

BOX BD FILTER



CENTRIFUGAL IN SOUNDPROOF CABINET WITH FILTER

MANUFACTURING FEATURES:

- Impellers made of polyamide reinforced with fiberglass up to size 33/33 (12/12). Rest of models made of galvanized steel sheet .
- BD range fans assembled in soundproof cabinets with thermo-acoustic insulation, Bs1d0 fire class on the supply panel.
- Fan assembled on antivibration mountings.
- Connection gland included.
- Casals exclusive design closed motors with extruded aluminum housing, which make the whole set of connections protected inside the terminal box integrated in the motor with IP-65 protection. Motor with IP-54 protection and class F insulation. Standard voltages 230V 50Hz for single phase motors and 230/400V 50Hz for three phase motors.
- Box with particle filter ISO Coarse \geq 60% (G4) integrated. Removable filter holder frame from both sides of the box for maintenance. Washable and replaceable filter media. Optimized air intake to maximize performance.

Accessories



BAC



CFF



INT



PI



REG



REGD



SFC



TCA



TIAC



VIS

APPLICATIONS:

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

- Air renewal in buildings and industries.
- Industrial and professional kitchen hoods. Use in supply or extraction with prior fat filtering.
- Maximum working temperature: 50°C.

UNDER REQUEST:

- LG0 position.
- Impellers made of galvanised steel sheet.
- 3 speed fans.

(*) The data shown correspond to measurements made without the filters installed.

Technical data

Single-phase motor / 4 poles

Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m ³ /h	Sound db (A)**	Weight kg	Connect. diagram
251100351STC	BOX BD FILTER 7/7 M4 0,13kW	1370	1,55	0,13	1.850	55	19	1
251220350STC	BOX BD FILTER 9/9 M4 0,35kW	1375	2,7	0,35	2.680	57	30	1
251320350STC	BOX BD FILTER 10/10 M4 0,59kW	1340	4,5	0,59	3.810	60	34	1

Single-phase motor / 6 poles

Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m ³ /h	Sound db (A)**	Weight kg	Connect. diagram
251160350STC	BOX BD FILTER 7/7 M6 0,04kW	885	0,6	0,04	1.030	40	20	1
251280351STC	BOX BD FILTER 9/9 M6 0,13kW	940	1,3	0,13	2.130	49	28	1
251370351STC	BOX BD FILTER 10/10 M6 0,21kW	945	2,1	0,21	2.720	53	34	1
251520351STC	BOX BD FILTER 12/12 M6 0,76kW	950	6,7	0,76	5.970	56	49	1

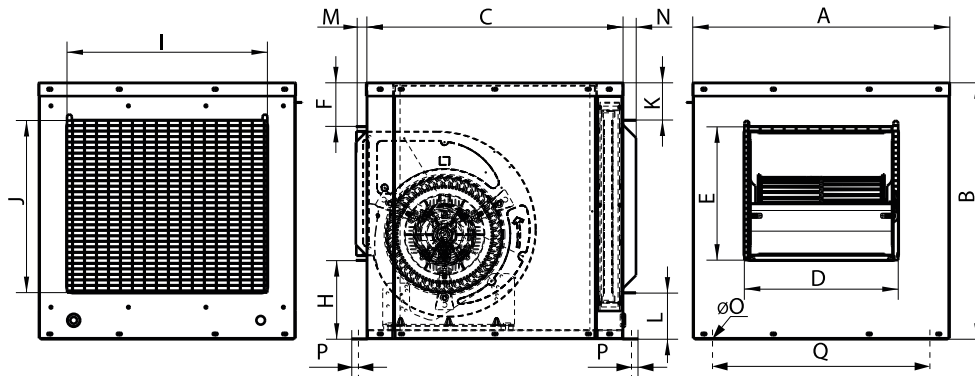
Three-phase motor / 6 poles

Code	Model	R.P.M.	Rated I. A		Rated power kW	Max. Airflow m ³ /h	Sound db (A)**	Weight kg	Connect. diagram
			230V	400V					
251519953STC	BOX BD FILTER 12/12 T6 1,1kW	945	6,54	3,78	1,10	6.100	55	51	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



