



**SPECIFICATION FOR APPROVAL**

**CUSTOMER** :  
**DESCRIPTION** : AC AXIAL FAN  
**DIMENSIONS** : Nominal: Ø 120 x 38 mm  
**M O D E L** :  
**P/N** : FL-12038HA2WB-FRL  
**APPROVED NO** :  
(AUTHORIZED)  
**APPROVED BY** :

DAWN.		CHKD.		APPD.		<b>SPEC. NO.</b>	
						<b>ISSUE DATE</b>	2018.09.11
						<b>EDITION</b>	05
						<b>REVISE DATE</b>	2020.11.27
						<b>E.SPEC</b>	

## AC AXIAL FAN

**MODEL :**

**P/N : FL-12038HA2WB-FRL**

### CHARACTERISTICS

- 1. Motor Design : Shaded-Pole Motor.**
- 2. Insulation Resistance : 100 MΩ minimum at 500 VDC.**
- 3. Dielectric Strength : 1800 VAC for one second.**
- 4. Motor Protection : Impedance protected.**
- 5. Noise Level : Measured in a semi-anechoic chamber.**

The fan is running in free air with microphone at a distance of one meter from the fan intake.

- 6. Air Performance : Measured by a double chamber. The value are recorded when the fan speed is stabilized at the rated voltage.**
- 7. Tolerances : ±10% on rated power and current.**

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## SPECIFICATIONS

