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SPECIFICATION FOR APPROVAL

Customer:

 Description: DC FAN

 Customer P/N: REV:

 Delta Model NO.: AFB0624HH-A

 Sample Rev: 01 Issue NO:

 Sample Issue Date: MAR.01.2005. 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 | 24 VDC |
| OPERATION VOLTAGE | 14.0 - 27.6 VDC |
| INPUT CURRENT | 0.11 (MAX. 0.14) A |
| INPUT POWER | 2.64 (MAX. 3.36) W |
| SPEED | 5000 R.P.M. (REF.) |
| MAX. AIR FLOW (AT ZERO STATIC PRESSURE) | 0.780 (MIN. 0.702) M ³ /MIN. 27.54 (MIN. 24.79) CFM |
| MAX. AIR PRESSURE (AT ZERO AIRFLOW) | 7.47 (MIN. 6.05) mmH ₂ O 0.294 (MIN. 0.238) inchH ₂ O |
| ACOUSTICAL NOISE (AVG.) | 40.0 (MAX. 44.0) dB-A |
| INSULATION TYPE | UL: CLASS A |

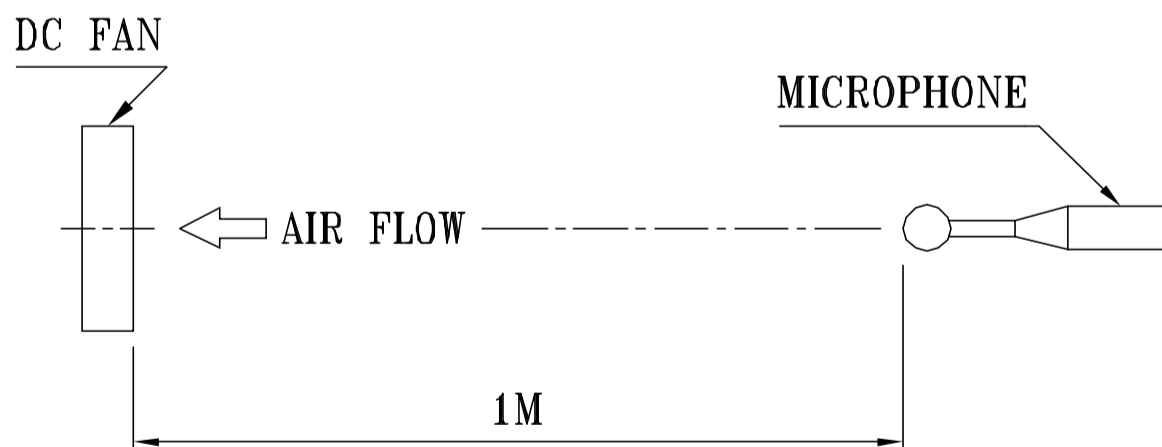
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| | |
|------------------------|---|
| INSULATION STRENGTH | 10 MEG OHM MIN. AT 500 VDC (BETWEEN FRAME AND (+) TERMINAL) |
| DIELECTRIC STRENGTH | 5 mA MAX. AT 500 VAC 60 Hz ONE MINUTE, (BETWEEN FRAME AND (+) TERMINAL) |
| EXTERNAL COVER | OPEN TYPE |
| LIFE EXPECTANCE | 70,000 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. 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 ----- TWO BALL BEARINGS

3-5. WEIGHT ----- 80 GRAMS

4. ENVIRONMENTAL:

4-1. OPERATING TEMPERATURE ----- -10 TO +70 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, PBB0s, CFCs, PBBEs, PBDPEs AND HCFCs.

7. PRODUCTION LOCATION

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

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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 $g_{RMS}=3.2$

