

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.

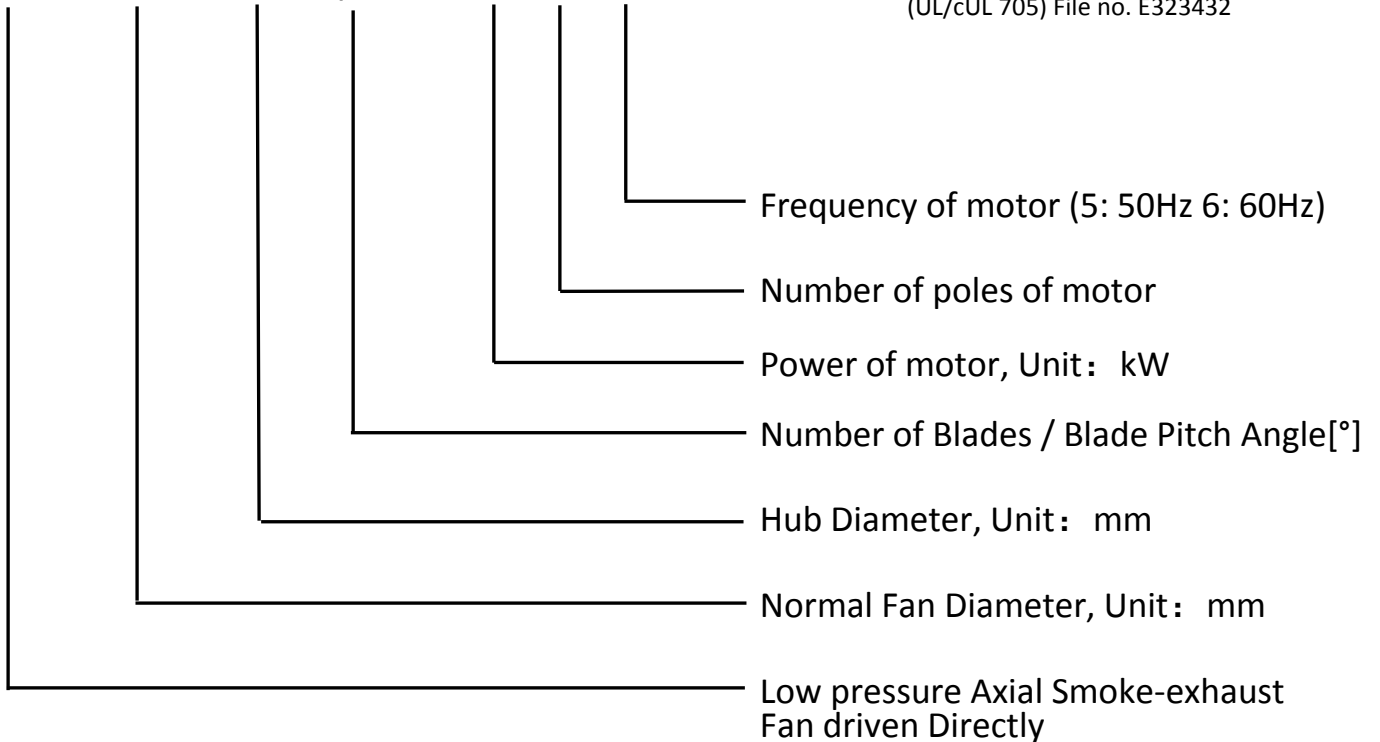


POWER VENTILATOR 45GD

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

Fan code

LASD-2000 -690-7/20°- 30- 8 - 6



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

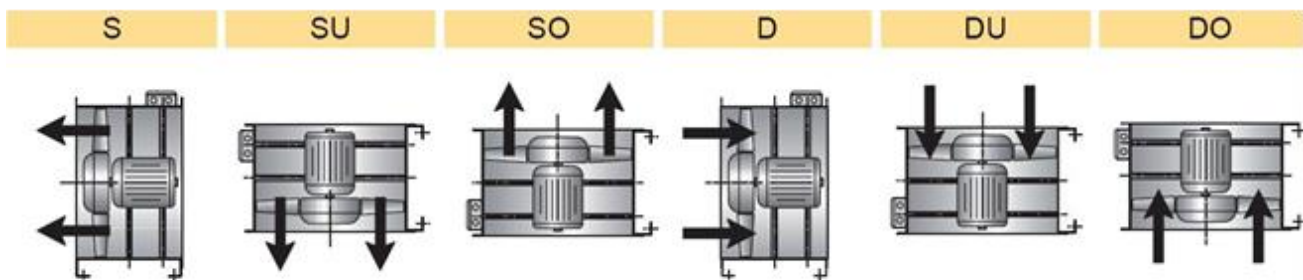
The Flowtech-propellers, hubs and blades are made of cast aluminum alloy, the aero-dynamical profile guarantees high efficiency and low noise. The blades are with adjustable pitch angle to optimum the duty point. The solidity varies for a wider range of performance. All rotating aluminum components are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

