

Box Fans

Smoke & Heat Exhaust Fans

KVB/F

MEET OUR NEW
RANGE OF BOXFANS
MANUFACTURED IN

ALUZINC AZ 185



Systemair your reliable partner in ventilation.

The company was founded in 1974 with a pioneering idea in developing and introducing the circular in line centrifugal duct fan which has simplified ventilation systems. Our leitmotiv "The straight way", has now extended from a product concept to a business philosophy. Our range has grown substantially to span a wide range of energy efficient fans, air handling units, air distribution products, air conditioning, air curtains and heating products. Our products are robust and easy to choose, install and use. Since then the product portfolio has grown considerably and today comprises of a wide range of energy efficient fans, air handling units, air distribution products, chillers, air curtains and heating products. Our business idea is

that with simplicity and reliability as core values, develop, manufacture and distribute ventilation products of high quality. With the business idea as a base and our customers as the focus, we will be perceived as a company to trust with a focus on delivery security, availability and quality. Our focus is to develop innovative and energy efficient products - that are easy to select, install and maintain. With over 5500 employees in 45 countries, we are always close to our customers.

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New range of boxfans in aluzinc!

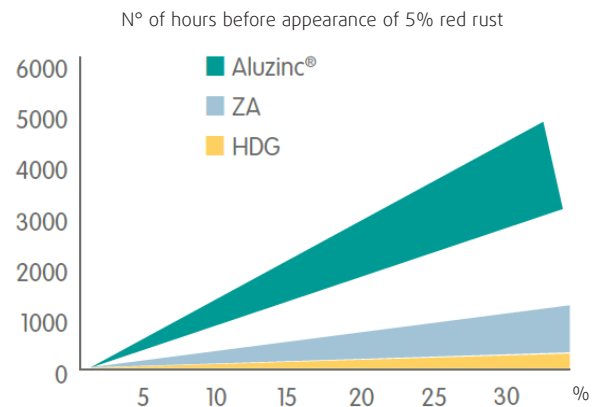


The KVB-F belongs to the Boxfans ventilation family. A wide range that offers efficient ventilation / extraction solutions for commercial, marine and industrial applications.

To be able to perform in such environments, the structure of our KVB-F ventilation units, both exterior and interior, are manufactured in Aluzinc AZ185, with the aim of offering the best quality to our customers.

The high resistance to corrosion is due to the combined action of aluminum and zinc, with the proportion of both materials being 55% and 43.4% respectively.

Metal	Corrosion class (ISO12944)				
	C1	C2	C3	C4	C5
Galvanized sheet Z275	●	●			
Aluzinc AZ185	●	●	●	●	
Stainless steel	●	●	●	●	●
Aluminum	●	●	●	●	



The Aluzinc combines the stability of Aluminum, the protection of Zinc and the hardness of Steel!

Each environment requires different classifications against corrosion according to ISO 12944-2 standard. It also has the possibility of manufacturing the air handling unit in stainless steel.

Corrosion Resistance	Type of environment
	Outside / Inside
C1 Very Low	Buildings with heating and clean atmospheres
C2 Low	Atmospheres with low pollution levels / Buildings without heating with possible condensations
C3 Medium	Urban and industrial atmospheres, with moderate pollution. Coastal areas with low salinity / manufacturing buildings with high humidity and with some contamination.
C4 High	Industrial areas and coastal areas with moderate salinity / Chemical industries and swimming pools
C5 Very High (Marine and Industrial)	Coastal and maritime areas with high salinity / Buildings or areas with almost permanent condensation and high pollution.

Applications

Reliable and efficient Smoke extract system is essential for every building.

The area of applications is extremely wide; from residential buildings, shopping centres to parkings and heavy industry facilities. The KVB/F extract fans are also used to extract polluted air with high temperatures, from parkings and industrial facilities. The KVB/F fans from Systemair faces requirements of practically every system.

The KVB/F smoke extract fans are approved for smoke extraction in case of fire and also for daily ventilation.

