

Delta Electronics Component Co., Ltd.  
Xi Nan District Shi Jie Town,  
Dong Guan City. Guangdong Province,  
China. P. R. C.

TEL : 86-769-86329008  
FAX : 86-769-86631589

SPECIFICATION FOR APPROVAL  
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Customer:

Description: DC SUPERFLO FAN

Customer P/N: REV:

Delta Model NO.: AUB0812H-A

Sample Rev: 01 Issue NO:

Sample Issue Date: Quantity:

1. SCOPE:

THIS SPECIFICATION DEFINES THE ELECTRICAL AND MECHANICAL CHARACTERISTICS OF THE DC BRUSHLESS AXIAL FLOW FAN. THE FAN MOTOR IS WITH TWO PHASES AND FOUR POLES.

2. CHARACTERS:

| ITEM                                       | DESCRIPTION                                                                      |
|--------------------------------------------|----------------------------------------------------------------------------------|
| RATED VOLTAGE                              | 12 VDC                                                                           |
| OPERATION VOLTAGE                          | 7.0-13.8 VDC                                                                     |
| INPUT CURRENT                              | 0.18 (MAX. 0.26) A                                                               |
| INPUT POWER                                | 2.16 (MAX. 3.12) W                                                               |
| SPEED                                      | 3000 R.P.M. (REF.)                                                               |
| MAX. AIR FLOW<br>(AT ZERO STATIC PRESSURE) | 1.100 (MIN. 0.990) M <sup>3</sup> /MIN.<br>38.83 (MIN. 34.95) CFM                |
| MAX. AIR PRESSURE<br>(AT ZERO AIRFLOW)     | 4.500 (MIN. 3.645) mmH <sub>2</sub> O<br>0.177 (MIN. 0.144) inchH <sub>2</sub> O |
| ACOUSTICAL NOISE (AVG.)                    | 34.0 (MAX. 38.0) dB-A                                                            |
| INSULATION TYPE                            | UL: CLASS A                                                                      |

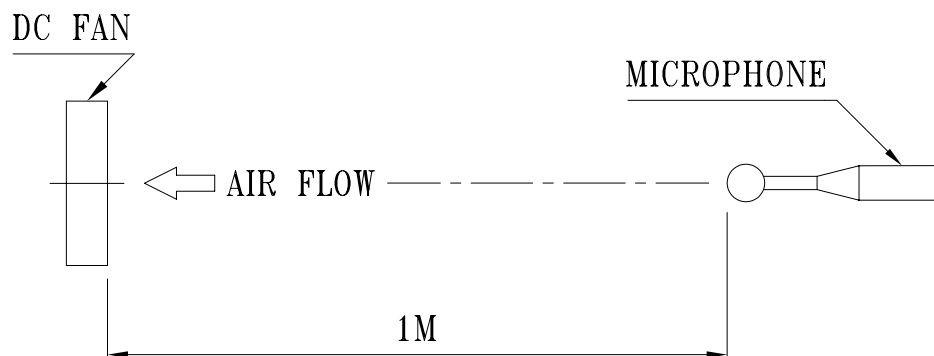
(continued)

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|                        |                                                                               |
|------------------------|-------------------------------------------------------------------------------|
| INSULATION STRENGTH    | 10 MEG OHM MIN. AT 500 VDC<br>(BETWEEN FRAME AND (+) TERMINAL)                |
| DIELECTRIC STRENGTH    | 5 mA MAX. AT 500 VAC 60 Hz<br>ONE MINUTE, (BETWEEN FRAME AND<br>(+) TERMINAL) |
| EXTERNAL COVER         | OPEN TYPE                                                                     |
| LIFE EXPECTANCE        | 50,000 HOURS CONTINUOUS OPERATION<br>AT 40 °C WITH 15 ~ 65 %RH.               |
|                        | CLOCKWISE VIEW<br>FROM NAME PLATE SIDE                                        |
| OVER CURRENT SHUT DOWN | THE CURRENT WILL SHUT DOWN WHEN<br>LOCKING ROTOR.                             |
| LEAD WIRE              | UL 1007 AWG #24<br>RED WIRE POSITIVE(+)<br>BLACK WIRE POSITIVE(-)             |

