

軸流直結式排煙風機

Low Pressure Axial Smoke-exhaust Fan Driven Directly with Cast Aluminum Airfoil Propellers

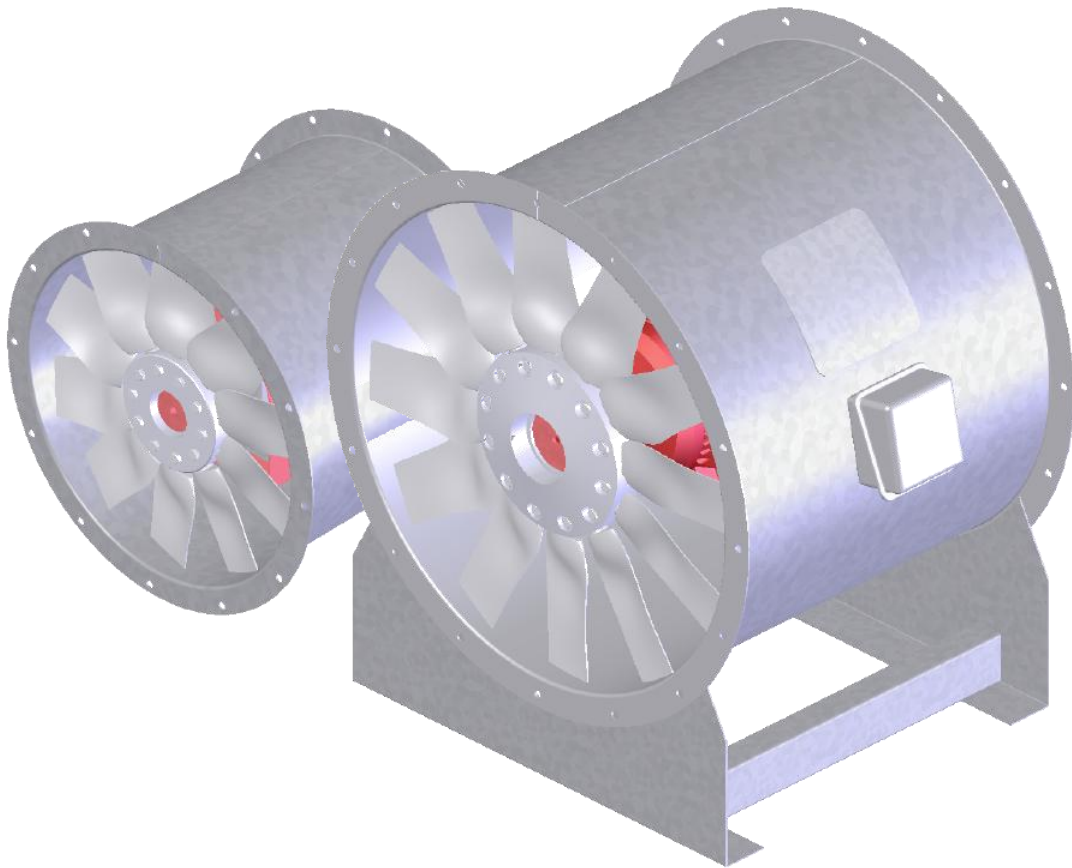


Axial Smoke-exhaust Fan Driven Directly with Cast Aluminum Airfoil Propellers

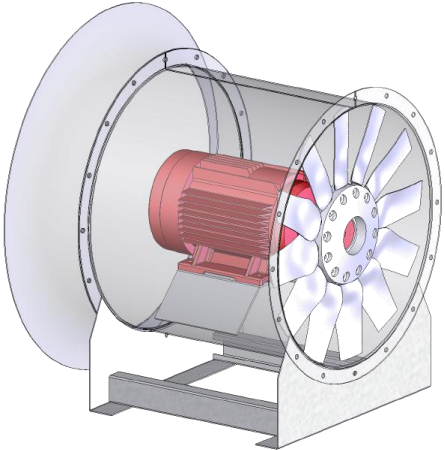
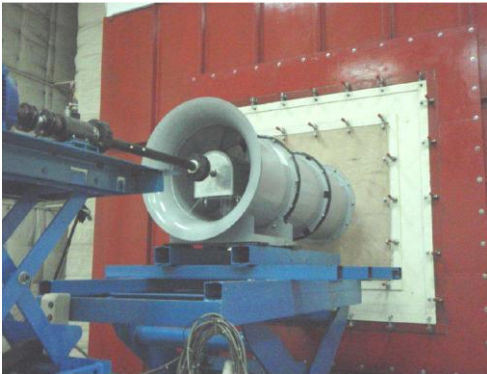



FLOWTECH Co., Ltd. certifies that the series LASD shown herein (page 18-93) are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

陽鼎實業股份有限公司特此證明，此處所示 LASD 系列目錄中，第18~93 頁獲得了加蓋AMCA 印章的授權。所示額定值系根據 AMCA 出版物 211 和AMCA出版物311所進行測試和程序確定，並符合 AMCA 認證額定值計畫的要求。



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Technical description 技術說明

Fan code 風機型號命名方法

FOR EXAMPLE LASD-560-200-5/10-3.7-2-6

LASD - 560 - 200 - 5 / 10° - 3.7 - 2 - 6

Frequency of motor

馬達頻率 (5:50Hz 6:60Hz)

Number of poles of motor

馬達極數

Power of motor, Unit: kW

馬達功率, 單位: kW

Number of Blades / Blade Pitch Angle[°]

葉輪葉片數 / 葉片角度

Hub Diameter

Normal Fan Diameter, Unit: mm

風機公稱直徑, 單位: mm

1. LASD 系列

Low pressure Axial Smoke-exhaust fan driven Directly

低壓直結式軸流排煙風機

2. AD 系列

Axial fan driven Directly

軸流直結式風機

Hanger Set

吊鉤座

(選用配件)

Inlet Bellmouth

集流器(鐘型入口)

(選用配件)

Inlet Flange

入口法蘭

Casing

機殼

Outlet Flange

出口法蘭

Inspect door

檢視口

(選用配件)

Hinged Frame

吊掛角鐵

Wire Box

接線盒

Casing Drain

洩水口

(選用配件)

Mounting Feet

安裝支架

Motor

馬達

Propeller Unit

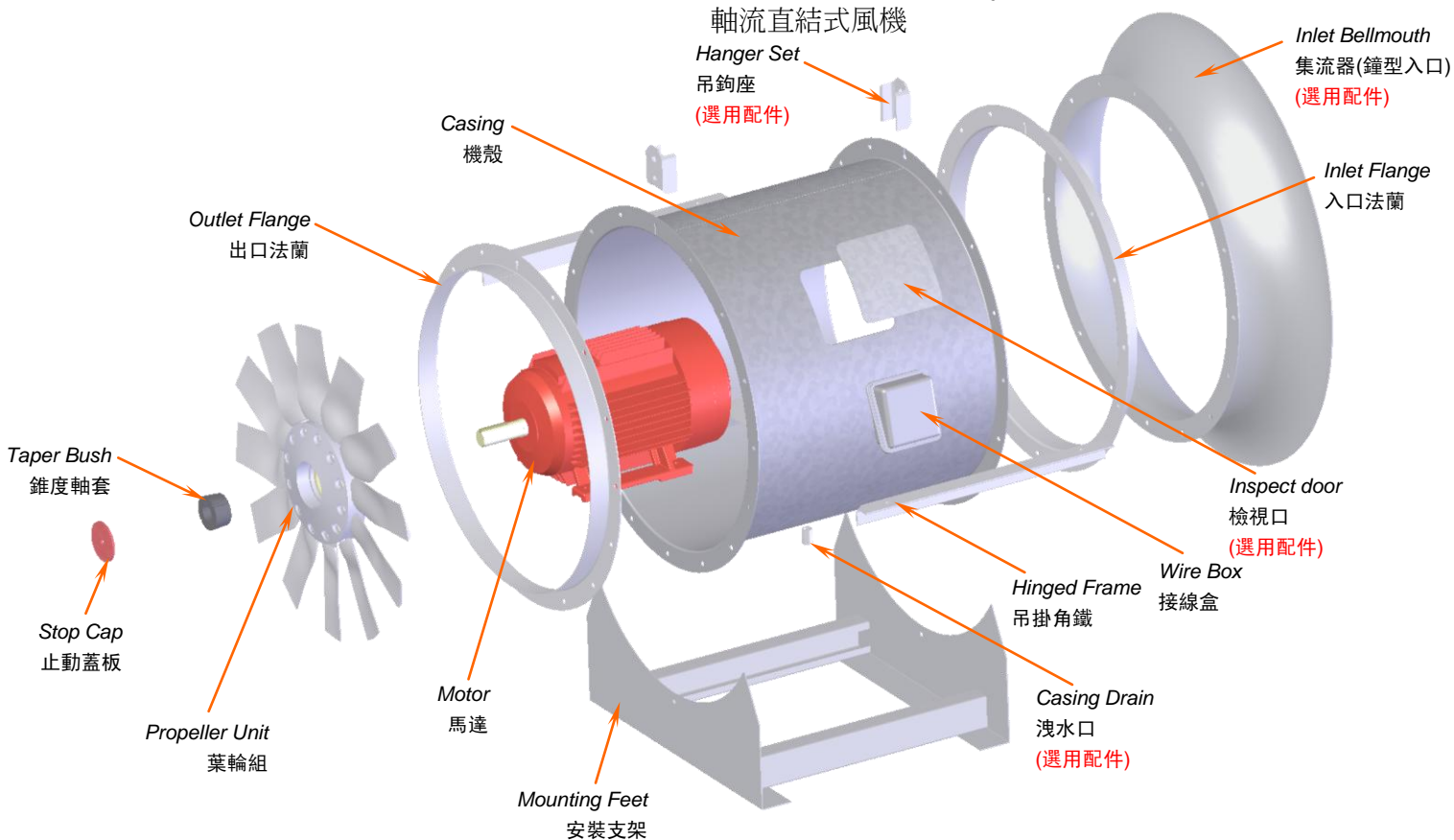
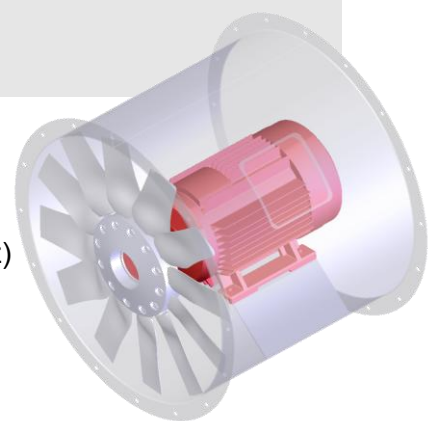
葉輪組

Taper Bush

錐度軸套

Stop Cap

止動蓋板



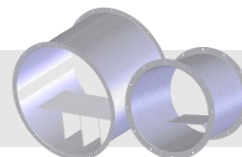
Fan layout drawing

風機設計爆炸圖

Types and Duties 規格和功率範圍

Flowtech-Axial flow Smoke-Exhaust fans are specially manufactured for all applications and mounting positions in case sizes 560 up to 1250 mm diameter. The performance range is from 500 up to 2,000 m³/min on air volume, at total pressure up to 1,800 Pa. Higher pressures are possible on multi-stage versions, contra-rotating. Air performance according to AMCA 210 standard, shown is for test installation type B, free inlet, ducted outlet. 陽鼎軸流排煙風機，依其適用範圍及安裝操作環境，以直徑 $\varnothing 560\text{mm}$ 至 $\varnothing 1250\text{mm}$ 不同規格來做製造。最大全壓可達到 1,800Pa 的情況下，風機流量可從 500 至 2,000 m³/min。若需要更大的壓力，可以串聯多級風機，利用反向葉片原理方向來達成。空氣性能依 AMCA 210 標準，安裝方式 Type B，入口加裝配件鐘型入口測試及出口加裝出口風管，其性能都是於 1.2 kg/m³ 空氣密度的標準條件下定義的。

Casing 機殼



Version: L (light version)

Casings are spun of sheet galvanized steel with integral inlet flanges on both ends, mounting hole drilled in accordance to DIN 24154, R 2. The strengthen structure is order to pad-mounted motors, foot-motors or flange-motors. It is suitable for duct or plenum type installation. This version is for all applications including smoke-extract and normal conditions in the HVAC-market.

結構形式 1: L (輕型結構)

機殼用鍍鋅鋼板製成通過精密旋壓成形，在機殼兩端旋壓製成法蘭，按 DIN 24154 標準的系列 2 的規定鑽孔，此強化結構以便安裝 Pad-mounting, foot mounting 及 flange mounting 之馬達。配合於管道或平面形式的安裝。這種結構形式可適應排煙與通風空調行業的全方位需求。

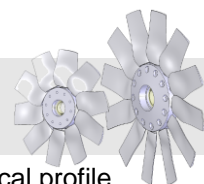
Version 2: H (heavy version)

Fan case and motor mounting made of hot-rolled steel, after welding that all steel parts are hot dip galvanized manufacturing. This version is for higher demands, for heavy industry or for high performances. Flanges on both ends, drilled in accordance to DIN 24154, R2 are integrated. On this type external terminal boxes are fitted as standard. If motors are with lubrication, tubes and grease-nipples are fitted outside fan case.

結構形式 2 : H (重型結構)

機殼和馬達底座以碳鋼製成，經焊接後進行熱浸鍍鋅處理。這種製造方式適合較高要求，使用於重工業領域或高功率情況。機殼兩端的法蘭，並按 DIN 24154 標準系列 2 鑽孔。對於此一筒形機殼，在機殼上可安裝適合之接線盒。若馬達需要潤滑保養，則將潤滑口移到機殼之外。

Propeller 葉輪



The **Flowtech**-propellers, hubs and blades are made of cast aluminum alloy, the aero-dynamical profile guarantees high efficiency and low noise. The blades are with adjustable pitch angle to optimum the duty point. The solidity varies for a wider range of performance. All rotating aluminum components are X-ray examined to ensure quality and reliability. All propellers are statically and dynamically balanced to ISO 1940 and AMCA 204 balance quality grade level-G2.5.

陽鼎風機葉輪，中心轆和葉片是由鑄鋁合金製的。葉片組外型的空氣力特性可以保證高效率 and 低噪音。中心轆結構允許在靜止時對葉片的角度進行調整，以達到最佳操作狀況。風機有不同的葉片數，因此可擴大了風機的適用範圍。所有旋轉的鋁合金部件在安裝前都經過 X-射線探傷檢驗，以保證品質及操作安全性。且全葉片組為確保振

動之良好其動平衡和靜平衡校正皆達到 ISO1940 / AMCA 204 (G2.5)級別。

Motors 馬達



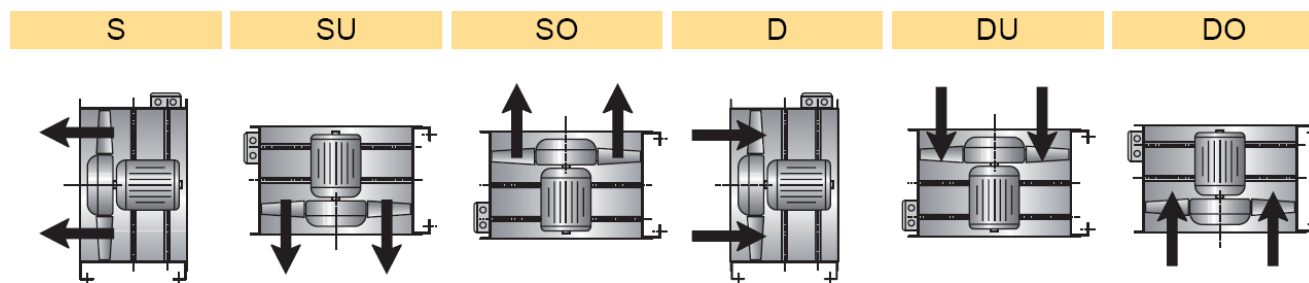
Flowtech uses as standard closed squirrel cage motors with pad-mounting and airstream rated to IEC 34, if required also in accordance to EPACT. The standard motors have Class H and enclosure IP 54. Continuous operating ranges from -40 °C to +40 °C, other operating conditions on demand. Multi speed versions with 2 or 3 speeds, TAB- or DUAL-wounded are also available. The motor bearings have L 10 (or L50) life design. All motors are can be manufactured to correspond to F200, F300 or F400 requirements for smoke-extract application.

陽鼎風機安裝符合 EN60034-1(IEC 34-1)標準的交流馬達，也可以應客戶要求按 EPACT 製造，作標準的四點固定。馬達全密閉、帶短路轉子。保護等級為 IP54，絕緣等級為 H 級。按用戶需求還可以選擇用於常溫環境操作馬達，或通過變級開關，實現兩級或三級調速的帶特殊繞組的馬達。馬達軸承的壽命按 L10 或 L50 設計。所有馬達亦可依排煙應用場合之需求符合 F200(耐溫達 200°C/120min)、F300(耐溫達 300°C/60min)或 F400(耐溫達 400°C/120min)之耐溫等級。

Forms of running 安裝位置和氣流方向

Flowtech-Axial flow fans are available for all forms of running. The chart information shows all standard forms of running, please indicate when ordering. Standard form of running "S". Form of running is especially relevant when weather proof motors are required.

陽鼎軸流風機可以適用於各種氣流方向。下圖中所示的安裝運行方式和氣流方向都是標準設計的。在訂貨時應加以說明。基本的氣流方向為 "S" 形式。當需要安裝特殊的馬達時，一定要說明氣流的方向。



Arrows indicating correct rotating and direction of airflow are mounted on the outside of the fan case.

表示正確旋轉及氣流方向的箭頭以貼在風機機殼外面。

Ancillaries 附件

Flowtech offers a wide range of ancillaries, e.g.:陽鼎公司提供多種附件，如：

- * Propeller or motor side guard 葉輪側或馬達側的護網
- * Mounting feet for both horizontal or vertical operation 用於水平或垂直安裝的支架
- * Matching flanges 配套的法蘭配件
- * Complete flex. connectors 柔性法蘭連接件
- * Bellmouth inlets 集流器(鐘型進風噴口)
- * Air operated dampers 空氣驅動的氣流調節器

- * Anti-vibration mounts 防振阻尼器
- * Silencers with or without pod 帶內芯或不帶內芯的管狀消音器
- * Anti-spark-track for flame proof 用於防火的火花保護帶
- * Inverters 變頻器

Specify the fan 風機說明

Having chosen the fan most suitable for your individual application: please specify as follows:

在選擇了最適合您的實際用途的風機後，請特別留意以下說明：

- (1) Manufacturer **Flowtech**, light or heavy version. 製造商:陽鼎，輕型結構或重型結構。
- (2) Exact details on motor data like power supply and cycles and specifications on temperature, flame proof, multi-speeds, extra enclosure and overheat protection. 對馬達參數的其它特殊要求:如電壓、頻率、溫度、防爆要求、轉速、特殊防護措施和過熱保護等。
- (3) The impeller manufactured in cast aluminum alloy with high efficiency blade profile and adjustable pitch angle. 用鑄鋁合金製造的葉片外型，葉片安裝前經過X-射線探傷檢驗。性能符合空氣動力學要求，葉片可在靜止時調節。
- (4) The case in light version made of galvanized sheet steel or heavy version with hot dip galvanized finish. 用鍍鋅鋼板製成的輕型機殼，或者用鋼板製成的熱浸鍍鋅的重型機殼。
- (5) All necessary ancillaries are to be specified. 所有必要的附件應當列出。

Ordering the fan 訂貨說明

After selection of the fan best for your needs please order as follows:

在選擇最適合您的風機後，訂購陽鼎風機時還需說明：

- (1) Fan type, casing version and running form 風機機殼形式、氣流方向和安裝位置。
- (2) Fan code and type: see below 正確的風機名稱和型號:按隨後提供的風機型號命名方法。
- (3) Quantity required 訂購數量。
- (4) Duty required at standard air and temperature, air volume in m^3/s at static pressure in Pa. 按單位 m^3/s (或 m^3/min)的流量，在空氣密度為 $1.2 \text{ kg}/\text{m}^3$ 下的風機靜壓;按單位Pa(或mmAq)。
- (5) Motor power rating in kW 需求的馬達功率。
- (6) Electrical supply 需求馬達電壓、頻率和馬達輸入相數。
- (7) Ancillaries required 必需的附件。

Useful information 其它有用的指示和信息

Fan selection 風機選用

Please select fans within the curve. Do not select above curve end, fan will work in stall and will be damaged. For a non-overloading selection you can select motor on the peak-kW from each pitch angle which marks and covers the maximum on absorbed power.

在配置風機時，在性能曲線中要注意，運行點應低於相應的性能曲線。當超過這一區域時，就存在失速的危險，風機發生共振。其結果是，作用在葉輪上的機械負荷會增大到足以損壞葉輪。為了能最大可能的保證運行安全，

可以按照葉片傾角對應的吸收功率性能曲線的最大值來選擇馬達，這樣可排除馬達過載的可能。

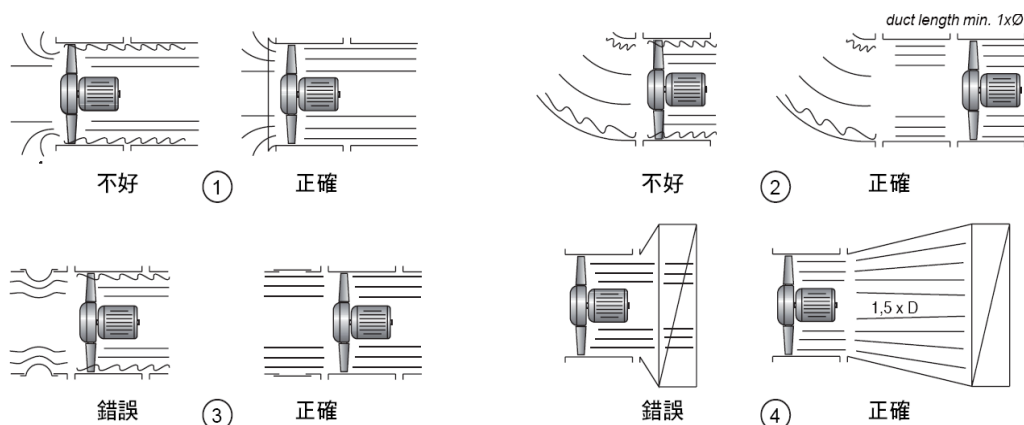
Fan installation 風機安裝

Installation recommendations are as follows:

- Fans with free inlet and outlet should be installed with 1,5 x fan diameter distance on extract and supply side to next equipment. Fans should have a bellmouth on the air entry to get a smooth airstream. High performance fans will work at higher efficiencies and save energy if diffusers are mounted on the outlet.
- When installing fans into systems and to other equipments (bends by 90 degree., filters, silencers etc) correct bend radius and distance are to be considered to avoid losses. Flexible connectors are to be installed smooth. By not following advices you will lose performance. (see pictures below)

風機安裝時，應注意以下幾點：

- * 自由地吸風和排風的風機的吸入氣流和排出氣流應當這樣配置，風機的進氣側和出氣側與其它結構件至少有 1.5x 風機直徑的自由空間。氣流吸入側應當用集流器，保證氣流均勻流向葉輪。對於大功率的風機，建議在風機出風口使用出口擴張管，這樣可以使風機工作在效率較高的狀況，產生節省能源效果。
- * 對於安裝在系統或風道中的風機，需要注意的是，在風機出口和進口處的連接件(如直角彎管，過濾器，消音器等)應當有足夠大的直徑和風機之間足夠的距離，以避免損失。柔性連接件的安裝要光滑。如果不注意安裝的要求，就可能降低風機的性能。(參考下圖)



Example fan selection 風機選型舉例

Required duty point by customer 客戶要求的狀況

* Volume flow 流量: $6 \text{ m}^3/\text{s}$ * static pressure 靜壓: 400 Pa

* Fan speed 風機轉速: 1760 [RPM] (4 Pole 4 極)

How to use: 用法:

After having chosen right fan performance curve please draw volume flow and pressure.

在選定正確的風機性能曲線後，畫出流量和壓力圖。

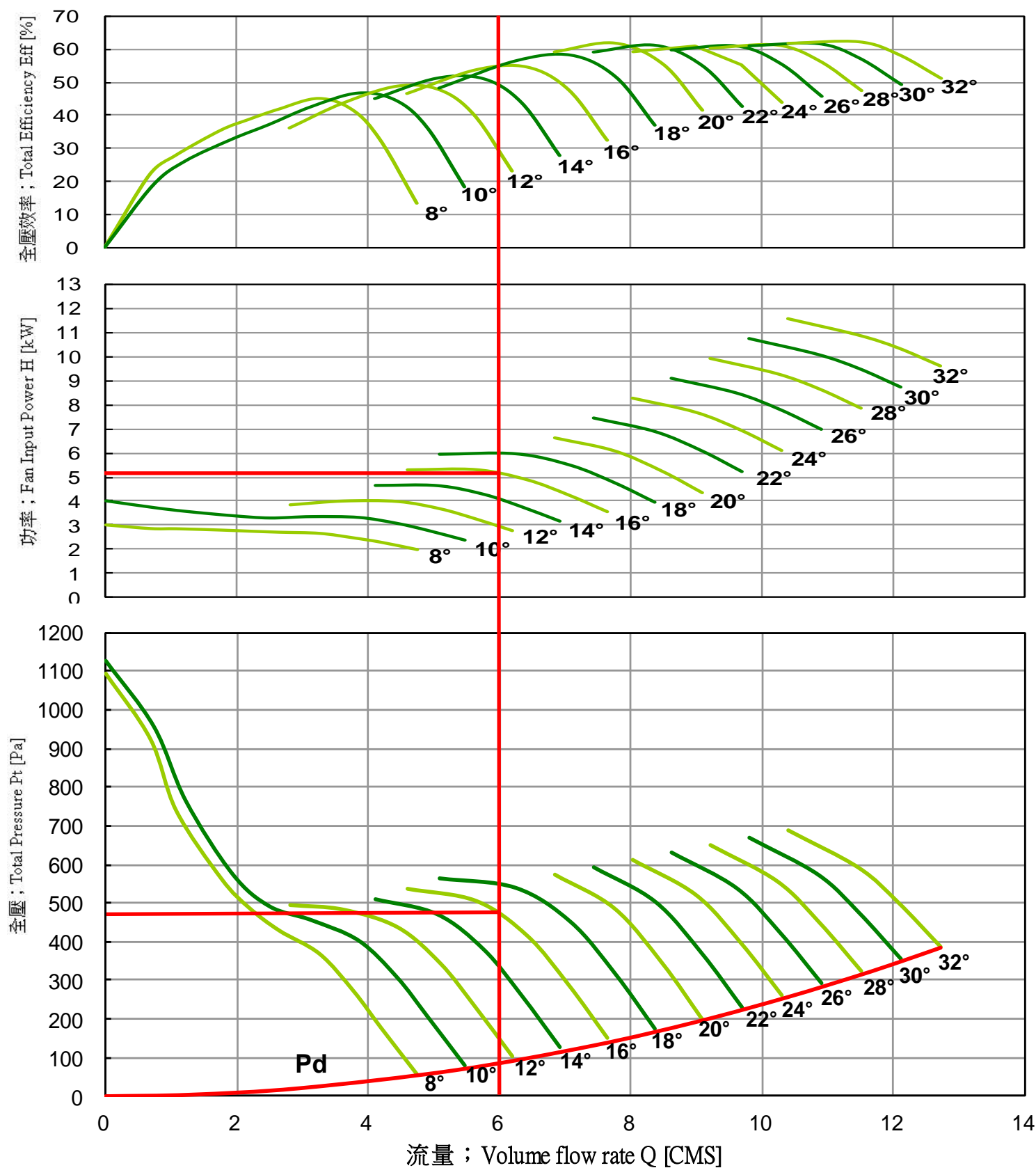
In the cross you will find the following fan data: 在曲線焦點處，可找到下風機數據:

* motor speed or number of poles 1760 [RPM] - 4-pole 馬達轉速或極數: 1760 [RPM]-4極

* pitch angle : 16 degrees 葉片傾角: 16 度

Performance curve

風機性能曲線



Choose motor power 確定馬達功率

After peak-absorbed power see table chart: 5 kW 按查表確定最大吸收功率5kW

Peak power is the max power over the whole pitch angle in the worst case.最大吸收功率是對應葉片傾角的整條性能曲線上，預計最壞情況下的最大值。

How to get the required noise level, see page 11.噪音級的計算，詳見第11頁。

Acoustic and noise control 噪音聲功率的決定

General 概述

Noise produced by axial flow fans is basically in a high frequency level. The sound power depends on careful selection of the fan regarding duty, efficiency, characteristics and above all quality of installation. There is a strong correlation between sound power and aerodynamic loss of the fan. Generally speaking, sound power of fans is a function of air volume and total pressure. This will be confirmed by the following rough calculation formula:

軸流風機產生的噪音主要是高頻噪音。影響噪音聲級的因素視風機的狀況、風機的效率、風機特性的是否合理選擇及整體安裝品質等決定的。為了獲得最接近且合適的人類耳朵聽覺效果，噪音位準根據 AMCA 300 量測。聲功率等級的確定根據“AMCA 300 全響室量測方法”測得。在聲功率和動壓損失之間有著嚴格的相互關係。一般來講，聲功率是流量和全壓的函數。可以通過下面的近似公式來粗略計算聲功率級：

$$L_{WG} [dB] = L_{WS} + 10 \log(\dot{V} \text{ m}^3/\text{s}) + 20 \log(\Delta p_{tot} [Pa]) \pm 5$$

式中：

L_{WG} = 總的聲功率級

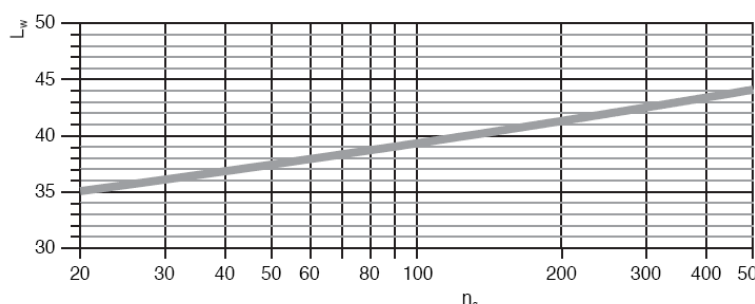
L_{WS} = 按圖 1. 與轉速相關的聲功率級

where by:

L_{WG} = total sound power

L_{WS} = specific sound power by the speed (see fig.1)

Fig 1.圖 1



$$n_q = n[\text{min}^{-1}] \cdot \frac{\sqrt{\dot{V}[\text{m}^3/\text{s}]}}{\left(\frac{\Delta p_t[\text{Pa}]}{\rho_m[\text{kg}/\text{m}^3] \cdot 9.81} \right)^{3/4}}$$

Sound power levels 聲功率級

This is the amount of power which a source gives off as sound. Sound power levels are expressed in decibels with a reference level of 1 picoWatt. The sound power level of a source remains the same regardless the environment and the distance to the listener.

聲功率是聲源產生的噪音功率。聲功率的單位是以皮瓦(Pico watt)為基準的分貝(dB)。聲源的聲功率只決定於聲源本身，與聲源周圍環境和測試據的距離無關。

Sound pressure levels 聲壓級

These are pressure fluctuations radiated by a source expressed in decibels with a reference level of 20 μPa .

The sound pressure level varies according to the distance of source to the listener and its environment.

聲壓是以聲源傳出的壓力振動。聲壓的單位是以20微帕(μP)基準的分貝(dB)。聲壓與測試點據聲源的距離以聲源周圍環境有關。

$$Nr = 10 \log(4 \pi \times r^2)$$

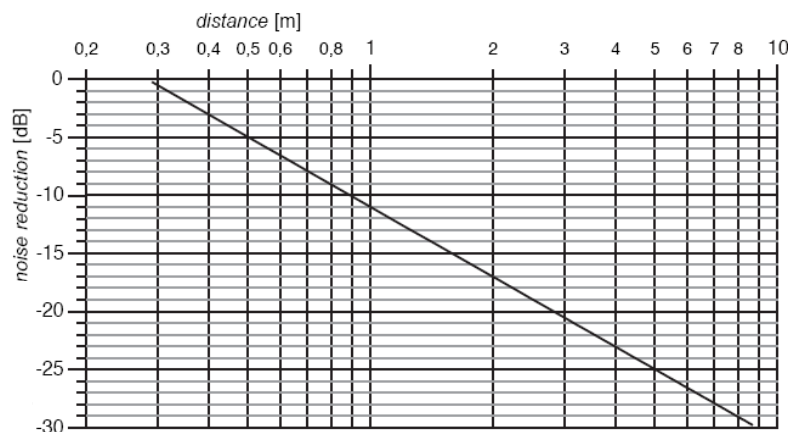
Sound distance

聲源距離; r [m]

Noise reduction

噪音衰減; Nr [dB]

Fig 2.
圖 2



Frequencies 頻率

Sound is split into different frequencies. Frequencies of human hearing ranges from about 20 cycles per second (Hz) to 20000 cycles per second (Hz). For practical purposes FLOWTECH publishes noise data in eight octave bands with the centre frequencies of 63, 125, 250, 500, 1000, 2000, 4000 and 8000 Hz.

噪音一般是由不同頻率的聲音組合成的。人耳能夠感覺到的聲音頻率範圍為 20Hz 至 20,000 Hz。在工程實際中，陽鼎一般只給出以下各頻率為中心的頻率倍頻及噪聲值:63、125、250、500、1000、2000、4000 和 8000Hz 每個風機都是有自己特有的噪音頻率分佈

„A“ weighted sound pressure levels (dB A) A 計權聲壓級 dB(A)

The ear is more sensitive to sound in some frequencies than in others. The „A“-weighting is an attempt to reflect this natural attention of sound. The „A“-weighting is a set of figures which are applied to the sound pressure levels. The levels in each of the octave band are added logarithmically to give a single figure. „A“-weighting will be over octave band as follows:

人耳對不同頻率範圍的聲音的敏感程度不同。通過 A 計權來模仿人耳對聲音的自然感覺。按照 A 計權，各個頻帶的聲壓級都要分別扣除一定的分貝值。對各頻帶的 A 計權聲壓級按對數求和，可得到 A 計權的總 X 聲壓級。

Chart (3)
表(3)

頻率[Hz]	63	125	250	500	1000	2000	4000	8000
A-計權[dB]	-26	-16	-9	-3	0	+1	+1	-1

Example 舉例

Customer requires the dB(A) level at 3 m distance from a 800 diameter. fan, 1760 1/min, 12 blades, 20 degree.

pitch angle, duty 6 m³/s at 500 Pa (static).

The sound data for the operating points inside these boundaries may be determined using interpolation.

Example to Ps comparison with 63Hz; $\frac{500 - 346}{517 - 346} = \frac{L_{W_{63Hz}} - 92}{94 - 92} \Rightarrow L_{W_{63Hz}} = 92 + \frac{2 \times 154}{171} = 93.8 \cong 94 \text{ [dB]}$

The same method to calculate and fill in each octave band decibel data as following:

一位用戶選擇一台風機，直徑 800mm，轉速 1760 1/min，葉片共 12 葉且傾角 20°，在靜壓為 500Pa 下的狀況為 6m³/s，想知道風機 3mm 位置處的 A 計權聲壓級 dB(A)。

Model No.	RPM	Ps	Sound Power re 10 ⁻¹² Watts Octave Band [Hz]								L _{WA}
			63	125	250	500	1000	2000	4000	8000	
LASD-800-12/20°-7.5-4	1760	346	92	97	97	98	94	91	87	83	100
LASD-800-12/20°-7.5-4	1760	517	94	99	99	102	101	97	92	85	105

噪音數值資料在操作點要求查找聲功率一覽表，因數據落在其中需使用內插法決定聲功率值。

LASD-800-12/20°-7.5-4	1760	500	94	99	99	102	100	96	92	85	104.2
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舉例靜壓為 500Pa 對照表格

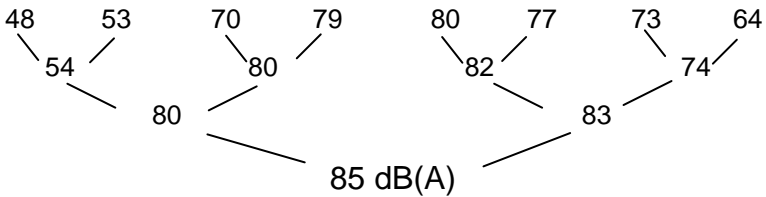
63Hz; $\frac{500 - 346}{517 - 346} = \frac{L_{W_{63Hz}} - 92}{94 - 92} \Rightarrow L_{W_{63Hz}} = 92 + \frac{2 \times 154}{171} = 93.8 \cong 94 \text{ [dB]}$

同理計算填入如上表完成之計算列結果。

Frequency 頻率[Hz]
sound power level 聲功率級
Reduction for 3 m distance (fig. 2)
按圖2扣除3m距離的聲壓級衰減
Apply „A“ as chart 3 按表3按A計權

63	125	250	500	1000	2000	4000	8000
94	99	99	102	100	96	92	85
-20	-20	-20	-20	-20	-20	-20	-20
-26	-16	-9	-3	0	1	1	-1

Add noise levels as given in chart 4 below
以表4進行對數求和



Addition of sound level 聲級求和		
Chart (4) 表(4)	Difference between two sound levels 兩個聲級值差值 [dB]	Add to the higher level 相加後得較高的聲級值 [dB]
	0-1	3
	2-3	2
	4-9	1
	≥ 10	0

$$L_{\Sigma} = 10 \cdot \log(10^{0.1L_1} + 10^{0.1L_2} + \dots + 10^{0.1L_n})$$

whereby: 式中:
L1= sound level of a source 1 聲源1的聲級
L_Σ= resulted level 總聲級

Noise of several sources, equivalent in characteristic and level

多個種類相同，強弱一樣的聲源產生的聲級

$$L_{\Sigma} = L_1 + 10 \cdot \log(Z)$$

whereby: 式中:

Z= number of sources 聲源個數

L1= sound level of a single source 單個聲源的聲級

L_Σ= resulted level 總聲級

Please note: 請注意:

Here are some usefully information and fan laws:陽鼎公司提供多種多樣的，不同消音效果的消音器。

Fan Laws 風機定律

(for geometrically similar fans only)

• Volume flow \approx rotational speed **Speed change - constant size**

在一定風機尺寸和一定的密度下
，轉速變化時:

* Pressure (all) \approx (rotational speed)²

流量與轉速成正比:

$$\frac{\dot{Q}_2}{\dot{Q}_1} = \frac{N_2}{N_1}$$

* Pressure (all) \approx (rotational speed)²

壓力變化與轉速的平方成正比:

$$\frac{\Delta P_a}{\Delta P_b} = \left(\frac{N_1}{N_2}\right)^2 = \left(\frac{\dot{Q}_1}{\dot{Q}_2}\right)^2$$

* Power absorbed \approx (rotational speed)³

吸收功率與轉速的三次方成正比:

$$\frac{P_1}{P_2} = \left(\frac{N_1}{N_2}\right)^3 = \left(\frac{\dot{Q}_1}{\dot{Q}_2}\right)^3$$

在轉速不變的條件下，葉輪尺寸變化時
(對幾何形狀相似的風機)

* Volume flow \approx (impeller Diameter)³

流量與葉輪直徑的三次方成正比:

$$\frac{\dot{Q}_2}{\dot{Q}_1} = \left(\frac{D_2}{D_1}\right)^3$$

* Pressure \approx (impeller Diameter)²

壓力差與葉輪直徑的平方成正比:

$$\frac{\Delta P_1}{\Delta P_2} = \left(\frac{D_1}{D_2}\right)^2$$

* Power absorbed \approx (impeller Diameter)⁵

吸收功率與葉輪直徑的五次方成正比:

$$\frac{P_1}{P_2} = \left(\frac{D_1}{D_2}\right)^5$$

Density change - constant speed- constant size

轉速,尺寸一定,而密度變化時 :

* Volume flow no change 流量不受影響:

$$\dot{V} = \text{constant}$$

* Pressure \approx Density 壓力差與密度成正比:

$$\frac{\Delta P_1}{\Delta P_2} = \frac{\rho_1}{\rho_2} = \frac{T_2}{T_1}$$

whereby: 式中:

T = Kelvin Temperature [K] 絕對溫度 [K]

* Power absorbed \approx Density

風機軸功率計算公式 :

$$P_L [kW] = \frac{\dot{V} [m^3 / s] \times \Delta P_t [Pa]}{\eta [\%] \times 10}$$

Pressure 壓力 :

* Dynamic Pressure [Pa] 動壓

$$P_d = \frac{\rho}{2} \cdot V^2$$

whereby: 式中:

ρ = air density in [kg/m³] 空氣密度 [kg/m³]

V = air velocity in [m/s] 風機中的空氣風速 [m/s]

* Total pressure 全壓

$$P_t = P_s + P_d$$

* Absorbed power - calculation in duty point

吸收功率與密度成正比:

$$\frac{P_1}{P_2} = \frac{\rho_1}{\rho_2} = \frac{T_2}{T_1}$$

Fan Performance 風機性能

Statement of Fan Performance 說明

Air and Sound performance of LASD series are based on test conducts in according with AMCA Standard 210. and performance changes with two factors as following:

LASD 系列的風機性能, 經過 AMCA 210 標準測試後所得到的性能曲線, 會由於以下兩個主要因素而改變:

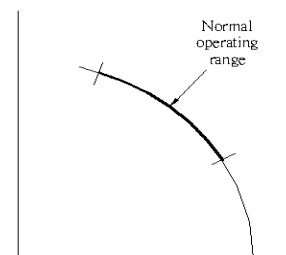
a) The air duct near to the fan were blocked or suddenly change the outline of ductwork.

In general, the air flow smoothly through the fan in a perfect design condition, and performance will appear like the result that expect.

在靠近風機的風道系統有不正常的阻礙或突然的變化。一般而言, 若依循合理的常規設計, 空氣流場會均勻的進入及被送出風機, 接近一個理想狀況, 性能會如預期的結果出現。

b) Change of the component within the fan, such as the change of the model of the fan, or even there is sizable most tip clearance.

風機內部元件的改變, 如風機型式的改變, 或甚至是有相當大的尖端間隙。



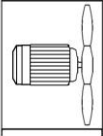
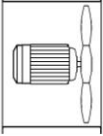
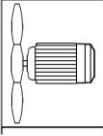
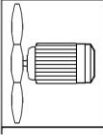
The influence of the following general effect that the choice of the fan must also be considered, in order to reach the working order on the proper choice blade pitch angle.

風機的選擇還必須考慮以下一般效應的影響, 在適當的選擇葉片角度以達到正常運轉狀態。

Fan Type 風機型式

LASD 系列主要風管安裝方式有 A 型式風機及相對應的 B 型式。其性能上的差異主要由於風機出口及入口, 在實

際使用安裝有風管或喇叭進風口。

Type 型式	Installation mode 安裝方式	Performance Change 性能變化	Noise Change 噪音變化
A	 B&D	Refer to Performance Curve 參照性能曲線上數據	Refer to Noise Tables 參照噪音表上數據
A	 A&C	qv 1.02 PsF 1.04 Compare to mode D Performance Curve 比較 D 式的性能曲線	Refer to Noise Tables 參照噪音表上數據
B	 B&D	Refer to Performance Curve 如性能曲線顯示	+ 2 ~ 3 dB
B	 A&C	Refer to Performance Curve 如性能曲線顯示	+ 2 ~ 3 dB

Fan performance with Type A and Installation mode B are licensed by AMCA International only.

Propeller Material 葉輪材質

Propeller Hubs and blades are made with cast aluminum and airfoil blades ensure efficient performance. Fan have several blades mode and blade pitch angle can be adjusted statically to ensure best operating condition. 中心轆(Hub)及葉片以鋁合金壓鑄而成，具良好的空氣動力性能。風機有不同葉片數並允許在靜止時進行葉片角度調整，以達到最佳操作狀態。

Tip clearance 尖端間隙

Fan performance curve and noise data are based on tip clearance /Impeller diameter in 0.25%。If the tip clearance get bigger then performance curve must be adjusted as following.

風機性能曲線及噪音值都是以尖端間隙/葉輪直徑在 0.25%為標準。若尖端間隙加大，則運轉點必須以下方式，在性能曲線上做些調整。

Tip clearance/Impeller dia. 尖端間隙/葉輪直徑：0.5% qv*1.01, PsF * 1.02

Tip clearance/Impeller dia 尖端間隙/葉輪直徑：0.75% qv*1.04, PsF * 1.08

Tip clearance/Impeller dia 尖端間隙/葉輪直徑：1.0% qv*1.06, PsF * 1.12

Fan performance calculates with this correction factors for tip clearance are not licensed by AMCA International.

Pressure Drop of Compound Fan 複合風機壓損

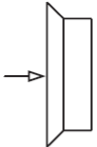

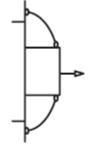
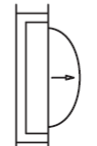
For special conditions, for example: using two fan, one fan operating and other standby. pressure drop of compound fan are in relation to blade pitch angle.

為了某些情況需要，如一台運轉使用，一台停機備用，必須共同使用兩台風機。這種狀況，複合風機(非加壓型風機)的壓損和葉片角度是有關係的。

Blade Pitch Angle葉片角度	K factor係數	Pressure Drop 壓損 = $K * Pdf$
8° ~20°	6.0	
20° ~30°	3.0	
30° ~20°	2.0	

Fan performance calculates with this correction factors are not licensed by AMCA International.

Pressure Drop of standard Accessories 標準附件的壓損

bellmouth inlets喇叭進風口		K factor 係數 0.20- A-mode A-型式 0.38- B-mode B-型式
guard安裝護網		0.75
Motor guard馬達圓錐保護蓋		0.4
Damper單向風門		0.3~0.4

Fan performance calculates with this correction factors "K" are not licensed by AMCA International.

Other Devices 其他裝置

Another installation mode does not mention here also can be apply to LASD series fan. General guideline are as following.在型錄上未詳細提到的風機其他安裝方式，也能應用於 LASD 系列風機。一般通則如下：

Fan Installation mode風機安裝方式	Pressure effect 壓力影響效應	Noise effect 噪音影響效應
Single fan with guide vane單一風機內裝有靜葉	1.25	+1 dB
Twin fans with guide vane雙台風機組內裝有導流裝置	2.00	+3 dB
Reversible Twin fans可正逆轉的雙台風機組	2.4	+8到 10 dB
Separable flow fan分流的風機	0.7	+2 dB

Fan performance calculates with this correction factors are not licensed by AMCA International.

When select the operation pint must consider the pressure drop effect as described and adjust the performance curve.

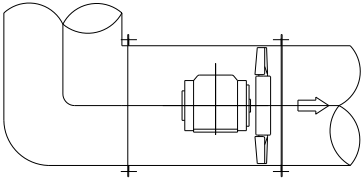
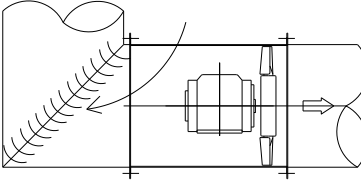
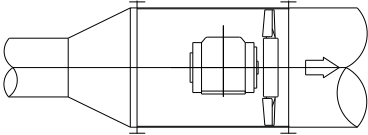
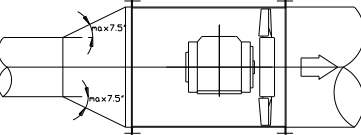
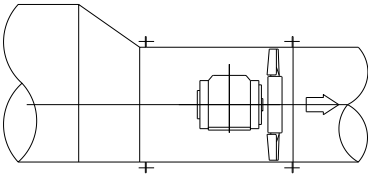
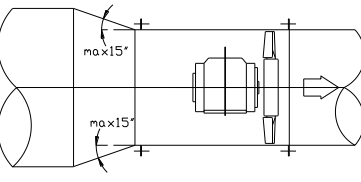
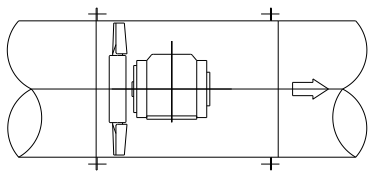
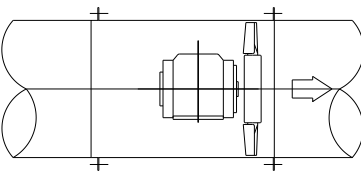
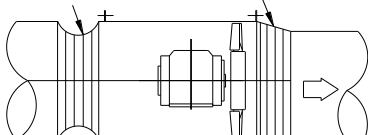
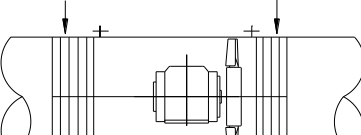
風機的操作點的選擇，必須考慮以上所提的壓力增加/損失因素，並在性能曲線上做調整。

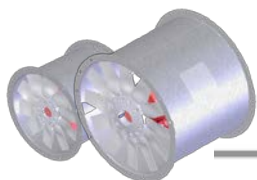
軸流風機風管安裝導引守則

Installation Guidelines for Ductwork of Axial Fan

請遵守下列安裝導引,以增加通風系統的風量

Please follow Installation Guidelines with Ductwork to maximize the air delivery to your ventilation system.