The KVB/F smoke extract fans have been certificate by BSI to ensure that they complies with the European product and testing standard EN 12101-3. The complete range carries the CE marking in accordance with EN 12101-3:2015"

Parking

Parking is always characterised with big areas and high level of air contamination. Such kind of facilities demand large air volumes and high quality fire protection. The box fan KVB/F with airflow up to 50 000 m³/h, that can be used both for general ventilation and fire safety, is a perfect solution for such kind of premises.



Offices

Office buildings are characterised with big concentration of people and high demand of air quality. Efficient and reliable fire safety system is required in such kind of facilities. KVB/F fans are a perfect solution for fire protection ventilation of such kind of buildings.





Industry

An industrial application means often high ceiling heights. If the air is polluted, it is generally best to take care of that at the source by a separate extract air system. KVB/F fans are a perfect solution for such kind of systems.



Public buildings

Shopping Centres are characterised with big areas, various types of facilities and huge amount of visitors every day. Such kind of buildings demand high efficient and reliable fire safety system. KVB/F meets all the demands of such kind of buildings.

Smoke extract fan KVB/F



- Certified in accordance with EN 12101-3 for 400 °C/120 min.
- Belt driven fan with motor out of the air stream
- Forward curved double inlet galvanized steel impeller
- Inline operation
- With single or two speed motors
- With control via frequency converter meet demands of Erp 2016 and 2018

The KVB/F range covers airflows from 1,000 up to 50,000 m³/h, for indoor and outdoor installation

Casing

Single skin box made manufactured from aluzinc AZ185.

Motor

Belt driven fan with IEC motor out of the air stream, insulation class F, enclosure class, motor IP55.

Impeller geometry

Impeller with forward curved blades manufactured from galvanized steel.

Applications

Industrial kitchen extract, malls, cinemas, theaters, parkings (extract and intake).

Operations

50&60 Hz (belt adjusted to the working point).

Installation

For indoor and outdoor installation (with roof cover) outside risk zone.

With control via frequency converter KVB/F fans meet demands of Erp 2016 and 2018.

You can find our Selection program on www.systemair.com

Accessories



Outlet rain protection

Outlet rain protection with bird screen protector



Roof

Rain protector with cross inclination. Flying 30 mm from the base.



Frequency converter

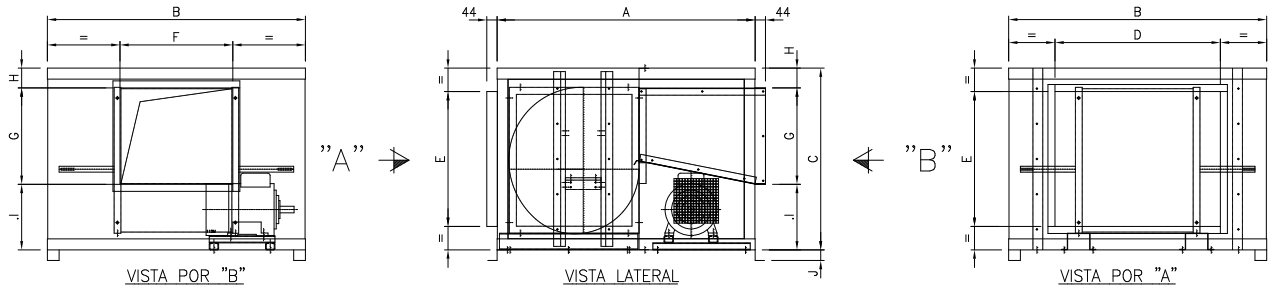
Frequency converter for speed control.



Power Switch

Power Switch mounted for maintenance.

Dimensions



KVB/F	A	B	C	K	Inlet D	E	Outlet F	G
9/9	785	760	595	45	455	395	306	272
10/10	850	825	615	45	555	415	334	297
12/12	920	945	680	45	655	480	394	349
15/15	1100	1100	775	45	705	575	481	411
18/18	1280	1250	900	80	905	700	564	487
20/20	1495	1475	1080	80	955	880	610	611
22/22	1640	1625	1180	80	1055	980	663	702
25/25	1800	1825	1300	80	1255	1100	773	801
30/28	2000	2135	1525	80	1455	1325	898	940

