

TWIN BOX BD PLUS



DOUBLE CENTRIFUGAL FAN IN SOUNDPROOF CABINET WITH SANDWICH PANELS

MANUFACTURING FEATURES

- Impellers made of polyamide reinforced with fibreglass for models 7/7, 9/9, 10/10 and 12/12, other models made of galvanized steel sheet.
- BD range fans assembled in soundproof cabinets.
- Ventilation box with 30 mm aluminum profile structure, nylon corners, galvanized sandwich panels with internal insulation rockwool (25mm thickness) class A1 (non-combustible) of 90kg/m3 density. All panels are equipped with "fastening system" for the quick assembly and disassembly whenever required, either for cleaning, maintenance or exchanging of panels.
- Cable exit through cable glands.
- Easy access through lateral panel.
- Changeable rear, bottom or top inlet cover.
- Closed motors specially designed by Casals. Extruded aluminium motor housing. Totally enclosed wiring box. IP-55 motor protection and rated class F insulation. Standard voltages 230V 50Hz for single phase and 230/400V 50Hz for three phase motors.

- Fans can run separately or simultaneously.

APPLICATIONS

Designed for inline installation, indoor or outdoor assembly, they are suitable for:

- Air renewal in buildings and industries.
- Maximum working temperature: 50°C.

UNDER REQUEST

- 3 speed fans.
- Impeller made of galvanized sheet.

* All data are referred to a single working fan. If both fans are working at the same time, data should be twice (x2) except for weight.

Accessories



INT



REG



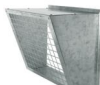
REG
TWIN



REGD



SFC



VIS



VISC

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
TW251100451	TWIN BOX BD PLUS 7/7 M4 0, 13kW	1370	1,55	0,13	1.850	52	48	1
TW251270450	TWIN BOX BD PLUS 9/7 M4 0, 35kW	1375	2,7	0,35	2.410	53	64	1
TW251220450	TWIN BOX BD PLUS 9/9 M4 0, 35kW	1375	2,7	0,35	2.680	54	66	1
TW251340450	TWIN BOX BD PLUS 10/8 M4 0, 59kW	1340	4,5	0,59	3.270	56	80	1
TW251320450	TWIN BOX BD PLUS 10/10 M4 0, 59kW	1340	4,5	0,59	3.810	57	84	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
TW251160450	TWIN BOX BD PLUS 7/7 M6 0, 04kW	885	0,6	0,04	1.030	37	48	1
TW251280451	TWIN BOX BD PLUS 9/9 M6 0, 13kW	940	1,3	0,13	2.130	46	66	1
TW251370451	TWIN BOX BD PLUS 10/10 M6 0, 21kW	945	2,1	0,21	2.720	50	84	1
TW251600452	TWIN BOX BD PLUS 12/9 M6 0, 76kW	950	6,7	0,76	5.550	52	102	1
TW251520451	TWIN BOX BD PLUS 12/12 M6 0, 76kW	950	6,7	0,76	5.970	53	108	1

Three-phase motor / 6 poles

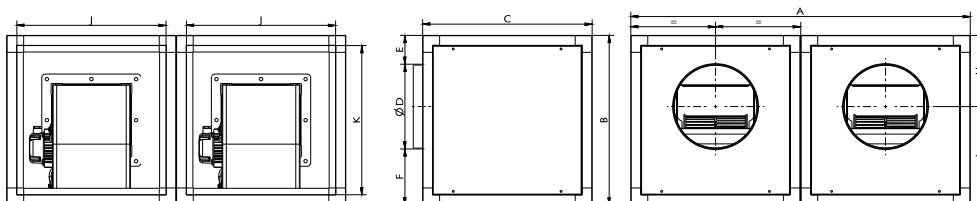
Code	Model	R.P.M.	Rated I. A		Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
			230V	400V					
TW251600451	TWIN BOX BD PLUS 12/9 T6 1, 1kW	945	6,54	3,78	1,10	5.490	52	106	2
TW251520453	TWIN BOX BD PLUS 12/12 T6 1, 1kW	945	6,54	3,78	1,10	6.100	52	108	2
TW252370457	TWIN BOX BD PLUS 15/15 T6 2, 2kW	900	10,92	6,31	2,20	10.460	57	156	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

