

## Low Pressure Axial Smoke-exhaust Fan Driven Directly

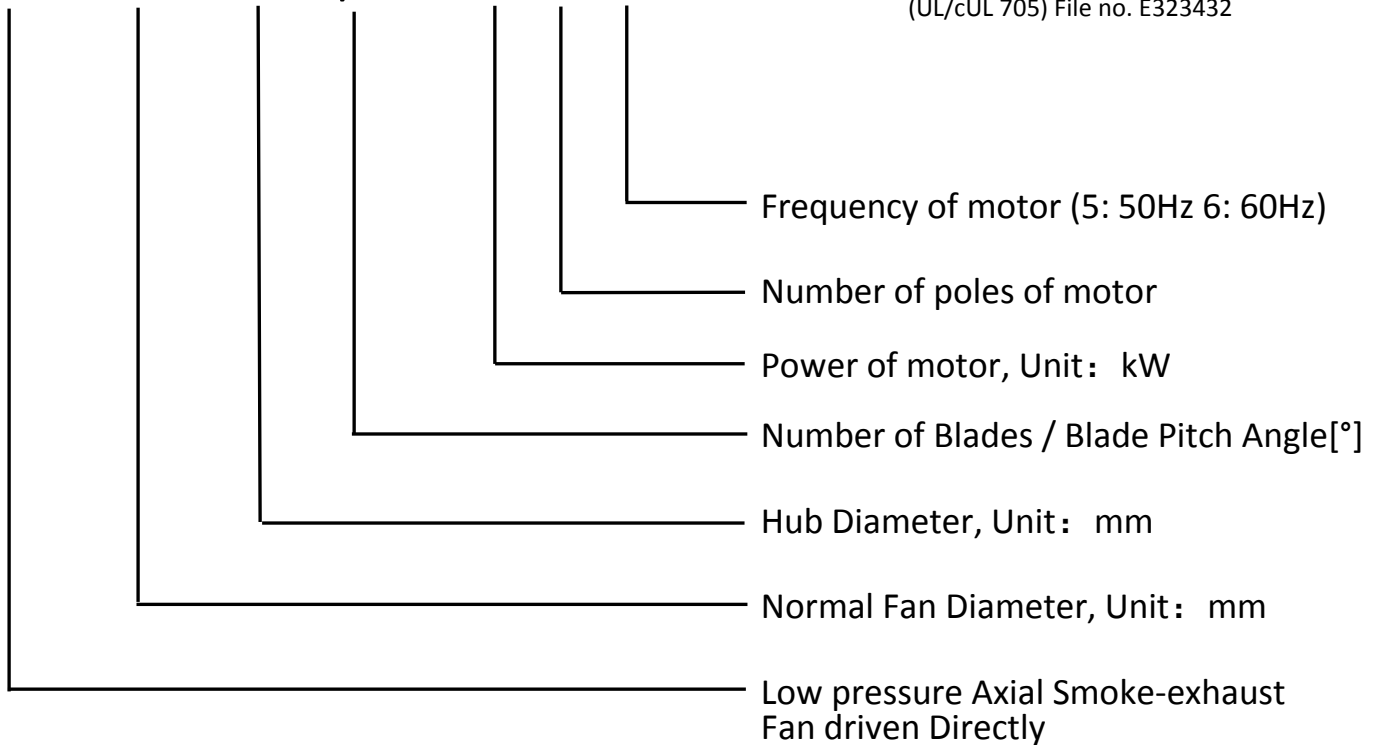


FLOWTECH Co., Ltd. certifies that the LASD-1120 shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

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 - 5



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

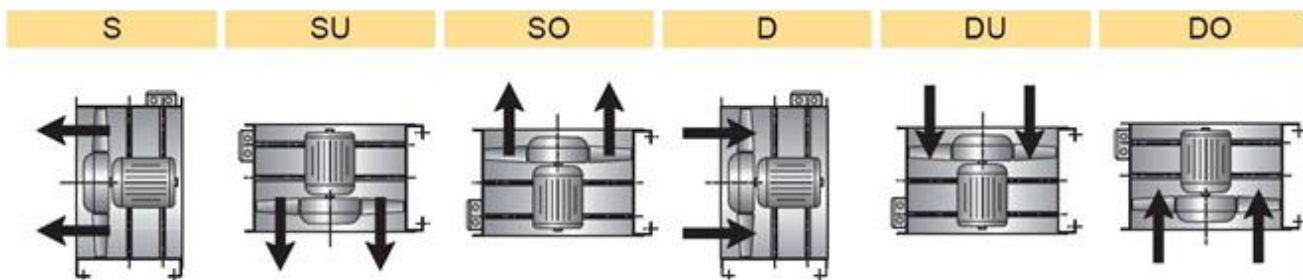
The Flowtech-propellers, hubs and blades are made of cast aluminum alloy, the aero-dynamical profile guarantees high efficiency and low noise. The blades are with adjustable pitch angle to optimum the duty point. The solidity varies for a wider range of performance. All rotating aluminum components are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

