

## MBX



### CENTRIFUGAL MEDIUM PRESSURE ATEX FAN

#### MANUFACTURING FEATURES

- Rolling steel sheet housing.
- Completely joined or welded housing.
- Simple inlet forward curved impeller made of aluminium sheet.
- Epoxy powder finishing coat.
- Inlet sparkproof ring made of copper or aluminium.
- Standard asynchronous squirrel-cage motor with IP-55 protection and Class F insulation. ATEX certified EEx-d. Manufactured with standard voltages: 230V 50Hz in single phase motors and 230/400V 50Hz in three phase motors up to 4kW, and 400/690V 50Hz for higher powers.
- Standard orientation: LG270.

#### APPLICATIONS

Designed for inline installation, they are suitable for:

- General ventilation in closed environments classified as ATEX zone 2 or 22.
- Maximum air working temperature from -20°C to 80°C.

## ACCESSORIES



INT



EASY  
KPE



RA



RBS



AC



EI



JE-45



BAD

#### UNDER REQUEST

- 60Hz fans and special voltages.
- Special ATEX executions.
- Orientation: RD0, RD45, RD90, RD135, RD180, RD225, RD270, RD315, LG0, LG45, LG90, LG135, LG180, LG225, LG315.

In compliance with the 94/9/CE Directive. ATEX II2G built. Certified II3G with certified ATEX EEx-d II2G motor for areas 2 (gas) or 22 (dust).

## TECHNICAL DATA

### THREE-PHASE MOTOR / 2 poles

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)*	Weight Kg	Connect. diagram
253110106XD	MBX 16/6 T2 0,37kW	2850	1	0,37	1.340	60	9,5	1
253170106XD	MBX 18/7 T2 0,75kW	2870	2	0,75	1.940	63	15	1
253240106XD	MBX 20/6 T2 0,37kW	2850	1	0,37	800	61	14	1
253190106XD	MBX 20/8 T2 1,1kW	2830	2,6	1,1	2.240	65	19	1
253210120XD	MBX 22/9 T2 1,1kW	2830	2,6	1,1	1.570	55	24	1
253200106XD	MBX 22/9 T2 2,2kW	2840	5,4	2,2	2.750	65	30	1
253280106XD	MBX 25/10 T2 2,2kW	2840	5,4	2,2	2.550	62	32	1
253290106XD	MBX 25/10 T2 3kW	2900	7,3	3	3.700	66	38	1
253360106XD	MBX 28/11 T2 4kW	2910	9,2	4	3.800	70	46	1

### THREE-PHASE MOTOR / 4 poles

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)*	Weight Kg	Connect. diagram
253160106XD	MBX 16/6 T4 0,18kW	1380	0,76	0,18	710	53	9,5	1
253340106XD	MBX 18/7 T4 0,25kW	1400	0,84	0,25	1.070	55	10	1
253230106XD	MBX 20/8 T4 0,37kW	1410	1,2	0,37	1.510	58	15	1
253200120XD	MBX 22/9 T4 0,55kW	1430	1,75	0,55	1.930	59	22	1
253310106XD	MBX 25/10 T4 1,1kW	1420	3,3	1,1	2.530	59	33	1
253370106XD	MBX 28/11 T4 2,2kW	1440	5,8	2,2	3.490	65	44	1
253450120XD	MBX 31/12 T4 3kW	1420	6,8	3	6.160	63	57	1
253450106XD	MBX 31/12 T4 4kW	1450	9,1	4	6.160	63	59	1
253480106XD	MBX 35/14 T4 3kW	1420	6,8	3	6.500	65	63	1
253480120XD	MBX 35/14 T4 5,5kW	1440	11,5	5,5	8.290	64	76	1
253510121XD	MBX 40/16 T4 5,5kW	1440	11,5	5,5	9.000	68	101	1
253510106XD	MBX 40/16 T4 7,5kW	1448	15,6	7,5	11.500	77	110	1
253530106XD	MBX 45/18 T4 5,5kW	1440	11,5	5,5	8.500	79	116	1
253530120XD	MBX 45/18 T4 7,5kW	1448	15,6	7,5	9.500	80	119	1
253530121XD	MBX 45/18 T4 11kW	1460	20,9	11	14.000	76	190	1

