



# SPECIFICATION FOR APPROVAL

**CUSTOMER:**

**EVERCOOL MODEL NO:** EC12038A2LST

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**DESCRIPTION:** AC220V FAN

<b>APPROVED BY (AUTHORISED)</b>	<b>APPROVED</b>
	<b>CHECKED</b>
	<b>DRAWN</b>
	<b>SALES</b>

\* Please confirm your acceptance by return fax or mail.

SPEC NO	ISSUE DATE	EDITION	REVISED DATE
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PRODUCT SPECIFICATION APPROVAL SHEET

產品規格承認書

1、機構 Mechanical	
1-1、外觀尺寸 External dimension	120*120*38MM
1-2、重量 Weight	460g
1-3、軸承 Bearing	含油軸承 SLEEVE
2、電氣特性 Electrical characteristics (在通風及額定電壓條件下 in free air at rated voltage)	
2-1、額定電壓 Rated voltage	220/50HZ
2-2、額定電流 Rated current	0.06A±10%
2-3、額定輸入功率 Rated input power	8W±10%
3、效率 Efficiency	
3-1、風扇轉數速 Rated speed(範圍 range)	2000RPM±15%
3-2、最大風量 Maximum air flow	52 CFM
3-3、最大靜壓 Maximum static air pressure	4.1 mmH2O
4、特性規格 Characteristics	
4-1、操作電壓 Operating voltage range	220V~240V
4-2、起動電壓 Staring voltage	175V(ON/OFF)
4-3、鎖定電流 Locked current	0.08A(Reference)
4-4、操作溫度 Operating temperature	-10℃~+70℃
4-5、儲存溫度 Storage temperature	-20℃~+85℃
4-6、環境濕度測試 Environment humidity	10%(RH)45℃ for 24 hours & 98% (RH)45℃ for 24 hours
4-7、絕緣阻抗強 Insulation resistance	在本體與兩條導線間加 500V 直流電壓之絕緣阻抗 10MΩ 以上 At least 10MΩat 500 VDC between housing and both lead wires.
4-8、絕緣耐壓強度 Dielectric strength	必須能抵抗在本體與兩線間加 1800V 交流電壓 1 分鐘 1mA Withstand 1800 VAC 1 minute 1mA between housing and both lead wires.
4-9、預期壽命(MTBF)：指在額定電壓及正常溫度，濕度條件下連續運轉。 Life eceptance：continuous operation at rated voltage and normal temperature & humidity.	
4-9-1、含油軸承壽命：30000 小時 Sleeve bearing life expectance：30000Hours	
4-9-2、雙滾珠軸承預期壽命：50000 小時。 Two balls bearing life expectance：50000Hours	
4-10、端子抗拉強度 Tensible strength of connector	端子以 1 公斤的拉力拉扯 15 秒不會脫落 Connector will not be any broken at 1 Kg for 15 seconds
4-11、★噪音分貝 Accoustic sound vel	27dBA
4-11-1、噪音測試說明 Accoustic sound level test descriptions 以額定電壓在噪音實驗室中測試背景雜音 10.4 分貝 Suspension at rated voltage in sound proof room background noise：10.4dBA	
<p style="text-align: center;">懸吊 Suspension</p> <p style="text-align: center;">← 1M → 麥克風感應器</p> <p style="text-align: center;">(對準風扇中心距離 50CM) ★ ( Aim to center of the fan)</p> <p style="text-align: center;">風扇 Fan</p> <p>通風狀態 Free air</p>	
4-12、特性定義 Characteristics definition：	

