PLATE MOUNTED AXIAL FLOW FANS

COMPACT Series type HCBB (Aluminium impellers)

IP65

Range of low profile plate mounted axial fans fitted with aluminium impellers

Motors

All the motors are **IP65** (1), **Class F** insulation (2), equipped with **thermal protection**.
All motors are speed controllable

Electrical supplies:

Single phase 230V-50Hz. (Capacitor located inside the wiring terminal box).

(1) Working temperatures from -40ºC up to 70ºC.

Additional Information

Standard air direction: form (A) configuration (Motor over Impeller).

Compact design

Compact design created by the combination of the motor with the factory matched direct drive wrap around impeller hub

Corrosion resistance

Mounting plate, motor support and finger proof guard protected by cataforesis primer and black polyester paint finish. Stainless steel screws

Terminal box

Wiring terminal box with cable gland PG-11

Impeller dynamically balanced

Impellers are dynamically balanced, according to ISO 1940 standard, giving vibration free operation

APPLICATIONS

Supply Voltages and Frequencies

Mains supply voltage	Motor type	Connection	Speed
SINGLE PHASE 230V 50Hz	230V 50Hz	See wiring diagram	Single

Acoustic characteristics

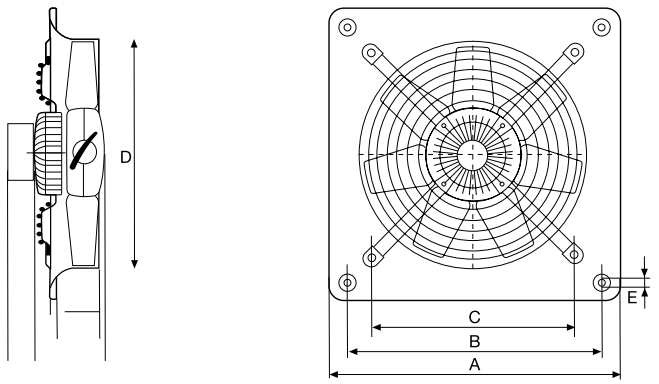
The sound levels shown in the technical characteristic chart, correspond to the value of sound pressure dB(A), measured in free field conditions at a distance equivalent to three times the diameter of the impeller with a minimum of 1.5 meters.
Sound power level spectrum in dB(A) at the corresponding frequency band in Hz.

LwA ASP QMAX	63	125	250	500	1000	2000	4000	8000
4-250	44	50	57	58	60	59	53	42
4-315	37	47	57	61	66	63	57	48
4-355	39	59	56	65	70	66	61	52
4-400	41	62	58	67	74	70	66	43
4-450	40	65	62	68	77	71	67	58
4-500	50	68	67	73	79	77	72	61
4-560	47	72	70	82	82	79	74	65
4-630	52	75	73	81	86	83	77	68

Technical characteristics with ALUMINIUM impellers (HCBB)

Model	Speed (r.p.m.)	Maximum absorbed power (W)	Maximum current (A)		Sound pressure level (dB(A))	Maximum air volume (m³/h)	Weight (kg)	Speed* controller
			at 230 V					
SINGLE PHASE 4 POLES								
HCBB/4-250/H	1330	60	0,3		52	1215	5	
HCBB/4-315/H	1300	100	0,6		54	2350	7	
HCBB/4-355/H	1225	200	1,0		58	3490	8	
HCBB/4-400/H	1200	340	1,6		60	5070	9	
HCBB/4-450/H	1290	480	2,3		65	6760	13	
HCBB/4-500/H	1290	650	3,0		68	9200	16	
HCBB/4-560/H	1250	980	5,9		71	12480	22	
HCBB/4-630/H	1200	1700	7,6		72	17060	25	

Dimensions (mm)



Model	A	B	C	Ø D	Ø E
250	315	260	220	254	10
315	400	330	280	315	10
355	450	380	315	355	10
400	500	420	355	400	10
450	560	480	400	450	10
500	630	560	450	500	10
560	710	630	510	560	10
630	800	710	580	630	12

Performance curves Series HCBB

Q = Air volume in, m^3/hr and m^3/s.
Pe = Static pressure in mmWG and Pa.
Dry air at 20ºC and 760 mmHg.
Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.

Typical fan selection:

Do not select the working point in the coloured area. To find the working point it is first necessary to plot the system resistance curve. The working point lies at the intersection between that curve and the fan performance curve.

Example: Required air volume 10.000 m^3/h at 3 mmWG.
Fan working point 11.300 m^3/h at 4 mmWG.