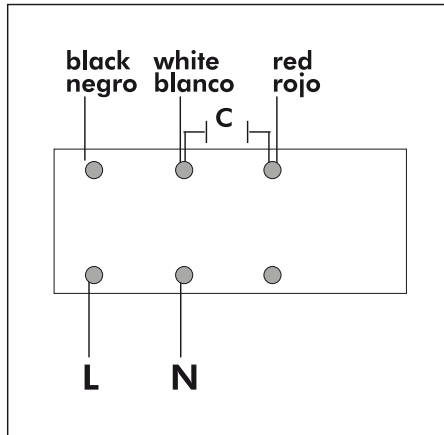
Model	A	B	C	D	E	F	H	I	J
BOX BD FILTER 7/7 M4 0,13kW	450	450	450	242	216	81	151	352	309
BOX BD FILTER 7/7 M6 0,04kW	450	450	450	242	216	81	151	352	309
BOX BD FILTER 9/9 M4 0,35kW	535	535	535	311	268	96	169	418	359
BOX BD FILTER 9/9 M6 0,13kW	535	535	535	311	268	96	169	418	359
BOX BD FILTER 10/10 M4 0,59kW	580	580	580	342	299	84	195	489	421
BOX BD FILTER 10/10 M6 0,21kW	580	580	580	342	299	84	195	489	421
BOX BD FILTER 12/12 M6 0,76kW	650	650	650	408	349	83	216	576	495
BOX BD FILTER 12/12 T6 1,1kW	650	650	650	408	349	83	216	576	495

Model	K	L	M	N	O	P	Q
BOX BD FILTER 7/7 M4 0,13kW	60	78.5	23	27	10	17	393,5
BOX BD FILTER 7/7 M6 0,04kW	60	78.5	23	27	10	17	393,5
BOX BD FILTER 9/9 M4 0,35kW	77	96	23	27	10	17	478,5
BOX BD FILTER 9/9 M6 0,13kW	77	96	23	27	10	17	478,5
BOX BD FILTER 10/10 M4 0,59kW	69	88	23	27	10	17	522,4
BOX BD FILTER 10/10 M6 0,21kW	69	88	23	27	10	17	522,4
BOX BD FILTER 12/12 M6 0,76kW	65	83	23	27	10	17	592,4
BOX BD FILTER 12/12 T6 1,1kW	65	83	23	27	10	17	592,4

