



SPECIFICATION FOR APPROVAL

Customer. \_\_\_\_\_

Description. DC FAN

Part No. \_\_\_\_\_ REV. \_\_\_\_\_

Delta Model No. DSB0612M-A REV. 00

Sample Issue No. \_\_\_\_\_

Sample Issue Date. MAR.25 2016

PLEASE SEND ONE COPY OF THIS SPECIFICATION BACK  
AFTER YOU SIGNED APPROVAL FOR PRODUCTION PRE-  
ARRANGMENT.

APPROVED BY:

DATE :

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**SPECIFICATION FOR APPROVAL**  
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Customer:

Description: DC FAN

Customer P/N: REV:00

Delta Model NO.: DSB0612M-A Delta safety model NO.: DSB0612M-A

Sample Rev: 00 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	3.5 - 13.2 VDC
START VOLTAGE (ENVIRONMENT TEMPERATURE AT 25°C)	≤ 3.5VDC.(ON-OFF)
INPUT CURRENT	0.11(MAX. 0.16) A SAFETY CURRENT ON LABEL :0.16A
INPUT POWER	1.32(MAX.19.20) W
SPEED(AFTER RUNNING 2 MINUTES)	3300 ± 10% R.P.M
MAX. AIR FLOW (AT ZERO STATIC PRESSURE)	0.504 (MIN. 0.454) M <sup>3</sup> /MIN. 17.79 (MIN. 16.01) CFM
MAX. AIR PRESSURE (AT ZERO AIRFLOW)	3.20 (MIN. 2.59 ) mmH <sub>2</sub> O 0.126 (MIN. 0.102 ) inchH <sub>2</sub> O
ACOUSTICAL NOISE (AVG.)	26.0 (MAX. 30.0) dB-A
INSULATION TYPE	UL: CLASS A

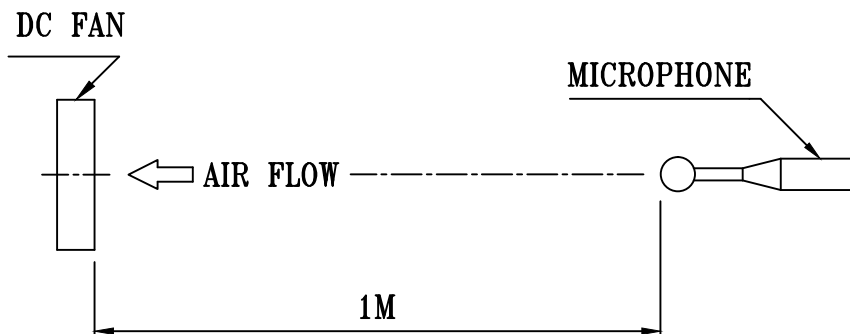
(continued)

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INSULATION STRENGTH	10 MEG OHM MIN. AT 500 VDC (BETWEEN FRAME AND (+) TERMINAL)
DIELECTRIC STRENGTH	5 mA MAX. AT 500 VAC 50/60 Hz ONE MINUTE, (BETWEEN FRAME AND (+) TERMINAL)
EXTERNAL COVER	OPEN TYPE
LIFE EXPECTANCE	30,000 HOURS CONTINUOUS OPERATION AT 40 °C WITH 15 ~ 65 %RH.
ROTATION	CLOCKWISE VIEW FROM NAME PLATE SIDE
OVER CURRENT SHUT DOWN	THE CURRENT WILL SHUT DOWN WHEN LOCKING ROTOR
LEAD WIRE	UL 1007 -F- AWG #24 BLACK WIRE NEGATIVE(-) RED WIRE POSITIVE(+)

- NOTES:
1. ALL READINGS ARE MEASURED AFTER STABLY WARMING UP THROUGH 10 MINUTES
  2. STANDARD AIR PROPERTY IS AIR AT (Td) 25°C TEMPERATURE, (RH) 65% RELATIVE HUMIDITY, AND (Pb) 760 mmHg BAROMETRIC PRESSURE.
  3. THE VALUES WRITTEN IN PARENS , ( ), ARE LIMITED SPEC.
  4. 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 ----- SLEEVE BEARING
- 3-5. WEIGHT ----- 58.0 GRAMS