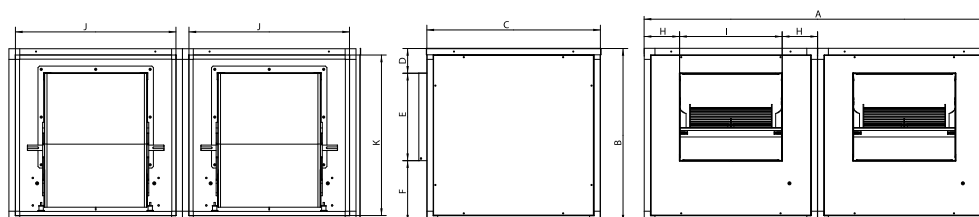
Dimensions



Model	A	B	C	D	E	F	H	I	J
TWIN BOX BD PLUS 7/7 M4 0,13kW	1000	500	500	250	85	165	210	290	440
TWIN BOX BD PLUS 7/7 M6 0,04kW	1000	500	500	250	85	165	210	290	440
TWIN BOX BD PLUS 9/7 M4 0,35kW	1100	550	550	315	87.5	147.5	245	305	490
TWIN BOX BD PLUS 9/9 M4 0,35kW	1100	550	550	355	57.5	137.5	235	315	490
TWIN BOX BD PLUS 9/9 M6 0,13kW	1100	550	550	355	57.5	137.5	235	315	490
TWIN BOX BD PLUS 10/8 M4 0,59kW	1200	600	600	355	2.5	162.5	260	340	540
TWIN BOX BD PLUS 10/10 M4 0,59kW	1200	600	600	400	50	150	250	350	540
TWIN BOX BD PLUS 10/10 M6 0,21kW	1200	600	600	400	50	150	250	350	540
TWIN BOX BD PLUS 12/9 M6 0,76kW	1400	700	700	400	105	195	305	395	640
TWIN BOX BD PLUS 12/9 T6 1,1kW	1400	700	700	400	105	195	305	395	640
TWIN BOX BD PLUS 12/12 M6 0,76kW	1400	700	700	450	80	170	305	395	640
TWIN BOX BD PLUS 12/12 T6 1,1kW	1400	700	700	450	80	170	305	395	640

Model	K
TWIN BOX BD PLUS 7/7 M4 0,13kW	440
TWIN BOX BD PLUS 7/7 M6 0,04kW	440
TWIN BOX BD PLUS 9/7 M4 0,35kW	490
TWIN BOX BD PLUS 9/9 M4 0,35kW	490
TWIN BOX BD PLUS 9/9 M6 0,13kW	490
TWIN BOX BD PLUS 10/8 M4 0,59kW	540
TWIN BOX BD PLUS 10/10 M4 0,59kW	540
TWIN BOX BD PLUS 10/10 M6 0,21kW	540
TWIN BOX BD PLUS 12/9 M6 0,76kW	640
TWIN BOX BD PLUS 12/9 T6 1,1kW	640
TWIN BOX BD PLUS 12/12 M6 0,76kW	640

Model	K
TWIN BOX BD PLUS 12/12 T6 1,1kW	640



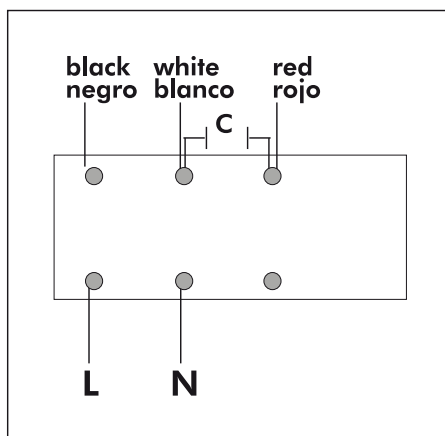
Model	A	B	C	D	E	F	H	I	J
TWIN BOX BD PLUS 15/15 T6 2,2kW	1600	800	800	114	403	283	163.5	473	740

