

# Low Pressure Axial Smoke-exhaust Fan Driven Directly

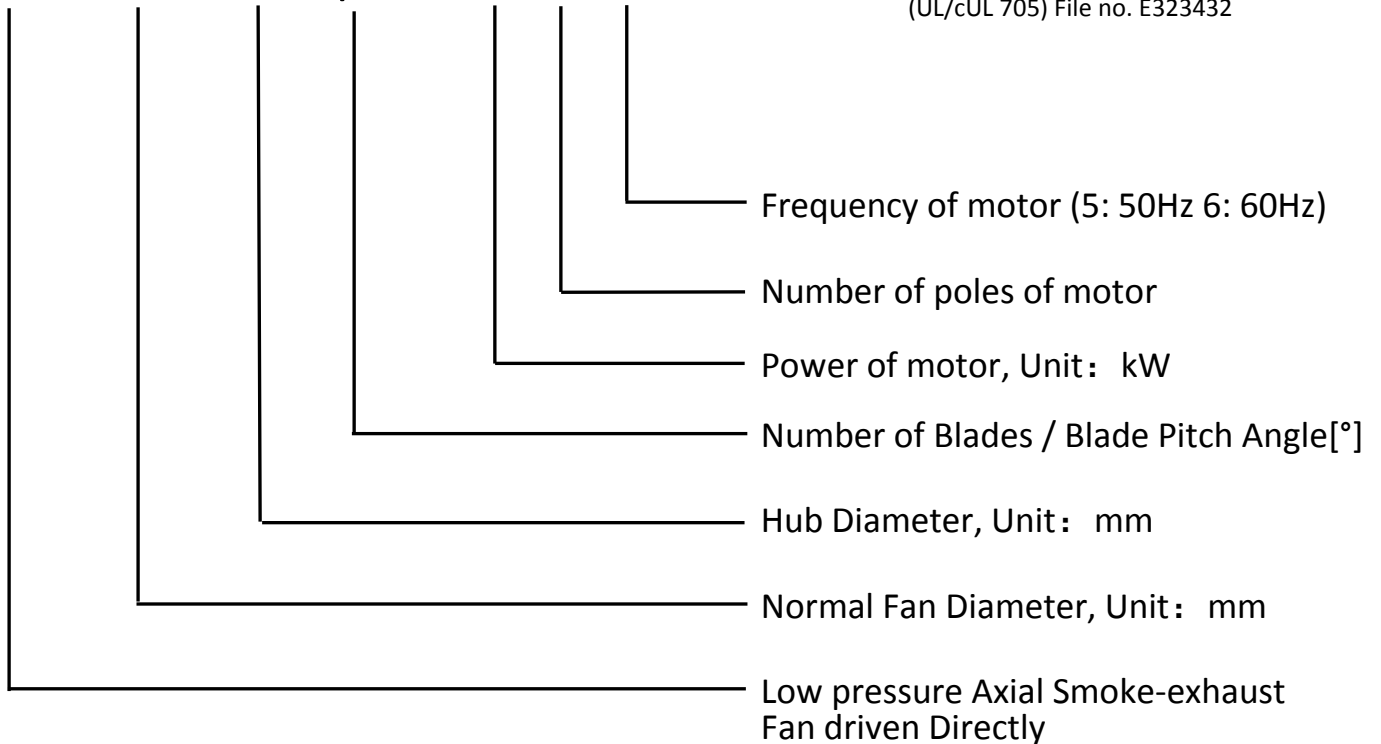


FLOWTECH Co., Ltd. certifies that the LASD-1120 shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

The AMCA certified ratings seal applies to air performance and sound for models LASD-1120-550-7 and LASD-1120-550-14 only and The AMCA certified ratings seal applies to the FEG for model LASD-1120-550-7 only.

## Fan code

LASD-1120 -550-7/20° - 15- 8 - 6



POWER VENTILATOR 45GD

LASD 1120 is listed for electrical (UL/cUL 705) File no. E323432

## 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

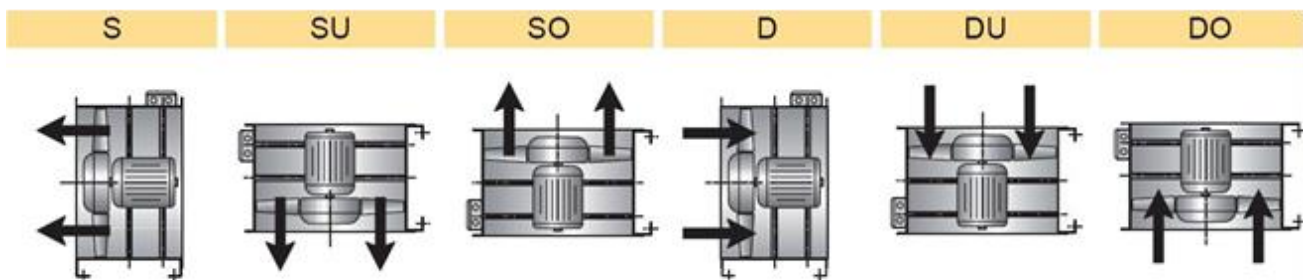
The Flowtech-propellers, hubs and blades are made of cast aluminum alloy, the aero-dynamical profile guarantees high efficiency and low noise. The blades are with adjustable pitch angle to optimum the duty point. The solidity varies for a wider range of performance. All rotating aluminum components are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