 <p>上游彎肱管形成入口 氣流不平衡 Upstream radius elbow creates Imbalance at inlet</p>	 <p>內部裝有導流板的方形 入口肘管產生較低程度 的紊流至風機入口 Square inlet elbow with extended trailing edge Vaness delivers less airflow to fan turbulent inlet.</p>
 <p>入口接突擴管易造成 紊流 Abrupt inlet transition Causes turbulence</p>	 <p>入口接漸擴管(1:7)可避免 紊流發生 Gradual(1:7)expansion of Inlet duct avoids impeller turbulence</p>
 <p>不對稱接管造成風機 負載不平衡且產生額 外的紊流和噪音 Asymmetrical transition creates imbalanced with Minimizes turbulence and noise</p>	 <p>對稱接管可平衡風機負載 並減小紊流噪音 Symmetrical transition balances load on fan, minimizes turbulence and noise.</p>
 <p>馬達在葉輪下游增加 紊流和影響 Motor upstream of impeller increase turbulence and noise</p>	 <p>馬達在葉輪上游減小紊流 和影響 Motor downstream from impeller.</p>
 <p>鬆弛或偏置的連接管 形成空氣紊流 Slack or offset flexible connection causes turbulent air flow.</p>	 <p>拉緊的撓性連接管可避免 紊流的產生並提供合適的 避震效果 Taut in-line flexible connections provide optional vibration isolation without creating turbulence.</p>



Axial Fan Driven Directly

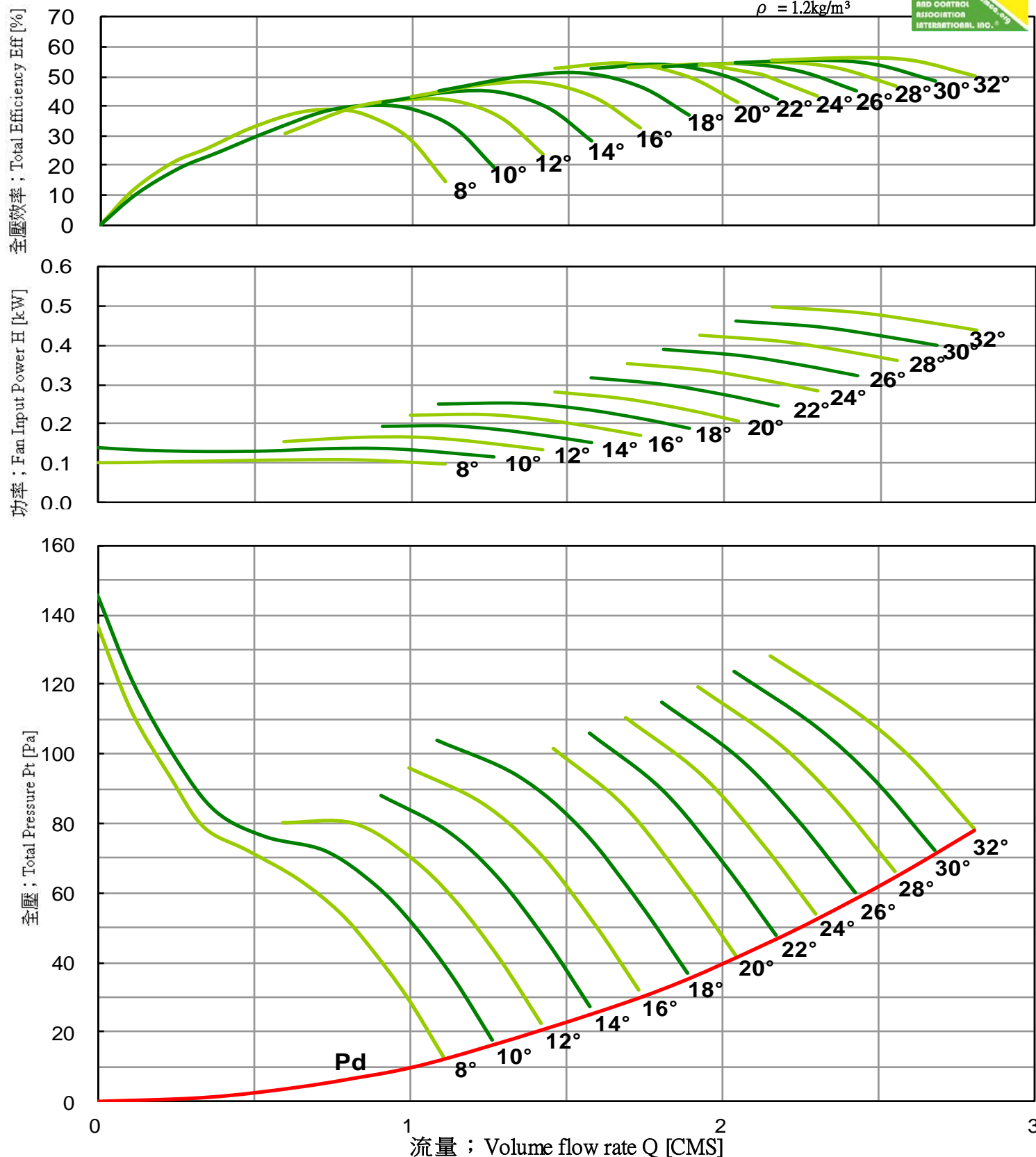
LASD-560-200-5 60Hz

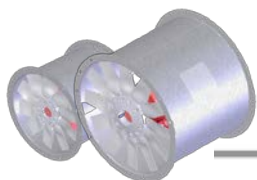
Performance curves 風機性能曲線

FEG 60

Fan Speed 風機轉速; $N = 1170$ [RPM]

Outlet Area 出口面積; $A = 0.2463$ [m²]





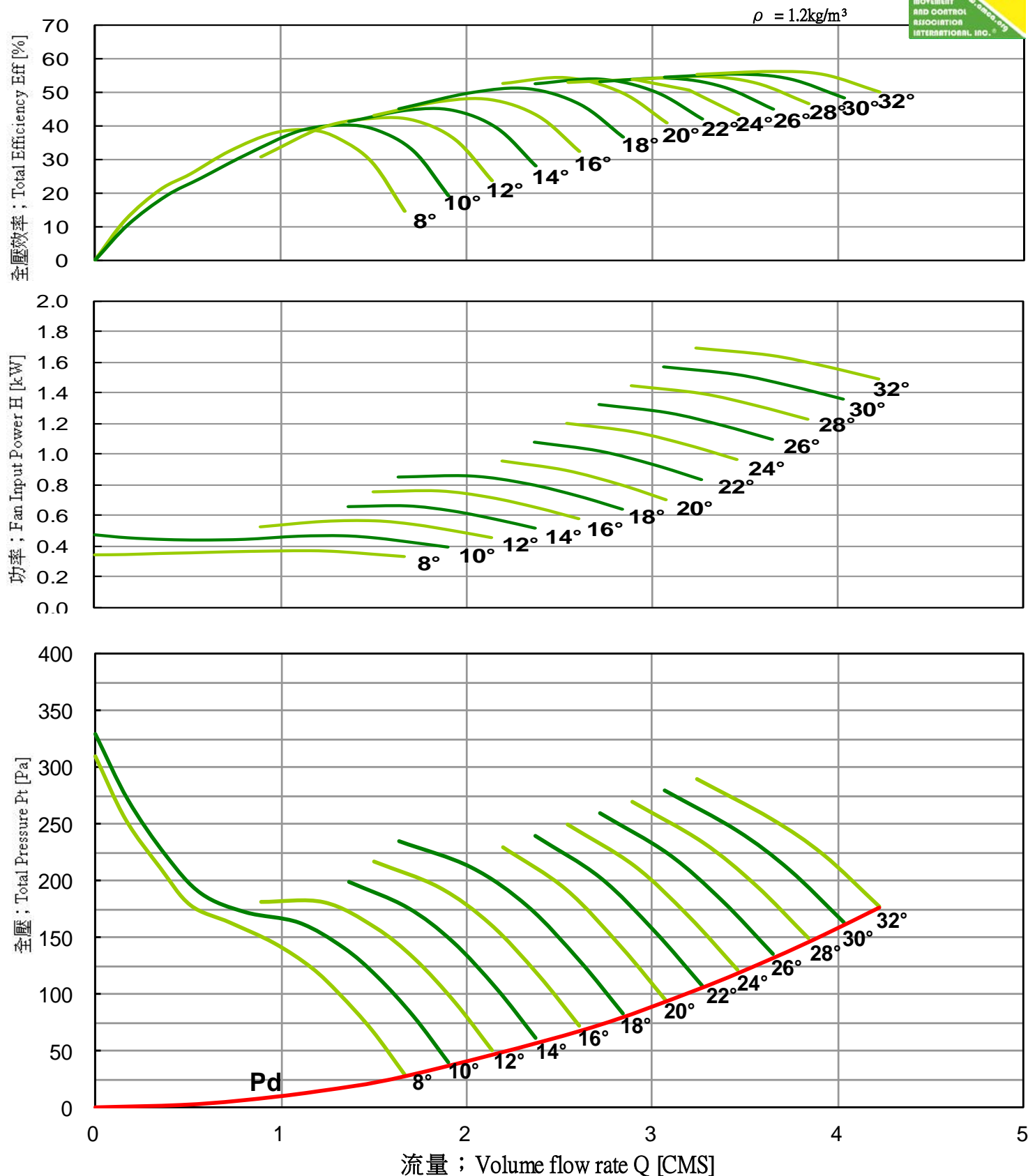
Axial Fan Driven Directly

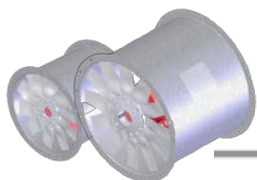
LASD-560-200-5 60Hz

Performance curves 風機性能曲線

FEG 60

Fan Speed 風機轉速; $N = 1760$ [RPM] Outlet Area 出口面積; $A = 0.2463$ [m²]





Axial Fan Driven Directly

LASD-560-200-5 60Hz

Performance curves 風機性能曲線

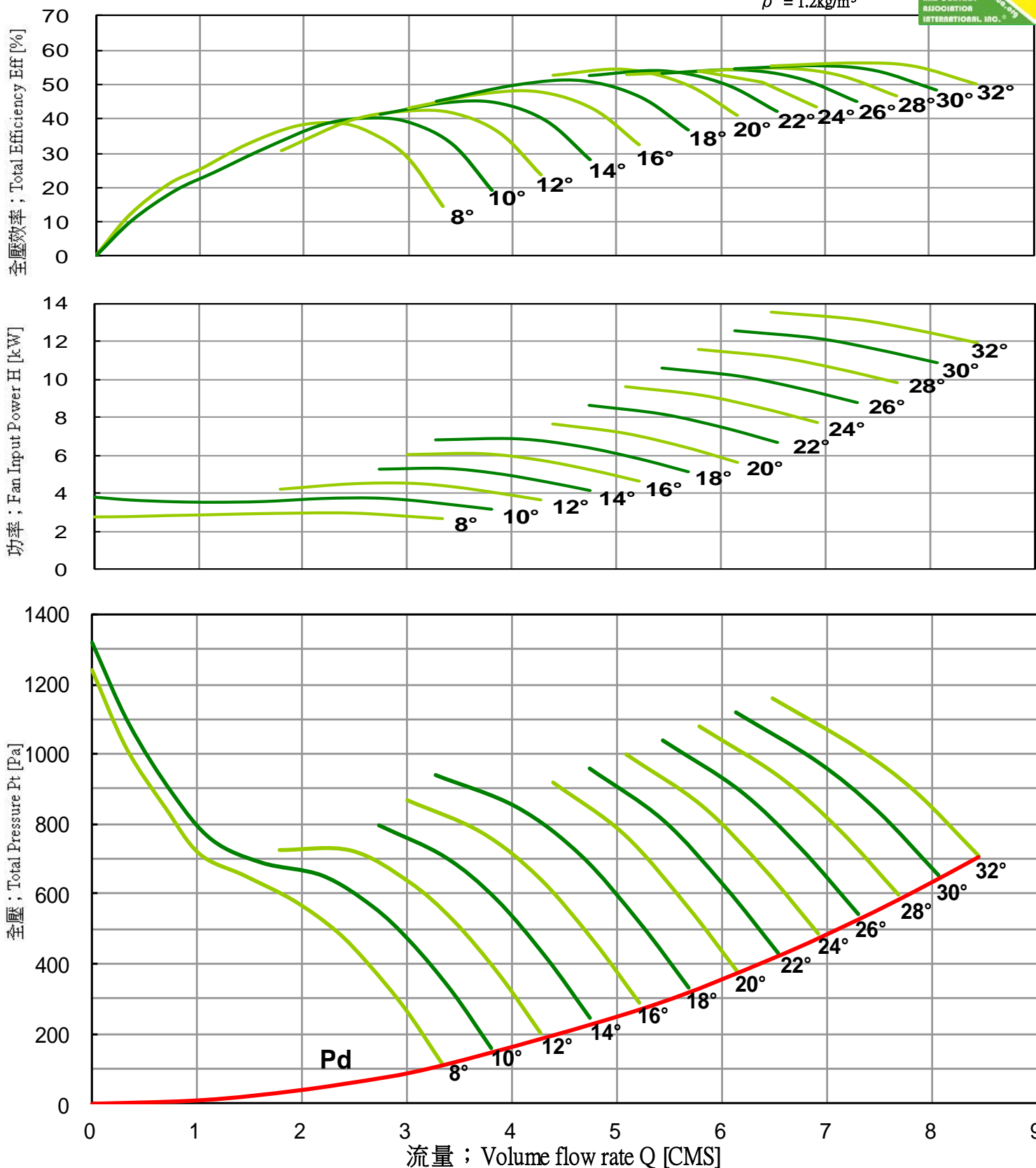
FEG 60

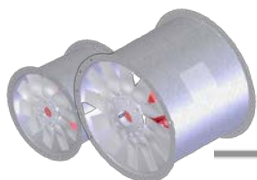
Fan Speed 風機轉速; $N = 3520$ [RPM]

Outlet Area 出口面積; $A = 0.2463$ [m²]



$\rho = 1.2 \text{ kg/m}^3$





Axial Fan Driven Directly

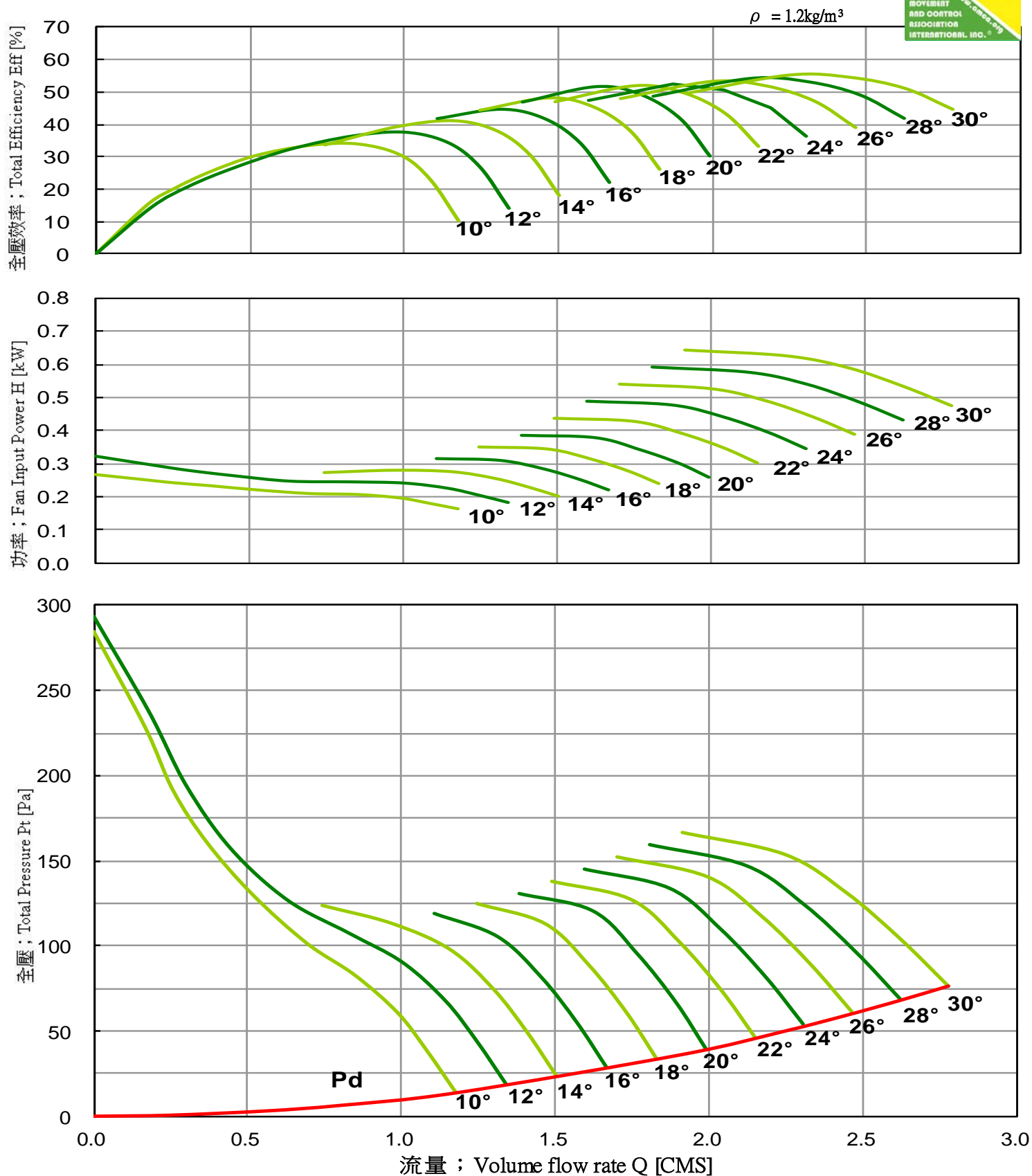
LASD-560-200-10 60Hz

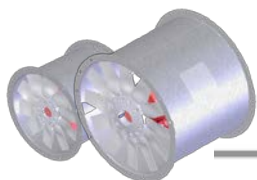
Performance curves 風機性能曲線

FEG 60

Fan Speed 風機轉速; N = 1170 [RPM]

Outlet Area 出口面積; A = 0.2463 [m²]





Axial Fan Driven Directly

LASD-560-200-10 60Hz

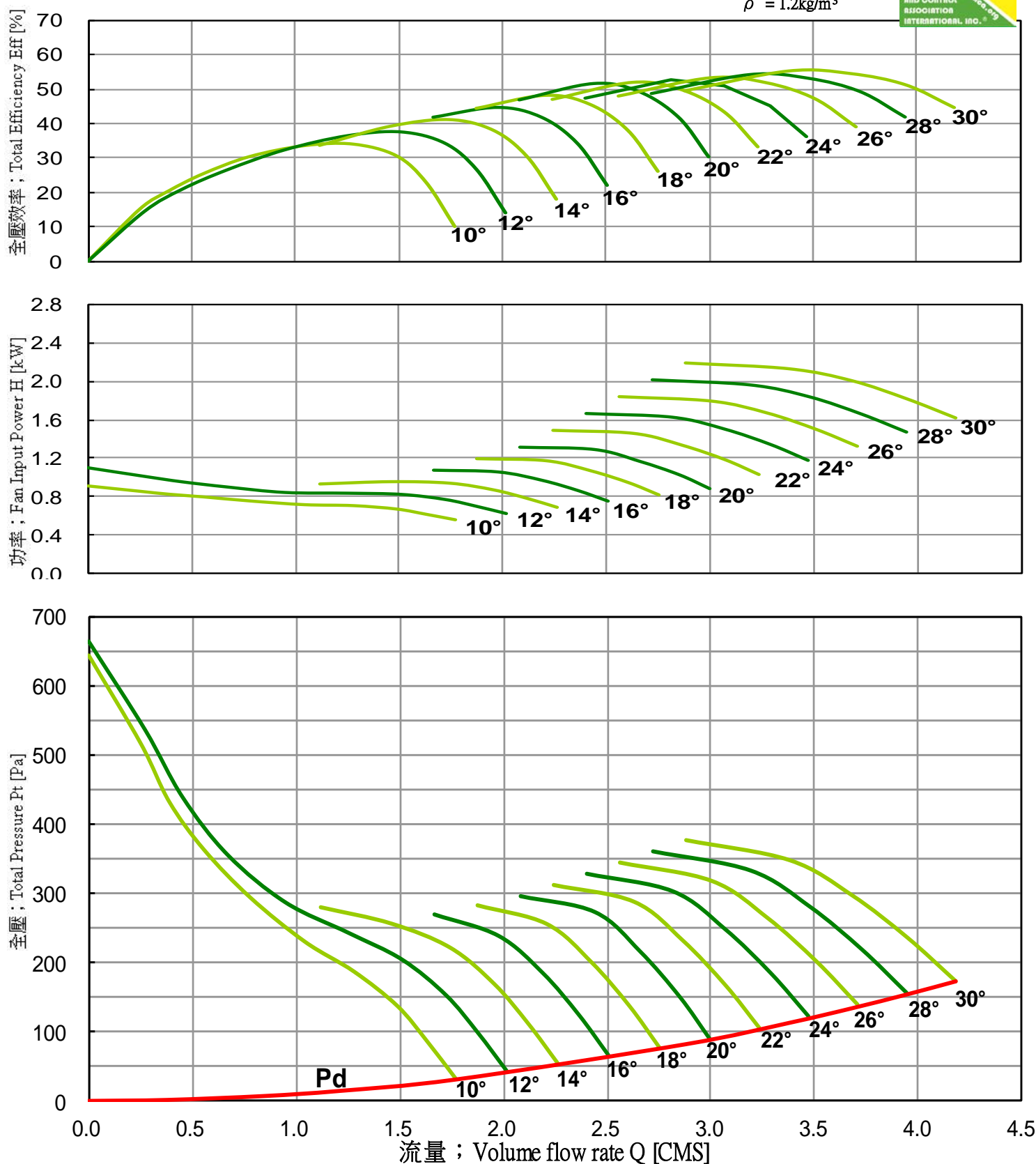
Performance curves 風機性能曲線

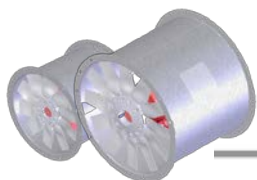
FEG 60

Fan Speed 風機轉速; $N = 1760$ [RPM]

Outlet Area 出口面積; $A = 0.2463$ [m²]

$\rho = 1.2 \text{ kg/m}^3$





Axial Fan Driven Directly

LASD-560-200-10 60Hz

Performance curves 風機性能曲線

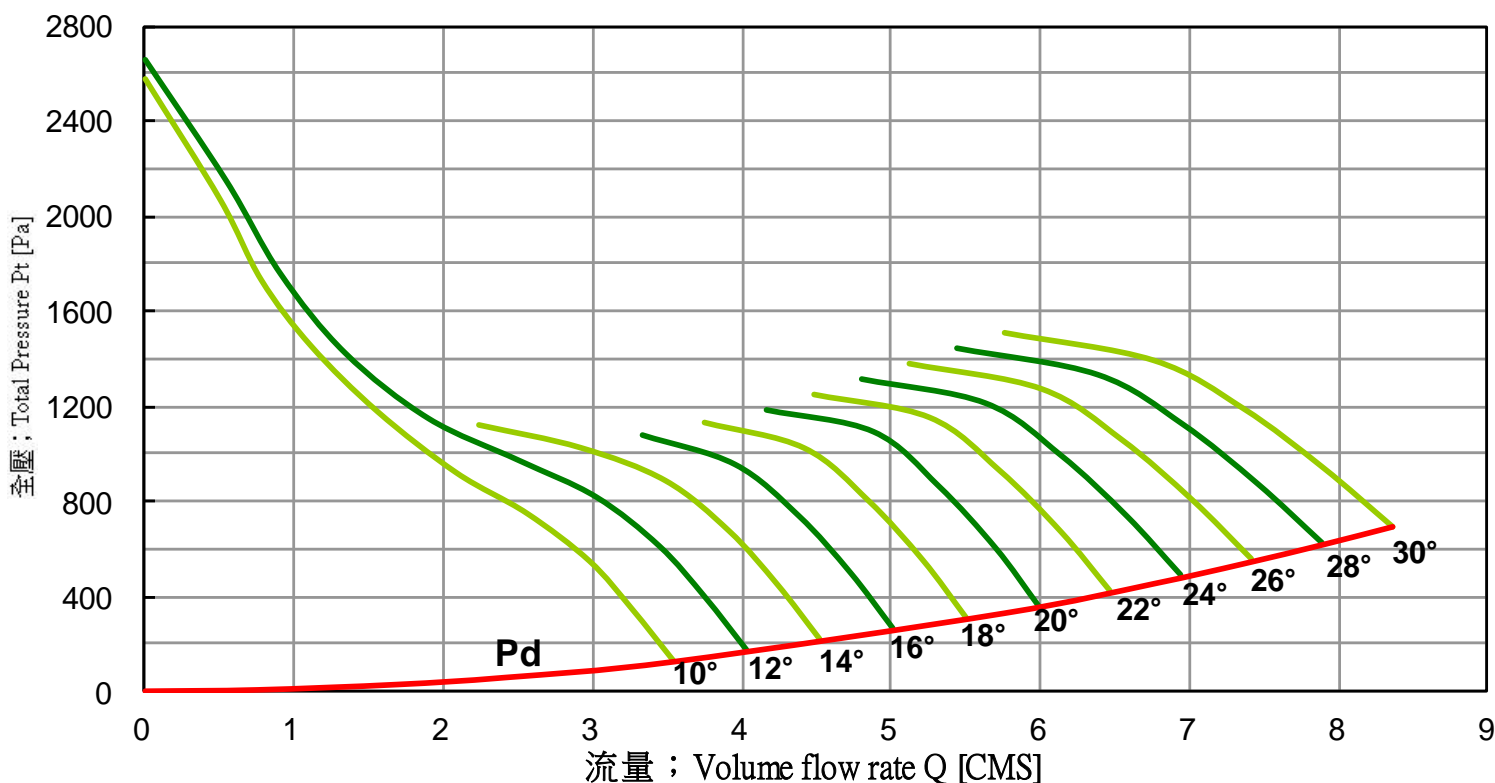
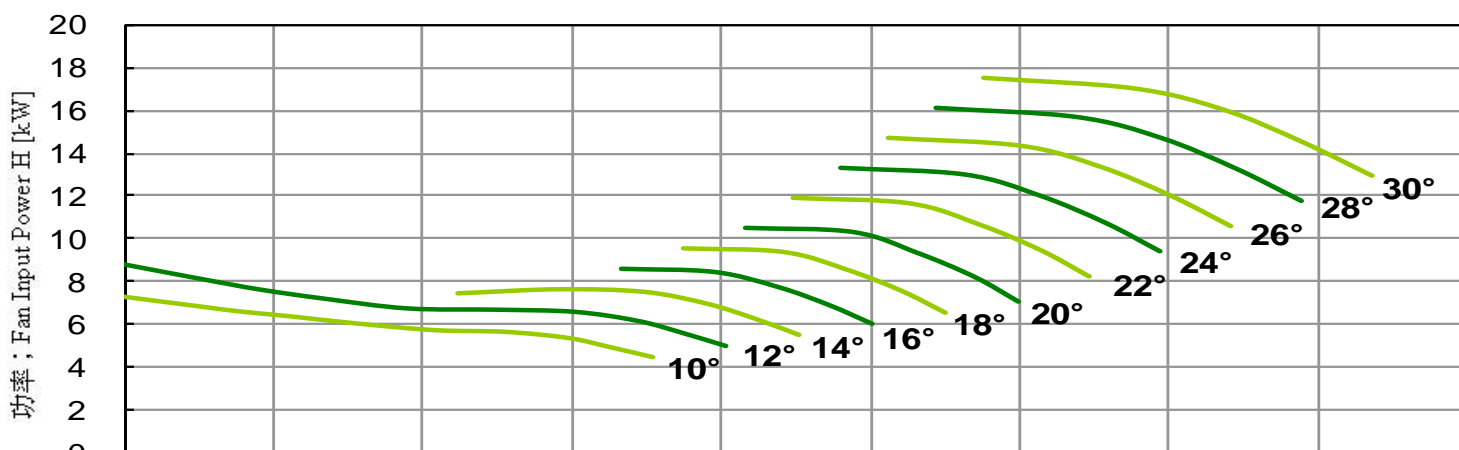
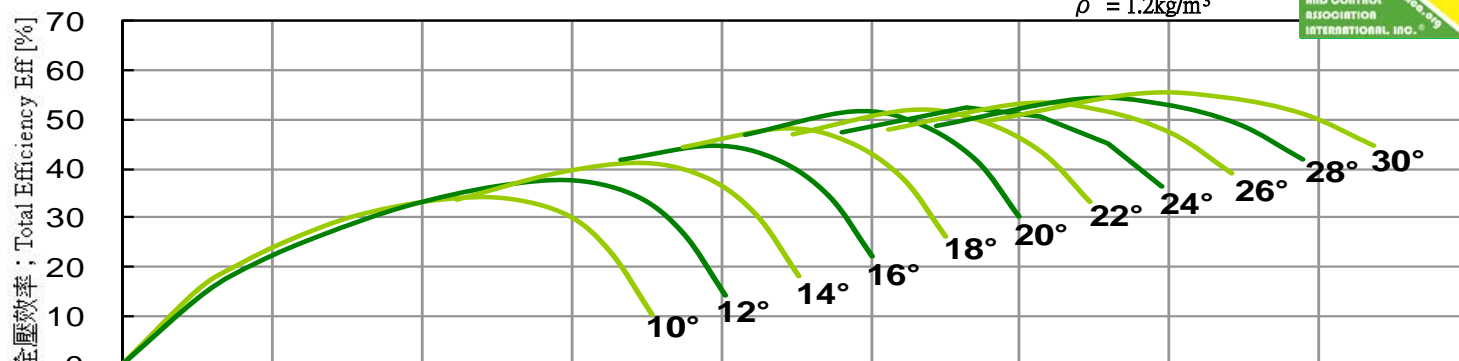
FEG 60

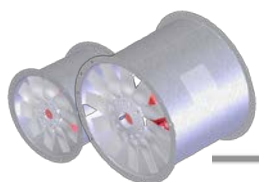
Fan Speed 風機轉速; $N = 3520$ [RPM]

Outlet Area 出口面積; $A = 0.2463$ [m²]



$\rho = 1.2 \text{ kg/m}^3$





Axial Fan Driven Directly

LASD-630-200-5

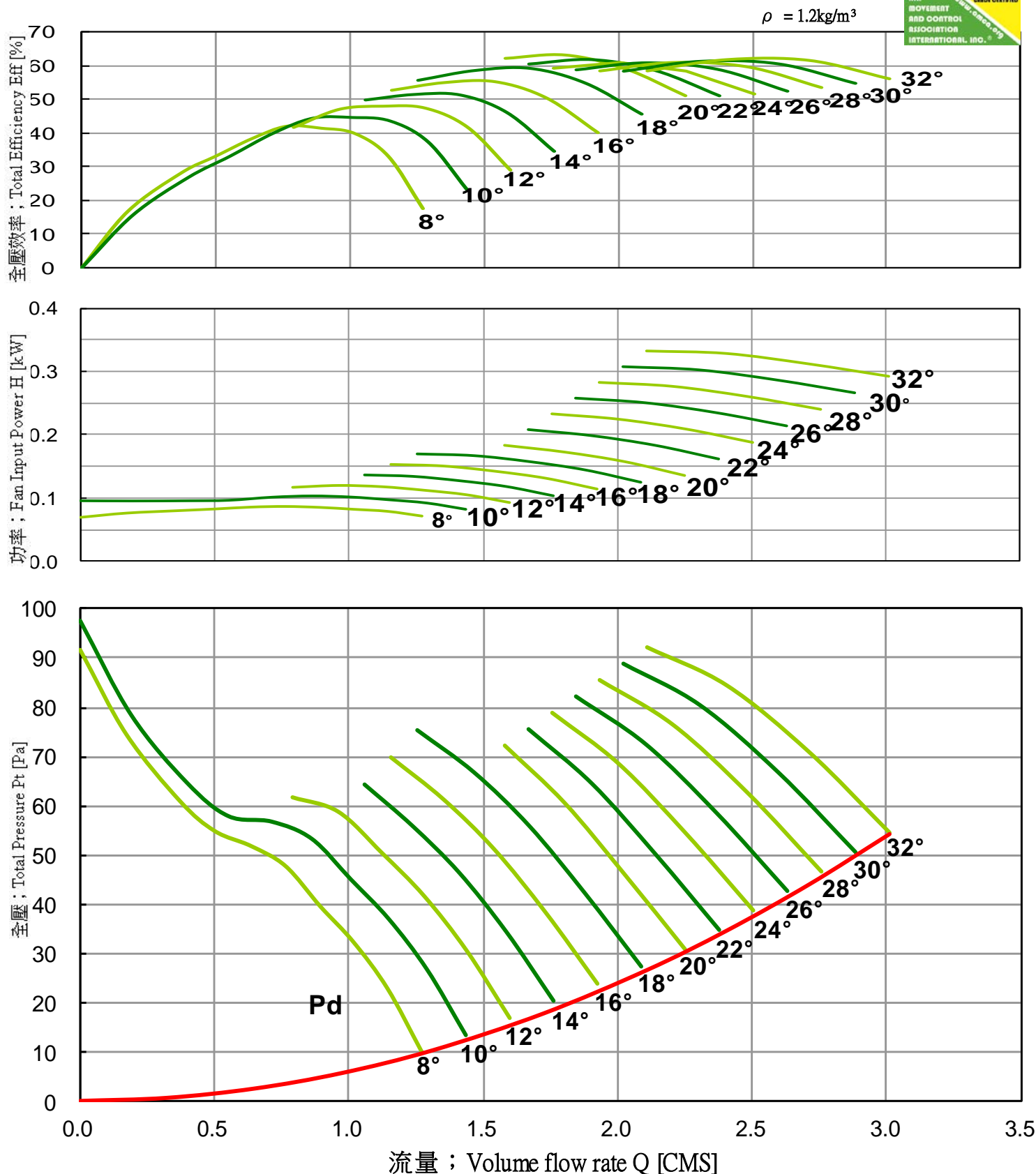
60Hz

Performance curves 風機性能曲線

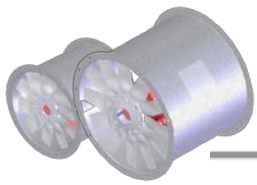
FEG 67

Fan Speed 風機轉速; N = 880 [RPM]

Outlet Area 出口面積; A = 0.3167 [m²]



Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).



Axial Fan Driven Directly

LASD-630-200-5

60Hz

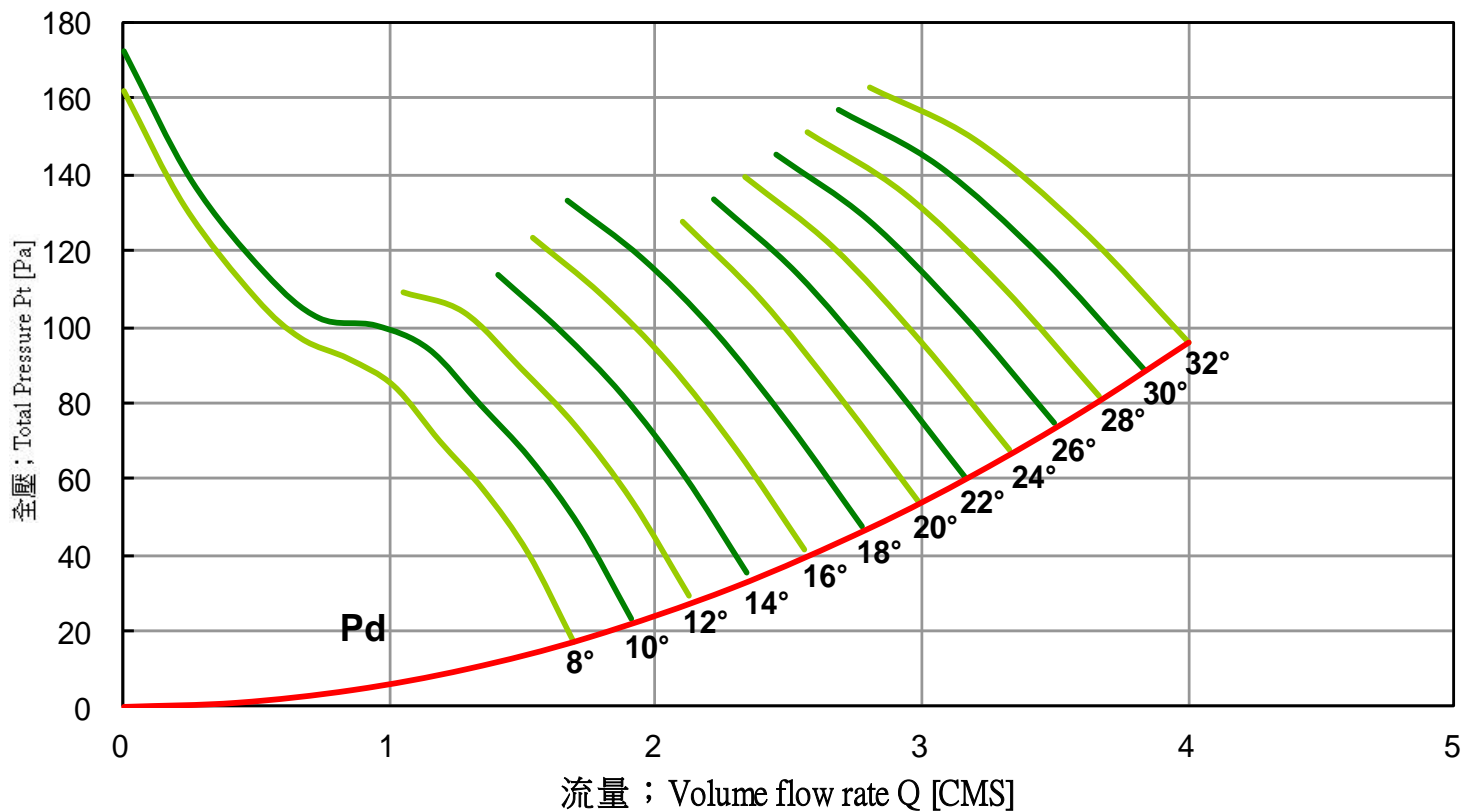
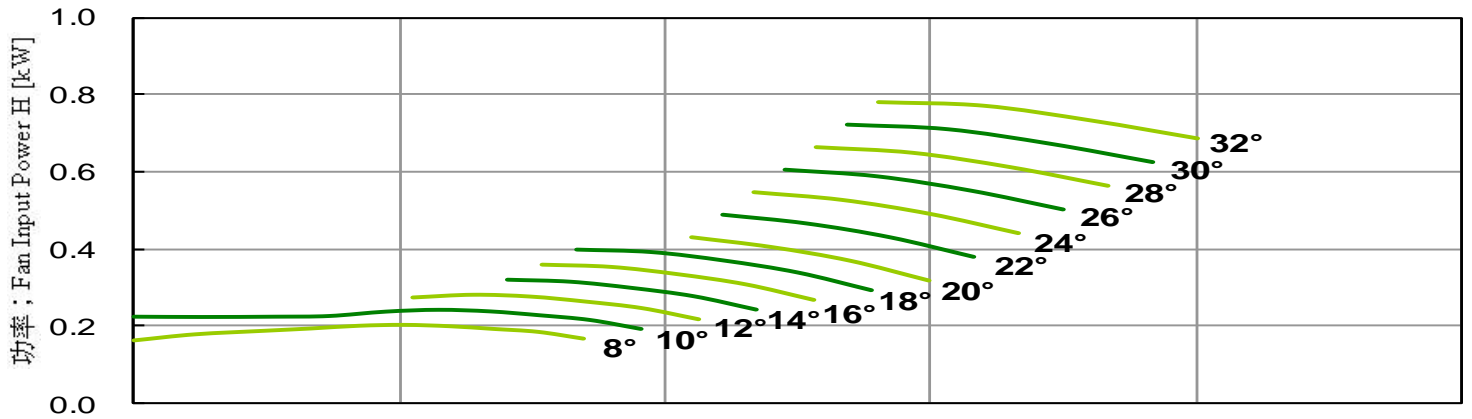
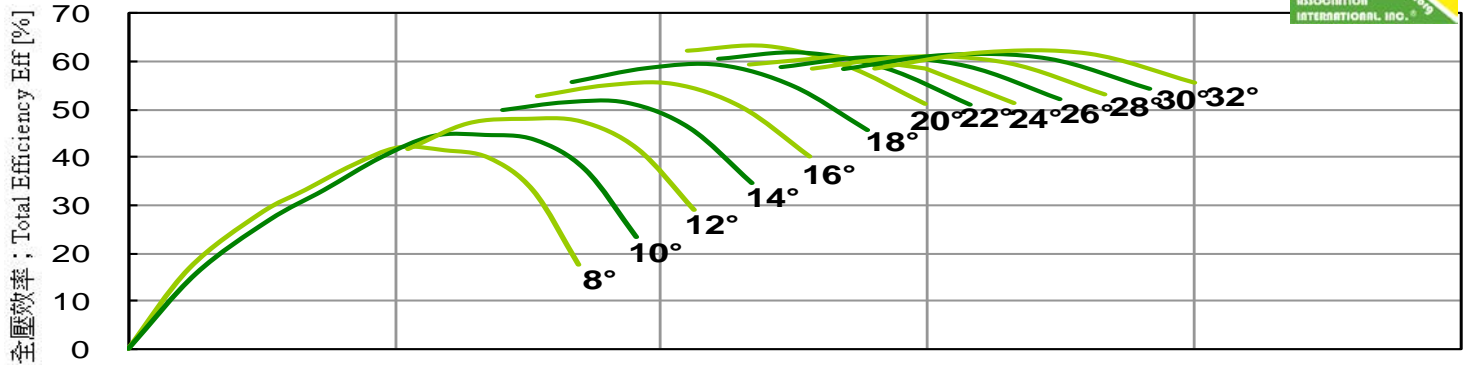
Performance curves 風機性能曲線

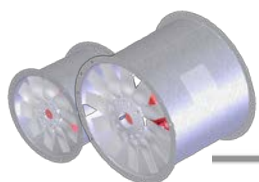
FEG 67

Fan Speed 風機轉速 ; N = 1170 [RPM] Outlet Area 出口面積 ; A = 0.3167 [m²]



$\rho = 1.2 \text{ kg/m}^3$





Axial Fan Driven Directly

LASD-630-200-5

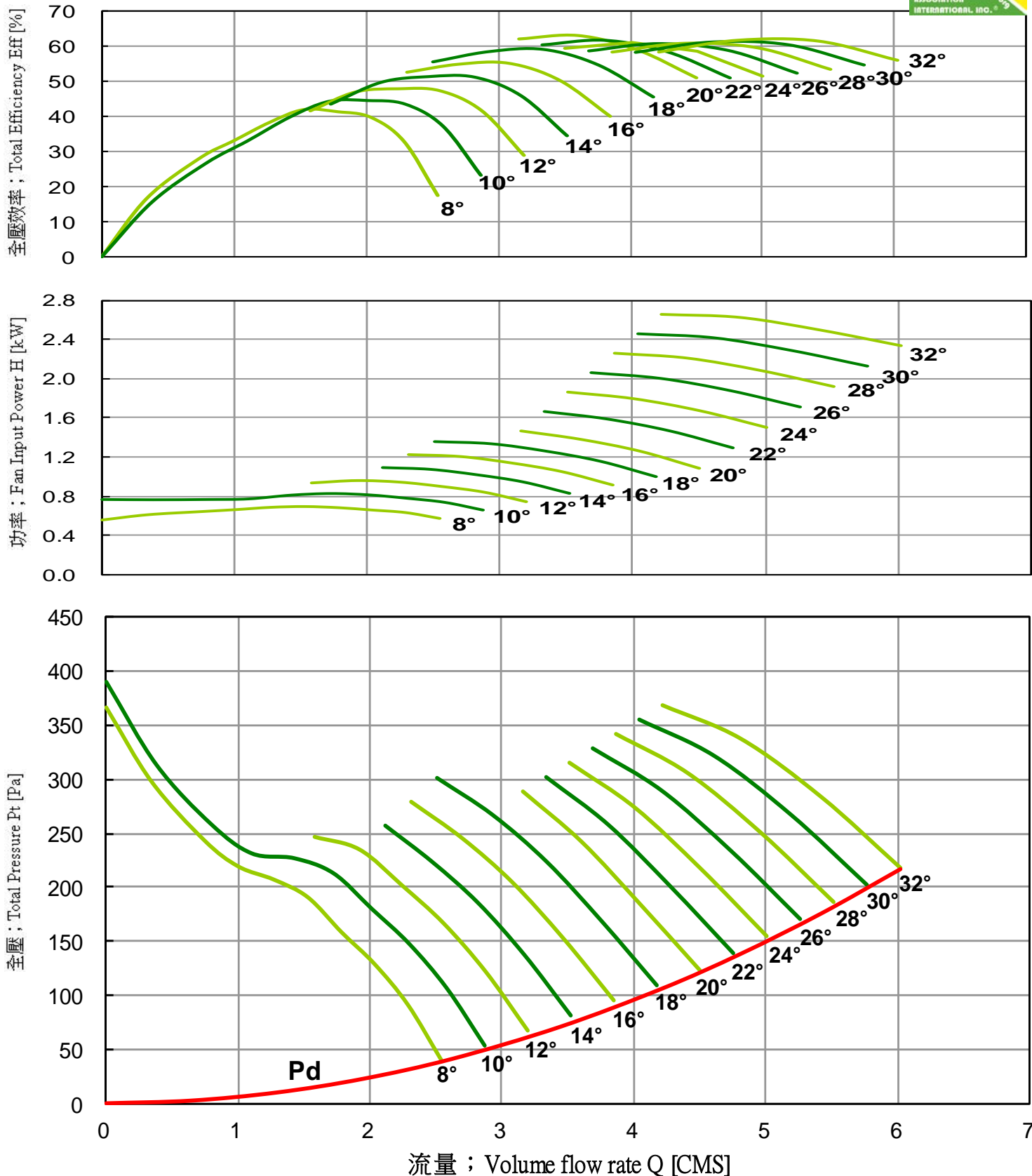
60Hz

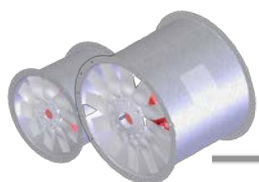
Performance curves 風機性能曲線

FEG 67

Fan Speed 風機轉速 ; N = 1760 [RPM] Outlet Area 出口面積 ; A = 0.3167 [m²]

$\rho = 1.2\text{kg/m}^3$





Axial Fan Driven Directly



LASD-630-200-5

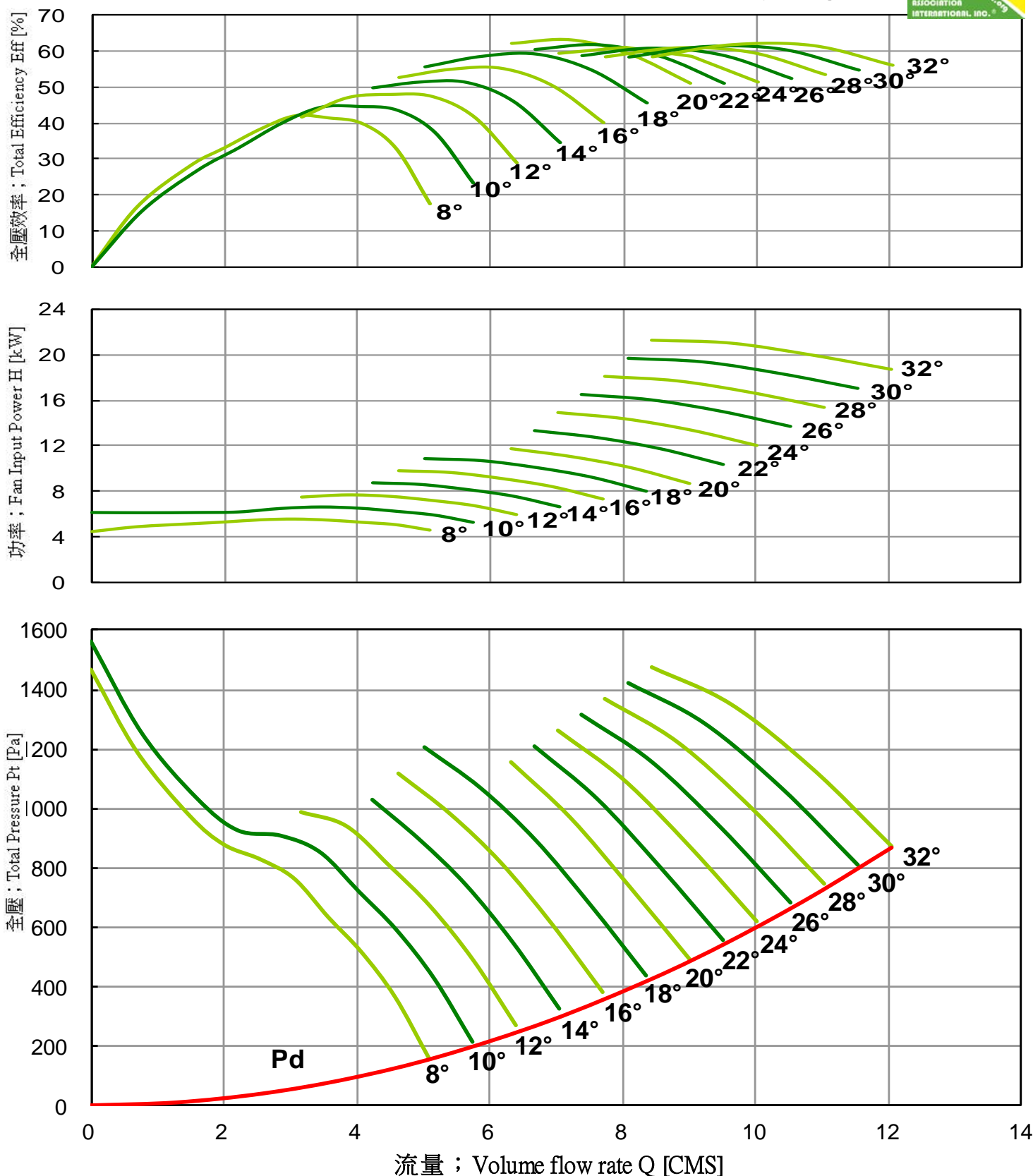
60Hz

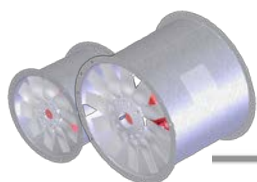
Performance curves 風機性能曲線

FEG 67

Fan Speed 風機轉速; $N = 3520$ [RPM] Outlet Area 出口面積; $A = 0.3167$ [m²]