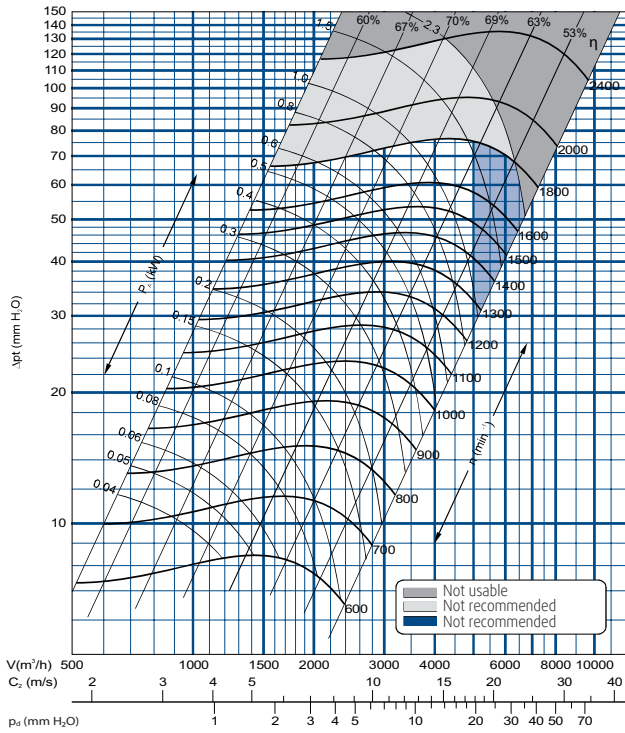
Technical data

Model	Amp. max.		Installed power [kW]	Speed [r.p.m.]	Air flow [m³/h]
	230V	400V			
KVB/F-9/9	1.78	1.03	0.37	1020	2200
KVB/F-9/9	2.51	1.45	0.55	1050	2900
KVB/F-9/9	3.22	1.79	0.75	1070	3200
KVB/F-9/9	4.58	2.50	1.1	1260	3750
KVB/F-10/10	1.78	1.03	0.37	845	2950
KVB/F-10/10	2.51	1.45	0.55	845	3800
KVB/F-10/10	3.22	1.79	0.75	960	4175
KVB/F-10/10	4.58	2.50	1.1	1070	4800
KVB/F-10/10	5.97	3.31	1.5	1140	5400
KVB/F-12/12	1.78	1.03	0.37	595	4200
KVB/F-12/12	2.51	1.45	0.55	675	4800
KVB/F-12/12	3.22	1.79	0.75	765	5400
KVB/F-12/12	4.58	2.50	1.1	855	5800
KVB/F-12/12	5.97	3.31	1.5	965	6500
KVB/F-12/12	8.48	4.83	2.2	1100	8000
KVB/F-15/15	2.51	1.45	0.55	525	5900
KVB/F-15/15	3.22	1.79	0.75	595	6500
KVB/F-15/15	4.58	2.50	1.1	635	7500
KVB/F-15/15	5.97	3.31	1.5	700	8200
KVB/F-15/15	8.48	4.83	2.2	800	9500
KVB/F-15/15	11.03	6.33	3	900	10600
KVB/F-15/15	14.36	8.23	4	990	12000
KVB/F-18/18	4.58	2.50	1.1	500	9000
KVB/F-18/18	5.67	3.31	1.5	540	9250
KVB/F-18/18	8.48	4.83	2.2	590	11500
KVB/F-18/18	11.07	6.33	3	640	13200
KVB/F-18/18	14.36	8.23	4	720	15000
KVB/F-18/18	19.72	10.90	5.5	850	17000
KVB/F-20/20	8.48	4.83	2.2	500	12800
KVB/F-20/20	11.07	6.33	3	570	14200
KVB/F-20/20	14.36	8.23	4	630	15500
KVB/F-20/20	19.72	10.90	5.5	670	17500
KVB/F-20/20	26.12	14.50	7.5	760	20000

