BD

Accessories


INT


MBI


RA


REG


REG VMC


REGD


RI


RM


S


SFC

FAN DOUBLE INLET

MANUFACTURING FEATURES:
• Galvanised steel sheet housing.
• Polyamide impeller reinforced with fibreglass in models 7/7, 9/9, 10/10 and 12/12. The impeller of the rest of models are made of galvanised steel sheet.
• Double inlet forward curved impeller in all models.
• Supplied with mounting feet (included in price).
•Exclusive system Casals fixing motor and turbine fan by flexible arms silent blocks to avoid any vibration. Arms in compliance with ROHS regulations 2002/95 / EC (Restriction of Hazardous Substances in electrical and electronic equipment)
•Closed motors specially designed Casals: extruded aluminum housing, all protected inside the terminal box on the motor IP 65 protection and motor with IP54 protection and Class F insulation standard voltages: 230V 50Hz in single phase and 230/400V 50Hz three-phase.
• Single phase motors with controllable voltage speed. Three phase motors controllable using a frecuency speed controller

APPLICATIONS:
Designed for assembly in equipment:
• Ventilation boxes and air handling units.
• Centrifugal heaters.
• Industrial and professional kitchen hoods.
• Maximum working temperature: 50ºC for single phase motors and 60ºC for three phase motors.

UNDER REQUEST
• Impeller made of galvanized steel sheet.
• MBI assembled

Technical data

Single-phase motor / 4 poles

Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
251100261	BD 7/7 M4 0,13kW	1370	1,55	0,13	1.940	58	9	1
251270260	BD 9/7 M4 0,35kW	1375	2,7	0,35	2.540	59	15	1
251220260	BD 9/9 M4 0,35kW	1375	2,7	0,35	2.820	60	12	1
251340260	BD 10/8 M4 0,59kW	1340	4,5	0,59	3.440	62	22	1
251320260	BD 10/10 M4 0,59kW	1340	4,5	0,59	4.010	63	22	1

Single-phase motor / 6 poles

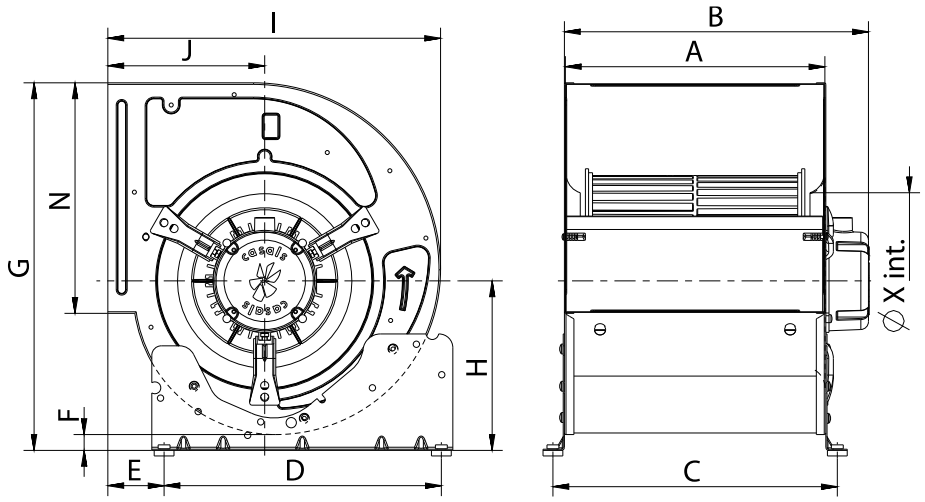
Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
251160260	BD 7/7 M6 0,04kW	885	0,6	0,04	1.080	43	9	1
251260261	BD 9/7 M6 0,13kW	940	1,3	0,13	2.060	49	14	1
251280261	BD 9/9 M6 0,13kW	940	1,3	0,13	2.250	52	15	1
251330261	BD 10/8 M6 0,21kW	945	2,1	0,21	2.630	55	17	1
251370261	BD 10/10 M6 0,21kW	945	2,1	0,21	2.870	56	15,50	1
251600261	BD 12/9 M6 0,76kW	950	6,7	0,76	5.840	58	21	1
251520261	BD 12/12 M6 0,76kW	950	6,7	0,76	6.280	59	27	1