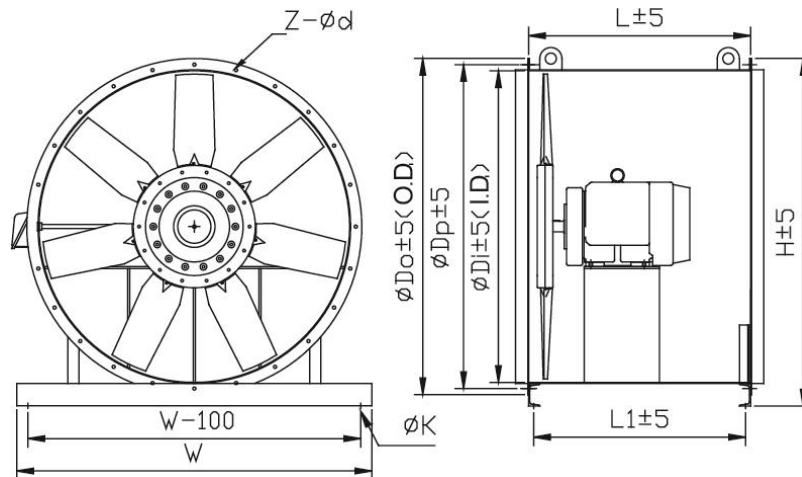
Flowtech-Axial flow fans are available for all forms of running. The chart information shows all standard forms of running, please indicate when ordering. Performance for form of running "D" are not certified by AMCA International. Form of running is especially relevant when weather proof motors are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



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

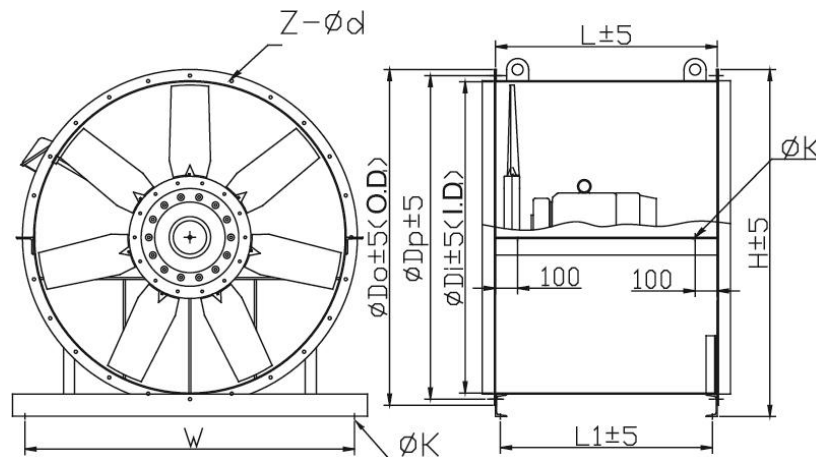
Dimensions (Unit: mm)

