



Single inlet centrifugal fans

BSP Series

BSP 800



Range of belt driven single inlet centrifugal fans, designed for emergency fire 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:

Three phase 230/400V-50Hz up to 3kW.

Three phase 400V-50Hz for higher power motors.

1 speed motor are speed controllable.

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 except 1250 and above, the housing is manufactured in galvanized sheet steel with the housing fixed to the side plates in "pittsburg lock" form system.

Housing for 1250 and 1400 are manufactured in mild steel finished with polyester powder coating.

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)

This type has a frame fitted on both sides of the fan which gives better strength and rigidity. It allows mounting in four different orientations, either CW or CCW rotation.

Type T (models from 710 to 1400)

This type has a welded frame giving increased stiffness and rigidity required for higher operating performance, either CW or CCW rotation.

On request

2 speed motors.

Epoxy paint.

Inspection door and drain hole.

+ Attributes



Assembly type C



Assembly type T

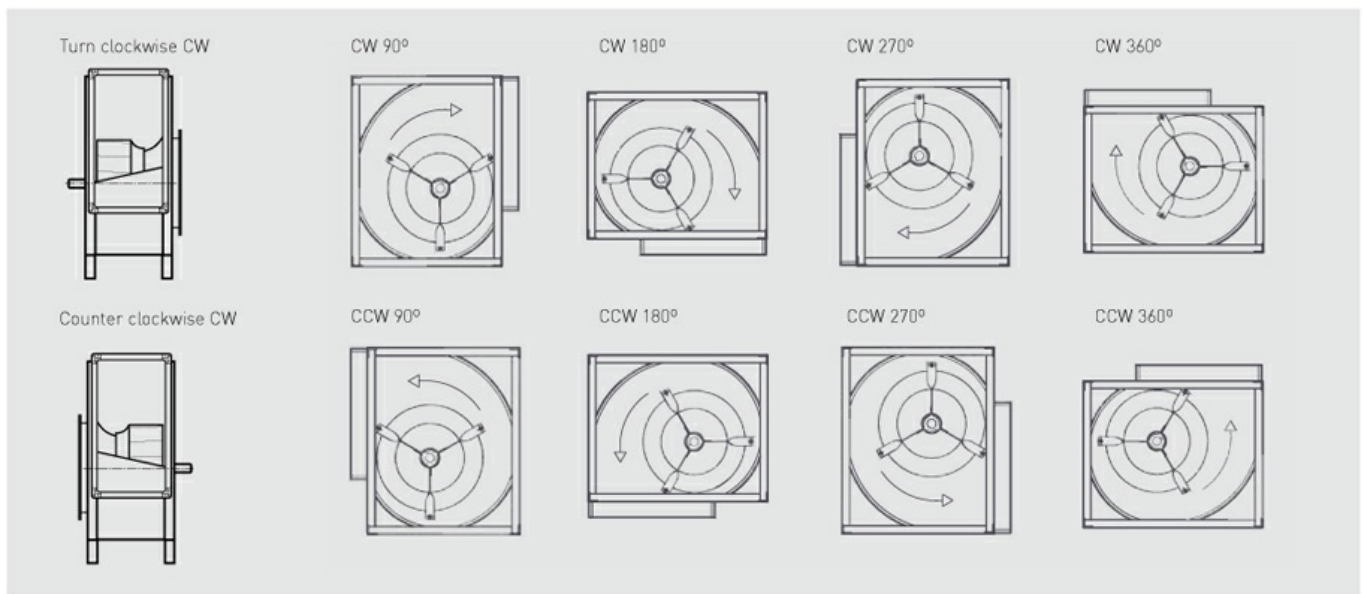
+ Reference

B S P - **8 0 0** - **T M** - **1 1 k W** - **9 0 0** - **9 0** - **C C W** - **4 0 0 V - 8 8 H z**

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 [°].
- 7 - : Rotation type.
- 8 - : Electrical supply.