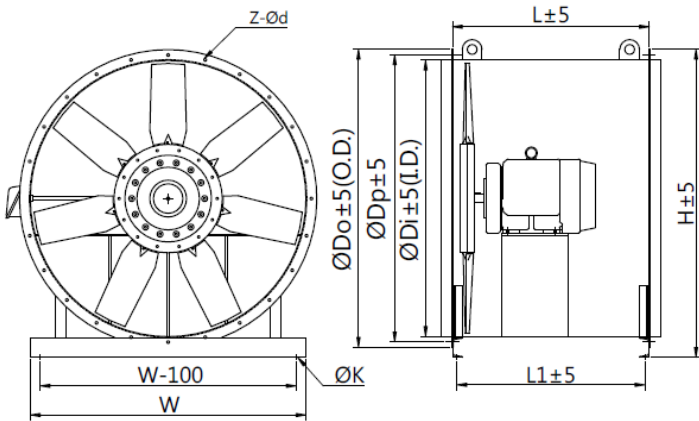


Fig. 1

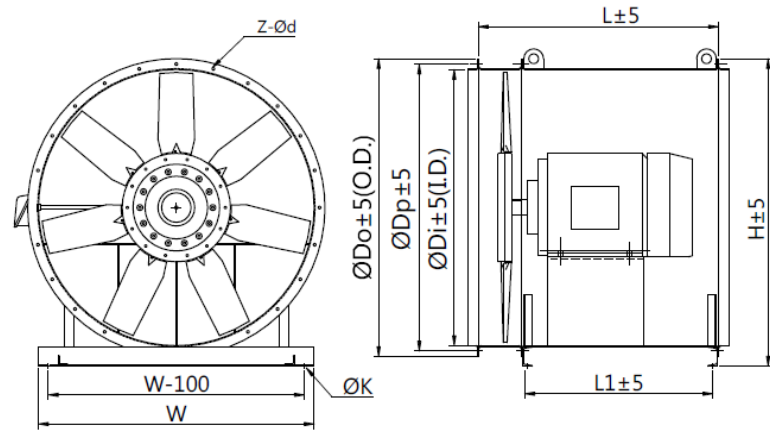


Fig. 2

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

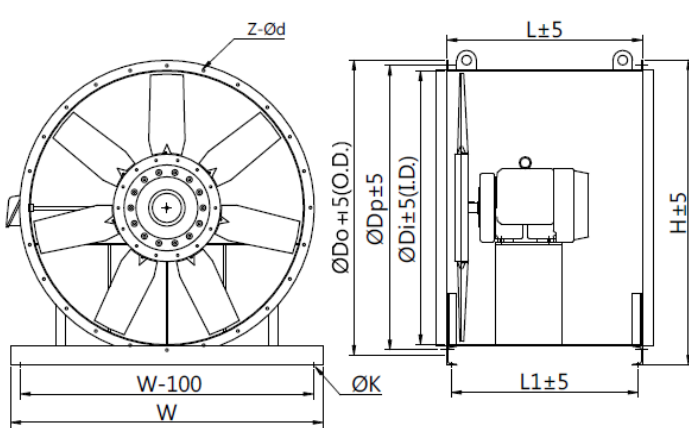


Fig. 3

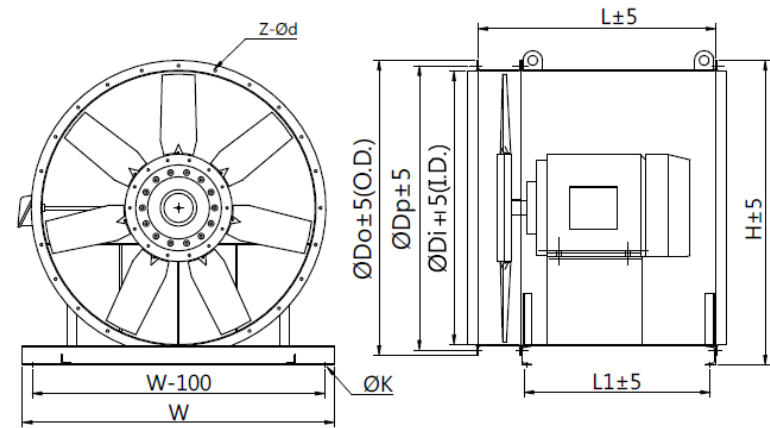


Fig. 4

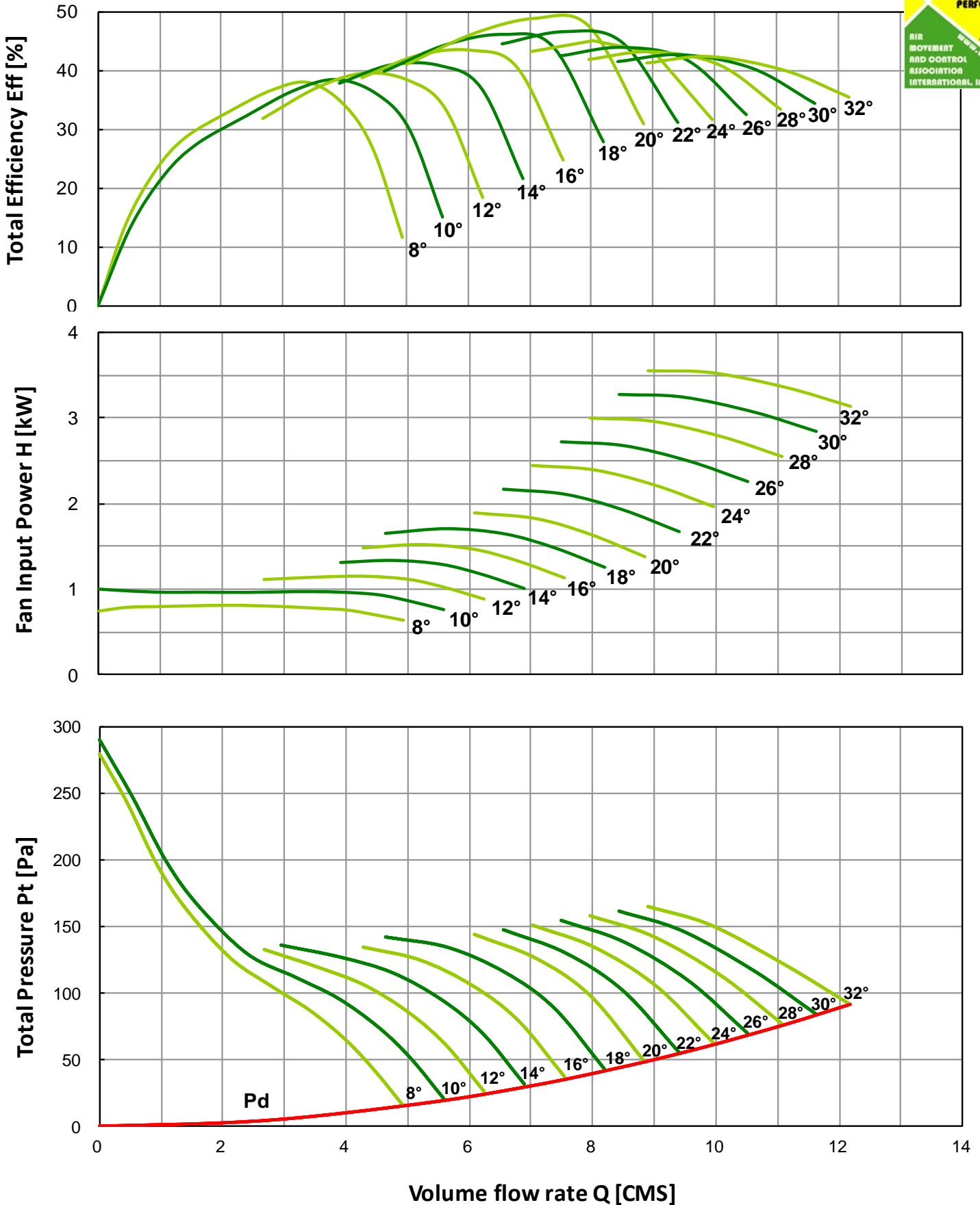
Fan Size	Di	Dp	Do	Z x d	L	L1	W	K	H	Max. Motor Frame size	Fig. No.
1120	1120	1190	1235	16x14	1000	942	1320	22	1282	≤225S	Fig. 3
1120	1120	1190	1235	16x14	1220	942	1320	22	1282	<250S	Fig. 4

**LASD-1120-550-7 (50 Hz) Performance Curves**

**FEG 50**



Fan Speed  $N = 720$  [rpm]    Outlet Area  $A = 0.987$  [m<sup>2</sup>]     $\rho = 1.2$ kg/m<sup>3</sup>