Wiring diagram

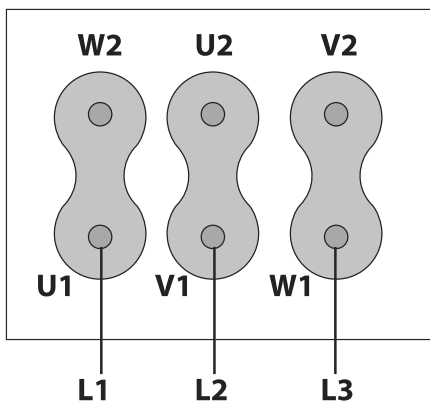
Wiring diagram N° 1

SINGLE PHASE MOTOR
MOTOR MONOFÁSICO

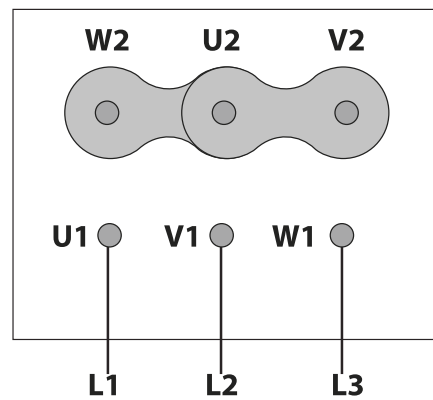


Wiring diagram N° 2

230V 



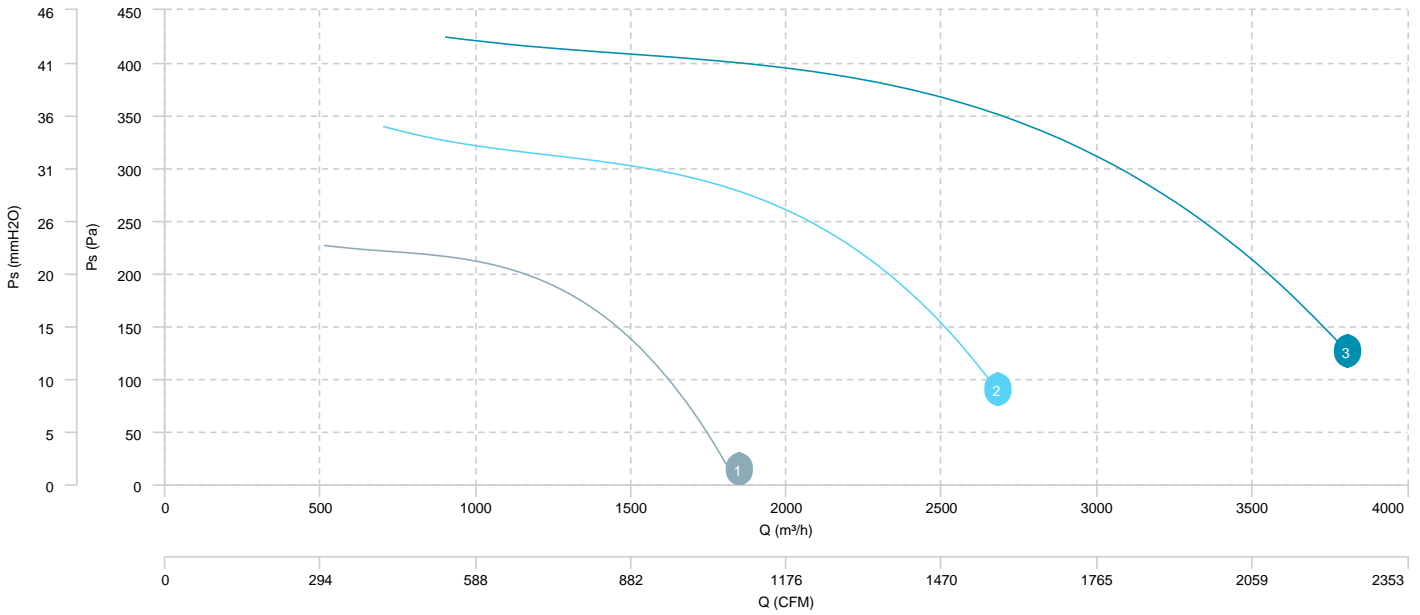