### MODEL:

**P/N : FL-12038HA2WB-FRL**

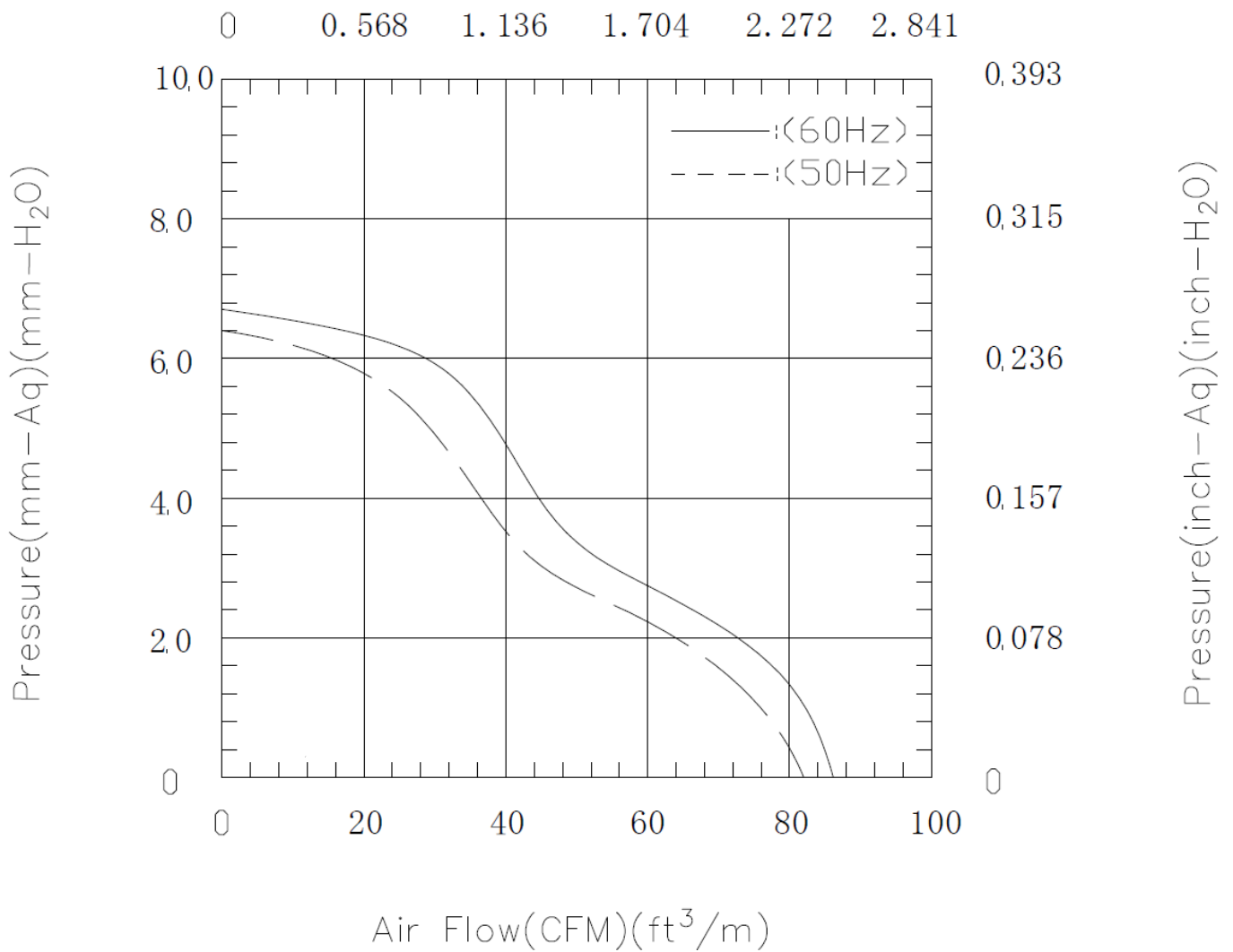
<b>1-1. Rated Voltage</b>	<b>: 230 V ~ 50/60 Hz</b>
<b>1-2. Operating Voltage Range</b>	<b>: 220 – 240 VAC ~ 50/60 Hz</b>
<b>1-3. Starting Voltage</b>	<b>: 187 VAC</b>
<b>1-4. Rated Speed</b>	<b>: 2500/2600 RPM ± 10%</b>
<b>1-5. Air Delivery</b>	<b>: 82/86 CFM</b>
<b>1-6. Static Air Pressure</b>	<b>: 6.4/6.7 mmH<sub>2</sub>O</b>
<b>1-7. Rated Current</b>	<b>: 0.10/0.08A ± 10%</b>
<b>1-8. Input Power</b>	<b>: 15/13 W ± 10%</b>
<b>1-9. Noise Level</b>	<b>: 38/40 dB(A)</b>
<b>1-10. Direction of Rotation</b>	<b>: Counterclockwise (view from the impeller)</b>
<b>1-11. Motor Protection</b>	<b>: Impedance protected</b>
<b>1-12. Motor insulation class</b>	<b>: 130 (B)</b>
<b>1-13. Operating Temperature</b>	<b>: -10 °C to +70 °C (RH 25% ~ 85% max.)</b>
<b>1-14. Storage Temperature</b>	<b>: -20 °C to +70 °C</b>
<b>1-15. Bearing System</b>	<b>: Ball bearing</b>
<b>1-16. Life Expectancy</b>	<b>: 50000 Hours at 25°C / 65% RH</b>
<b>1-17. Approvals</b>	<b>: CE</b>
<b>1-18. Weight</b>	<b>: 400 g</b>