4. ENVIRONMENTAL:

- 4-1. OPERATING TEMPERATURE ----- -10 TO +60 DEGREE C
- 4-2. STORAGE TEMPERATURE ----- -40 TO +70 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: (TEST SAMPLE: DSB0612H-A)

8-1. THERMAL CYCLING      LOW TEMPERATURE: -40°C  
                                HIGH TEMPERATURE: +70°C  
                                SOAK TIME: 30 MINUTES  
                                TRANSITION TIME < 5 MINUTES  
                                DUTY CYCLES: 5

8-2. HUMIDITY EXPOSURE    TEMPERATURE: +25°C ~ +65°C  
                                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

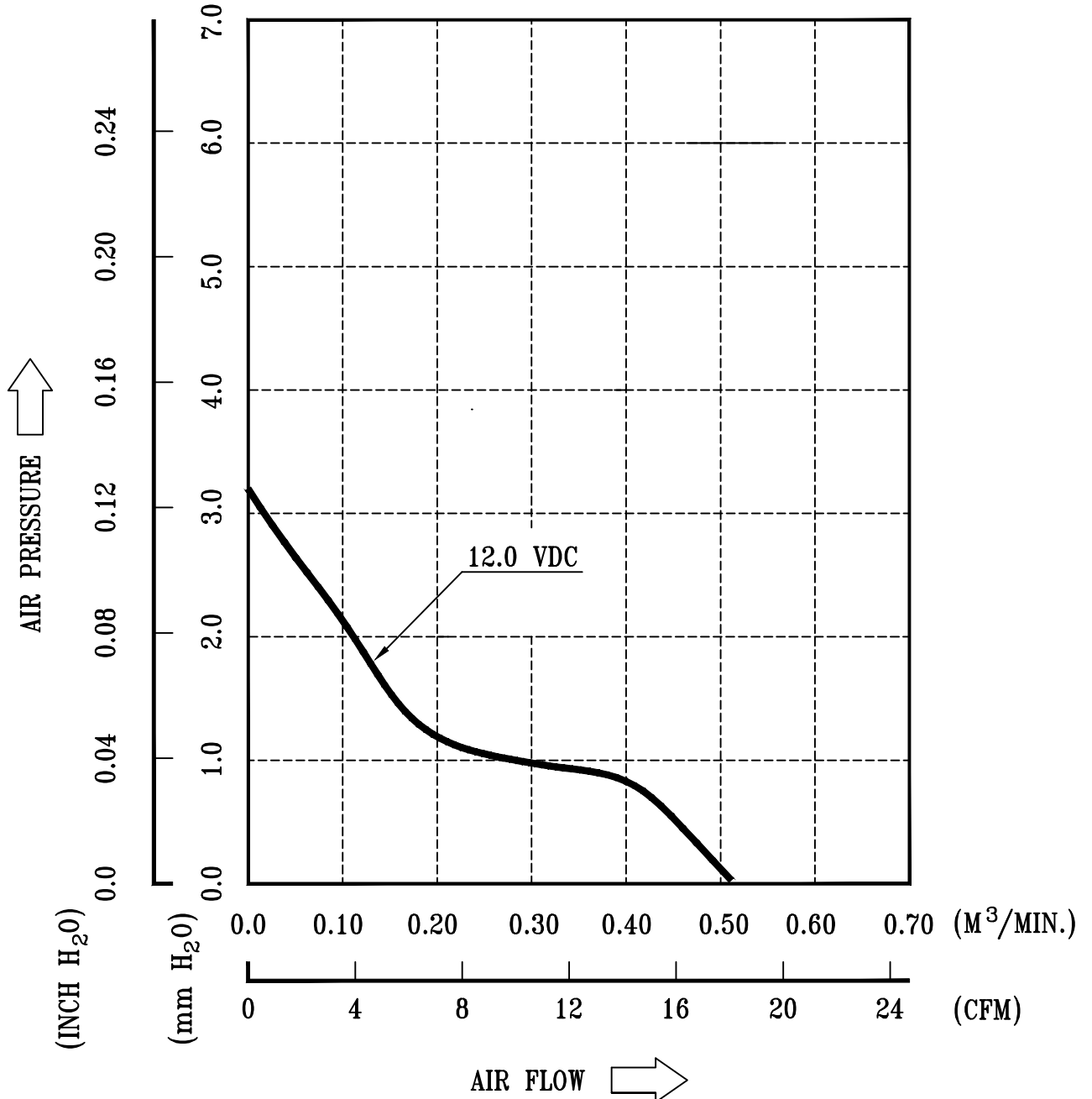
8-4. MECHANICAL SHOCK    TEMPERATURE: +20°C  
                                ORIENTATION: X, Y, Z  
                                POWER: NON-OPERATING  
                                ACCELERATION: 20 G MIN.  
                                PULSE: 11 ms HALF-SINE WAVE  
                        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

