

Low Pressure Axial Smoke-exhaust Fan Driven Directly



FLOWTECH Co., Ltd. certifies that the LASD-1600 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.

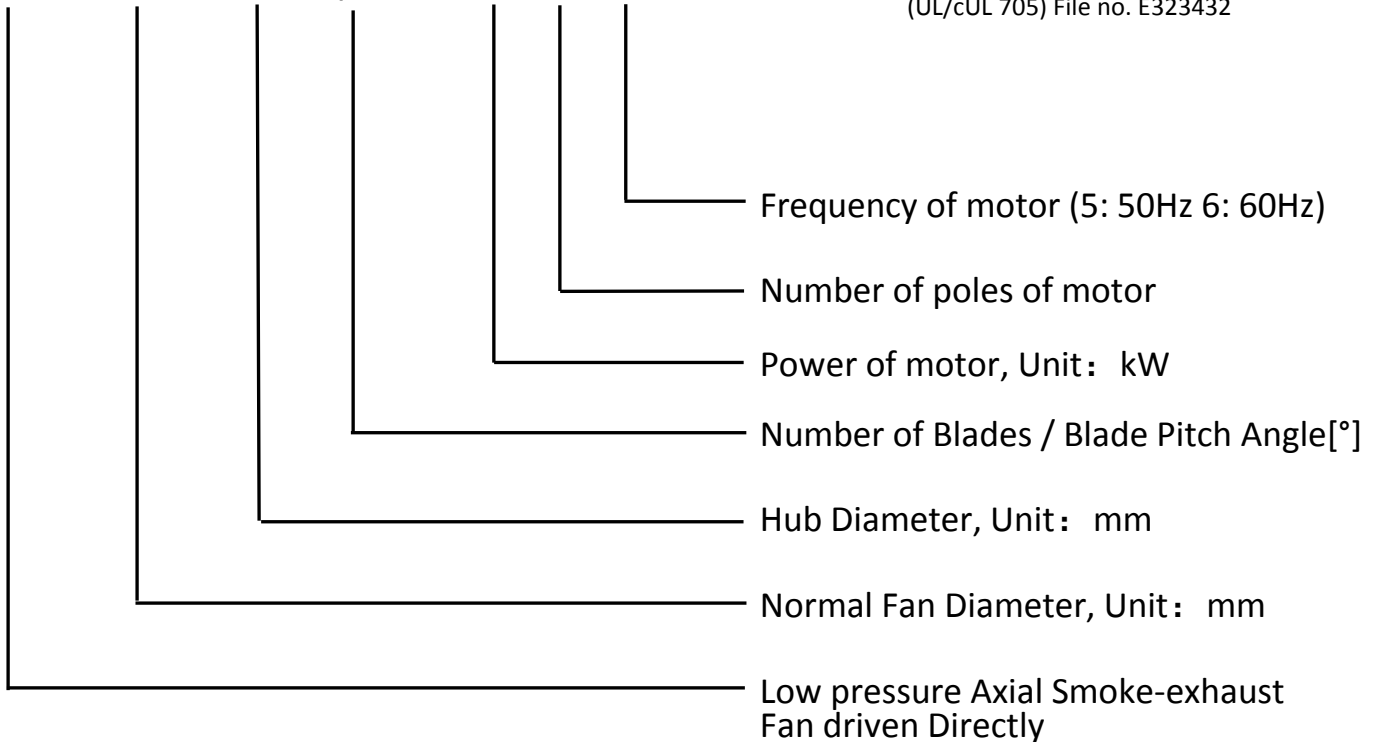


POWER VENTILATOR 45GD

LASD-1600 is listed for electrical (UL/cUL 705) File no. E323432

Fan code

LASD-1600 -550-7/20°- 15- 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

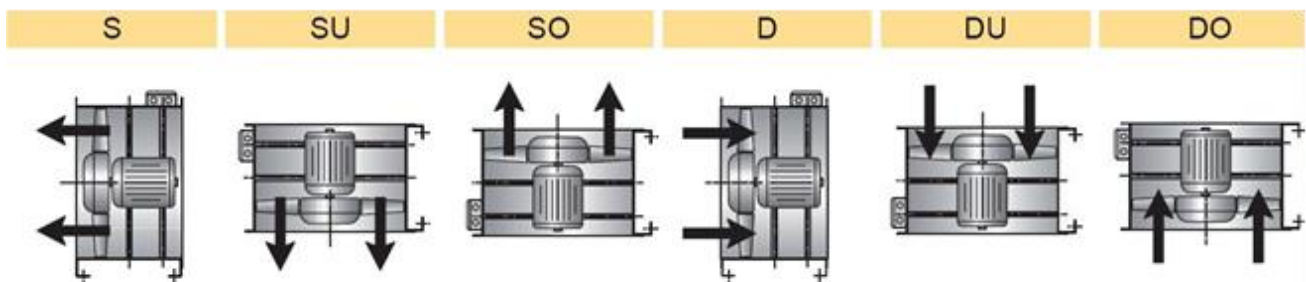
The Flowtech-propellers, hubs and blades are made of cast aluminum alloy, the aero-dynamical profile guarantees