Three-phase motor / 6 poles

Code	Model	R.P.M.	Rated I. A		Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
			230V	400V					
251600161	BD 12/9 T6 1,1kW	945	6,54	3,78	1,10	5.780	58	26	2
251520160	BD 12/12 T6 1,1kW	945	6,54	3,78	1,10	6.450	58	27	2

Notes:
** Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

Dimensions



Model	A	B màx	C	D	E	F	G	H	I
BD 7/7 M4 0,13kW	230	302	259	245	48,5	9,5	337	150	316
BD 7/7 M6 0,04kW	230	277	259	245	48,5	9,5	337	150	316
BD 9/7 M4 0,35kW	233	287	262	245	70	19	407	191	376
BD 9/7 M6 0,13kW	233	284	262	245	70	19	407	191	376
BD 9/9 M4 0,35kW	301	354,5	330	245	70	19	407	191	376
BD 9/9 M6 0,13kW	301	352	330	245	70	19	407	191	376
BD 10/8 M4 0,59kW	265	339	294	350	70,5	20	464	214	420
BD 10/8 M6 0,21kW	265	333	294	350	70,5	20	464	214	420
BD 10/10 M4 0,59kW	329	384	359	350	70,5	20	464	214	420
BD 10/10 M6 0,21kW	329	384	359	350	70,5	20	464	214	420
BD 12/9 M6 0,76kW	310	380	339	350	77	17	536	244	490
BD 12/9 T6 1,1kW	310	380	339	350	77	17	536	244	490
BD 12/12 M6 0,76kW	396	437	425	350	77	17	536	244	490
BD 12/12 T6 1,1kW	396	437	425	350	77	17	536	244	490

Model	J	N	X
BD 7/7 M4 0,13kW	153	208	158
BD 7/7 M6 0,04kW	153	208	158
BD 9/7 M4 0,35kW	184	260	202
BD 9/7 M6 0,13kW	184	260	202
BD 9/9 M4 0,35kW	184	260	202
BD 9/9 M6 0,13kW	184	260	202
BD 10/8 M4 0,59kW	198	291	220
BD 10/8 M6 0,21kW	198	291	220
BD 10/10 M4 0,59kW	198	291	220

Model	J	N	X
BD 10/10 M6 0,21kW	198	291	220
BD 12/9 M6 0,76kW	230	343,5	260
BD 12/9 T6 1,1kW	230	343,5	260
BD 12/12 M6 0,76kW	230	343,5	260
BD 12/12 T6 1,1kW	230	343,5	260

Wiring diagram

DIAGRAM Nº 1

SINGLE PHASE MOTOR
MOTOR MONOFÁSICO

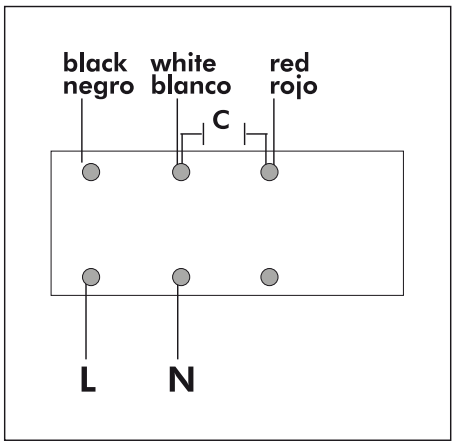
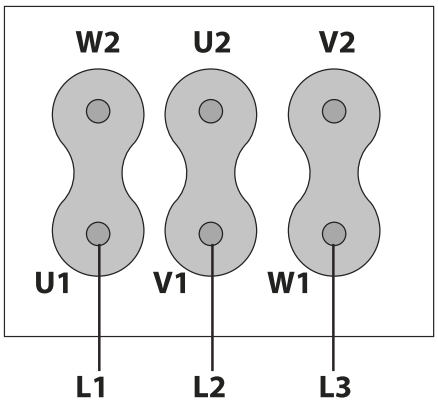
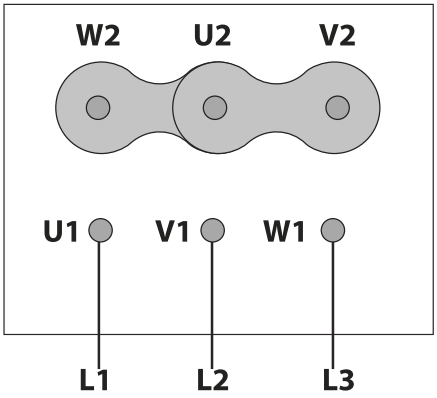