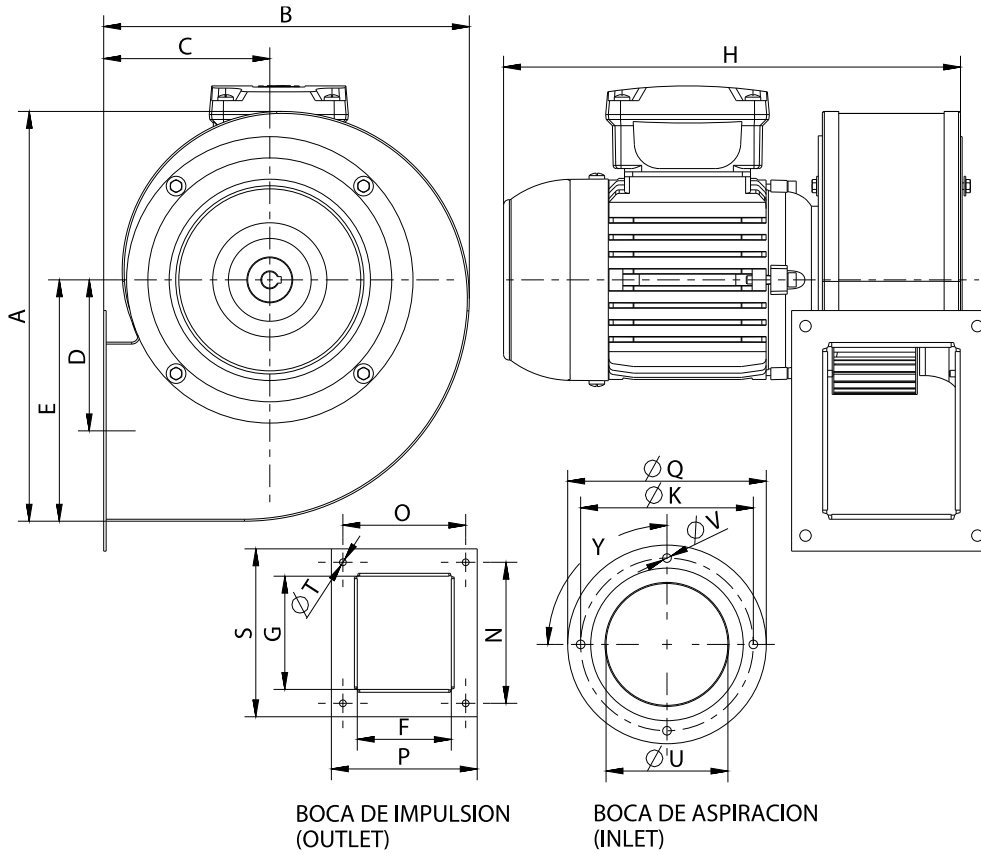
### THREE-PHASE MOTOR / 6 poles

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)*	Weight Kg	Connect. diagram
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Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)*	Weight Kg	Connect. diagram
253380106XD	MBX 28/11 T6 0,75kW	930	2,2	0,75	2.300	58	37	1
253510120XD	MBX 40/16 T6 2,2kW	930	5,2	2,2	7.150	59	94	1
253560106XD	MBX 45/18 T6 2,2kW	930	5,2	2,2	6.800	64	112	1