+ Orientation

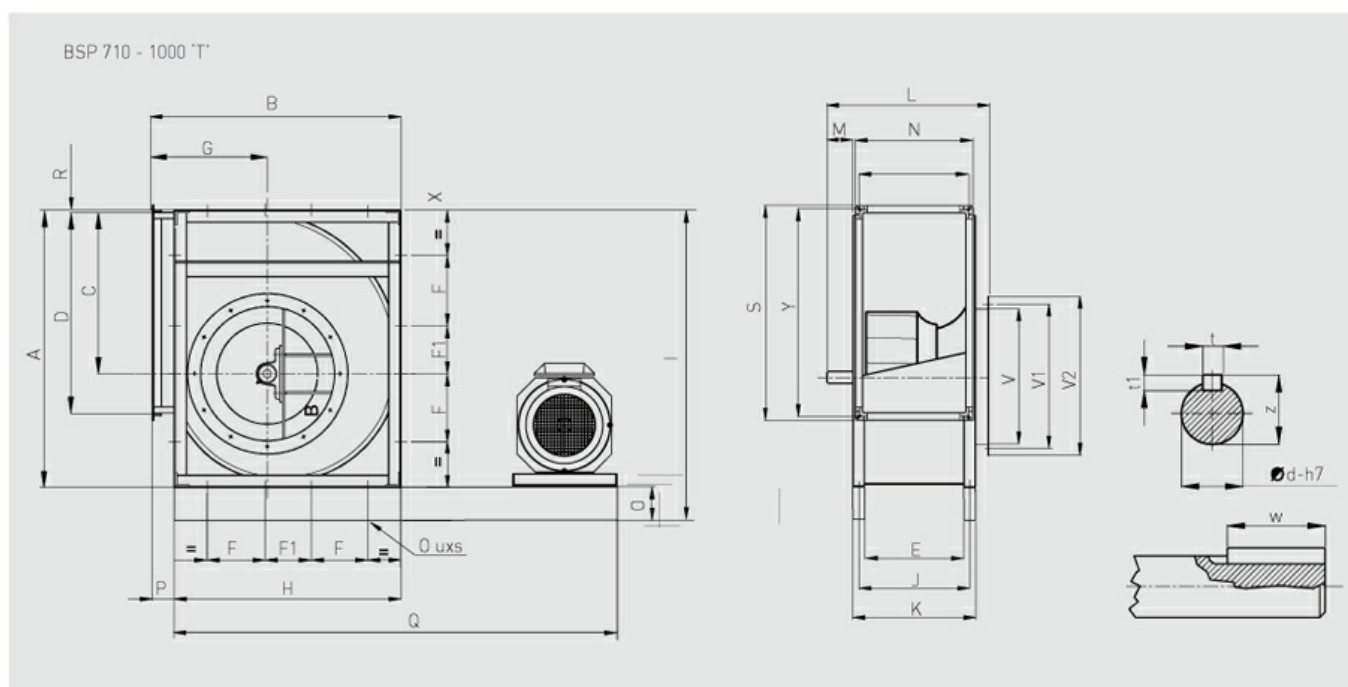


+ Technical characteristics

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

Model	Minimum motor power (kW)	Maximum motor power (kW)	N. min (r.p.m.)	N. max (r.p.m.)	Maximum temperature in continuous operation (°C)	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