DIAGRAM Nº 2

230V △



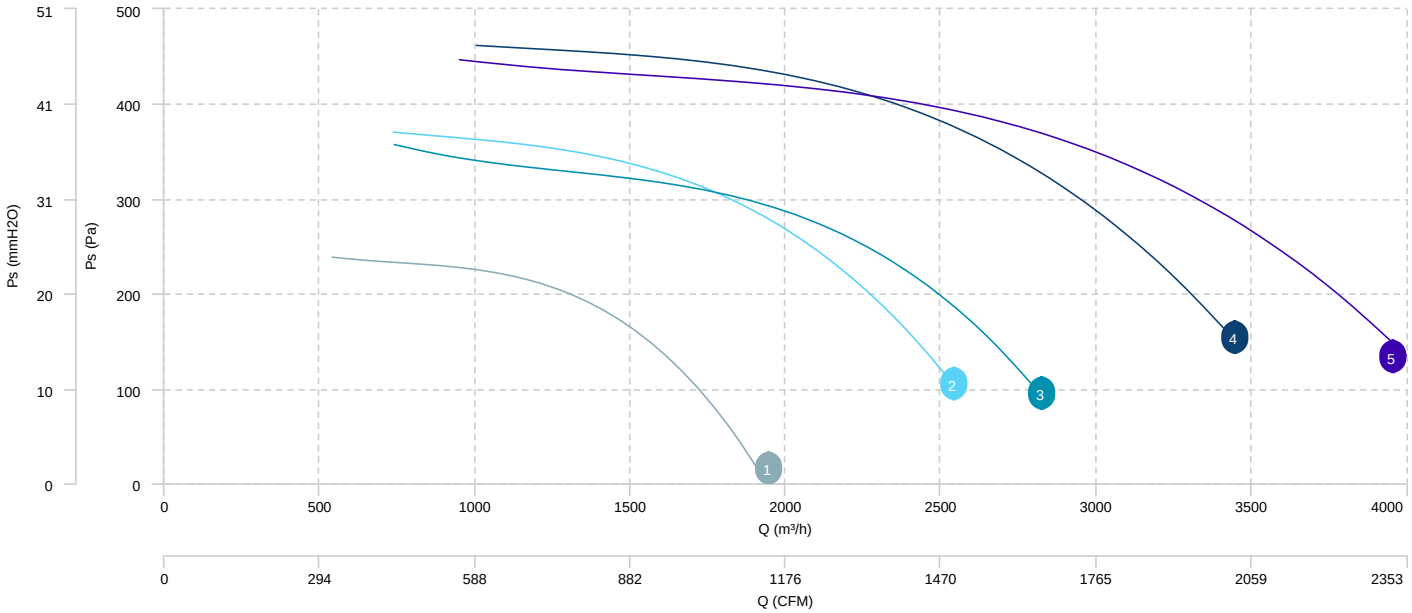
400V Y



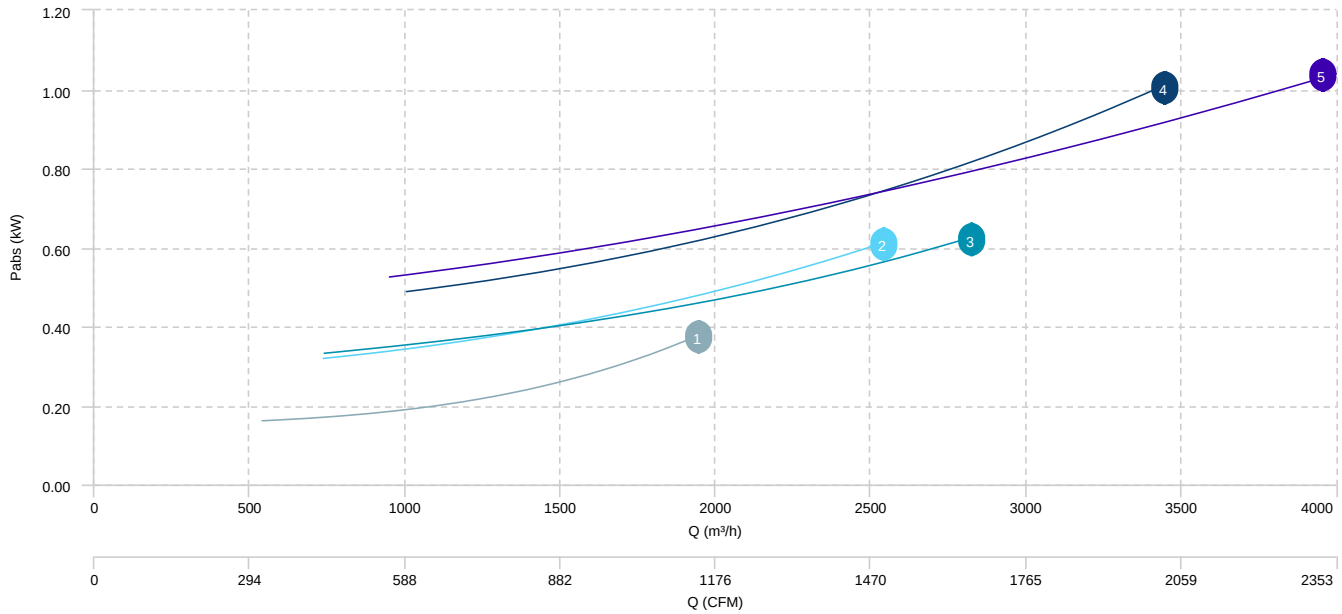
CHARACTERISCTIC CURVE

1	BD 7/7 M4 0,13kW
2	BD 9/7 M4 0,35kW