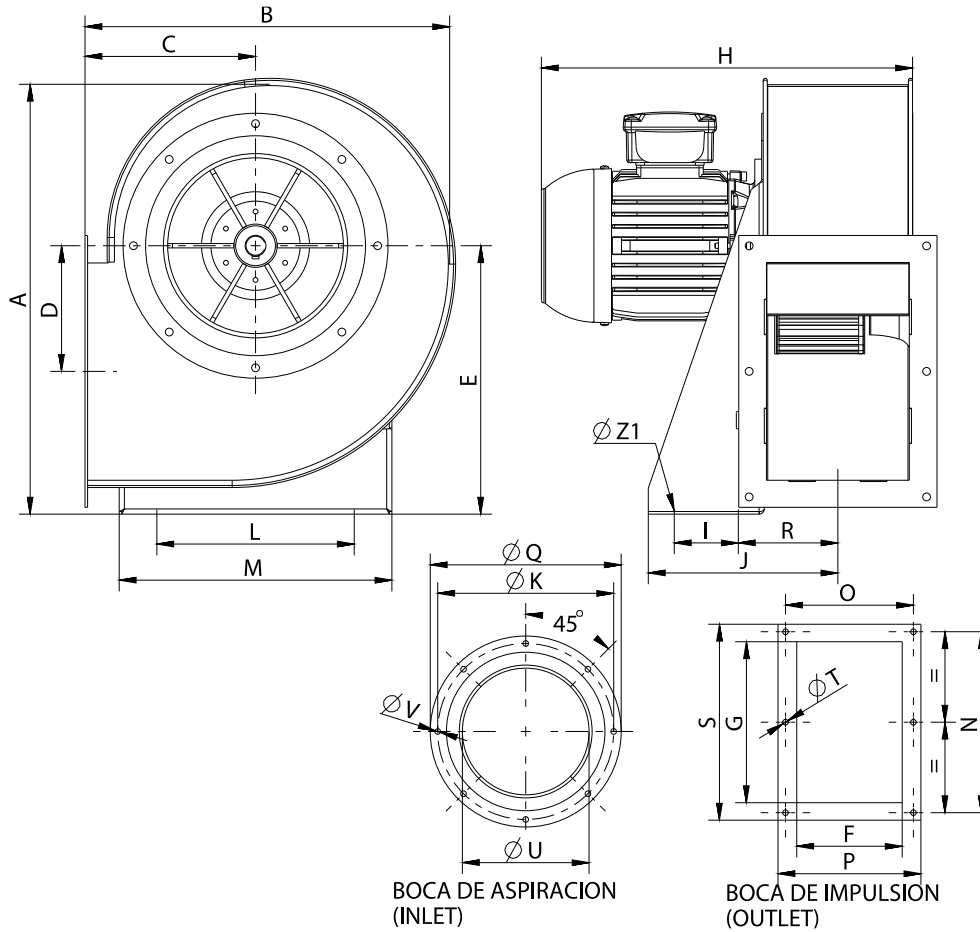
**Notes:**  
 \* Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

### DIMENSIONS DIAGRAM



Model	A	B	C	D	E	F	G	H	K
MBX 16/6 T2 0,37kW	295	266	119	108	171,5	100	120	325	180
MBX 16/6 T4 0,18kW	295	266	119	108	171,5	100	120	298	180
MBX 18/7 T2 0,75kW	350	305	130	133	205	115	140	358	214
MBX 18/7 T4 0,25kW	350	305	130	133	205	115	140	339	214
MBX 20/6 T2 0,37kW	347	302	132	150	202	105	100	329	230
MBX 20/8 T2 1,1kW	374	320	138	139	221	130	160	372	230
MBX 20/8 T4 0,37kW	374	320	138	139	221	130	160	353	230

Model	N	O	P	Q	S	TØ	UØ	VØ	Y
MBX 16/6 T2 0,37kW	147	128	152	207	172	7	127	9	4x90°
MBX 16/6 T4 0,18kW	147	128	152	207	172	7	127	9	4x90°
MBX 18/7 T2 0,75kW	169	146	169	237	192	8	143	9	4x90°
MBX 18/7 T4 0,25kW	169	146	169	237	192	8	143	9	4x90°
MBX 20/6 T2 0,37kW	128	134	159	255	153	8	161	9	8x45°
MBX 20/8 T2 1,1kW	189	160	184	255	213	8	161	9	8x45°
MBX 20/8 T4 0,37kW	189	160	184	255	213	8	161	9	8x45°