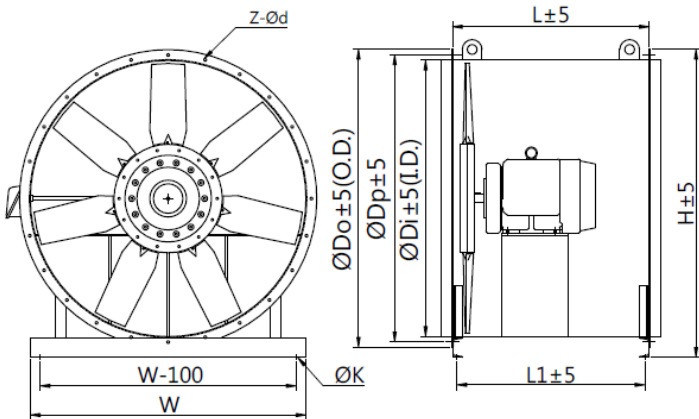


Fig. 1

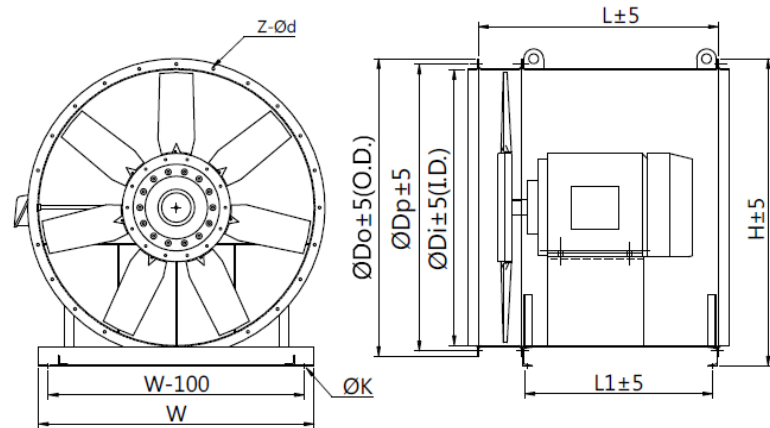


Fig. 2

Fan Size	Di	Dp	Do	Z x d	L	L1	W	K	H	Max. Motor Frame size	Fig. No.
1120	1120	1190	1235	16x14	1000	942	1120	22	1282	≤225S	Fig. 1
1120	1120	1190	1235	16x14	1220	942	1120	22	1282	<250S	Fig. 2