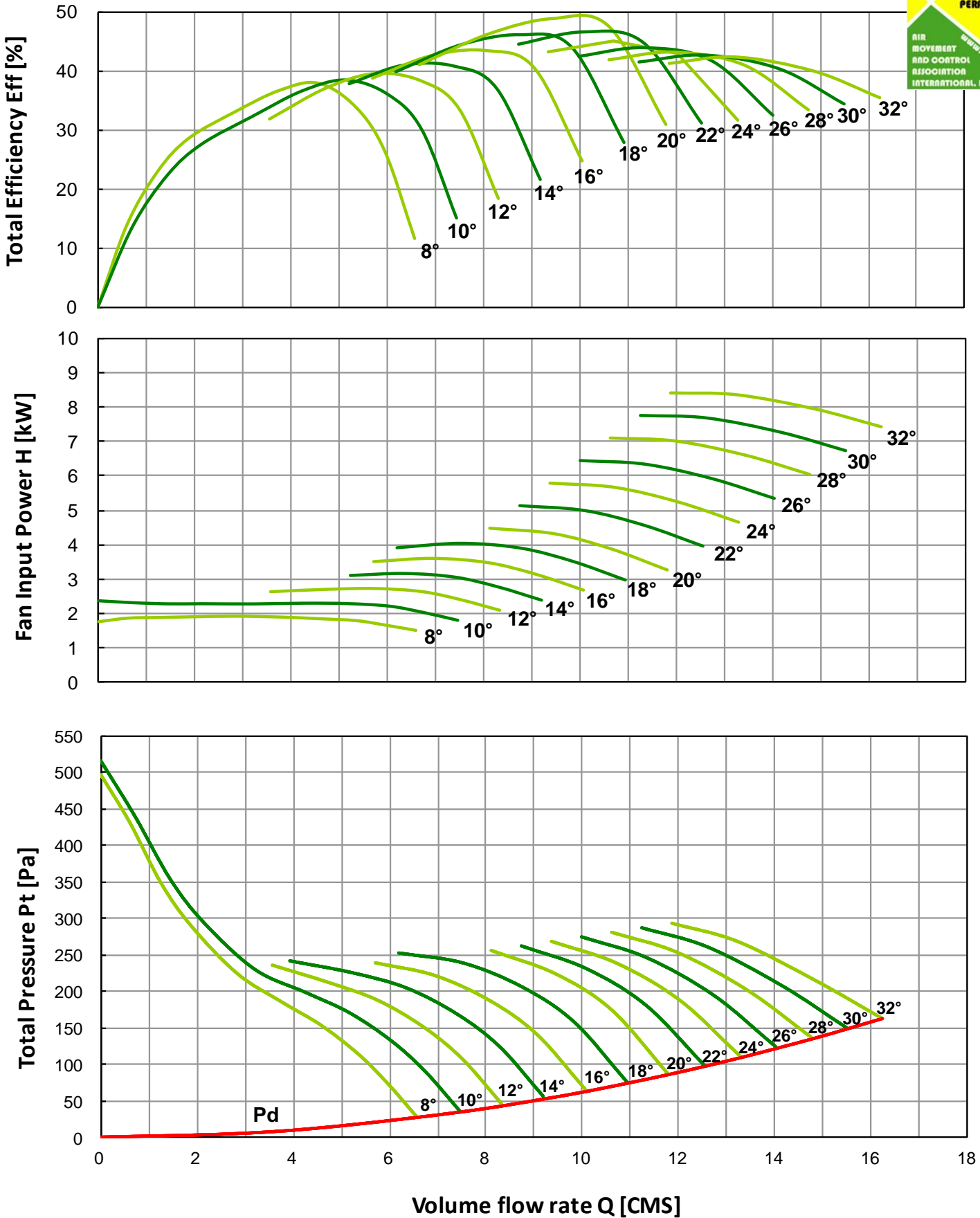
Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

LASD-1120-550-7 (50 Hz) Performance Curves

FEG 50



Fan Speed  $N = 960$  [rpm] Outlet Area  $A = 0.987$  [m<sup>2</sup>]  $\rho = 1.2$ kg/m<sup>3</sup>



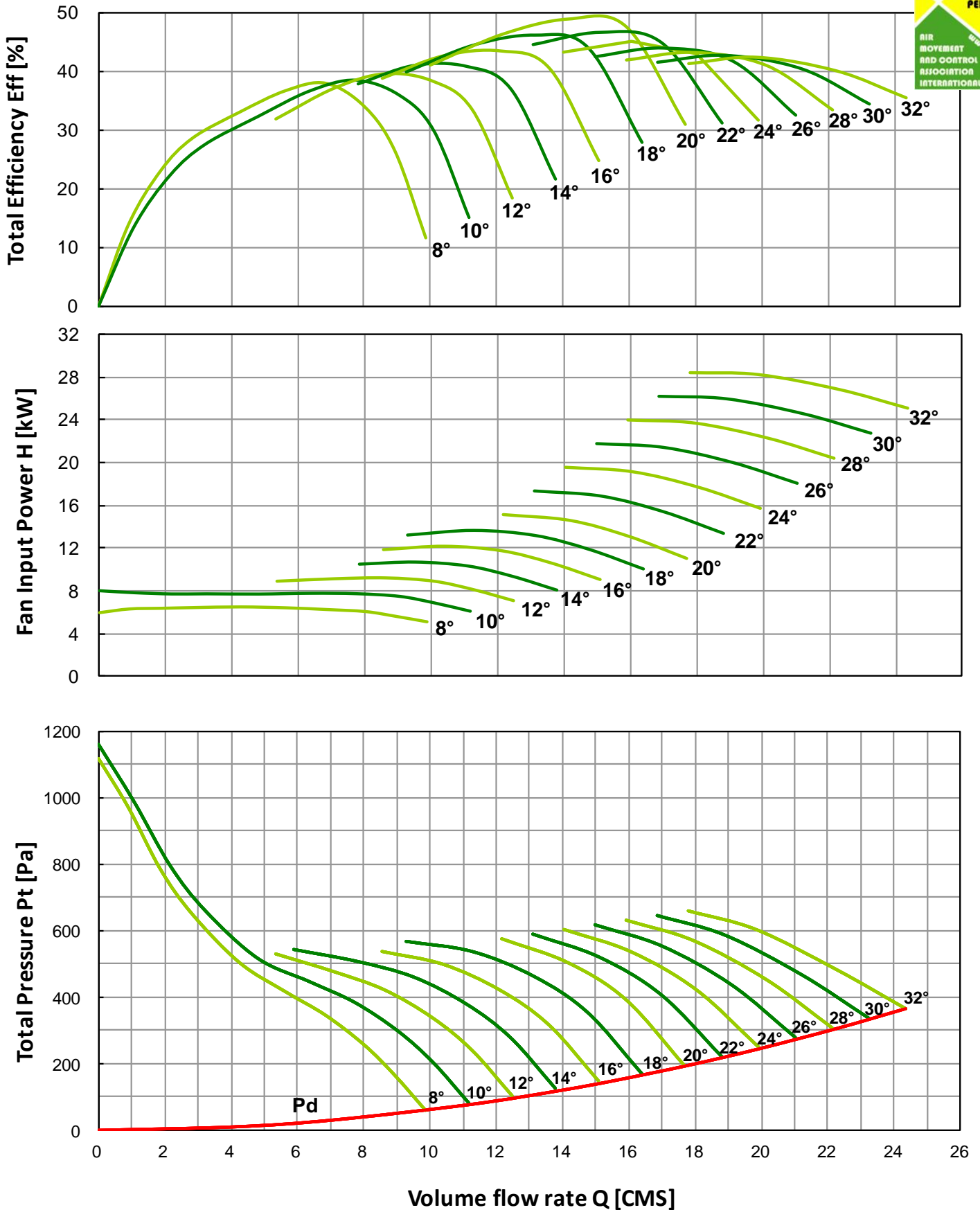
Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of **appurtenances** (accessories).

