Low Pressure Axial Smoke-exhaust Fan Driven Directly

FLOWTECH Co., Ltd. certifies that the LASD-2000 shown herein 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.

c UL US LISTED

POWER VENTILATOR 45GD

LASD-2000 is listed for electrical (UL/cUL 705) File no. E323432

Fan code

LASD-2000 -690-7/20°- 30- 8 - 5

- 5: Frequency of motor (5: 50Hz 6: 60Hz)
- 8: Number of poles of motor
- 30: Power of motor, Unit： kW
- 7/20°: Number of Blades / Blade Pitch Angle[°]
- 690: Hub Diameter, Unit： mm
- LASD-2000: Normal Fan Diameter, Unit： mm
- Low pressure Axial Smoke-exhaust Fan driven Directly

Casing

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, R2. 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.assemblies.

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.

Propeller

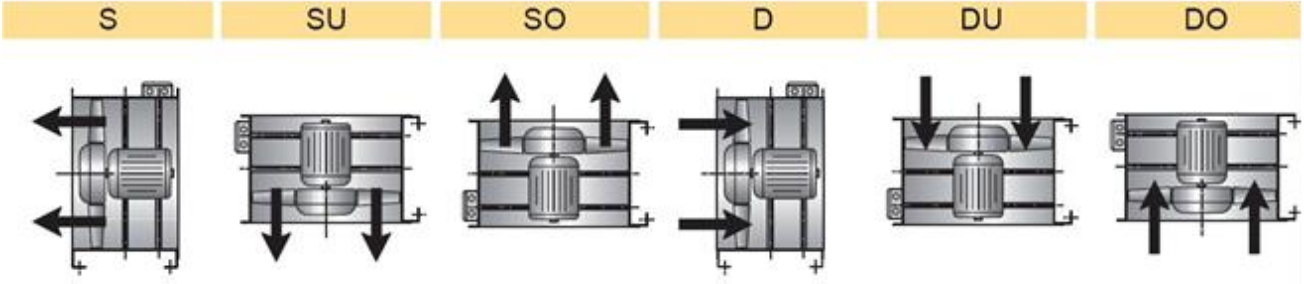
The Flowtech-propellers, hubs and blades are made of cast aluminum alloy, the aero-dynamical profile guarantees high efficiency and low noise. The blades are with adjustable pitch angle to optimum the duty point. The solidity varies for a wider range of performance. All rotating aluminum components are 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.

Motors

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 L 50) life design. All motors are can be manufactured to correspond to F200, F300 or F400 requirements for smoke-extract application.

Forms of running

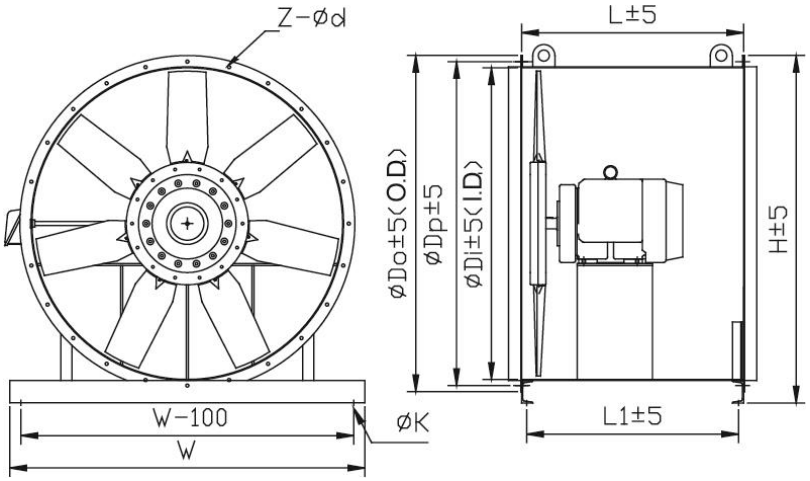
Flowtech-Axial flow fans are available for all forms of running. The chart information shows all standard forms of running, please indicate when ordering. Performance for form of running “D” are not certified by AMCA International. Form of running is especially relevant when weather proof motors are required.