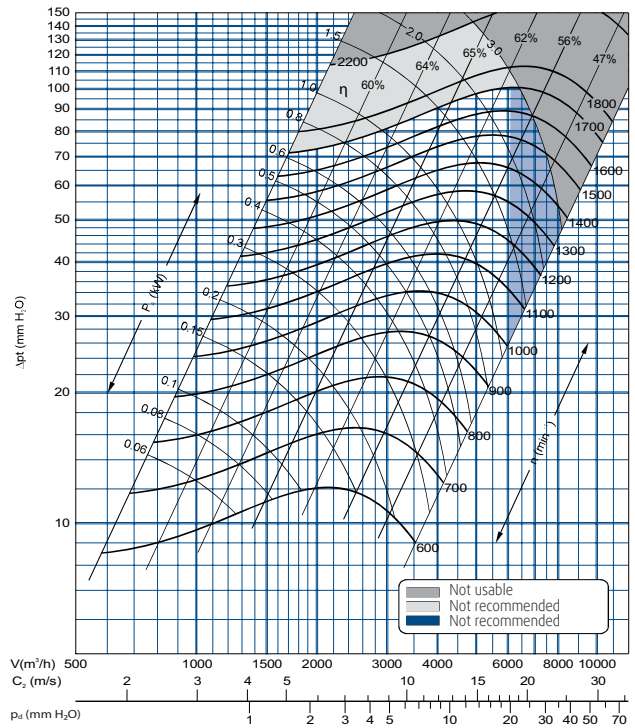
Model	Amp. max.		Installed power [kW]	Speed [r.p.m.]	Air flow [m³/h]
	230V	400V			
KVB/F-22/22	8.48	4.83	2.2	430	15000
KVB/F-22/22	11.07	6.33	3	480	17000
KVB/F-22/22	14.36	8.23	4	500	19000
KVB/F-22/22	19.72	10.90	5.5	580	21500
KVB/F-22/22	26.12	14.50	7.5	610	22000
KVB/F-22/22	37.02	20.80	11	740	27000
KVB/F-25/25	8.48	4.83	2.2	375	17000
KVB/F-25/25	11.07	6.33	3	405	20500
KVB/F-25/25	14.36	8.23	4	450	22000
KVB/F-25/25	19.72	10.90	5.5	485	24500
KVB/F-25/25	26.12	14.50	7.5	545	28000
KVB/F-25/25	37.02	20.80	11	610	32000
KVB/F-25/25	49.31	27.80	15	640	37000
KVB/F-30/28	11.07	6.33	3	360	22000
KVB/F-30/28	14.36	8.23	4	380	25000
KVB/F-30/28	19.72	10.90	5.5	395	31500
KVB/F-30/28	26.12	14.50	7.5	410	36000
KVB/F-30/28	37.07	20.80	11	480	42000
KVB/F-30/28	49.31	27.80	15	520	48000