high efficiency and low noise. The blades are with adjustable pitch angle to optimum the duty point. The solidity varies for a wider range of performance. All rotating aluminum components are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

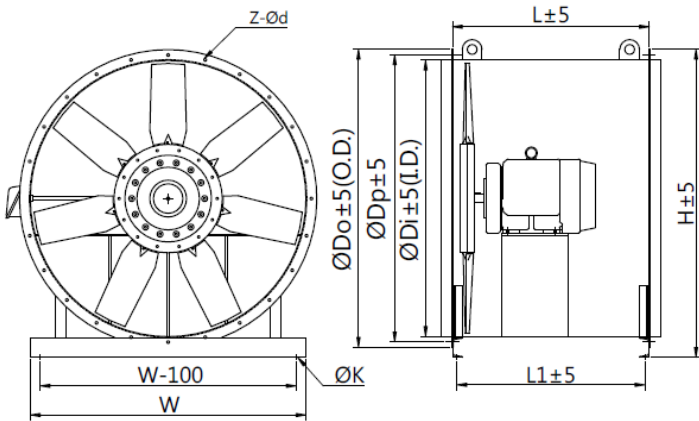


Fig. 1

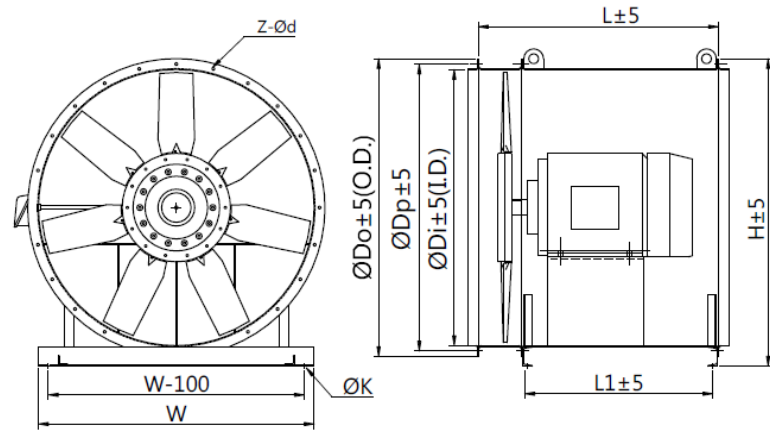


Fig. 2

Fan Size	Di	Dp	Do	Z x d	L	L1	W	K	H	Max. Motor Frame size	Fig. No.
1600	1600	1660	1710	16x14	1000	942	1600	22	1759	≤225S	Fig. 1
1600	1600	1660	1710	16x14	1220	942	1600	22	1759	<280M	Fig. 2