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

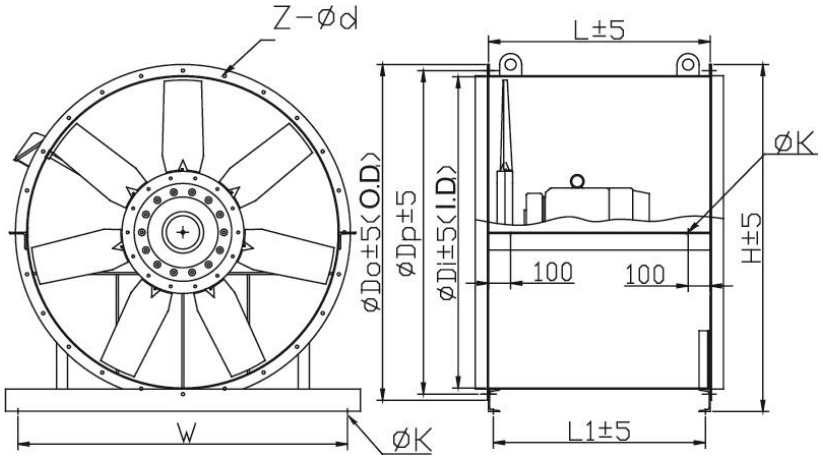
Dimensions (Unit: mm)

Feet mounting



Fan Size	Di	Dp	Do	Z x d	L	L1	W	K	H	Max. Motor Frame size
2000	2000	2055	2110	24x14	1220	1127	2000	22	2211	≤225S
2000	2000	2055	2110	24x14	1525	1432	2000	22	2211	<280M