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



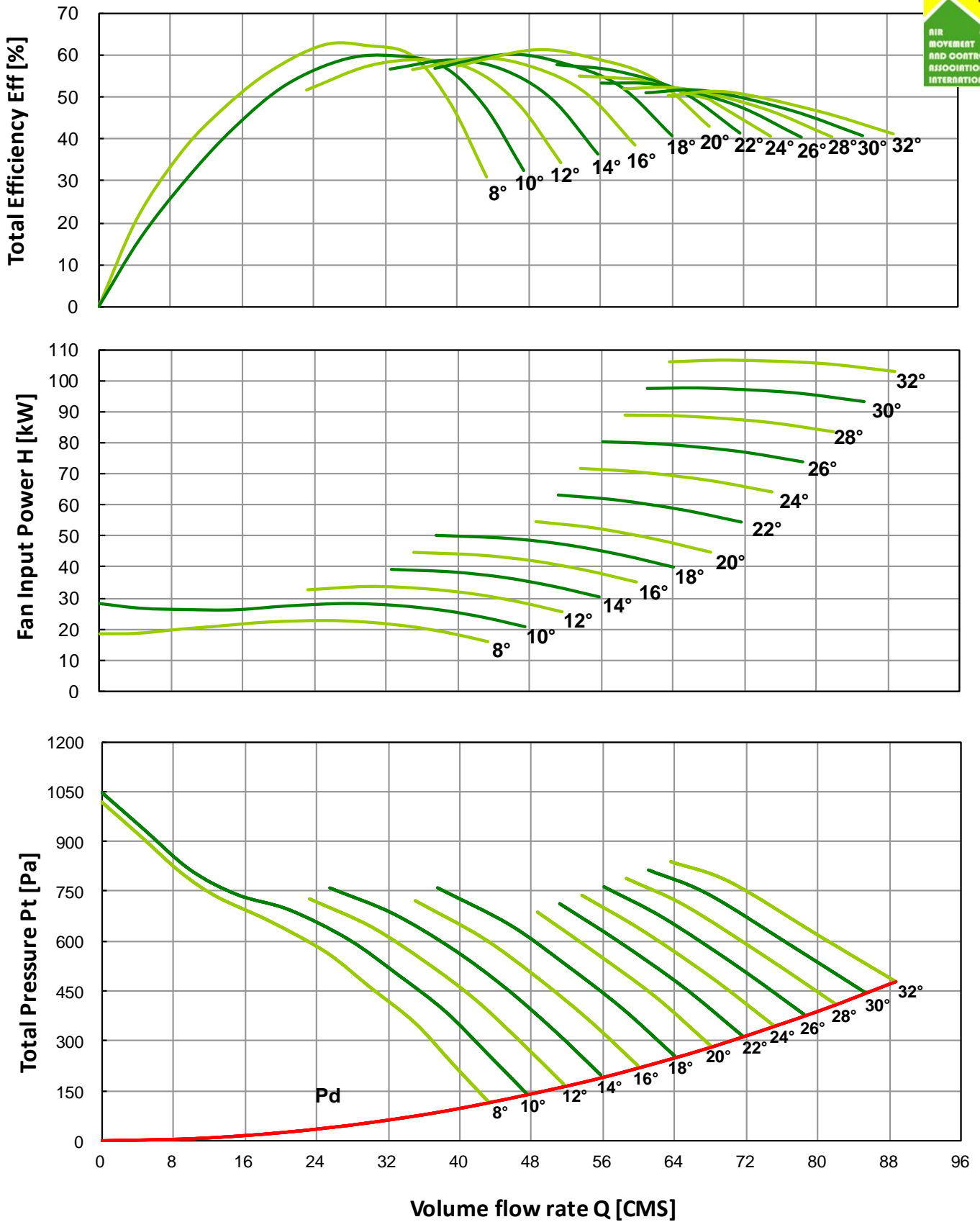
Fan Size	Di	Dp	Do	Z x d	L	L1	W	K	H	Max. Motor Frame size
2000	2000	2055	2110	24x14	1020	1455	2087	22	2211	≤225S
2000	2000	2055	2110	24x14	1325	1455	2087	22	2211	<280M