$\rho = 1.2 \text{ kg/m}^3$





Axial Fan Driven Directly

LASD-630-200-10

60Hz

Performance curves 風機性能曲線

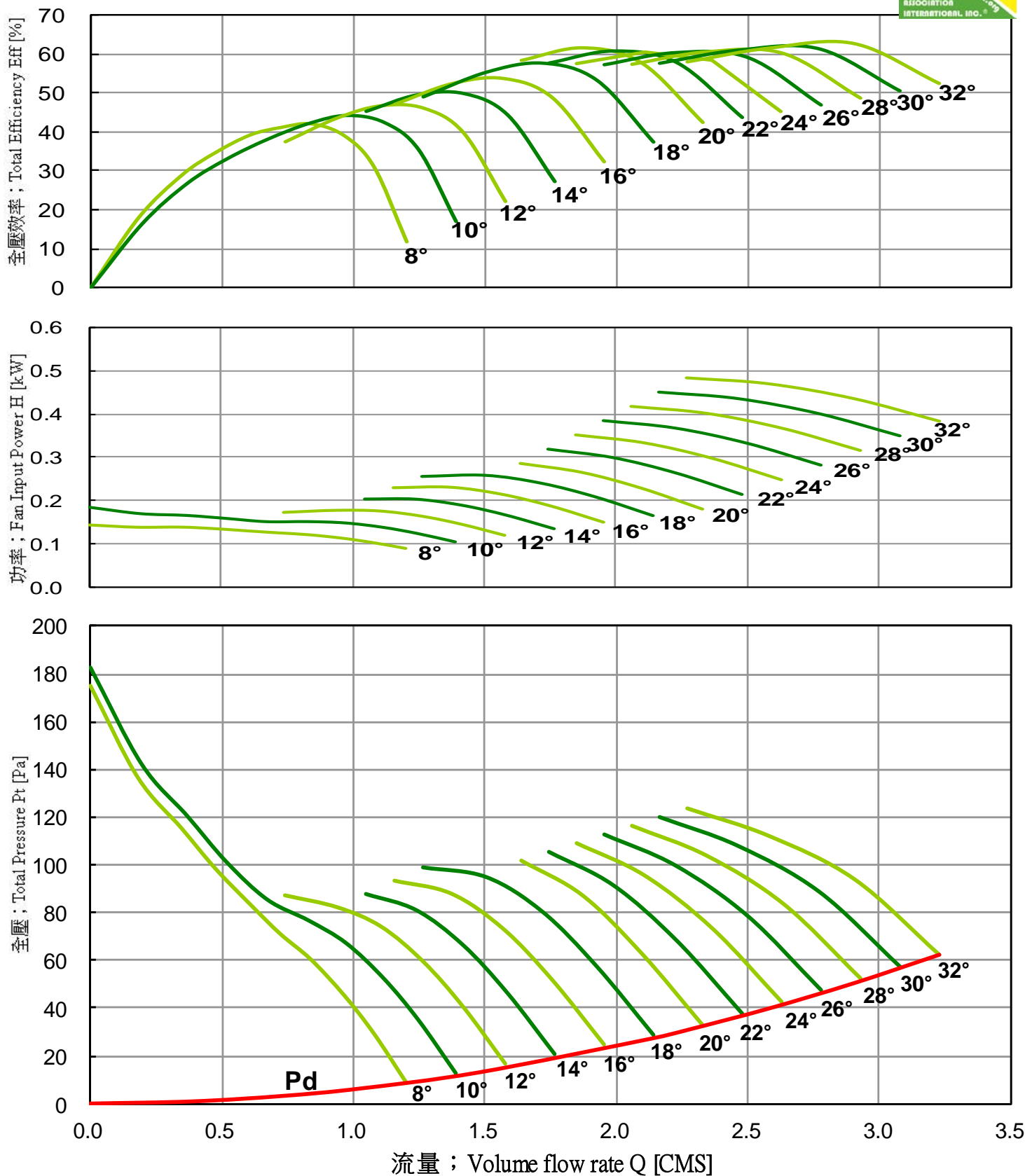
FEG 67

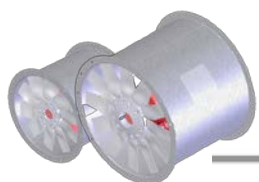
Fan Speed 風機轉速 ; N = 880 [RPM]

Outlet Area 出口面積 ; A = 0.3167 [m²]



$\rho = 1.2 \text{ kg/m}^3$





Axial Fan Driven Directly

LASD-630-200-10

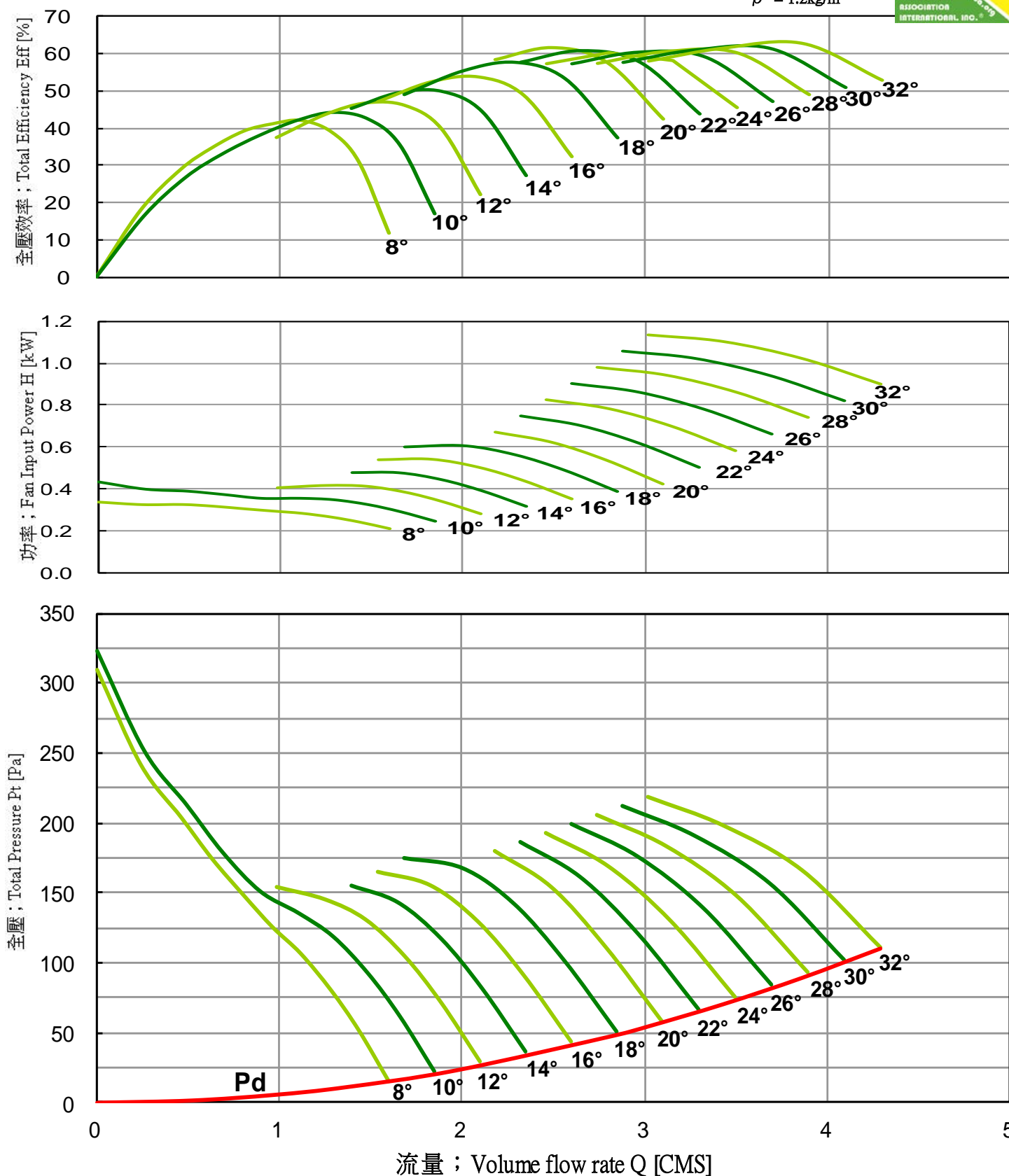
60Hz

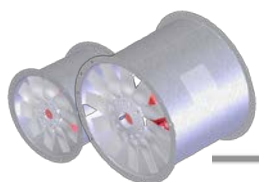
Performance curves 風機性能曲線

FEG 67

Fan Speed 風機轉速: $N = 1170$ [RPM] Outlet Area 出口面積: $A = 0.3167$ [m²]

$\rho = 1.2 \text{ kg/m}^3$





Axial Fan Driven Directly

LASD-630-200-10

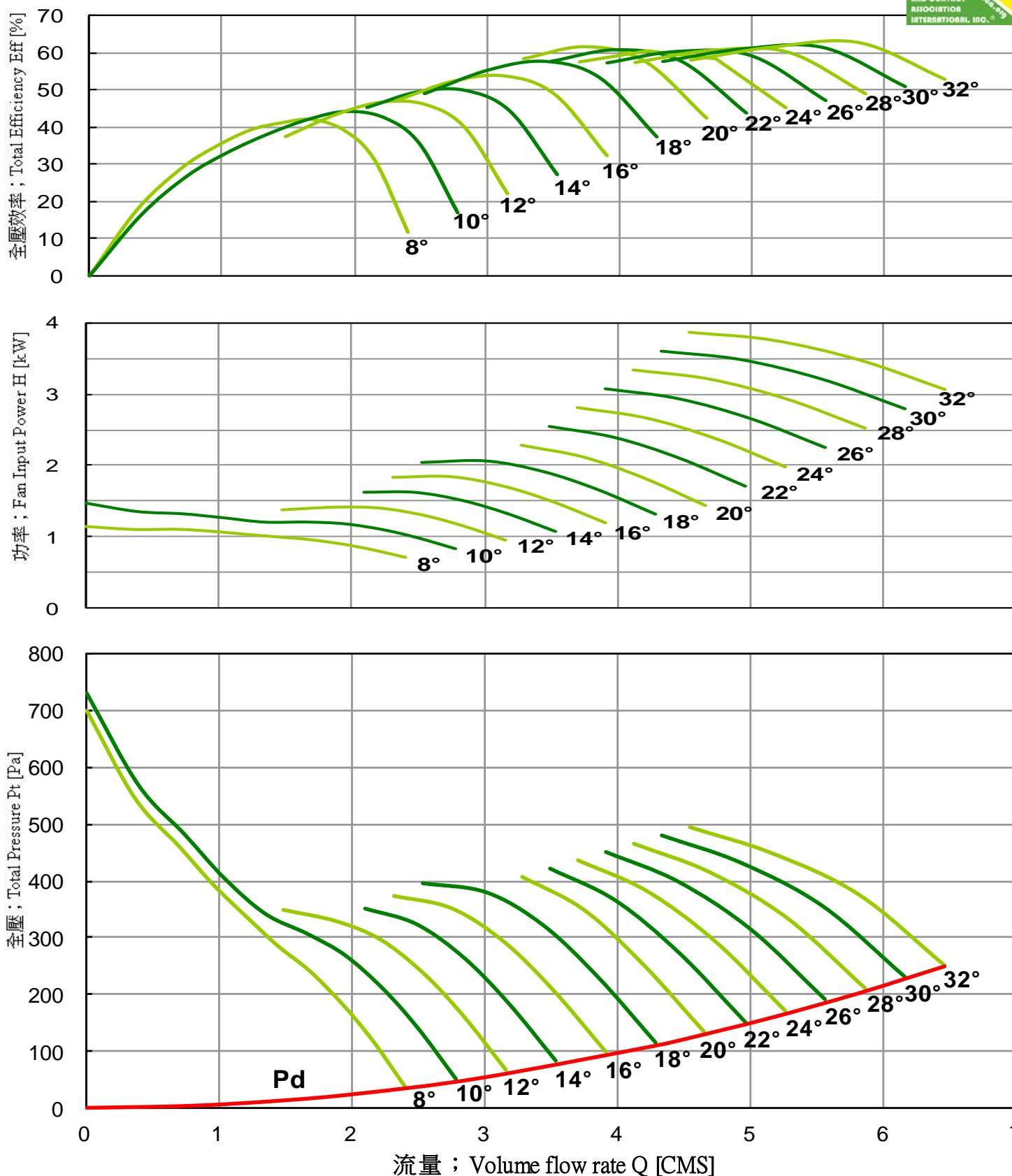
60Hz

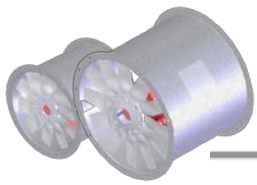
Performance curves 風機性能曲線

FEG 67

Fan Speed 風機轉速 ; N = 1760 [RPM] Outlet Area 出口面積 ; A = 0.3167 [m²]

$\rho = 1.2\text{kg/m}^3$





Axial Fan Driven Directly

LASD-630-200-10

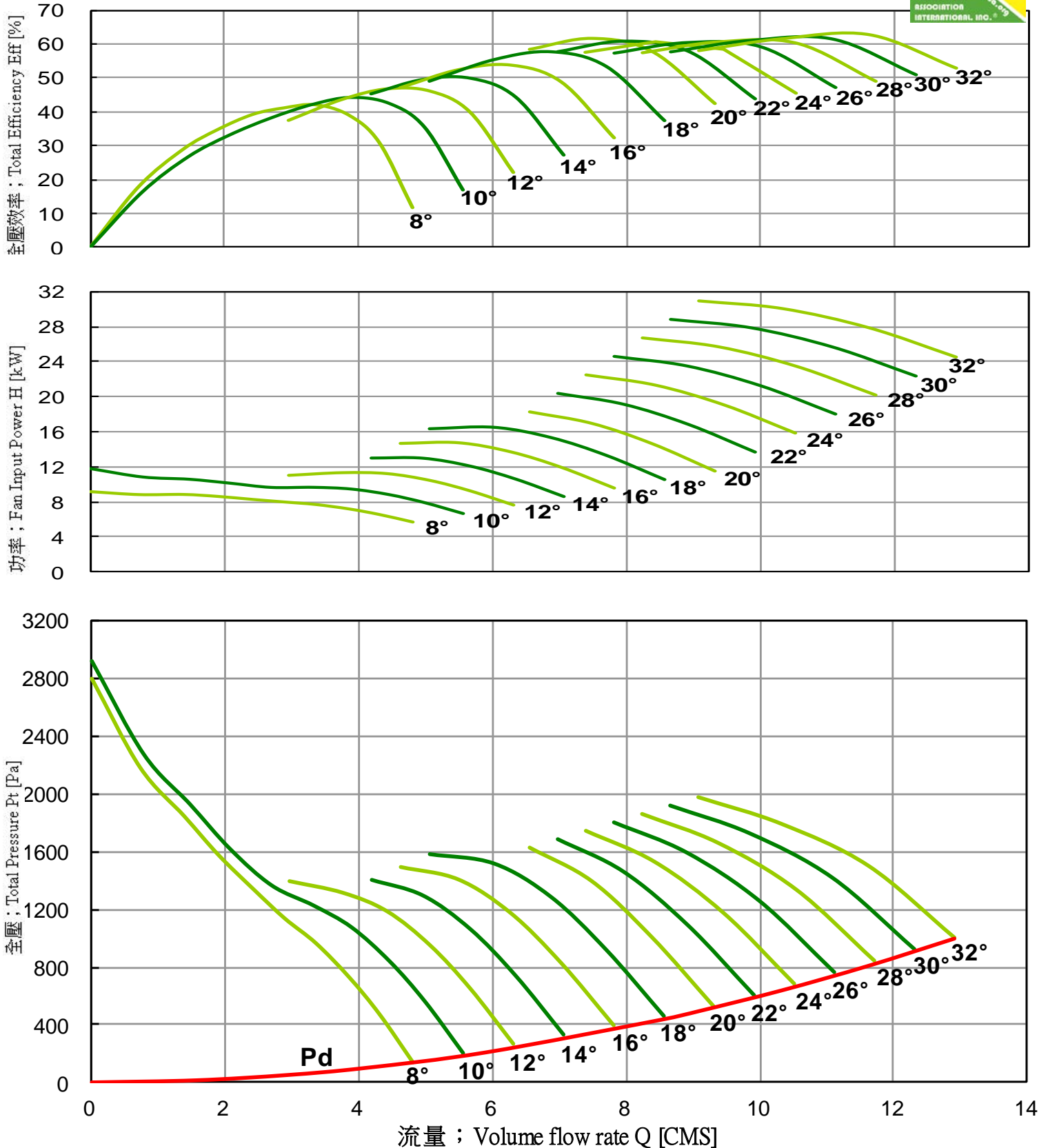
60Hz

Performance curves 風機性能曲線

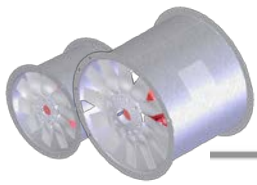
FEG 67

Fan Speed 風機轉速 ; N = 3520 [RPM] Outlet Area 出口面積 ; A = 0.3167 [m²]

$\rho = 1.2\text{kg/m}^3$



Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).



Axial Fan Driven Directly

LASD-630-300-6

60Hz

Performance curves 風機性能曲線

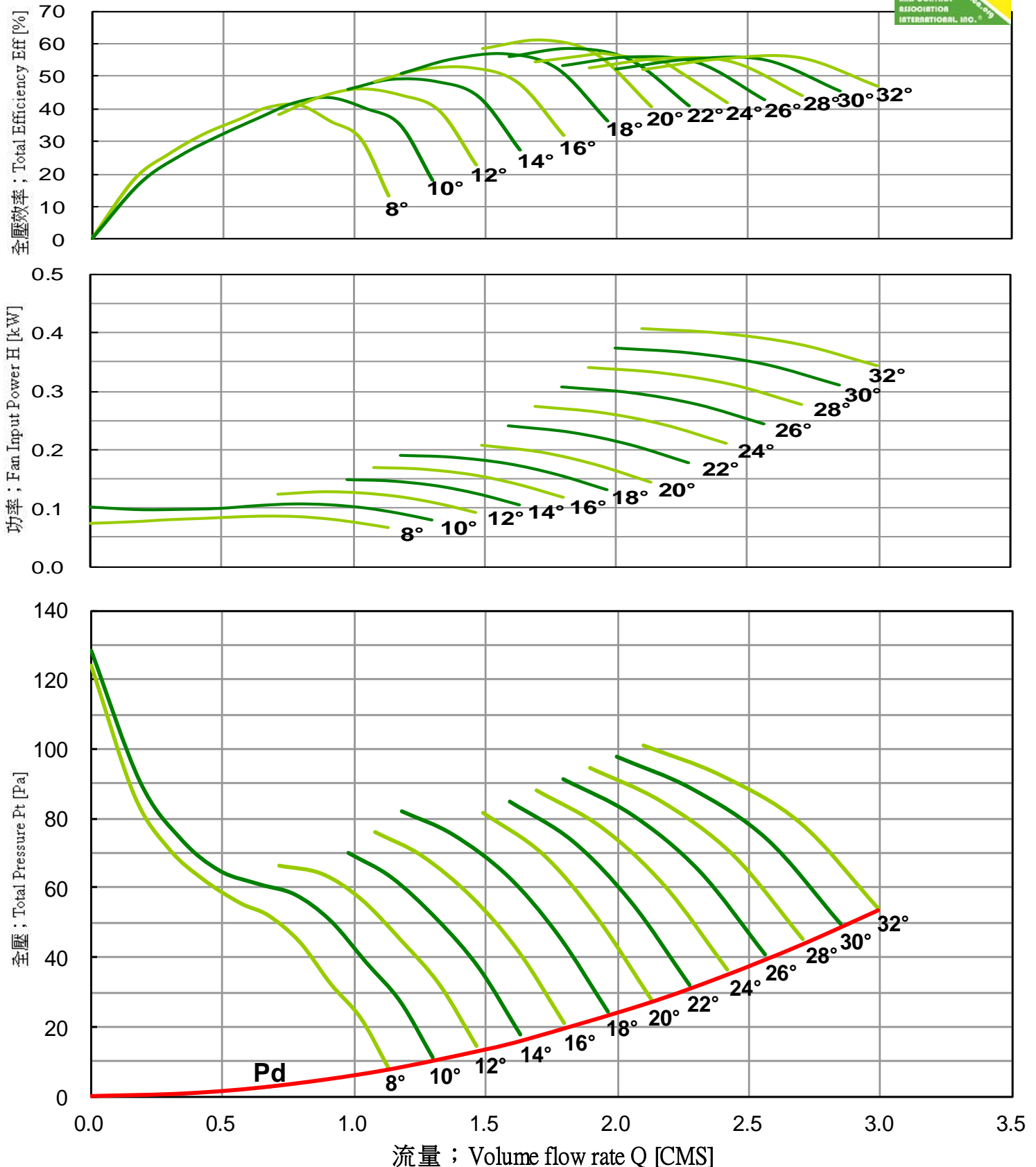
FEG 63

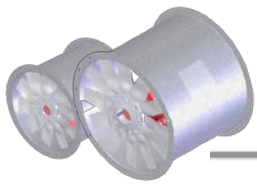
Fan Speed 風機轉速 ; N = 880 [RPM]

Outlet Area 出口面積 ; A = 0.3167 [m²]



$\rho = 1.2\text{kg/m}^3$





Axial Fan Driven Directly

LASD-630-300-6

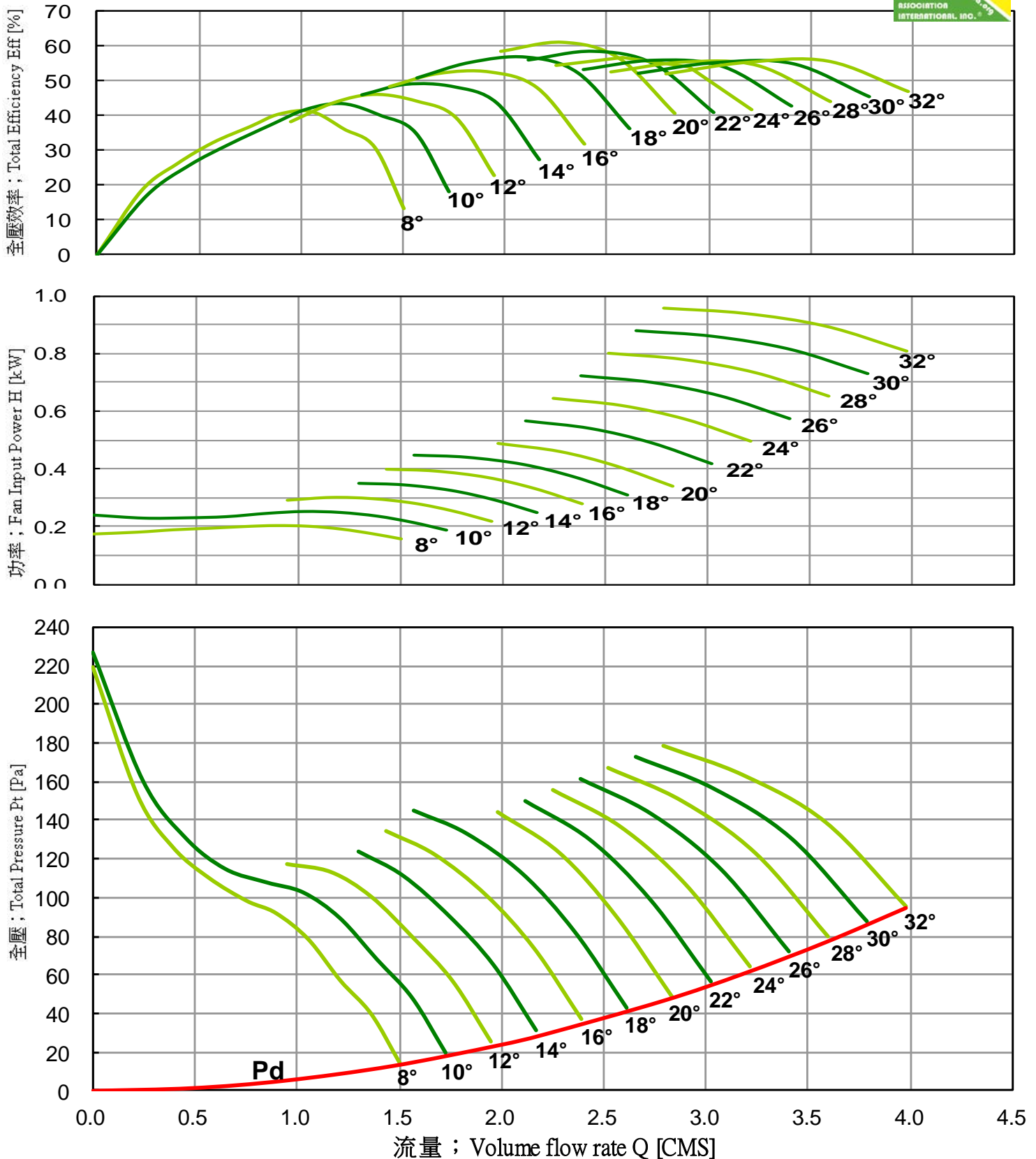
60Hz

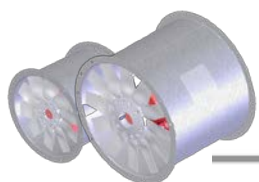
Performance curves 風機性能曲線

FEG 63

Fan Speed 風機轉速 ; N = 1170 [RPM] Outlet Area 出口面積 ; A = 0.3167 [m²]

$\rho = 1.2\text{kg/m}^3$





Axial Fan Driven Directly

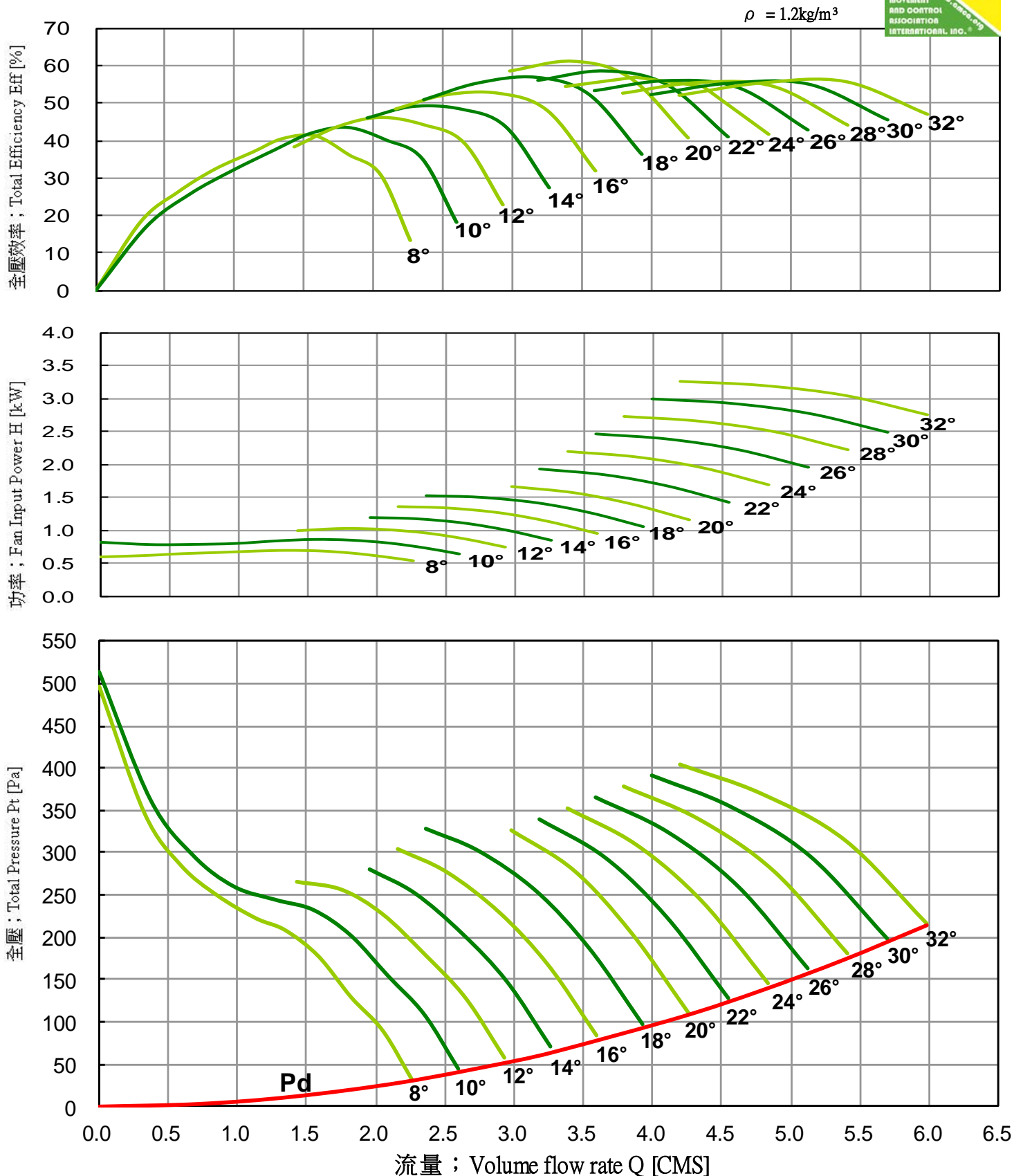
LASD-630-300-6

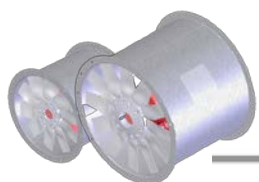
60Hz

Performance curves 風機性能曲線

FEG 63

Fan Speed 風機轉速; $N = 1760$ [RPM] Outlet Area 出口面積; $A = 0.3167$ [m²]





Axial Fan Driven Directly

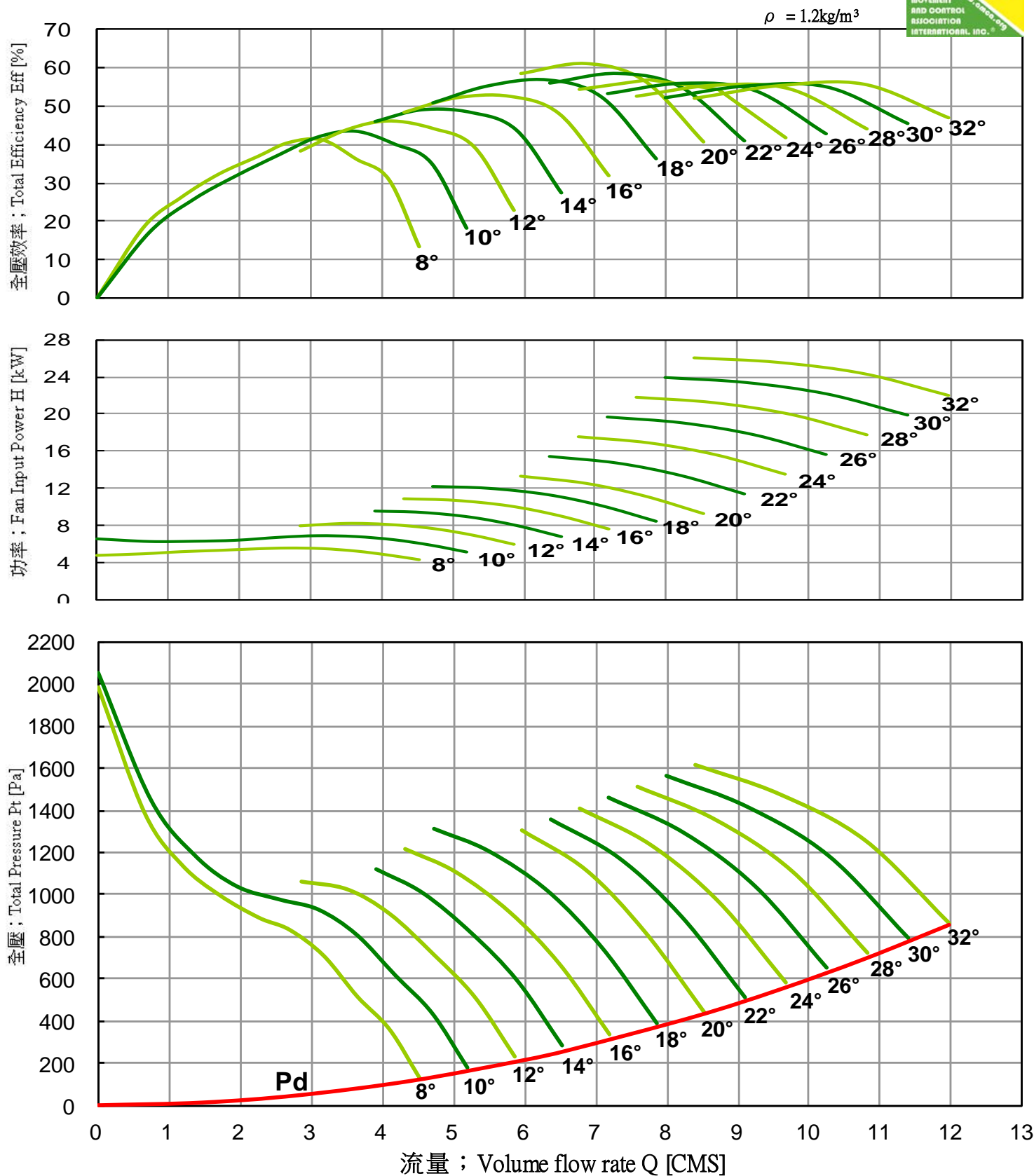
LASD-630-300-6

60Hz

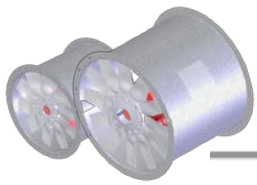
Performance curves 風機性能曲線

FEG 63

Fan Speed 風機轉速 ; N = 3520 [RPM] Outlet Area 出口面積 ; A = 0.3167 [m²]



Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).



Axial Fan Driven Directly

LASD-630-300-12

60Hz

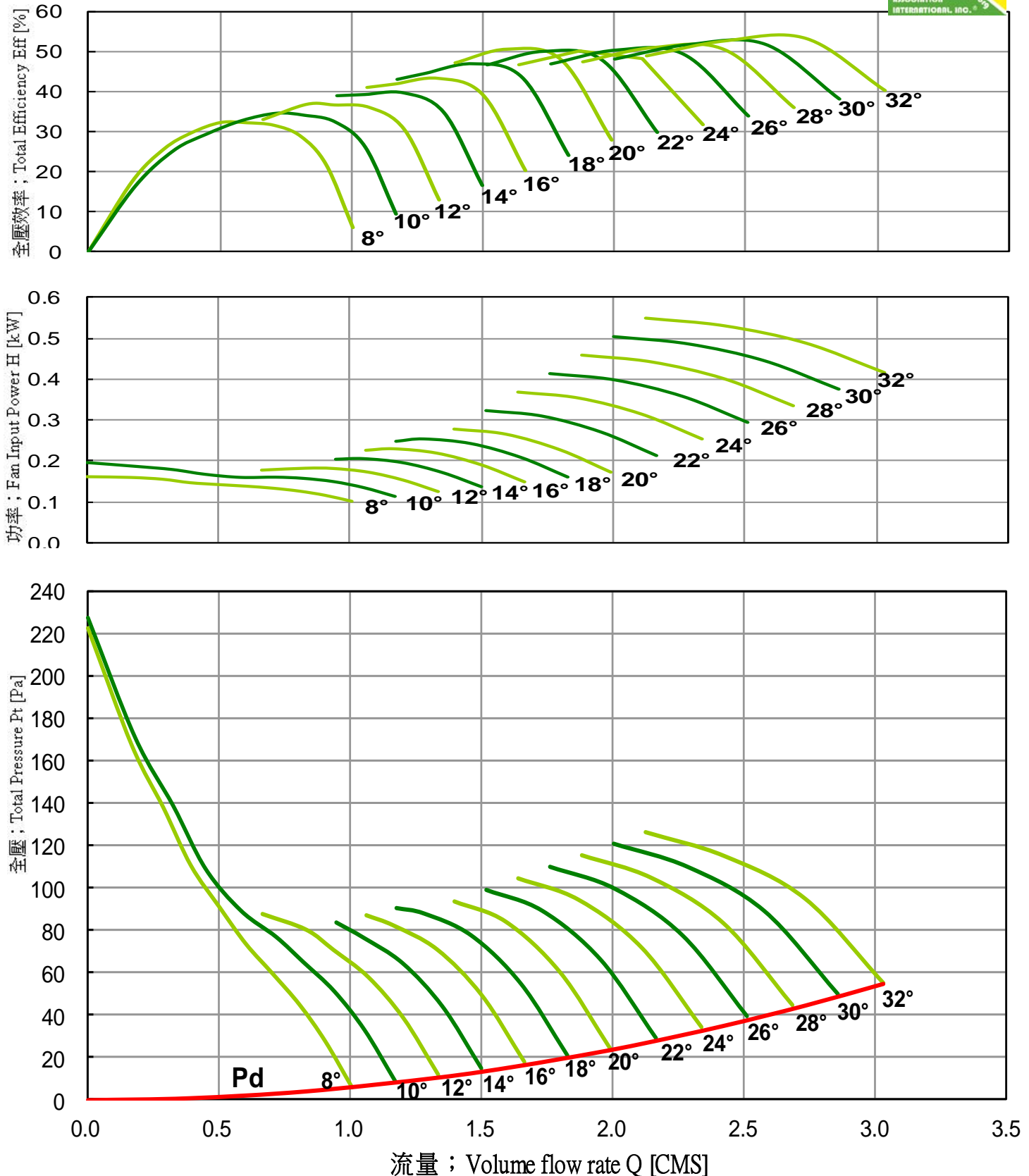
Performance curves 風機性能曲線

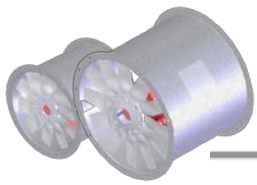
FEG 56

Fan Speed 風機轉速; N = 880 [RPM]

Outlet Area 出口面積; A = 0.3167 [m²]

$\rho = 1.2\text{kg/m}^3$





Axial Fan Driven Directly

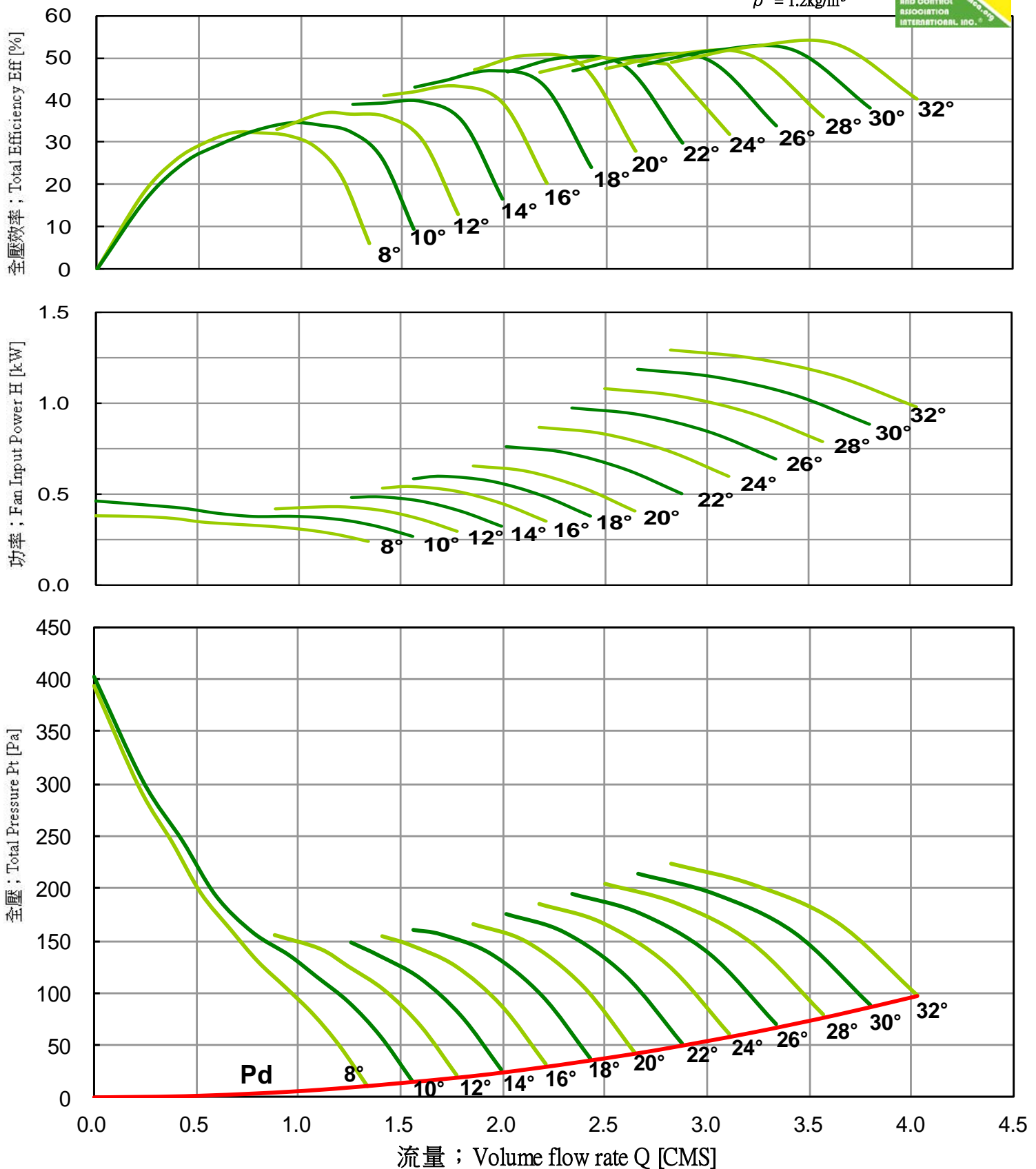
LASD-630-300-12

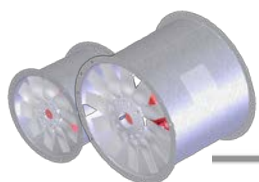
60Hz

Performance curves 風機性能曲線

FEG 56

Fan Speed 風機轉速; N = 1170 [RPM] Outlet Area 出口面積; A = 0.3167 [m²]





Axial Fan Driven Directly

LASD-630-300-12

60Hz

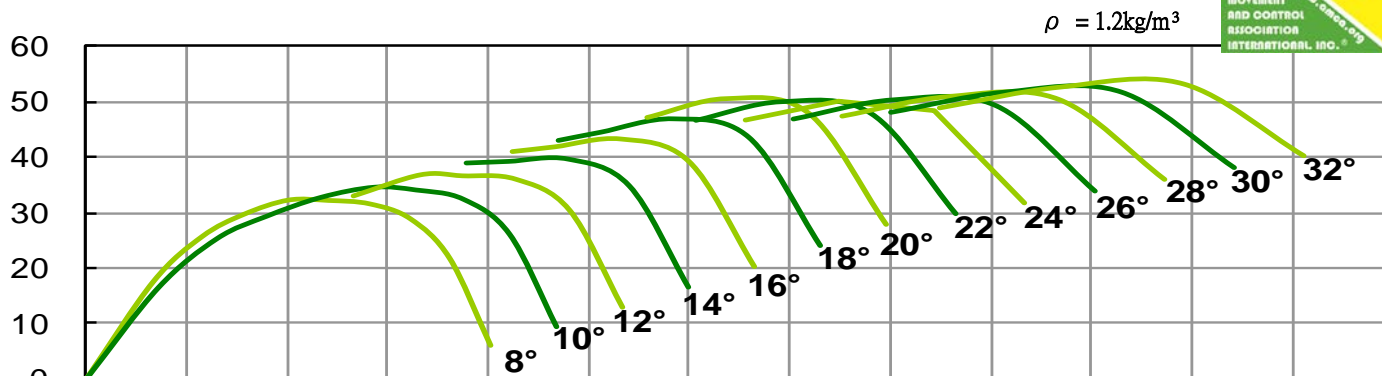
Performance curves 風機性能曲線

FEG 56

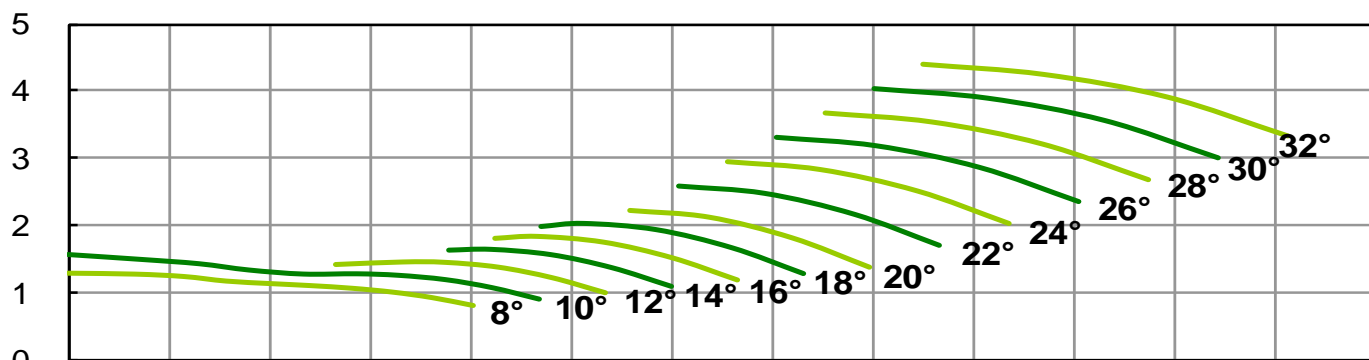
Fan Speed 風機轉速 ; N = 1760 [RPM] Outlet Area 出口面積 ; A = 0.3167 [m²]



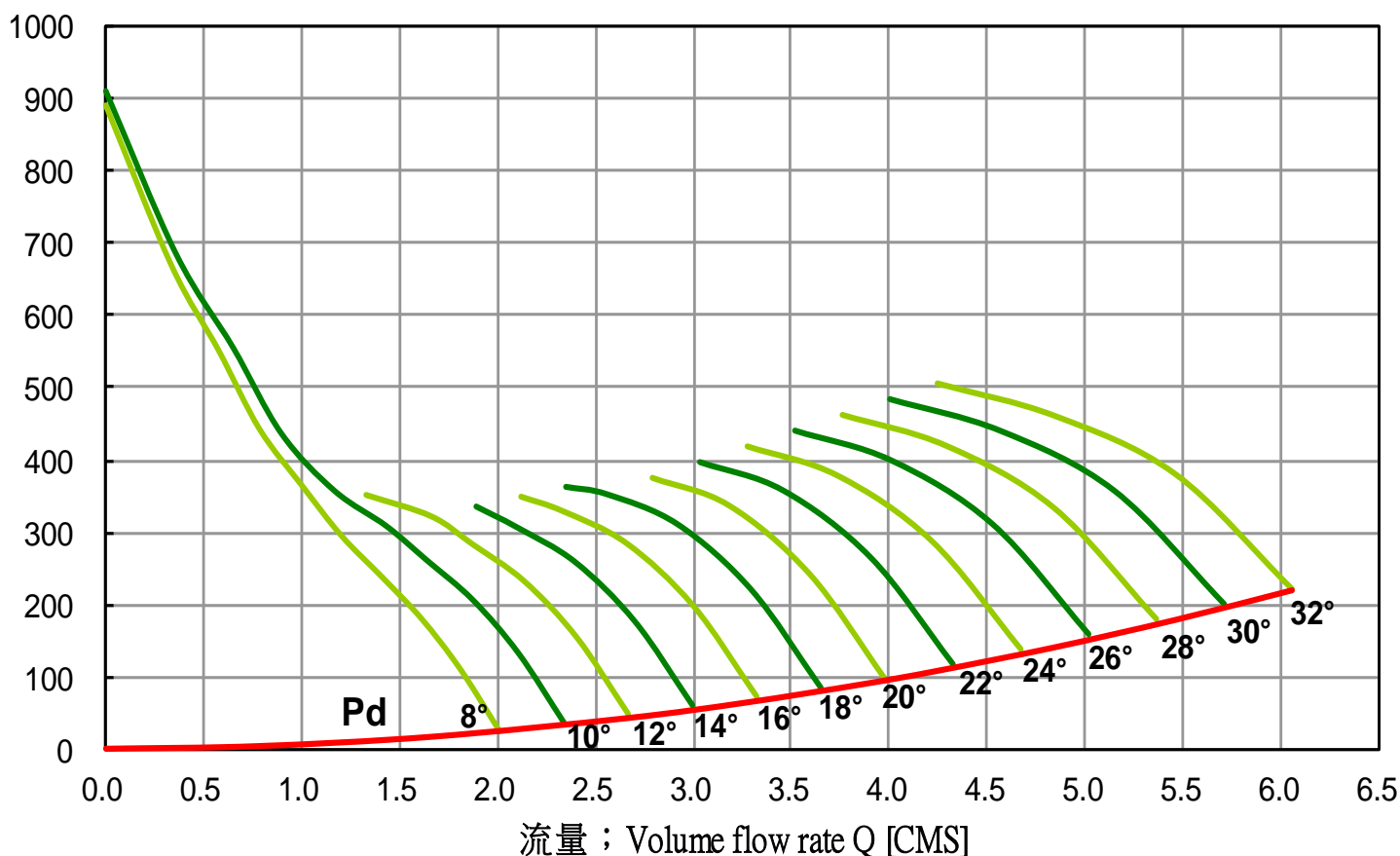
全壓效率 ; Total Efficiency Eff [%]

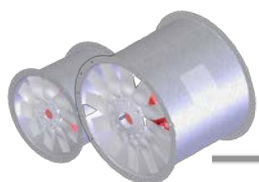


功率 ; Fan Input Power P [kW]



全壓 ; Total Pressure Pt [Pa]





Axial Fan Driven Directly

LASD-630-300-12

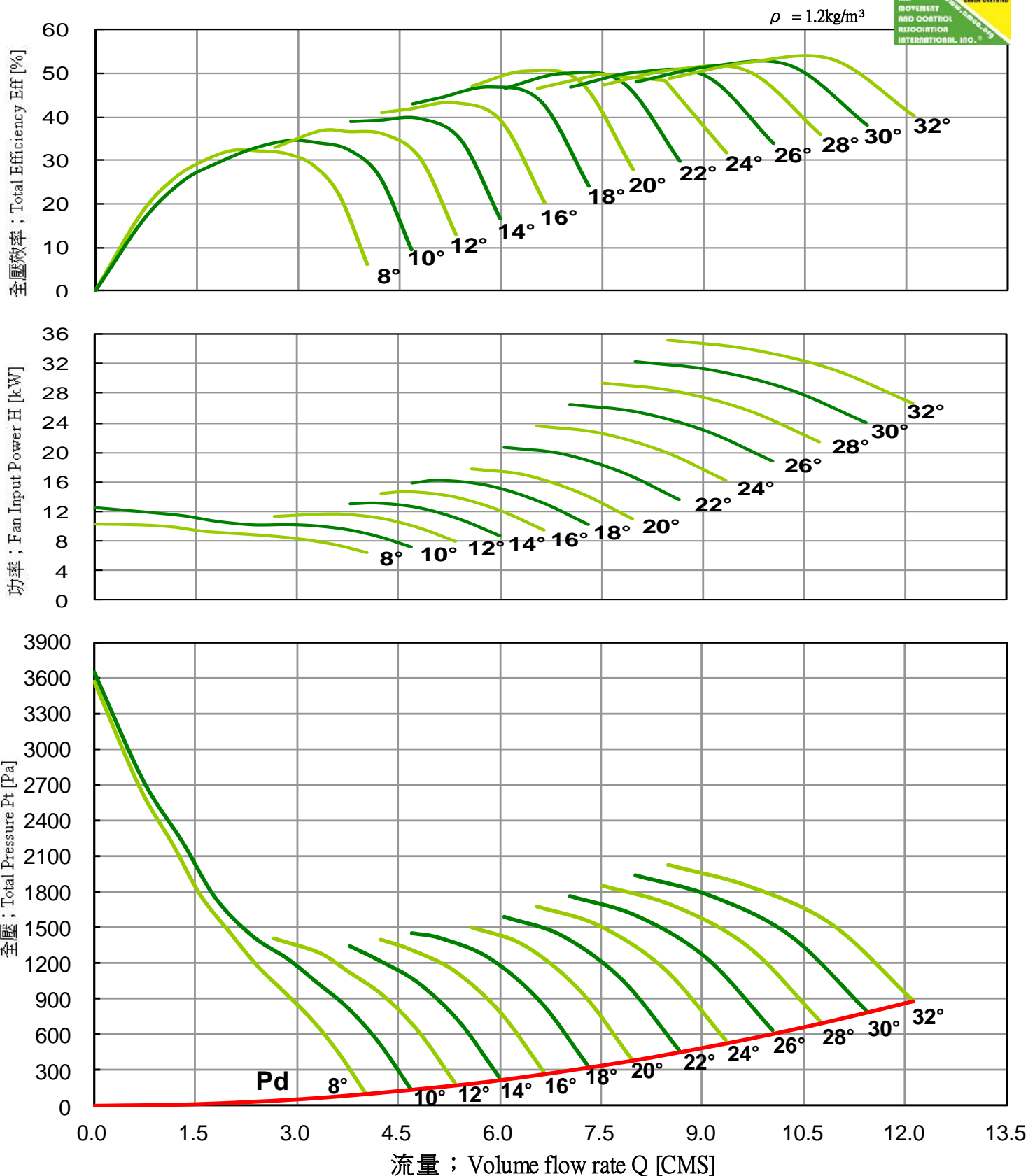
60Hz

Performance curves 風機性能曲線

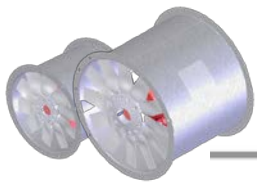
FEG 56

Fan Speed 風機轉速; $N = 3520$ [RPM]

Outlet Area 出口面積; $A = 0.3167$ [m²]



Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).