Model	K
TWIN BOX BD PLUS 15/15 T6 2,2kW	740

Wiring diagram

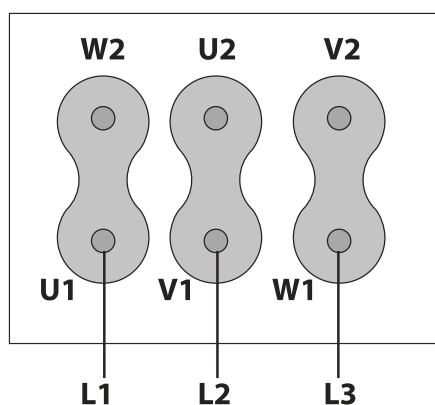
Wiring diagram Nº 1

SINGLE PHASE MOTOR MOTOR MONOFÁSICO

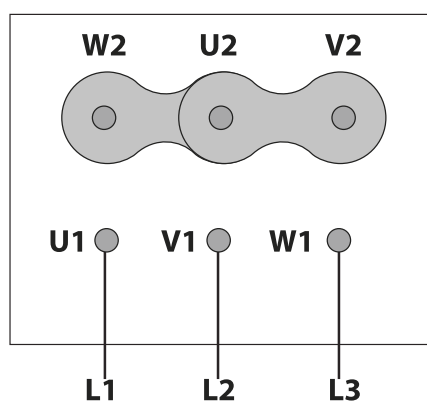


Wiring diagram Nº 2

230V 