LASD-2000-690-7 (60 Hz) Performance Curves

FEG 63



Fan Speed $N = 880$ [rpm] Outlet Area $A = 3.142$ [m²] $\rho = 1.2$ kg/m³



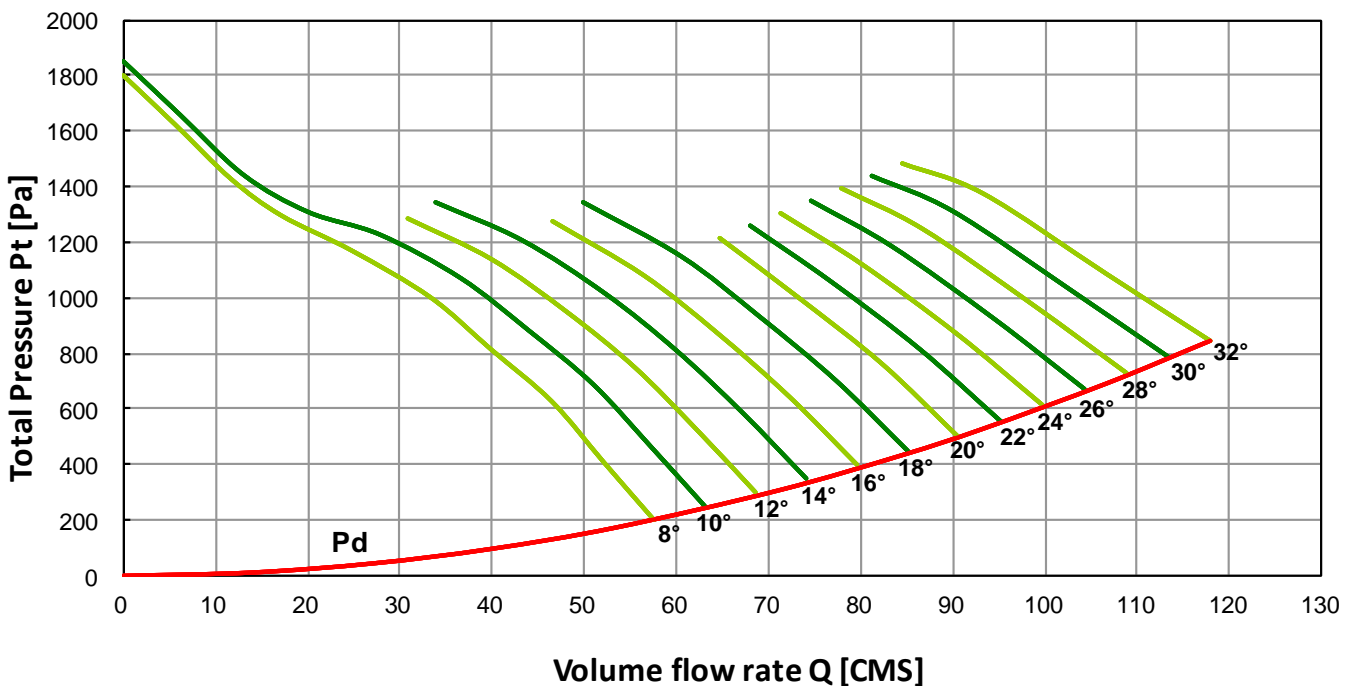