Axial Fan Driven Directly

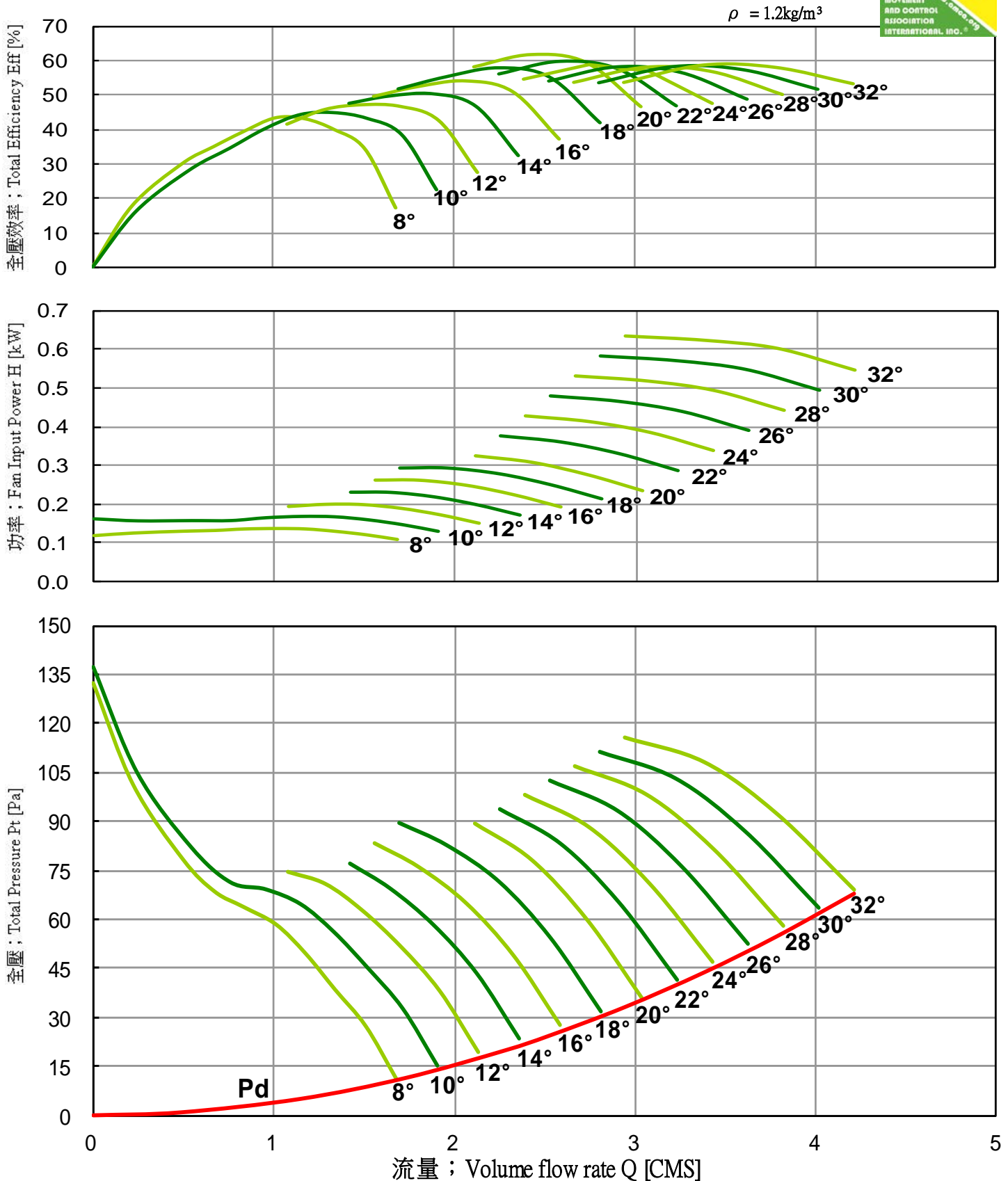
LASD-710-300-6

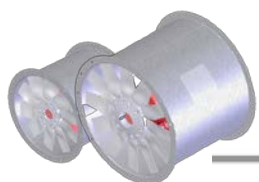
60Hz

Performance curves 風機性能曲線

FEG 63

Fan Speed 風機轉速; N = 880 [RPM] Outlet Area 出口面積; A = 0.3959 [m²]





Axial Fan Driven Directly

LASD-710-300-6

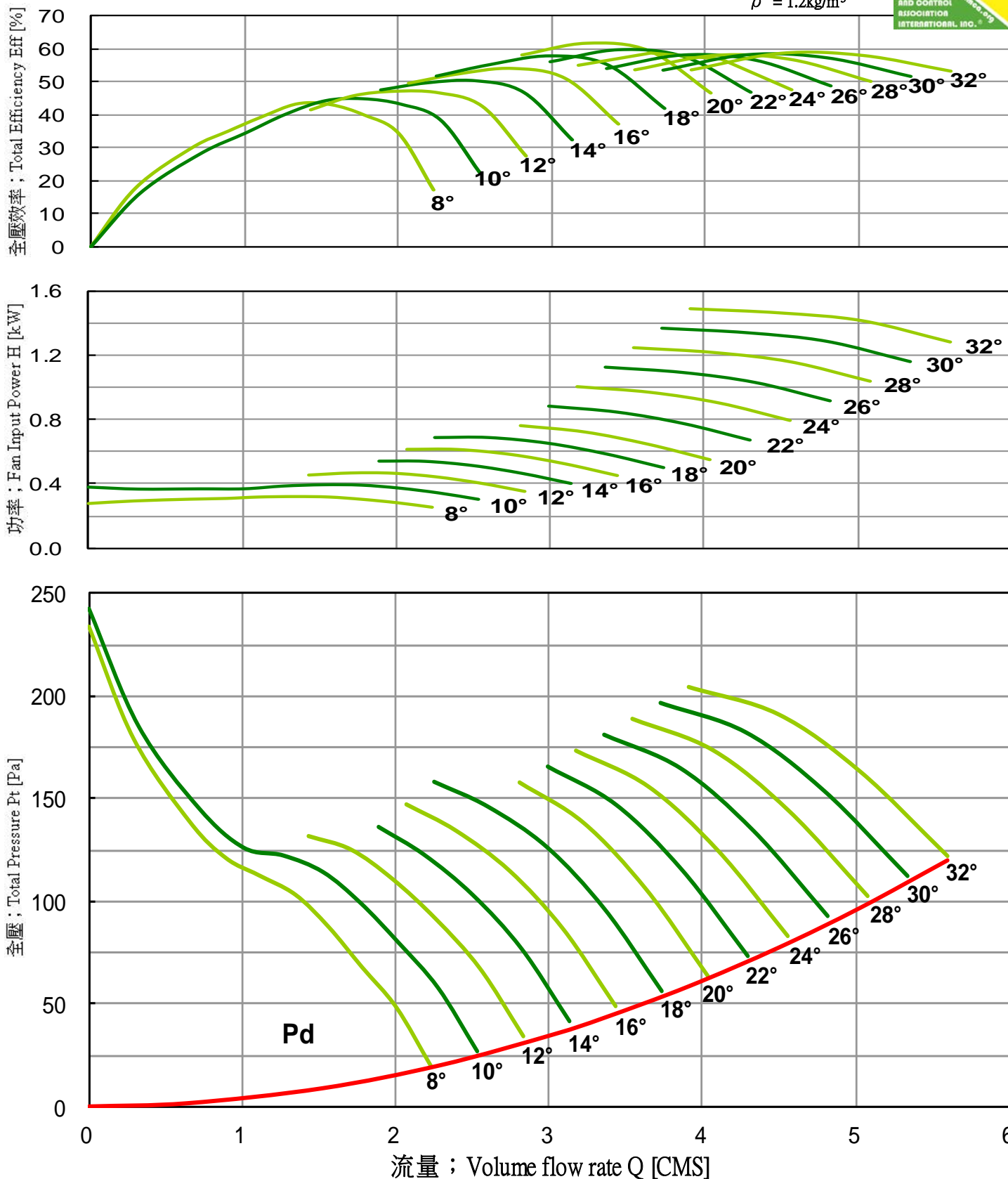
60Hz

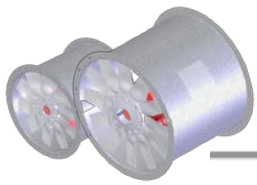
Performance curves 風機性能曲線

FEG 63

Fan Speed 風機轉速; N = 1170 [RPM] Outlet Area 出口面積; A = 0.3959 [m²]

$\rho = 1.2\text{kg/m}^3$





Axial Fan Driven Directly

LASD-710-300-6

60Hz

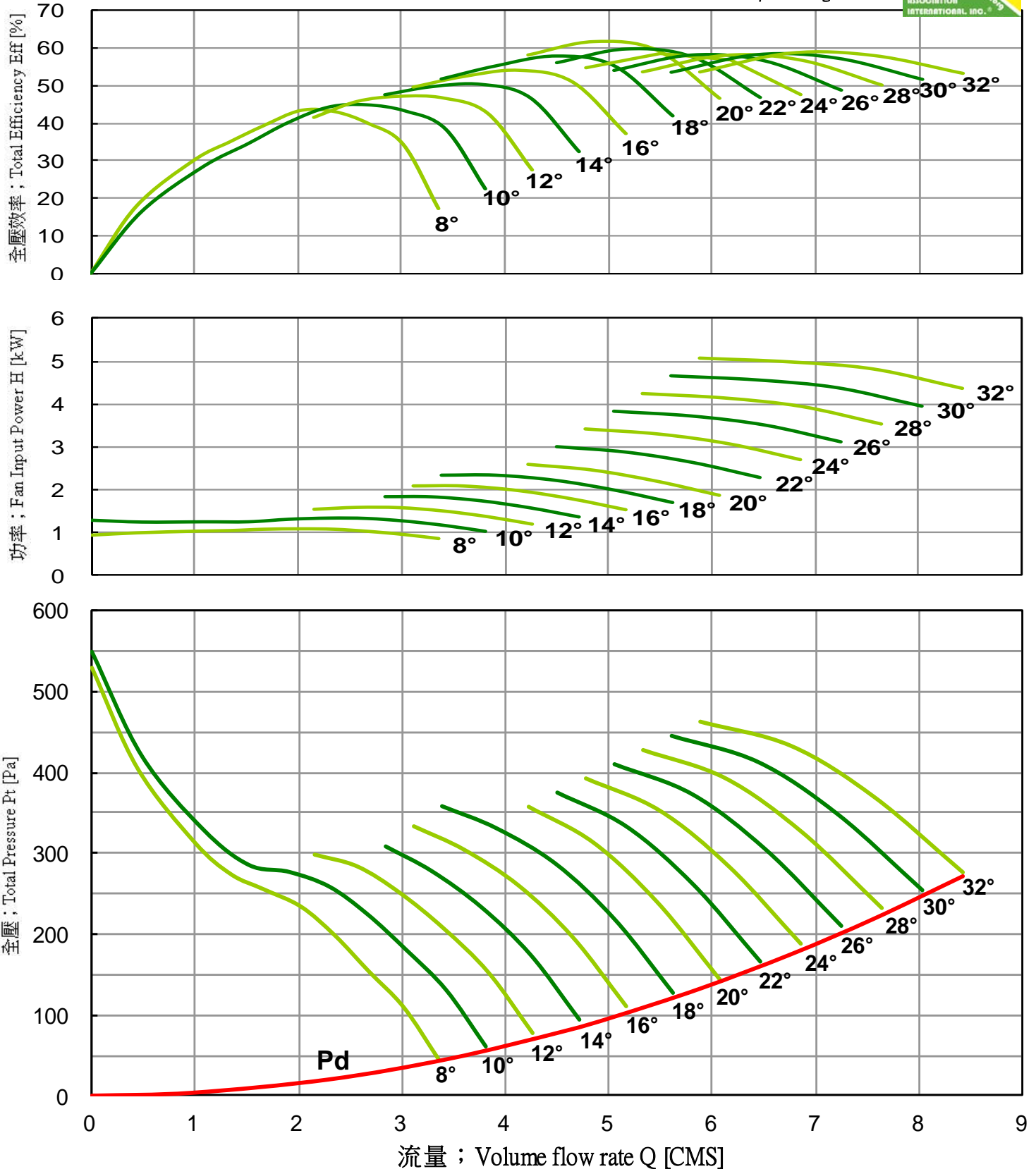
Performance curves 風機性能曲線

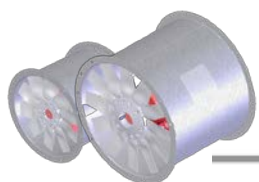


FEG 63

Fan Speed 風機轉速 ; N = 1760 [RPM] Outlet Area 出口面積 ; A = 0.3959 [m²]

$\rho = 1.2 \text{ kg/m}^3$





Axial Fan Driven Directly

LASD-710-300-6

60Hz

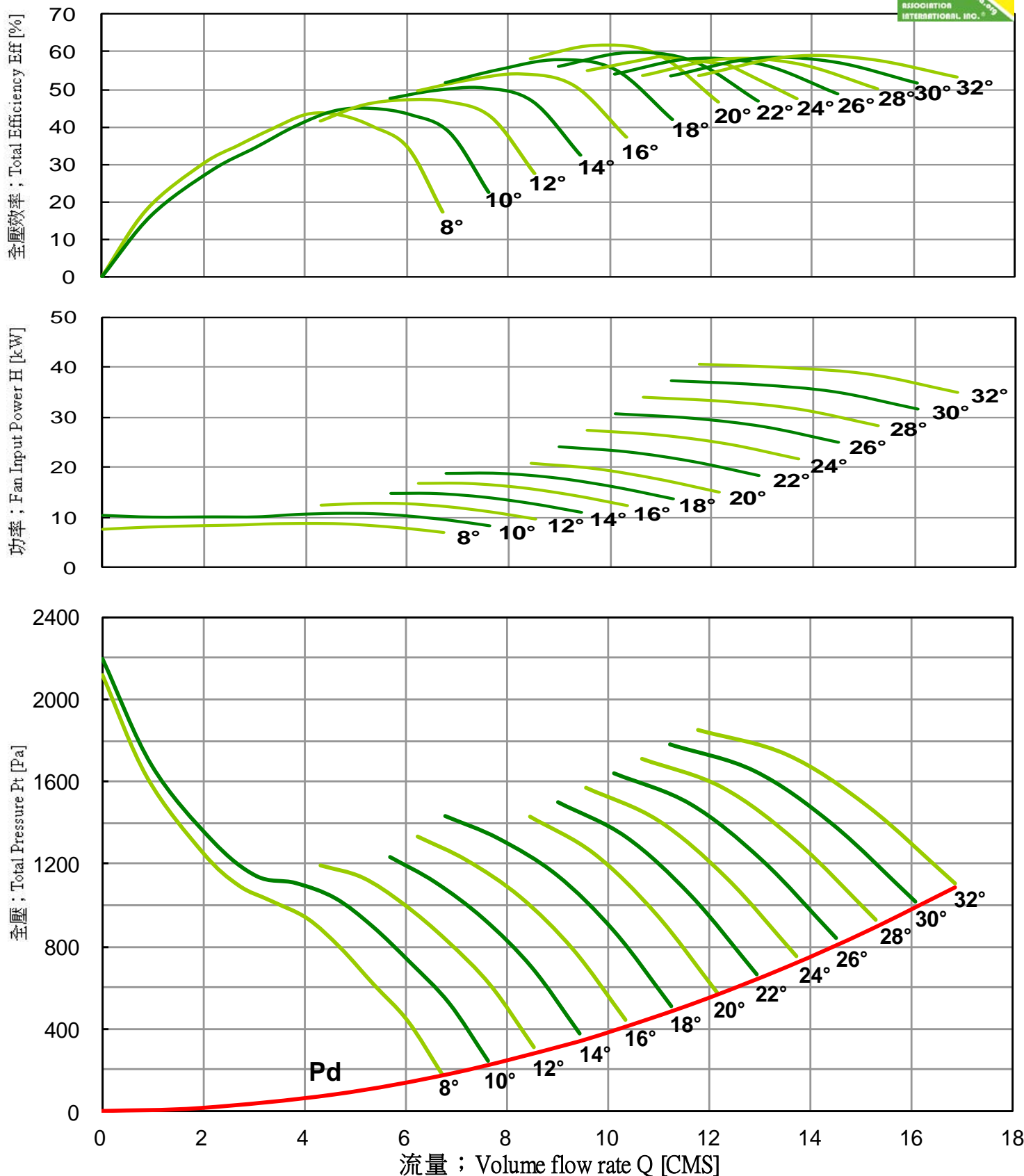
Performance curves 風機性能曲線

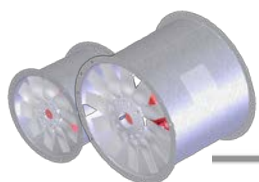
FEG 63

Fan Speed 風機轉速; N = 3520 [RPM]

Outlet Area 出口面積; A = 0.3959 [m²]

$\rho = 1.2\text{kg/m}^3$





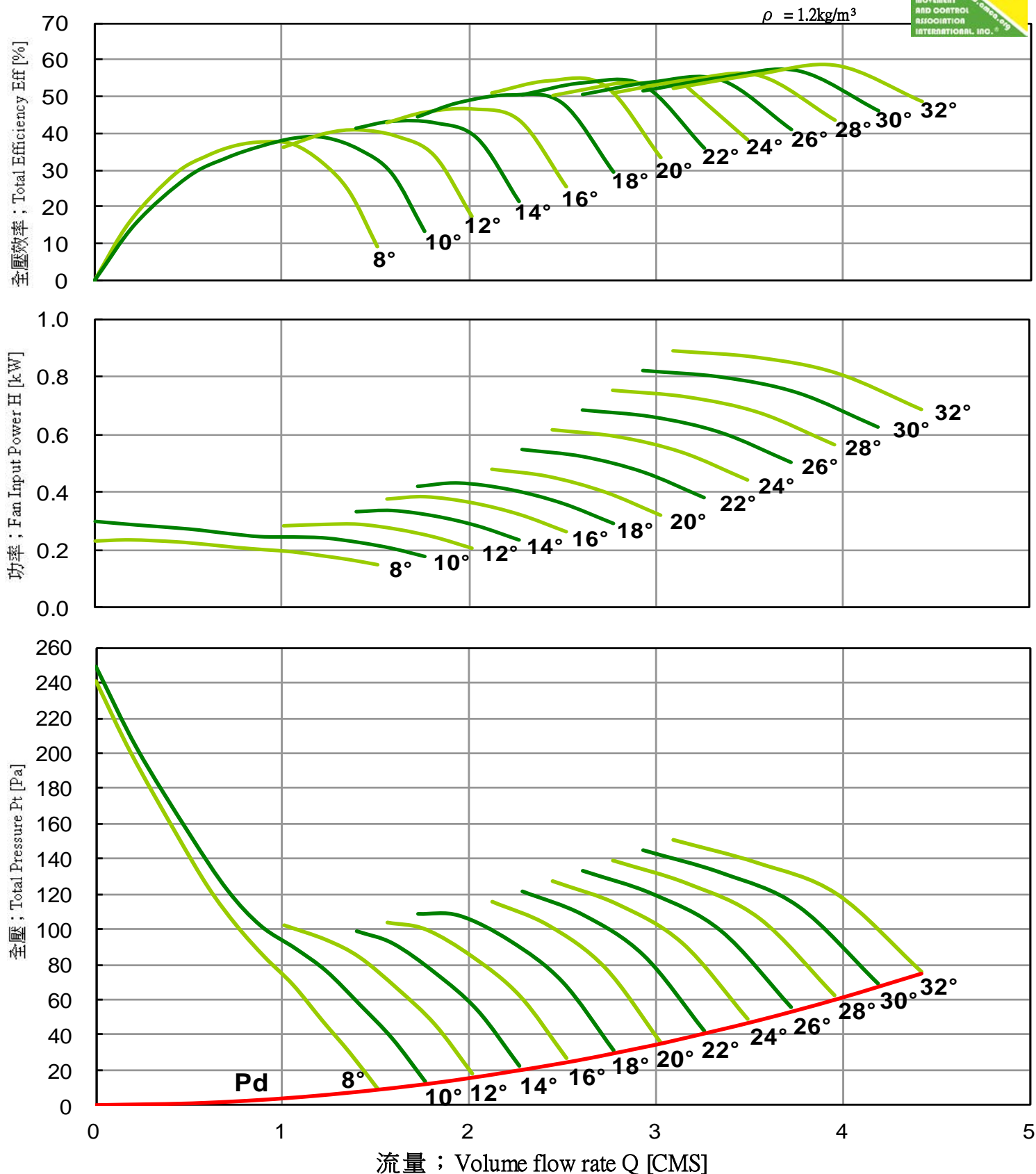
Axial Fan Driven Directly

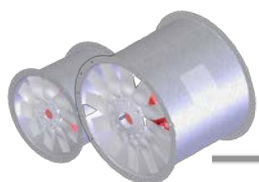
LASD-710-300-12 60Hz

Performance curves 風機性能曲線

FEG 60

Fan Speed 風機轉速: $N = 880$ [RPM] Outlet Area 出口面積: $A = 0.3959$ [m²]





Axial Fan Driven Directly

LASD-710-300-12 60Hz

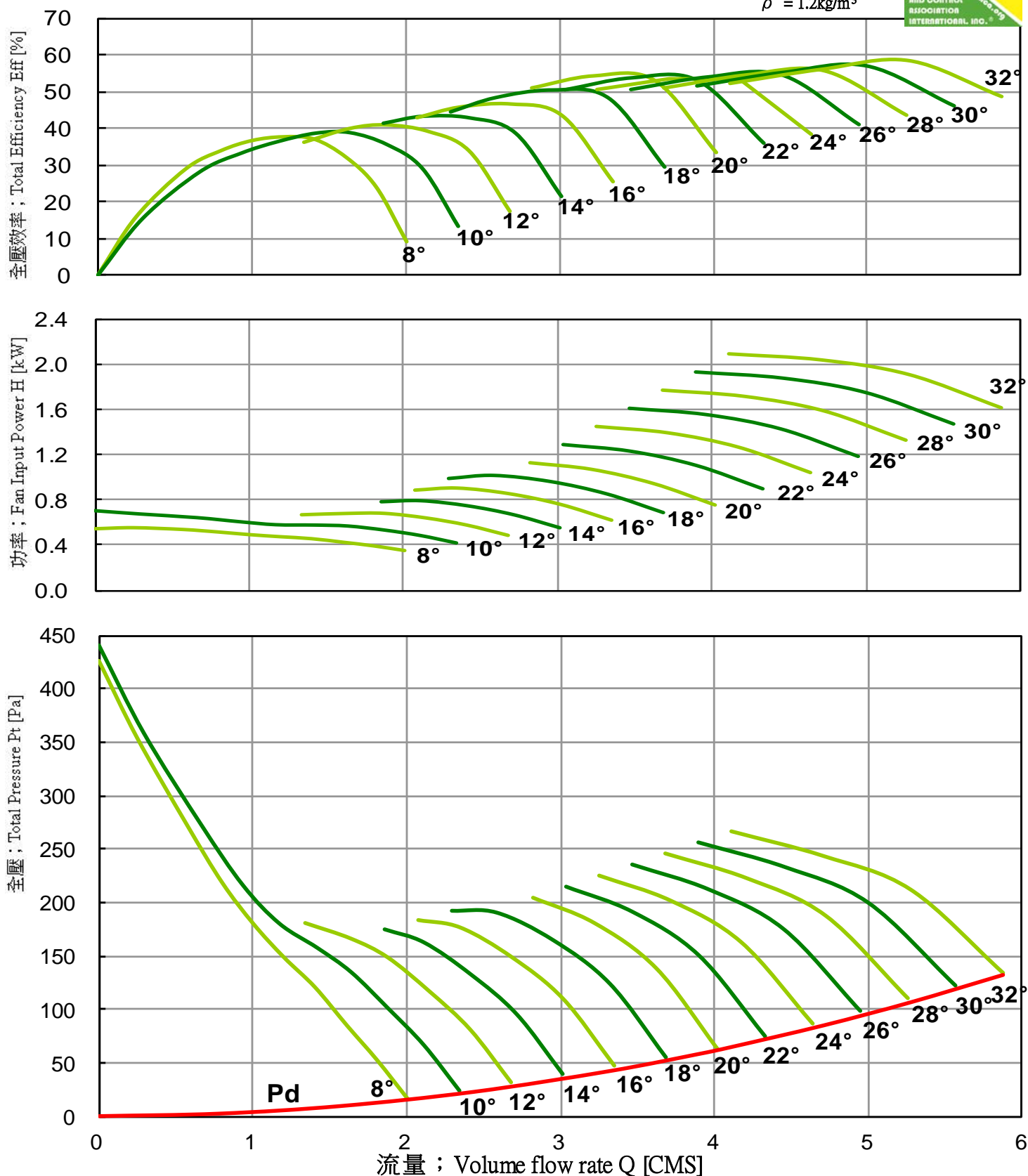
Performance curves 風機性能曲線

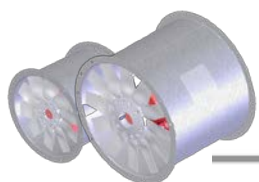


FEG 60

Fan Speed 風機轉速 ; $N = 1170$ [RPM] Outlet Area 出口面積 ; $A = 0.3959$ [m²]

$\rho = 1.2\text{kg/m}^3$





Axial Fan Driven Directly

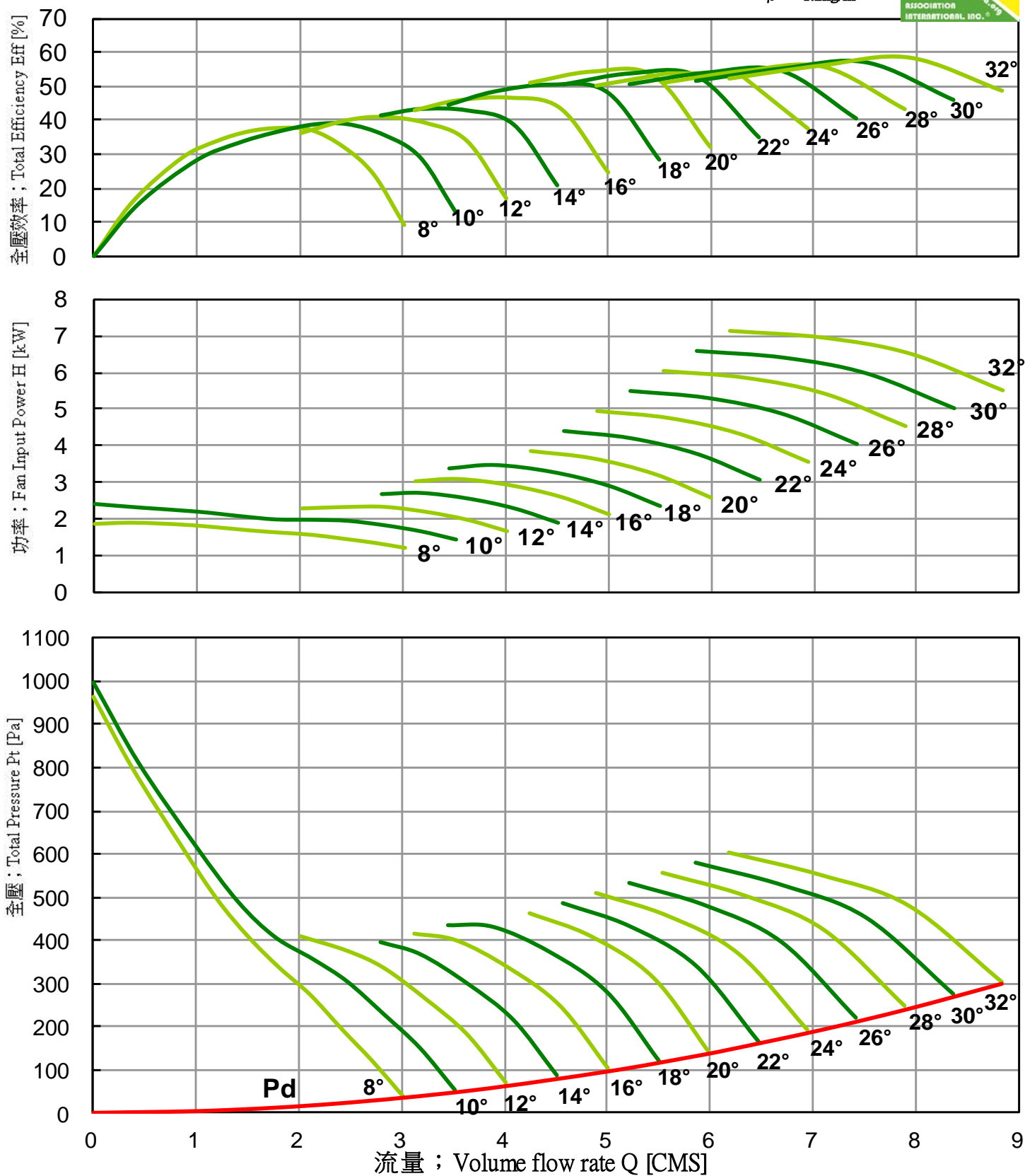
LASD-710-300-12 60Hz

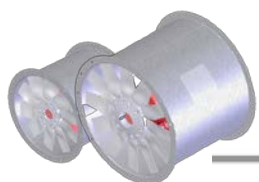
Performance curves 風機性能曲線

FEG 60

Fan Speed 風機轉速; $N = 1760$ [RPM] Outlet Area 出口面積; $A = 0.3959$ [m²]

$\rho = 1.2 \text{ kg/m}^3$





Axial Fan Driven Directly

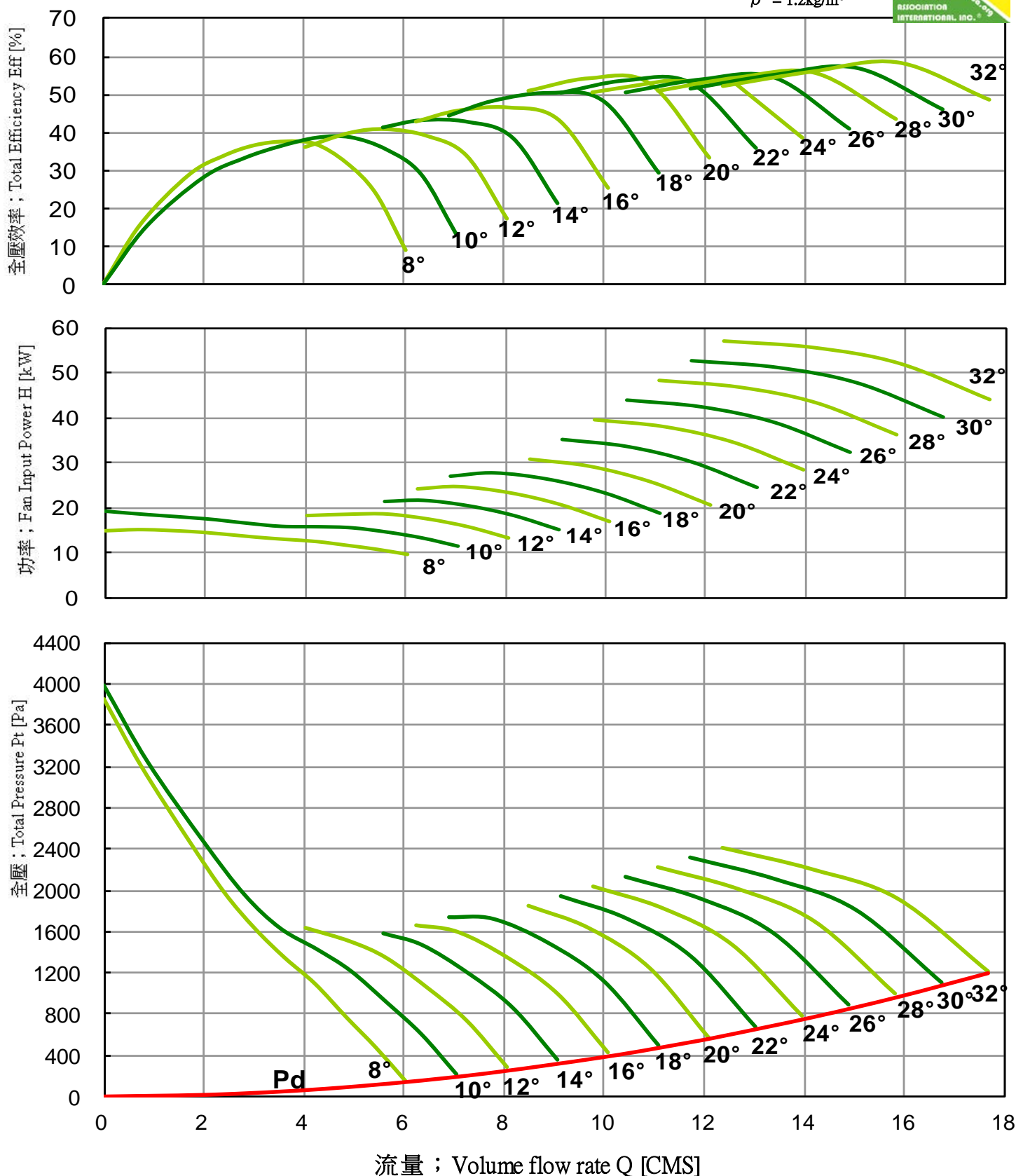
LASD-710-300-12 60Hz

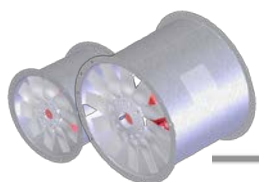
Performance curves 風機性能曲線

FEG 60

Fan Speed 風機轉速; $N = 3520$ [RPM] Outlet Area 出口面積; $A = 0.3959$ [m²]

$\rho = 1.2\text{kg/m}^3$





Axial Fan Driven Directly

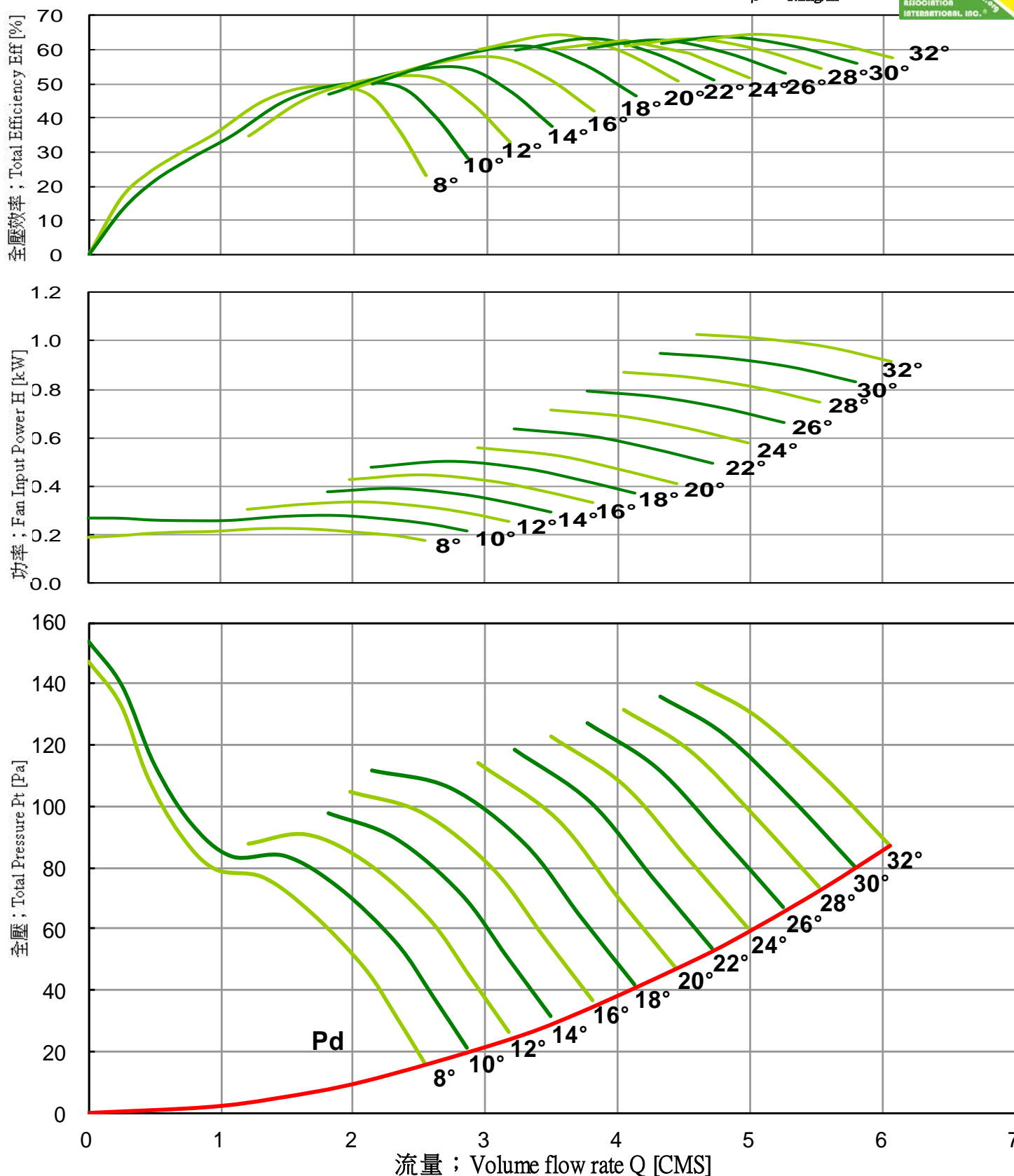
LASD-800-300-6 60Hz

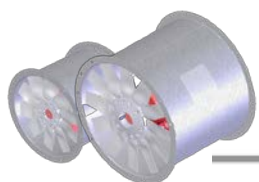
Performance curves 風機性能曲線

FEG 67

Fan Speed 風機轉速; $N = 880$ [RPM] Outlet Area 出口面積; $A = 0.5027$ [m²]

$\rho = 1.2 \text{ kg/m}^3$





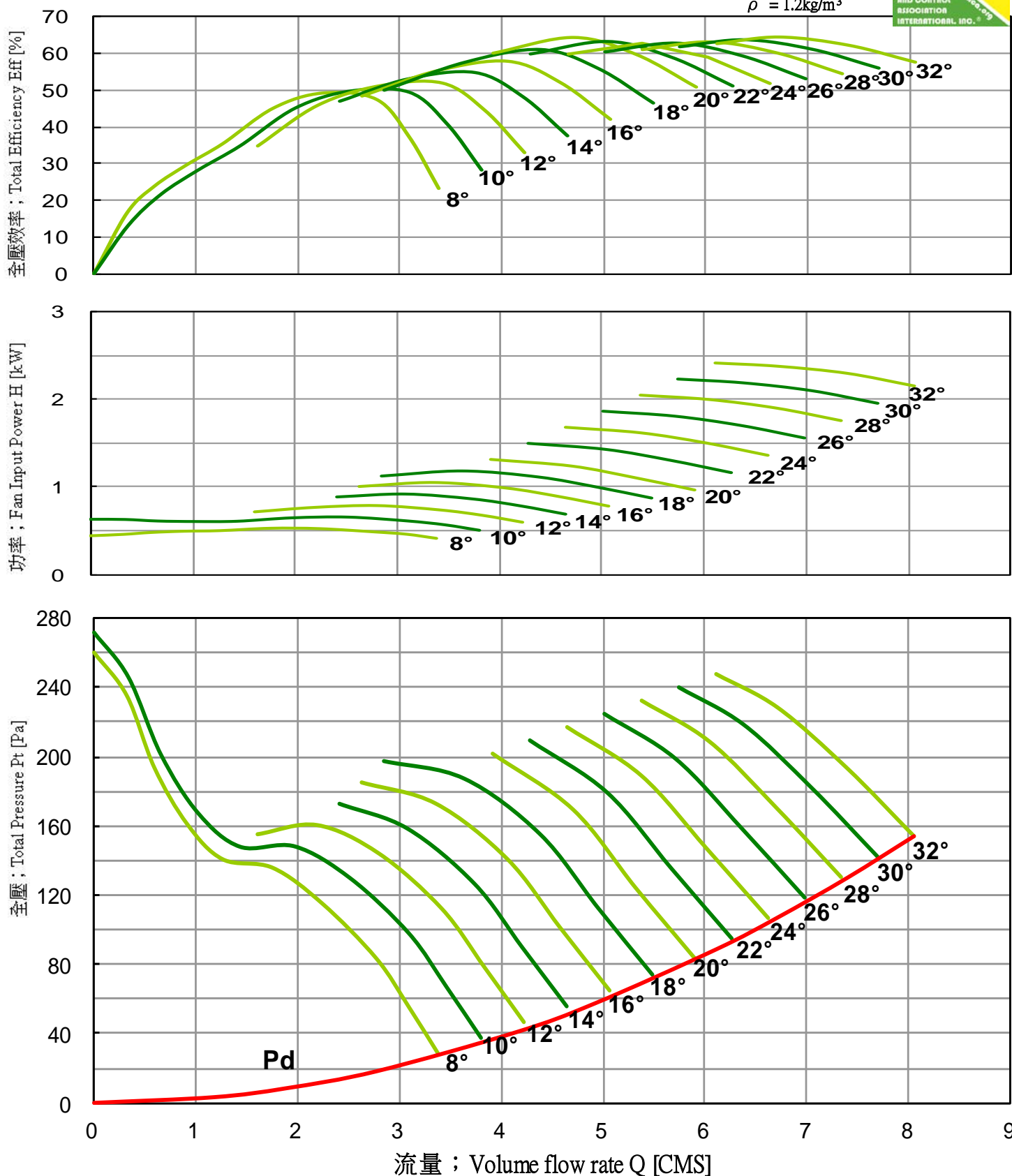
Axial Fan Driven Directly

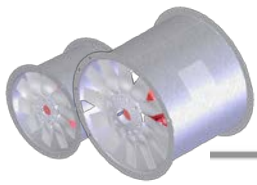
LASD-800-300-6 60Hz

Performance curves 風機性能曲線

FEG 67

Fan Speed 風機轉速; $N = 1170$ [RPM] Outlet Area 出口面積; $A = 0.5027$ [m²]