3	BD 9/9 M4 0,35kW
4	BD 10/8 M4 0,59kW
5	BD 10/10 M4 0,59kW

AIR FLOW - PRESSURE

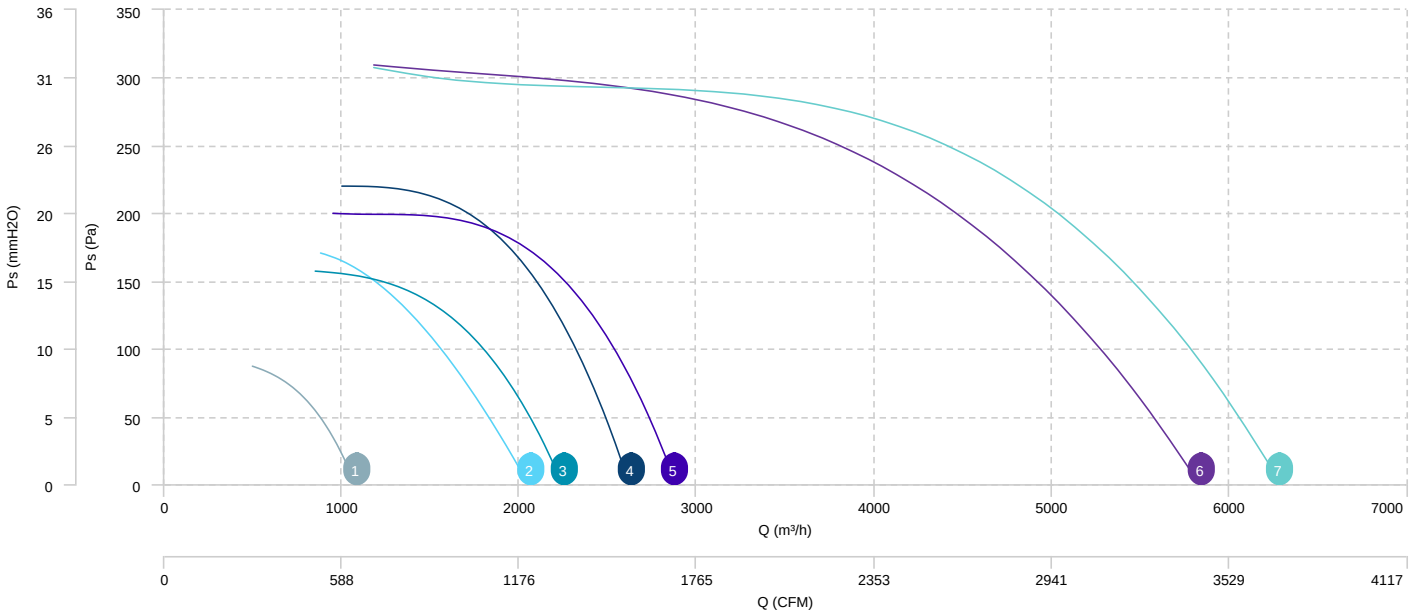


AIR FLOW - ABSORBED POWER