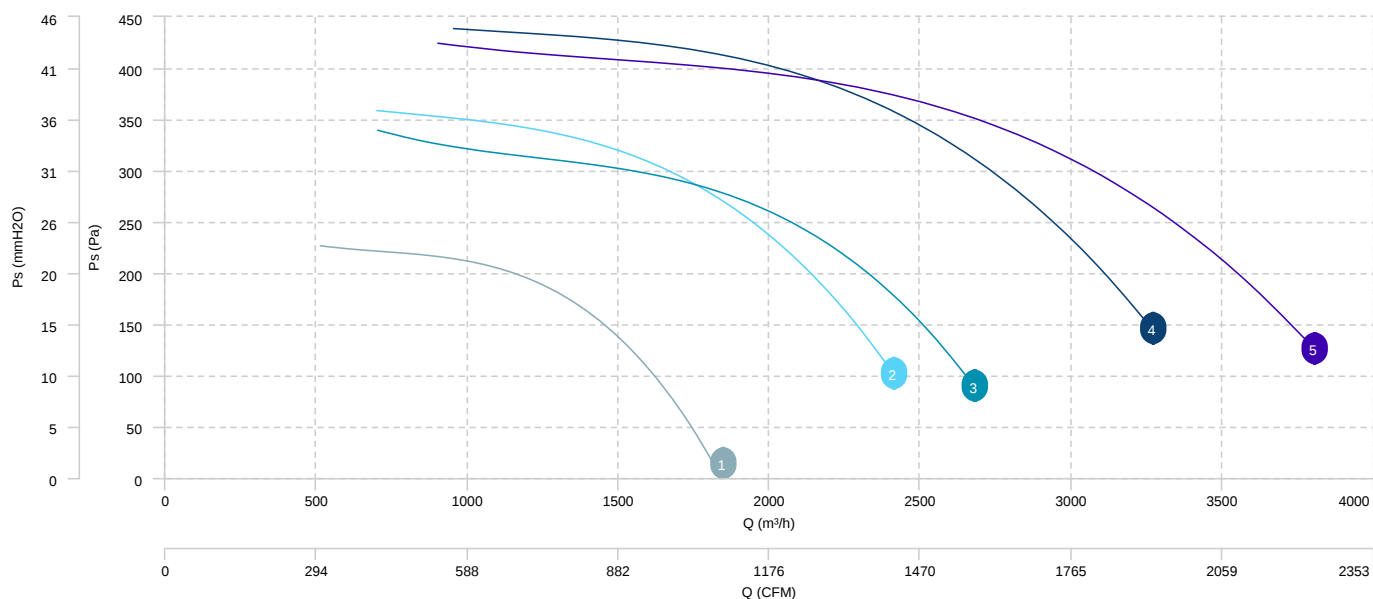
400V 



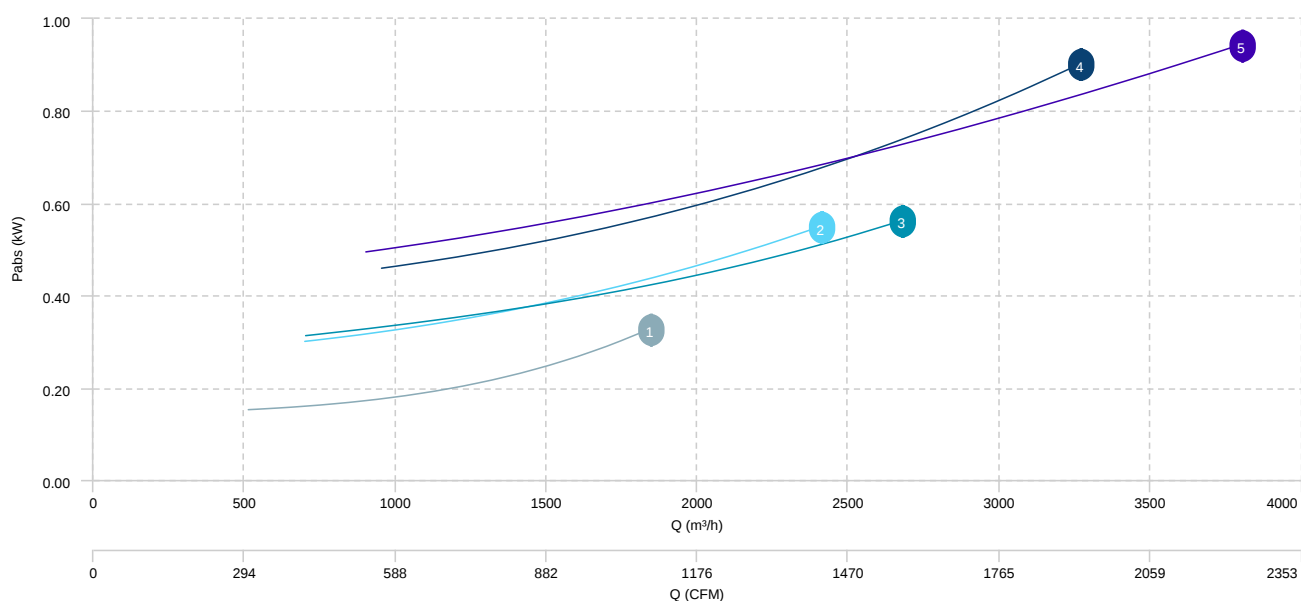
CHARACTERISCTIC CURVE

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

AIR FLOW - PRESSURE

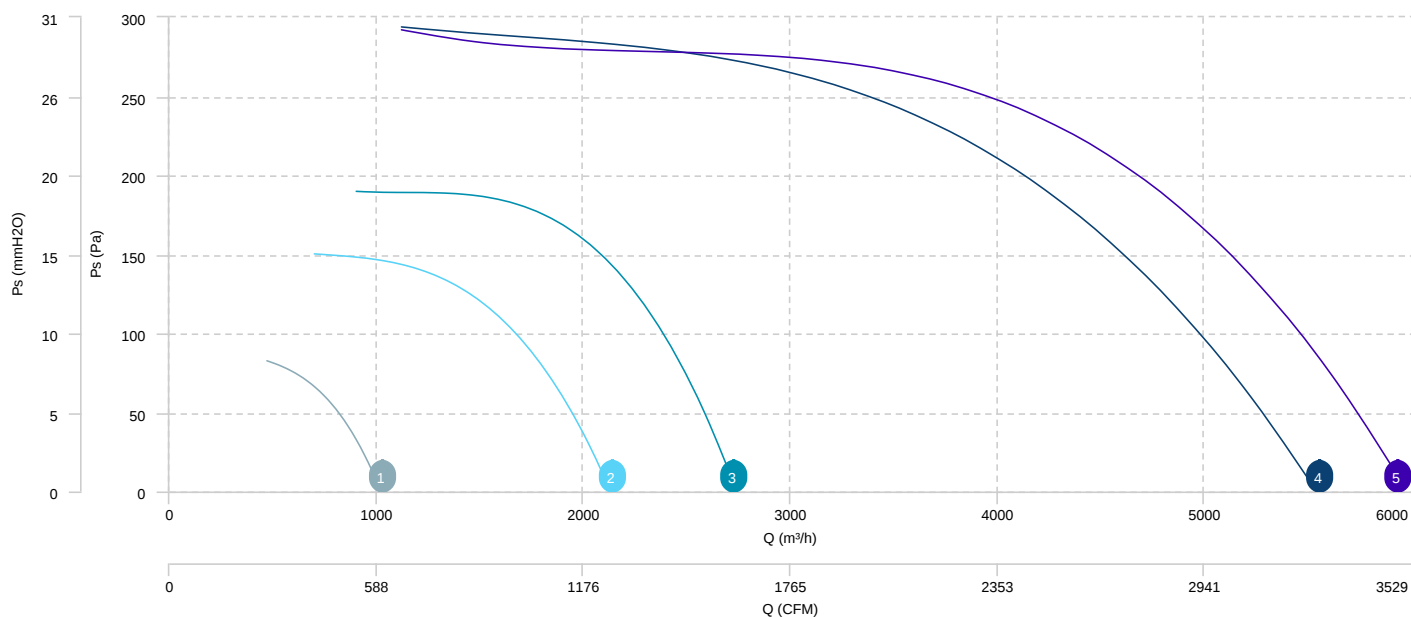