400V 



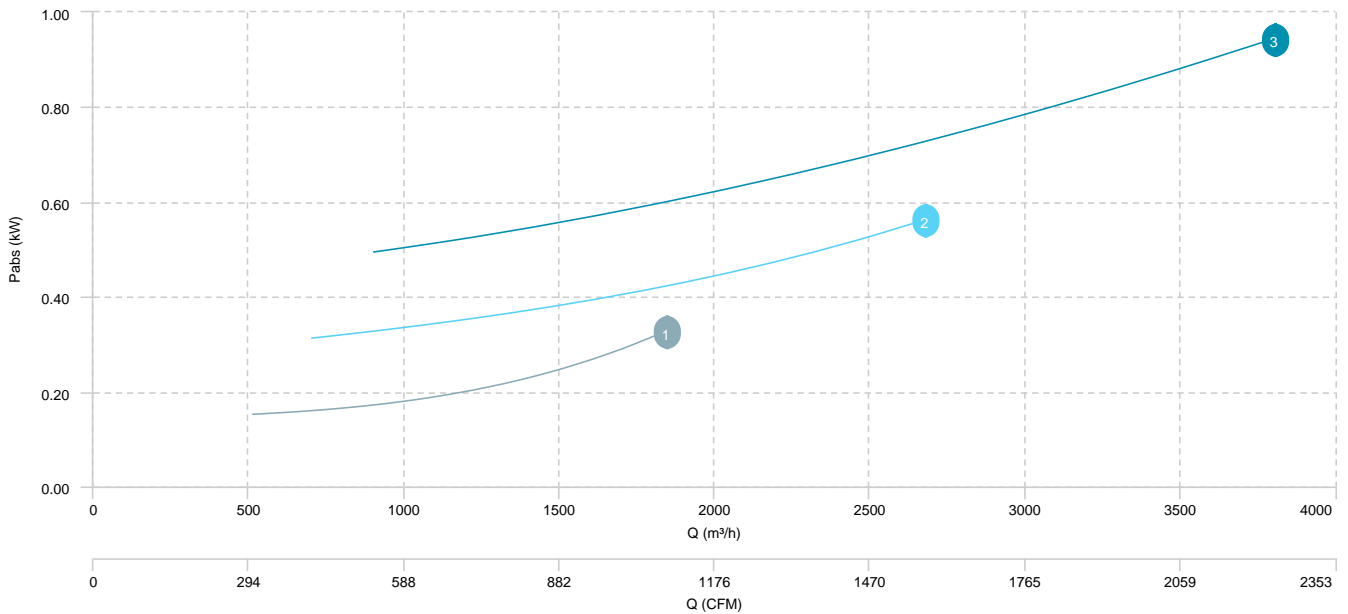
CHARACTERISTIC CURVE

- 1** BOX BD FILTER 7/7 M4 0, 13kW
- 2** BOX BD FILTER 9/9 M4 0, 35kW
- 3** BOX BD FILTER 10/10 M4 0,59kW

AIR FLOW - PRESSURE

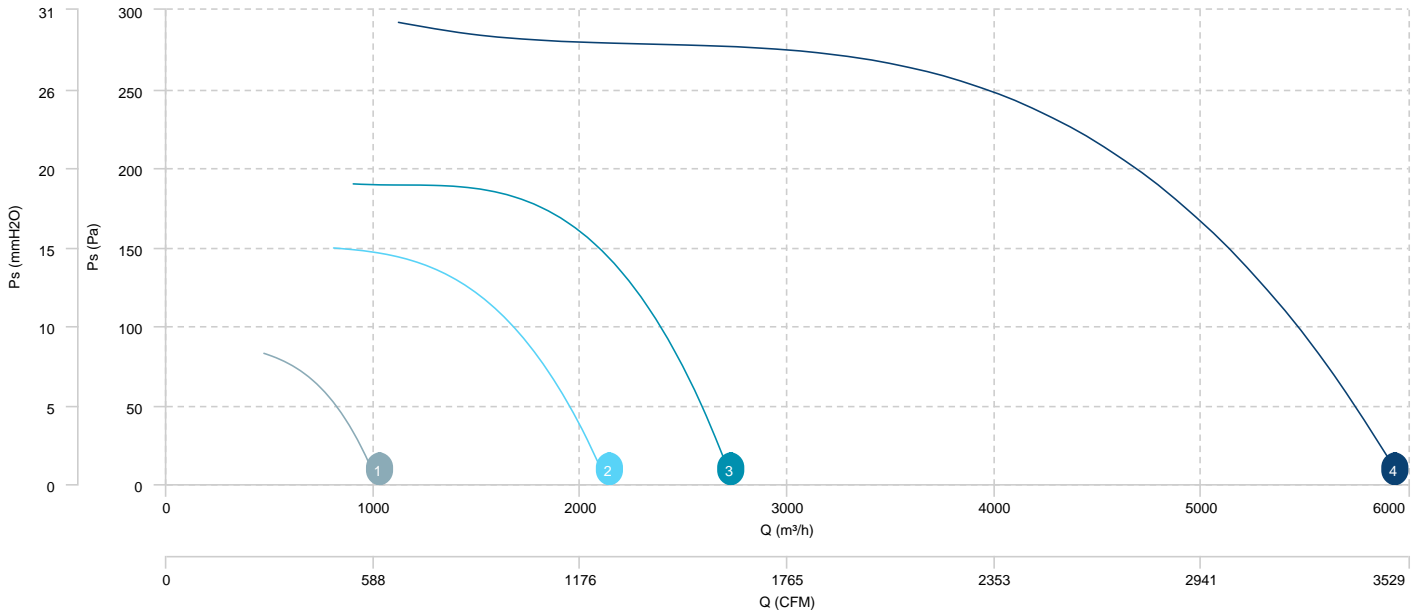