### Ceiling Hanging

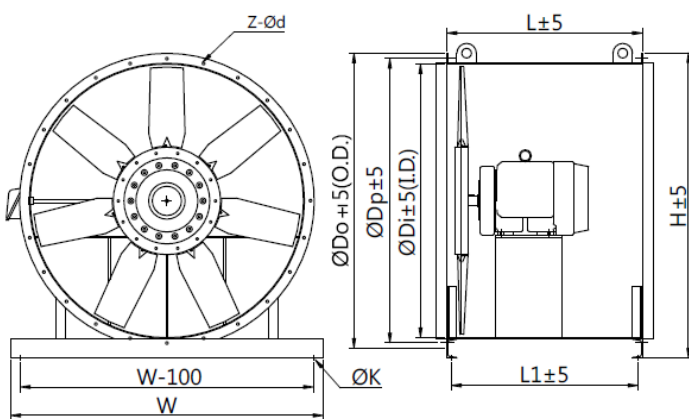


Fig. 3

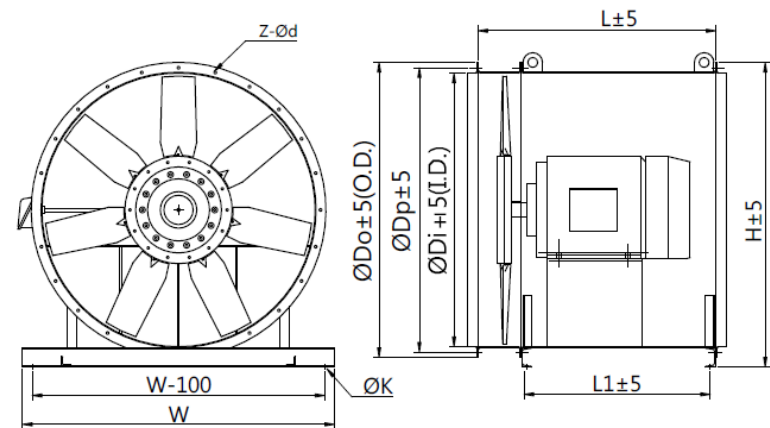


Fig. 4

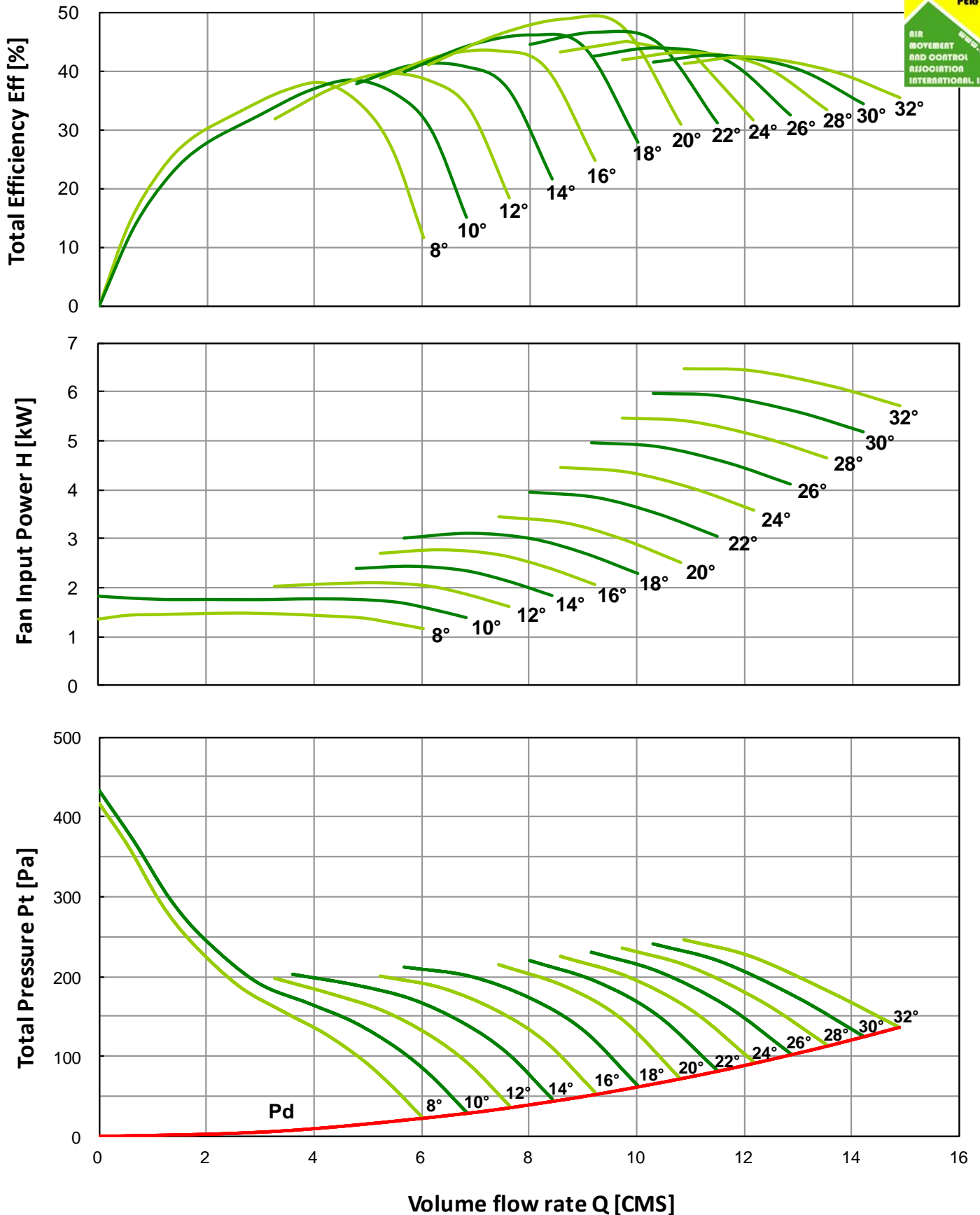
Fan Size	Di	Dp	Do	Z x d	L	L1	W	K	H	Max. Motor Frame size	Fig. No.
1120	1120	1190	1235	16x14	1000	942	1320	22	1282	≤225S	Fig. 3
1120	1120	1190	1235	16x14	1220	942	1320	22	1282	<250S	Fig. 4

**LASD-1120-550-7 (60 Hz) Performance Curves**

**FEG 50**



Fan Speed  $N = 880$  [rpm]    Outlet Area  $A = 0.987$  [m<sup>2</sup>]     $\rho = 1.2$ kg/m<sup>3</sup>



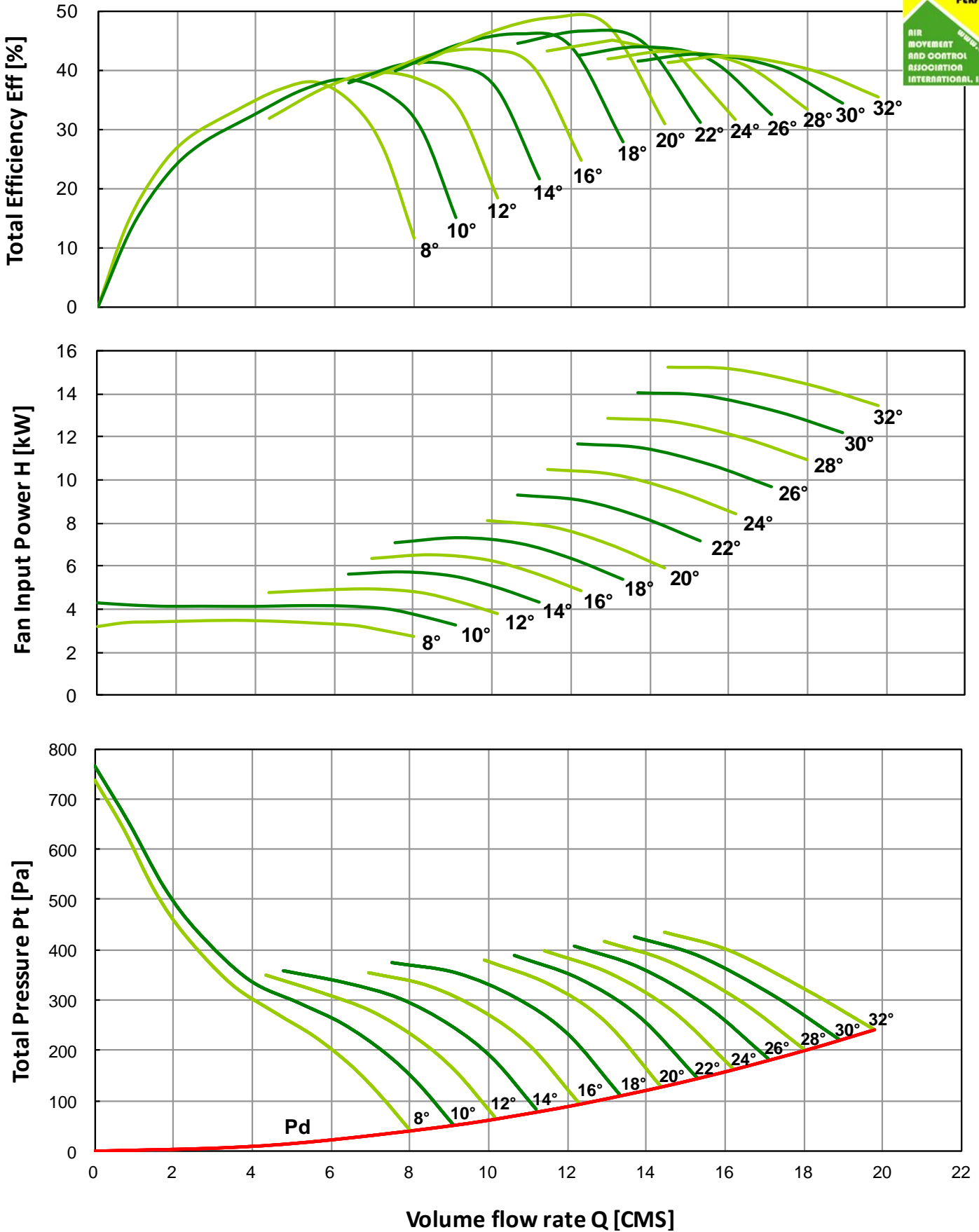
Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