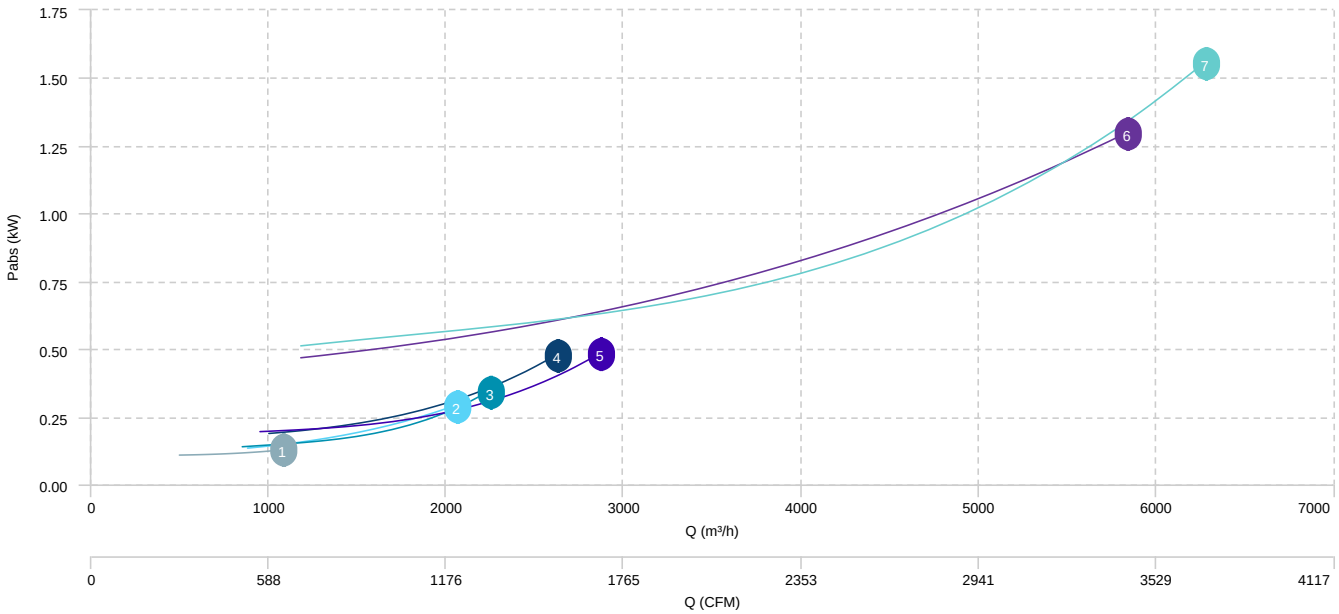


1	BD 7/7 M6 0,04kW	2	BD 9/7 M6 0,13kW	3	BD 9/9 M6 0,13kW	4	BD 10/8 M6 0,21kW
5	BD 10/10 M6 0,21kW	6	BD 12/9 M6 0,76kW	7	BD 12/12 M6 0,76kW		