Ceiling Hanging

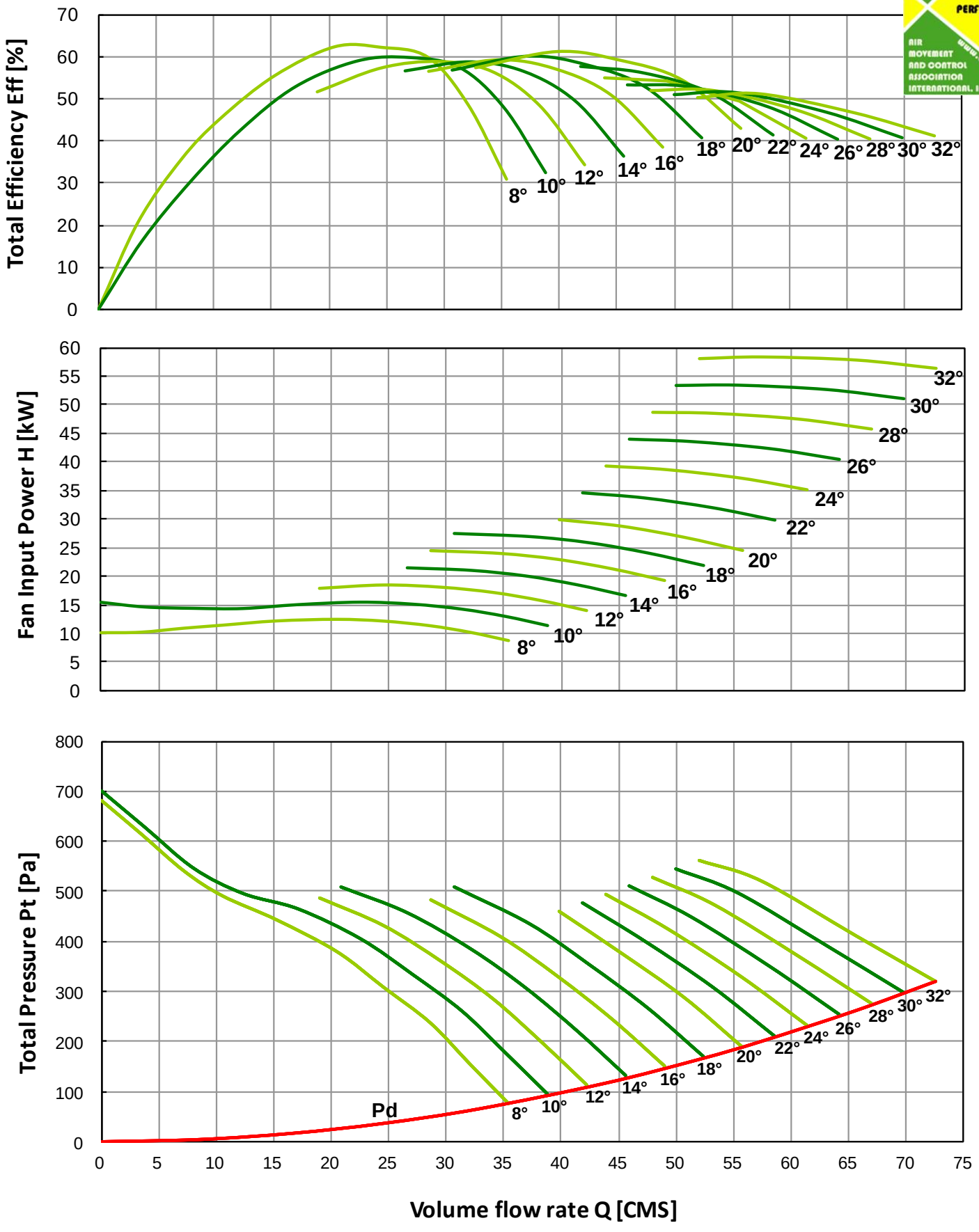


Fan Size	Di	Dp	Do	Z x d	L	L1	W	K	H	Max. Motor Frame size
2000	2000	2055	2110	24x14	1220	1020	2087	22	2211	≤225S
2000	2000	2055	2110	24x14	1525	1325	2087	22	2211	<280M