LASD-1120-550-7 (60 Hz) Performance Curves

FEG 50



Fan Speed  $N = 1170$  [rpm] Outlet Area  $A = 0.987$  [m<sup>2</sup>]  $\rho = 1.2$  kg/m<sup>3</sup>



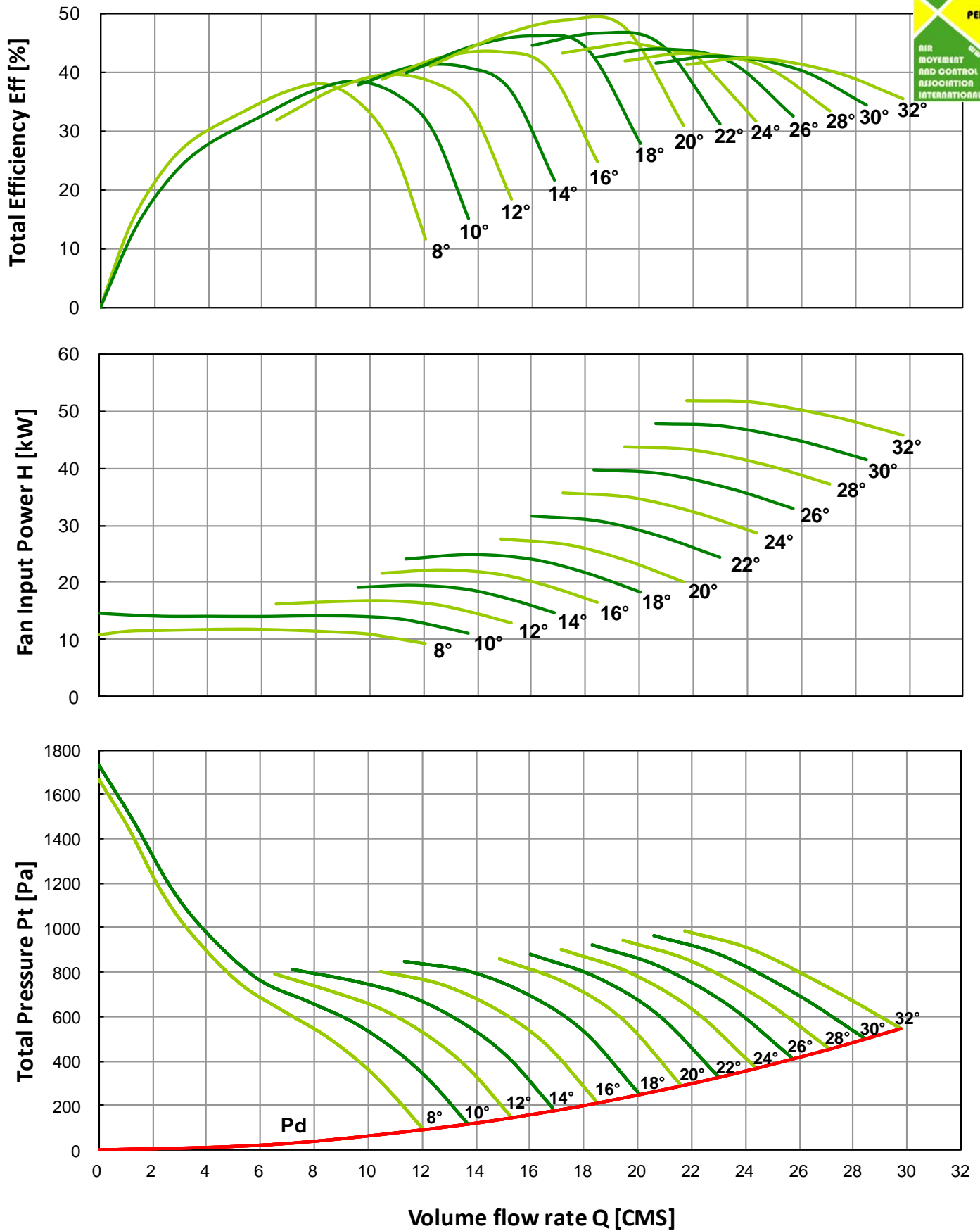
Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of **appurtenances** (accessories).