LASD-1120-550-7 (50 Hz) Performance Curves

FEG 50



Fan Speed  $N = 1440$  [rpm] Outlet Area  $A = 0.987$  [m<sup>2</sup>]  $\rho = 1.2$ kg/m<sup>3</sup>

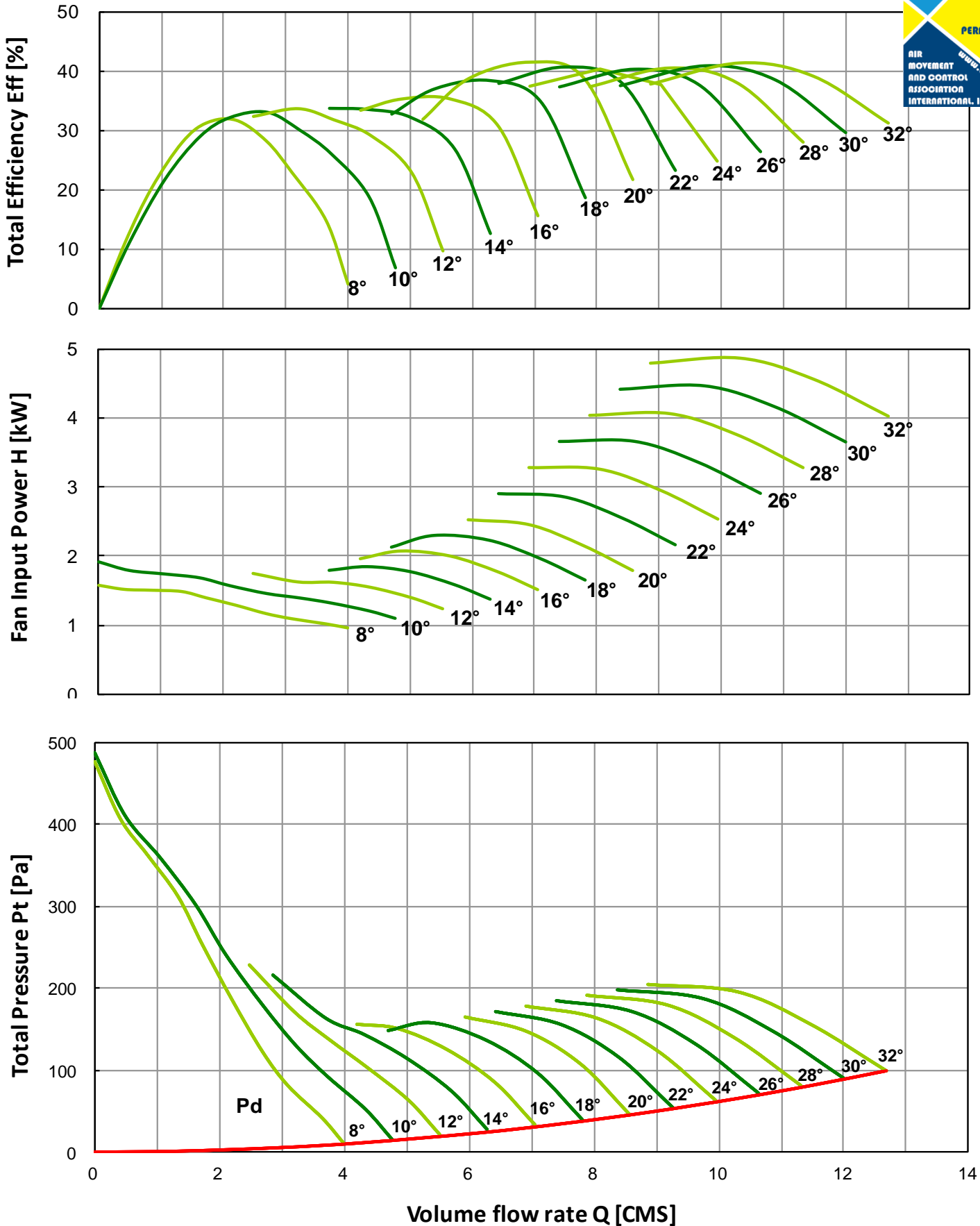


Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of **appurtenances** (accessories).