AIR FLOW - ABSORBED POWER

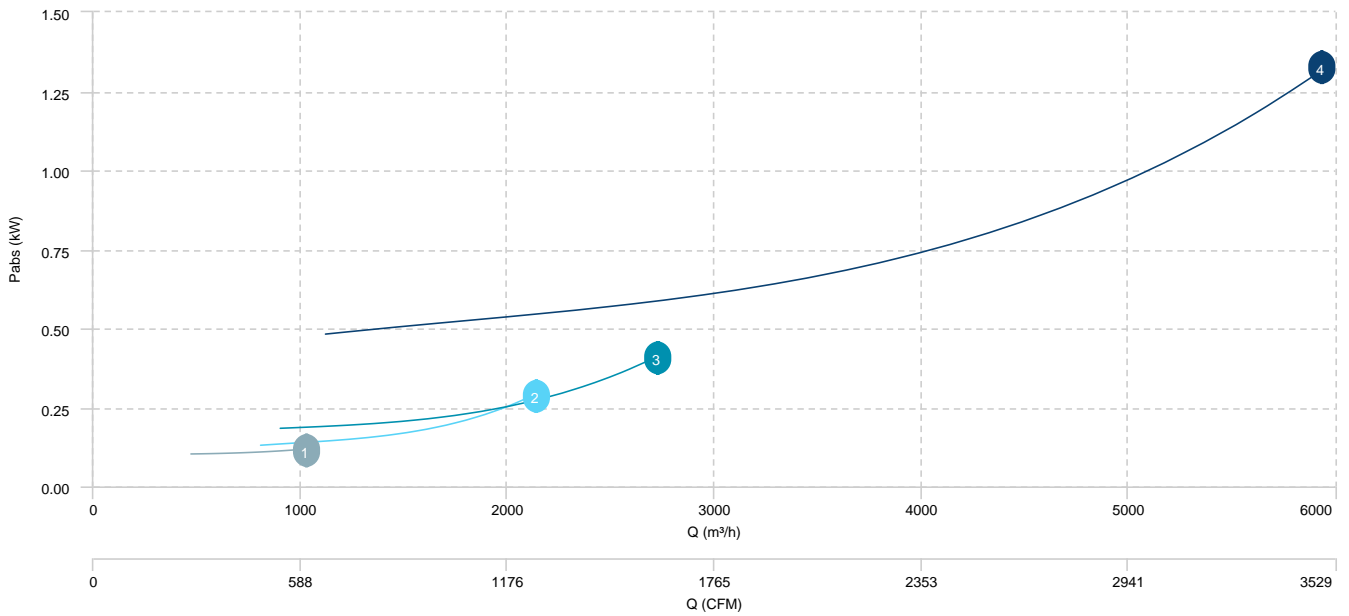


- 1 BOX BD FILTER 7/7 M6 0, 04kW
- 2 BOX BD FILTER 9/9 M6 0, 13kW
- 3 BOX BD FILTER 10/10 M6 0,21kW
- 4 BOX BD FILTER 12/12 M6 0,76kW