LASD-2000-690-7 (50 Hz) Performance Curves

FEG 63

Fan Speed N = 720 [rpm] Outlet Area A =3.142 [m²] ρ= 1.2kg/m³

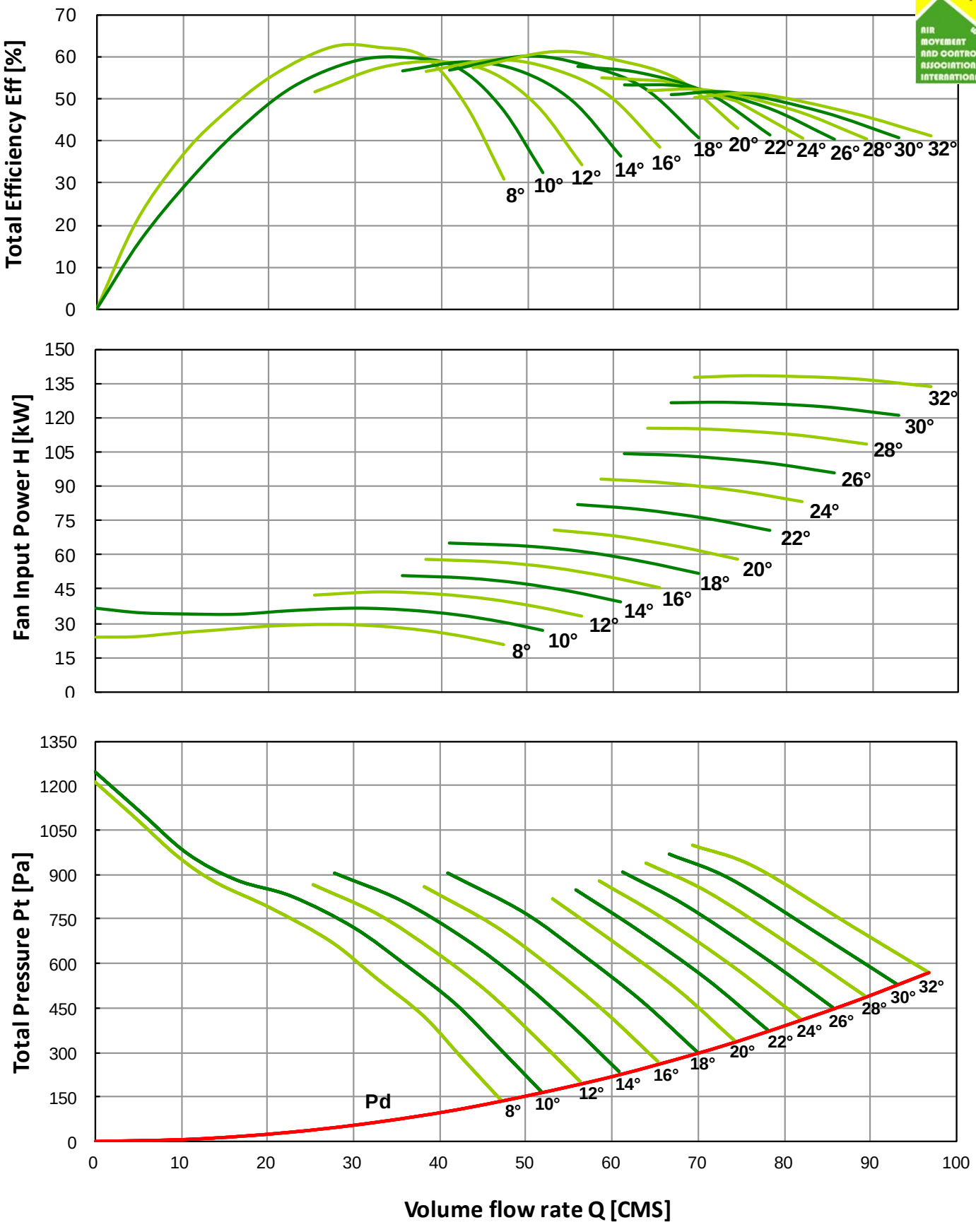


Performance certified is for installation type A： free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).