8-5. LIFE                      TEMPERATURE: Max. OPERATION TEMPERATURE  
                                POWER: RATE VOLTAGE OPERATING  
                                DURATION: 1000 HOURS MIN.

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9. P & Q CURVE:



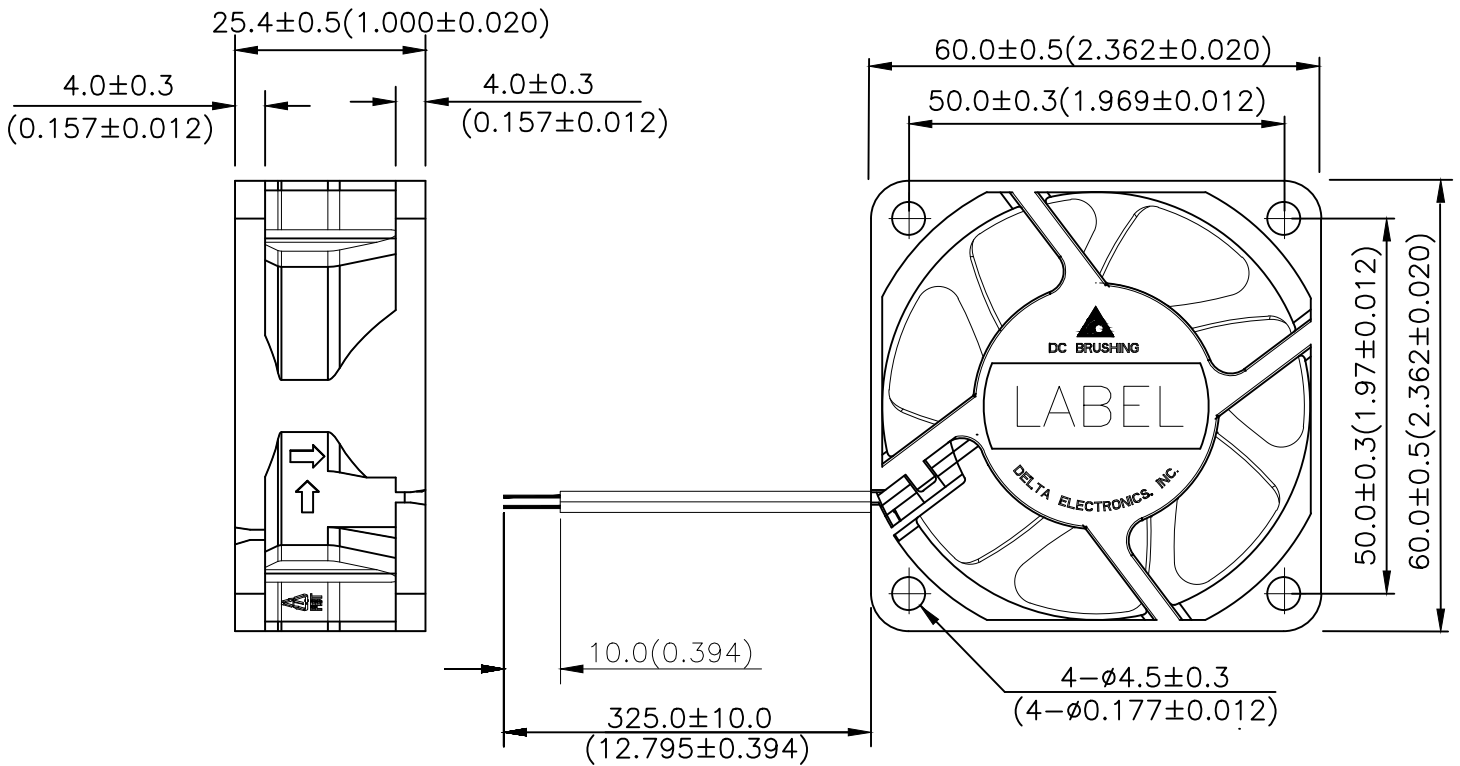
\* TEST CONDITION: INPUT VOLTAGE ----- OPERATION VOLTAGE  
TEMPERATURE ----- ROOM TEMPERATURE  
HUMIDITY ----- 65%RH

