Single inlet centrifugal fans

BSP Series

Serial BSP

BSP 1400



Range of belt driven single inlet centrifugal fans, designed for emergency smoke extraction in fire conditions and certified F400-120. The fans are also suitable for supply or exhaust applications in commercial and industrial buildings.
Sizes of this series are in accordance with AMCA standard 99-0098-76 and DIN323R20.

Operating limit
Each fan type has its maximum operating speed and power due to its mechanical design. The operating limit of BSP series is adjusted to meet the requirement of class I limit as defined in AMCA standard 99-2408-69.

Motor
Foot-mounted motor (B3), IP55, Class F insulation.
Electrical supplies:<dd>Three phase 220-240/380-415-50/60* Hz up to 3 kW.
(*Check Easyvent for 60Hz available models).
T hree phase 380-415V-50Hz, for higher power motors and two speed motors.</dd>1 speed motor are speed controllable by inverter.

Wheel
The wheel of BSP series has backward curved blades manufactured in cold rolled sheet steel with polyester powder coating finish.

Housing
For all sizes, the housing is manufactured in galvanized sheet steel with the housing fixed to the side plates in "pittsburg lock" form system.

Frame
The frame is manufactured with galvanized angular bars for type "C".
For type "T", they are manufactured with sections of steel and finished with polyester powder coating.
-Type C (models from 315 to 630)
- Type T (models from 710 to 1000).

On request
Inspection door (IP) and drain hole (CD).
Epoxy paint.
2 speed motors.

Technical data

Technical characteristics

Before making any electrical connection ensure that the voltage and frequency of the mains electrical supply matches that of the fan data place label.
Explosion proof types only work at an ambient temperature between -30ºC and +40ºC.

Model	Minimum motor power (kW)	Maximum motor power (kW)	N. min (r.p.m.)	N. max (r.p.m.)	Maximum temperature in continuous operation (ºC)	Weight (Kg)
315	0,25	3	1400	3100	85	19
355	0,25	4	1200	2800	85	25
400	0,55	4	1300	2500	85	33
450	0,55	5,5	1000	2200	85	42
500	0,75	5,5	900	1950	85	55
560	0,75	7,5	800	1800	85	76
630	0,75	7,5	700	1500	85	101
710	1,1	11	600	1350	100	189
800	1,1	15	500	1200	100	228
900	1,5	15	500	1050	100	285
1000	3	18,5	500	950	100	338
1120	3	22	400	850	100	575
1250	3	30	350	780	100	769
1400	5,5	45	350	680	100	1048

Reference

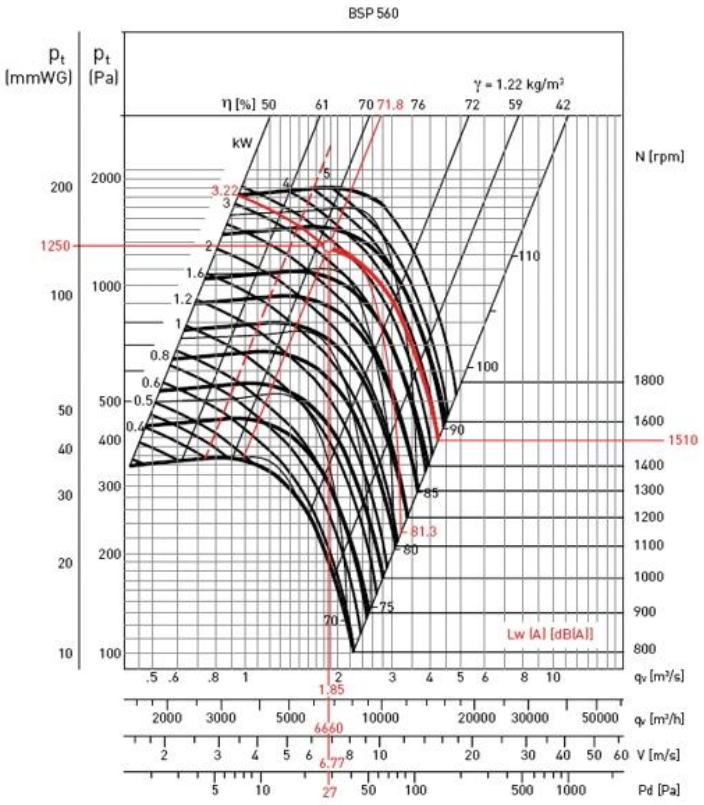
BSP	-	800	-	TM	-	11kW	-	900	-	90	-	CCW	-	400V-88Hz
1		2		3		4		5		6		7		8

1 - : Serie.
2 - : Impeller diameter (mm).
3 - : Fan type.
4 - : Motor power (kW).
5 - : Fan speed (r.p.m.).
6 - : Orientation (º).
7 - : Rotation type.
8 - : Electrical supply.

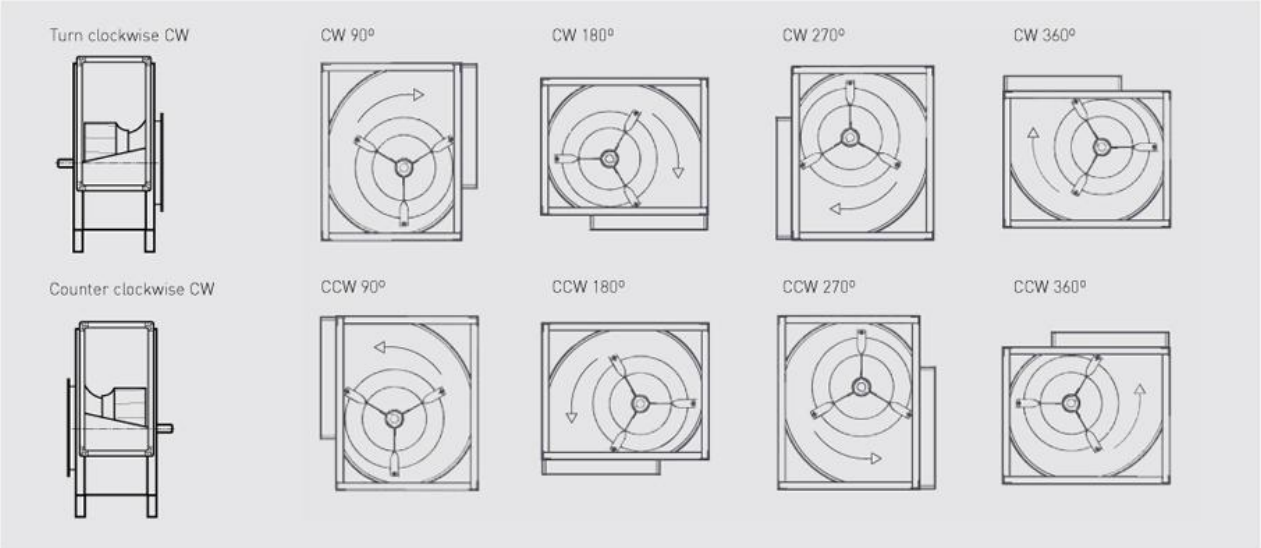
Curve - Example of selection

- Airflow: q_v = 6660 m³/h
- Outlet velocity: V = 6.77 m/s
- Dynamic pressure: Pd = 27 Pa
- Total pressure: p_t = 1250 Pa
- Fan speed: N = 1510 rpm
- Absorbed power: W = 3.22 kW
- Total effciency: η = 71.8 %
- Sound power level: Lw(A) = 81.3 dB(A)

- Performance shown is for Installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances in the airstream. Power rating kW does not include drive losses.
- The A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet Lwi(A) sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.



Orientation



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