LASD-2000-690-7 (50 Hz) Performance Curves

FEG 63

Fan Speed N = 960 [rpm] Outlet Area A =3.142 [m²] ρ= 1.2kg/m³

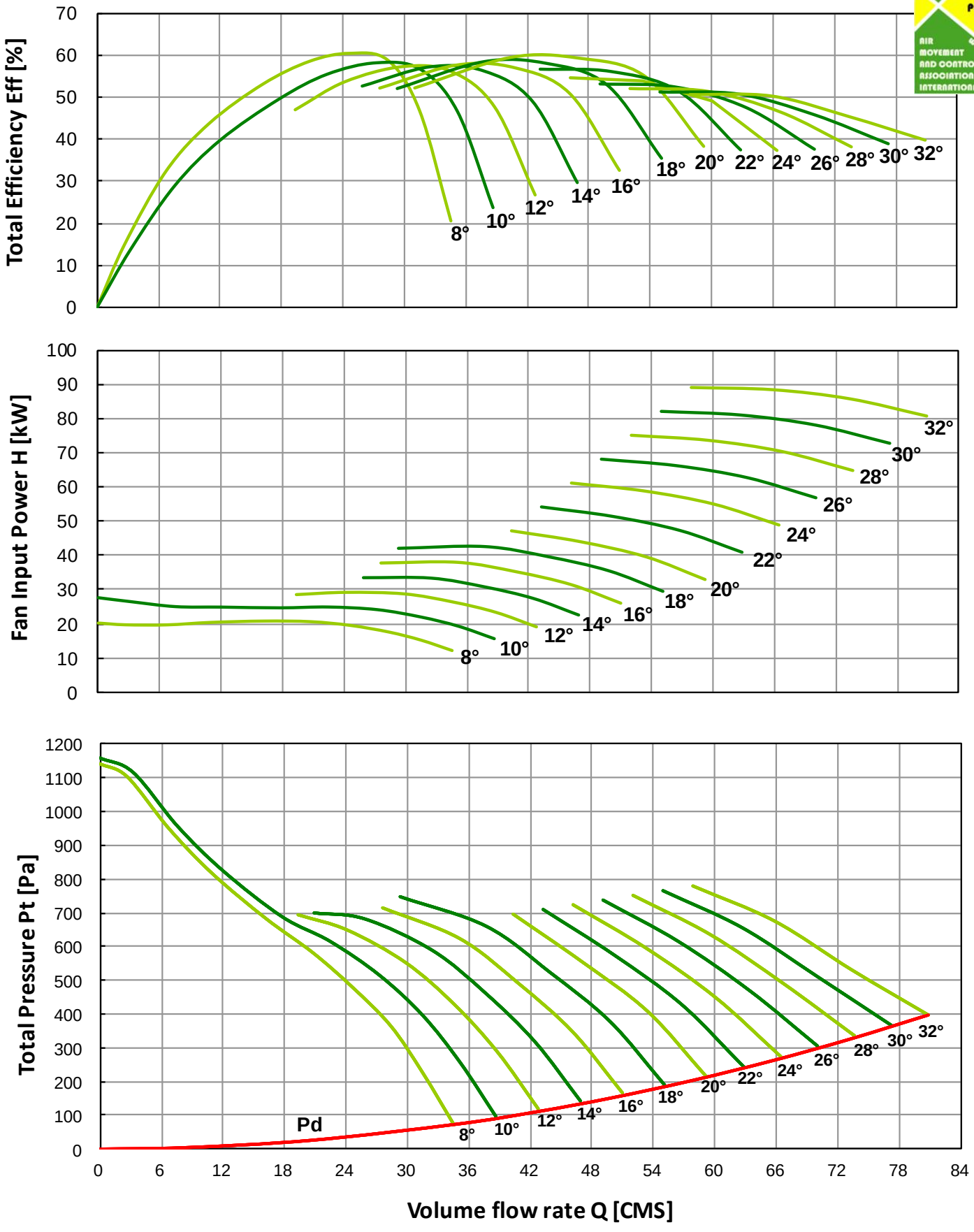


Performance certified is for installation type A： free inlet, free outlet. Performance ratings do not include the effects of **appurtenances** (accessories).

