

BIFURCATED

SERIES LBA

INTRODUCTION

Bifurcation, meaning to split or branch off into two parts, is clearly demonstrated in the bifurcated fan, which was developed primarily for high temperature and moisture laden air movement applications. The fan impeller is coupled directly to the motor, which is out of the air stream. The LUFT series LBA bifurcated axials are available in eight impeller diameters. The motors are available in standard three phase voltages and three alternative speeds of 900rpm, 1400rpm or 2800rpm.

APPLICATION

Because of the various temperatures in which this type of fan can operate, they are supplied in three different categories. This must be considered when selecting and ordering the LBA bifurcated fan.

Medium temperature unit – suitable for temperatures up to 70°C, consisting of a bifurcated hot dip galvanized steel casing, aluminium impeller and a class 'F' insulated motor.

High temperature unit – suitable for temperatures up to 200°C. The construction of this fan is identical to the medium temperature unit with the exception that the motor chamber is fully insulated.

Extra high temperature unit – suitable for maximum temperatures



of up to 300°C. This range is supplied with a steel impeller, a heavily insulated motor chamber and the motor shaft fitted with a aluminium cooling spinner.

IMPORTANT

Since the increase, or decrease in air temperature affects both, the pressure at which the fan must operate and the motor power, care must be taken when selecting the correct fan for the application.

It is beyond the scope of this

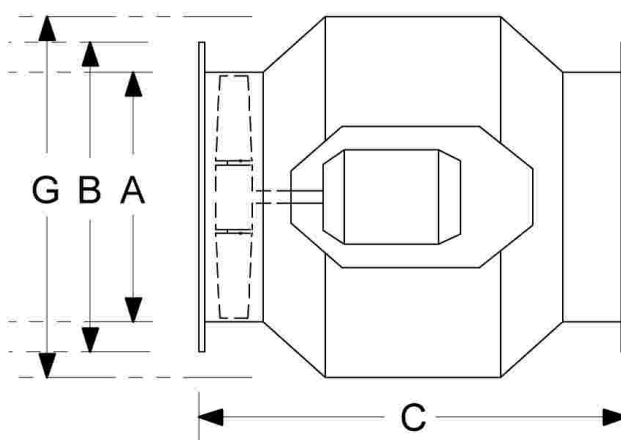
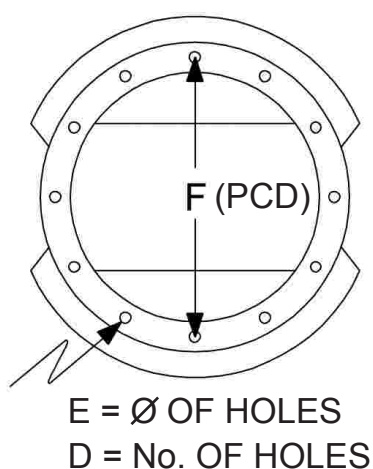
publication to provide accurate fan curves for every combination of temperate, pressure, altitude and motor power for each fan at all the impeller diameters and speeds. The tables on the reverse of this document are a guide only to the volumes and pressures that can be achieved with standard fan sizes and speeds. These quick selection tables are based on standard air, which is 1.2kg/m³.

As the fan blades are fully adjustable, with exception to the extra high temperature unit, any duty within the fan's limits can be selected from our cased axial fan curves and applying the correction factor formulae for temperature, motor power or altitude.

Guidance on these formulae can be found under the 'Information Sheets' in our catalogue or assistance can be obtained from any of our technical sales staff.

TECHNICAL DATA

FAN CODE	Rpm	kW	Frame/max	Blades	Angle	m ³ /sec	Pa	dB(A)
LBA400	1440	0.55	80/100	10	34	1.0	105	66
	2880	2.20	90/100	10	24	1.5	400	83
LBA500	1440	0.75	80/112	10	26	1.5	150	75
	2880	4.00	11/112	10	23	3.0	480	92
LBA 560	1440	1.50	90/112	10	29	2.5	160	77
LBA630	1440	3.00	100/112	10	34	4.0	180	79
	920	1.10	90/112	10	31	3.5	90	76
LBA 710	1440	4.00	112/112	10	33	5.5	200	84
	920	2.20	112/112	10	33	5.0	100	80
LBA800	1440	4.00	112/112	10	27	7.0	180	81
	920	4.00	132/132	14	33	8.0	120	84
LBA900	1440	7.50	132/132	14	23	8.0	280	94
	920	5.50	132/132	14	34	10.0	160	92
LBA1000	1440	11.00	132/132	14	24	12.0	280	99



IMPORTANT

Please note that the figures in the above table are to be used as a guide only. The motor kW and frame sizes are maximum for each fan size and speed. Volumes and pressures are given at standard air. Allowances must be made for higher temperatures and altitudes.

DIMENSIONS

FAN CODE	A	B	C	D	E	F	G	KG
LBA400	400	485	625	8	10	450	565	56
LBA500	500	585	650	8	10	550	680	65
LBA560	560	645	725	12	10	610	800	84
LBA630	630	736	780	12	10	688	850	102
LBA710	710	806	825	12	12	768	900	124
LBA800	800	906	900	12	14	857	1020	157
LBA900	900	1006	1045	12	14	958	1200	216
LBA1000	1000	1108	1220	12	14	1054	1320	293



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