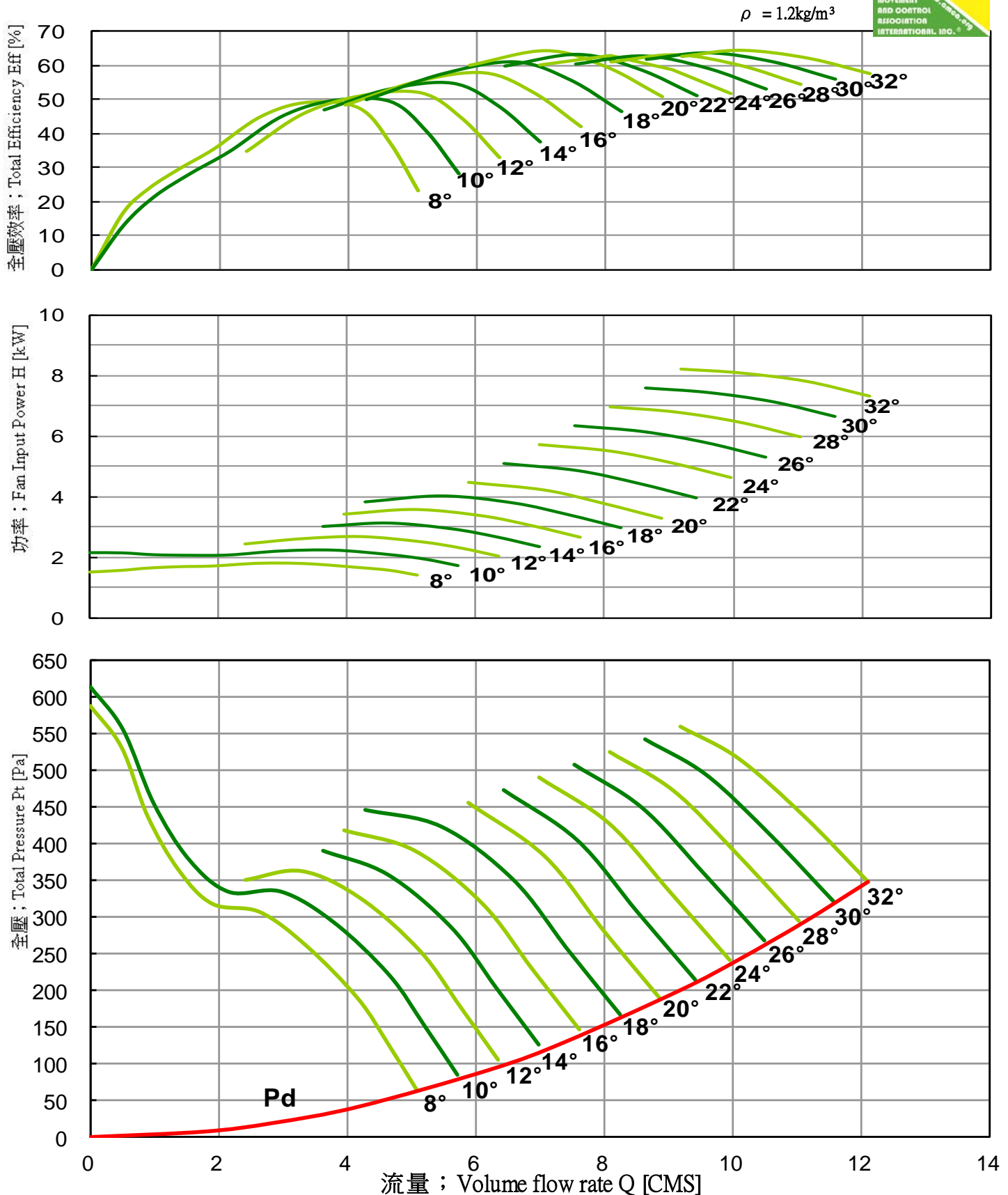
Axial Fan Driven Directly

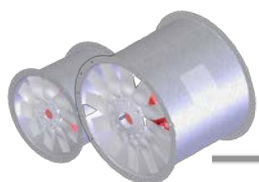
LASD-800-300-6 60Hz

Performance curves 風機性能曲線

FEG 67

Fan Speed 風機轉速 ; N = 1760 [RPM] Outlet Area 出口面積 ; A = 0.5027 [m²]





Axial Fan Driven Directly

LASD-800-300-12 60Hz

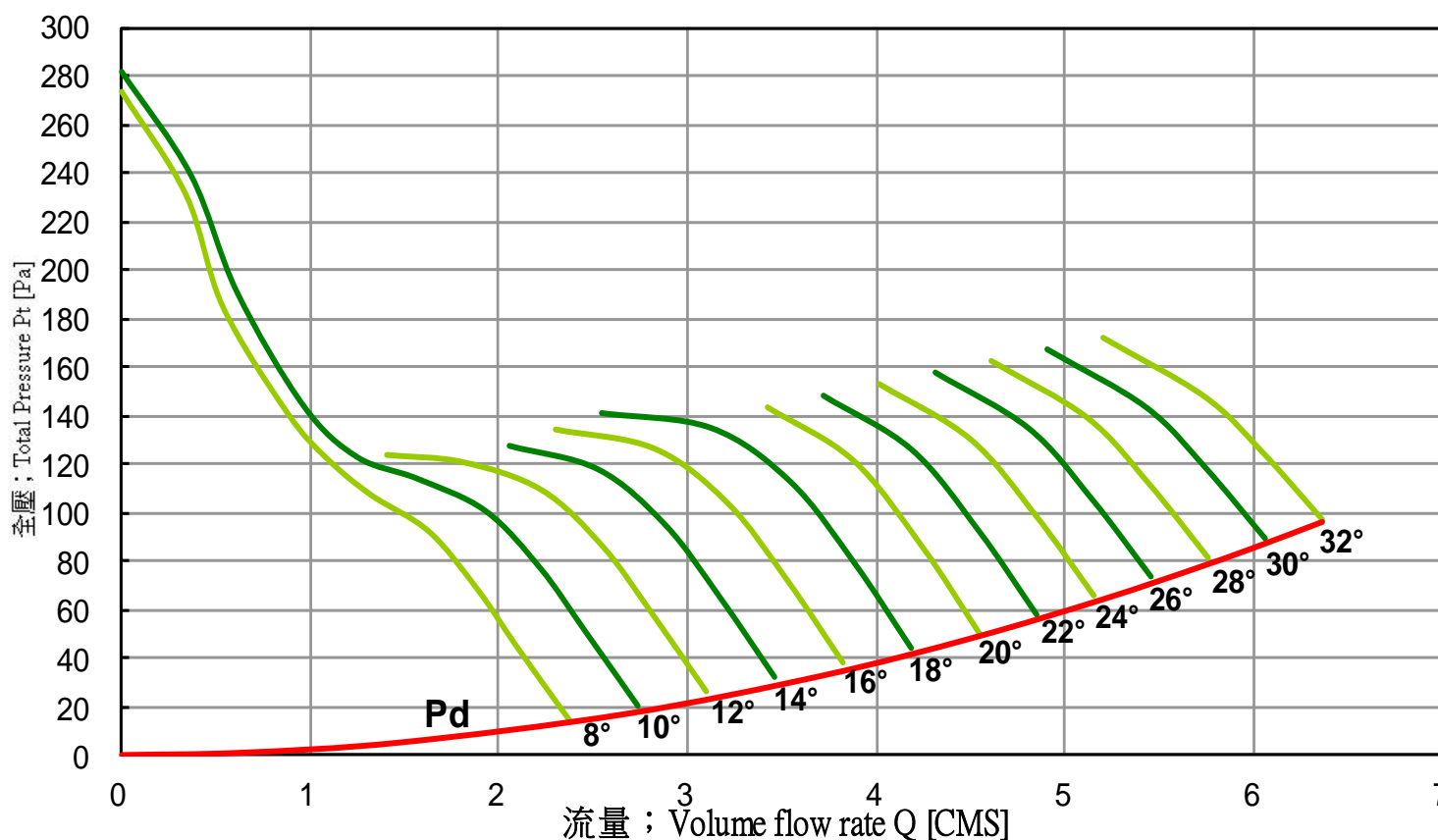
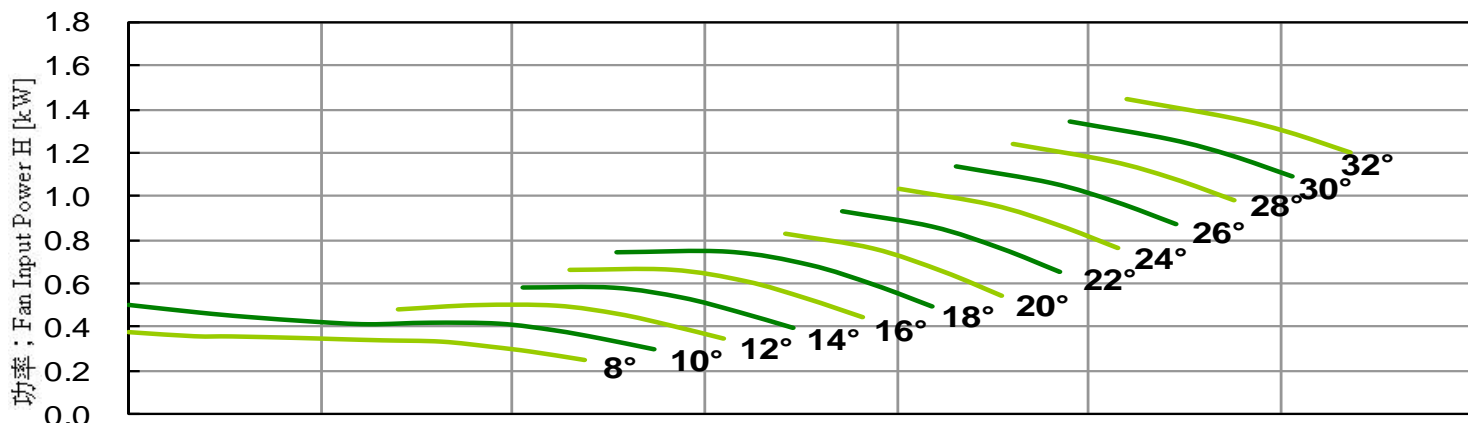
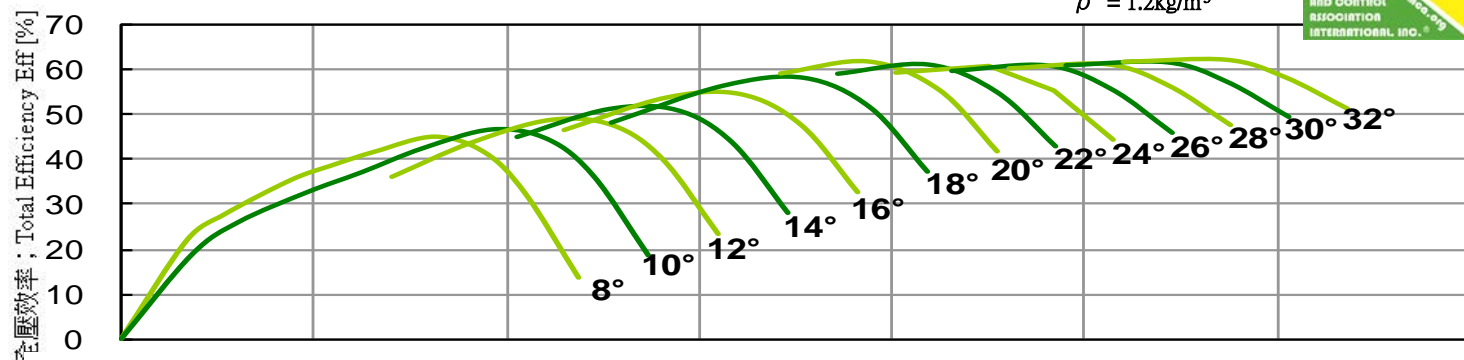
Performance curves 風機性能曲線

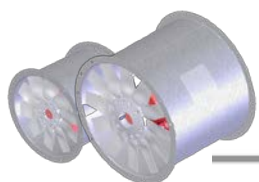
FEG 63

Fan Speed 風機轉速 ; N = 880 [RPM]

Outlet Area 出口面積 ; A = 0.5027 [m²]

$\rho = 1.2 \text{ kg/m}^3$





Axial Fan Driven Directly

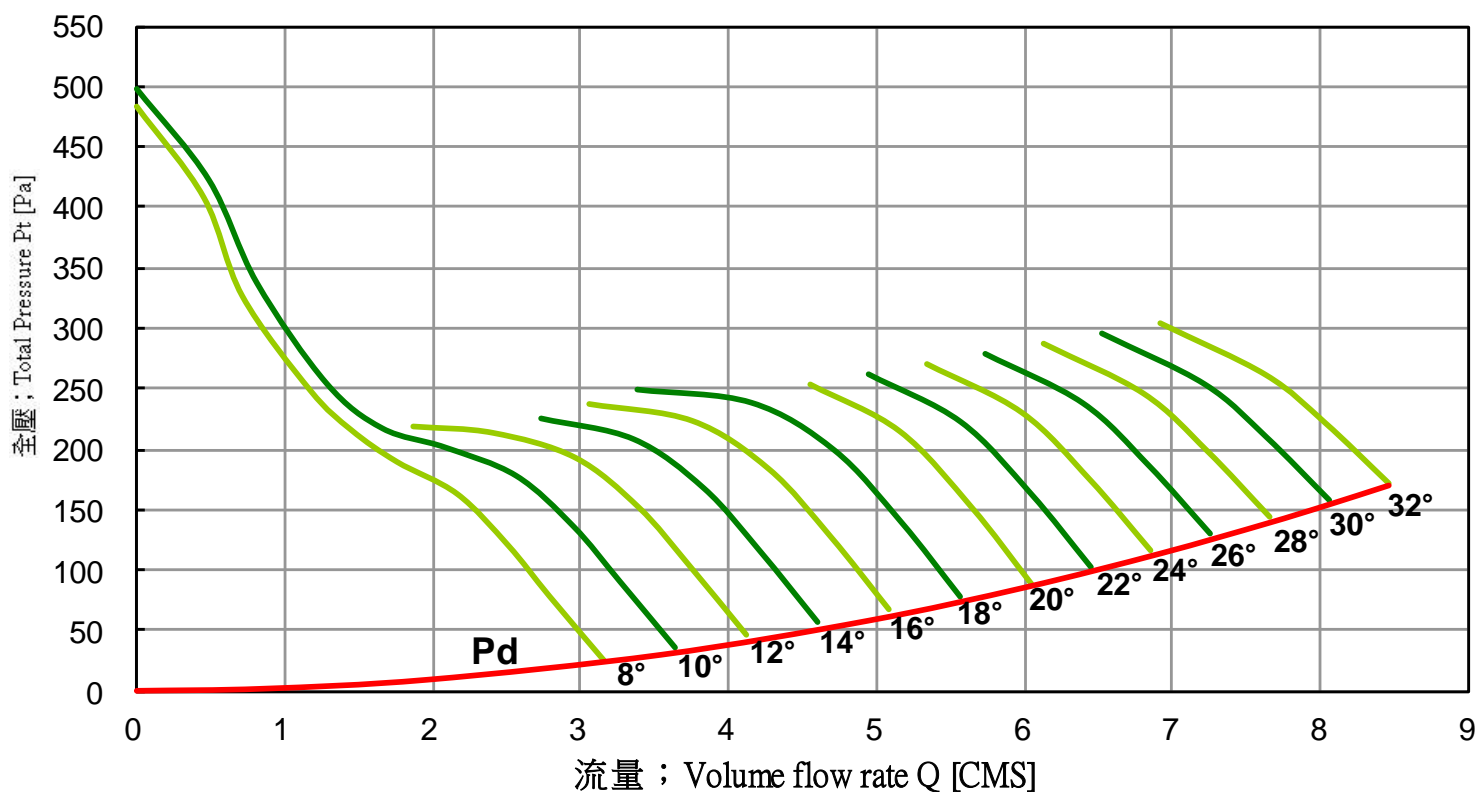
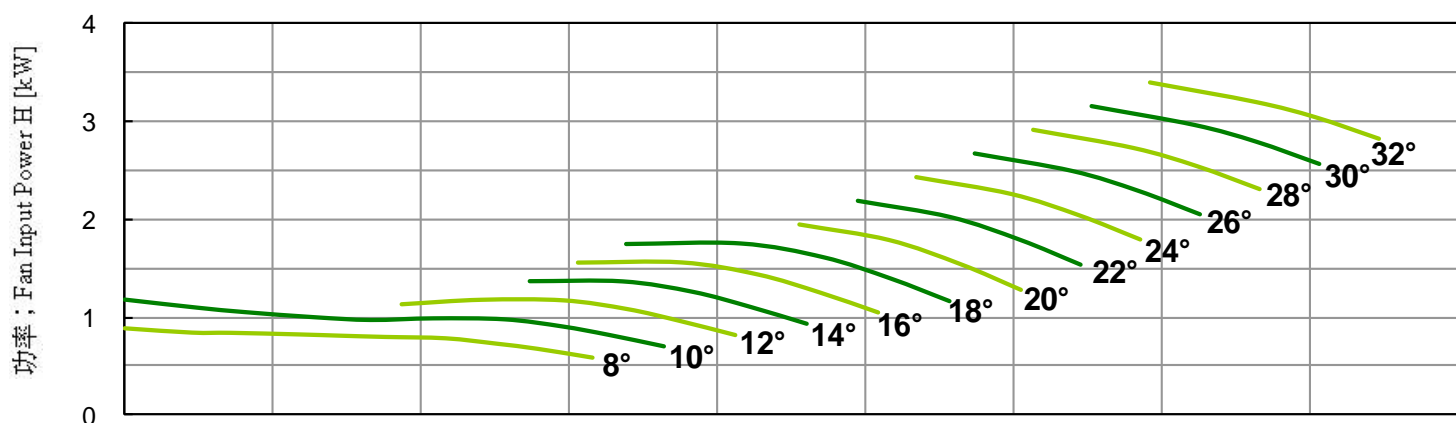
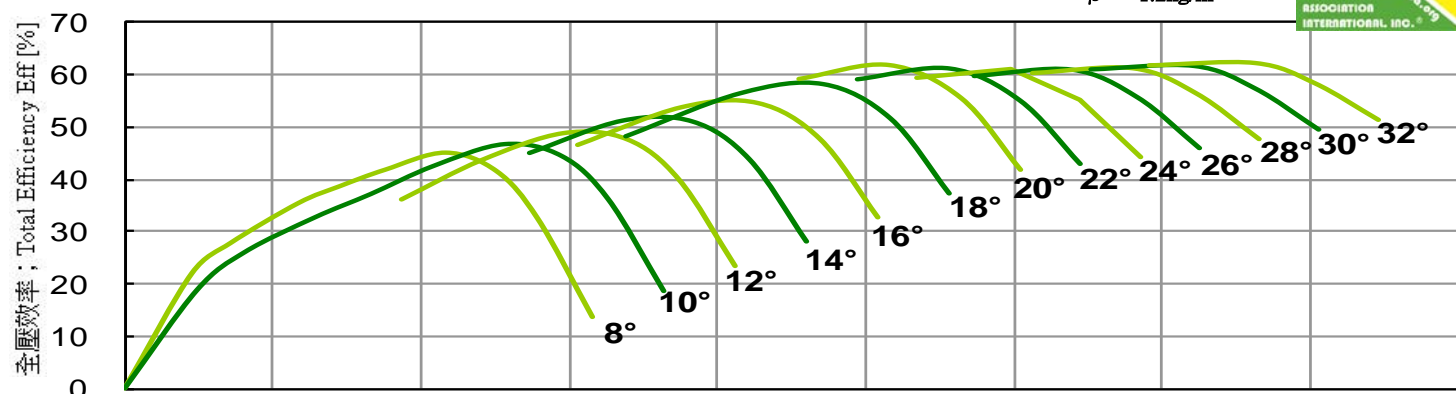
LASD-800-300-12 60Hz

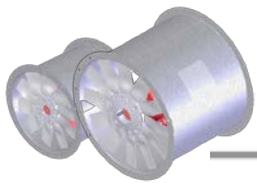
Performance curves 風機性能曲線

FEG 63

Fan Speed 風機轉速; $N = 1170$ [RPM] Outlet Area 出口面積; $A = 0.5027$ [m²]

$\rho = 1.2 \text{ kg/m}^3$





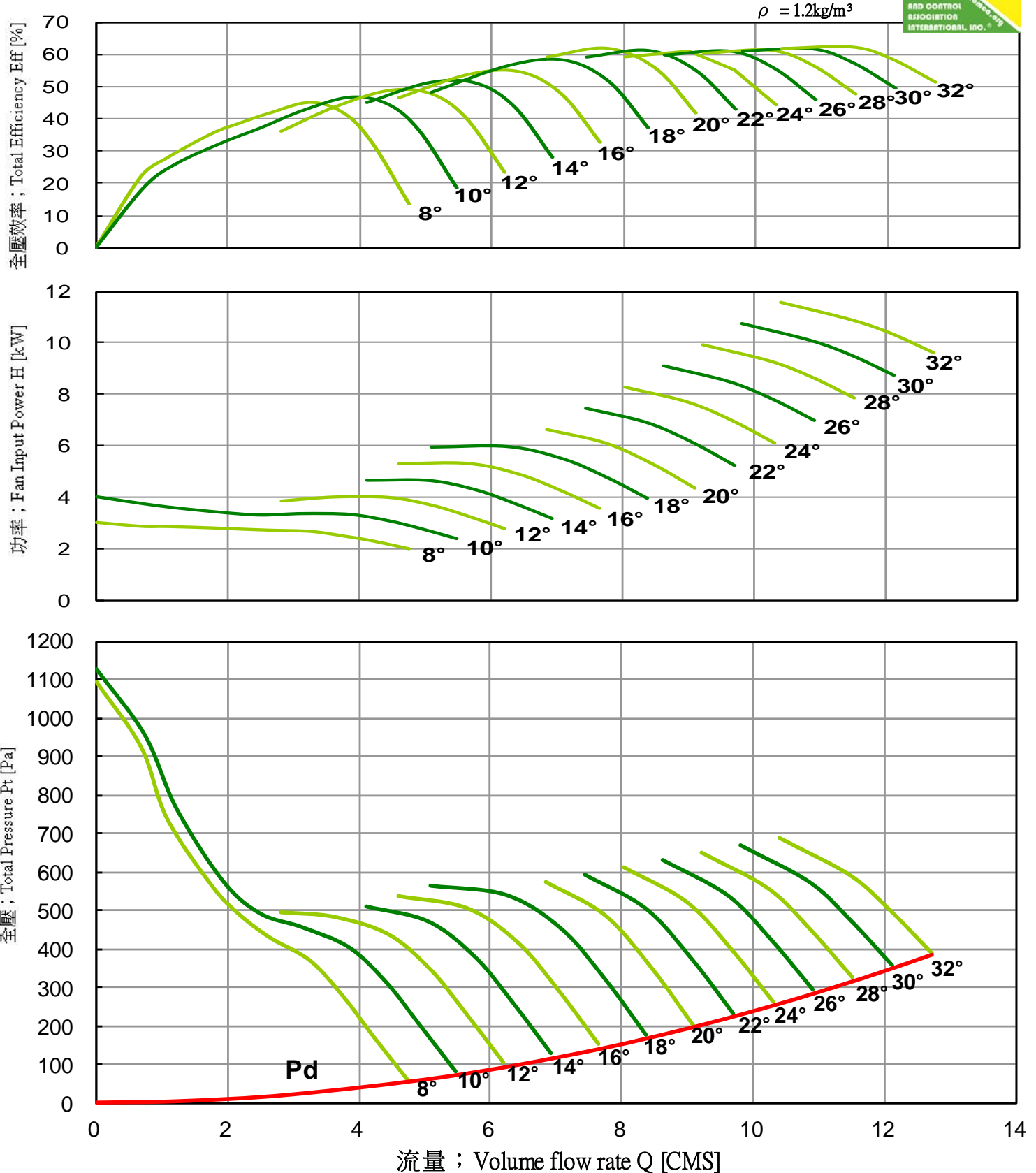
Axial Fan Driven Directly

LASD-800-300-12 60Hz

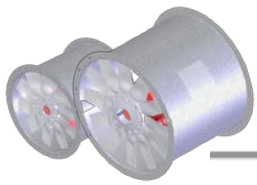
Performance curves 風機性能曲線

FEG 63

Fan Speed 風機轉速 ; N = 1760 [RPM] Outlet Area 出口面積 ; A = 0.5027 [m²]



Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).



Axial Fan Driven Directly

LASD-900-300-6

60Hz

Performance curves 風機性能曲線

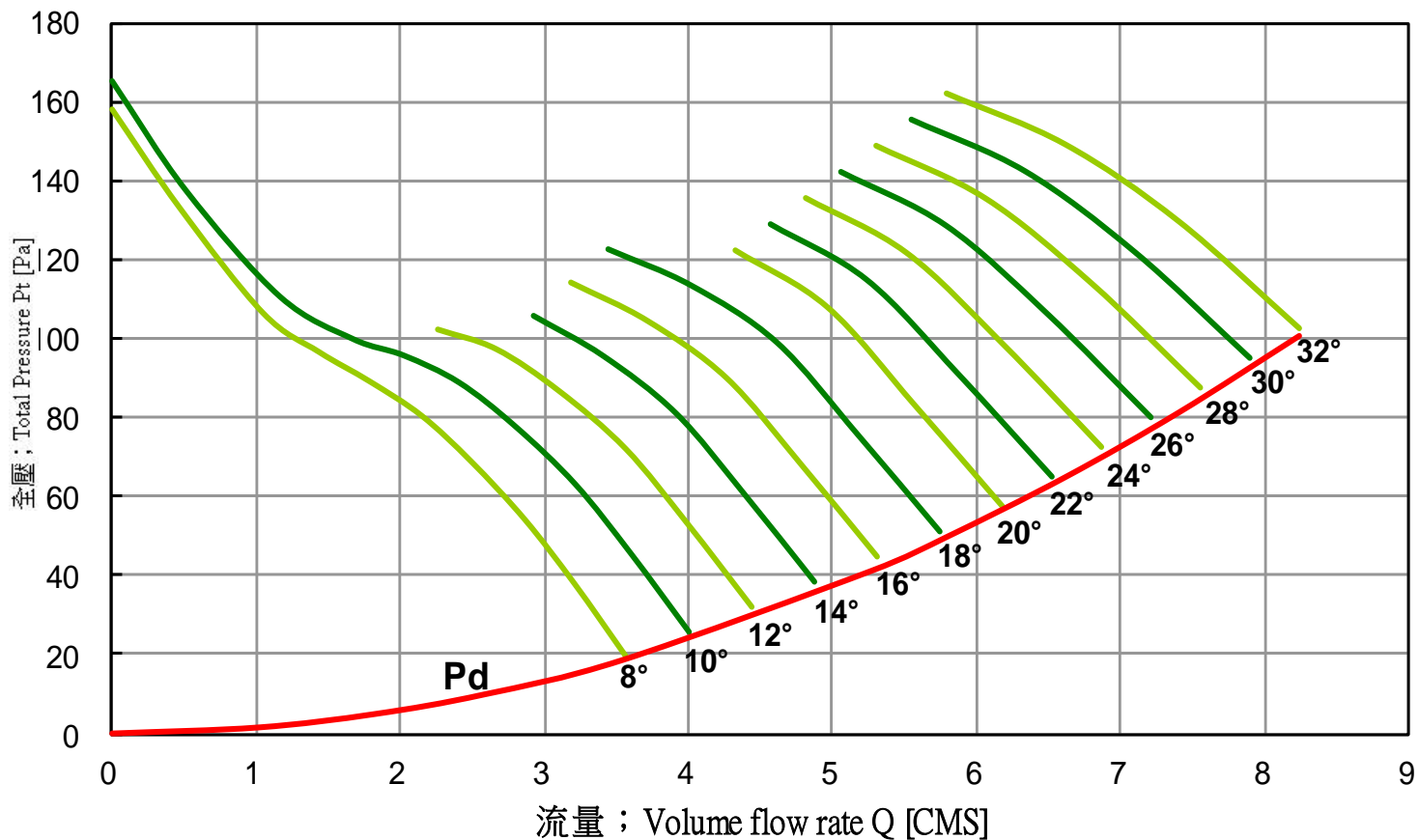
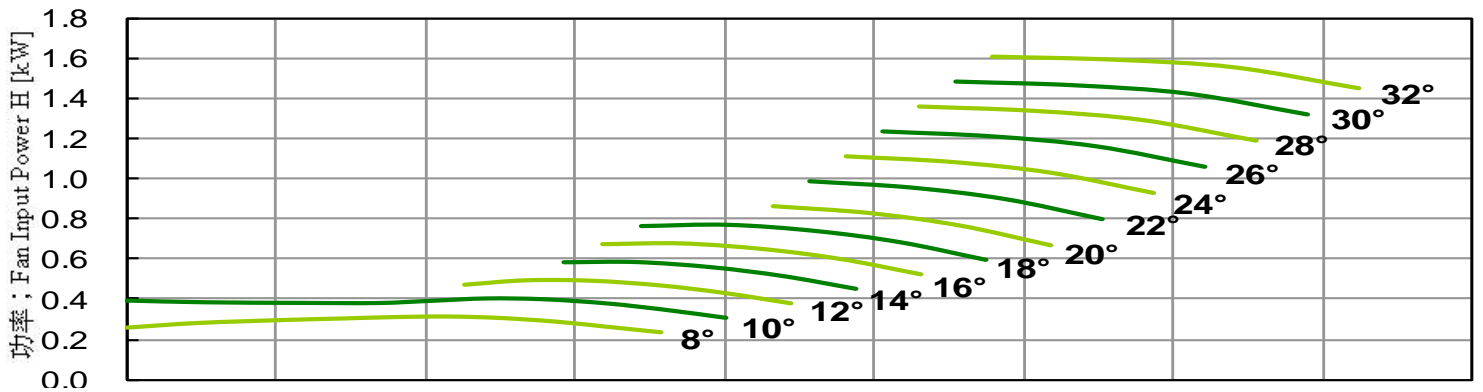
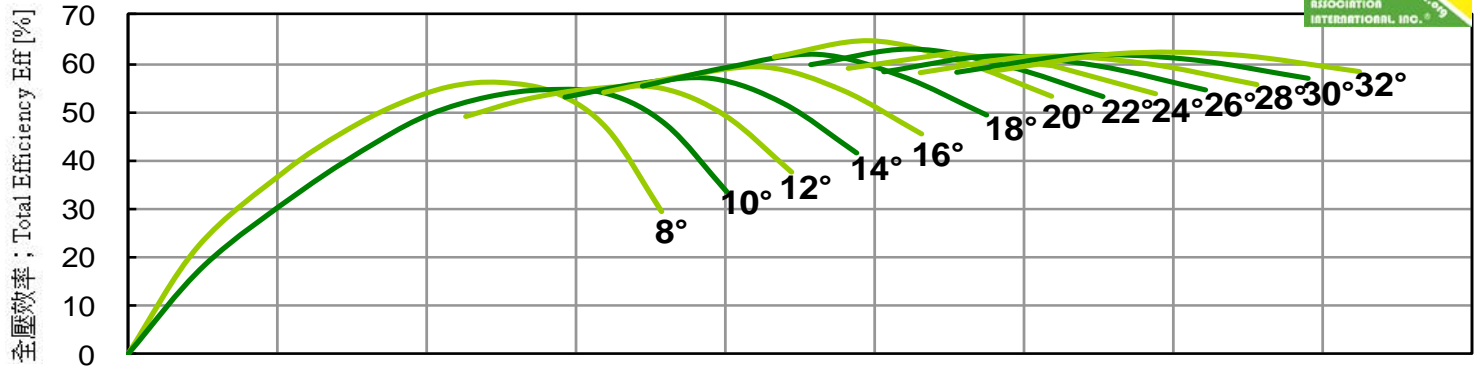
FEG 67

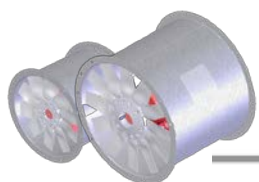
Fan Speed 風機轉速; N = 880 [RPM]

Outlet Area 出口面積; A = 0.6362 [m²]



$\rho = 1.2 \text{ kg/m}^3$





Axial Fan Driven Directly



LASD-900-300-6

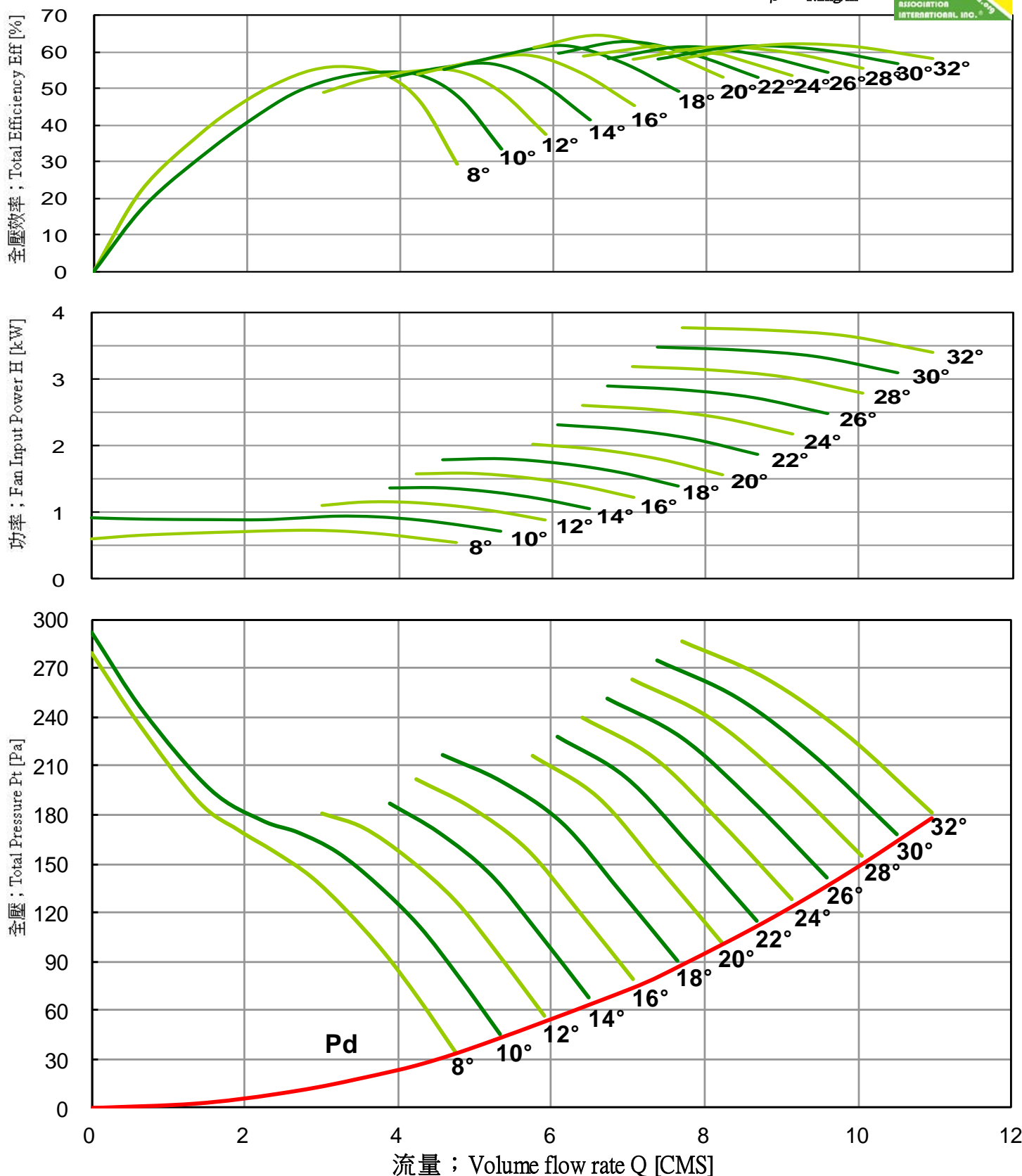
60Hz

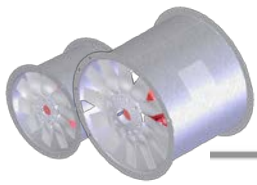
Performance curves 風機性能曲線

FEG 67

Fan Speed 風機轉速: $N = 1170$ [RPM] Outlet Area 出口面積: $A = 0.6362$ [m²]

$\rho = 1.2\text{kg/m}^3$





Axial Fan Driven Directly



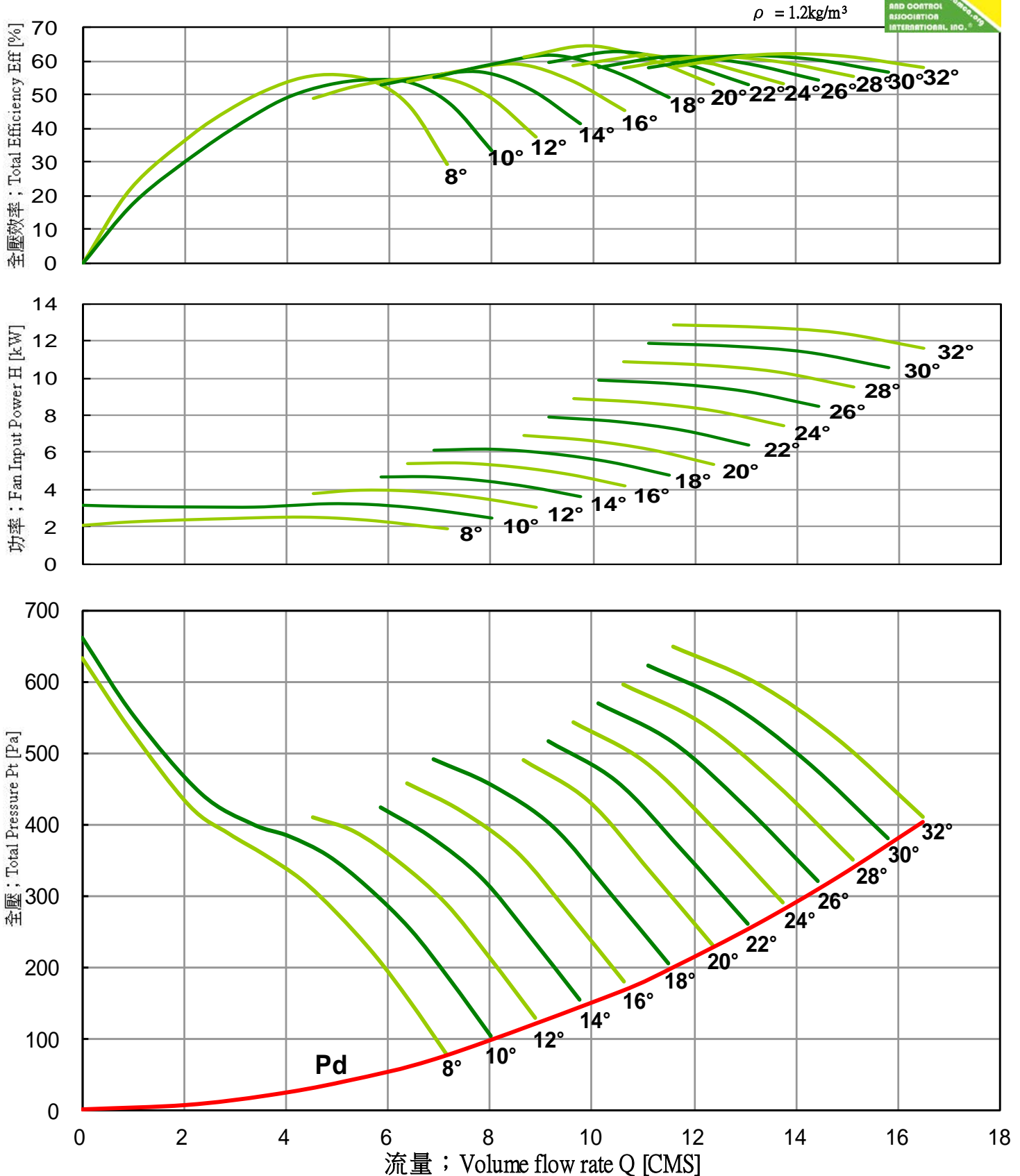
LASD-900-300-6

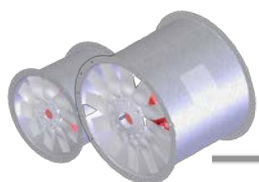
60Hz

Performance curves 風機性能曲線

FEG 67

Fan Speed 風機轉速; $N = 1760$ [RPM] Outlet Area 出口面積; $A = 0.6362$ [m²]





Axial Fan Driven Directly

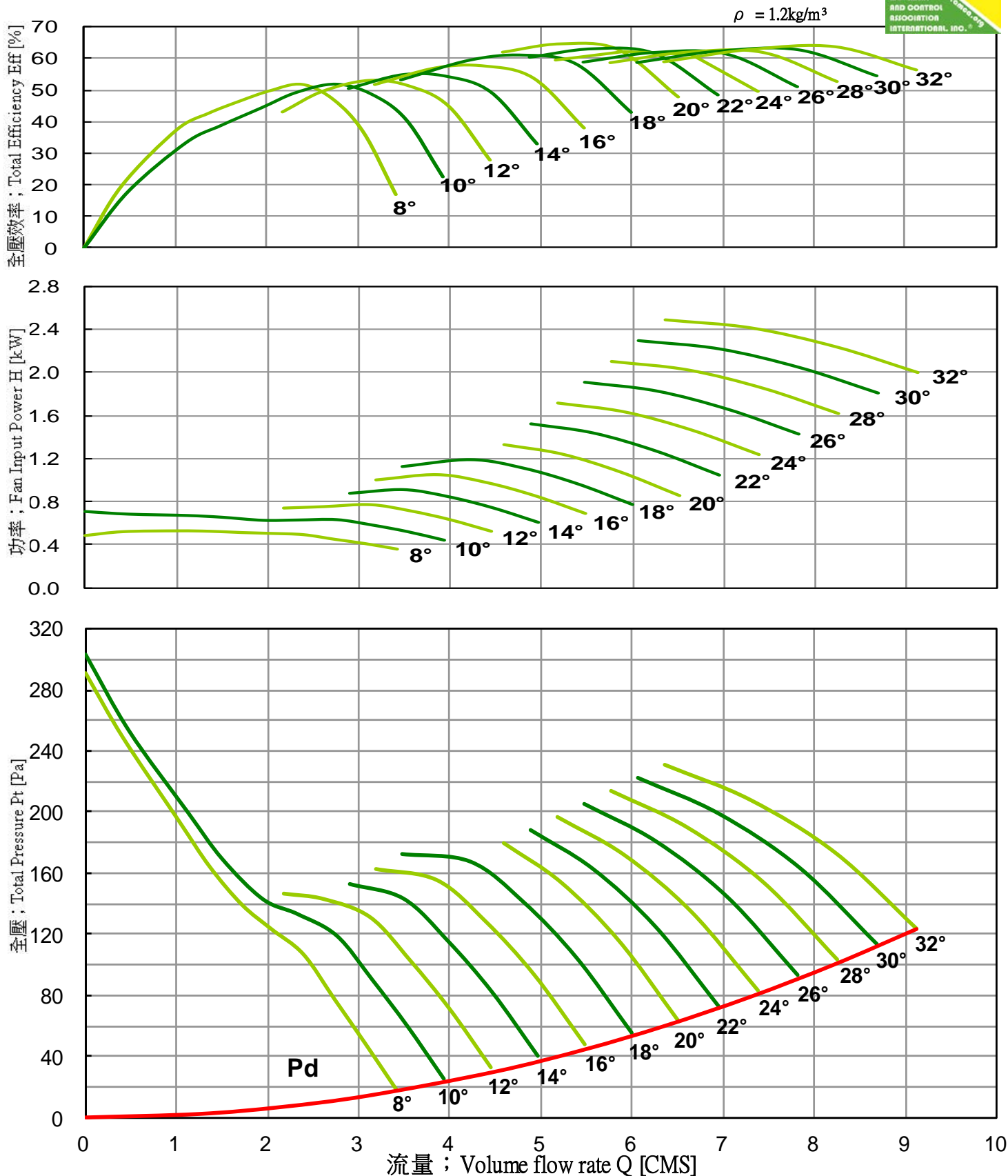
LASD-900-300-12

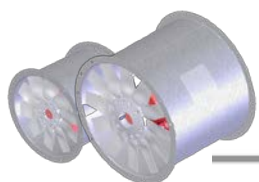
60Hz

Performance curves 風機性能曲線

FEG 67

Fan Speed 風機轉速; $N = 880$ [RPM] Outlet Area 出口面積; $A = 0.6362$ [m²]





Axial Fan Driven Directly

LASD-900-300-12

60Hz

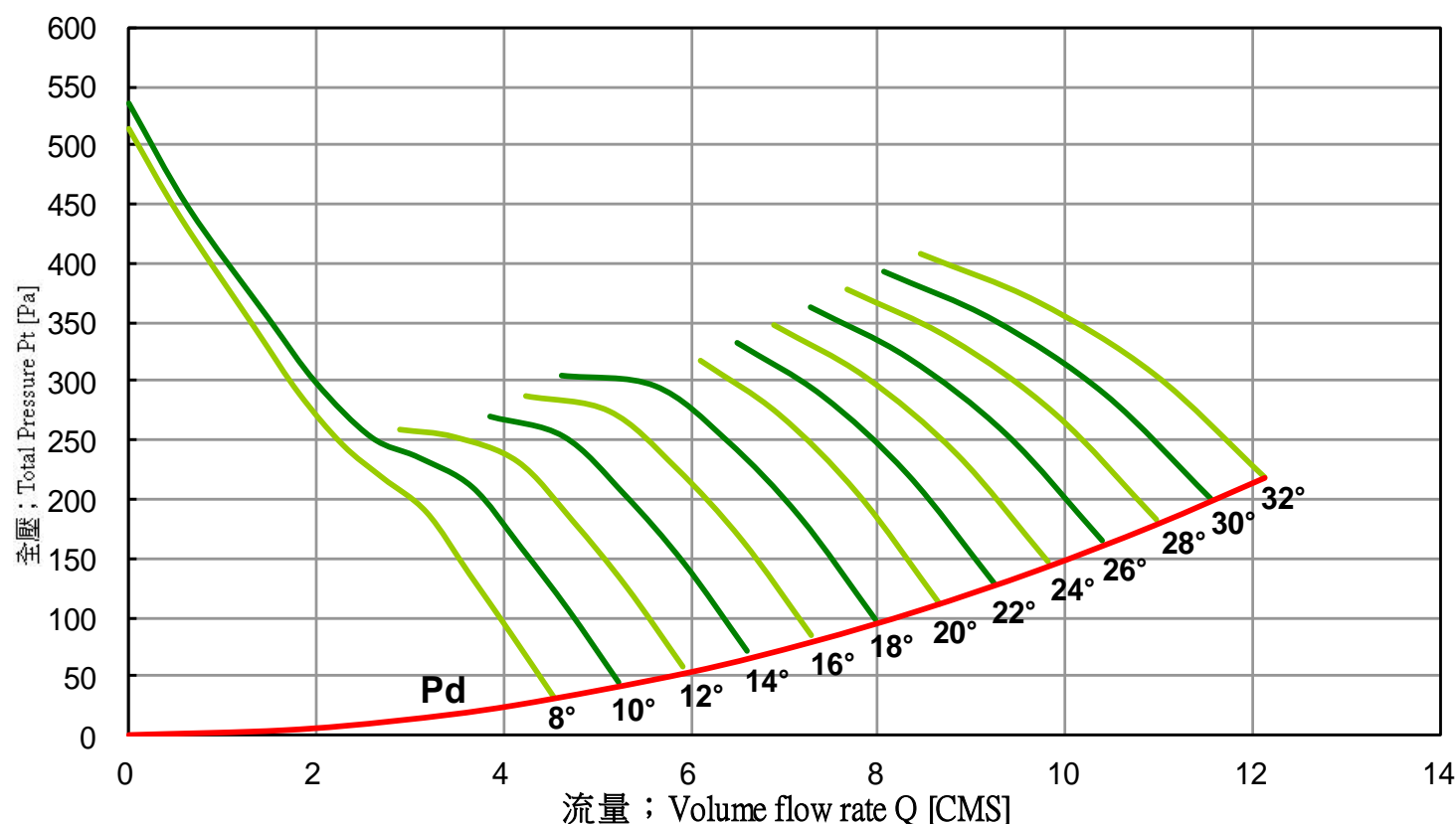
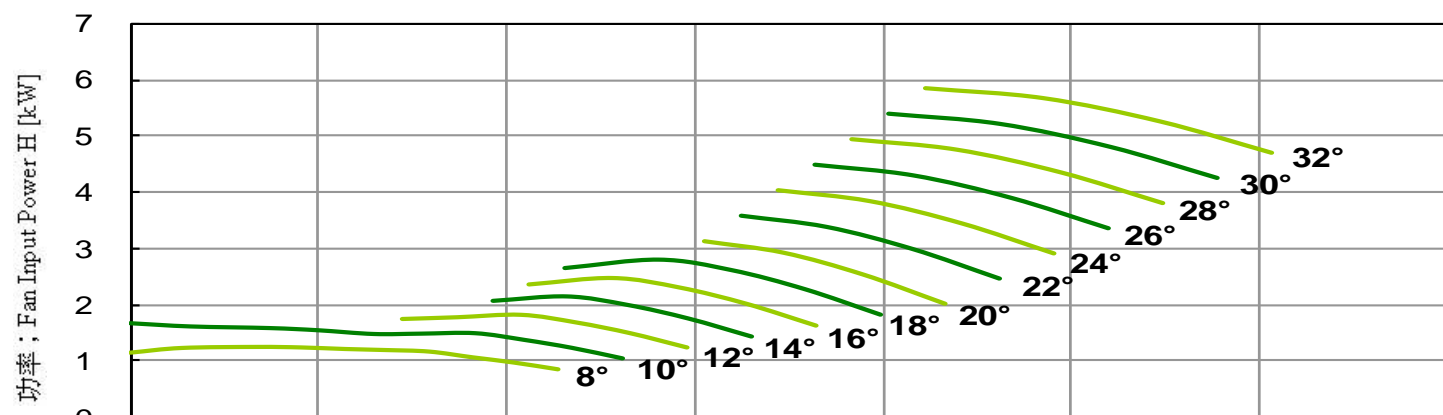
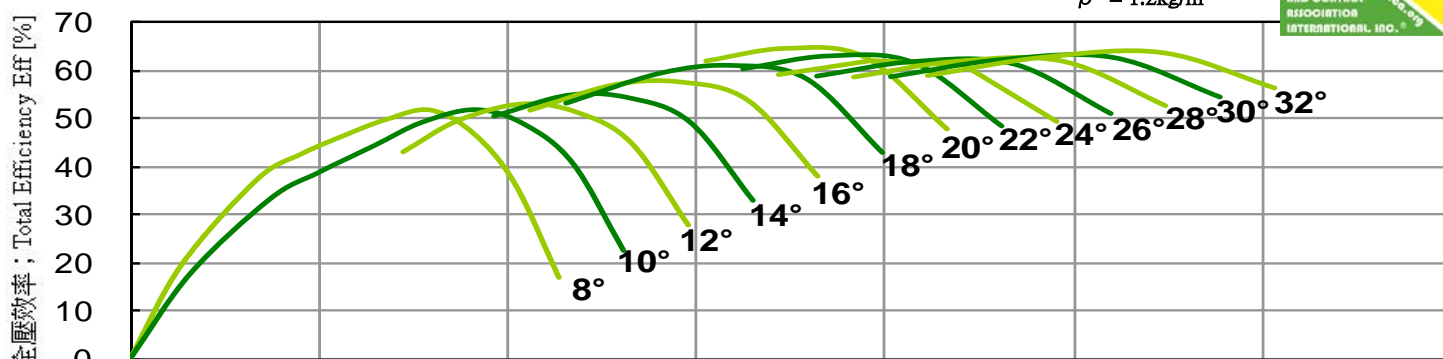
Performance curves 風機性能曲線

FEG 67

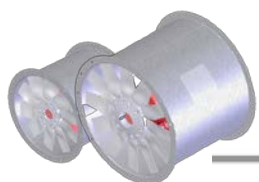
Fan Speed 風機轉速; $N = 1170$ [RPM] Outlet Area 出口面積; $A = 0.6362$ [m²]



$\rho = 1.2 \text{ kg/m}^3$



Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).