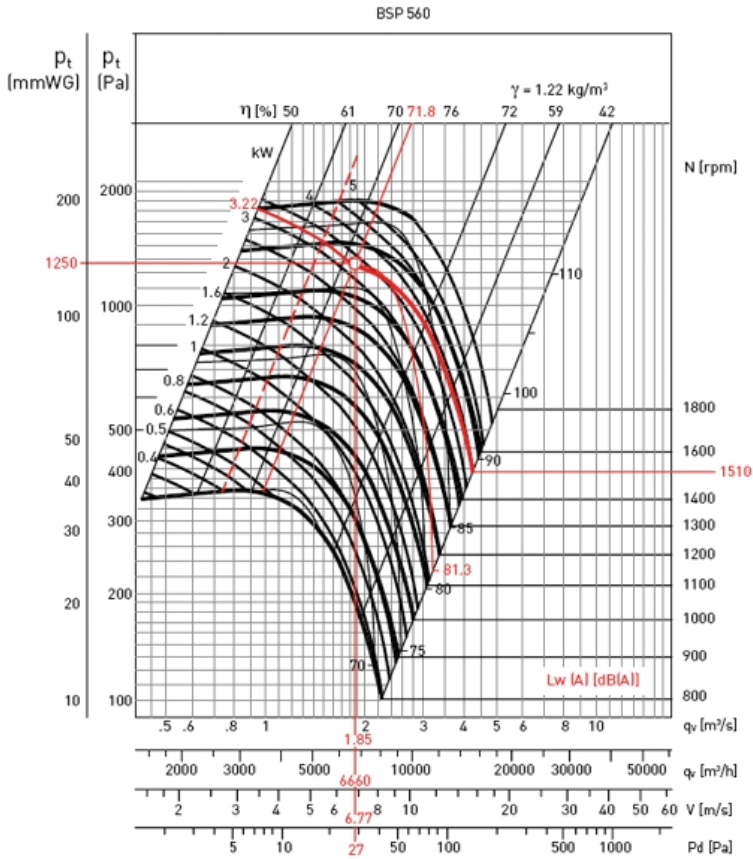
+ Dimensions



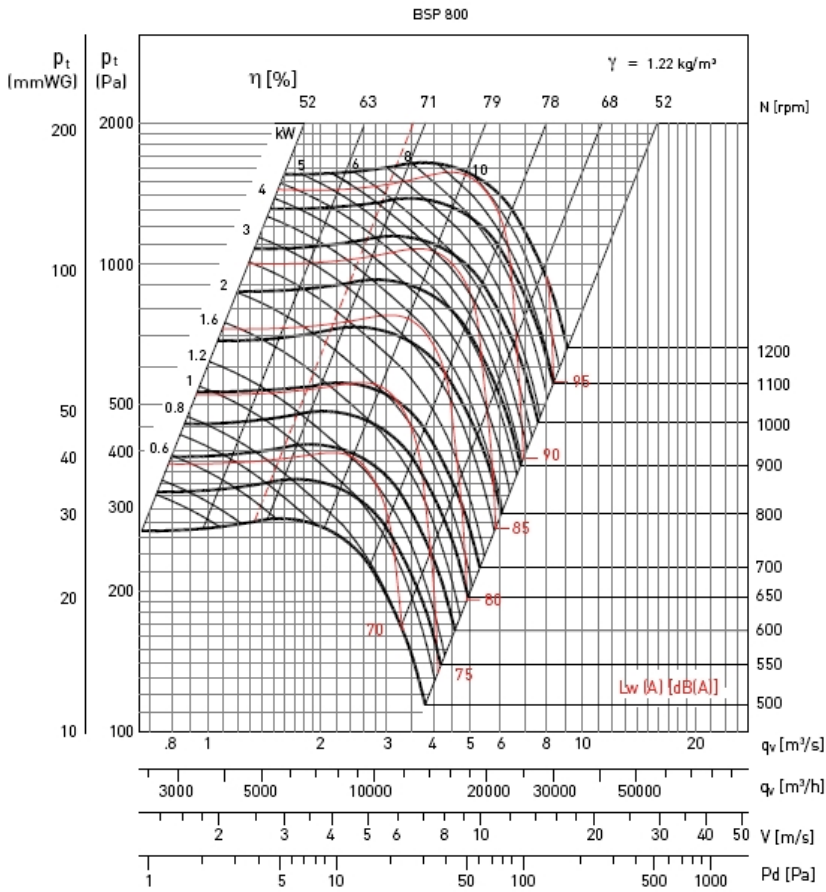
Model	A	B	C	D	E	F	F1	G	H	I	J	K	L	M	N	O	P	Q	R	S	V	V1	V2	X	Y	t	t1	w	z	$\varnothing d$	uxs
710	1302	1120	765	898	479	360	150	484	1057	1403	529	579	763	114	535	100	63	1815	7	954	710	751	796	507	926	14	9	70	48,5	45	17x22
800	1468	1254	862	1006	533	405	171	540	1180	1565	583	633	817	114	589	100	74	1908	7	1062	800	837	886	561	1034	14	9	70	48,5	45	17x22
900	1648	1408	971	1130	595	455	189	604	1319	1759	645	695	906	141	651	100	89	2021	7	1186	900	934	986	623	1158	16	10	90	59	55	17x22
1000	1810	1540	1066	1266	663	500	200	656	1450	1913	713	763	974	141	719	100	90	2142	9	1322	1000	1043	1086	691	1294	16	10	90	59	55	17x22

+ Curve - Example of selection

- Airflow: $q_v = 6660 \text{ m}^3/\text{h}$
 - Outlet velocity: $V = 6.77 \text{ m/s}$
 - Dynamic pressure: $P_d = 27 \text{ Pa}$
 - Total pressure: $p_t = 1250 \text{ Pa}$
 - Fan speed: $N = 1510 \text{ rpm}$
 - Absorbed power: $W = 3.22 \text{ kW}$
 - Total efficiency: $\eta = 71.8 \%$
 - Sound power level: $L_w(A) = 81.3 \text{ dB(A)}$
- 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 $L_{wi}(A)$ sound power levels for installation type B - free inlet, ducted outlet. Ratings do not include the effect of duct end corrections.



+ Curves



+ Mounting Accessories



ACOPEL F400 N
Circular flexible connector.
Certified F400-120.



PAVZ
Rubber anti-vibration mounts
that absorb vibration and
attenuate the noise produced
in the installation.
(1 PAVZ= 4 supports in a bag).



DEF. DES. FSA/BSB
Rectangular guard for
mounting at
the BSP fan outlet.



DEF. ASP. BDB/FDA
Proof guard for mounting at
the BSP fan inlet.



BRIDA IMP. C/LONA F400 BSB
Rectangular flexible connector for
mounting at the BSP fan outlet.