Performance

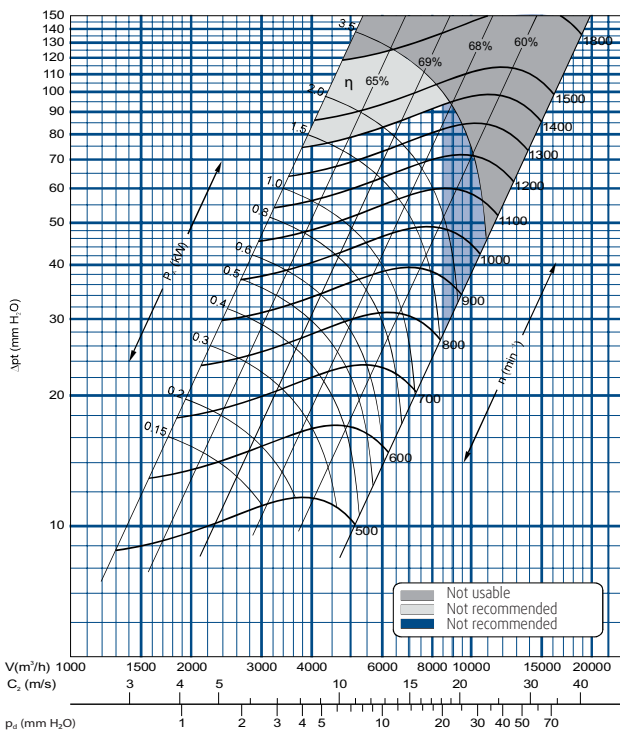
9-9



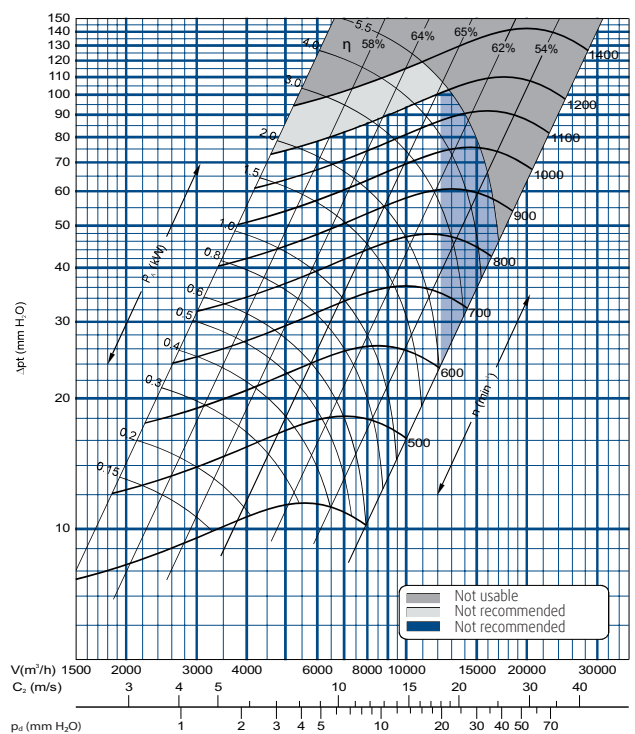
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12-12

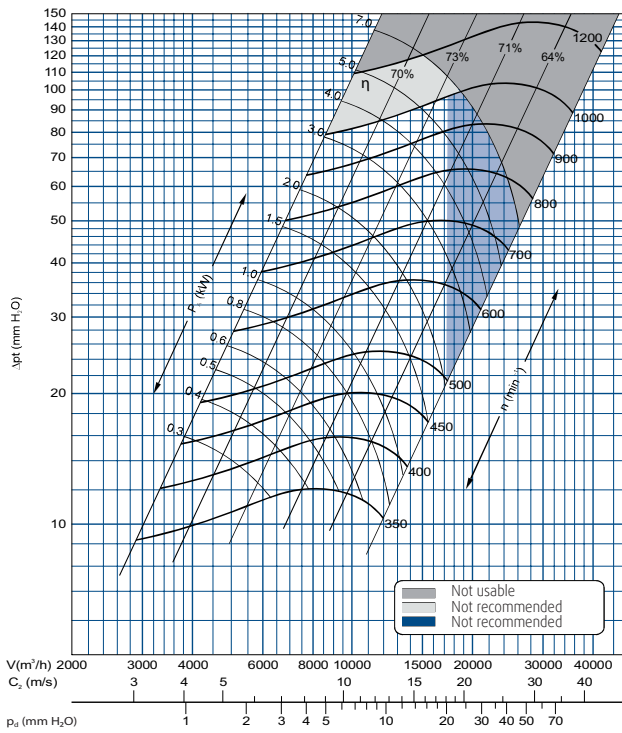


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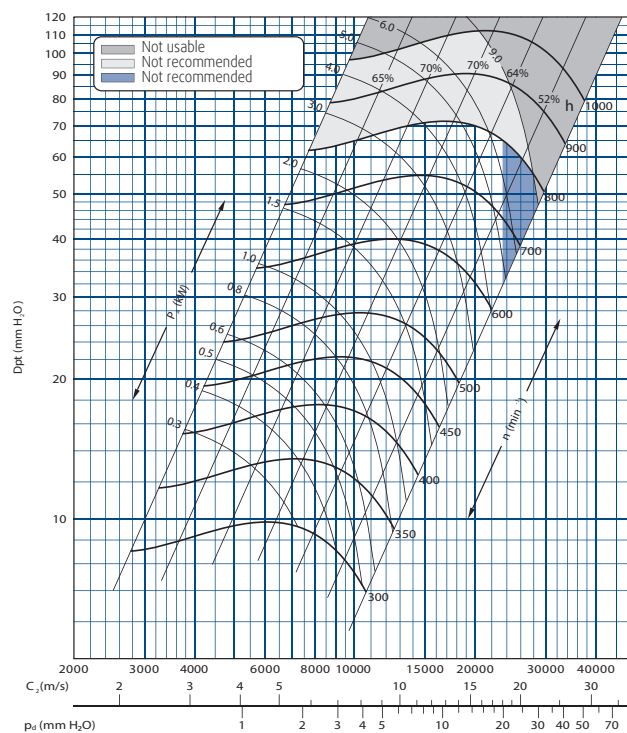