Axial Fan Driven Directly



LASD-900-300-12

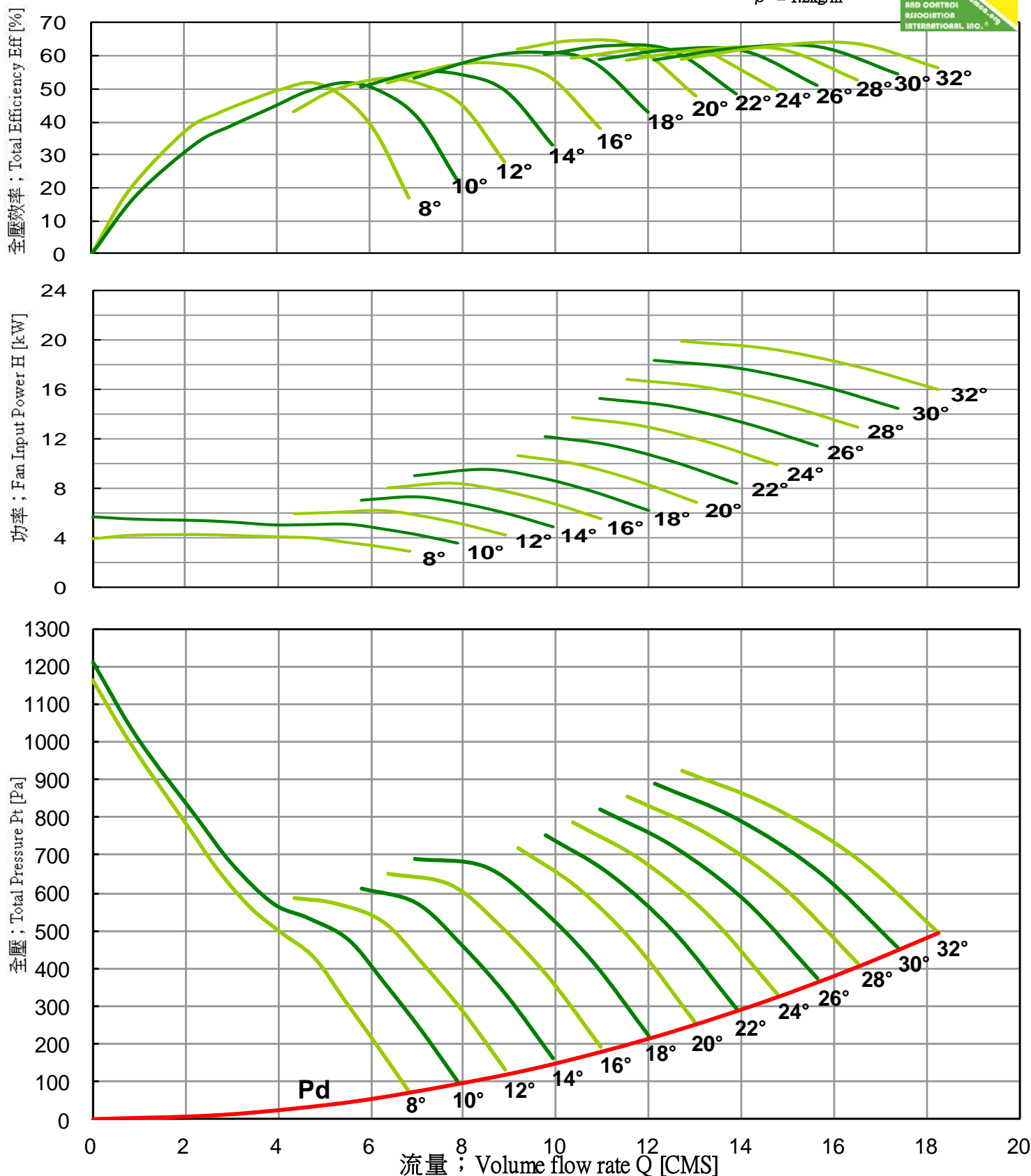
60Hz

Performance curves 風機性能曲線

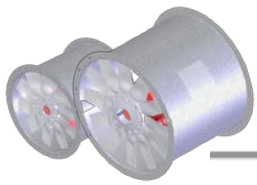
FEG 67

Fan Speed 風機轉速 ; N = 1760 [RPM] Outlet Area 出口面積 ; A = 0.6362 [m²]

$\rho = 1.2\text{kg/m}^3$



Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).



Axial Fan Driven Directly



LASD-1000-300-6 60Hz

Performance curves 風機性能曲線

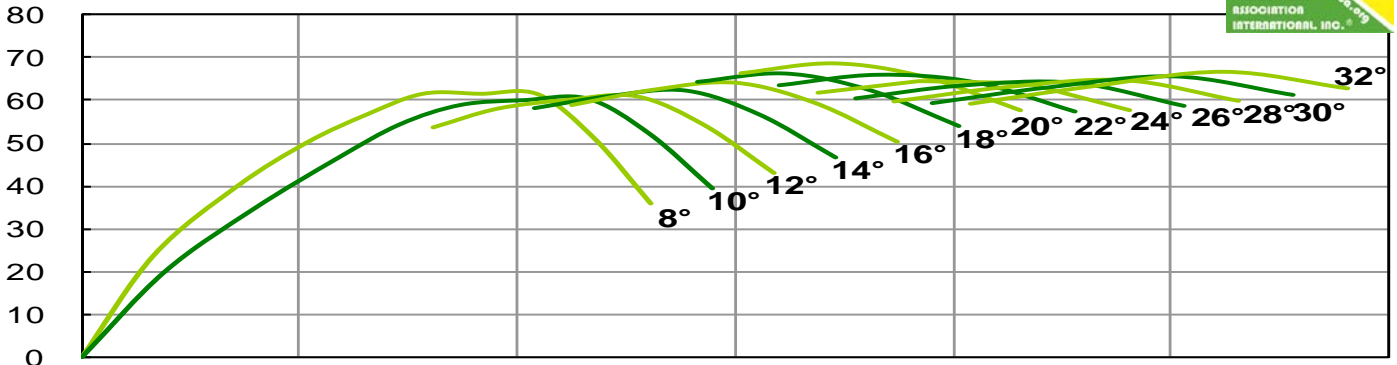
FEG 71

Fan Speed 風機轉速 ; N = 880 [RPM] Outlet Area 出口面積 ; A = 0.7933 [m²]

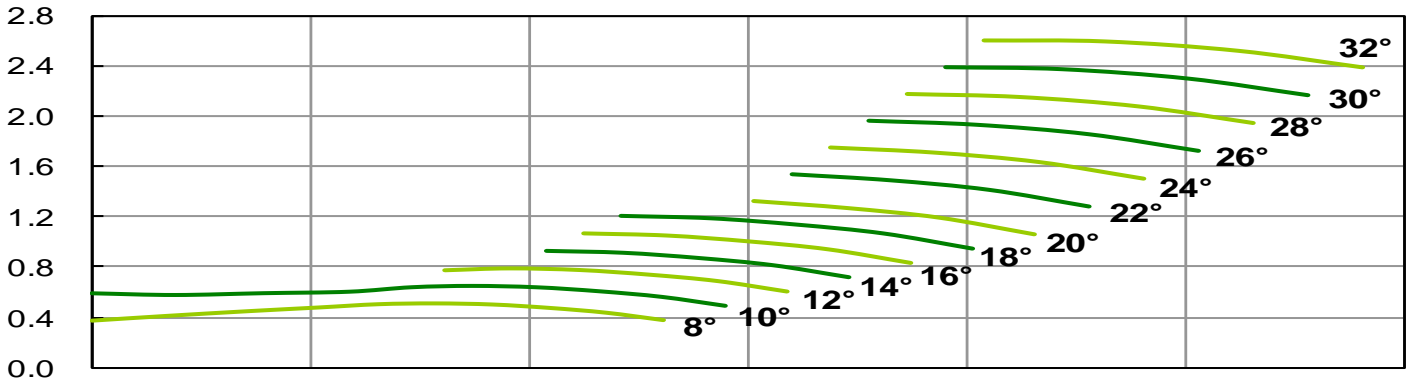
$\rho = 1.2\text{kg/m}^3$



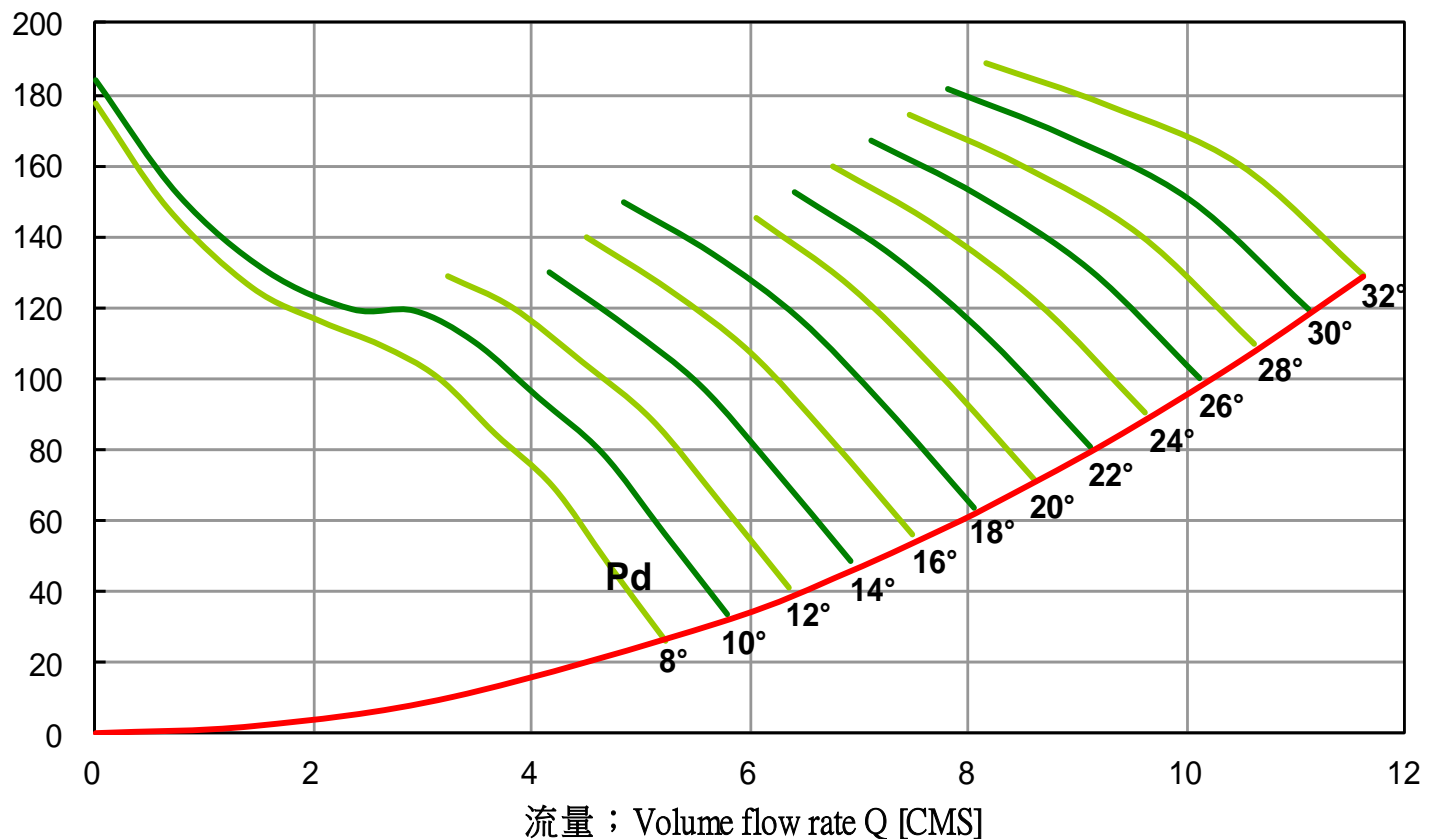
全壓效率 ; Total Efficiency Eff [%]



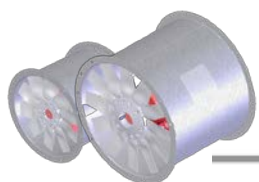
功率 ; Fan Input Power H [kW]



全壓 ; Total Pressure Pt [Pa]



Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).



Axial Fan Driven Directly



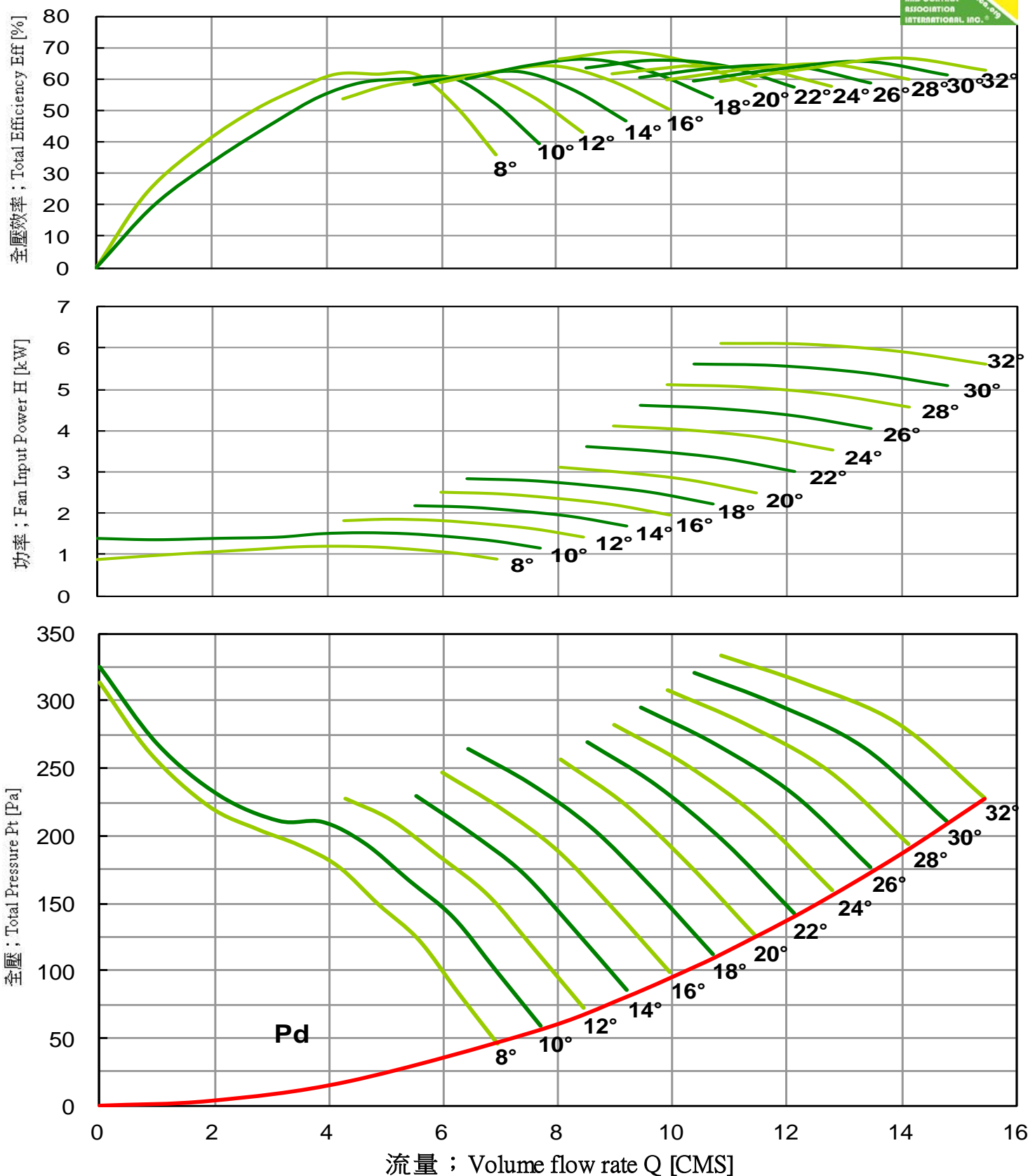
LASD-1000-300-6 60Hz

Performance curves 風機性能曲線

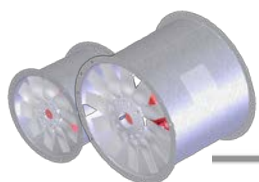
FEG 71

Fan Speed 風機轉速 ; N = 1170 [RPM] Outlet Area 出口面積 ; A = 0.7933 [m²]

$\rho = 1.2\text{kg/m}^3$



Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).



Axial Fan Driven Directly



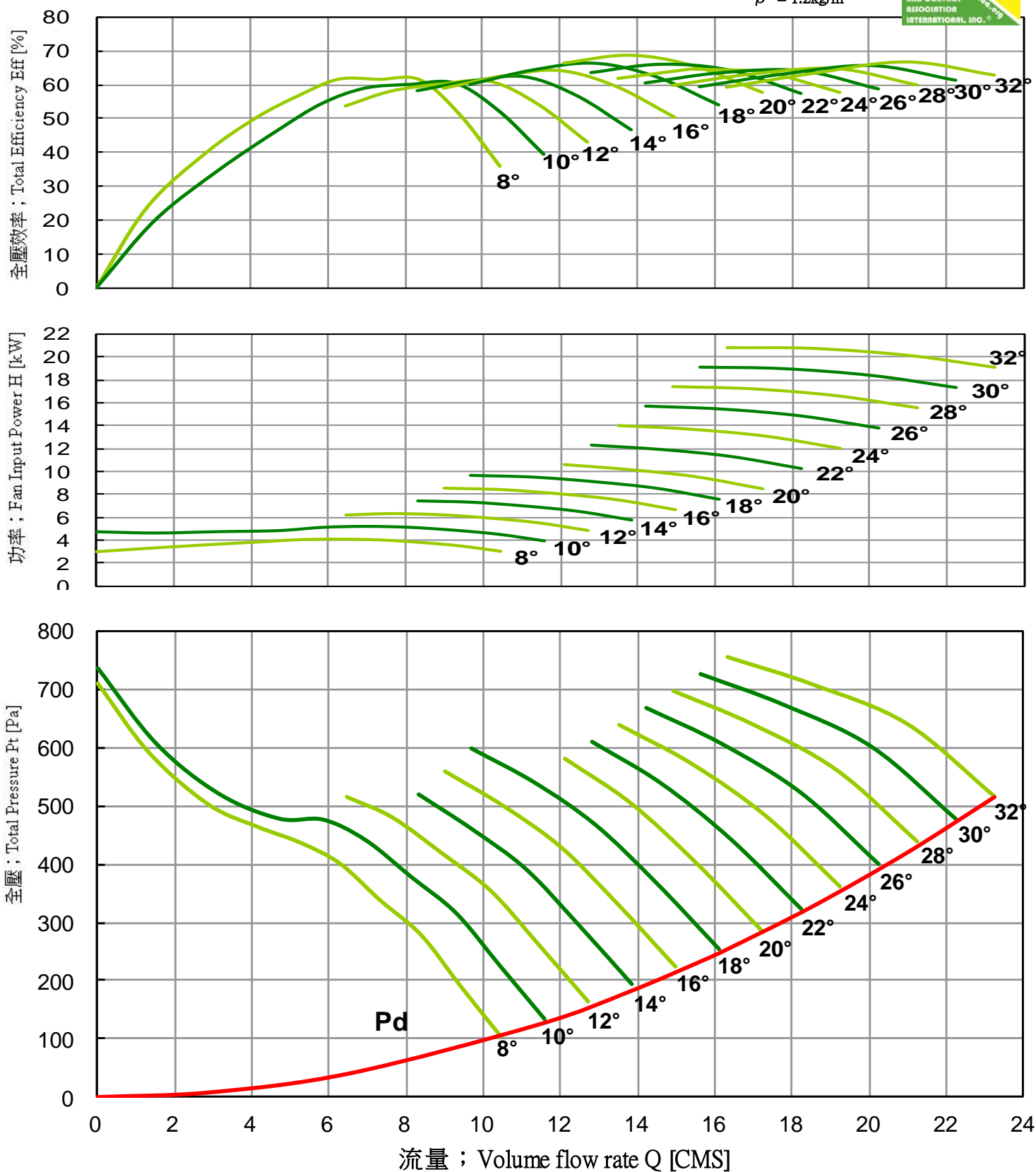
LASD-1000-300-6 **60Hz**

Performance curves 風機性能曲線

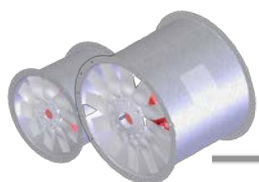
FEG 71

Fan Speed 風機轉速; $N = 1760$ [RPM] Outlet Area 出口面積; $A = 0.7933$ [m²]

$\rho = 1.2 \text{ kg/m}^3$



Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).



Axial Fan Driven Directly

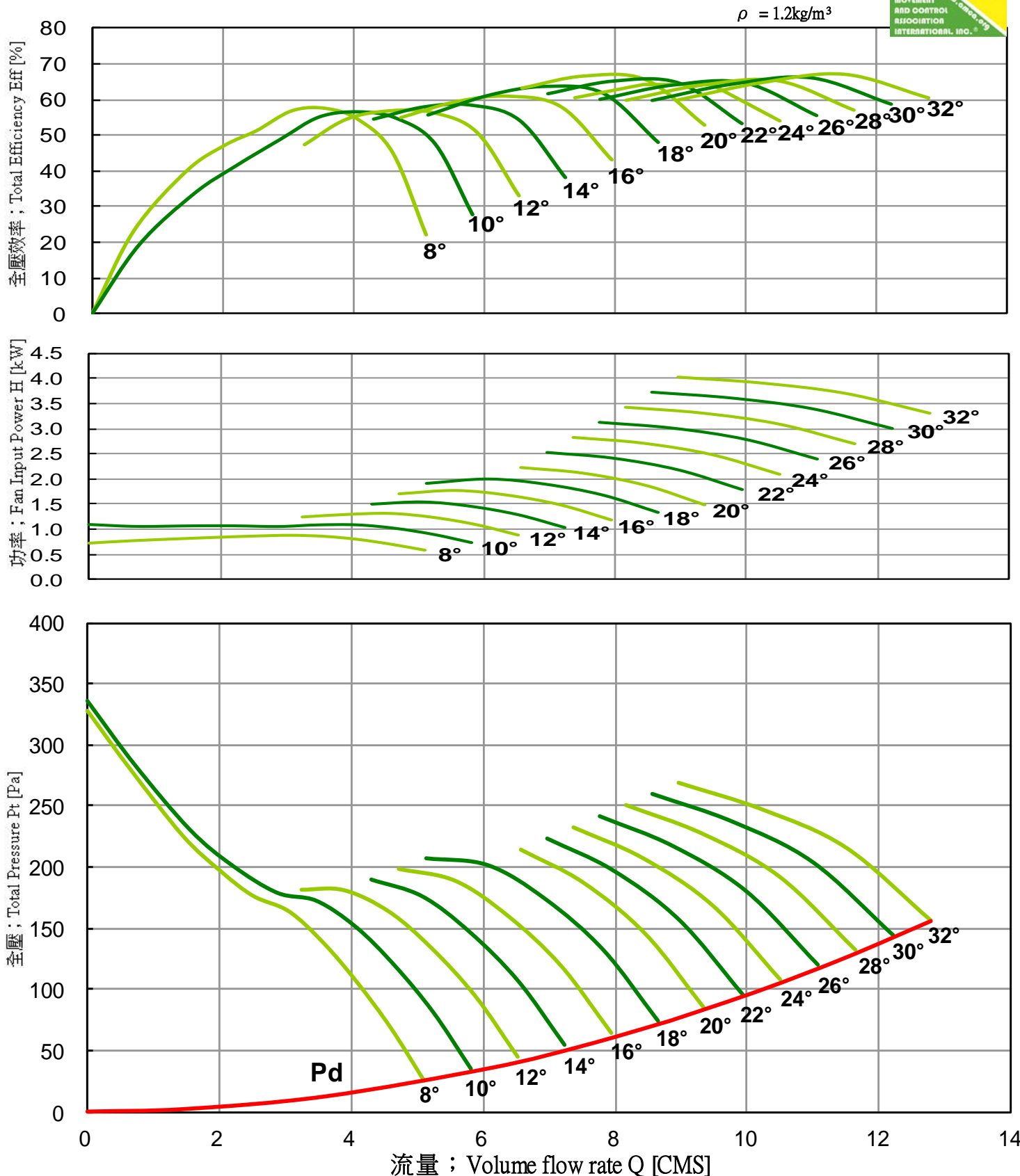
LASD-1000-300-12

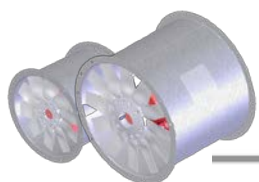
60Hz

Performance curves 風機性能曲線

FEG 71

Fan Speed 風機轉速 ; N = 880 [RPM] Outlet Area 出口面積 ; A = 0.7933 [m²]





Axial Fan Driven Directly

LASD-1000-300-12

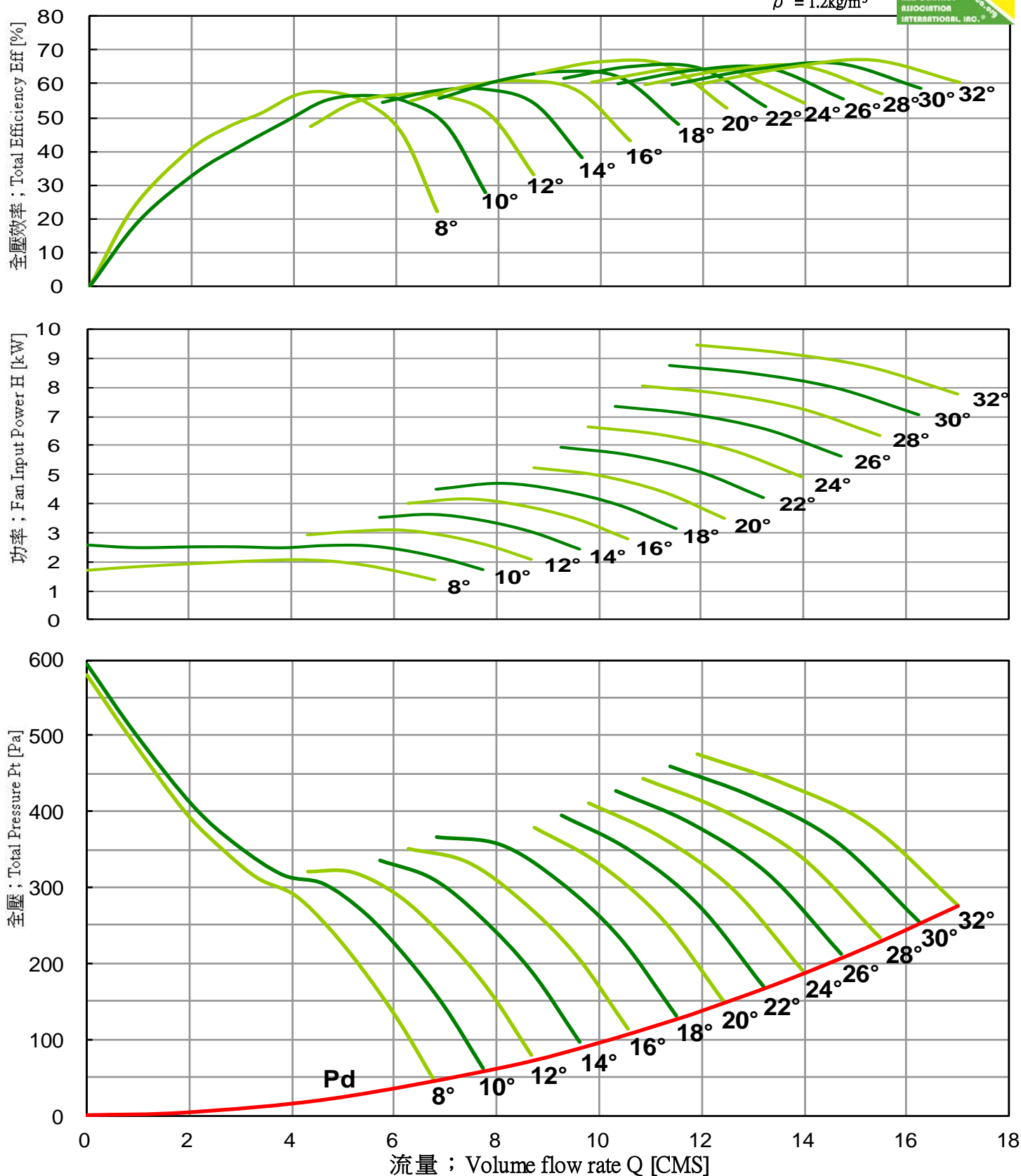
60Hz

Performance curves 風機性能曲線

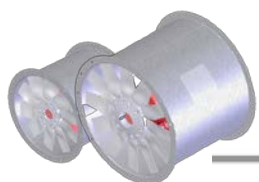
FEG 71

Fan Speed 風機轉速; $N = 1170$ [RPM] Outlet Area 出口面積; $A = 0.7933$ [m²]

$\rho = 1.2 \text{ kg/m}^3$



Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).



Axial Fan Driven Directly

LASD-1000-300-12

60Hz

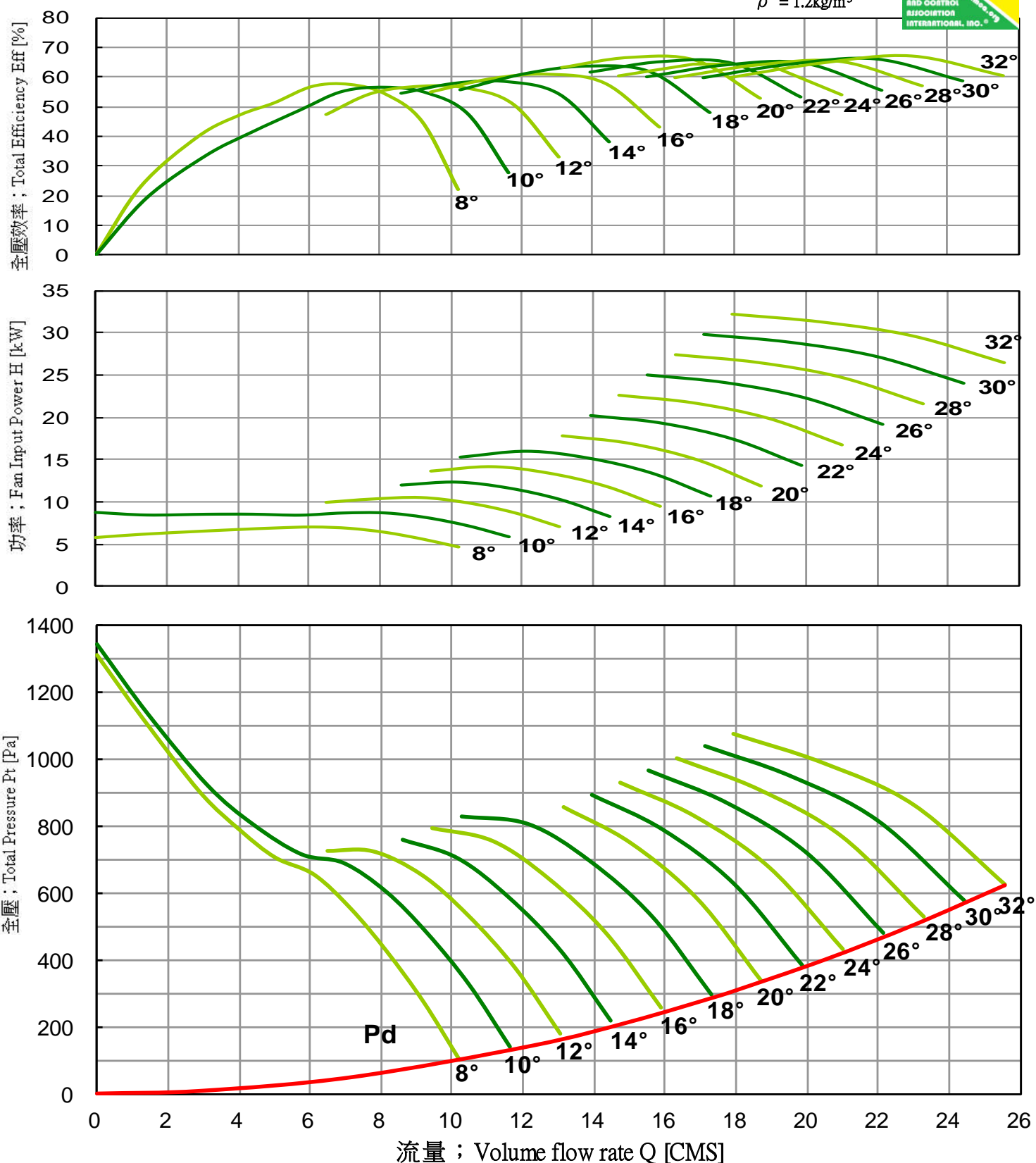
Performance curves 風機性能曲線

FEG 71

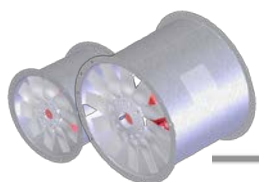
Fan Speed 風機轉速 ; N = 1760 [RPM] Outlet Area 出口面積 ; A = 0.7933 [m²]



$\rho = 1.2 \text{ kg/m}^3$



Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).



Axial Fan Driven Directly



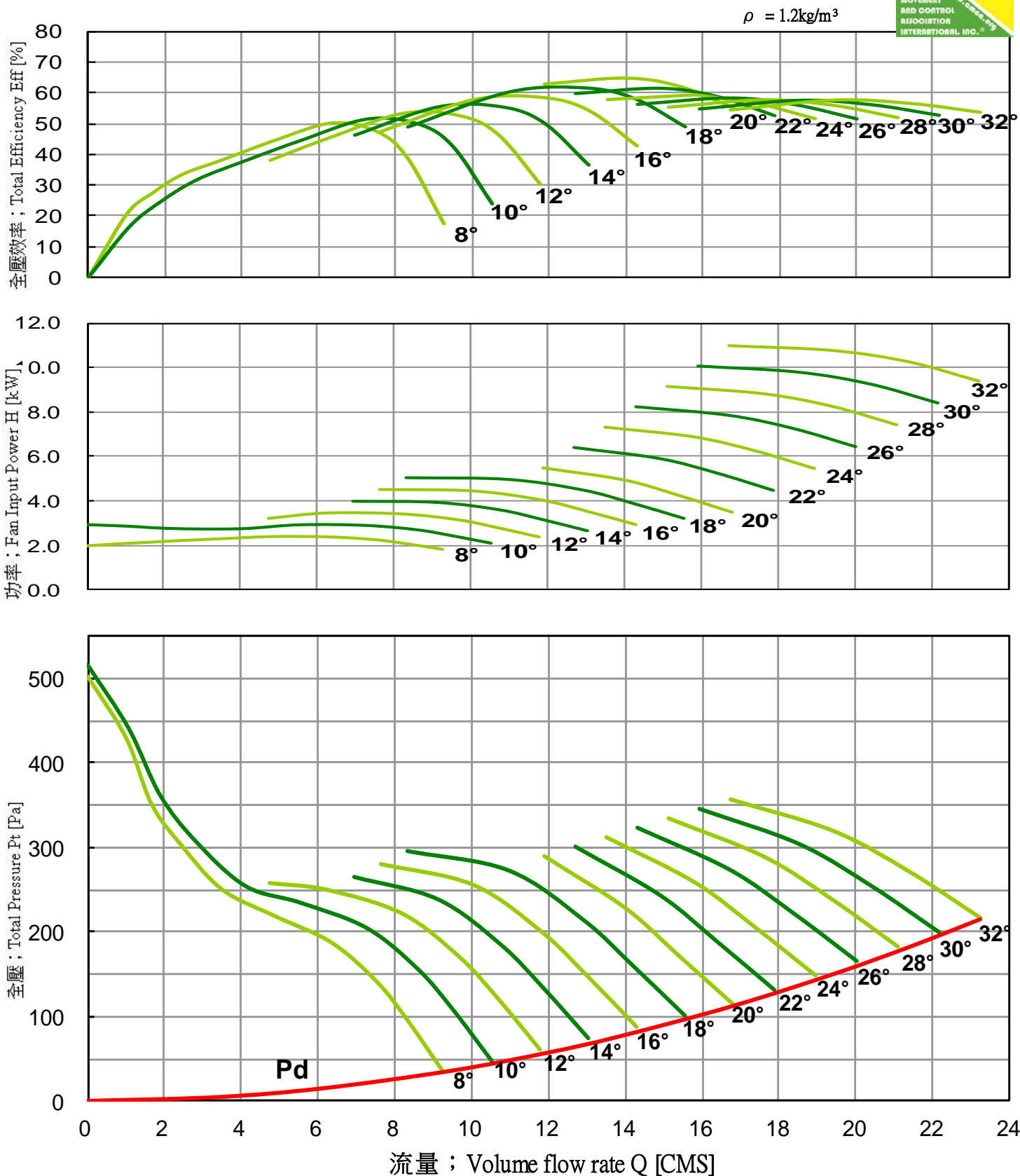
LASD-1250-550-7 **60Hz**

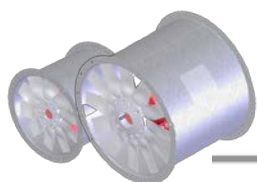
Performance curves 風機性能曲線

FEG 67

Fan Speed 風機轉速 ; N = 880 [RPM]

Outlet Area 出口面積 ; A = 1.2272 [m²]





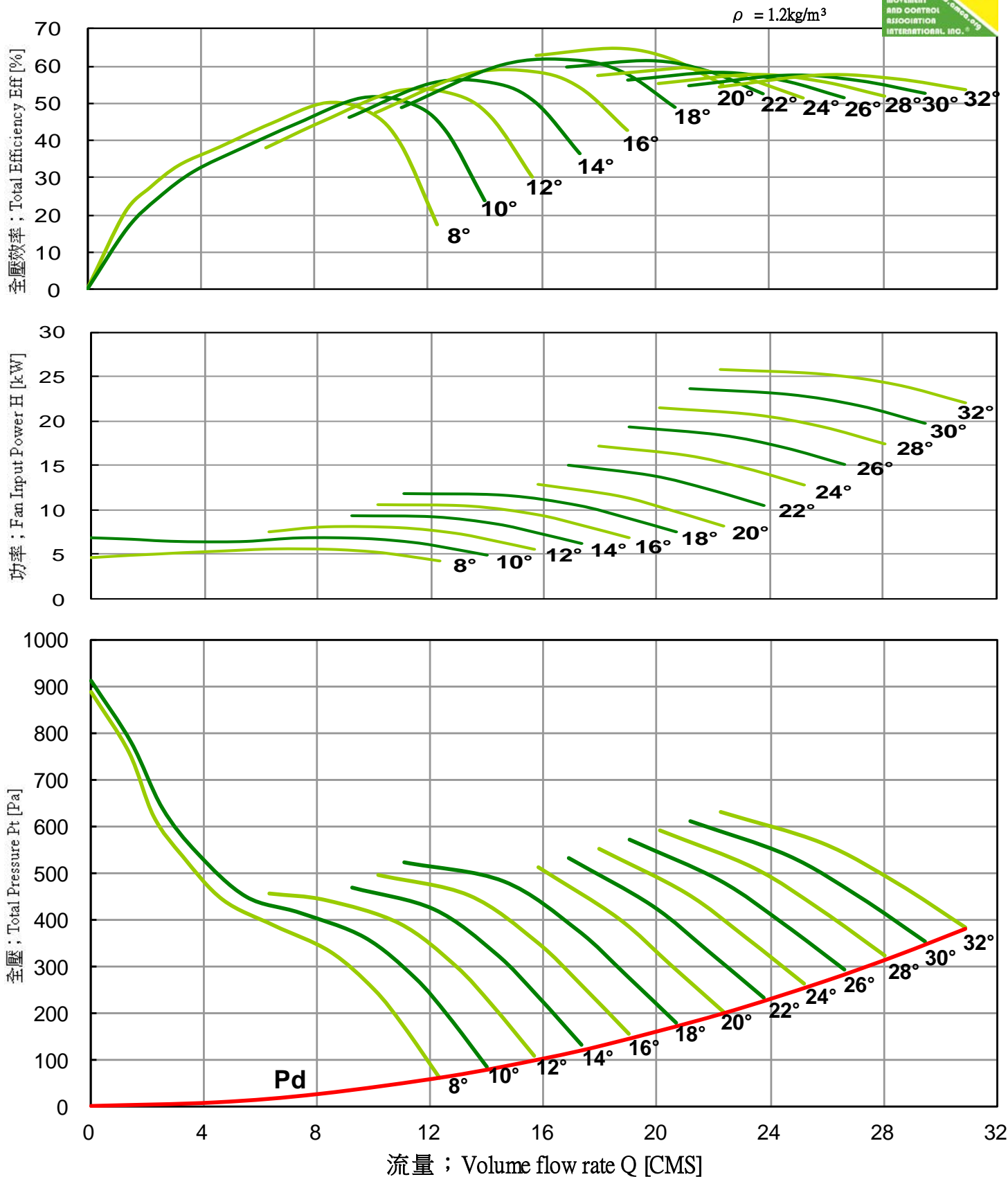
Axial Fan Driven Directly

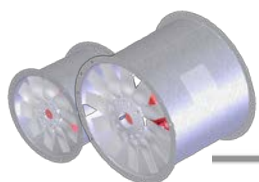
LASD-1250-550-7 60Hz

Performance curves 風機性能曲線

FEG 67

Fan Speed 風機轉速; $N = 1170$ [RPM] Outlet Area 出口面積; $A = 1.2272$ [m²]





Axial Fan Driven Directly

LASD-1250-550-7 60Hz

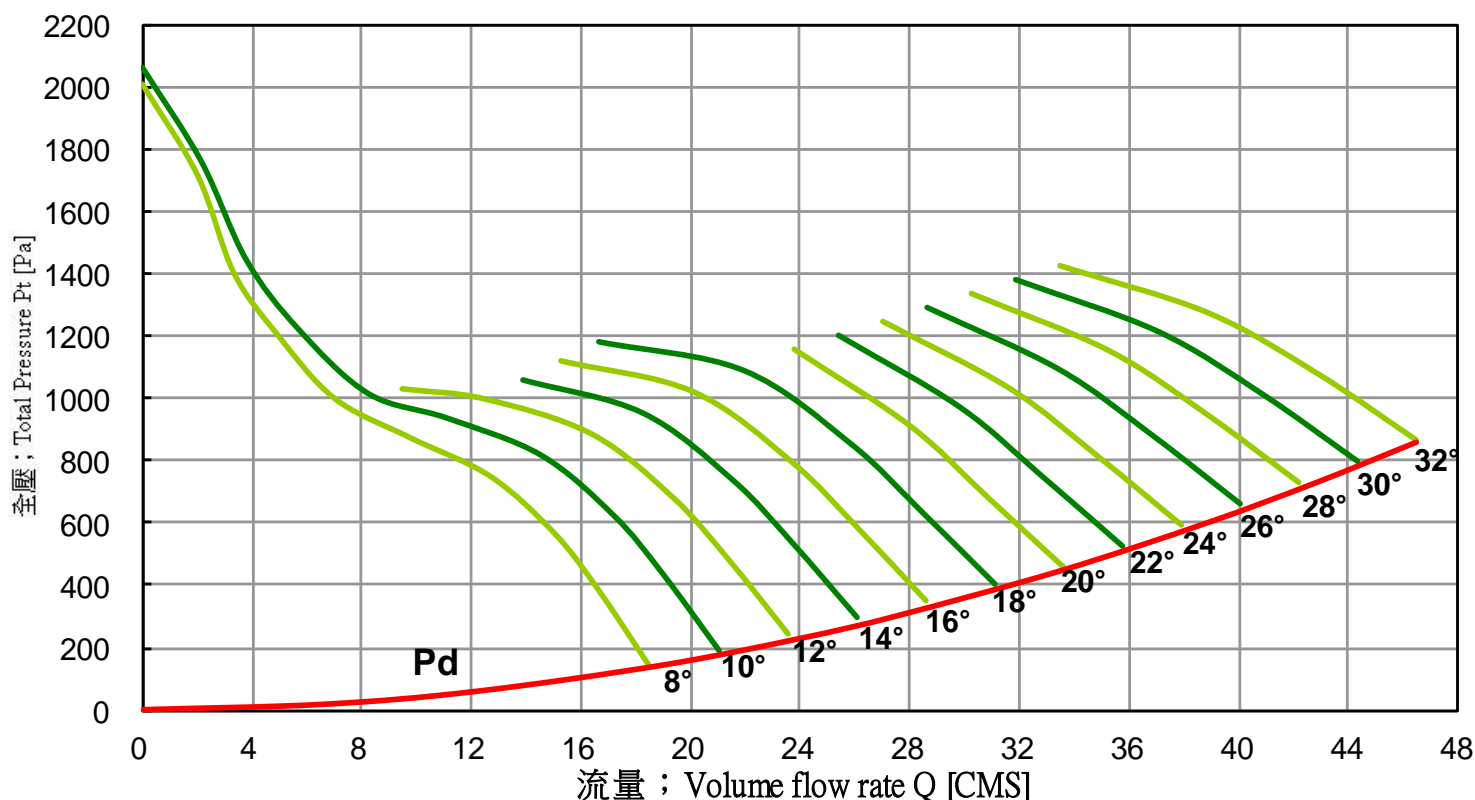
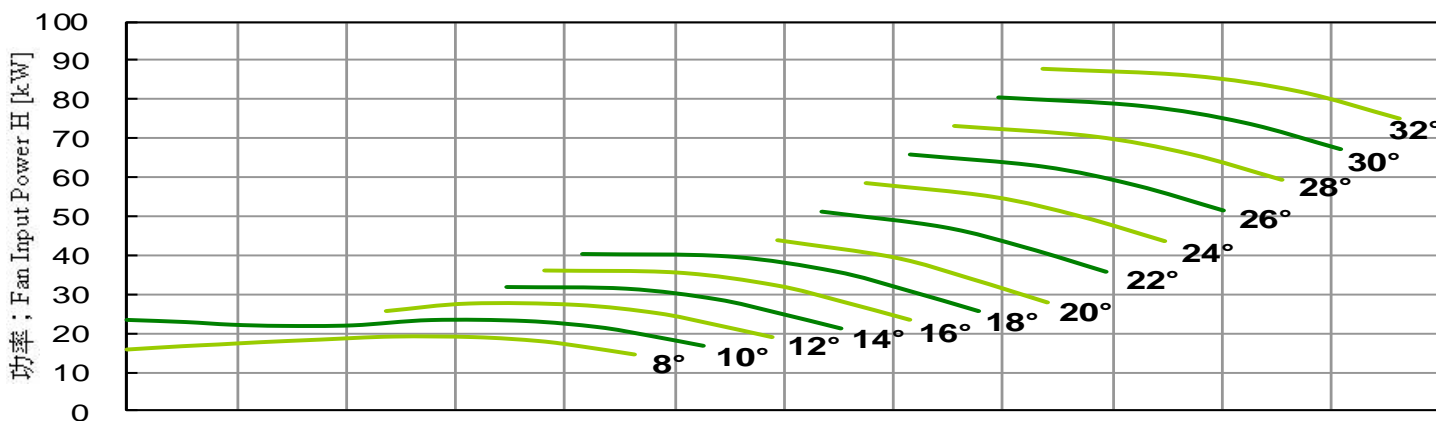
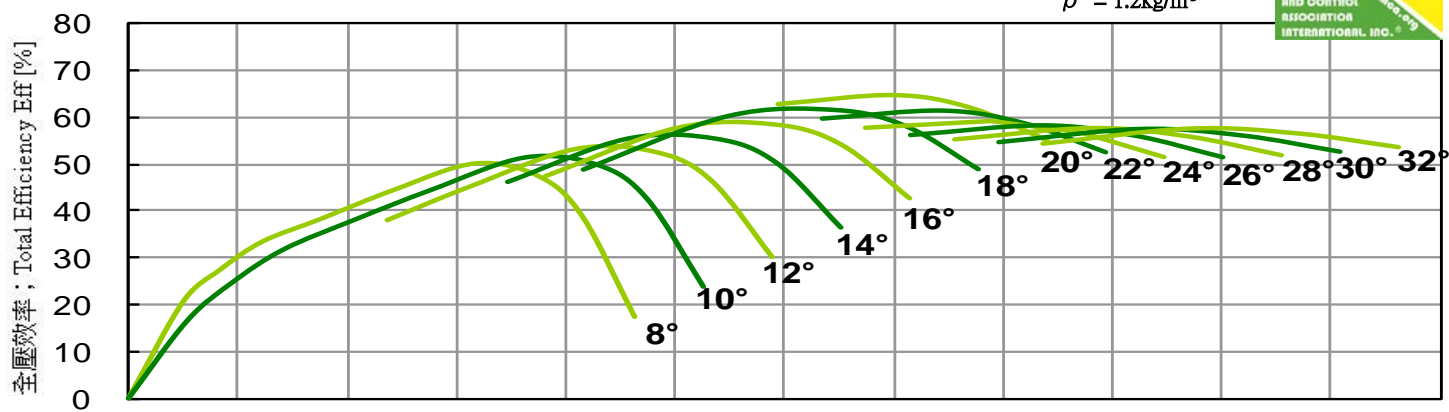
Performance curves 風機性能曲線