LASD-1120-550-7 (60 Hz) Performance Curves

FEG 50



Fan Speed N = 1760 [rpm] Outlet Area A = 0.987 [m<sup>2</sup>] ρ = 1.2kg/m<sup>3</sup>

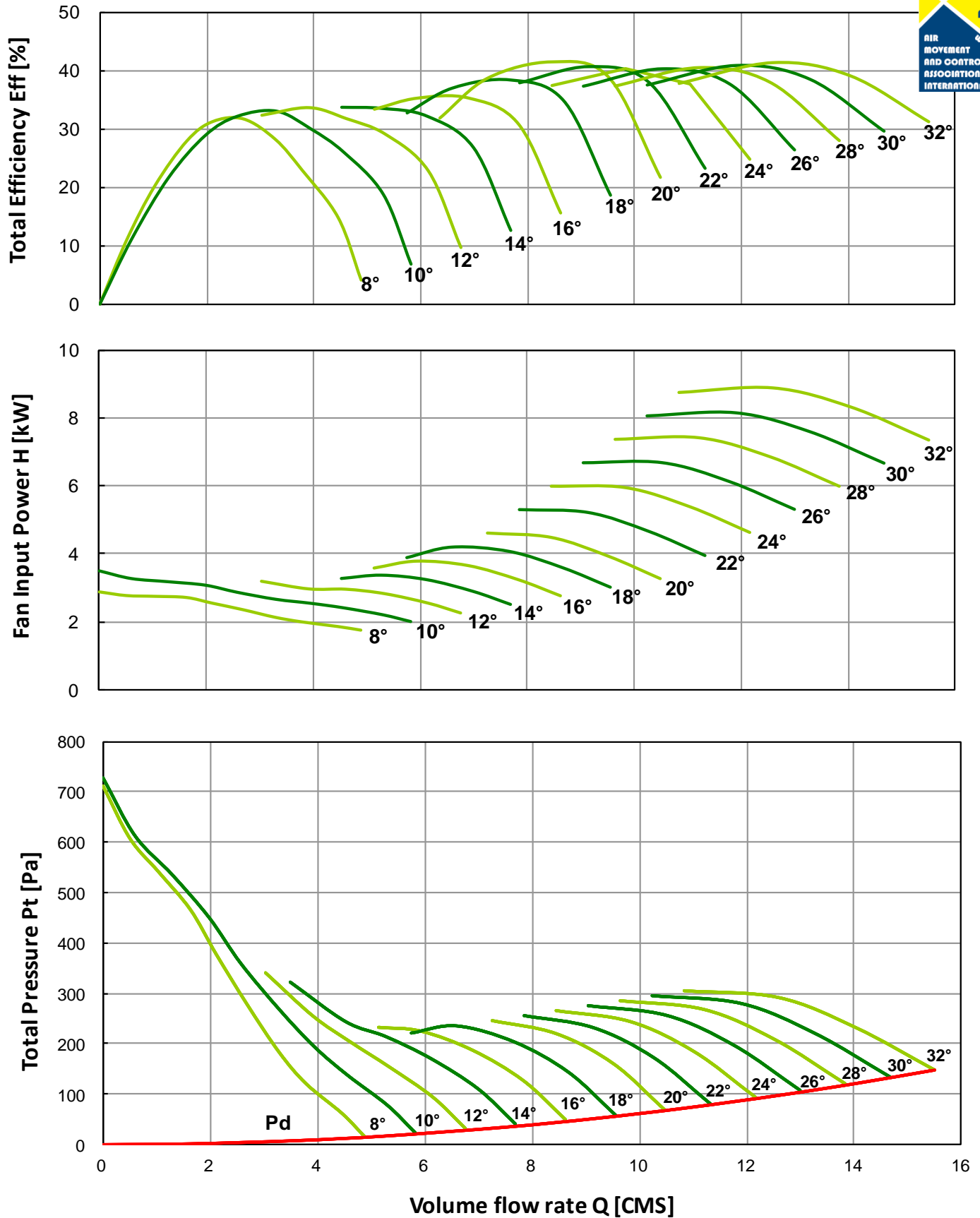


Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of **appurtenances** (accessories).