Ceiling Hanging

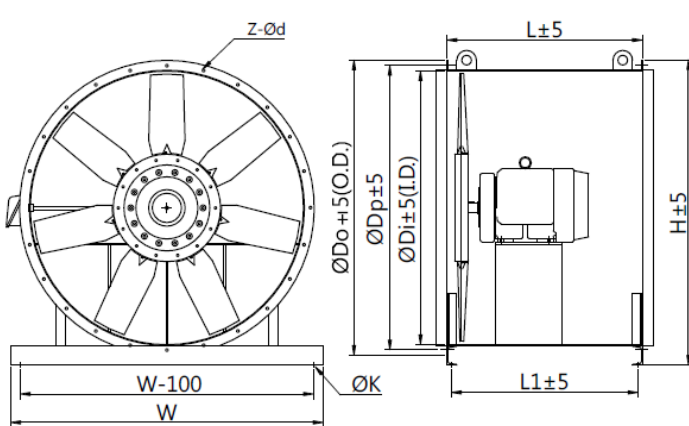


Fig. 3

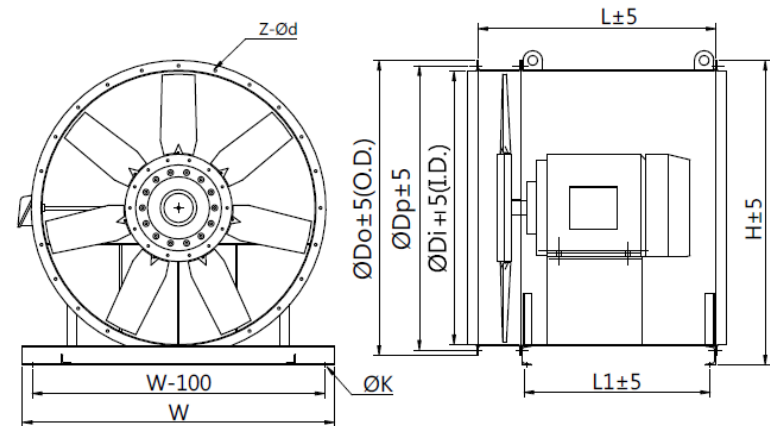


Fig. 4

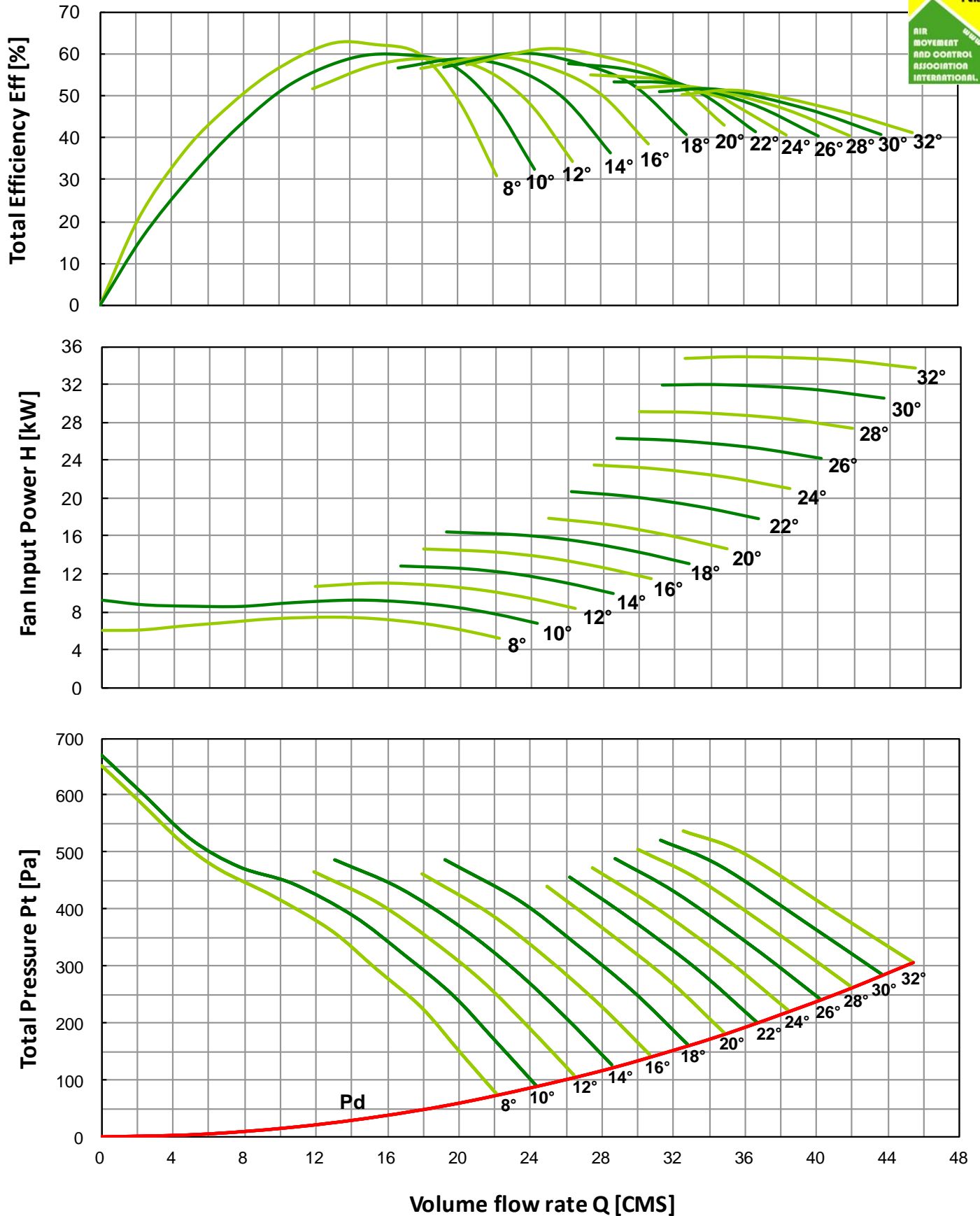
Fan Size	Di	Dp	Do	Z x d	L	L1	W	K	H	Max. Motor Frame size	Fig. No.
1600	1600	1660	1710	16x14	1000	942	1800	22	1759	≤225S	Fig. 3
1600	1600	1660	1710	16x14	1220	942	1800	22	1759	<280M	Fig. 4