PART NO:

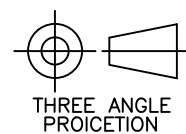
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10. DIMENSION DRAWING:

LABEL:



UL 1007 -F- AWG #24  
BLACK WIRE NEGATIVE(-)  
RED WIRE POSITIVE(+)



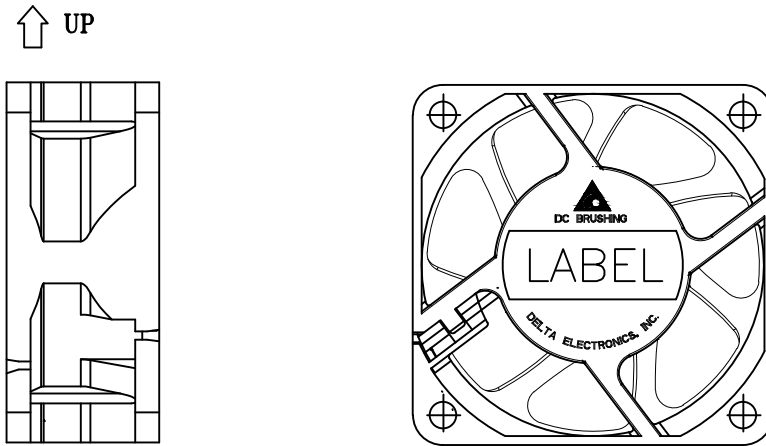
UNIT:mm(INCH)

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PART NO:  
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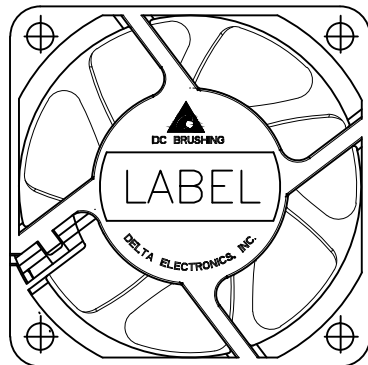
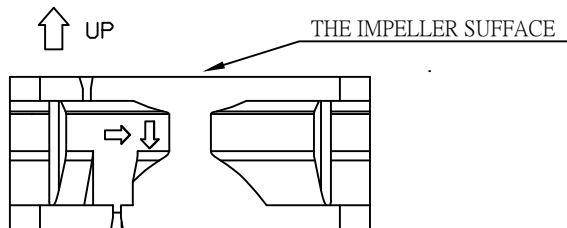
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11 SLEEVE BEARING FAN MOUNTING TYPE :

PLEASE BE CAUTIONS WHEN MOUNTING THE FAN ,REFEERCE THE TYPE: A OR B . IF COMTOMER HAVE OTHER MOUNTING TYPE ,PEASE CONTACT US.



TYPE :A



THIRD ANGLE  
PROJECTION

TYPE :B