Performance

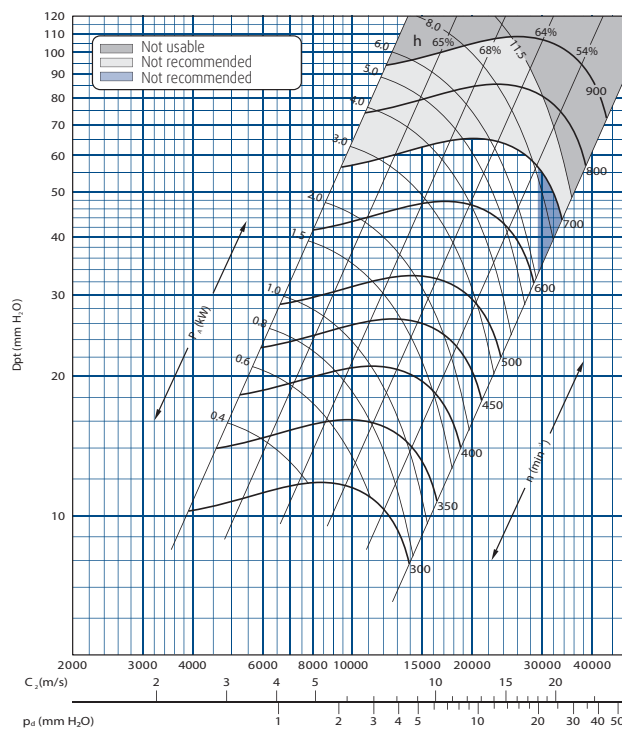
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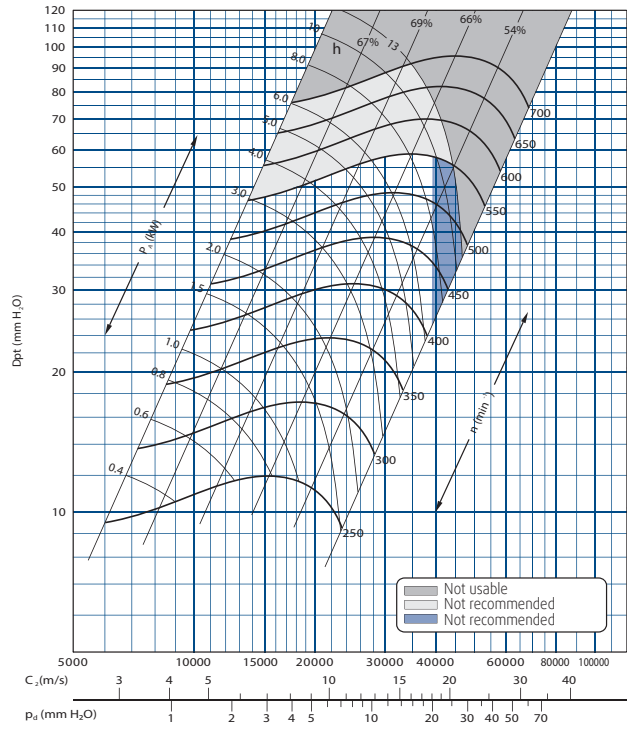
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22-22