LASD-2000-690-14 (50 Hz) Performance Curves

FEG 63

Fan Speed N = 720 [rpm] Outlet Area A =3.142 [m²] ρ= 1.2kg/m³

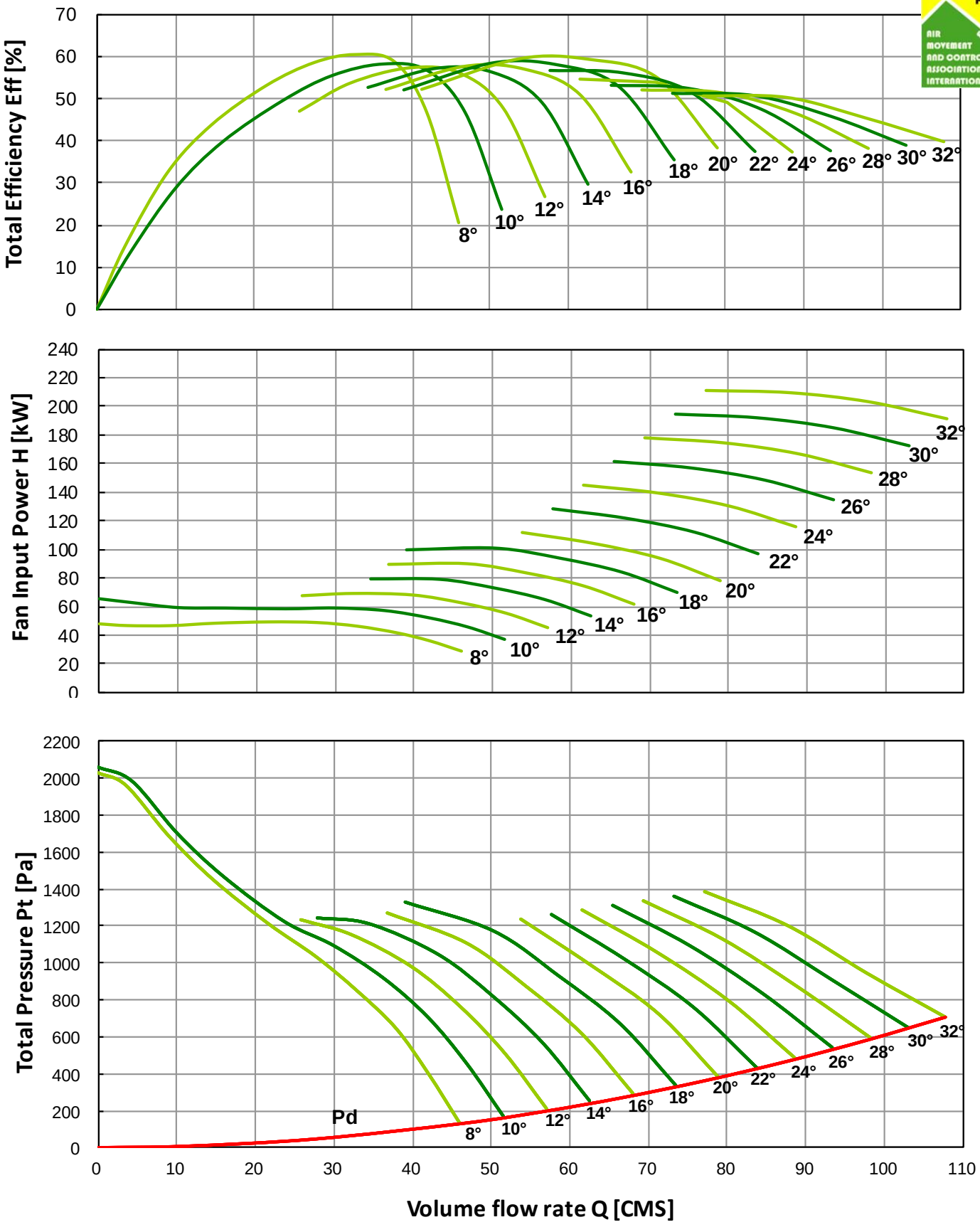


Performance certified is for installation type A： free inlet, free outlet. Performance ratings do not include the effects of **appurtenances** (accessories).

LASD-2000-690-14 (50 Hz) Performance Curves

FEG 63

Fan Speed N = 960 [rpm] Outlet Area A =3.142 [m²] ρ= 1.2kg



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

LASD-2000-690 (50 Hz) Sound Data[dB]