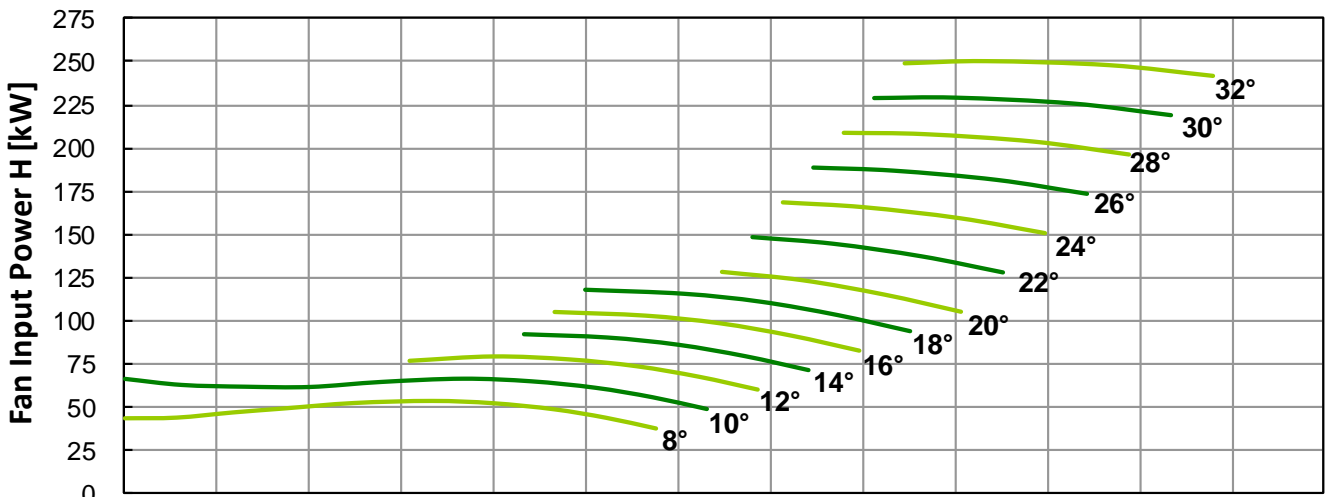
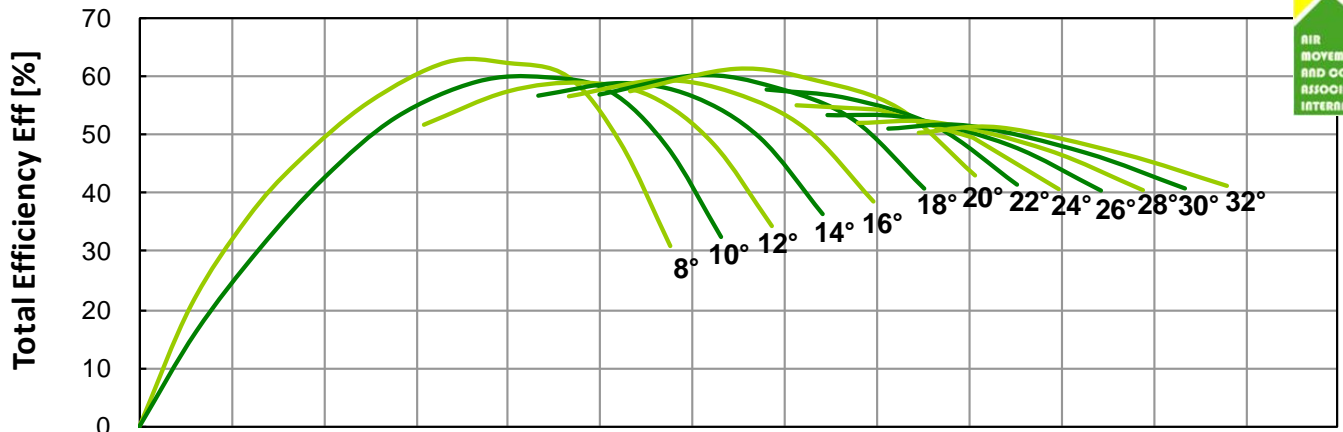
Performance certified is for installation type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).