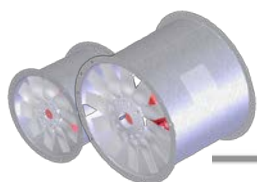
FEG 67

Fan Speed 風機轉速; $N = 1760$ [RPM] Outlet Area 出口面積; $A = 1.2272$ [m²]



$\rho = 1.2 \text{ kg/m}^3$





Axial Fan Driven Directly

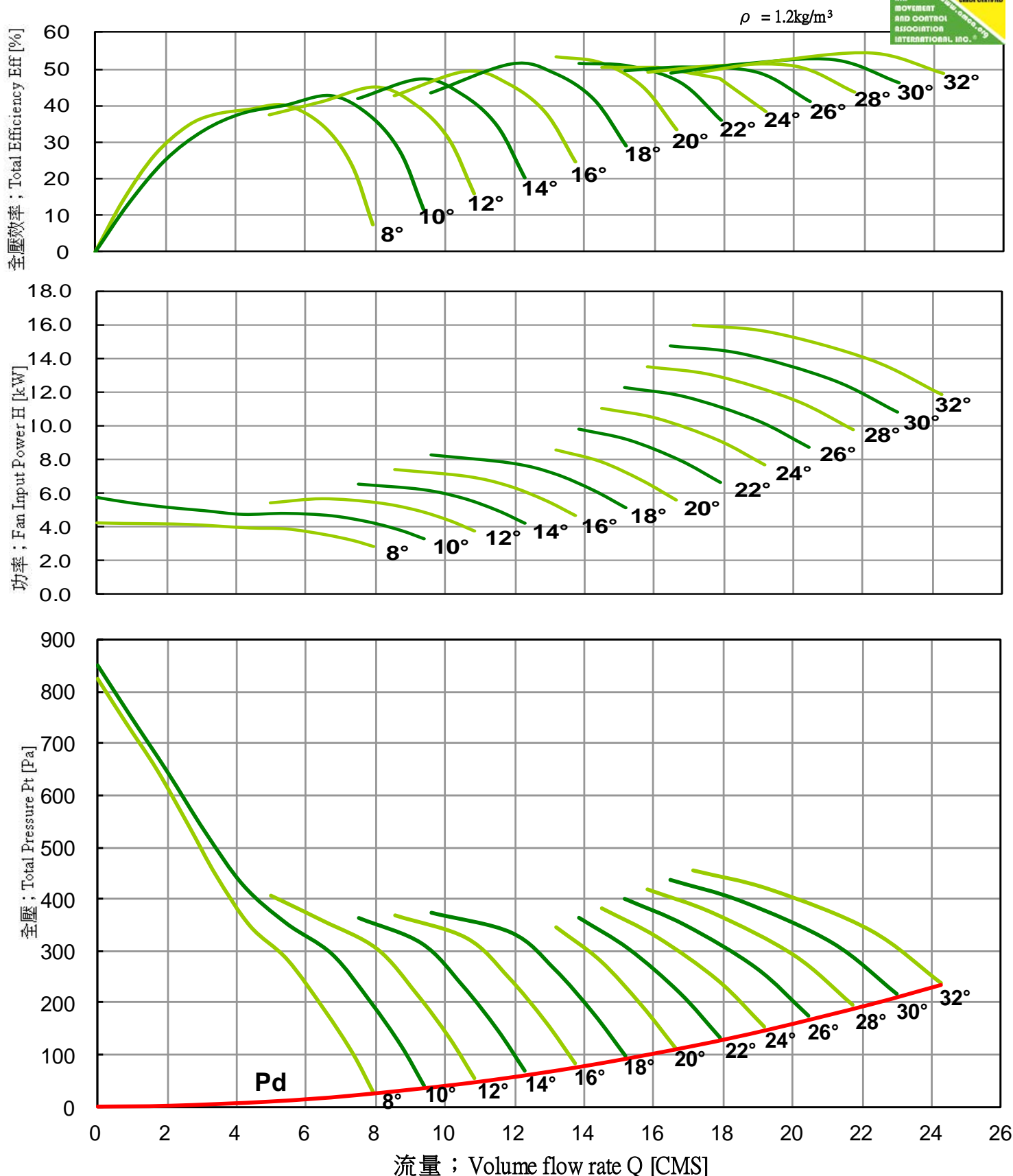
LASD-1250-550-14 60Hz

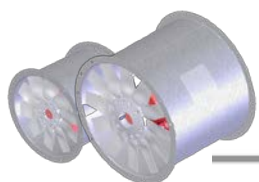
Performance curves 風機性能曲線

FEG 56

Fan Speed 風機轉速; N = 880 [RPM]

Outlet Area 出口面積; A = 1.2272 [m²]





Axial Fan Driven Directly

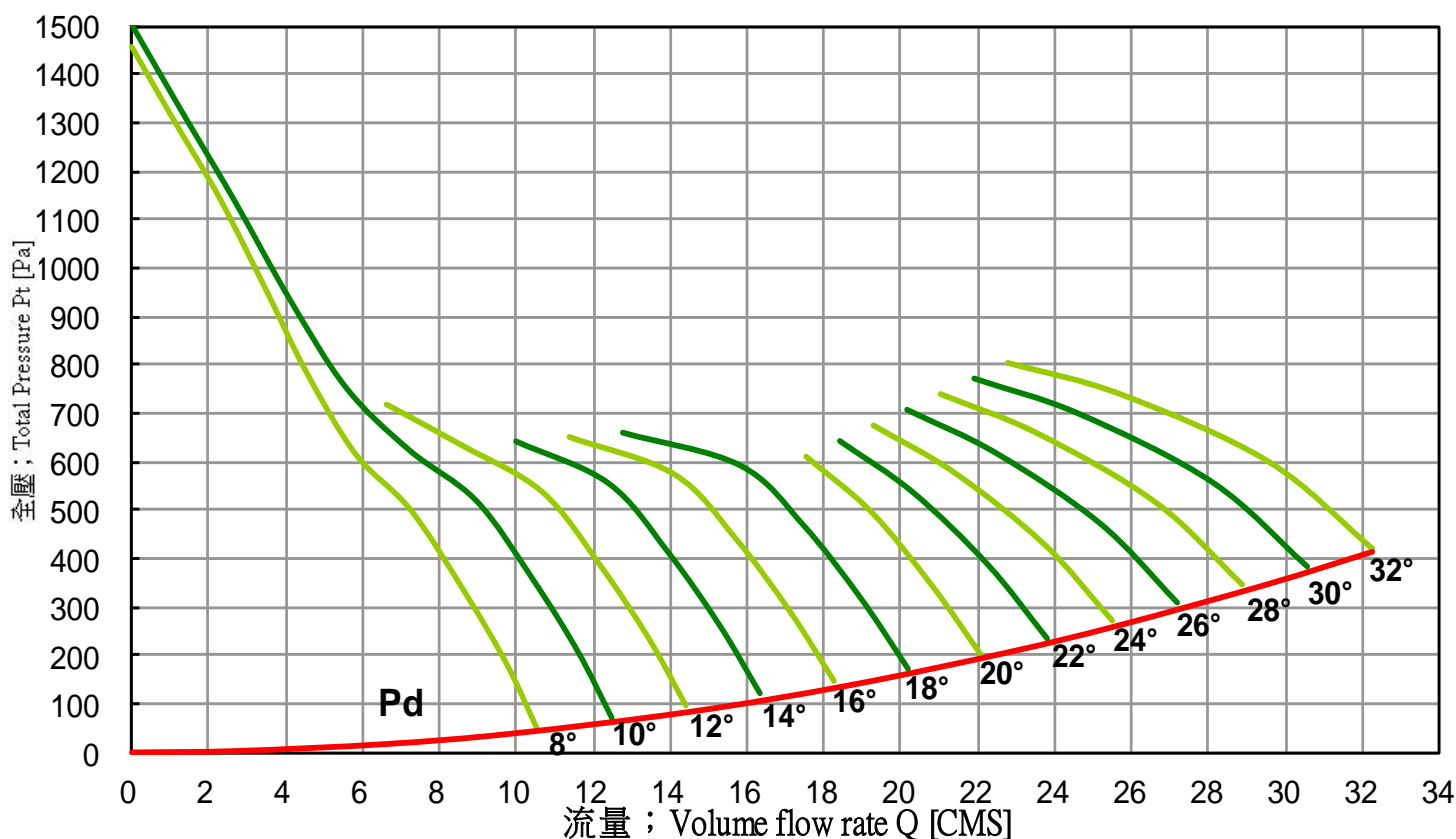
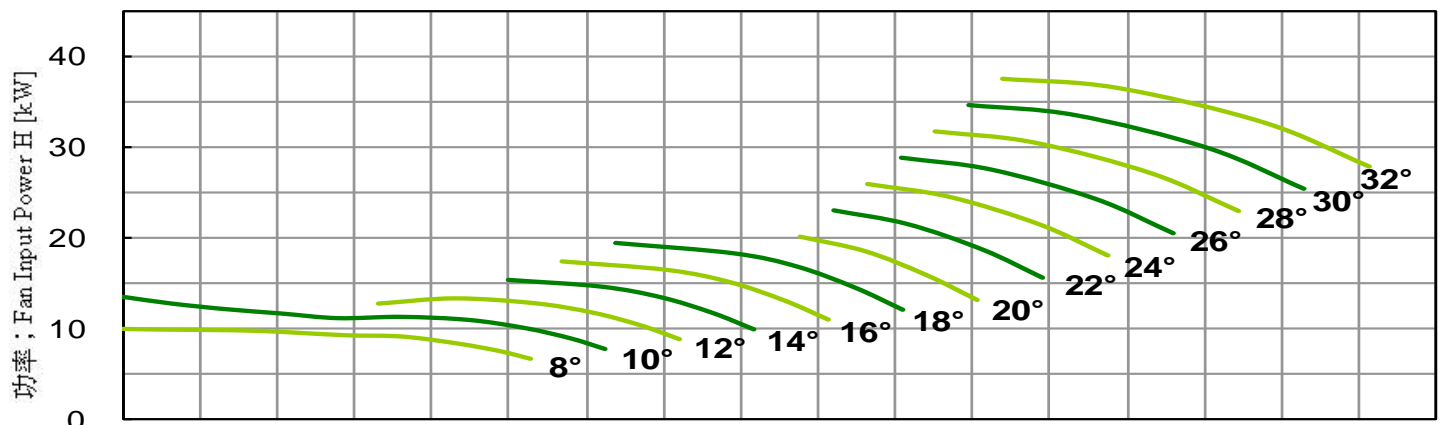
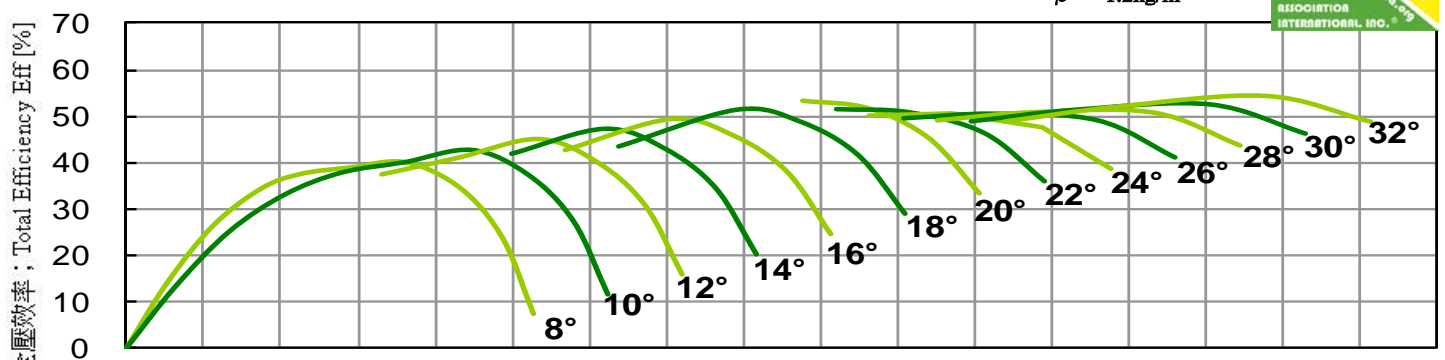
LASD-1250-550-14 60Hz

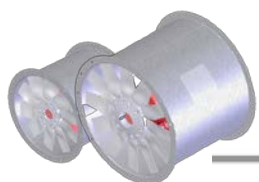
Performance curves 風機性能曲線

FEG 56

Fan Speed 風機轉速; $N = 1170$ [RPM] Outlet Area 出口面積; $A = 1.2272$ [m²]

$\rho = 1.2 \text{ kg/m}^3$





Axial Fan Driven Directly

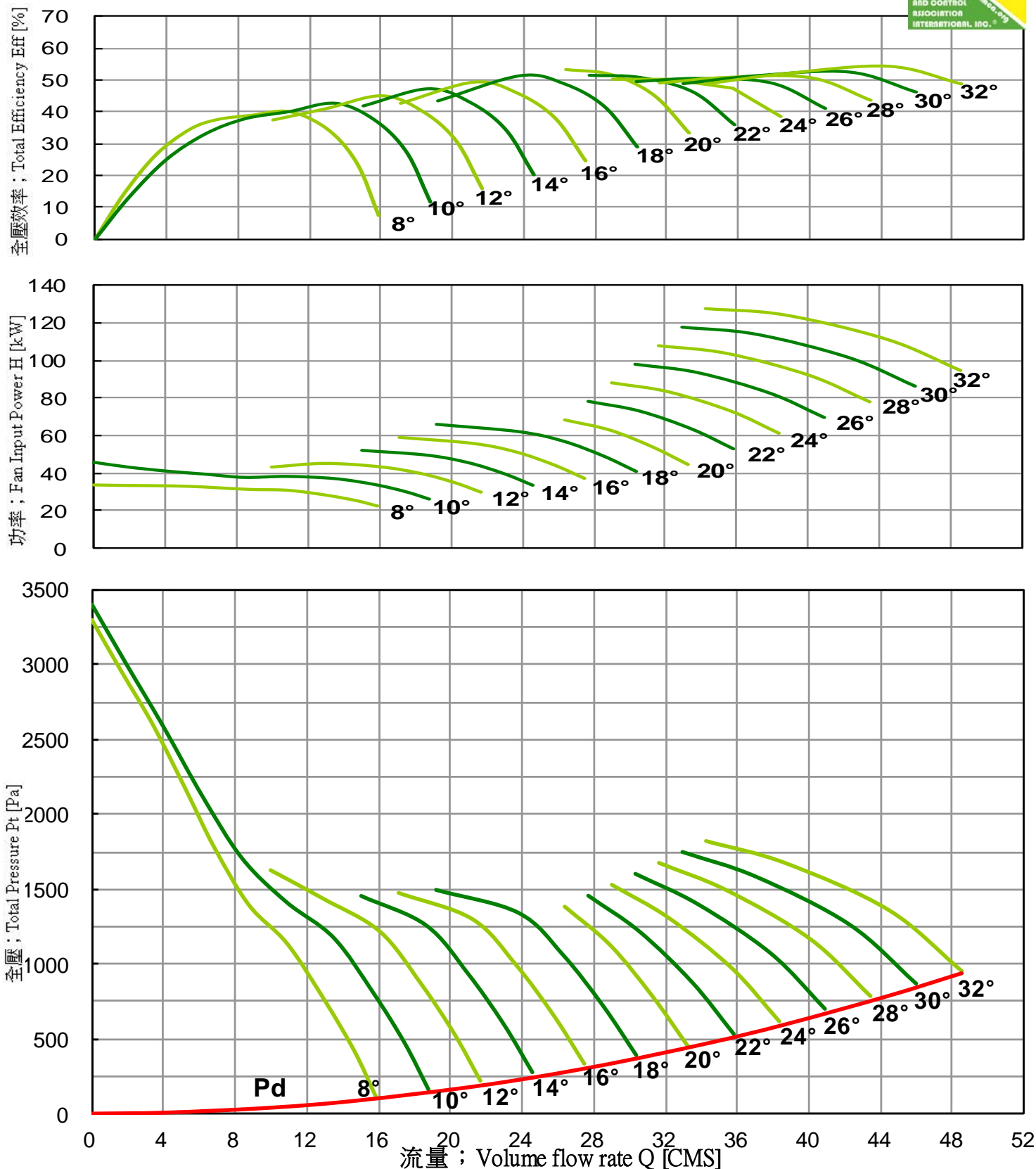
LASD-1250-550-14 60Hz

Performance curves 風機性能曲線

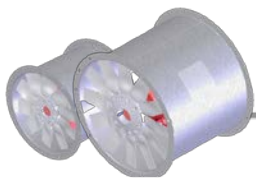
FEG 56

Fan Speed 風機轉速; $N = 1760$ [RPM] Outlet Area 出口面積; $A = 1.2272$ [m²]

$\rho = 1.2\text{kg/m}^3$



Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).



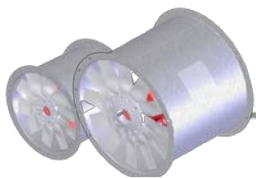
Axial Smoke-exhaust Fan



LASD-560-200-5 **60Hz** Sound Data 風機聲功率數值[dB]

型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶								Sound Power re 10 ⁻¹² Watts Octave Band [Hz]		入口處 A 加權聲功率位準 L _{WiA} [dBA]]
			63	125	250	500	1000	2000	4000	8000			
LASD-560-200-5/8°	3520	0	100	100	104	98	99	97	92	90	104		
LASD-560-200-5/8°	3520	280	101	101	103	97	100	100	96	91	105		
LASD-560-200-5/8°	3520	560	99	99	104	101	104	102	94	88	108		
LASD-560-200-5/8°	3520	840	100	100	110	102	99	96	91	87	106		
LASD-560-200-5/20°	3520	0	102	102	109	102	102	98	92	90	107		
LASD-560-200-5/20°	3520	296	102	102	110	101	100	97	90	88	106		
LASD-560-200-5/20°	3520	592	102	102	107	100	99	96	90	89	104		
LASD-560-200-5/20°	3520	832	103	103	108	100	101	98	94	92	106		
LASD-560-200-5/32°	3520	0	104	104	111	106	104	101	94	92	109		
LASD-560-200-5/32°	3520	320	104	104	112	104	103	100	94	92	109		
LASD-560-200-5/32°	3520	644	104	104	111	103	103	99	95	93	108		
LASD-560-200-5/32°	3520	960	105	105	109	102	102	100	96	94	108		
LASD-560-200-5/8°	1760	0	85	89	83	84	82	77	75	67	86		
LASD-560-200-5/8°	1760	70	86	88	82	85	85	81	76	67	89		
LASD-560-200-5/8°	1760	140	84	89	86	89	87	79	73	66	90		
LASD-560-200-5/8°	1760	210	85	95	87	84	81	76	72	67	87		
LASD-560-200-5/20°	1760	0	87	94	87	87	83	77	75	68	88		
LASD-560-200-5/20°	1760	74	87	95	86	85	82	75	73	66	87		
LASD-560-200-5/20°	1760	148	87	92	85	84	81	75	74	68	86		
LASD-560-200-5/20°	1760	208	88	93	85	86	83	79	77	72	88		
LASD-560-200-5/32°	1760	0	89	96	91	89	86	79	77	72	91		
LASD-560-200-5/32°	1760	80	89	97	89	88	85	79	77	73	90		
LASD-560-200-5/32°	1760	161	89	96	88	88	84	80	78	75	90		
LASD-560-200-5/32°	1760	240	90	94	87	87	85	81	79	76	90		
LASD-560-200-5/8°	1170	0	79	80	75	74	70	67	61	53	76		
LASD-560-200-5/8°	1170	31	78	79	75	76	74	69	62	53	78		
LASD-560-200-5/8°	1170	62	78	80	79	79	73	67	60	53	79		
LASD-560-200-5/8°	1170	93	82	86	76	73	69	65	60	55	76		
LASD-560-200-5/20°	1170	0	82	85	78	76	71	67	62	55	78		
LASD-560-200-5/20°	1170	33	83	86	77	74	69	65	60	53	77		
LASD-560-200-5/20°	1170	65	81	83	76	73	69	66	62	56	76		
LASD-560-200-5/20°	1170	92	82	84	77	75	72	69	65	60	78		
LASD-560-200-5/32°	1170	0	84	87	81	78	73	69	65	60	80		
LASD-560-200-5/32°	1170	35	85	88	80	77	73	69	66	62	80		
LASD-560-200-5/32°	1170	71	84	87	79	77	73	70	67	64	80		
LASD-560-200-5/32°	1170	106	84	85	78	77	74	71	68	65	80		

The sound power level ratings shown are in decibels referred to 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{Wi} and L_{WiA} sound power levels for Installation Type B : free inlet, ducted outlet.



Axial Smoke-exhaust Fan



LASD-560-200-10 **60Hz** Sound Data 風機聲功率數值[dB]

型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶 Sound Power re 10 ⁻¹² Watts Octave Band [Hz]								入口處 A 加權聲功率位準 L _{WA} [dBA]
			63	125	250	500	1000	2000	4000	8000	
LASD-560-200-10/8°	3520	0	97	97	103	104	101	99	95	93	106
LASD-560-200-10/8°	3520	576	95	95	100	101	103	103	99	94	108
LASD-560-200-10/8°	3520	1148	102	102	102	108	103	99	94	90	108
LASD-560-200-10/8°	3520	1724	102	102	102	107	102	98	95	92	108
LASD-560-200-10/20°	3520	0	103	103	104	108	104	100	95	94	109
LASD-560-200-10/20°	3520	300	102	102	105	107	103	100	95	93	108
LASD-560-200-10/20°	3520	604	102	102	104	106	102	99	94	93	107
LASD-560-200-10/20°	3520	960	103	103	106	104	104	102	98	94	109
LASD-560-200-10/32°	3520	0	104	104	105	109	107	103	97	94	111
LASD-560-200-10/32°	3520	392	104	104	107	109	106	101	96	93	110
LASD-560-200-10/32°	3520	788	104	104	109	108	104	100	96	93	109
LASD-560-200-10/32°	3520	1160	103	103	111	106	104	101	99	94	110
LASD-560-200-10/8°	1760	0	82	88	89	86	84	80	78	70	89
LASD-560-200-10/8°	1760	144	80	85	86	88	88	84	79	71	92
LASD-560-200-10/8°	1760	287	87	87	93	88	84	79	75	70	90
LASD-560-200-10/8°	1760	431	87	87	92	87	83	80	77	72	90
LASD-560-200-10/20°	1760	0	88	89	93	89	85	80	79	70	91
LASD-560-200-10/20°	1760	75	87	90	92	88	85	80	78	70	90
LASD-560-200-10/20°	1760	151	87	89	91	87	84	79	78	70	90
LASD-560-200-10/20°	1760	240	88	91	89	89	87	83	79	72	91
LASD-560-200-10/32°	1760	0	89	90	94	92	88	82	79	72	93
LASD-560-200-10/32°	1760	98	89	92	94	91	86	81	78	71	92
LASD-560-200-10/32°	1760	197	89	94	93	89	85	81	78	71	91
LASD-560-200-10/32°	1760	290	88	96	91	89	86	84	79	74	92
LASD-560-200-10/8°	1170	0	77	80	80	76	73	70	64	56	79
LASD-560-200-10/8°	1170	64	74	77	78	79	77	72	65	57	81
LASD-560-200-10/8°	1170	127	78	82	84	77	72	68	63	58	80
LASD-560-200-10/8°	1170	190	78	81	83	76	72	69	65	60	79
LASD-560-200-10/20°	1170	0	80	82	84	78	73	71	65	56	80
LASD-560-200-10/20°	1170	33	80	82	83	77	73	70	64	56	80
LASD-560-200-10/20°	1170	67	79	81	82	76	72	70	64	56	79
LASD-560-200-10/20°	1170	106	81	81	80	79	76	72	66	59	81
LASD-560-200-10/32°	1170	0	81	83	85	81	76	71	66	59	82
LASD-560-200-10/32°	1170	43	82	84	85	79	74	70	65	58	81
LASD-560-200-10/32°	1170	87	83	85	84	78	74	70	65	58	81
LASD-560-200-10/32°	1170	128	84	84	82	78	76	72	67	62	81

The sound power level ratings shown are in decibels referred to 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wi} and L_{WA} sound power levels for Installation Type B : free inlet, ducted outlet.



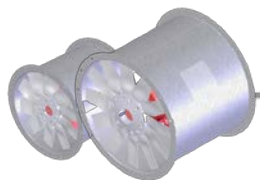
LASD-630-200-5 60Hz

Sound Data 風機聲功率數值[dB]



型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶				Sound Power re 10 ⁻¹² Watts Octave Band [Hz]				入口處 A 加權聲功率位準 L _{WA} [dBA]]
			63	125	250	500	1000	2000	4000	8000	
LASD-630-200-5/8°	3520	0	98	98	105	105	102	99	95	92	107
LASD-630-200-5/8°	3520	417	99	99	102	103	100	99	97	93	106
LASD-630-200-5/8°	3520	708	101	101	102	104	106	104	98	91	110
LASD-630-200-5/8°	3520	853	103	103	103	106	106	101	96	91	109
LASD-630-200-5/20°	3520	0	105	105	112	109	104	100	96	93	110
LASD-630-200-5/20°	3520	657	106	106	110	108	104	99	95	91	109
LASD-630-200-5/20°	3520	917	107	107	108	106	103	99	94	92	108
LASD-630-200-5/20°	3520	1188	111	111	107	108	109	106	100	95	113
LASD-630-200-5/32°	3520	0	108	108	113	112	109	104	100	95	114
LASD-630-200-5/32°	3520	430	108	108	114	111	107	103	99	95	113
LASD-630-200-5/32°	3520	797	108	108	111	109	106	103	98	95	111
LASD-630-200-5/32°	3520	1283	108	108	109	108	105	101	97	95	110
LASD-630-200-5/8°	1760	0	83	90	90	87	84	80	77	73	89
LASD-630-200-5/8°	1760	104	84	87	88	85	84	82	78	73	89
LASD-630-200-5/8°	1760	177	86	87	89	91	89	83	76	72	93
LASD-630-200-5/8°	1760	213	88	88	91	91	86	81	76	72	92
LASD-630-200-5/20°	1760	0	90	97	94	89	85	81	78	74	92
LASD-630-200-5/20°	1760	164	91	95	93	89	84	80	76	73	91
LASD-630-200-5/20°	1760	229	92	93	91	88	84	79	77	74	90
LASD-630-200-5/20°	1760	297	96	92	93	94	91	85	80	76	95
LASD-630-200-5/32°	1760	0	93	98	97	94	89	85	80	76	95
LASD-630-200-5/32°	1760	107	93	99	96	92	88	84	80	76	94
LASD-630-200-5/32°	1760	199	93	96	94	91	88	83	80	77	93
LASD-630-200-5/32°	1760	321	93	94	93	90	86	82	80	78	92

The sound power level ratings shown are in decibels referred to 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wi} and L_{WA} sound power levels for Installation Type B : free inlet, ducted outlet.



LASD-630-200-5 60Hz

Sound Data 風機聲功率數值[dB]



型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10^{-12} 為基準) 八音階頻帶 Sound Power re 10^{-12} Watts Octave Band [Hz]								入口處 A 加權聲功率位準 L _{wiA} [dBA]
			63	125	250	500	1000	2000	4000	8000	
LASD-630-200-5/8°	1170	0	81	81	80	76	73	69	66	61	78
LASD-630-200-5/8°	1170	46	78	79	79	74	74	71	66	61	79
LASD-630-200-5/8°	1170	78	78	79	81	81	77	70	64	61	82
LASD-630-200-5/8°	1170	94	79	80	83	80	74	69	64	61	81
LASD-630-200-5/20°	1170	0	88	88	83	77	74	70	67	62	81
LASD-630-200-5/20°	1170	73	86	86	82	77	73	68	65	62	80
LASD-630-200-5/20°	1170	101	84	84	80	77	72	69	66	63	79
LASD-630-200-5/20°	1170	131	83	84	85	84	79	73	68	65	84
LASD-630-200-5/32°	1170	0	89	89	87	82	78	73	69	64	84
LASD-630-200-5/32°	1170	47	90	90	84	81	77	72	69	65	83
LASD-630-200-5/32°	1170	88	87	87	83	80	77	72	69	66	83
LASD-630-200-5/32°	1170	142	85	85	82	79	75	72	70	68	81
LASD-630-200-5/8°	880	0	75	75	72	69	65	62	58	53	71
LASD-630-200-5/8°	880	26	72	73	70	69	67	63	58	53	71
LASD-630-200-5/8°	880	44	72	74	76	74	68	61	57	54	74
LASD-630-200-5/8°	880	53	73	76	76	71	66	61	57	54	73
LASD-630-200-5/20°	880	0	82	79	74	70	66	63	59	54	73
LASD-630-200-5/20°	880	41	80	78	74	69	65	61	58	55	72
LASD-630-200-5/20°	880	57	78	76	73	69	64	62	59	56	71
LASD-630-200-5/20°	880	74	77	78	79	76	70	65	61	58	77
LASD-630-200-5/32°	880	0	83	82	79	74	70	65	61	56	76
LASD-630-200-5/32°	880	27	84	81	77	73	69	65	61	57	75
LASD-630-200-5/32°	880	50	81	79	76	73	68	65	62	59	75
LASD-630-200-5/32°	880	80	79	78	75	71	67	65	63	61	74

The sound power level ratings shown are in decibels referred to 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wi} and L_{wiA} sound power levels for Installation Type B : free inlet, ducted outlet.



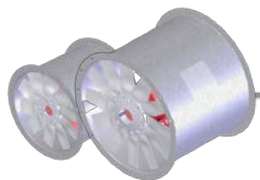
LASD-630-200-10 60Hz

Sound Data 風機聲功率數值[dB]



型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶				Sound Power re 10 ⁻¹² Watts Octave Band [Hz]				入口處 A 加權聲功率位準 L _{wi} A [dBA]]
			63	125	250	500	1000	2000	4000	8000	
LASD-630-200-10/8°	3520	0	94	94	96	108	104	101	98	95	109
LASD-630-200-10/8°	3520	632	93	93	96	106	105	105	102	96	110
LASD-630-200-10/8°	3520	1264	97	97	103	113	109	104	99	93	113
LASD-630-200-10/8°	3520	1896	98	98	103	114	109	103	99	95	114
LASD-630-200-10/20°	3520	0	100	100	102	113	108	102	99	96	113
LASD-630-200-10/20°	3520	620	100	100	101	114	107	102	98	95	113
LASD-630-200-10/20°	3520	1062	100	100	101	113	106	101	98	94	112
LASD-630-200-10/20°	3520	1492	99	99	102	112	109	106	102	97	114
LASD-630-200-10/32°	3520	0	106	106	107	112	109	106	102	99	114
LASD-630-200-10/32°	3520	695	105	105	105	111	108	104	101	98	113
LASD-630-200-10/32°	3520	1157	104	104	104	113	108	104	101	98	114
LASD-630-200-10/32°	3520	1580	105	105	106	110	107	104	102	99	112
LASD-630-200-10/8°	1760	0	79	81	93	89	86	83	80	74	92
LASD-630-200-10/8°	1760	158	78	81	91	90	90	87	81	75	94
LASD-630-200-10/8°	1760	316	82	88	98	94	89	84	78	73	95
LASD-630-200-10/8°	1760	474	83	88	99	94	88	84	80	76	95
LASD-630-200-10/20°	1760	0	85	87	98	93	87	84	81	76	95
LASD-630-200-10/20°	1760	155	85	86	99	92	87	83	80	76	94
LASD-630-200-10/20°	1760	266	85	86	98	91	86	83	79	75	93
LASD-630-200-10/20°	1760	373	84	87	97	94	91	87	82	77	96
LASD-630-200-10/32°	1760	0	91	92	97	94	91	87	84	78	96
LASD-630-200-10/32°	1760	174	90	90	96	93	89	86	83	78	95
LASD-630-200-10/32°	1760	289	89	89	98	93	89	86	83	79	96
LASD-630-200-10/32°	1760	395	90	91	95	92	89	87	84	80	95

The sound power level ratings shown are in decibels referred to 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wi} and L_{WA} sound power levels for Installation Type B : free inlet, ducted outlet.



LASD-630-200-10 60Hz

Sound Data 風機聲功率數值[dB]



型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10^{-12} 為基準) 八音階頻帶 Sound Power re 10^{-12} Watts Octave Band [Hz]								入口處 A 加權聲功率位準 L _{wiA} [dBA]
			63	125	250	500	1000	2000	4000	8000	
LASD-630-200-10/8°	1170	0	71	84	84	78	75	72	68	61	81
LASD-630-200-10/8°	1170	70	70	82	82	80	80	75	69	63	84
LASD-630-200-10/8°	1170	140	75	89	89	82	77	72	66	62	85
LASD-630-200-10/8°	1170	210	76	90	90	81	77	73	69	64	85
LASD-630-200-10/20°	1170	0	77	89	89	80	76	73	70	64	84
LASD-630-200-10/20°	1170	68	77	90	90	79	76	72	69	64	85
LASD-630-200-10/20°	1170	117	77	89	89	78	75	72	68	63	84
LASD-630-200-10/20°	1170	165	76	88	88	83	80	75	70	65	86
LASD-630-200-10/32°	1170	0	82	88	88	83	80	76	72	65	86
LASD-630-200-10/32°	1170	77	81	87	87	81	78	75	72	66	85
LASD-630-200-10/32°	1170	128	80	89	89	81	78	75	72	67	85
LASD-630-200-10/32°	1170	175	81	86	86	81	79	76	73	69	85
LASD-630-200-10/8°	880	0	66	78	74	71	68	65	59	52	73
LASD-630-200-10/8°	880	40	66	76	75	75	72	66	60	54	76
LASD-630-200-10/8°	880	79	73	83	79	74	69	63	58	54	76
LASD-630-200-10/8°	880	119	73	84	79	73	69	65	61	56	76
LASD-630-200-10/20°	880	0	72	83	78	72	69	66	61	55	76
LASD-630-200-10/20°	880	39	71	84	77	72	68	65	61	56	75
LASD-630-200-10/20°	880	66	71	83	76	71	68	64	60	55	74
LASD-630-200-10/20°	880	93	72	82	79	76	72	67	62	57	78
LASD-630-200-10/32°	880	0	77	82	79	76	72	69	63	56	78
LASD-630-200-10/32°	880	43	75	81	78	74	71	68	63	57	77
LASD-630-200-10/32°	880	72	74	83	78	74	71	68	64	59	77
LASD-630-200-10/32°	880	99	76	80	77	74	72	69	65	61	77

The sound power level ratings shown are in decibels referred to 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wi} and L_{wiA} sound power levels for Installation Type B : free inlet, ducted outlet.



LASD-630-300-6 60Hz

Sound Data 風機聲功率數值[dB]



型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10^{-12} 為基準) 八音階頻帶 Sound Power re 10^{-12} Watts Octave Band [Hz]								入口處 A 加權聲功率位準 L _w A [dBA]
			63	125	250	500	1000	2000	4000	8000	
LASD-630-300-6/8°	3520	0	94	94	108	105	102	100	97	94	108
LASD-630-300-6/8°	3520	259	94	94	108	105	103	101	97	94	108
LASD-630-300-6/8°	3520	651	97	97	108	105	103	104	101	94	110
LASD-630-300-6/8°	3520	980	99	99	108	109	107	102	96	91	111
LASD-630-300-6/20°	3520	0	99	99	118	110	105	101	97	94	113
LASD-630-300-6/20°	3520	834	100	100	115	108	102	99	95	91	110
LASD-630-300-6/20°	3520	1252	106	106	113	108	104	100	96	92	110
LASD-630-300-6/20°	3520	1309	106	106	111	109	108	105	99	94	112
LASD-630-300-6/32°	3520	0	106	106	117	112	108	104	100	95	114
LASD-630-300-6/32°	3520	563	106	106	118	113	108	104	99	95	115
LASD-630-300-6/32°	3520	929	107	107	117	112	107	103	99	95	114
LASD-630-300-6/32°	3520	1422	108	108	117	112	105	101	98	95	113
LASD-630-300-6/8°	1760	0	79	93	90	87	85	82	79	74	90
LASD-630-300-6/8°	1760	65	79	93	90	88	86	82	79	74	91
LASD-630-300-6/8°	1760	163	82	93	90	88	89	86	79	73	93
LASD-630-300-6/8°	1760	245	84	93	94	92	87	81	76	72	93
LASD-630-300-6/20°	1760	0	84	103	95	90	86	82	79	76	93
LASD-630-300-6/20°	1760	209	85	100	93	87	84	80	76	74	91
LASD-630-300-6/20°	1760	313	91	98	93	89	85	81	77	75	92
LASD-630-300-6/20°	1760	327	91	96	94	93	90	84	79	76	94
LASD-630-300-6/32°	1760	0	91	102	97	93	89	85	80	76	96
LASD-630-300-6/32°	1760	141	91	103	98	93	89	84	80	76	96
LASD-630-300-6/32°	1760	232	92	102	97	92	88	84	80	77	95
LASD-630-300-6/32°	1760	356	93	102	97	90	86	83	80	78	94

The sound power level ratings shown are in decibels referred to 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_wi and L_wiA sound power levels for Installation Type B : free inlet, ducted outlet.



LASD-630-300-6 60Hz

Sound Data 風機聲功率數值[dB]



型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶				Sound Power re 10 ⁻¹² Watts Octave Band [Hz]				入口處 A 加權聲功率位準 L _{wiA} [dBA]]
			63	125	250	500	1000	2000	4000	8000	
LASD-630-300-6/8°	1170	0	74	84	79	77	75	71	68	62	80
LASD-630-300-6/8°	1170	29	74	84	80	78	76	71	68	62	80
LASD-630-300-6/8°	1170	72	76	84	80	79	79	73	67	61	82
LASD-630-300-6/8°	1170	108	77	85	85	80	75	69	64	61	82
LASD-630-300-6/20°	1170	0	80	94	82	79	75	71	69	64	83
LASD-630-300-6/20°	1170	92	80	91	79	76	73	68	66	64	80
LASD-630-300-6/20°	1170	138	84	89	81	78	74	70	67	65	81
LASD-630-300-6/20°	1170	145	83	87	84	83	78	72	68	66	84
LASD-630-300-6/32°	1170	0	85	93	85	82	78	73	69	65	85
LASD-630-300-6/32°	1170	62	85	94	85	82	78	72	69	65	85
LASD-630-300-6/32°	1170	103	86	93	84	81	77	72	69	66	84
LASD-630-300-6/32°	1170	157	86	93	84	78	75	72	70	68	83
LASD-630-300-6/8°	880	0	82	79	76	74	71	68	63	57	76
LASD-630-300-6/8°	880	16	82	79	76	75	71	68	63	57	77
LASD-630-300-6/8°	880	41	82	79	77	77	73	68	62	56	78
LASD-630-300-6/8°	880	61	82	81	78	77	73	67	62	57	78
LASD-630-300-6/20°	880	0	88	80	75	71	67	64	61	56	74
LASD-630-300-6/20°	880	52	85	78	72	69	65	61	59	57	72
LASD-630-300-6/20°	880	78	83	78	74	70	66	62	60	58	73
LASD-630-300-6/20°	880	82	81	79	78	75	69	64	61	59	76
LASD-630-300-6/32°	880	0	87	82	78	74	70	65	61	57	76
LASD-630-300-6/32°	880	35	88	83	78	74	69	65	61	57	76
LASD-630-300-6/32°	880	58	87	82	77	73	69	65	62	59	76
LASD-630-300-6/32°	880	89	87	82	75	71	68	65	63	61	75

The sound power level ratings shown are in decibels referred to 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wi} and L_{wiA} sound power levels for Installation Type B : free inlet, ducted outlet.



LASD-630-300-12 60Hz

Sound Data 風機聲功率數值[dB]



型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10^{-12} 為基準) 八音階頻帶 Sound Power re 10^{-12} Watts Octave Band [Hz]								入口處 A 加權聲功率位準 L _{wi} A [dBA]
			63	125	250	500	1000	2000	4000	8000	
LASD-630-300-12/8°	3520	0	95	95	99	108	105	104	101	97	111
LASD-630-300-12/8°	3520	632	97	97	100	108	106	105	102	96	111
LASD-630-300-12/8°	3520	1264	101	101	103	114	110	105	98	92	114
LASD-630-300-12/8°	3520	1896	101	101	104	115	109	103	97	92	114
LASD-630-300-12/20°	3520	0	98	98	101	111	106	103	100	98	112
LASD-630-300-12/20°	3520	657	100	100	102	111	106	102	99	97	111
LASD-630-300-12/20°	3520	1106	101	101	102	111	106	102	99	96	111
LASD-630-300-12/20°	3520	1347	102	102	104	110	111	107	103	99	114
LASD-630-300-12/32°	3520	0	104	104	106	114	109	106	102	98	115
LASD-630-300-12/32°	3520	809	103	103	105	114	109	104	100	96	114
LASD-630-300-12/32°	3520	1283	105	105	106	114	108	103	99	95	114
LASD-630-300-12/32°	3520	1694	106	106	105	115	108	103	99	95	114
LASD-630-300-12/8°	1760	0	80	84	93	90	89	86	82	76	94
LASD-630-300-12/8°	1760	158	82	85	93	91	90	87	81	76	94
LASD-630-300-12/8°	1760	316	86	88	99	95	90	83	77	74	96
LASD-630-300-12/8°	1760	474	86	89	100	94	88	82	77	74	96
LASD-630-300-12/20°	1760	0	83	86	96	91	88	85	83	77	94
LASD-630-300-12/20°	1760	164	85	87	96	91	87	84	82	77	93
LASD-630-300-12/20°	1760	277	86	87	96	91	87	84	81	77	93
LASD-630-300-12/20°	1760	337	87	89	95	96	92	88	84	78	97
LASD-630-300-12/32°	1760	0	89	91	99	94	91	87	83	79	97
LASD-630-300-12/32°	1760	202	88	90	99	94	89	85	81	77	96
LASD-630-300-12/32°	1760	321	90	91	99	93	88	84	80	76	95
LASD-630-300-12/32°	1760	424	91	90	100	93	88	84	80	77	95

The sound power level ratings shown are in decibels referred to 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wi} and L_{wi}A sound power levels for Installation Type B : free inlet, ducted outlet.



LASD-630-300-12 60Hz

Sound Data 風機聲功率數值[dB]



型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶				Sound Power re 10 ⁻¹² Watts Octave Band [Hz]				入口處 A 加權聲功率位準 L _{wiA} [dBA]]
			63	125	250	500	1000	2000	4000	8000	
LASD-630-300-12/8°	1170	0	73	79	84	80	79	74	70	63	83
LASD-630-300-12/8°	1170	70	74	80	84	81	80	75	69	64	84
LASD-630-300-12/8°	1170	140	78	83	90	83	77	71	66	64	85
LASD-630-300-12/8°	1170	210	78	84	91	81	76	70	66	64	85
LASD-630-300-12/20°	1170	0	75	81	87	80	78	75	71	63	84
LASD-630-300-12/20°	1170	73	77	81	87	79	76	74	71	65	83
LASD-630-300-12/20°	1170	122	77	80	87	79	76	73	70	65	83
LASD-630-300-12/20°	1170	149	79	82	86	86	80	77	72	66	86
LASD-630-300-12/32°	1170	0	81	85	90	83	80	76	72	67	86
LASD-630-300-12/32°	1170	89	80	84	90	81	78	74	70	65	85
LASD-630-300-12/32°	1170	142	81	84	90	80	77	73	69	64	85
LASD-630-300-12/32°	1170	187	82	83	91	80	77	73	69	66	85
LASD-630-300-12/8°	880	0	69	78	75	74	71	67	61	54	76
LASD-630-300-12/8°	880	40	70	78	76	75	72	66	61	56	76
LASD-630-300-12/8°	880	79	73	84	80	75	68	62	59	57	77
LASD-630-300-12/8°	880	119	74	85	79	73	67	62	59	57	76
LASD-630-300-12/20°	880	0	71	81	76	73	70	68	62	54	76
LASD-630-300-12/20°	880	41	72	81	76	72	69	67	62	56	75
LASD-630-300-12/20°	880	69	72	81	76	72	69	66	62	57	75
LASD-630-300-12/20°	880	84	74	80	81	77	73	69	63	57	79
LASD-630-300-12/32°	880	0	76	84	79	76	72	68	64	59	78
LASD-630-300-12/32°	880	51	75	84	79	74	70	66	62	57	77
LASD-630-300-12/32°	880	80	76	84	78	73	69	65	61	56	76
LASD-630-300-12/32°	880	106	75	85	78	73	69	65	62	59	76

The sound power level ratings shown are in decibels referred to 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wi} and L_{wiA} sound power levels for Installation Type B : free inlet, ducted outlet.



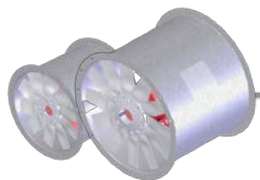
LASD-710-300-6 60Hz

Sound Data 風機聲功率數值[dB]



型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶				Sound Power re 10 ⁻¹² Watts Octave Band [Hz]				入口處 A 加權聲功率位準 L _{wiA} [dBA]]
			63	125	250	500	1000	2000	4000	8000	
LASD-710-300-6/8°	3520	0	97	97	110	109	105	102	99	98	111
LASD-710-300-6/8°	3520	506	97	97	109	109	107	107	104	100	113
LASD-710-300-6/8°	3520	872	101	101	108	111	111	108	102	96	115
LASD-710-300-6/8°	3520	1068	102	102	114	114	109	104	100	95	115
LASD-710-300-6/20°	3520	0	104	104	115	112	107	103	100	99	114
LASD-710-300-6/20°	3520	499	104	104	114	111	106	102	99	97	113
LASD-710-300-6/20°	3520	891	105	105	113	110	106	101	98	96	112
LASD-710-300-6/20°	3520	1384	108	108	111	115	114	110	106	101	118
LASD-710-300-6/32°	3520	0	111	111	116	114	110	107	103	99	116
LASD-710-300-6/32°	3520	601	111	111	116	114	110	106	102	99	116
LASD-710-300-6/32°	3520	1030	112	112	114	111	108	105	103	99	114
LASD-710-300-6/32°	3520	1561	112	112	115	112	108	106	104	101	115
LASD-710-300-6/8°	1760	0	82	95	94	90	87	84	83	77	93
LASD-710-300-6/8°	1760	126	82	94	94	92	92	89	85	77	96
LASD-710-300-6/8°	1760	218	86	93	96	96	93	87	81	75	97
LASD-710-300-6/8°	1760	267	87	99	99	94	89	85	80	75	96
LASD-710-300-6/20°	1760	0	89	100	97	92	88	85	84	78	95
LASD-710-300-6/20°	1760	125	89	99	96	91	87	84	82	77	94
LASD-710-300-6/20°	1760	223	90	98	95	91	86	83	81	77	93
LASD-710-300-6/20°	1760	346	93	96	100	99	95	91	86	80	100
LASD-710-300-6/32°	1760	0	96	101	99	95	92	88	84	80	98
LASD-710-300-6/32°	1760	150	96	101	99	95	91	87	84	80	97
LASD-710-300-6/32°	1760	258	97	99	96	93	90	88	84	81	96
LASD-710-300-6/32°	1760	390	97	100	97	93	91	89	86	83	97

The sound power level ratings shown are in decibels referred to 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wi} and L_{wiA} sound power levels for Installation Type B : free inlet, ducted outlet.