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**MODEL :**

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**PERFORMANCE CURVES**



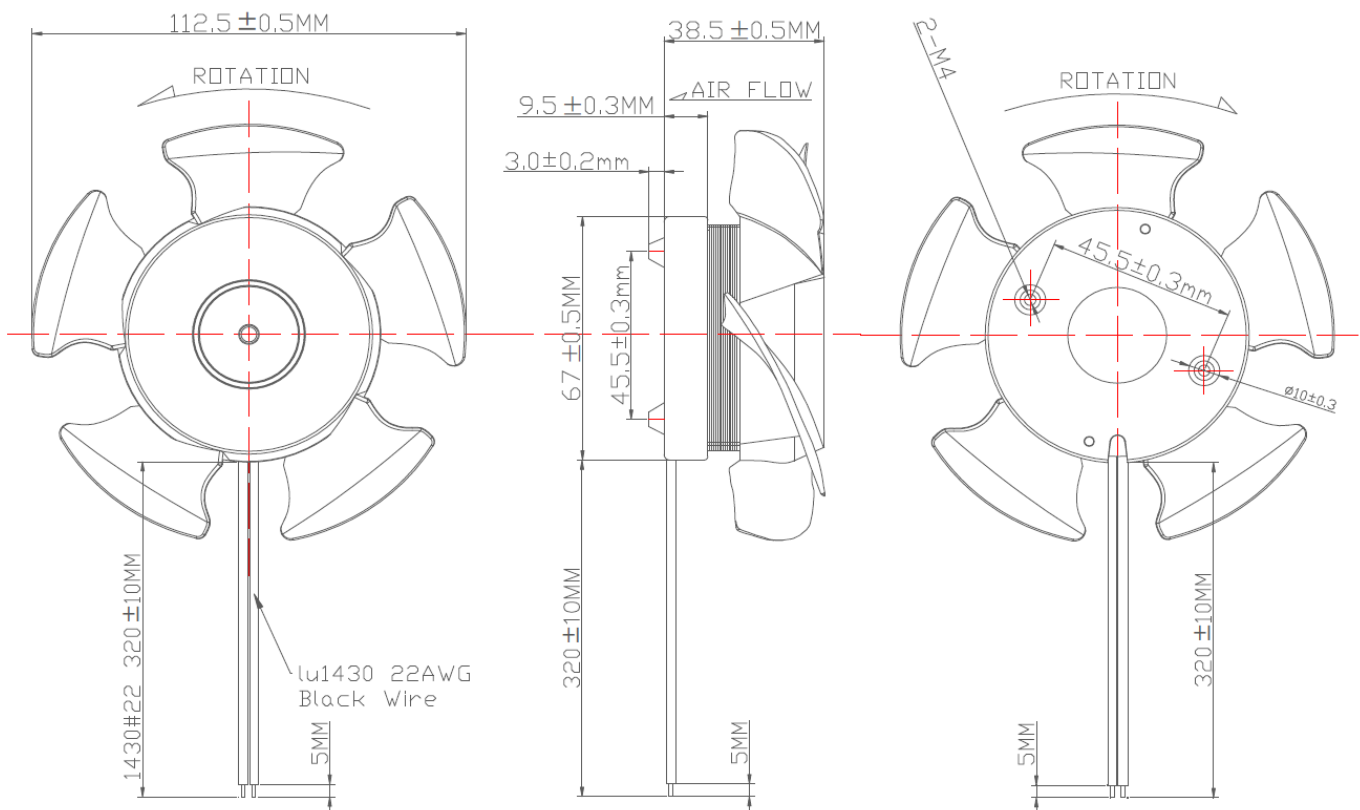
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## MATERIAL

### 2. Material

- 2-1. Frame : /
- 2-2. Impeller : **5 Blades, black thermoplastic PBT (UL 94V-0)**
- 2-3. Terminals : **2 Wires UL type 1430, 22 AWG, 300 V, 105°C, black, 320mm length / 5mm stripped**  
**2 Fixing holes M4, depth of screw max 4 mm**

## DIMENSIONS



**Air Flow Direction: Label side.**

**UNITS : mm**

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**LABEL**

**3. Label**



**3-1. Label Dimension: 46mm**

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	<b>P A G E</b>	<b>6 O F 6</b>		

## Notes

- 1. FANLAB will not guarantee the products if the application of our products is exceeded the limitation which is specified on this specification.**
- 2. In case of change of the specification specified on this document, a written notice is requested in advance.**
- 3. Please do not touch the impeller with pressure and never bring the fan with lead wire. The bearings and lead wire may be damaged.**
- 4. No guarantee on the products against the safety problem or failure caused by powder dust, drop of water or insect.**
- 5. If there is any data or related documentation different from this data sheet, this data sheet is the principal reference.**
- 6. For the purpose of MIS, please indicate P/N on every order.**
- 7. In case of the fan has no polarity protection function, wires with same color (electrode) must be connected together during the assembly. (i.e. red + red, black + black) or the fan will be damaged immediately.**
- 8. Please do not use the fan in the environment of corrosive gas or liquid or any detrimental gas.**
- 9. Please do not store the fan in the environment of high / low temperature, high humidity or any detrimental gas. Please store the fan within 6 months, every 6 months, there shall be a linkage of electric current to the fan, even though the fan is stored in room temperature.**
- 10. While the fan is in operation, please do not lock the fan intentionally for a long period of time, since the continuous stoppage will result in over-heat and thus burn-out of the fan.**
- 11. During the installation of the fan, please pay substantial attention to possible noise cause by resonance vibration and vibration.**
- 12. During the testing of the fan, please be sure to use finger guard to insure safety.**
- 13. Unless otherwise specified, if there is any doubt in the judgement, the temperature and relative humidity range of environment will be take in according to the standard test condition as 25°C and 65% RH.**

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