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

TEST TIME: 2 HOURS ON EACH ORIENTATION

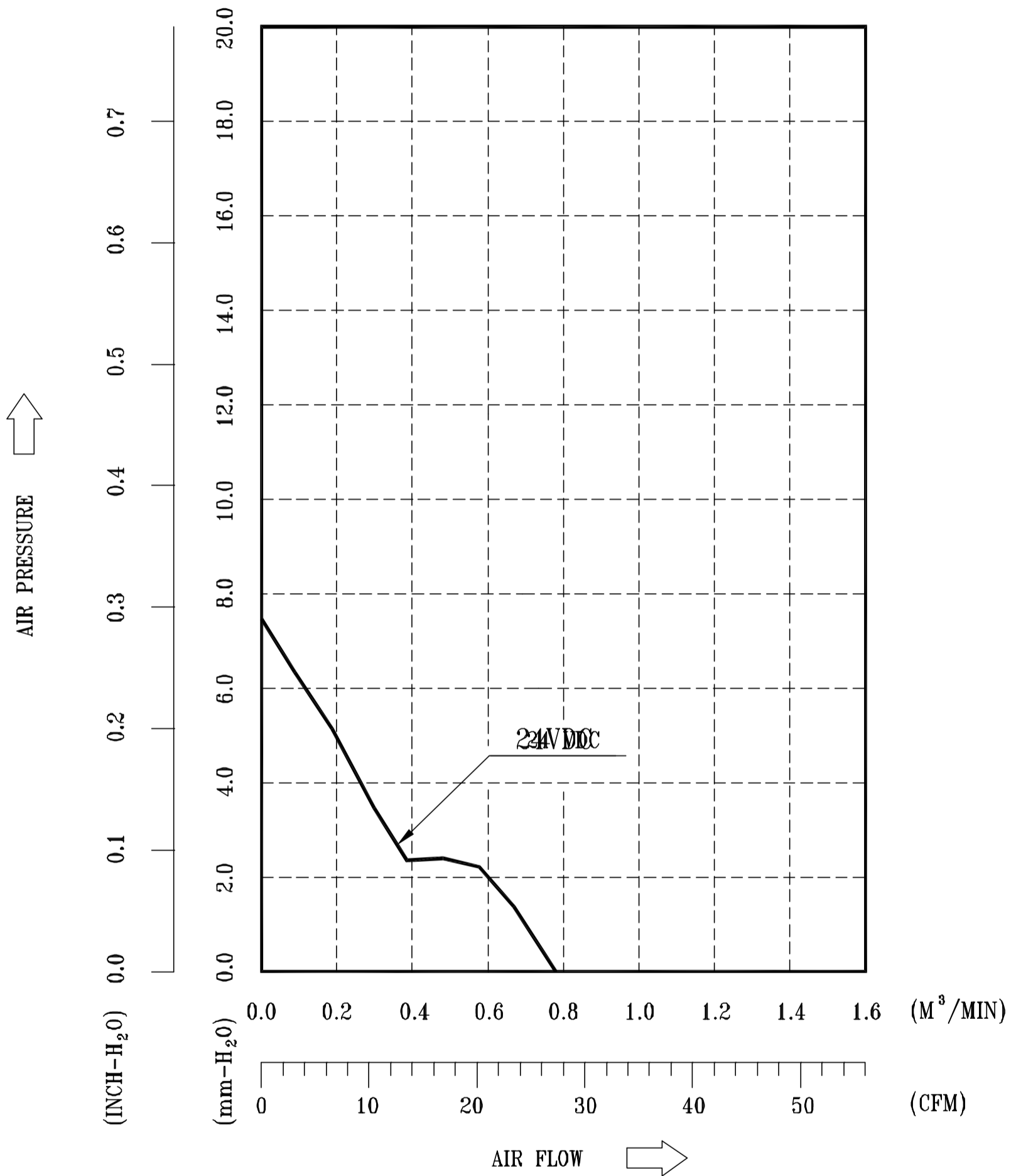
8-4. MECHANICAL TEMPERATURE: +20°C
SHOCK ORIENTATION: X, Y, Z
 POWER: NON-OPERATING
 ACCELERATION: 20 G MIN.
 PULSE: 11 ms HALF-SINE WAVE
 NUMBER OF SHOCKS: 5 SHOCKS
 FOR EACH DIRECTION

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

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9. P & Q CURVE:



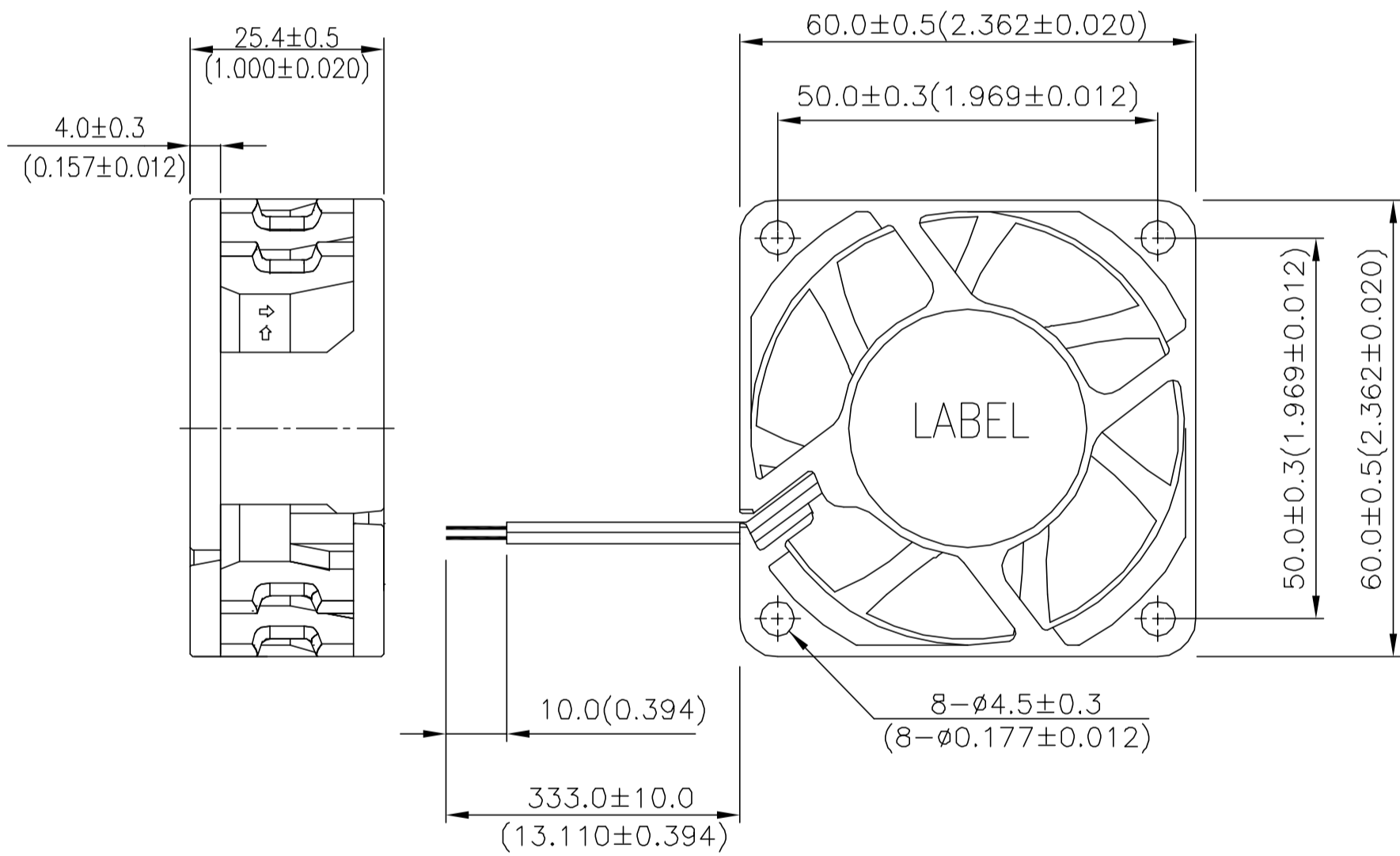
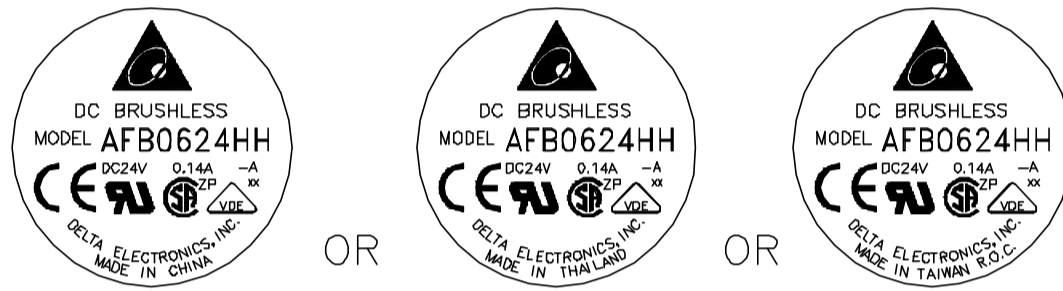
* TEST CONDITION: INPUT VOLTAGE ----- OPERATION VOLTAGE
TEMPERATURE ----- ROOM TEMPERATURE
HUMIDITY ----- 65%RH

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10. DIMENSION DRAWING:

LABEL:



UNIT: mm(INCH)