# LASD-1120-550-14 (60 Hz) Performance Curves

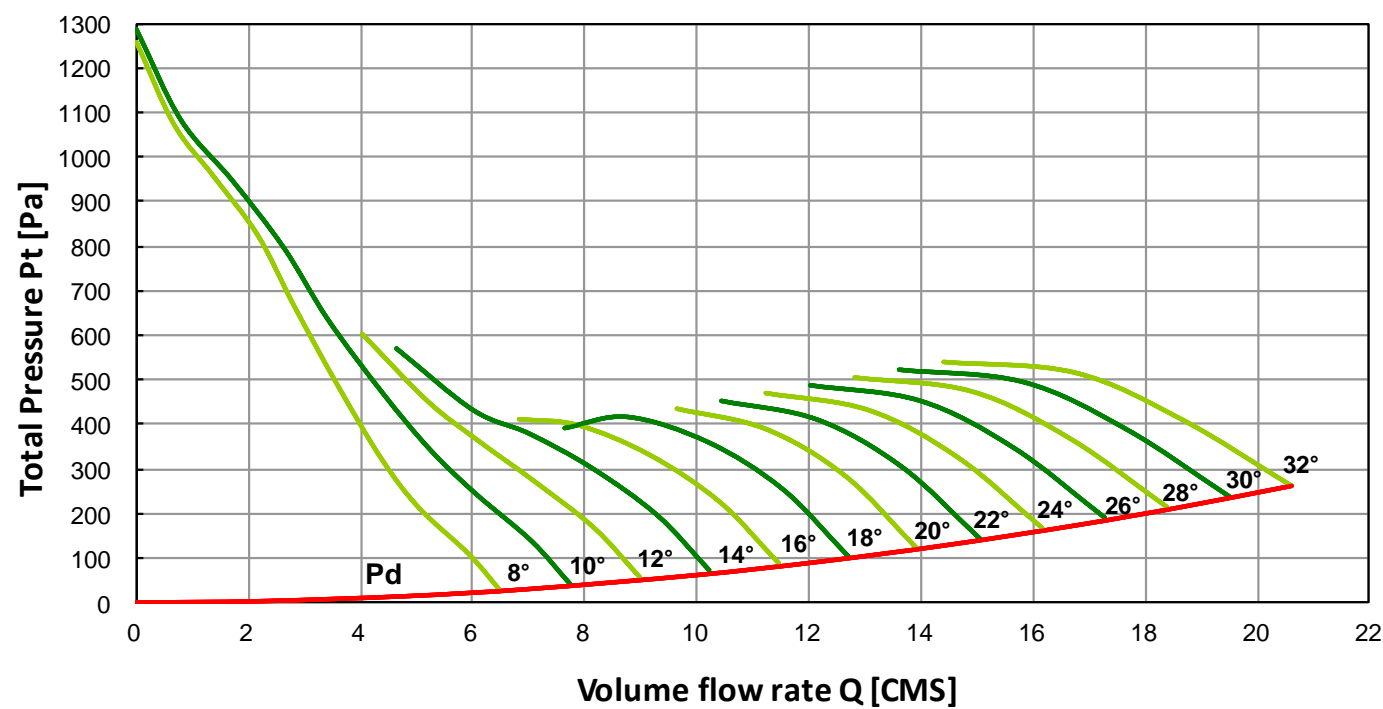
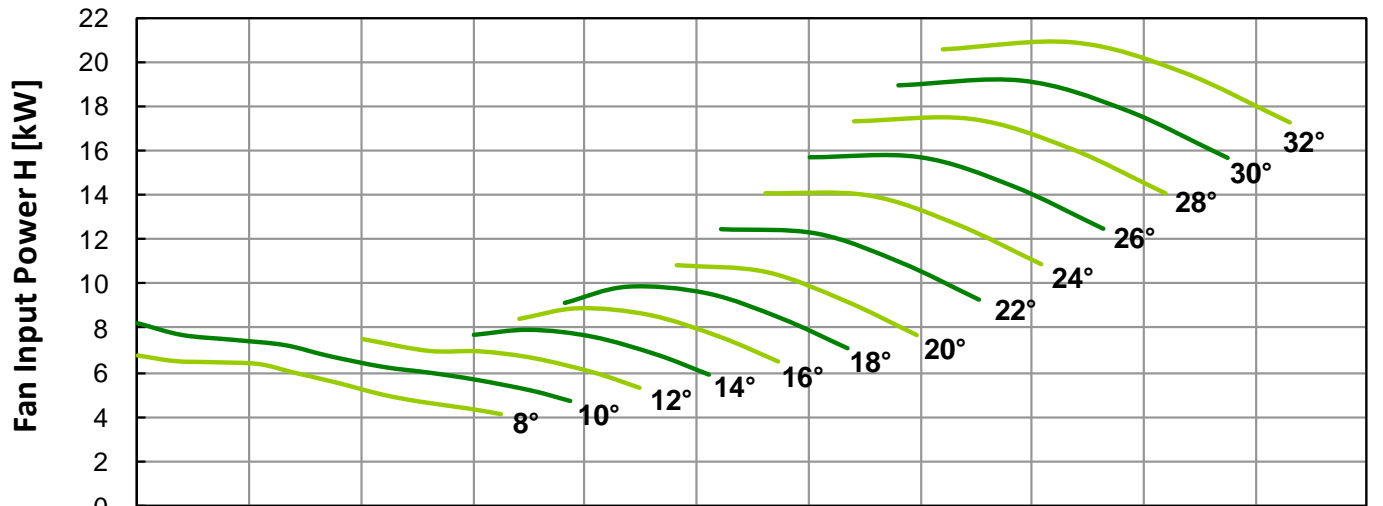
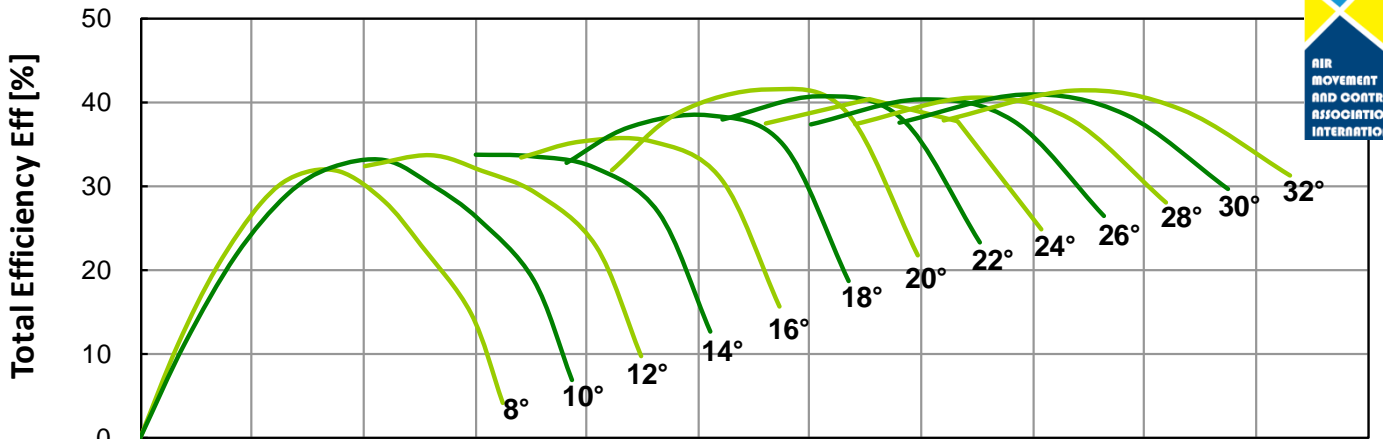
Fan Speed N = 880 [rpm] Outlet Area A = 0.987 [m<sup>2</sup>] ρ = 1.2kg/m<sup>3</sup>