LASD-2000-690-7 (60 Hz) Performance Curves

FEG 63



Fan Speed N = 1170 [rpm] Outlet Area A = 3.142 [m²] ρ = 1.2kg/m³



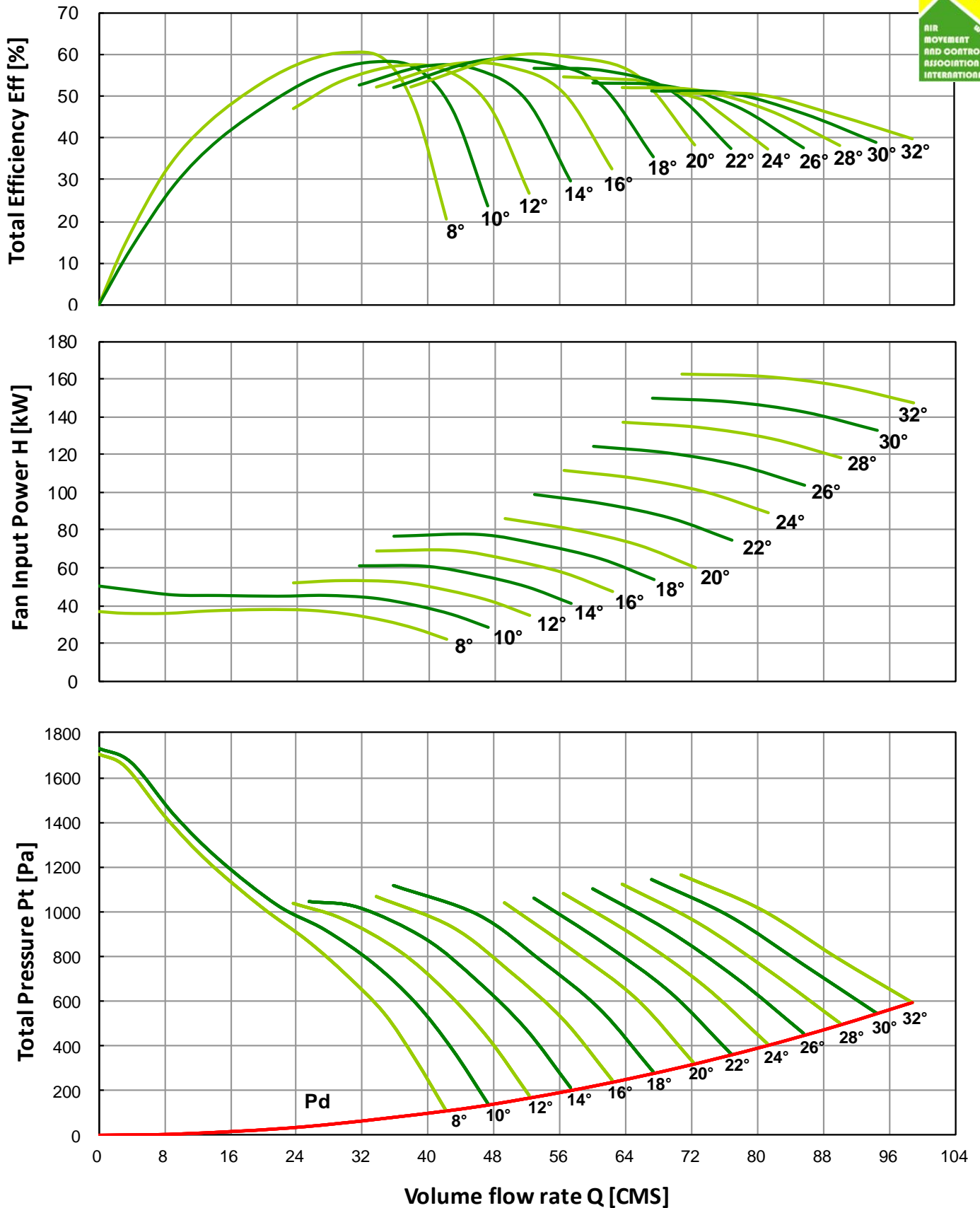
Performance certified is for installation type A: free inlet, free outlet. Performance ratings do not include the effects of **appurtenances** (accessories).