# LASD-1120-550-14 (50 Hz) Performance Curves

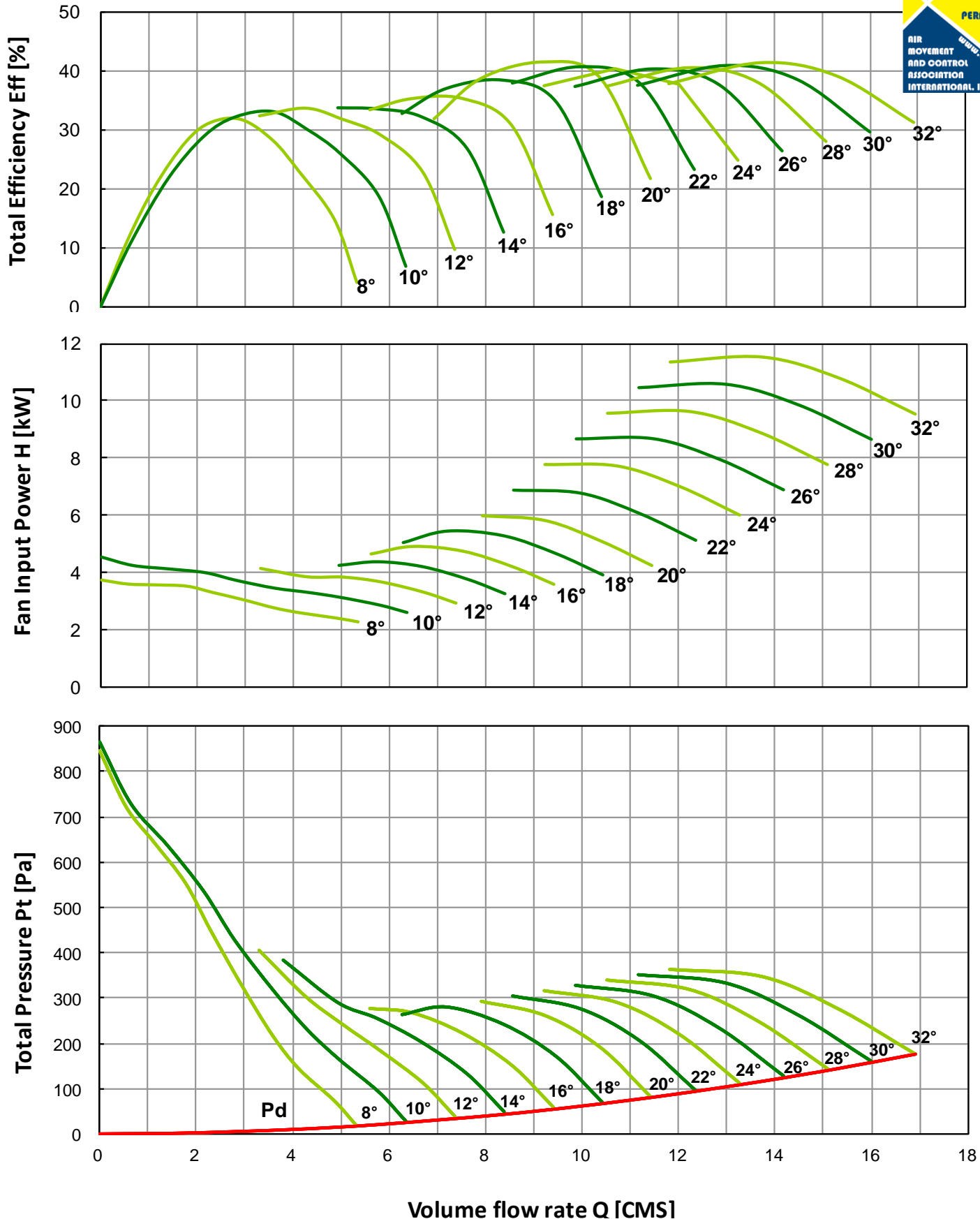
Fan Speed  $N = 720$  [rpm]   Outlet Area  $A = 0.987$  [m<sup>2</sup>]    $\rho = 1.2$ kg/m<sup>3</sup>



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

# LASD-1120-550-14 (50 Hz) Performance Curves

Fan Speed  $N = 960$  [rpm]    Outlet Area  $A = 0.987$  [m<sup>2</sup>]     $\rho = 1.2$  kg/m