AIR FLOW - PRESSURE

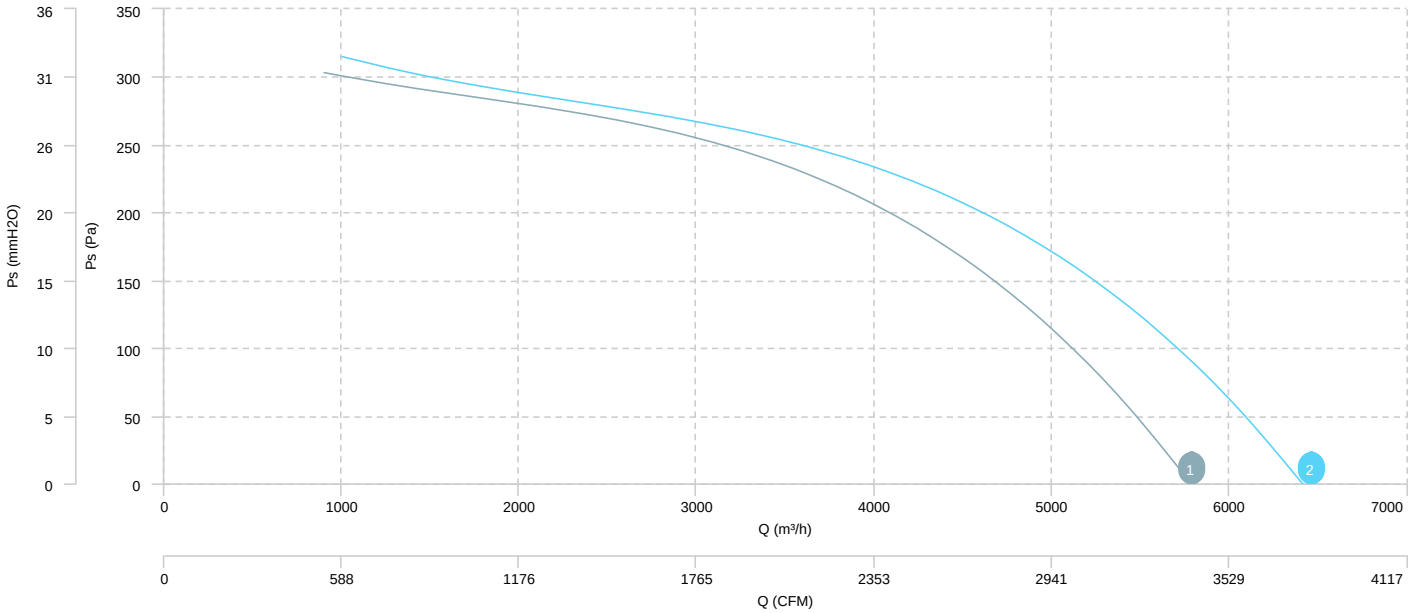


AIR FLOW - ABSORBED POWER

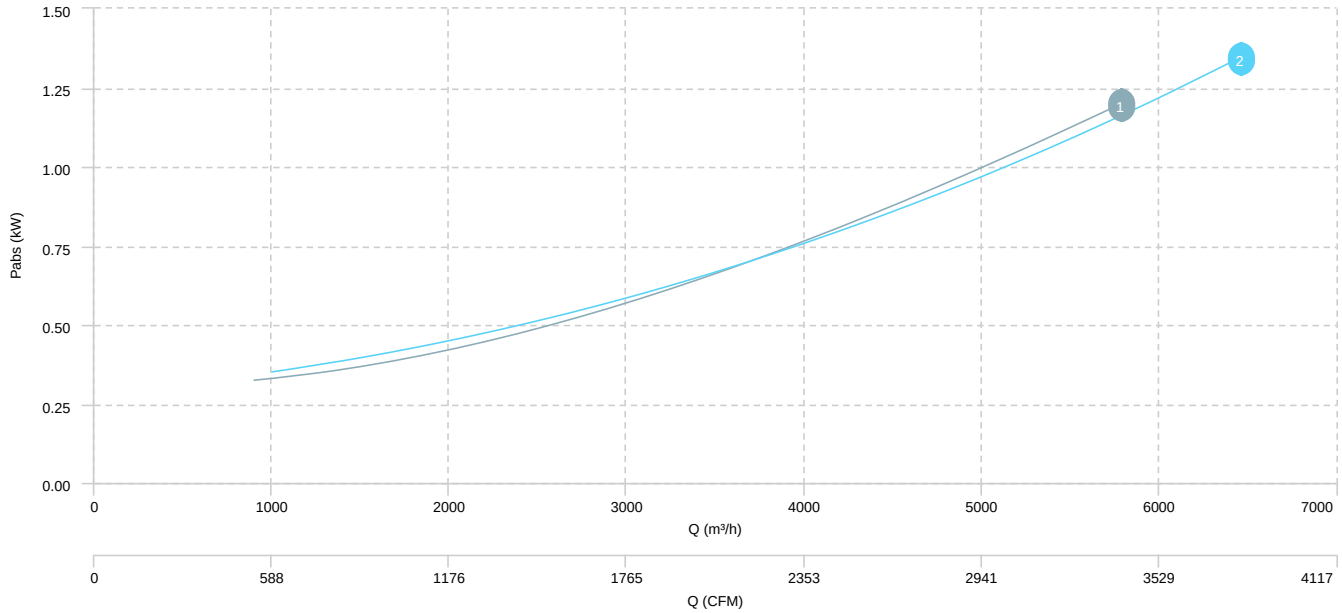


1	BD 12/9 T6 1,1kW
2	BD 12/12 T6 1,1kW

AIR FLOW - PRESSURE



AIR FLOW - ABSORBED POWER



Sound data

Sound / 4 poles

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
BD 7/7 M4 0,13kW	Inlet	63	65	74	76	80	79	75	65	84
BD 9/7 M4 0,35kW	Inlet	64	66	75	77	81	80	76	66	85
BD 9/9 M4 0,35kW	Inlet	65	67	76	78	82	81	77	67	86
BD 10/8 M4 0,59kW	Inlet	67	69	78	80	84	83	79	69	88
BD 10/10 M4 0,59kW	Inlet	68	70	79	81	85	84	80	70	89

Sound / 6 poles

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
BD 7/7 M6 0,04kW	Inlet	48	50	59	61	65	64	60	50	69
BD 9/7 M6 0,13kW	Inlet	54	56	65	67	71	70	66	56	75
BD 9/9 M6 0,13kW	Inlet	57	59	68	70	74	73	69	59	78
BD 10/8 M6 0,21kW	Inlet	60	62	71	73	77	76	72	62	81
BD 10/10 M6 0,21kW	Inlet	61	63	72	73	77	77	72	63	82
BD 12/9 M6 0,76kW	Inlet	63	65	74	76	80	79	75	65	84
BD 12/9 T6 1,1kW	Inlet	63	65	74	76	80	79	75	65	84
BD 12/12 M6 0,76kW	Inlet	64	66	75	76	80	80	75	66	85
BD 12/12 T6 1,1kW	Inlet	63	65	74	76	80	79	75	65	84

erp data

ERP	
Fan type	Centrifugal fan radial or forward blades
Instalation cathegory	A
Efficency cathegory	Static
The fan has to be installed with FSC	No