LASD-2000-690-14 (60 Hz) Performance Curves

FEG 63



Fan Speed $N = 880$ [rpm] Outlet Area $A = 3.142$ [m²] $\rho = 1.2$ kg/m³



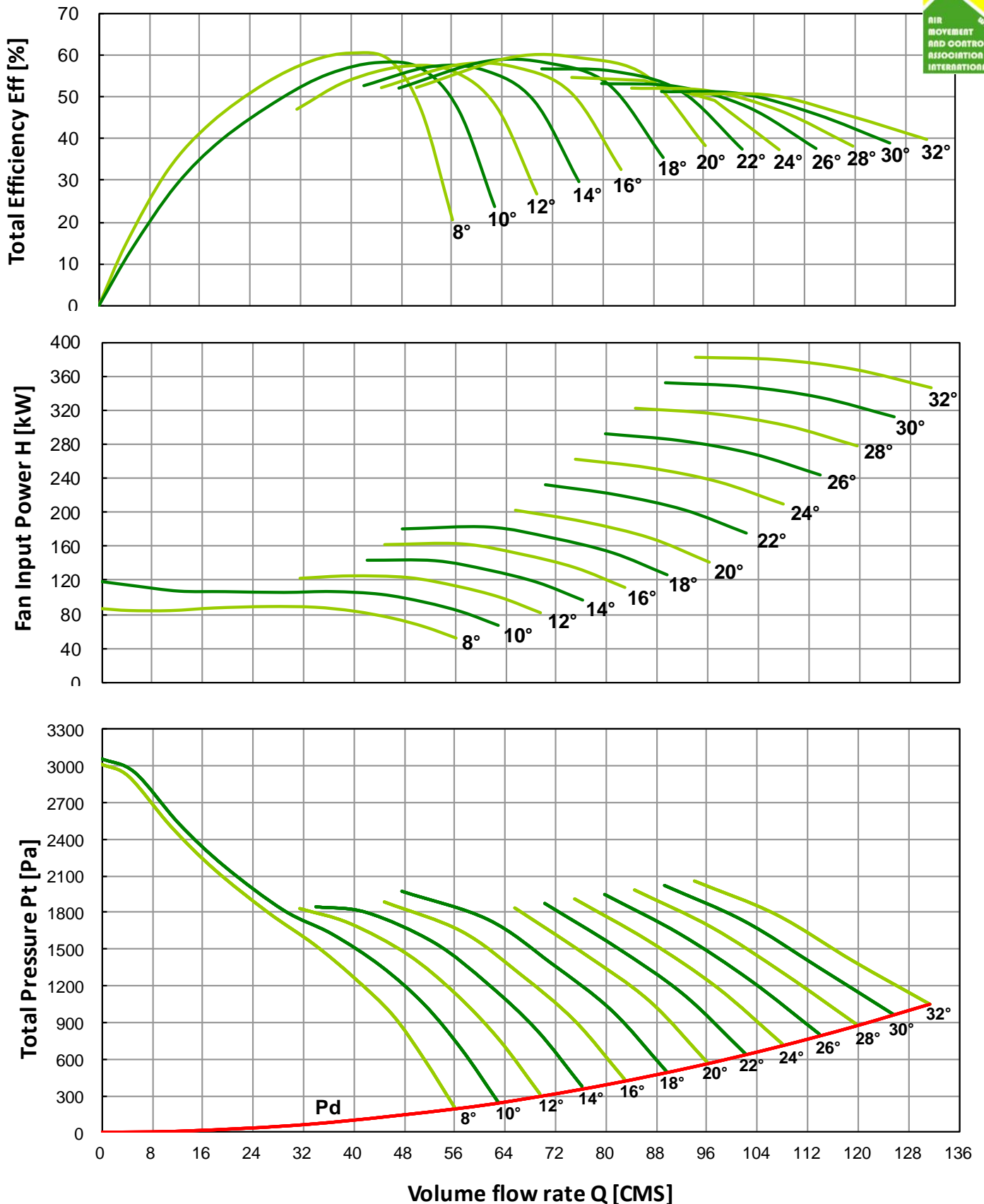
Performance certified is for installation type A: free inlet, free outlet. Performance ratings do not include the effects of **appurtenances** (accessories).

LASD-2000-690-14 (60 Hz) Performance Curves

FEG 63



Fan Speed $N = 1170$ [rpm] Outlet Area $A = 3.142$ [m²] $\rho = 1.2$ kg/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 (60 Hz) Sound Data[dB]