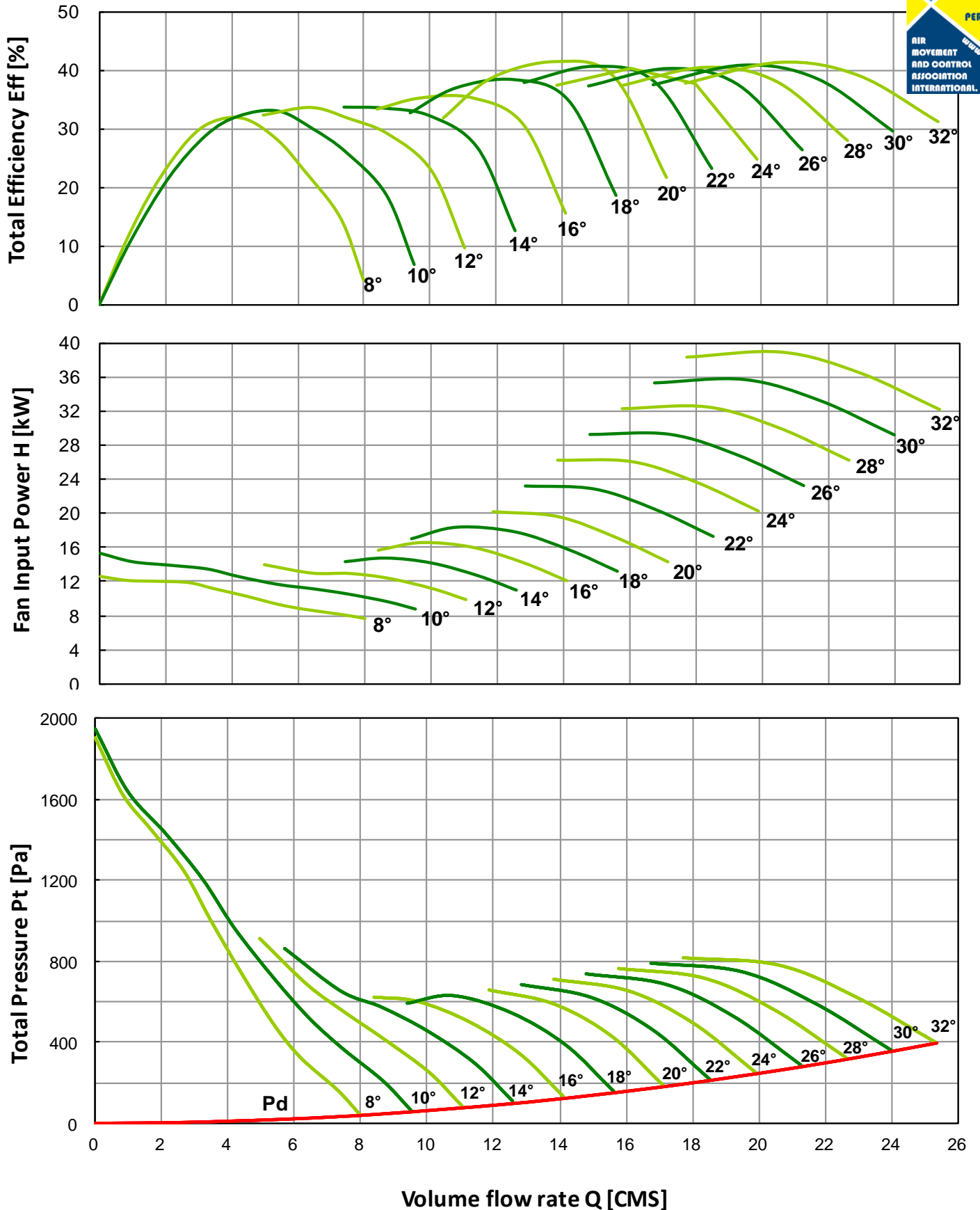


Performance certified is for installation type B: free inlet, ducted outlet. Performance ratings do not include the effects of **appurtenances** (accessories).



