



Data Specification Sheet

Customer :
ECFD Part Number : EC12038B00HL-01-A03
Revision :
Description : 120x120x38mm – AC Variable Frequency Motor
Issue Date : 2017-05-26



Customer Approval

Signature

Print Name

Position

Date

Thanks for your interest in our products. Once formally approved please sign and return this specification to your designated Sales Manager

EC fans & drives will not release any orders into production without receipt of a signed approval data specification sheet

EC Fans & Drives
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General Information

ITEM		Specification		
01	Part Number	EC12038B00HL-01-A03		
02	Dimension	120×120×38mm		
03	Rated Voltage	100-120/220-240VAC (50/60Hz)		
04	Start-up Voltage	85VAC (50/60Hz)		
05	Operating Voltage	85~265VAC		
06	Rated Speed	3500Rpm	±10%	a. Rated Voltage b. 25°C and 65% RH c. Measured after 5 Minutes
07	Maximum Current	0.18 A	Max	
08	Maximum Power	9.5W		
09	Max Airflow	123.92	CFM	a. PQ Measurement Apparatus : (LW9266-SR) b. Standard : AMCA c. Rated Voltage d. Rated Current
		3.51	m ³ /min	
10	Max Static Pressure	0.36	Inch-H ₂ O	
		90.51	Pa	
11	Life Expectancy	50000hrs at 40°C		a.L10 at Conf. Level 90% b.Rated Voltage
12	Noise Level	49.3dB		a.Rated Voltage b.Non-Echo Chamber c.Standard:CNS 8753/ISO3744 d.Test Condition:ISO 7779 e.Distance: 1.0M
13	Motor Type	AF AC Frequency-Switching Fan		
14	Rotating Direction	Clockwise (From Label side)		

Material Information

01	Bearing	<input checked="" type="checkbox"/> Dual Ball Bearing	<input type="checkbox"/> Sleeve Bearing
02	Frame	<input checked="" type="checkbox"/> PBT of UL94V-0	<input type="checkbox"/> Die-cast Aluminum Alloy
03	Impeller	<input checked="" type="checkbox"/> PBT of UL94V-0	<input type="checkbox"/> Steel
04	Bobbin	<input checked="" type="checkbox"/> PBT of UL94V-0	
05	Connection Type	<input type="checkbox"/> Tags <input checked="" type="checkbox"/> Black(N) <input checked="" type="checkbox"/> Black(L) <input type="checkbox"/> Brown(E) UL1007 22# <input type="checkbox"/> Terminal	<input type="checkbox"/> White(RD) <input type="checkbox"/> Yellow(FG) 300mm ±10mm
06	Sleeving	<input checked="" type="checkbox"/> Heat shrink Sleeving	
07	Connector	2 x AMP 2-520102-2 (or Alternative)	

Electrical Information

ITEM		Specification
01	Locked Rotor Protection	<input type="checkbox"/> Locked the fan blade 72hours, after lock released, the fan can work normally
		<input checked="" type="checkbox"/> Auto power off after locked at rated voltage for 1sec After auto power off, circuit will attempt restart in 2 to 6 seconds
02	Insulation Resistance	100MΩ Between unshielded wire and frame at 500VDC/min
03	Dielectric Strength	1800VAC/5mA/ 3s between lead wire and frame
04	Constant Rotation Speed	During the operating voltage the fan has constant rotation speed
05	Moisture Protection	PCBA Conformally Coated Against Moisture Ingress
06	Soft Start	Soft Start Function Reduced to Minimum Setting for Increased Start-up Torque
07	Special Function	<input type="checkbox"/> RD <input type="checkbox"/> FG