LASD-1600-550-7 (60 Hz) Performance Curves

FEG 63



Fan Speed $N = 880$ [rpm] Outlet Area $A = 2.011$ [m²] $\rho = 1.2$ kg/m³



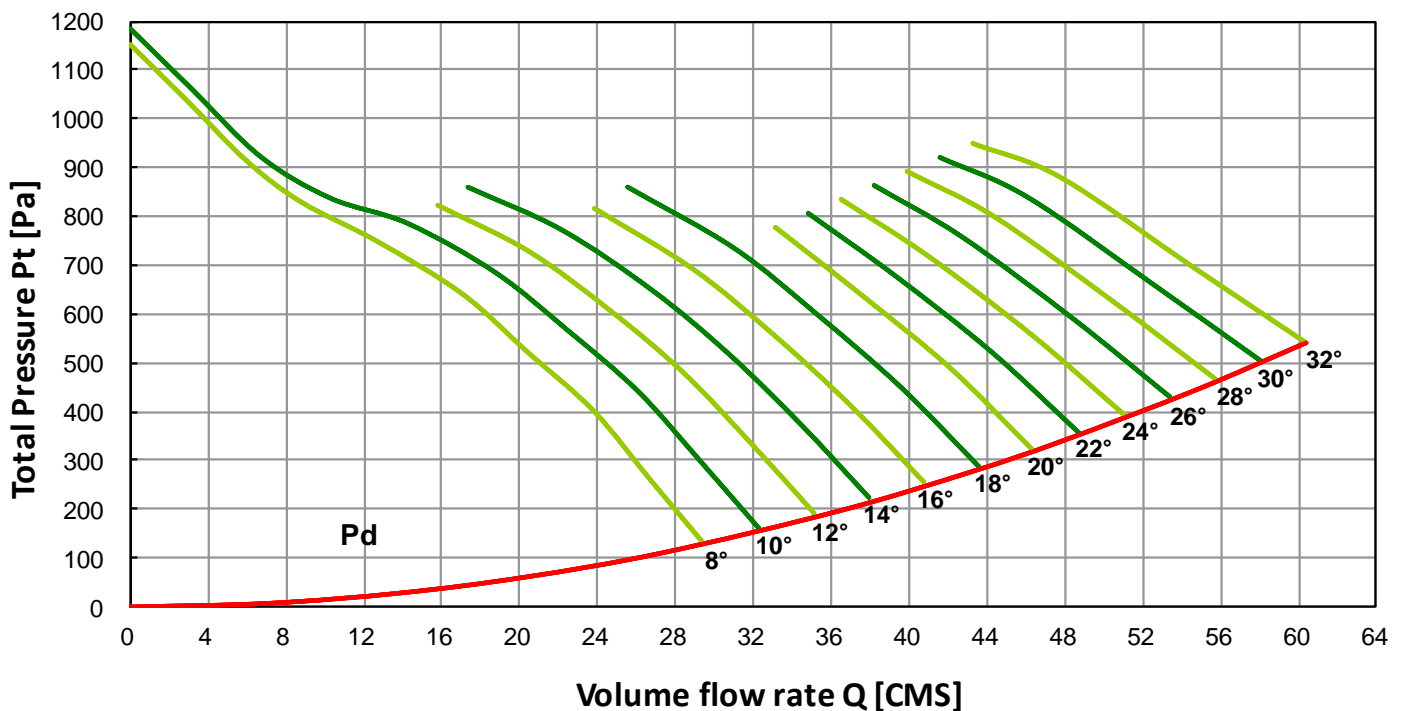