AIR FLOW - ABSORBED POWER

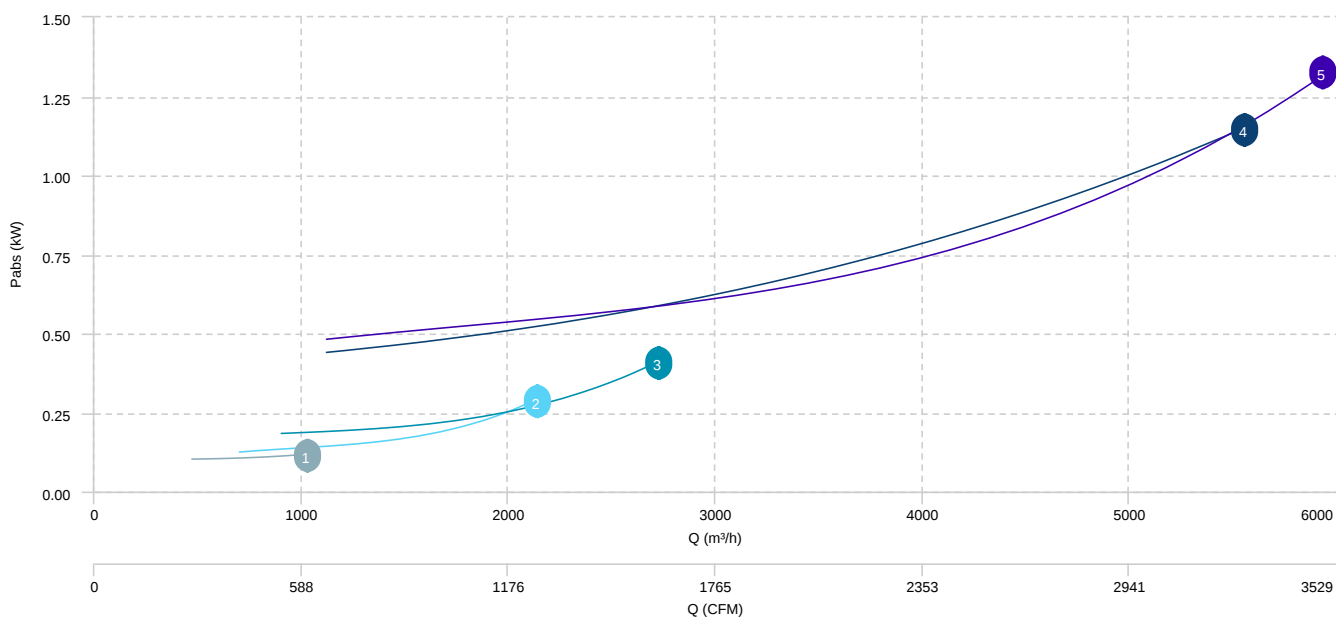


1	TWIN BOX BD PLUS 7/7 M6 0,04kW	2	TWIN BOX BD PLUS 9/9 M6 0,13kW	3	TWIN BOX BD PLUS 10/10 M6 0,21kW	4	TWIN BOX BD PLUS 12/9 M6 0,76kW
5	TWIN BOX BD PLUS 12/12 M6 0,76kW						