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

# LASD-1120-550-14 (60 Hz) Performance Curves

Fan Speed N = 1170 [rpm] Outlet Area A = 0.987 [m<sup>2</sup>] ρ = 1.2kg/m

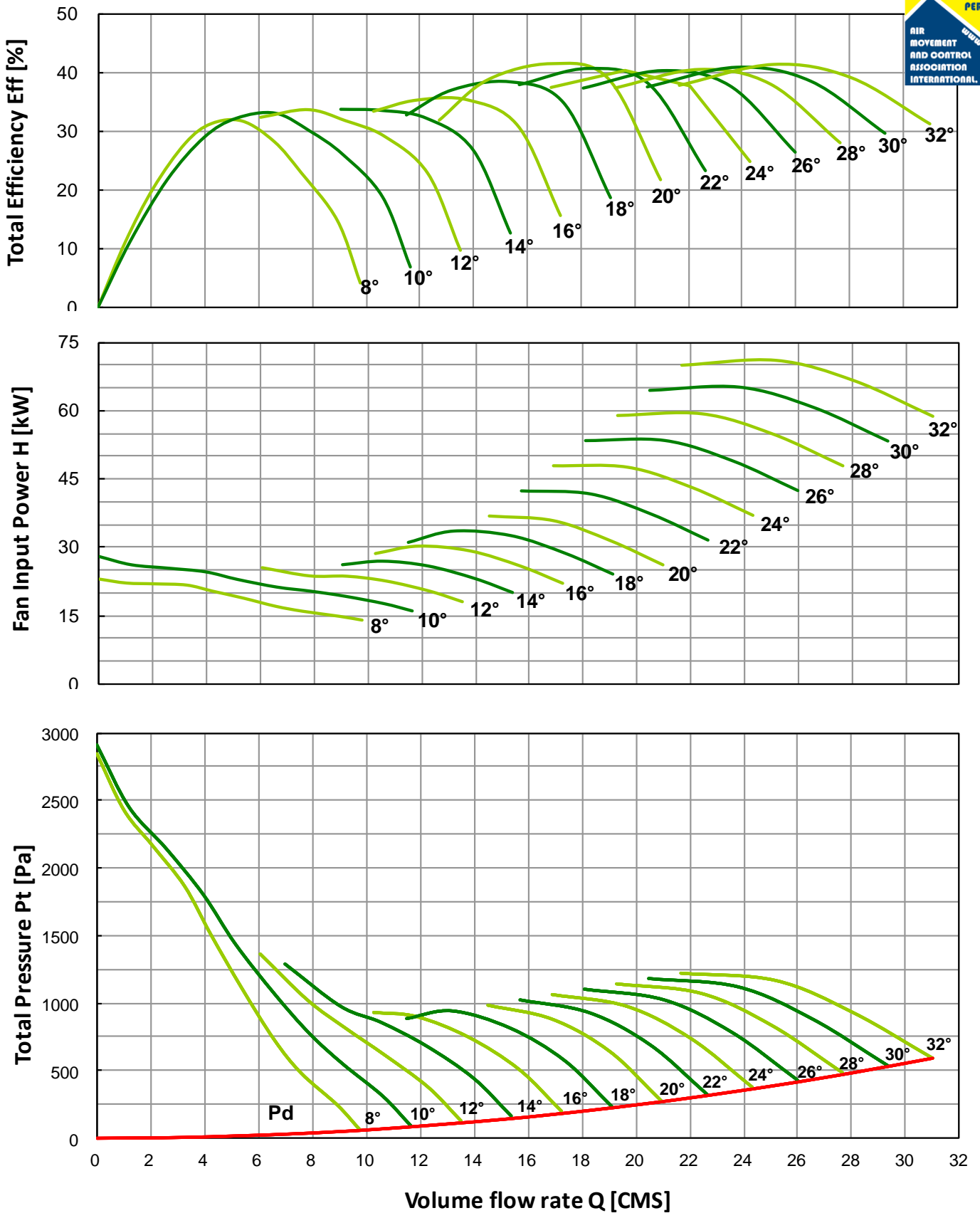


Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of **appurtenances** (accessories).