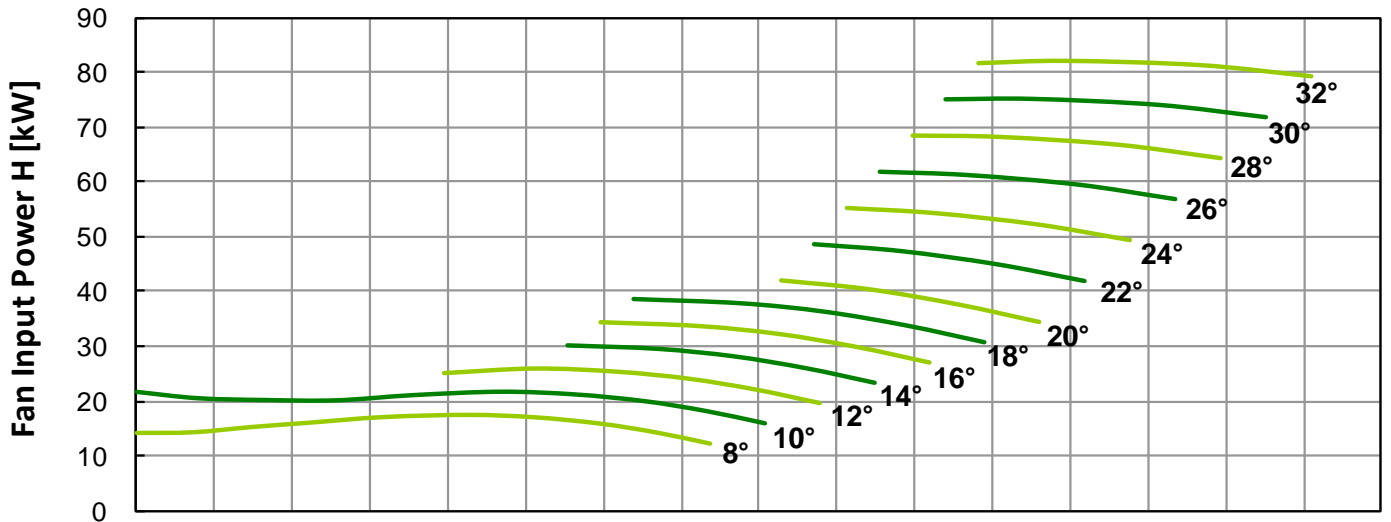
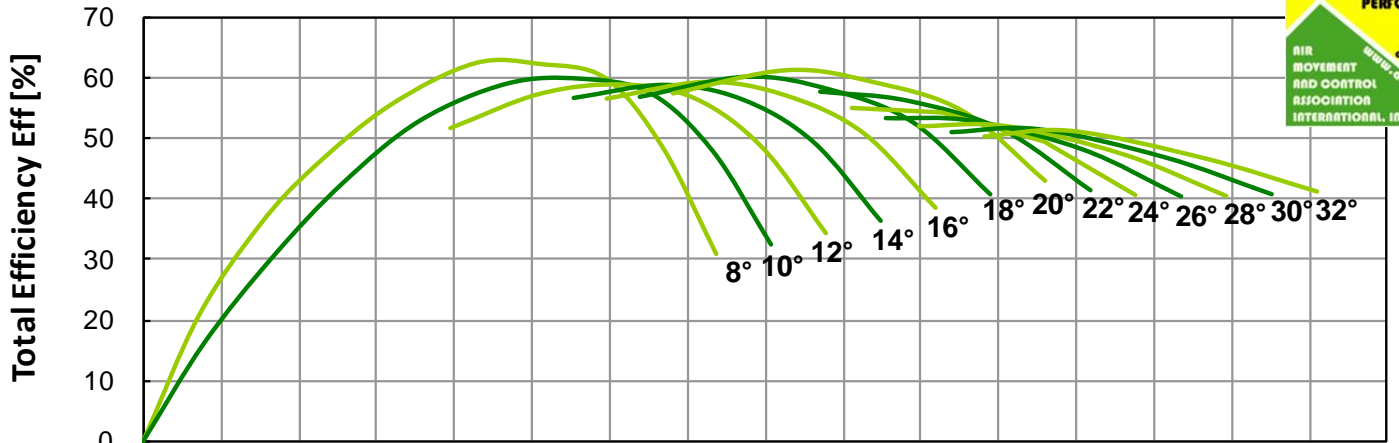
Performance certified is for installation type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).