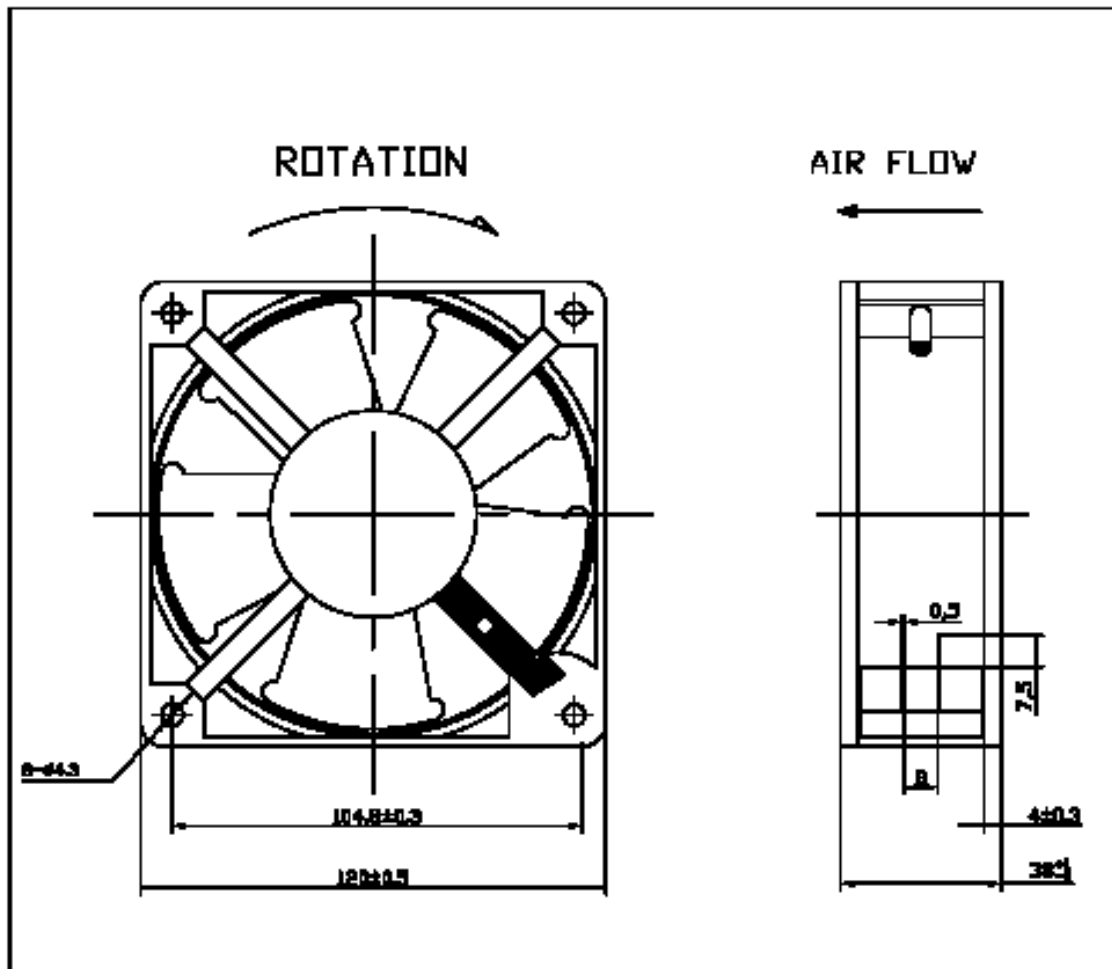
<p>4-12-1、額定電流&amp;額定轉速&amp;額定操作功率，須在額定電壓下；馬達連續轉 5 分鐘達到規格下限，10 分鐘達到正常值。</p> <p>Rated current, rated speed and rated input power shall reach bottom line of specification after 5 minutes continuous rotation at rated voltage and reach standard specification after 10 minutes continuous at rated voltage.</p>					
<p>4-12-2、起動電壓是指當突然通電後能夠使風扇起動之最低電壓。</p> <p>Starting voltage is the least voltage that enables to start the fan by sudden power on.</p>					
<p>5、保護功能 Protection：</p>					
<p>5-1、風扇旋轉鎖定測試：將風扇通電鎖死測試至少 48 小時，當鎖定解除之後均仍然正常運轉。</p> <p>Fans spin lock test：Fan power will be tested at least 48 hours locked, when the lock is still after the lifting of the normal operation of</p>					
6、安全規格 Safety		UL	TUV	CE	
7、原材料 Material					
項次 Item	主要元件 Major components	材質或型式	等級	UL 號碼 UL No.	備註 Rmark
7-1	外框 Fan housing	鋁框 Aluminum box			
7-2	扇葉 Fan blade	PBT 85% + Fiber 15%	94V-0		
7-3	軸心 Stator core	不銹鋼 Stainless steel (SUS420J2)			
7-4	軸承 Bearing	滾珠軸承或含油銅軸承 Ball bearing or sleeve bearing (Cu+GLY)-2100			含油軸承 Sleeve bearing
7-5	線架 Line frame	PA6/66 加纖 5%-25% 防火 V0			
7-6	矽鋼片 Silicon steel strip	H1300			
7-7	漆包線 Enamelled copper wires	去膜直徑 0.07-0.072mm Material & Specification 0.07-0.072mm	MW-2 UEW		耐熱 Heat Resistance155°C
7-8	連接器 Connector	端子式 Terminal Type 6.9			
7-9	貼紙 Label	多元脂 Polyester			
<p>8、出貨檢驗程式 Product inspection procedur。</p> <p>本公司出貨檢驗程式均依照下列步驟實施 Inspection procedures below are extremely followed</p>					
<p>8-1、100% 生產線上電性，死角，扇葉拉拔。</p> <p>100% Electric, rotating, dead spot, fan blade fasten, and primary noise test on production line</p>					
<p>8-2、100%以手敲擊測試及靜音室異音過濾。</p> <p>100% Strike test by hand and noise filter in quiet room.</p>					