Model No.	N [RPM]	Ps [Pa]	Sound Power re 10 ⁻¹² Watts Octave Band [Hz]								L _{woA} [dB]
			63	125	250	500	1000	2000	4000	8000	
LASD-2000-690-7/8°	880	0	110	110	111	110	105	104	99	88	112
LASD-2000-690-7/8°	880	110	110	110	110	109	105	104	99	89	111
LASD-2000-690-7/8°	880	300	108	110	109	109	106	104	99	89	111
LASD-2000-690-7/8°	880	590	109	110	110	107	104	101	97	92	110
LASD-2000-690-7/20°	880	0	115	115	115	113	108	104	99	94	114
LASD-2000-690-7/20°	880	110	115	115	114	112	108	104	99	94	114
LASD-2000-690-7/20°	880	300	114	115	113	111	107	103	99	95	113
LASD-2000-690-7/20°	880	590	113	114	113	112	108	105	101	97	114
LASD-2000-690-7/32°	880	0	118	118	118	115	111	107	104	100	117
LASD-2000-690-7/32°	880	110	117	118	117	115	110	107	104	100	117
LASD-2000-690-7/32°	880	300	117	118	117	114	110	107	103	100	116
LASD-2000-690-7/32°	880	590	121	120	118	114	110	105	100	96	116
LASD-2000-690-7/8°	1170	0	116	116	117	118	113	109	110	98	119
LASD-2000-690-7/8°	1170	340	115	116	115	117	113	110	110	99	119
LASD-2000-690-7/8°	1170	680	115	115	115	116	113	110	109	99	118
LASD-2000-690-7/8°	1170	1020	115	115	117	115	111	109	105	100	117
LASD-2000-690-7/20°	1170	0	121	121	121	121	116	112	108	102	122
LASD-2000-690-7/20°	1170	340	120	121	120	120	116	111	108	103	121
LASD-2000-690-7/20°	1170	680	120	120	119	119	115	111	107	104	120
LASD-2000-690-7/20°	1170	1020	119	120	119	119	116	112	108	105	121
LASD-2000-690-7/32°	1170	0	124	124	124	124	119	115	111	108	125
LASD-2000-690-7/32°	1170	340	123	124	124	123	118	115	111	108	124
LASD-2000-690-7/32°	1170	680	124	124	124	122	117	114	111	107	124
LASD-2000-690-7/32°	1170	1020	127	127	125	122	117	114	109	104	124

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 L_{woA} sound power levels for installation Type A: free inlet, free outlet.

LASD-2000-690 (60 Hz) Sound Data[dB]



Model No.	N [RPM]	Ps [Pa]	Sound Power re 10 ⁻¹² Watts Octave Band [Hz]								L _{woA} [dB]
			63	125	250	500	1000	2000	4000	8000	
LASD-2000-690-14/8°	880	0	99	105	115	111	108	105	101	91	114
LASD-2000-690-14/8°	880	290	97	103	113	109	108	106	102	92	113
LASD-2000-690-14/8°	880	570	96	102	113	110	109	106	100	91	113
LASD-2000-690-14/8°	880	850	98	104	112	110	107	104	98	91	112
LASD-2000-690-14/20°	880	0	111	114	120	116	111	108	102	93	118
LASD-2000-690-14/20°	880	290	107	112	119	114	111	107	101	94	117
LASD-2000-690-14/20°	880	570	107	111	119	114	110	106	101	96	116
LASD-2000-690-14/20°	880	850	107	111	118	115	112	107	102	97	117
LASD-2000-690-14/32°	880	0	116	116	122	120	113	109	104	100	120
LASD-2000-690-14/32°	880	290	116	116	121	119	112	109	104	100	119
LASD-2000-690-14/32°	880	570	115	115	121	118	112	108	104	101	119
LASD-2000-690-14/32°	880	850	114	114	120	118	111	108	104	101	119
LASD-2000-690-14/8°	1170	0	106	106	121	118	115	112	111	101	121
LASD-2000-690-14/8°	1170	500	103	103	121	116	114	113	112	102	120
LASD-2000-690-14/8°	1170	1000	102	102	119	117	115	114	110	101	121
LASD-2000-690-14/8°	1170	1500	104	104	118	118	115	112	107	100	120
LASD-2000-690-14/20°	1170	0	117	117	126	123	119	115	112	102	125
LASD-2000-690-14/20°	1170	500	114	114	126	122	118	115	110	103	124
LASD-2000-690-14/20°	1170	1000	113	113	126	122	118	114	109	104	124
LASD-2000-690-14/20°	1170	1500	113	113	124	122	119	115	110	105	124
LASD-2000-690-14/32°	1170	0	122	122	128	127	122	117	112	108	128
LASD-2000-690-14/32°	1170	500	122	122	128	126	121	116	112	108	127
LASD-2000-690-14/32°	1170	1000	121	121	127	125	120	116	112	108	126
LASD-2000-690-14/32°	1170	1500	120	120	126	125	120	116	112	108	126

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 L_{woA} sound power levels for installation Type A: free inlet, free outlet.