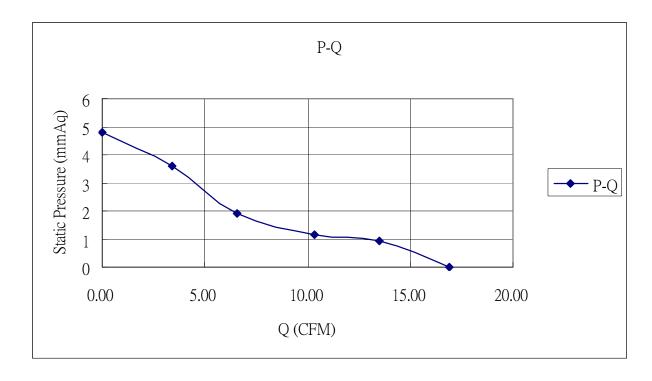
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9. PERFORMANCE CHART

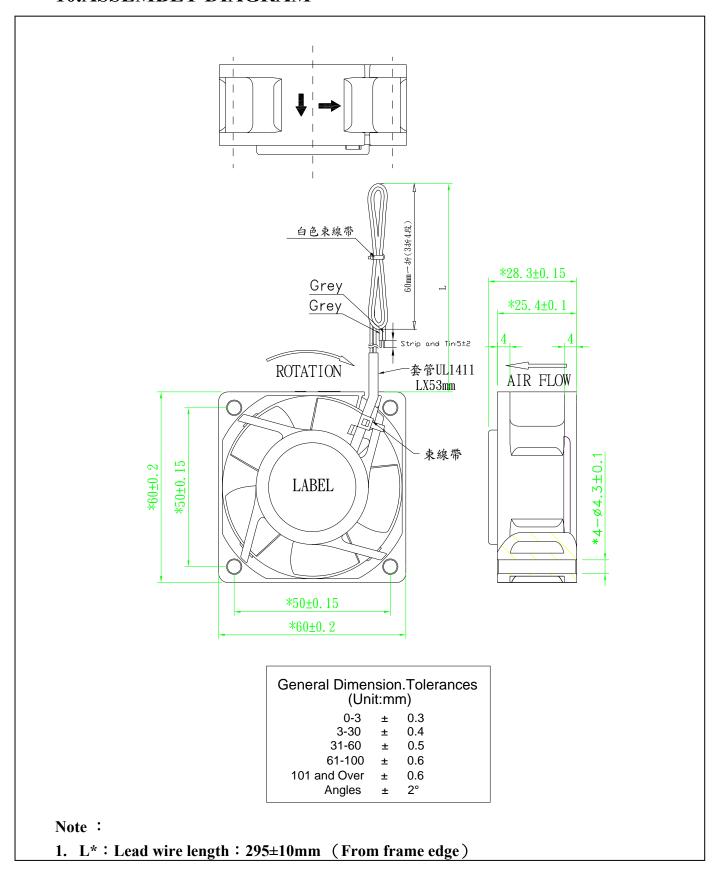
This measurement is according to the AMCA 210-99 Standard.

PQ curve for FA6B60-A1041E2AL under Rated Voltage.





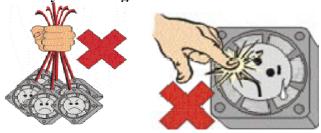
10.ASSEMBLY DIAGRAM





11. ORDERING AND OPERATING REMARKS

- 12.1 Please indicate Part No. on every order.
- 12.2 For those not specified but vital to your requirement, ACT-RX is in full position to supply qualified substitutes.
- 12.3 ACT-RX does not guarantee the product if applications exceed specified limitations.
- 12.4 Please do not touch the impeller and never carry the fan the lead wires. The bearings and the lead wires may be damaged.



- 12.5 Please do not use the fan in the environment of corrosive gas or liquid.
- 12.6 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 through the fan is stored in room temperature.
- 12.7 Improper use may lead to malfunction. To ensure normal operation, avoid dipping the fan into watery and oily liquid, or exposing it to heat, etc.
- 12.8 Please do not lock the rotor for those fan models without Auto Restart function during operation to prevent over heating which may cause permanent damage.
- 12.9 Warrantee period is 12 months max. under the environment condition IP-20 specified in IEC60529.
- 12.10 All specifications subject to change without prior notice.



12.FAN PACKING DATA