<p>8-3、10 cm落地試驗依附 MIL-STD-105E 作抽樣。 10 cm drop test at random in accordance with MIL-STD-105E standard.</p>
<p>8-4、出貨抽樣檢驗依 MIL-STD-105E 作允退判定。 Random inspection in accordance with MIL-STD-105E standard.</p>
<p>8-5、允退標準如下 Pass/Reject standard： 加嚴 Critical AQL：0.4                      正常 Major AQL：0.65                      寬鬆 Minor AQL：1.0</p>
<p>9、注意事項(Notes)：</p>
<p>9-1、使用時請勿超出本規格所規定之極限，否則我們不保證此產品。 We will not guarantee the products if the application of our products are exceeded the limitation which is specified on this specification.</p>
<p>9-2、倘若要變更此份檔的任何規格，請務必事先提出需求。 In case of changes of the specification specified on this document. A written notice is requested in advance.</p>
<p>9-3、請勿觸壓著葉片以及電源線纏繞著風扇或用力拉扯電源線，如此軸心與電源線將會被損毀。 Please do not touch the impeller with the pressure and never bring the fan with lead wire. The bearing and lead wire may be damaged</p>
<p>9-4、本產品不保證因粉塵、水滴、小蟲進入，而影響壽命與不良品產生。 No guarantee on the products against the safety problem or failure caused by powder dust, drop of water or insect.</p>
<p>9-5、如有任何資料及檔與此份資料不同，將以此份資料為主要參考。 If there is any data or related documentation different from this data sheet. This data sheet is the principle reference.</p>
<p>9-6、請勿在可燃性氣體與任何有害環境中使用。 Please do not use the fan in the environment of corrosive gas or liquid or any detrimental gas.</p>
<p>9-7、請於六個月內使用，否則風扇存放在很高溫或很低溫，溫度很高或室溫中風扇於六個月後會有漏電流產生。 Please do not store the fan in the environment of high/low temperature, high humidity or detrimental gas. Please store within six months, every six months, shall be a leakage of electric current to the fan, even though the fan is stored in room.</p>
<p>9-8、當風扇於運轉中，請勿企圖將風扇鎖死特別長的時間；如此，會因連續停止不轉，產生高熱而燒毀風扇。 While the fan is in operation, please do not lock the fan intentionally for a long periods of time, since the continuous stoppage will result in overheat and thus burnt out the fan.</p>
<p>9-9、組裝風扇時，請特別注意，因共振或振動產生的噪音。 During the installation of the fan, please pay substantial attention to possible notice caused by resonance vibration and shock.</p>
<p>9-10、當搬運或作業中，風扇如從 60 cm 的高度落下，將會對葉片的平衡產生若干影響，特別是滾珠軸承避免掉落。 It is very important to notify that avoid to drop from 60cm height when in any movement or operation, it will impact the balance of blade. Especially ball bearing structure is avoided.</p>
<p>9-11、鎖外殼之螺絲扭力不得超 4Kgf。 The torque of the screw which locked the frame should not exceed 4 Kgf.</p>

## MATERIAL

1. FRAME: ALuminum die-cast, Black color
2. IMPELLER: THERMOLASTIC PBT OF UL 94V0
3. LEAD WIRE: UL 1007# 20 AWG

## DIMENSIONS : MM



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