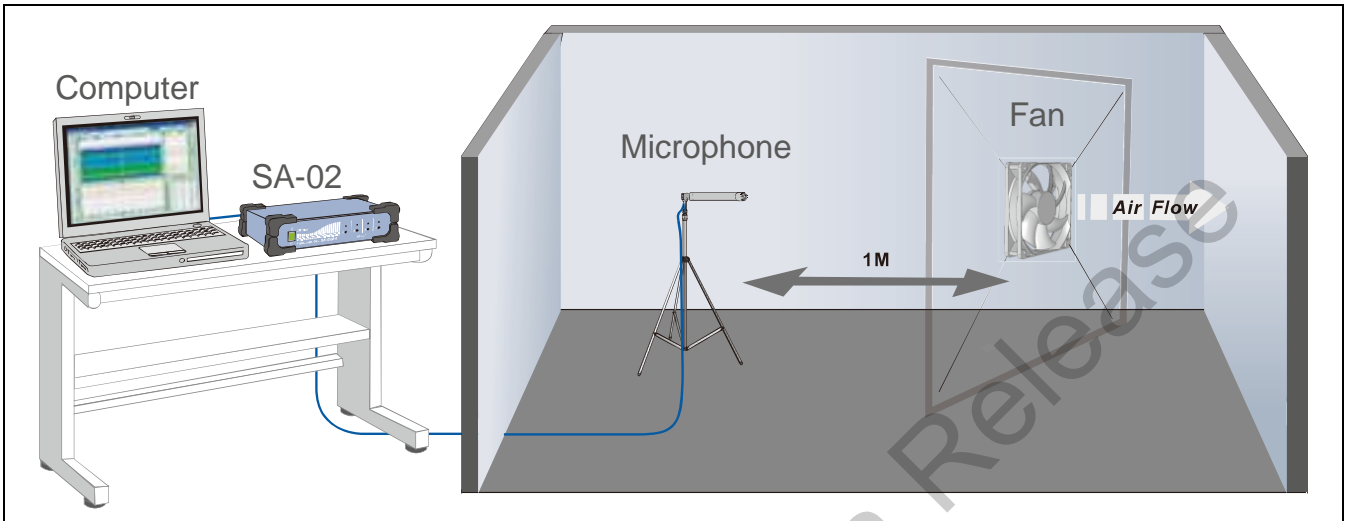
Environmental Specification

ITEM		Specification
01	Operating Temp. Range	Temperature : -25°C to +70°C
		Humidity : 15%~ 90% RH
02	Storage Temp. Range	Temperature : -40°C to +70°C
		Humidity : 15%~ 90% RH

Approvals

01	CE	In Accordance with Low Voltage Directive 2006/95/EC <input checked="" type="checkbox"/> IEC 60335-2-80:2002 (Second edition) + A1:2004 +A2:2008 in conjunction with IEC 60335-1:2010 (Fifth Edition)
02	UL	<input checked="" type="checkbox"/> File Number E468951
03	CUL	<input checked="" type="checkbox"/> File Number E468951
03	TUV	<input type="checkbox"/> In Progress