LASD-1600-550-7 (60 Hz) Performance Curves

FEG 63



Fan Speed N = 1170 [rpm] Outlet Area A = 2.011 [m²] ρ = 1.2kg/m³



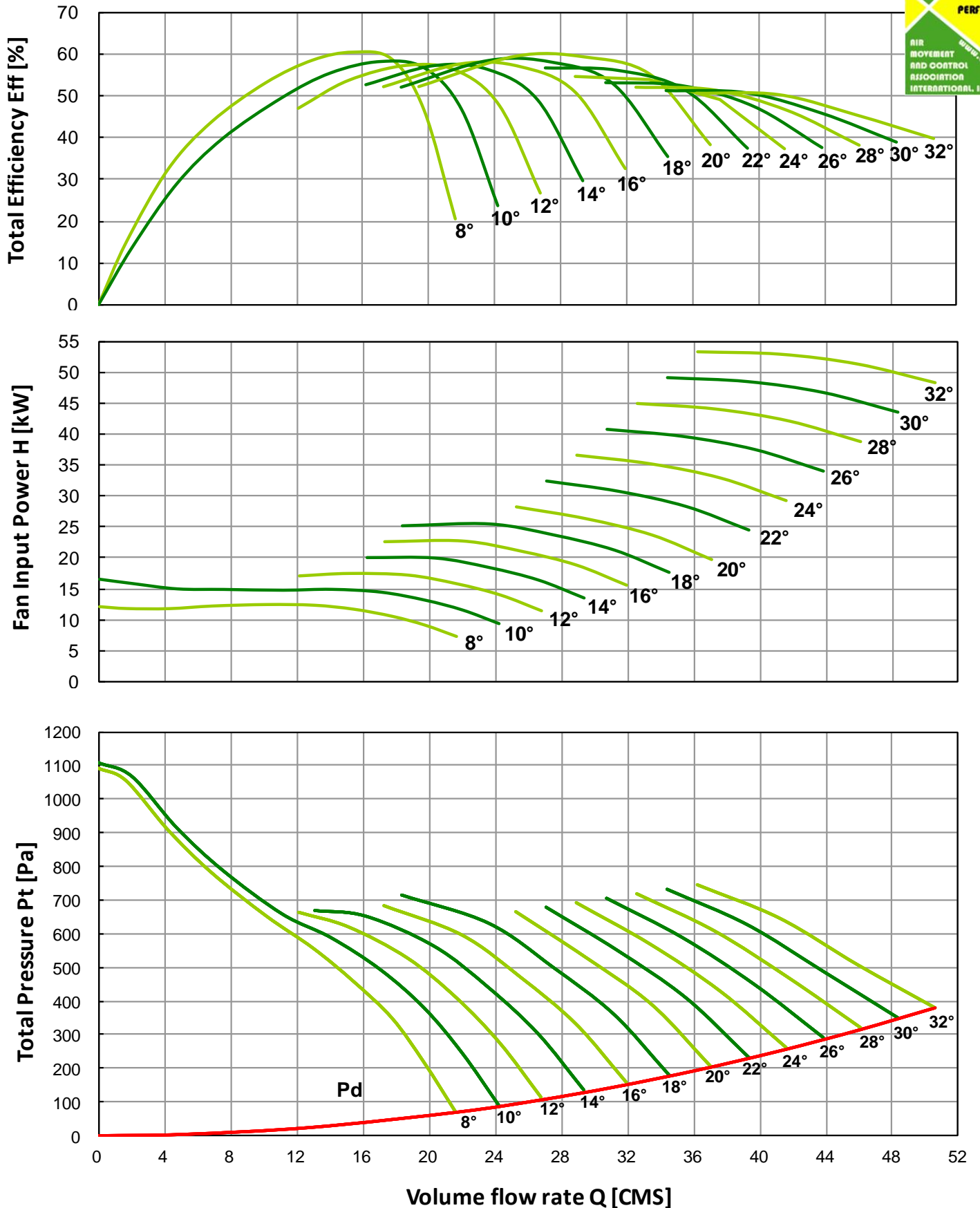
Performance certified is for installation type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).