# LASD-1120-550-14 (50 Hz) Performance Curves

Fan Speed  $N = 1440$  [rpm]    Outlet Area  $A = 0.987$  [m<sup>2</sup>]     $\rho = 1.2$ kg/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 (50 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°	720	0	92	90	88	84	80	76	66	62	86
LASD-1120-550-7/8°	720	79	90	90	88	88	83	76	66	61	88
LASD-1120-550-7/8°	720	123	96	93	86	83	79	74	65	60	85
LASD-1120-550-7/8°	720	161	96	92	85	82	79	75	66	62	85
LASD-1120-550-7/20°	720	0	99	96	92	87	82	77	67	63	89
LASD-1120-550-7/20°	720	59	98	94	90	86	81	76	67	63	88
LASD-1120-550-7/20°	720	95	98	93	90	85	82	78	70	65	88
LASD-1120-550-7/20°	720	134	105	97	90	86	84	78	72	68	90
LASD-1120-550-7/32°	720	0	101	99	95	89	85	79	72	67	92
LASD-1120-550-7/32°	720	44	100	98	94	88	84	80	73	69	91
LASD-1120-550-7/32°	720	90	99	96	93	87	84	80	75	71	90
LASD-1120-550-7/32°	720	130	99	95	92	87	85	80	75	73	90
LASD-1120-550-7/8°	960	0	99	99	95	92	88	84	76	70	94
LASD-1120-550-7/8°	960	140	96	96	95	94	91	85	76	70	95
LASD-1120-550-7/8°	960	219	102	102	95	90	87	82	75	68	93
LASD-1120-550-7/8°	960	286	101	102	94	89	86	83	76	70	93
LASD-1120-550-7/20°	960	0	105	105	100	96	90	85	78	71	98
LASD-1120-550-7/20°	960	105	105	105	98	94	89	84	77	71	96
LASD-1120-550-7/20°	960	169	104	104	97	93	89	86	79	73	96
LASD-1120-550-7/20°	960	238	112	107	99	94	91	86	80	76	98
LASD-1120-550-7/32°	960	0	107	107	103	98	93	88	81	76	100
LASD-1120-550-7/32°	960	78	106	106	102	97	92	88	82	77	99
LASD-1120-550-7/32°	960	160	105	105	101	96	92	88	83	79	99
LASD-1120-550-7/32°	960	231	104	105	100	95	92	88	84	80	98
LASD-1120-550-7/8°	1440	0	107	108	105	103	99	95	91	81	105
LASD-1120-550-7/8°	1440	316	105	105	105	103	103	98	91	81	107
LASD-1120-550-7/8°	1440	492	111	111	108	101	98	94	89	80	105
LASD-1120-550-7/8°	1440	644	110	111	107	100	97	94	90	81	104
LASD-1120-550-7/20°	1440	0	114	114	111	107	102	97	92	82	109
LASD-1120-550-7/20°	1440	236	113	114	109	105	101	96	91	83	107
LASD-1120-550-7/20°	1440	380	113	113	108	105	100	97	93	85	107
LASD-1120-550-7/20°	1440	506	120	120	112	105	101	99	93	87	110
LASD-1120-550-7/32°	1440	0	116	116	114	110	104	100	94	87	111
LASD-1120-550-7/32°	1440	176	115	115	113	109	103	99	95	88	111
LASD-1120-550-7/32°	1440	360	114	114	111	108	102	99	95	90	109
LASD-1120-550-7/32°	1440	520	112	114	110	107	102	100	95	90	109

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>w</sub>i and L<sub>w</sub>iA sound power levels for installation Type B: free inlet, ducted outlet.

## LASD-1120-550 (50 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°	720	0	85	92	89	86	84	80	69	65	89
LASD-1120-550-14/8°	720	75	87	94	92	87	84	76	67	63	89
LASD-1120-550-14/8°	720	183	89	98	91	86	82	74	67	62	89
LASD-1120-550-14/8°	720	311	88	98	90	86	82	77	70	65	89
LASD-1120-550-14/20°	720	0	89	98	91	86	82	74	67	62	89
LASD-1120-550-14/20°	720	70	88	96	90	86	82	77	70	65	88
LASD-1120-550-14/20°	720	118	94	97	93	88	86	80	73	67	91
LASD-1120-550-14/20°	720	143	94	98	94	90	88	81	73	68	93
LASD-1120-550-14/32°	720	0	97	101	98	93	89	82	73	67	95
LASD-1120-550-14/32°	720	45	97	100	98	92	88	81	73	67	94
LASD-1120-550-14/32°	720	74	97	100	97	91	87	81	73	68	94
LASD-1120-550-14/32°	720	150	97	100	96	90	87	81	74	70	93
LASD-1120-550-14/8°	960	0	91	95	98	94	91	88	80	73	96
LASD-1120-550-14/8°	960	133	93	97	101	96	91	85	77	71	98
LASD-1120-550-14/8°	960	325	95	100	101	94	90	84	76	70	97
LASD-1120-550-14/8°	960	550	94	99	104	94	90	86	79	73	98
LASD-1120-550-14/20°	960	0	95	100	104	94	90	84	76	70	98
LASD-1120-550-14/20°	960	124	94	99	102	94	90	86	79	73	97
LASD-1120-550-14/20°	960	210	100	102	103	97	93	89	82	76	100
LASD-1120-550-14/20°	960	254	100	103	103	98	95	90	83	77	101
LASD-1120-550-14/32°	960	0	103	105	107	101	97	91	83	76	103
LASD-1120-550-14/32°	960	80	103	105	107	100	96	90	82	76	103
LASD-1120-550-14/32°	960	132	103	105	107	100	95	90	83	76	102
LASD-1120-550-14/32°	960	267	103	99	107	98	94	90	83	78	102
LASD-1120-550-14/8°	1440	0	100	100	107	104	101	99	95	84	107
LASD-1120-550-14/8°	1440	300	102	102	109	107	102	99	91	82	108
LASD-1120-550-14/8°	1440	732	104	104	113	106	101	97	89	82	108
LASD-1120-550-14/8°	1440	1244	103	103	113	105	101	97	92	85	108
LASD-1120-550-14/20°	1440	0	104	104	113	106	101	97	89	82	108
LASD-1120-550-14/20°	1440	280	103	103	111	105	101	97	92	85	107
LASD-1120-550-14/20°	1440	472	109	109	112	108	103	101	95	88	110
LASD-1120-550-14/20°	1440	572	109	109	113	109	105	103	96	88	111
LASD-1120-550-14/32°	1440	0	112	112	116	113	108	104	97	88	114
LASD-1120-550-14/32°	1440	180	112	112	116	113	107	103	96	88	114
LASD-1120-550-14/32°	1440	296	112	112	115	112	106	102	96	88	113
LASD-1120-550-14/32°	1440	600	112	112	115	111	105	102	96	89	112

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.