AIR FLOW - PRESSURE

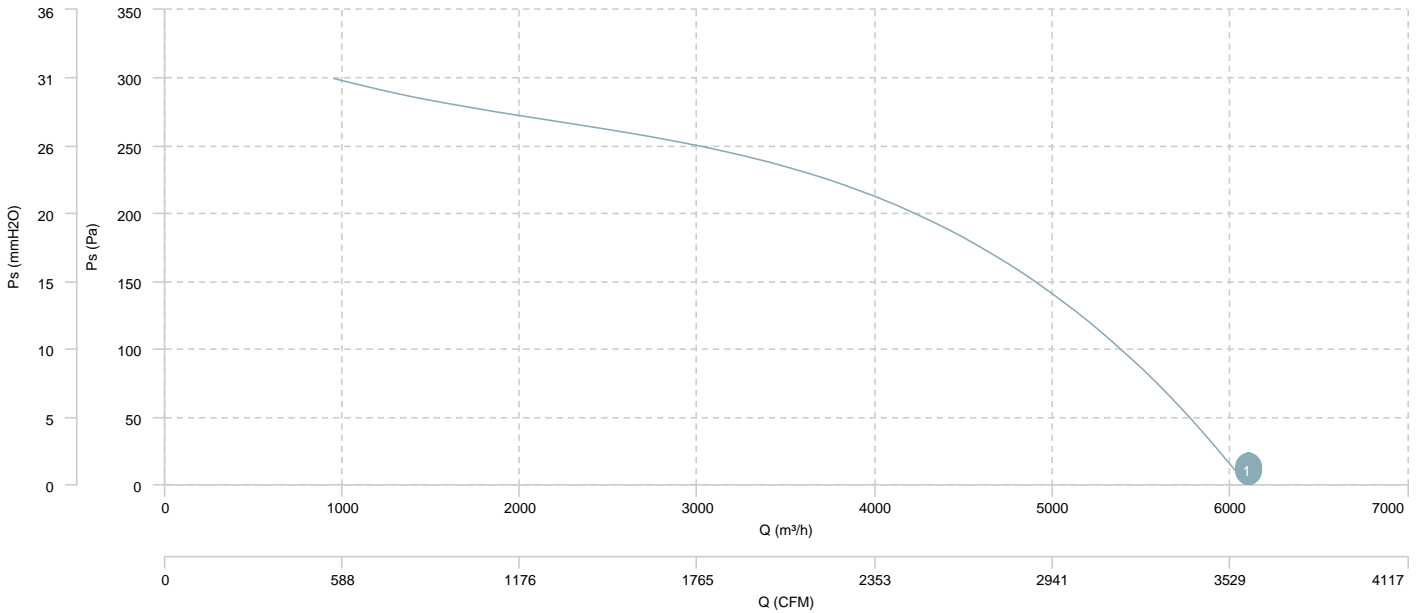


AIR FLOW - ABSORBED POWER

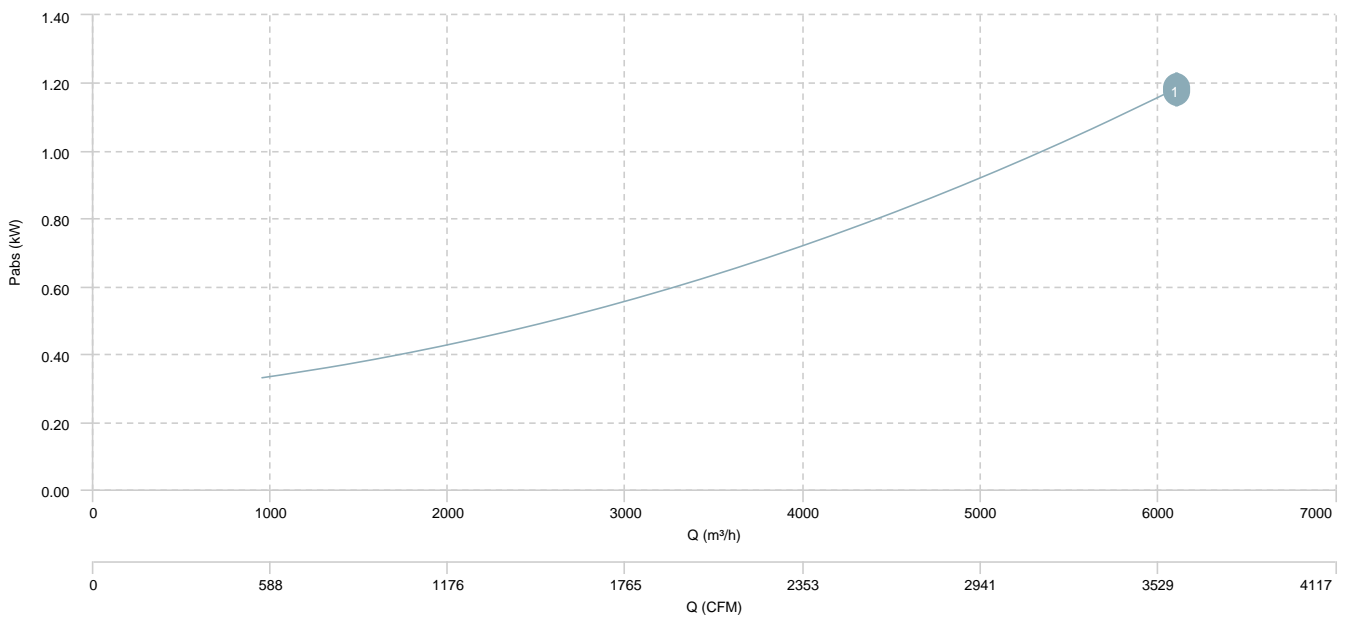


1 BOX BD FILTER 12/12 T6
1,1kW

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
BOX BD FILTER 7/7 M4 0,13kW	Inlet	60	62	71	73	77	76	72	62	81
BOX BD FILTER 9/9 M4 0,35kW	Inlet	62	64	73	75	79	78	74	64	83
BOX BD FILTER 10/10 M4 0,59kW	Inlet	65	67	76	78	82	81	77	67	86

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
BOX BD FILTER 7/7 M6 0,04kW	Inlet	45	47	56	58	62	61	57	47	66
BOX BD FILTER 9/9 M6 0,13kW	Inlet	54	56	65	67	71	70	66	56	75
BOX BD FILTER 10/10 M6 0,21kW	Inlet	58	60	69	70	74	74	69	60	79
BOX BD FILTER 12/12 M6 0,76kW	Inlet	61	63	72	73	77	77	72	63	82
BOX BD FILTER 12/12 T6 1,1kW	Inlet	60	62	71	73	77	76	72	62	81

erp data

ERP	
Fan type	Centrifugal fan radial or forward blades
Installation category	A
Efficiency category	Static
The fan has to be installed with FSC	No

ERP / 6 poles

Model	Motor power (kW)	Maximum efficiency point data						
		Max. efficiency (%)	Efficiency grade (N) (N)	Air Flow (m³/h)	Ps (Pa)	Pabs (kW)	speed (rpm)	Specific ratio
BOX BD FILTER 10/10 M6 0,21kW	0,21	36,51	46,97	1.713,03	180,33	0,22	945	1,00
BOX BD FILTER 12/12 M6 0,76kW	0,76	36,78	44,24	3.479,52	266,56	0,66	950	1,00
BOX BD FILTER 12/12 T6 1,1kW	1,10	37,19	45,24	2.847,62	253,74	0,53	945	1,00