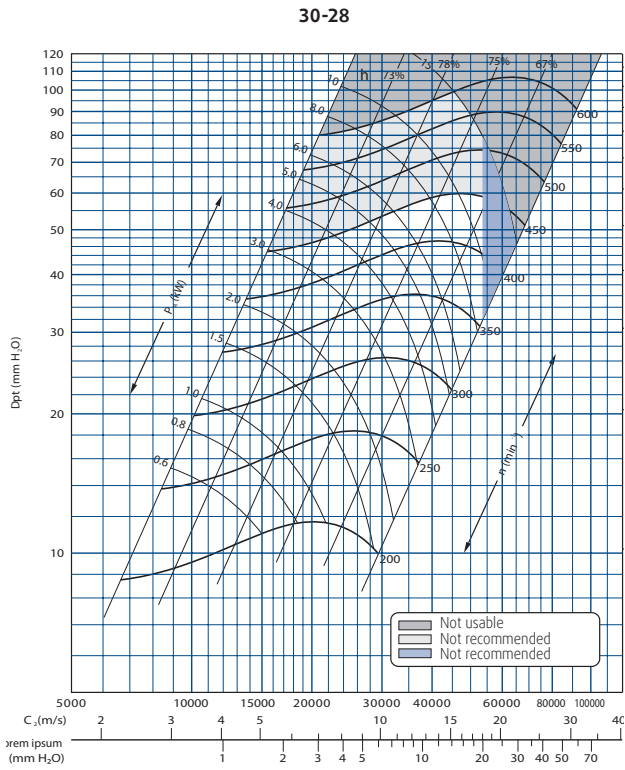


25-25



Note: All fan curves are for 50 Hz. For 60 Hz the transmission will be adjusted to the working point.

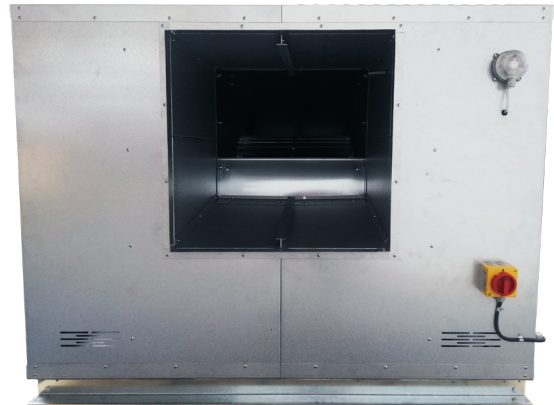
Performance



Note: All these fan curve are for 50 Hz. For 60 Hz the transmission will be adjusted to the working point.

Specification text

KVB/F smoke extract box fan range, tested at LGAI in Barcelona in accordance with EN 12101-3 for 400°C/2h and certified by BSI for inline operation. Belt driven with motor placed outside of the air stream. Motor IP 55, insulation class F. Forward curved double inlet galvanized steel impeller. Aluzinc AZ185, single skin. With one or two speed motor. Air flows from 1.000 up to 50.000 m³/h. For indoor and outdoor installation (with roof cover). Outside risk zone.



KVB/F fan product selector

With the Systemair product selector for box fans, it is even easier to find the right fan for the specific application. The software can be downloaded at www.systemair.com. The product selector covers all box fans for standard temperatures and smoke extraction.

The product selector includes function to filter fans that correspond to ERP 2016 and 2018 directives.

Another advantage: no installation is required for the Systemair product selector, it is freely available online.

Product Selector

Fans
Axial fans
Box fans
Heat recovery units
Supply and extract units
Electric duct heaters
Water heating batteries
Water cooling batteries
Air distribution products

Selection criteria

Required point

Air flow: m³/h

Static pressure: Pa

Fan type

KPB (belt driven fan with insulated casing)

KVB/F (smoke extract fan certified 400°C/2H)

Motor specification

Frequency: Hz

Configuration mode

Standard fan (stock items)

Configurable fan (items made to order)

Accessories

Inlet:

Outlet: Outlet rain protection

Protection: Roof, Double galvanised, Inlet filter

Control: Power switch, Pressure switch, Frequency converter

Sound

Sound pressure distance: m

Selection results

2 products found

Sort by: Best fit

Working point		Acoustic data		Nominal data					
#	Name	Item number	Air flow [m ³ /h]	Static pressure [Pa]	Absorbed power (P2) [W]	Efficiency [%]	Speed [r.p.m.]	Air velocity [m/s]	
1	KVB/F 10-10 0,37Kw 940Rpm 50Hz	647274	2236	250	280	62	940	6.6	
2	KVB/F 09-09 1,1Kw 1320Rpm50Hz	647273	2650	351	420	71	1320	9.3	



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