LASD-710-300-6 60Hz

Sound Data 風機聲功率數值[dB]



型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶				Sound Power re 10 ⁻¹² Watts Octave Band [Hz]				入口處 A 加權聲功率位準 L _W A [dBA]]
			63	125	250	500	1000	2000	4000	8000	
LASD-710-300-6/8°	1170	0	77	86	84	79	77	74	72	63	83
LASD-710-300-6/8°	1170	56	76	85	84	82	82	78	72	63	86
LASD-710-300-6/8°	1170	96	79	85	88	85	81	75	69	63	86
LASD-710-300-6/8°	1170	118	81	90	88	82	78	73	68	63	85
LASD-710-300-6/20°	1170	0	83	91	86	80	77	75	73	64	84
LASD-710-300-6/20°	1170	55	83	90	85	79	76	74	71	63	83
LASD-710-300-6/20°	1170	98	83	89	84	79	75	73	70	65	82
LASD-710-300-6/20°	1170	153	85	89	92	88	84	79	74	68	90
LASD-710-300-6/32°	1170	0	88	92	88	84	81	76	73	68	87
LASD-710-300-6/32°	1170	66	88	92	88	83	80	76	73	69	86
LASD-710-300-6/32°	1170	114	89	90	85	82	80	77	73	70	86
LASD-710-300-6/32°	1170	173	89	91	85	83	81	78	75	72	87
LASD-710-300-6/8°	880	0	80	79	75	72	69	68	62	53	75
LASD-710-300-6/8°	880	32	79	79	77	77	74	70	62	53	79
LASD-710-300-6/8°	880	55	78	81	81	78	72	66	60	54	79
LASD-710-300-6/8°	880	67	84	84	79	74	70	65	60	55	77
LASD-710-300-6/20°	880	0	85	82	77	73	70	69	63	54	76
LASD-710-300-6/20°	880	31	84	81	76	72	69	67	62	54	75
LASD-710-300-6/20°	880	56	83	80	76	71	68	66	62	57	74
LASD-710-300-6/20°	880	87	81	85	84	80	76	71	65	59	82
LASD-710-300-6/32°	880	0	86	84	80	77	73	69	65	60	79
LASD-710-300-6/32°	880	38	86	84	80	76	72	69	65	61	79
LASD-710-300-6/32°	880	64	84	81	78	75	73	69	66	63	78
LASD-710-300-6/32°	880	98	85	82	78	76	74	71	68	65	79

The sound power level ratings shown are in decibels referred to 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_Wi and L_WiA sound power levels for Installation Type B : free inlet, ducted outlet.



LASD-710-300-12 60Hz

Sound Data 風機聲功率數值[dB]



型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶				Sound Power re 10 ⁻¹² Watts Octave Band [Hz]				入口處 A 加權聲功率位準 L _{WiA} [dBA]]
			63	125	250	500	1000	2000	4000	8000	
LASD-710-300-12/8°	3520	0	98	98	99	114	109	106	104	102	115
LASD-710-300-12/8°	3520	948	100	100	101	115	113	109	105	99	117
LASD-710-300-12/8°	3520	1896	105	105	104	118	112	107	102	97	118
LASD-710-300-12/8°	3520	2845	103	103	104	117	111	107	103	98	117
LASD-710-300-12/20°	3520	0	103	103	104	117	110	106	103	101	116
LASD-710-300-12/20°	3520	797	104	104	104	115	109	105	102	100	115
LASD-710-300-12/20°	3520	1277	104	104	104	114	109	106	105	101	115
LASD-710-300-12/20°	3520	1599	107	107	107	114	113	111	107	103	118
LASD-710-300-12/32°	3520	0	110	110	110	118	113	110	106	102	119
LASD-710-300-12/32°	3520	955	110	110	109	116	111	108	104	100	117
LASD-710-300-12/32°	3520	1435	109	109	108	116	111	107	104	101	116
LASD-710-300-12/32°	3520	1903	111	111	110	114	111	108	106	102	116
LASD-710-300-12/8°	1760	0	83	84	99	94	91	89	87	80	97
LASD-710-300-12/8°	1760	237	85	86	100	98	94	90	84	77	99
LASD-710-300-12/8°	1760	474	90	89	103	97	92	87	82	77	99
LASD-710-300-12/8°	1760	711	88	89	102	96	92	88	83	79	98
LASD-710-300-12/20°	1760	0	88	89	102	95	91	88	86	80	98
LASD-710-300-12/20°	1760	199	89	89	100	94	90	87	85	80	97
LASD-710-300-12/20°	1760	319	89	89	99	94	91	90	86	80	97
LASD-710-300-12/20°	1760	400	92	92	99	98	96	92	88	81	101
LASD-710-300-12/32°	1760	0	95	95	103	98	95	91	87	81	101
LASD-710-300-12/32°	1760	239	95	94	101	96	93	89	85	80	99
LASD-710-300-12/32°	1760	359	94	93	101	96	92	89	86	82	98
LASD-710-300-12/32°	1760	476	96	95	99	96	93	91	87	83	99

The sound power level ratings shown are in decibels referred to 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wi} and L_{wiA} sound power levels for Installation Type B : free inlet, ducted outlet.



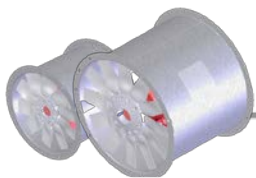
LASD-710-300-12 60Hz

Sound Data 風機聲功率數值[dB]



型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶				Sound Power re 10 ⁻¹² Watts Octave Band [Hz]				入口處 A 加權聲功率位準 L _{wi} A [dBA]]
			63	125	250	500	1000	2000	4000	8000	
LASD-710-300-12/8°	1170	0	74	79	90	82	81	79	75	66	87
LASD-710-300-12/8°	1170	105	76	81	91	87	83	78	71	64	89
LASD-710-300-12/8°	1170	210	81	84	94	84	81	75	70	65	88
LASD-710-300-12/8°	1170	314	79	83	93	84	81	76	72	67	88
LASD-710-300-12/20°	1170	0	79	83	93	83	80	78	75	66	88
LASD-710-300-12/20°	1170	88	80	83	91	82	80	77	74	66	87
LASD-710-300-12/20°	1170	141	80	83	90	83	82	79	74	67	87
LASD-710-300-12/20°	1170	177	83	85	90	88	85	81	75	67	90
LASD-710-300-12/32°	1170	0	86	88	94	87	84	79	75	68	90
LASD-710-300-12/32°	1170	105	86	87	92	85	82	78	74	68	88
LASD-710-300-12/32°	1170	159	85	86	92	84	82	78	75	71	88
LASD-710-300-12/32°	1170	210	87	87	90	85	83	80	76	72	89
LASD-710-300-12/8°	880	0	69	84	79	76	74	72	65	56	79
LASD-710-300-12/8°	880	59	71	85	83	79	75	69	62	55	81
LASD-710-300-12/8°	880	119	74	88	82	77	72	67	62	57	79
LASD-710-300-12/8°	880	178	74	87	81	77	73	68	64	59	79
LASD-710-300-12/20°	880	0	74	87	80	76	73	71	65	56	79
LASD-710-300-12/20°	880	50	74	85	79	75	72	70	65	57	78
LASD-710-300-12/20°	880	80	74	84	79	76	75	71	65	58	80
LASD-710-300-12/20°	880	100	77	84	83	81	77	73	66	58	83
LASD-710-300-12/32°	880	0	80	88	83	80	76	72	66	59	82
LASD-710-300-12/32°	880	60	79	86	81	78	74	70	65	59	80
LASD-710-300-12/32°	880	90	78	86	81	77	74	71	67	63	80
LASD-710-300-12/32°	880	119	80	84	81	78	76	72	68	64	81

The sound power level ratings shown are in decibels referred to 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{Wi} and L_{WiA} sound power levels for Installation Type B : free inlet, ducted outlet.



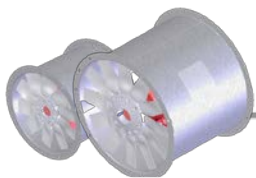
Axial Smoke-exhaust Fan



LASD-800-300-6 **60Hz** Sound Data 風機聲功率數值[dB]

型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶								Sound Power re 10 ⁻¹² Watts Octave Band [Hz]	入口處 A 加權聲功率位準 L _{WA} [dBA]
			63	125	250	500	1000	2000	4000	8000		
LASD-800-300-6/8°	1760	0	88	98	96	91	90	87	84	81	95	
LASD-800-300-6/8°	1760	148	89	96	94	90	90	91	88	82	97	
LASD-800-300-6/8°	1760	291	91	93	96	99	96	90	85	79	100	
LASD-800-300-6/8°	1760	435	93	101	100	96	92	89	86	82	99	
LASD-800-300-6/20°	1760	0	96	105	102	96	93	89	85	81	99	
LASD-800-300-6/20°	1760	131	96	104	101	94	91	88	84	80	98	
LASD-800-300-6/20°	1760	262	96	102	99	93	91	88	85	81	97	
LASD-800-300-6/20°	1760	394	99	101	99	95	94	91	88	84	99	
LASD-800-300-6/32°	1760	0	101	107	105	100	97	93	88	84	103	
LASD-800-300-6/32°	1760	153	102	106	104	99	96	93	88	85	102	
LASD-800-300-6/32°	1760	307	102	105	103	98	95	92	89	86	101	
LASD-800-300-6/32°	1760	431	102	103	101	97	95	93	90	86	101	
LASD-800-300-6/8°	1170	0	80	90	83	82	80	76	76	66	85	
LASD-800-300-6/8°	1170	65	81	88	82	81	82	81	78	66	87	
LASD-800-300-6/8°	1170	129	83	85	90	89	84	78	74	65	89	
LASD-800-300-6/8°	1170	192	85	93	89	85	82	79	76	69	88	
LASD-800-300-6/20°	1170	0	88	97	88	86	83	77	76	66	88	
LASD-800-300-6/20°	1170	58	88	96	87	84	81	76	75	66	87	
LASD-800-300-6/20°	1170	116	88	94	86	83	81	77	75	68	86	
LASD-800-300-6/20°	1170	174	91	93	86	87	84	80	78	71	89	
LASD-800-300-6/32°	1170	0	93	99	92	90	87	81	77	73	92	
LASD-800-300-6/32°	1170	68	94	98	91	89	86	81	78	73	91	
LASD-800-300-6/32°	1170	136	94	97	90	88	85	82	79	74	91	
LASD-800-300-6/32°	1170	191	94	95	89	87	86	83	79	74	91	
LASD-800-300-6/8°	880	0	83	81	76	75	72	69	66	56	77	
LASD-800-300-6/8°	880	37	81	79	75	75	76	73	67	55	80	
LASD-800-300-6/8°	880	73	78	81	84	81	75	70	64	55	81	
LASD-800-300-6/8°	880	109	86	85	81	77	74	71	67	60	80	
LASD-800-300-6/20°	880	0	90	87	81	78	74	70	66	56	80	
LASD-800-300-6/20°	880	33	89	86	79	76	73	69	65	56	79	
LASD-800-300-6/20°	880	66	87	84	78	76	73	70	66	59	79	
LASD-800-300-6/20°	880	98	86	84	80	79	76	73	69	62	81	
LASD-800-300-6/32°	880	0	92	90	85	82	78	73	69	65	84	
LASD-800-300-6/32°	880	38	91	89	84	81	78	73	70	65	83	
LASD-800-300-6/32°	880	77	90	88	83	80	77	74	70	65	83	
LASD-800-300-6/32°	880	108	88	86	82	80	78	75	71	66	83	

The sound power level ratings shown are in decibels referred to 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wi} and L_{WA} sound power levels for Installation Type B : free inlet, ducted outlet.



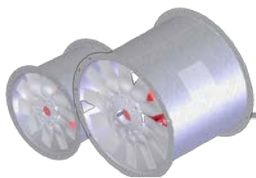
Axial Smoke-exhaust Fan



LASD-800-300-12 **60Hz** Sound Data 風機聲功率數值[dB]

型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶 Sound Power re 10 ⁻¹² Watts Octave Band [Hz]								入口處 A 加權聲功率位準 L _{WiA} [dBA]
			63	125	250	500	1000	2000	4000	8000	
LASD-800-300-12/8°	1760	0	89	89	95	95	94	92	89	84	99
LASD-800-300-12/8°	1760	229	89	89	93	95	97	96	91	84	101
LASD-800-300-12/8°	1760	451	93	96	103	101	96	92	86	79	102
LASD-800-300-12/8°	1760	696	93	95	101	100	95	91	87	82	101
LASD-800-300-12/20°	1760	0	95	95	100	100	97	92	88	84	102
LASD-800-300-12/20°	1760	172	93	94	100	99	95	91	87	83	101
LASD-800-300-12/20°	1760	346	94	94	99	98	94	91	88	83	100
LASD-800-300-12/20°	1760	517	96	96	101	102	101	98	92	85	105
LASD-800-300-12/32°	1760	0	100	100	104	103	99	95	90	85	105
LASD-800-300-12/32°	1760	181	100	100	103	102	99	95	90	85	104
LASD-800-300-12/32°	1760	362	99	99	102	101	98	95	90	86	103
LASD-800-300-12/32°	1760	544	100	99	101	101	98	94	91	87	103
LASD-800-300-12/8°	1170	0	81	79	87	86	85	81	79	69	89
LASD-800-300-12/8°	1170	101	81	80	85	87	89	84	79	69	92
LASD-800-300-12/8°	1170	199	85	92	95	89	85	80	74	65	91
LASD-800-300-12/8°	1170	308	85	87	93	88	84	80	77	69	90
LASD-800-300-12/20°	1170	0	87	86	92	90	86	80	80	69	91
LASD-800-300-12/20°	1170	76	85	86	92	88	85	79	79	68	90
LASD-800-300-12/20°	1170	153	86	85	91	87	84	80	78	69	89
LASD-800-300-12/20°	1170	229	88	87	93	94	91	86	80	71	95
LASD-800-300-12/32°	1170	0	92	92	96	92	89	83	79	73	94
LASD-800-300-12/32°	1170	80	92	90	95	92	88	83	79	73	93
LASD-800-300-12/32°	1170	160	91	89	94	91	88	83	79	74	93
LASD-800-300-12/32°	1170	241	92	87	93	91	87	84	80	75	92
LASD-800-300-12/8°	880	0	74	80	80	79	77	74	69	59	82
LASD-800-300-12/8°	880	57	74	78	79	82	81	76	69	59	84
LASD-800-300-12/8°	880	113	81	88	86	81	77	71	64	55	83
LASD-800-300-12/8°	880	174	80	86	85	80	76	72	67	59	82
LASD-800-300-12/20°	880	0	80	85	85	82	77	73	69	58	83
LASD-800-300-12/20°	880	43	79	85	84	80	76	72	68	57	82
LASD-800-300-12/20°	880	86	79	84	83	79	76	73	68	59	82
LASD-800-300-12/20°	880	129	81	86	87	86	83	77	70	61	87
LASD-800-300-12/32°	880	0	85	89	88	84	80	75	70	64	86
LASD-800-300-12/32°	880	45	85	88	87	84	80	75	70	64	86
LASD-800-300-12/32°	880	91	84	87	86	83	80	75	71	66	85
LASD-800-300-12/32°	880	136	84	86	86	83	79	76	72	67	85

The sound power level ratings shown are in decibels referred to 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{Wi} and L_{WiA} sound power levels for Installation Type B : free inlet, ducted outlet.



Axial Smoke-exhaust Fan



LASD-900-300-6 **60Hz** Sound Data 風機聲功率數值[dB]

型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶								Sound Power re 10 ⁻¹² Watts Octave Band [Hz]	入口處 A 加權聲功率位準 L _{wiA} [dBA]
			63	125	250	500	1000	2000	4000	8000		
LASD-900-300-6/8°	1760	0	86	97	95	91	91	90	91	87	98	
LASD-900-300-6/8°	1760	161	88	95	94	91	94	95	95	89	101	
LASD-900-300-6/8°	1760	323	90	95	100	103	98	94	91	85	103	
LASD-900-300-6/8°	1760	484	91	101	100	98	95	93	90	85	101	
LASD-900-300-6/20°	1760	0	95	103	101	96	94	92	92	89	101	
LASD-900-300-6/20°	1760	286	96	101	99	95	93	91	89	86	99	
LASD-900-300-6/20°	1760	379	98	100	99	97	96	94	92	88	101	
LASD-900-300-6/20°	1760	454	100	100	102	104	104	99	94	89	107	
LASD-900-300-6/32°	1760	0	101	106	104	100	98	96	92	89	104	
LASD-900-300-6/32°	1760	194	101	106	103	99	97	95	93	90	103	
LASD-900-300-6/32°	1760	338	102	104	102	98	97	97	94	90	103	
LASD-900-300-6/32°	1760	499	102	102	101	98	97	96	94	90	103	
LASD-900-300-6/8°	1170	0	88	88	82	82	82	80	85	69	89	
LASD-900-300-6/8°	1170	71	86	86	82	83	87	86	87	70	92	
LASD-900-300-6/8°	1170	143	86	87	96	90	87	82	81	70	93	
LASD-900-300-6/8°	1170	214	92	92	90	86	85	82	78	73	90	
LASD-900-300-6/20°	1170	0	94	94	88	86	84	81	86	71	91	
LASD-900-300-6/20°	1170	126	92	92	86	85	83	81	79	74	89	
LASD-900-300-6/20°	1170	167	91	91	87	88	86	84	81	76	92	
LASD-900-300-6/20°	1170	201	91	92	95	96	92	87	82	77	97	
LASD-900-300-6/32°	1170	0	97	97	91	90	88	84	81	77	93	
LASD-900-300-6/32°	1170	86	97	97	90	89	87	85	82	78	93	
LASD-900-300-6/32°	1170	149	95	95	89	88	88	87	82	78	93	
LASD-900-300-6/32°	1170	221	93	93	89	88	88	86	82	78	93	
LASD-900-300-6/8°	880	0	82	80	76	76	75	76	72	56	81	
LASD-900-300-6/8°	880	40	80	78	76	79	80	80	74	57	85	
LASD-900-300-6/8°	880	81	80	85	88	83	79	76	70	59	85	
LASD-900-300-6/8°	880	121	86	85	82	80	78	74	70	65	83	
LASD-900-300-6/20°	880	0	88	86	81	79	76	77	74	59	83	
LASD-900-300-6/20°	880	72	86	84	80	78	76	74	71	66	82	
LASD-900-300-6/20°	880	95	85	83	82	81	79	77	73	68	84	
LASD-900-300-6/20°	880	113	85	87	89	88	84	79	74	69	89	
LASD-900-300-6/32°	880	0	91	89	85	83	80	77	73	69	86	
LASD-900-300-6/32°	880	48	91	88	84	82	80	78	74	70	86	
LASD-900-300-6/32°	880	84	89	87	83	82	82	79	74	70	86	
LASD-900-300-6/32°	880	125	87	85	83	82	81	78	74	70	86	

The sound power level ratings shown are in decibels referred to 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{Wi} and L_{WiA} sound power levels for Installation Type B : free inlet, ducted outlet.



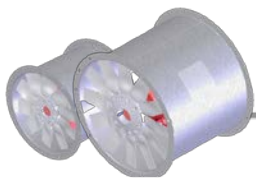
Axial Smoke-exhaust Fan



LASD-900-300-12 **60Hz** Sound Data 風機聲功率數值[dB]

型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶 Sound Power re 10 ⁻¹² Watts Octave Band [Hz]								入口處 A 加權聲功率位準 L _{WiA} [dBA]
			63	125	250	500	1000	2000	4000	8000	
LASD-900-300-12/8°	1760	0	85	86	96	95	94	93	94	90	100
LASD-900-300-12/8°	1760	215	84	85	95	96	99	100	97	90	104
LASD-900-300-12/8°	1760	430	88	91	97	100	103	98	94	88	105
LASD-900-300-12/8°	1760	645	92	93	104	102	98	95	91	86	104
LASD-900-300-12/20°	1760	0	94	94	102	100	97	95	95	92	103
LASD-900-300-12/20°	1760	215	93	93	101	99	96	94	95	91	102
LASD-900-300-12/20°	1760	430	93	93	101	100	97	95	94	90	103
LASD-900-300-12/20°	1760	645	95	96	107	107	105	102	97	90	110
LASD-900-300-12/32°	1760	0	101	100	106	104	100	98	96	92	106
LASD-900-300-12/32°	1760	215	100	99	104	103	99	97	94	91	105
LASD-900-300-12/32°	1760	430	100	99	103	102	99	97	95	91	105
LASD-900-300-12/32°	1760	645	101	100	103	102	101	99	96	92	106
LASD-900-300-12/8°	1170	0	76	87	87	84	85	83	87	72	92
LASD-900-300-12/8°	1170	95	75	86	86	88	92	88	87	72	96
LASD-900-300-12/8°	1170	190	80	88	89	95	91	85	84	71	96
LASD-900-300-12/8°	1170	285	84	95	95	90	87	83	80	72	93
LASD-900-300-12/20°	1170	0	85	93	93	88	87	84	90	73	94
LASD-900-300-12/20°	1170	95	84	92	92	87	86	84	88	73	93
LASD-900-300-12/20°	1170	190	84	92	92	88	87	85	86	75	93
LASD-900-300-12/20°	1170	285	86	98	98	97	95	90	84	77	100
LASD-900-300-12/32°	1170	0	92	97	97	92	90	86	87	77	96
LASD-900-300-12/32°	1170	95	91	95	95	91	89	86	84	78	95
LASD-900-300-12/32°	1170	190	91	94	94	91	89	87	83	79	95
LASD-900-300-12/32°	1170	285	92	94	94	92	91	89	84	80	96
LASD-900-300-12/8°	880	0	71	81	80	79	78	79	75	60	84
LASD-900-300-12/8°	880	54	70	80	81	84	84	82	75	60	88
LASD-900-300-12/8°	880	108	76	82	85	87	83	79	72	59	88
LASD-900-300-12/8°	880	161	78	89	87	83	79	76	71	63	85
LASD-900-300-12/20°	880	0	79	87	85	82	79	80	77	60	86
LASD-900-300-12/20°	880	54	78	86	84	81	79	80	76	61	85
LASD-900-300-12/20°	880	108	78	86	84	82	80	79	75	64	86
LASD-900-300-12/20°	880	161	81	92	92	90	87	82	75	68	92
LASD-900-300-12/32°	880	0	85	91	89	85	82	81	77	67	89
LASD-900-300-12/32°	880	54	84	89	87	84	82	79	76	70	87
LASD-900-300-12/32°	880	108	83	88	87	84	82	79	75	71	88
LASD-900-300-12/32°	880	161	85	88	87	86	84	81	76	72	89

The sound power level ratings shown are in decibels referred to 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{Wi} and L_{WiA} sound power levels for Installation Type B : free inlet, ducted outlet.



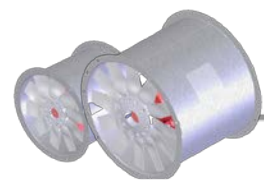
Axial Smoke-exhaust Fan



LASD-1000-300-6 **60Hz** Sound Data 風機聲功率數值[dB]

型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶								Sound Power re 10 ⁻¹² Watts Octave Band [Hz]	入口處 A 加權聲功率位準 L _{wi} A [dBA]
			63	125	250	500	1000	2000	4000	8000		
LASD-1000-300-6/8°	1760	0	87	97	96	95	95	94	95	94	102	
LASD-1000-300-6/8°	1760	161	88	96	95	94	95	94	96	94	102	
LASD-1000-300-6/8°	1760	323	90	97	96	97	102	100	97	92	106	
LASD-1000-300-6/8°	1760	484	93	101	102	102	98	96	93	89	104	
LASD-1000-300-6/20°	1760	0	97	103	102	100	99	96	96	94	104	
LASD-1000-300-6/20°	1760	174	97	103	102	99	98	95	94	91	103	
LASD-1000-300-6/20°	1760	323	98	102	101	98	97	95	92	89	102	
LASD-1000-300-6/20°	1760	536	102	101	100	99	99	98	95	92	104	
LASD-1000-300-6/32°	1760	0	104	106	105	104	102	100	97	93	107	
LASD-1000-300-6/32°	1760	222	104	106	105	102	101	99	97	93	107	
LASD-1000-300-6/32°	1760	381	105	105	104	101	100	99	97	94	106	
LASD-1000-300-6/32°	1760	501	106	106	106	104	103	102	98	94	108	
LASD-1000-300-6/8°	1170	0	88	88	86	86	86	83	90	79	94	
LASD-1000-300-6/8°	1170	71	87	87	85	85	86	85	91	77	94	
LASD-1000-300-6/8°	1170	143	88	88	86	92	93	87	88	77	97	
LASD-1000-300-6/8°	1170	214	92	93	94	90	88	85	81	77	94	
LASD-1000-300-6/20°	1170	0	94	94	91	90	89	85	91	77	96	
LASD-1000-300-6/20°	1170	77	94	94	90	89	88	84	86	77	93	
LASD-1000-300-6/20°	1170	143	93	93	90	88	87	84	81	77	92	
LASD-1000-300-6/20°	1170	237	92	92	90	89	90	87	84	80	95	
LASD-1000-300-6/32°	1170	0	97	97	95	94	92	89	85	81	97	
LASD-1000-300-6/32°	1170	98	97	97	94	92	91	89	86	81	97	
LASD-1000-300-6/32°	1170	168	96	96	93	91	91	89	86	82	96	
LASD-1000-300-6/32°	1170	221	97	97	96	94	94	90	87	82	98	
LASD-1000-300-6/8°	880	0	82	81	80	80	78	80	79	68	86	
LASD-1000-300-6/8°	880	40	81	80	79	80	79	81	79	65	86	
LASD-1000-300-6/8°	880	81	82	81	82	87	85	82	77	66	89	
LASD-1000-300-6/8°	880	121	86	87	86	83	81	77	73	69	86	
LASD-1000-300-6/20°	880	0	88	87	85	84	81	81	79	65	88	
LASD-1000-300-6/20°	880	44	88	86	84	83	80	79	76	67	86	
LASD-1000-300-6/20°	880	81	87	86	83	82	80	77	73	69	85	
LASD-1000-300-6/20°	880	134	86	85	84	84	83	80	76	72	87	
LASD-1000-300-6/32°	880	0	91	90	89	87	85	81	77	73	90	
LASD-1000-300-6/32°	880	55	91	90	87	86	84	82	78	73	89	
LASD-1000-300-6/32°	880	95	90	89	86	85	84	82	78	74	89	
LASD-1000-300-6/32°	880	125	91	91	89	88	86	83	79	74	91	

The sound power level ratings shown are in decibels referred to 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{Wi} and L_{WiA} sound power levels for Installation Type B : free inlet, ducted outlet.



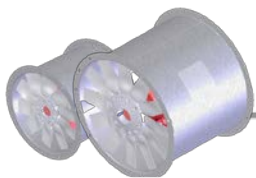
Axial Smoke-exhaust Fan



LASD-1000-300-12 60Hz Sound Data 風機聲功率數值

型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) Sound Power re 10 ⁻¹² Watts 八音階頻帶 Octave Band [Hz]								入口處 A 加權聲功率位準 L _{WiA} [dBA]
			63	125	250	500	1000	2000	4000	8000	
LASD-1000-300-12/8°	1760	0	87	87	98	97	97	97	98	96	104
LASD-1000-300-12/8°	1760	323	87	87	98	97	98	99	101	96	106
LASD-1000-300-12/8°	1760	645	91	92	101	104	105	100	98	93	108
LASD-1000-300-12/8°	1760	968	93	94	104	103	101	99	96	91	106
LASD-1000-300-12/20°	1760	0	99	98	105	104	101	99	99	97	107
LASD-1000-300-12/20°	1760	308	98	97	104	103	100	98	99	95	106
LASD-1000-300-12/20°	1760	536	99	98	105	103	101	100	98	94	107
LASD-1000-300-12/20°	1760	746	100	99	109	110	110	107	101	95	114
LASD-1000-300-12/32°	1760	0	105	103	108	107	104	102	99	95	110
LASD-1000-300-12/32°	1760	359	105	103	108	106	103	102	98	93	109
LASD-1000-300-12/32°	1760	589	105	103	108	105	102	101	98	94	108
LASD-1000-300-12/32°	1760	802	105	103	107	105	101	100	98	95	108
LASD-1000-300-12/8°	1170	0	78	89	89	88	89	87	92	80	96
LASD-1000-300-12/8°	1170	143	78	89	89	88	90	91	94	78	98
LASD-1000-300-12/8°	1170	285	83	92	93	97	93	88	89	76	98
LASD-1000-300-12/8°	1170	428	84	95	95	92	91	88	84	79	96
LASD-1000-300-12/20°	1170	0	90	96	96	92	91	88	94	81	98
LASD-1000-300-12/20°	1170	136	89	95	95	91	90	88	92	79	97
LASD-1000-300-12/20°	1170	237	90	96	96	91	92	89	89	80	97
LASD-1000-300-12/20°	1170	330	91	100	100	101	100	94	89	82	104
LASD-1000-300-12/32°	1170	0	96	99	99	95	95	90	90	81	100
LASD-1000-300-12/32°	1170	159	96	99	99	93	94	90	86	81	99
LASD-1000-300-12/32°	1170	260	96	99	99	92	93	90	87	82	98
LASD-1000-300-12/32°	1170	355	96	98	98	92	92	90	87	83	98
LASD-1000-300-12/8°	880	0	72	83	82	82	82	83	81	69	88
LASD-1000-300-12/8°	880	81	72	83	82	83	84	86	81	65	90
LASD-1000-300-12/8°	880	161	77	86	89	89	85	83	77	64	91
LASD-1000-300-12/8°	880	242	79	89	88	86	84	80	76	71	89
LASD-1000-300-12/20°	880	0	83	90	88	86	83	84	82	69	90
LASD-1000-300-12/20°	880	77	82	89	87	85	83	84	80	67	89
LASD-1000-300-12/20°	880	134	82	90	88	86	85	83	79	70	90
LASD-1000-300-12/20°	880	187	84	94	95	95	92	86	80	73	96
LASD-1000-300-12/32°	880	0	88	93	91	89	87	84	80	71	92
LASD-1000-300-12/32°	880	90	88	93	91	88	86	82	78	73	91
LASD-1000-300-12/32°	880	147	88	93	90	87	86	83	79	74	91
LASD-1000-300-12/32°	880	201	88	92	90	86	85	83	79	75	90

The sound power level ratings shown are in decibels referred to 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{Wi} and L_{WiA} sound power levels for Installation Type B : free inlet, ducted outlet.



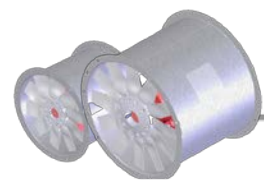
Axial Smoke-exhaust Fan



LASD-1250-550-7 **60Hz** Sound Data 風機聲功率數值[dB]

型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶 Sound Power re 10 ⁻¹² Watts Octave Band [Hz]								入口處 A 加權聲功率位準 L _{WA} [dBA]
			63	125	250	500	1000	2000	4000	8000	
LASD-1250-550-7/8°	1760	0	112	112	112	108	107	105	101	93	112
LASD-1250-550-7/8°	1760	467	109	109	109	107	107	106	103	94	112
LASD-1250-550-7/8°	1760	934	112	112	114	113	107	104	99	92	114
LASD-1250-550-7/8°	1760	1401	113	113	113	110	106	103	100	96	112
LASD-1250-550-7/20°	1760	0	118	118	118	114	111	106	102	95	117
LASD-1250-550-7/20°	1760	362	117	117	117	113	110	105	101	93	116
LASD-1250-550-7/20°	1760	715	115	115	115	111	108	104	100	95	114
LASD-1250-550-7/20°	1760	1068	114	114	116	117	114	109	104	98	119
LASD-1250-550-7/32°	1760	0	121	121	121	117	114	109	104	98	119
LASD-1250-550-7/32°	1760	362	119	119	119	116	113	108	103	98	118
LASD-1250-550-7/32°	1760	725	119	119	119	114	111	107	103	100	117
LASD-1250-550-7/32°	1760	1087	117	117	117	112	110	107	104	101	116
LASD-1250-550-7/8°	1170	0	104	104	100	100	97	95	89	78	102
LASD-1250-550-7/8°	1170	206	101	101	99	99	98	97	90	79	103
LASD-1250-550-7/8°	1170	413	104	104	106	100	97	93	87	79	103
LASD-1250-550-7/8°	1170	619	105	105	103	99	96	93	90	83	102
LASD-1250-550-7/20°	1170	0	110	110	106	105	99	95	91	78	105
LASD-1250-550-7/20°	1170	160	109	109	105	104	98	94	89	78	104
LASD-1250-550-7/20°	1170	316	107	107	103	101	97	93	89	81	103
LASD-1250-550-7/20°	1170	472	106	106	109	108	102	98	92	85	108
LASD-1250-550-7/32°	1170	0	113	113	109	108	102	97	92	85	108
LASD-1250-550-7/32°	1170	160	111	111	108	106	101	96	92	86	107
LASD-1250-550-7/32°	1170	320	111	111	106	104	100	96	93	88	106
LASD-1250-550-7/32°	1170	480	109	109	104	103	100	97	94	90	105
LASD-1250-550-7/8°	880	0	97	97	93	92	90	86	78	70	95
LASD-1250-550-7/8°	880	117	94	94	92	92	91	88	79	70	95
LASD-1250-550-7/8°	880	234	97	99	98	92	89	84	77	71	95
LASD-1250-550-7/8°	880	350	98	98	95	91	88	85	81	75	94
LASD-1250-550-7/20°	880	0	103	103	99	96	91	87	80	70	98
LASD-1250-550-7/20°	880	91	102	102	98	95	90	86	78	70	97
LASD-1250-550-7/20°	880	179	100	100	96	93	89	85	79	73	95
LASD-1250-550-7/20°	880	267	99	101	102	99	94	89	83	77	100
LASD-1250-550-7/32°	880	0	106	106	102	99	94	89	83	76	101
LASD-1250-550-7/32°	880	91	104	104	101	98	93	88	83	78	99
LASD-1250-550-7/32°	880	181	104	104	99	96	92	88	85	80	98
LASD-1250-550-7/32°	880	272	102	102	97	95	92	89	86	82	98

The sound power level ratings shown are in decibels referred to 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wi} and L_{WA} sound power levels for Installation Type B : free inlet, ducted outlet.



Axial Smoke-exhaust Fan

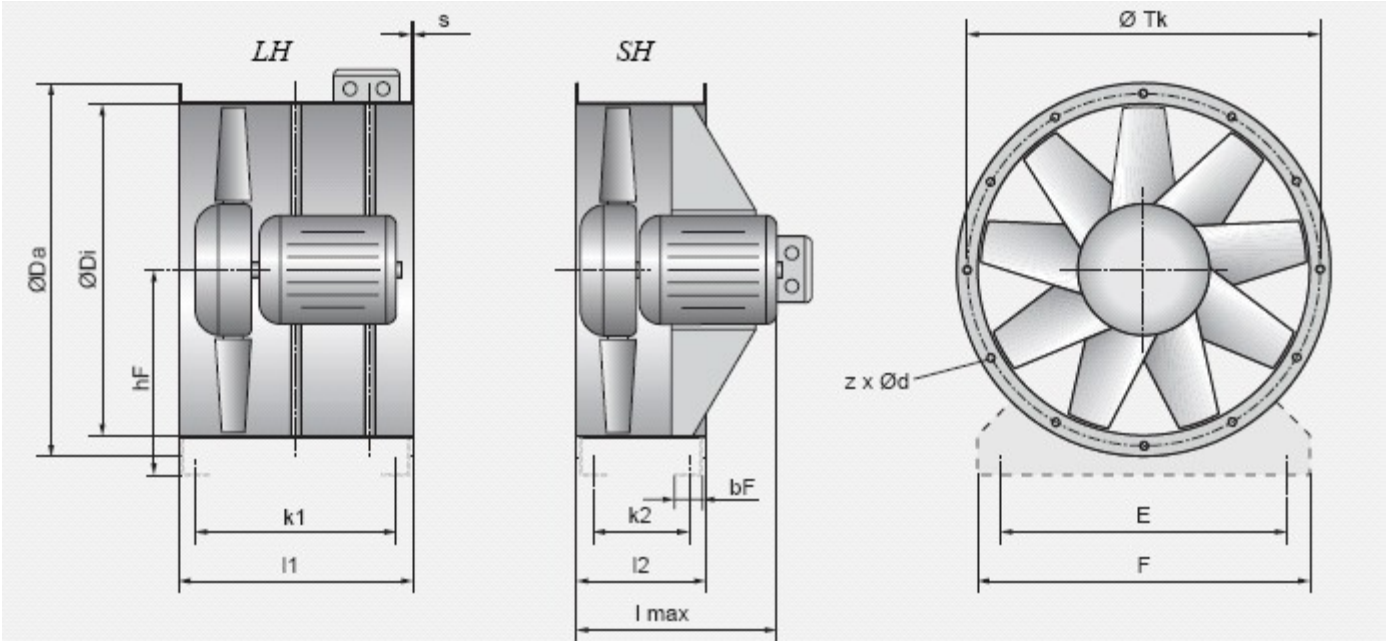


LASD-1250-550-14 60Hz Sound Data 風機聲功率數值

型號 Model No.	轉速 N [RPM]	靜壓 Ps [Pa]	風機聲功率(以 10 ⁻¹² 為基準) 八音階頻帶 Sound Power re 10 ⁻¹² Watts Octave Band [Hz]								入口處 A 加權聲功率位準 L _{WiA} [dBA]
			63	125	250	500	1000	2000	4000	8000	
LASD-1250-550-14/8°	1760	0	103	103	107	113	108	108	104	96	115
LASD-1250-550-14/8°	1760	849	104	104	107	111	111	109	103	94	115
LASD-1250-550-14/8°	1760	1707	106	106	111	118	110	106	101	95	117
LASD-1250-550-14/8°	1760	2555	108	108	111	116	110	106	103	98	116
LASD-1250-550-14/20°	1760	0	110	110	114	120	112	109	105	97	120
LASD-1250-550-14/20°	1760	418	108	108	113	119	112	109	104	96	119
LASD-1250-550-14/20°	1760	839	108	108	112	117	110	108	103	96	117
LASD-1250-550-14/20°	1760	1258	107	107	111	117	112	109	105	98	118
LASD-1250-550-14/32°	1760	0	115	115	118	122	116	113	107	99	122
LASD-1250-550-14/32°	1760	392	115	115	117	122	115	111	105	98	121
LASD-1250-550-14/32°	1760	791	112	112	115	119	113	110	105	99	119
LASD-1250-550-14/32°	1760	1258	110	110	113	117	112	109	105	101	118
LASD-1250-550-14/8°	1170	0	95	95	105	100	100	99	91	81	105
LASD-1250-550-14/8°	1170	375	96	96	102	103	102	98	89	81	105
LASD-1250-550-14/8°	1170	754	98	98	110	103	99	94	89	82	105
LASD-1250-550-14/8°	1170	1129	100	100	108	103	99	96	92	86	105
LASD-1250-550-14/20°	1170	0	102	102	112	105	102	99	93	82	108
LASD-1250-550-14/20°	1170	185	100	100	111	104	102	98	91	82	107
LASD-1250-550-14/20°	1170	371	100	100	109	102	101	97	90	83	106
LASD-1250-550-14/20°	1170	556	99	99	109	105	102	99	92	86	107
LASD-1250-550-14/32°	1170	0	107	107	114	109	106	101	94	84	111
LASD-1250-550-14/32°	1170	173	106	106	113	107	105	99	92	84	110
LASD-1250-550-14/32°	1170	350	104	104	111	105	104	98	93	86	108
LASD-1250-550-14/32°	1170	556	102	102	109	104	102	98	94	89	107
LASD-1250-550-14/8°	880	0	88	92	98	93	93	89	81	73	97
LASD-1250-550-14/8°	880	212	89	92	96	96	94	88	79	73	98
LASD-1250-550-14/8°	880	427	91	96	103	95	91	86	80	74	98
LASD-1250-550-14/8°	880	639	93	96	101	95	91	88	83	78	98
LASD-1250-550-14/20°	880	0	95	99	105	97	94	90	82	75	101
LASD-1250-550-14/20°	880	105	93	97	104	97	94	89	81	75	100
LASD-1250-550-14/20°	880	210	93	97	102	95	93	88	81	75	99
LASD-1250-550-14/20°	880	315	92	96	102	97	94	90	83	78	100
LASD-1250-550-14/32°	880	0	100	103	107	101	98	92	84	76	104
LASD-1250-550-14/32°	880	98	99	102	106	100	96	90	83	76	102
LASD-1250-550-14/32°	880	198	97	100	104	98	95	90	84	78	101
LASD-1250-550-14/32°	880	315	95	98	102	97	94	90	86	81	100

The sound power level ratings shown are in decibels referred to 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{Wi} and L_{WiA} sound power levels for Installation Type B : free inlet, ducted outlet.

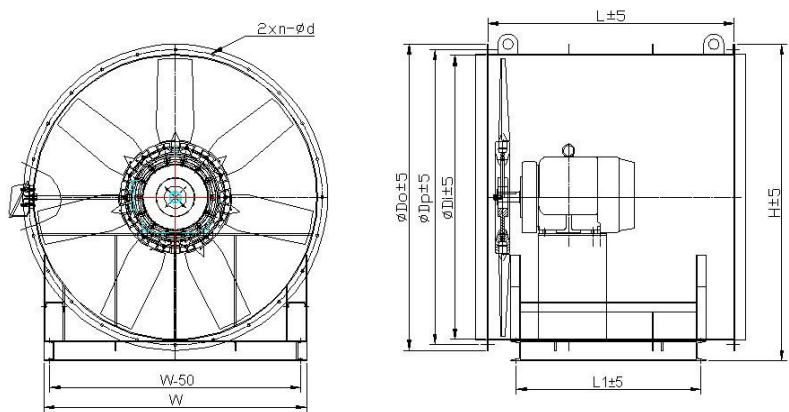
Feet mounting 落地式



尺寸 size	Di [mm]	Da [mm]	hF [mm]	z*d [mm]	Tk [mm]	E [mm]	F [mm]	bF [mm]
560	565	660	348	12*14	629	500	560	60
630	634	734	385	12*14	698	570	630	60
710	711	814	425	12*14	775	650	710	60
800	797	904	469	16*14	861	740	800	60
900	897	1002	516	16*14	958	840	900	60
1000	1003	1105	572	16*14	1067	900	960	60
1250	1250	1365	685	16*14	1320	1150	1210	60

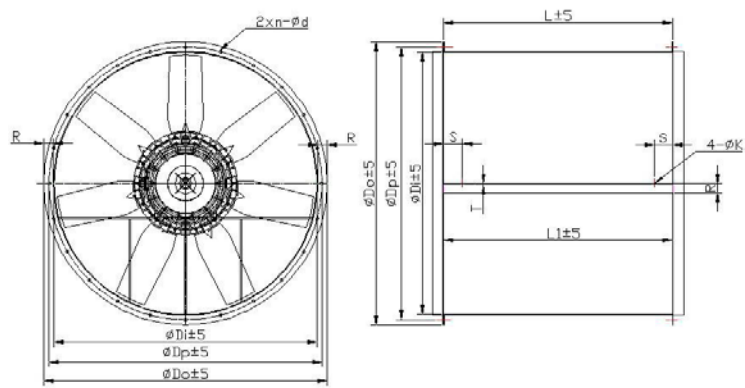
尺寸 size	LH				SH			LL				SL		
	S [mm]	k1 [mm]	l1 [mm]	馬達 max.	k 2 [mm]	l2 [mm]	lmax [mm]	S [mm]	k1 [mm]	l1 [mm]	馬達 max.	k 2 [mm]	l2 [mm]	lmax [mm]
560	3	454	520	132	149	225	460	3	434	520	132	150	225	460
630	3	534	600	132	299	275	550	3	404	520	132	149	225	550
710	3	584	650	160	222	300	575	3	404	520	132	149	225	575
800	3	634	700	180	212	300	575	3	404	520	132	139	225	575
900	4	632	700	180	212	300	575	3	404	520	132	214	300	575
1000	4	732	800	200	212	300	575	3	404	520	132	214	300	575
1250	4	932	1000											

Feet mounting 落地式 圖 1 落地式外型尺寸圖



尺寸 size	Di [mm]	Dp [mm]	Do [mm]	H [mm]	z*d [mm]	L [mm]	L1 [mm]	W [mm]
1250	1250	1320	1365	1392	16*14	1000	955	1250

Ceiling Hanging 吊掛式 圖 2 吊掛式外型尺寸圖



尺寸 size	Di [mm]	Dp [mm]	Do [mm]	n*d	L [mm]	L1 [mm]	t [mm]	T [mm]	R [mm]	K [mm]	S [mm]	安裝最大 馬達
560	565	629	660	12*14	520	514	3	5	50	14	100	
630	634	698	734	12*14	600	594	3	5	50	14	100	
710	711	775	814	12*14	650	644	3	5	50	14	100	
800	797	861	904	16*14	700	694	3	5	50	14	100	
900	894	958	1002	16*14	700	694	4	5	50	14	100	
1000	1003	1067	1105	16*14	800	794	4	5	50	14	100	
1250	1250	1320	1365	16*14	1000	992	4	5	100	14	100	

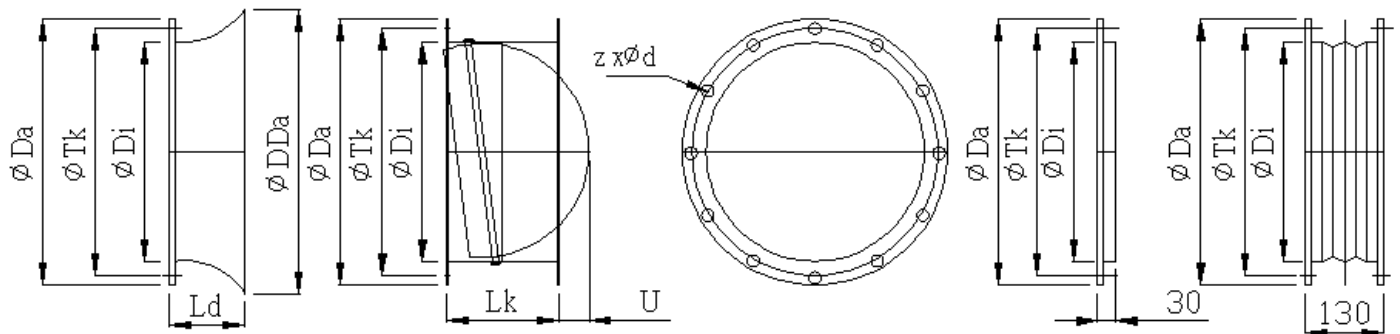
Dimensions + Accessories 尺寸 + 附件

ED
集流器(通風噴口)

LRK
空氣驅動的氣流調節器

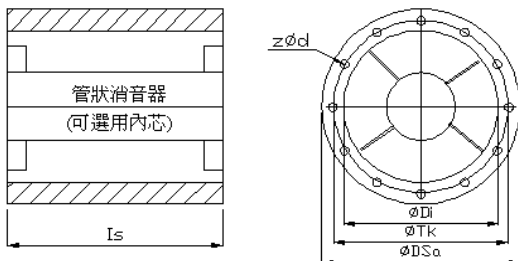
GL-LASD
配套的法蘭配件

EV-LASD
柔性法蘭聯接器



規格尺寸 size	Da [mm]	Di [mm]	Tk [mm]	z*d [mm]	DDa [mm]	Ld [mm]	Lk [mm]	U [mm]
560	660	565	629	12*14	667	135	185	110
630	734	634	698	16*14	775	135	210	125
710	814	711	775	16*14	816	170	310	155
800	904	797	861	16*14	915	200	330	195
900	1002	897	958	16*14	1015	250	330	220
1000	1105	1003	1067	16*14	1115	250	330	220
1250	1365	1250	1320	16*14	按需求 On demand			

SD
管狀消音器(可選用內芯)



規格 DSa ls 尺寸 [mm] [mm]				不同頻率下聲級衰減 suppression at [Hz]							
			kg	63 [dB]	125 [dB]	250 [dB]	500 [dB]	1k [dB]	2k [dB]	4k [dB]	8k [dB]
560	765	1120	50	1	3	10	10	6	3	1	1
		630	34	1	1	5	5	3	2	1	1
630	835	1250	58	1	3	9	9	4	2	1	1
		750	48	1	2	6	6	3	2	1	1
710	915	1500	87	1	4	12	10	5	2	1	1
		800	62	1	3	7	5	2	1	1	1
800	1005	1600	98	1	4	11	7	4	2	1	1
		9000		On demand 按需求							
900		1800		On demand 按需求							
		1000		On demand 按需求							
1000		2000		On demand 按需求							
1250				On demand 按需求							

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