AIR FLOW - PRESSURE



AIR FLOW - ABSORBED POWER

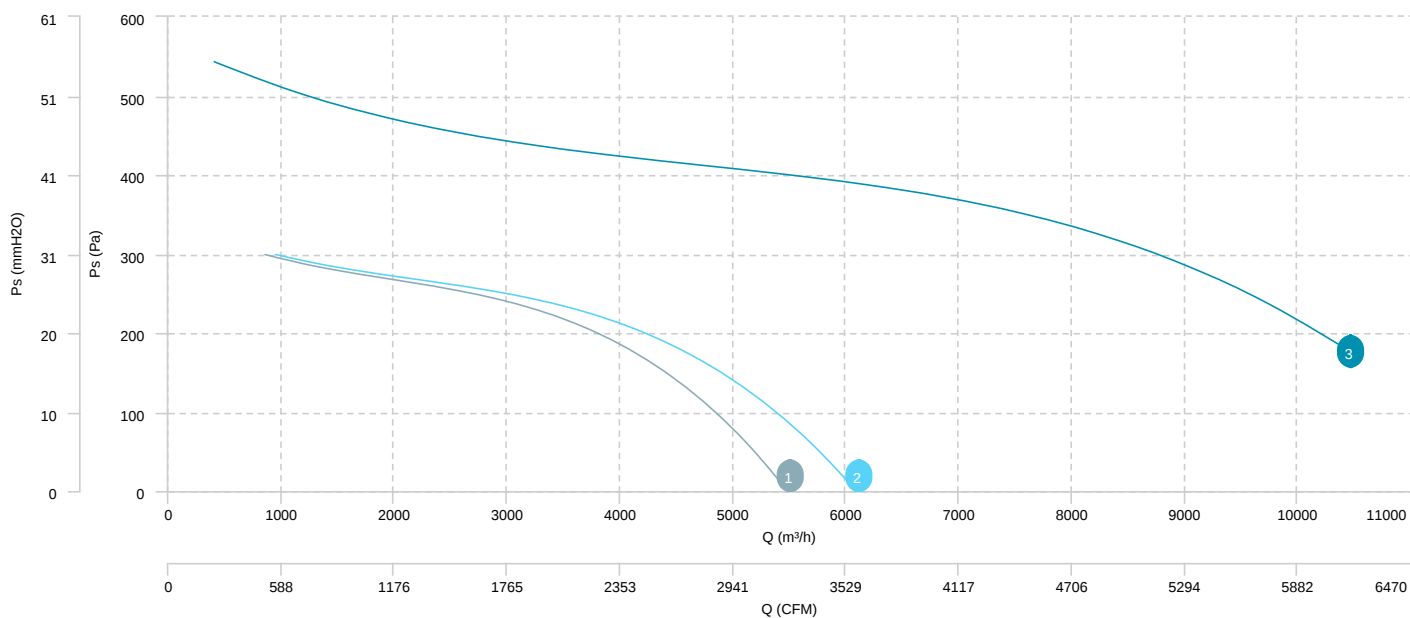


1 TWIN BOX BD PLUS 12/9
T6 1,1kW

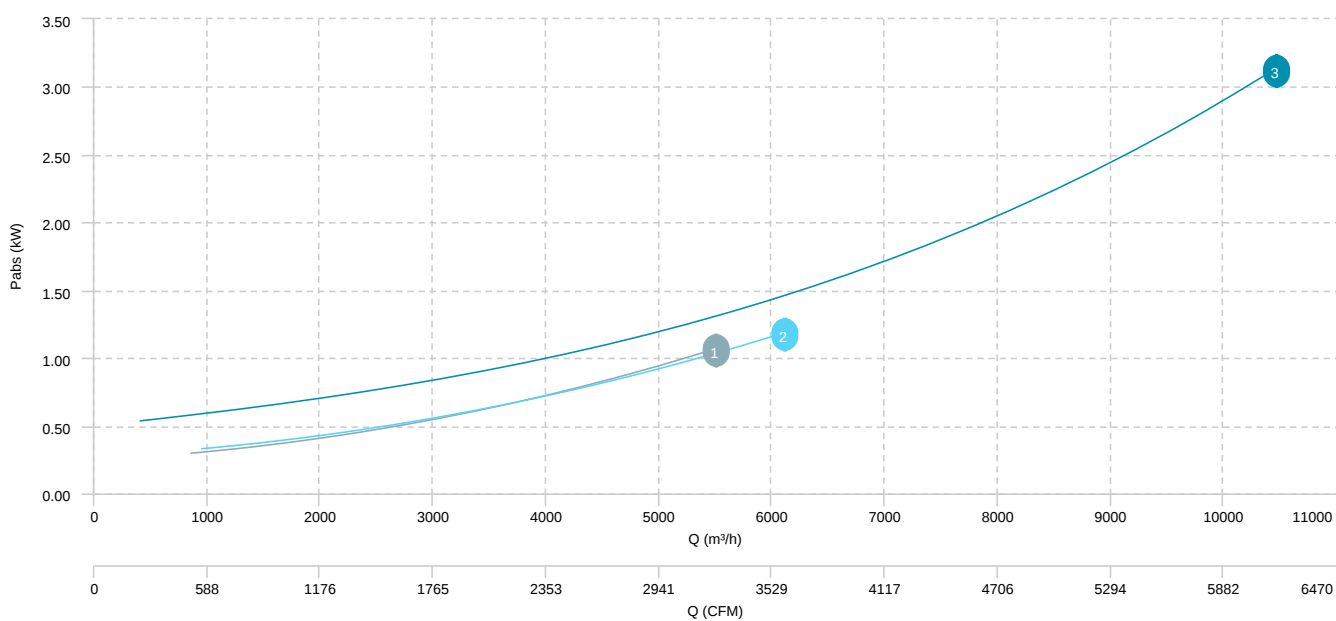
2 TWIN BOX BD PLUS 12/12
T6 1,1kW

3 TWIN BOX BD PLUS 15/15
T6 2,2kW

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
TWIN BOX BD PLUS 7/7 M4 0, 13kW	Inlet	57	59	68	70	74	73	69	59	78
TWIN BOX BD PLUS 9/7 M4 0, 35kW	Inlet	58	60	69	71	75	74	70	60	79
TWIN BOX BD PLUS 9/9 M4 0, 35kW	Inlet	59	61	70	72	76	75	71	61	80
TWIN BOX BD PLUS 10/8 M4 0, 59kW	Inlet	61	63	72	74	78	77	73	63	82
TWIN BOX BD PLUS 10/10 M4 0, 59kW	Inlet	62	64	73	75	79	78	74	64	83

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
TWIN BOX BD PLUS 7/7 M6 0, 04kW	Inlet	42	44	53	55	59	58	54	44	63
TWIN BOX BD PLUS 9/9 M6 0, 13kW	Inlet	51	53	62	64	68	67	63	53	72
TWIN BOX BD PLUS 10/10 M6 0, 21kW	Inlet	55	57	66	67	71	71	66	57	76
TWIN BOX BD PLUS 12/9 M6 0, 76kW	Inlet	57	59	68	70	74	73	69	59	78
TWIN BOX BD PLUS 12/9 T6 1, 1kW	Inlet	57	59	68	70	74	73	69	59	78
TWIN BOX BD PLUS 12/12 M6 0, 76kW	Inlet	58	60	69	70	74	74	69	60	79
TWIN BOX BD PLUS 12/12 T6 1, 1kW	Inlet	57	59	68	70	74	73	69	59	78
TWIN BOX BD PLUS 15/15 T6 2, 2kW	Inlet	62	64	73	75	79	78	74	64	83