LASD-1600-550-14 (60 Hz) Performance Curves

FEG 63



Fan Speed N = 880 [rpm] Outlet Area A = 2.011 [m²] ρ = 1.2kg/m³



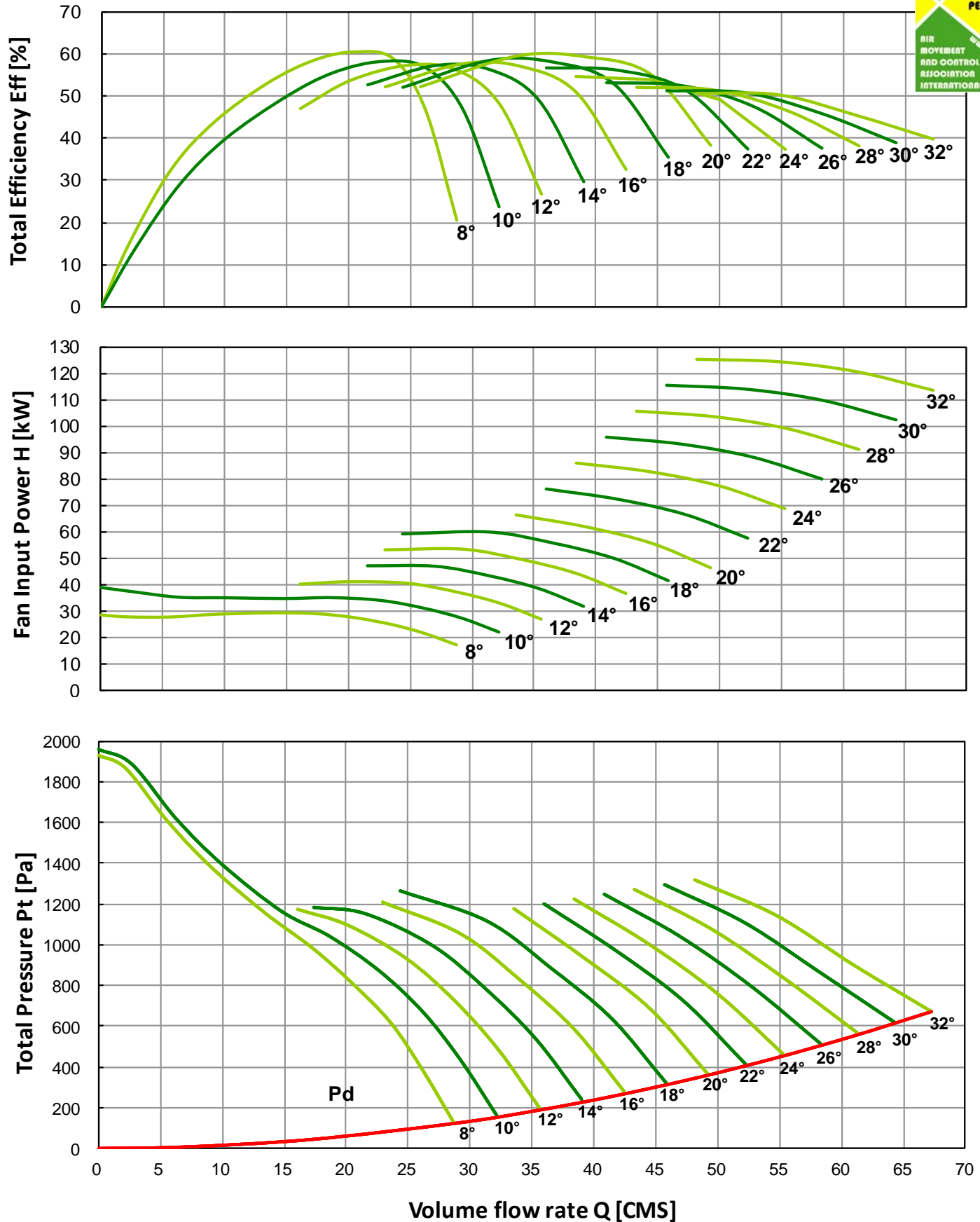
Performance certified is for installation type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).

LASD-1600-550-14 (60 Hz) Performance Curves

FEG 63



Fan Speed N = 1170 [rpm] Outlet Area A = 2.011 [m²] ρ = 1.2kg/m



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

LASD-1600-550 (60 Hz) Sound Data[dB]