- NOTES: 1. ALL READINGS ARE MEASURED AFTER STABLY WARMING UP  
THROUGH 10 MINUTES AT ROOM TEMPERATURE.  
2. THE VALUES WRITTEN IN PARENS , ( ), ARE LIMITED SPEC.  
3. ACOUSTICAL NOISE MEASURING CONDITION:



NOISE IS MEASURED AT RATED VOLTAGE IN FREE AIR IN ANECHOIC CHAMBER WITH B & K SOUND LEVEL METER WITH MICROPHONE AT A DISTANCE OF ONE METER FROM THE FAN INTAKE.

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3. MECHANICAL:

- 3-1. DIMENSIONS ----- SEE DIMENSIONS DRAWING
- 3-2. FRAME ----- PLASTIC UL: 94V-0
- 3-3. IMPELLER ----- PLASTIC UL: 94V-0
- 3-4. BEARING SYSTEM ----- SUPERFLO BEARING
- 3-5. WEIGHT ----- 88.0 GRAMS

4. ENVIRONMENTAL:

- 4-1. OPERATING TEMPERATURE ----- -10 TO +60 DEGREE C
- 4-2. STORAGE TEMPERATURE ----- -40 TO +75 DEGREE C
- 4-3. OPERATING HUMIDITY ----- 5 TO 90 % RH
- 4-4. STORAGE HUMIDITY ----- 5 TO 95 % RH

5. PROTECTION:

5-1. LOCKED ROTOR PROTECTION

IMPEDANCE OF MOTOR WINDING PROTECTS MOTOR FROM FIRE IN 96 HOURS OF LOCKED ROTOR CONDITION AT THE RATED VOLTAGE.

5-2. POLARITY PROTECTION

BE CAPABLE OF WITHSTANDING IF REVERSE CONNECTION FOR POSITIVE AND NEGATIVE LEADS.

6. RE OZONE DEPLETING SUBSTANCES:

- 6-1. NO CONTAINING PBBs, PBBOs, CFCs, PBBEs, PBDPEs AND HCFCs.

7. PRODUCTION LOCATION

- 7-1. PRODUCTS WILL BE PRODUCED IN CHINA OR THAILAND.

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8. BASIC RELIABILITY REQUIREMENT:

8-1. THERMAL      LOW TEMPERATURE: -40°C  
CYCLING      HIGH TEMPERATURE: +80°C  
                 SOAK TIME: 30 MINUTES  
                 TRANSITION TIME < 5 MINUTES  
                 DUTY CYCLES: 5

8-2. HUMIDITY      TEMPERATURE: +25°C ~ +65°C  
EXPOSURE      HUMIDITY: 90-98% RH @ +65°C  
                 FOR 4 HOURS/CYCLE  
                 POWER: NON-OPERATING  
                 TEST TIME: 168 HOURS

8-3. VIBRATION      TEMPERATURE: +25°C  
                 ORIENTATION: X, Y, Z  
                 POWER: NON-OPERATING  
                 VIBRATION LEVEL: OVERALL gRMS=3.2

| FREQUENCY(Hz) | PSD(G <sup>2</sup> /Hz) |
|---------------|-------------------------|
| 10            | 0.040                   |
| 20            | 0.100                   |
| 40            | 0.100                   |
| 800           | 0.002                   |
| 1000          | 0.002                   |