Noise Measure Condition



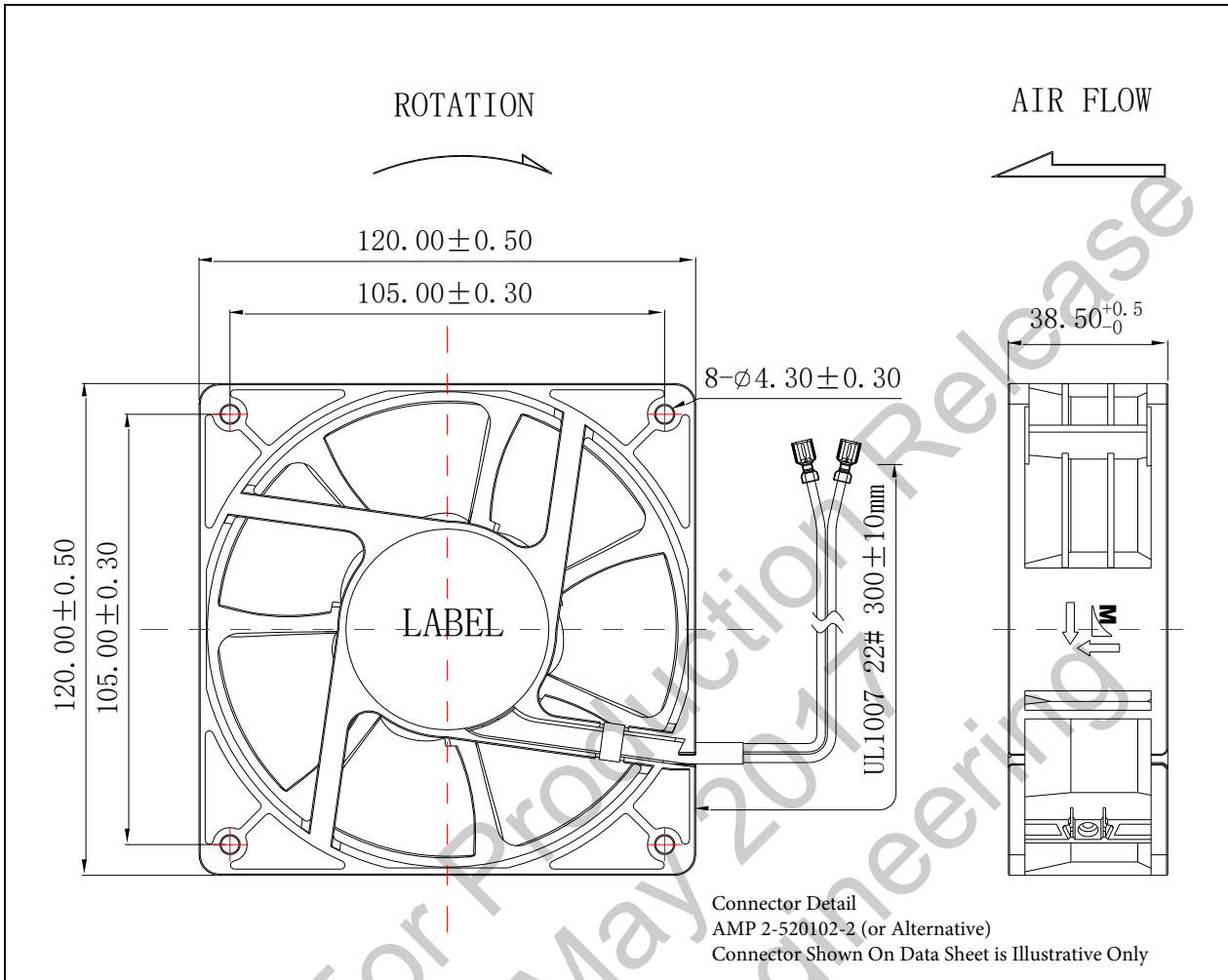
Measurement Systems

1. ANECHOIC Room Noise Measurement System
2. Rion SA-02 4-Channel Signal Analyzer, U-57 Microphone
3. Specifications: ISO 3744, ISO 3745, ISO 7779, CNS6753, JIS 8346
4. Background Noise: < 18dB(A)

Label Identification

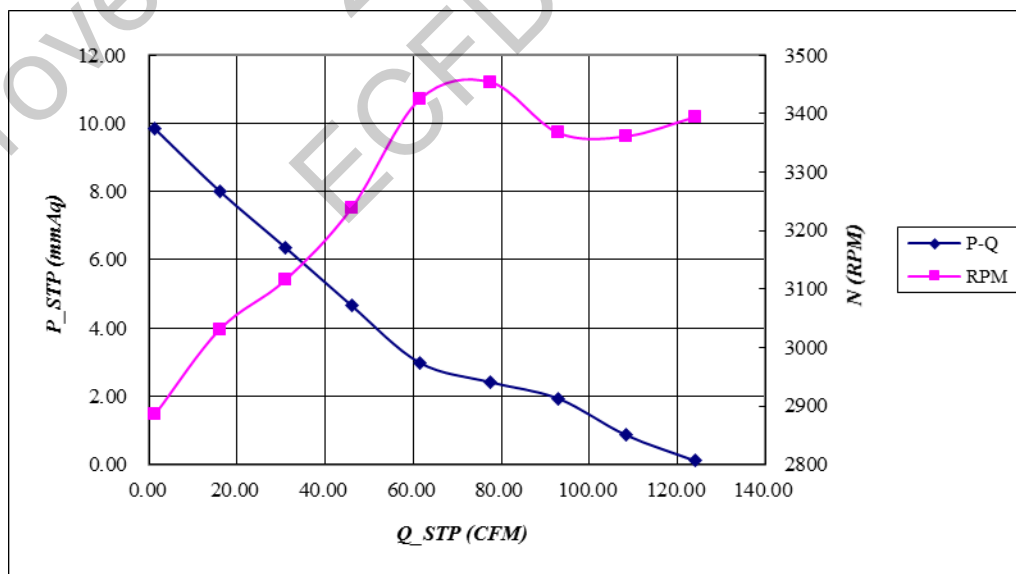
	Model No.	EC12038B00HL-01-A03
	Rated Voltage	100-120/220-240VAC (50/60Hz)
	Maximum Power	9.5W
	Label Size	Φ47.0mm
	Label Color	Green
	Safety Approvals	CE UL CUL
	Appendix Code	No

Outline Dimension



Airflow Curve

The airflow curve was in accordance with AMCA 210 under rated conditions



Note:

1. EC fans & drives will not guarantee the products if your application exceeds the limitations outlined in this specification.
2. Please do not touch or push fan blade with fingers or other items Fan blade and ball bearings may be damaged which could cause defect
3. Please avoid operating EC Fans & Drives products in poisonous materials (organic, cyanogen's, formalin, phenol, etc.) or corrosive gas environment (H₂S, SO₂, NO₂, etc.)
4. Always ensure that fans are stored according to the storage temperatures specified. Do not store in a high humidity environment. If the fans are stored for more than 6 months, EC fans & drives recommend functional testing before using.
5. Please do not damage this product this product including coil and lead wires while installing or wiring as this could cause defect
6. Always ensure that fan unit is connected to correct voltage & polarity
7. Improper mounting may cause harsh resonance, vibration, and noise
8. Please handle fans carefully. Although products are drop tested it is important to note that damage can occur to the balancing or bearing alignment if dropped
9. EC fans & drives recommend that all fans should be fitted with an approved fan guard to prevent injury

Disclaimer

All technical information stated in this document are provided in good faith and are believed to be accurate as at the date of publication. EC fans & drives reserve the right to amend or change any information in this document at their discretion

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