Model No.	N [RPM]	Ps [Pa]	Sound Power re 10 ⁻¹² Watts Octave Band [Hz]								L _w A [dB]
			63	125	250	500	1000	2000	4000	8000	
LASD-1600-550-7/8°	880	0	103	104	104	103	98	97	92	82	105
LASD-1600-550-7/8°	880	207	102	102	102	102	99	97	92	83	104
LASD-1600-550-7/8°	880	414	102	103	104	100	96	93	89	85	102
LASD-1600-550-7/8°	880	622	101	103	105	103	100	97	93	90	105
LASD-1600-550-7/20°	880	0	108	108	108	106	101	97	93	87	107
LASD-1600-550-7/20°	880	207	107	107	106	105	100	97	93	89	106
LASD-1600-550-7/20°	880	414	106	106	106	105	101	98	94	91	107
LASD-1600-550-7/20°	880	622	113	113	111	107	103	99	94	89	109
LASD-1600-550-7/32°	880	0	111	111	111	109	104	101	97	93	110
LASD-1600-550-7/32°	880	207	110	110	110	107	103	100	97	93	109
LASD-1600-550-7/32°	880	414	115	115	111	107	103	98	93	88	109
LASD-1600-550-7/32°	880	622	117	116	113	110	105	101	96	91	112
LASD-1600-550-7/8°	1170	0	110	110	110	111	106	102	104	91	112
LASD-1600-550-7/8°	1170	366	108	108	107	109	107	104	103	92	112
LASD-1600-550-7/8°	1170	732	109	109	111	108	103	101	97	93	110
LASD-1600-550-7/8°	1170	1099	108	108	111	110	107	105	101	98	113
LASD-1600-550-7/20°	1170	0	114	114	115	114	109	105	102	95	115
LASD-1600-550-7/20°	1170	366	113	113	113	112	108	104	100	96	114
LASD-1600-550-7/20°	1170	732	112	112	112	113	109	106	102	98	114
LASD-1600-550-7/20°	1170	1099	120	120	118	115	110	107	102	98	117
LASD-1600-550-7/32°	1170	0	117	117	117	117	112	108	105	101	118
LASD-1600-550-7/32°	1170	366	116	116	116	115	111	108	104	101	117
LASD-1600-550-7/32°	1170	732	121	121	119	116	110	107	101	96	117
LASD-1600-550-7/32°	1170	1099	123	123	120	118	113	109	104	99	119

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_w and L_wA sound power levels for installation Type A: free inlet, free outlet.

LASD-1600-550 (60 Hz) Sound Data[dB]



Model No.	N [RPM]	Ps [Pa]	Sound Power re 10 ⁻¹² Watts Octave Band [Hz]								LwoA [dB]
			63	125	250	500	1000	2000	4000	8000	
LASD-1600-550-14/8°	880	0	97	103	112	108	105	103	98	89	111
LASD-1600-550-14/8°	880	184	95	101	110	107	105	103	99	89	110
LASD-1600-550-14/8°	880	368	94	100	110	107	105	104	98	89	110
LASD-1600-550-14/8°	880	552	94	100	109	107	105	103	97	88	110
LASD-1600-550-14/20°	880	0	104	108	113	109	105	101	95	86	111
LASD-1600-550-14/20°	880	184	101	105	113	108	104	100	94	88	110
LASD-1600-550-14/20°	880	368	100	104	111	107	104	99	94	89	109
LASD-1600-550-14/20°	880	552	100	104	110	108	105	100	95	90	110
LASD-1600-550-14/32°	880	0	109	109	115	113	106	102	97	93	113
LASD-1600-550-14/32°	880	184	108	108	113	111	105	102	97	94	112
LASD-1600-550-14/32°	880	367	107	107	112	111	105	102	97	94	112
LASD-1600-550-14/32°	880	551	107	108	113	111	105	102	97	94	112
LASD-1600-550-14/8°	1170	0	103	103	118	115	113	109	108	99	118
LASD-1600-550-14/8°	1170	326	101	101	117	114	112	110	109	99	118
LASD-1600-550-14/8°	1170	651	100	100	116	114	112	111	108	99	118
LASD-1600-550-14/8°	1170	977	100	100	116	114	113	111	106	98	118
LASD-1600-550-14/20°	1170	0	114	114	124	121	117	112	109	100	123
LASD-1600-550-14/20°	1170	326	113	113	123	120	116	112	109	100	122
LASD-1600-550-14/20°	1170	651	111	111	123	120	116	112	108	100	122
LASD-1600-550-14/20°	1170	977	111	111	122	119	116	112	107	101	121
LASD-1600-550-14/32°	1170	0	120	120	126	124	119	114	109	105	125
LASD-1600-550-14/32°	1170	324	118	118	121	122	118	113	109	106	123
LASD-1600-550-14/32°	1170	649	118	118	121	122	118	113	109	106	123
LASD-1600-550-14/32°	1170	973	117	117	118	121	117	113	109	106	122

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