TEST TIME: 2 HOURS ON EACH ORIENTATION

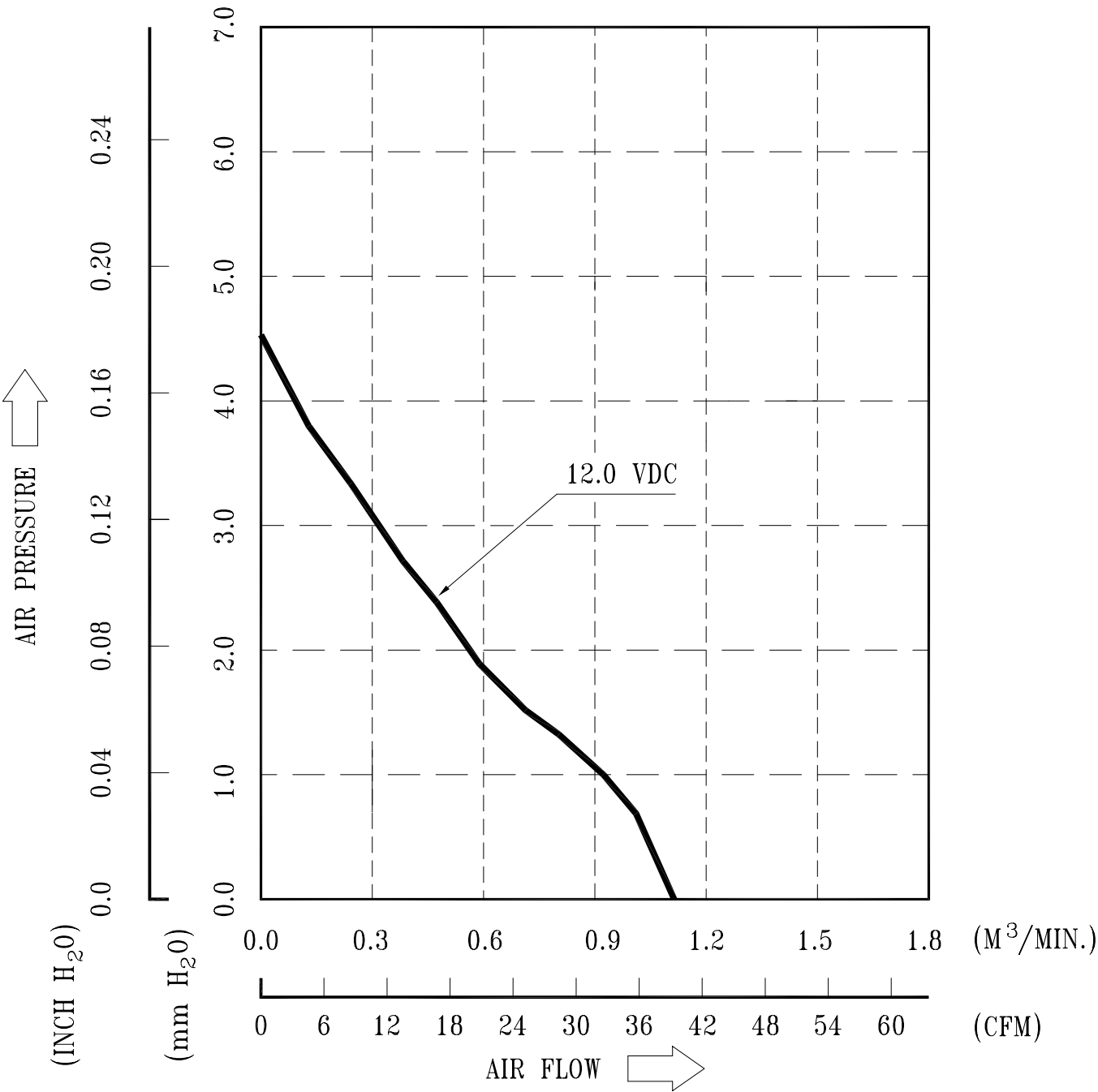
8-4. MECHANICAL      TEMPERATURE: +20°C  
SHOCK      ORIENTATION: X, Y, Z  
                 POWER: NON-OPERATING  
                 ACCELERATION: 20 G MIN.  
                 PULSE: 11 ms HALF-SINE WAVE  
                 NUMBER OF SHOCKS: 5 SHOCKS  
                 FOR EACH DIRECTION

8-5. LIFE      TEMPERATURE: MAX. OPERATING TEMPERATURE  
                 POWER: OPERATING  
                 DURATION: 1000 HOURS MIN.