# LASD-1120-550-14 (60 Hz) Performance Curves

Fan Speed N = 1760 [rpm] Outlet Area A = 0.987 [m<sup>2</sup>] ρ = 1.2kg/m



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

## LASD-1120-550 (60 Hz) Sound Data[dB]



Model No.	N [RPM]	Ps [Pa]	Sound Power re 10 <sup>-12</sup> Watts Octave Band [Hz]								L <sub>w</sub> A [dB]
			63	125	250	500	1000	2000	4000	8000	
LASD-1120-550-7/8°	880	0	97	97	93	89	86	82	73	67	92
LASD-1120-550-7/8°	880	118	94	94	93	92	89	82	73	67	93
LASD-1120-550-7/8°	880	184	100	100	93	88	85	80	72	66	91
LASD-1120-550-7/8°	880	241	99	100	92	87	84	80	73	68	91
LASD-1120-550-7/20°	880	0	103	104	98	93	88	83	74	69	96
LASD-1120-550-7/20°	880	88	98	93	90	85	82	78	69	65	88
LASD-1120-550-7/20°	880	142	102	102	95	91	87	83	77	71	94
LASD-1120-550-7/20°	880	200	110	104	96	91	89	84	78	73	95
LASD-1120-550-7/32°	880	0	105	106	101	95	90	85	79	73	98
LASD-1120-550-7/32°	880	66	104	104	100	94	90	85	80	75	97
LASD-1120-550-7/32°	880	134	103	103	99	93	89	85	80	77	96
LASD-1120-550-7/32°	880	194	102	103	97	93	90	86	81	78	96
LASD-1120-550-7/8°	1170	0	103	103	100	97	93	89	83	75	99
LASD-1120-550-7/8°	1170	209	100	100	100	99	97	91	83	75	101
LASD-1120-550-7/8°	1170	325	106	106	102	96	92	88	81	74	99
LASD-1120-550-7/8°	1170	425	106	106	101	95	91	88	83	76	98
LASD-1120-550-7/20°	1170	0	110	110	105	101	96	91	85	77	103
LASD-1120-550-7/20°	1170	156	109	109	103	100	95	90	84	77	102
LASD-1120-550-7/20°	1170	251	108	108	102	99	95	91	86	79	101
LASD-1120-550-7/20°	1170	354	116	114	105	99	96	92	87	81	104
LASD-1120-550-7/32°	1170	0	112	112	109	104	99	94	88	81	106
LASD-1120-550-7/32°	1170	116	111	111	107	103	98	93	88	83	105
LASD-1120-550-7/32°	1170	238	110	110	106	102	97	93	89	84	104
LASD-1120-550-7/32°	1170	343	108	110	105	101	97	94	89	85	104
LASD-1120-550-7/8°	1760	0	112	112	112	108	104	101	97	88	110
LASD-1120-550-7/8°	1760	472	109	109	109	108	107	104	97	89	111
LASD-1120-550-7/8°	1760	735	115	115	115	108	103	100	95	87	111
LASD-1120-550-7/8°	1760	962	114	114	115	107	102	99	95	88	110
LASD-1120-550-7/20°	1760	0	119	119	119	113	108	103	98	90	115
LASD-1120-550-7/20°	1760	350	118	118	118	111	106	102	97	89	114
LASD-1120-550-7/20°	1760	568	117	117	117	110	106	102	99	92	113
LASD-1120-550-7/20°	1760	801	125	125	119	111	106	104	99	93	116
LASD-1120-550-7/32°	1760	0	121	121	121	116	111	106	100	94	118
LASD-1120-550-7/32°	1760	263	119	119	119	115	110	105	100	95	117
LASD-1120-550-7/32°	1760	508	118	118	118	114	108	105	101	96	116
LASD-1120-550-7/32°	1760	777	117	117	118	113	108	105	101	96	115

The sound power level ratings shown are in decibels referred to 10<sup>-12</sup> 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<sub>wi</sub> and L<sub>wiA</sub> sound power levels for installation Type B: free inlet, ducted outlet.

## LASD-1120-550 (60 Hz) Sound Data[dB]



Model No.	N [RPM]	Ps [Pa]	Sound Power re 10 <sup>-12</sup> Watts Octave Band [Hz]								LwA [dB]
			63	125	250	500	1000	2000	4000	8000	
LASD-1120-550-14/8°	880	0	89	94	97	91	89	85	77	71	94
LASD-1120-550-14/8°	880	112	91	96	99	93	89	83	74	68	95
LASD-1120-550-14/8°	880	273	93	99	102	92	87	81	73	68	96
LASD-1120-550-14/8°	880	465	92	98	102	91	88	83	76	71	96
LASD-1120-550-14/20°	880	0	93	99	102	92	87	81	74	68	96
LASD-1120-550-14/20°	880	105	92	98	100	92	88	83	76	71	95
LASD-1120-550-14/20°	880	176	98	100	101	94	91	86	79	73	97
LASD-1120-550-14/20°	880	214	98	101	101	96	93	87	80	74	98
LASD-1120-550-14/32°	880	0	101	104	105	99	94	88	80	73	101
LASD-1120-550-14/32°	880	67	101	104	105	98	93	87	79	73	100
LASD-1120-550-14/32°	880	111	101	104	105	97	93	87	80	74	100
LASD-1120-550-14/32°	880	224	101	97	105	96	92	87	81	76	100
LASD-1120-550-14/8°	1170	0	96	98	103	99	96	93	87	79	102
LASD-1120-550-14/8°	1170	198	97	100	105	101	97	92	84	77	103
LASD-1120-550-14/8°	1170	483	99	102	108	100	96	90	83	76	103
LASD-1120-550-14/8°	1170	821	98	100	108	100	95	91	85	79	103
LASD-1120-550-14/20°	1170	0	99	102	108	100	96	90	83	76	103
LASD-1120-550-14/20°	1170	185	98	101	106	100	95	91	85	79	102
LASD-1120-550-14/20°	1170	312	104	105	107	102	98	95	89	82	104
LASD-1120-550-14/20°	1170	378	104	106	107	103	100	96	89	82	105
LASD-1120-550-14/32°	1170	0	107	109	111	107	102	97	89	82	108
LASD-1120-550-14/32°	1170	119	107	108	111	106	101	96	89	82	108
LASD-1120-550-14/32°	1170	195	108	109	111	106	101	96	89	82	108
LASD-1120-550-14/32°	1170	396	108	106	111	104	99	95	90	84	107
LASD-1120-550-14/8°	1760	0	105	105	110	112	107	104	101	92	113
LASD-1120-550-14/8°	1760	448	106	106	111	114	108	104	98	89	114
LASD-1120-550-14/8°	1760	1093	108	108	114	117	107	102	96	89	116
LASD-1120-550-14/8°	1760	1858	107	107	113	117	107	103	98	91	116
LASD-1120-550-14/20°	1760	0	108	108	114	117	107	102	96	89	116
LASD-1120-550-14/20°	1760	418	107	107	113	115	107	103	98	91	114
LASD-1120-550-14/20°	1760	705	113	113	115	116	109	106	101	94	116
LASD-1120-550-14/20°	1760	854	113	113	116	116	111	108	102	95	117
LASD-1120-550-14/32°	1760	0	116	116	119	120	114	109	103	95	120
LASD-1120-550-14/32°	1760	269	116	116	119	120	113	108	103	95	120
LASD-1120-550-14/32°	1760	442	117	117	119	120	112	108	102	95	119
LASD-1120-550-14/32°	1760	896	117	117	112	120	111	107	102	96	119

The sound power level ratings shown are in decibels referred to 10<sup>-12</sup> 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 Lwi and LwiA sound power levels for installation Type B: free inlet, ducted outlet.