Model No.	N [RPM]	Ps [Pa]	Sound Power re 10^{-12} Watts Octave Band [Hz]								$L_{WO}A$ [dB]
			63	125	250	500	1000	2000	4000	8000	
LASD-2000-690-7/8°	720	0	106	106	107	104	100	100	91	81	107
LASD-2000-690-7/8°	720	80	106	105	106	104	100	100	91	82	106
LASD-2000-690-7/8°	720	200	106	104	105	104	101	100	92	83	107
LASD-2000-690-7/8°	720	320	104	105	105	102	100	97	91	84	105
LASD-2000-690-7/20°	720	0	110	111	111	107	102	99	93	88	109
LASD-2000-690-7/20°	720	80	110	110	110	107	102	98	93	89	108
LASD-2000-690-7/20°	720	200	110	109	109	106	102	98	94	90	108
LASD-2000-690-7/20°	720	320	110	109	109	106	102	99	95	91	108
LASD-2000-690-7/32°	720	0	113	113	113	110	106	102	98	95	112
LASD-2000-690-7/32°	720	80	113	113	113	109	105	102	98	95	111
LASD-2000-690-7/32°	720	200	113	113	112	108	105	102	98	95	111
LASD-2000-690-7/32°	720	320	115	114	112	108	104	100	96	92	110
LASD-2000-690-7/8°	960	0	112	112	113	112	107	105	103	91	114
LASD-2000-690-7/8°	960	200	111	112	112	111	108	106	103	92	114
LASD-2000-690-7/8°	960	380	110	112	110	111	108	106	103	92	113
LASD-2000-690-7/8°	960	560	111	111	111	110	107	105	101	93	113
LASD-2000-690-7/20°	960	0	117	117	117	115	111	106	102	96	116
LASD-2000-690-7/20°	960	200	116	117	116	114	110	106	102	97	116
LASD-2000-690-7/20°	960	380	116	117	115	114	110	106	102	98	116
LASD-2000-690-7/20°	960	560	115	116	115	114	110	106	102	99	116
LASD-2000-690-7/32°	960	0	119	120	120	118	113	110	106	103	119
LASD-2000-690-7/32°	960	200	119	120	119	117	113	110	106	102	119
LASD-2000-690-7/32°	960	380	119	119	119	117	112	109	106	102	119
LASD-2000-690-7/32°	960	560	121	121	119	117	112	109	104	100	118

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 outlet LwoA sound power levels for installation Type A: free inlet, free outlet.

LASD-2000-690 (50 Hz) Sound Data[dB]

Model No.	N [RPM]	Ps [Pa]	Sound Power re 10^{-12} Watts Octave Band [Hz]								$L_{WO}A$ [dB]
			63	125	250	500	1000	2000	4000	8000	
LASD-2000-690-14/8°	720	0	95	110	108	106	102	101	94	84	108
LASD-2000-690-14/8°	720	200	93	109	107	104	103	102	95	85	108
LASD-2000-690-14/8°	720	380	92	109	107	105	104	101	93	84	108
LASD-2000-690-14/8°	720	560	94	108	107	105	102	98	92	84	107
LASD-2000-690-14/20°	720	0	106	116	114	110	106	102	95	87	112
LASD-2000-690-14/20°	720	200	103	115	113	109	105	101	95	88	111
LASD-2000-690-14/20°	720	380	103	114	112	109	105	100	95	90	111
LASD-2000-690-14/20°	720	560	102	114	112	110	106	101	96	91	112
LASD-2000-690-14/32°	720	0	112	118	117	114	108	103	98	94	115
LASD-2000-690-14/32°	720	200	112	117	116	113	107	103	98	95	114
LASD-2000-690-14/32°	720	380	110	116	115	112	106	103	99	95	113
LASD-2000-690-14/32°	720	560	110	116	115	112	106	103	99	95	113
LASD-2000-690-14/8°	960	0	101	105	117	113	110	107	104	95	116
LASD-2000-690-14/8°	960	330	99	103	117	111	110	108	105	95	116
LASD-2000-690-14/8°	960	660	98	102	115	112	111	109	103	94	116
LASD-2000-690-14/8°	960	990	100	104	114	113	110	106	101	94	115
LASD-2000-690-14/20°	960	0	113	115	122	118	114	110	105	96	120
LASD-2000-690-14/20°	960	330	109	113	122	117	113	109	104	97	119
LASD-2000-690-14/20°	960	660	109	112	121	116	113	109	104	98	119
LASD-2000-690-14/20°	960	990	109	111	120	117	114	109	104	99	119
LASD-2000-690-14/32°	960	0	118	118	124	122	116	112	106	102	123
LASD-2000-690-14/32°	960	330	118	118	124	121	115	111	106	103	122
LASD-2000-690-14/32°	960	660	117	117	123	120	114	111	106	103	121
LASD-2000-690-14/32°	960	990	116	116	122	120	114	111	106	103	121

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 outlet LwoA sound power levels for installation Type A: free inlet, free outlet.