ERP / 4 poles

		Maximum efficiency point data						
Model	Motor power (kW)	Max. efficiency (%)	Efficiency grade (N) (N)	Air Flow (m³/h)	Ps (Pa)	Pabs (kW)	speed (rpm)	Specific ratio
BD 7/7 M4 0,13kW	0,13	33,70	44,44	1.104,78	219,73	0,20	1370	1,00
BD 9/7 M4 0,35kW	0,35	35,36	44,16	1.515,85	336,02	0,41	1375	1,00
BD 9/9 M4 0,35kW	0,35	35,49	44,08	1.790,28	305,88	0,44	1375	1,00
BD 10/8 M4 0,59kW	0,59	38,80	46,35	2.064,92	426,79	0,64	1340	1,00
BD 10/10 M4 0,59kW	0,59	38,41	45,62	2.454,37	399,11	0,73	1340	1,00

ERP / 6 poles

		Maximum efficiency point data						
Model	Motor power (kW)	Max. efficiency (%)	Efficiency grade (N) (N)	Air Flow (m³/h)	Ps (Pa)	Pabs (kW)	speed (rpm)	Specific ratio
BD 9/7 M6 0,13kW	0,13	32,72	44,38	1.012,63	164,08	0,14	940	1,00
BD 9/9 M6 0,13kW	0,13	32,64	44,03	1.243,12	149,05	0,16	940	1,00
BD 10/8 M6 0,21kW	0,21	38,67	49,11	1.481,15	213,49	0,22	945	1,00
BD 10/10 M6 0,21kW	0,21	38,43	48,75	1.713,03	193,37	0,23	945	1,00
BD 12/9 M6 0,76kW	0,76	36,56	44,03	3.017,28	283,33	0,66	950	1,00
BD 12/9 T6 1,1kW	1,1	39,31	47,52	2.597,40	267,04	0,50	945	1,00
BD 12/12 M6 0,76kW	0,76	38,72	46,03	3.479,52	284,56	0,70	950	1,00
BD 12/12 T6 1,1kW	1,1	39,95	47,86	2.847,69	270,65	0,56	945	1,00