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9. P & Q CURVE:



\* TEST CONDITION: INPUT VOLTAGE ----- OPERATION VOLTAGE  
 TEMPERATURE ----- ROOM TEMPERATURE  
 HUMIDITY ----- 65%RH

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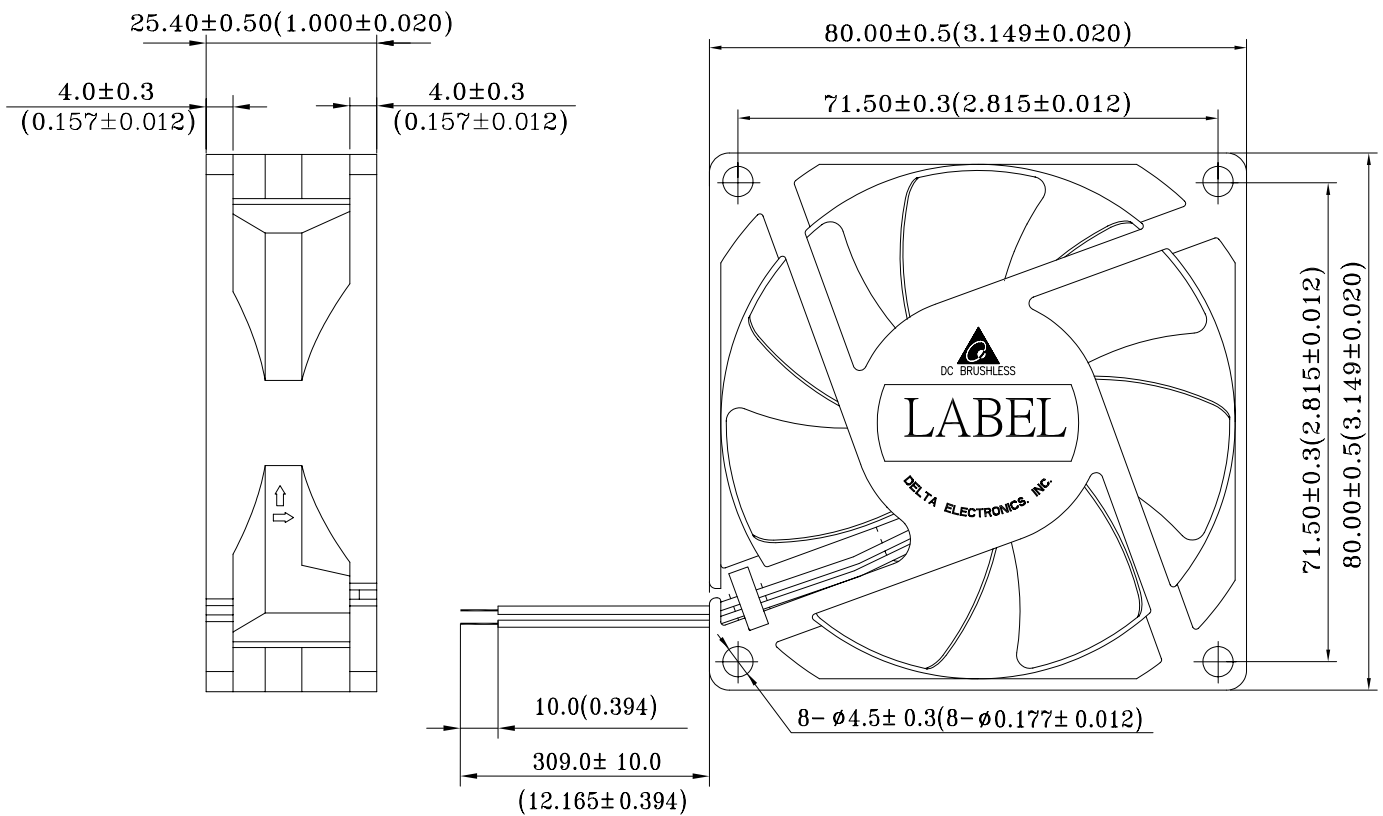
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## 10. DIMENSION DRAWING:

LABEL:



OR



UNIT: mm(INCH)

### NOTES:

- 1.LEAD WIRE UL1007 AWG#24  
RED WIRE----(+)  
BLACK WIRE----(-)

- 2.THIS PRODUCT IS ROHS COMPLIANT



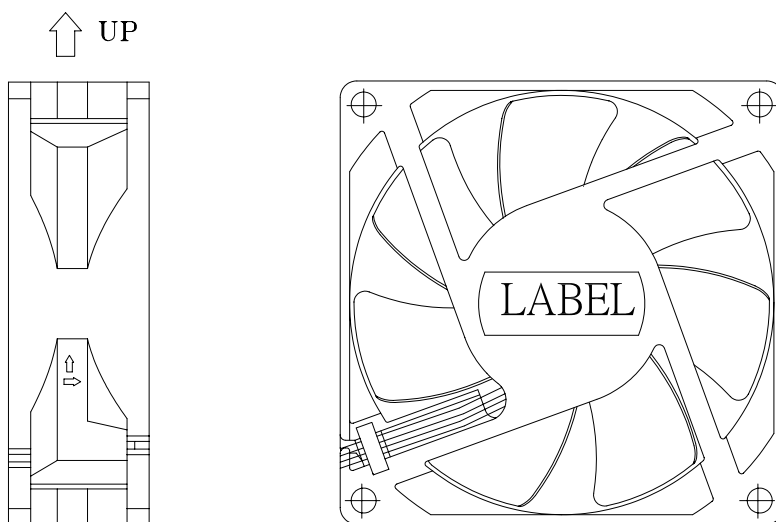
THIRD ANGLE  
PROJECTION

PART NO.:

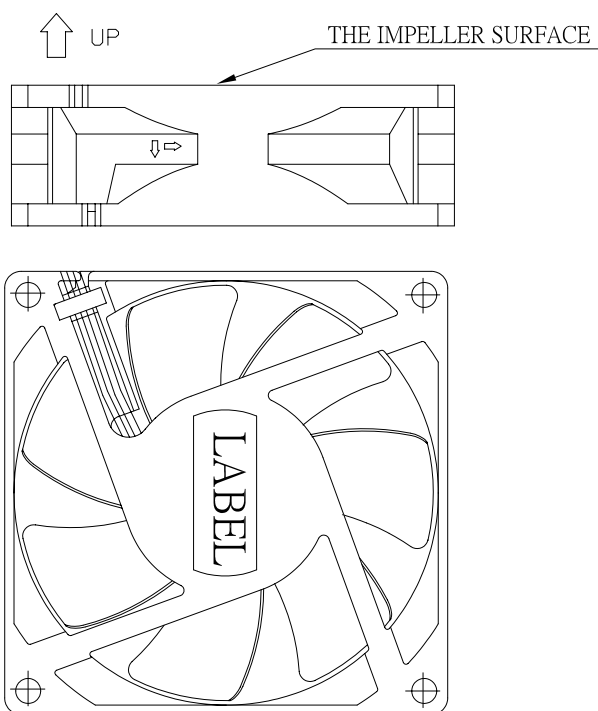
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# 11. SLEEVE BEARING FAN MOUNTING TYPE :

WE SUGGEST THAT THE FAN IS MOUNTED AS THE TYPE A OR B. IF YOU WOULD LIKE TO HAVE OTHER MOUNTING TYPE, PLEASE CONTACT US.



TYPE :A



TYPE :B

THIRD ANGLE  
PROJECTION