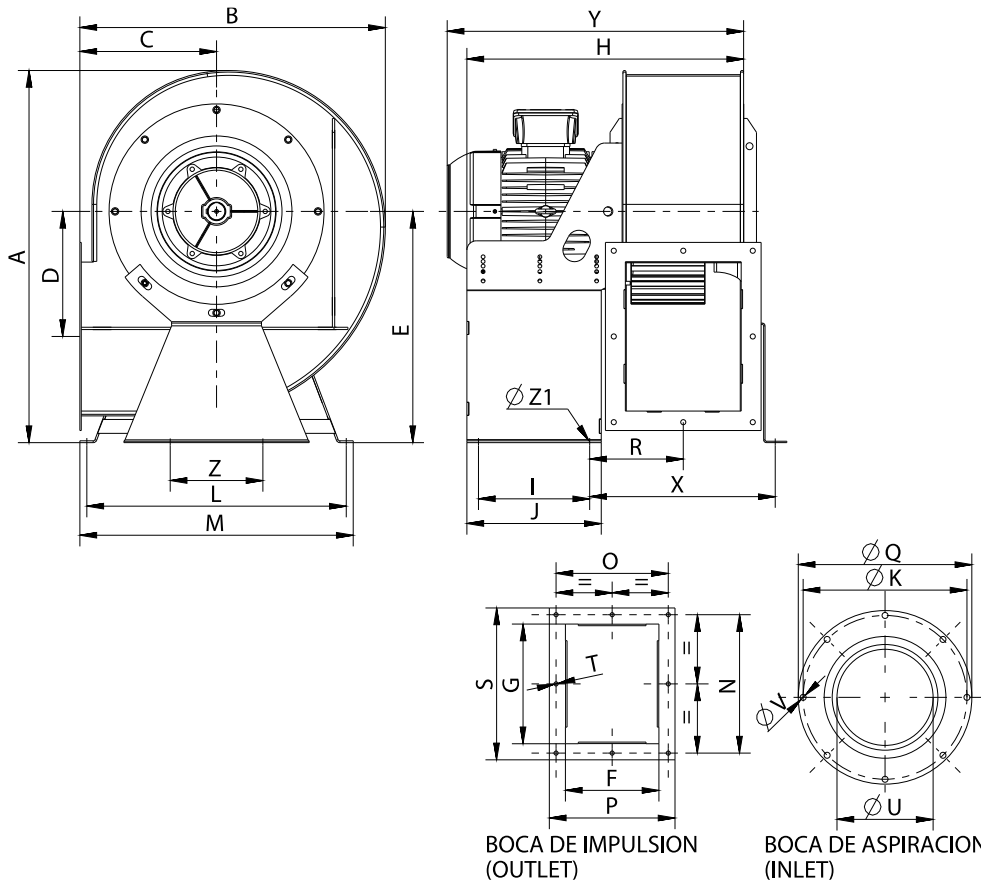


Model	A	B	C	D	E	F	G	H	I
MBX 22/9 T2 1,1kW	447	382	181	134	280	140	216	403	50
MBX 22/9 T2 2,2kW	447	382	181	134	280	140	216	439	50
MBX 22/9 T4 0,55kW	447	382	181	134	280	140	216	403	50
MBX 25/10 T2 2,2kW	496	420	197	142	310	165	254	463	74
MBX 25/10 T2 3kW	496	420	197	142	310	165	254	498	74
MBX 25/10 T4 1,1kW	496	420	197	142	310	165	254	427	74
MBX 28/11 T2 4kW	549	468	216	154	340	180	300	529,5	95
MBX 28/11 T4 2,2kW	549	468	216	154	340	180	300	453,5	95

Model	J	K	L	M	N	O	P	Q	R
MBX 22/9 T2 1,1kW	110	256	220	290	256	180	204	280	102
MBX 22/9 T2 2,2kW	110	256	220	290	256	180	204	280	102
MBX 22/9 T4 0,55kW	110	256	220	290	256	180	204	280	102
MBX 25/10 T2 2,2kW	134	282	228	315	290	205	229	306	114,5
MBX 25/10 T2 3kW	134	282	228	315	290	205	229	306	114,5
MBX 25/10 T4 1,1kW	134	282	228	315	290	205	229	306	114,5
MBX 28/11 T2 4kW	144	320	245	350	340	220	244	348	111,5

Model	J	K	L	M	N	O	P	Q	R
MBX 28/11 T4 2,2kW	144	320	245	350	340	220	244	348	111,5

Model	S	TØ	UØ	VØ	Z1Ø
MBX 22/9 T2 1,1kW	282	9	180	9	11
MBX 22/9 T2 2,2kW	282	9	180	9	11
MBX 22/9 T4 0,55kW	282	9	180	9	11
MBX 25/10 T2 2,2kW	314	9	203	9	13
MBX 25/10 T2 3kW	314	9	203	9	13
MBX 25/10 T4 1,1kW	314	9	203	9 <td>13</td>	13
MBX 28/11 T2 4kW	364	9	228	9	13
MBX 28/11 T4 2,2kW	364	9	228	9	13



Model	A	B	C	D	E	F	G	H	I
MBX 31/12 T4 3kW	640	531	249	180	406	198	319	538	240
MBX 31/12 T4 4kW	640	531	249	180	406	198	319	538	240
MBX 35/14 T4 3kW	715	587	270	242	451	224	280	564	240

Model	A	B	C	D	E	F	G	H	I
MBX 35/14 T4 5,5kW	715	587	270	242	451	224	280	564	240
MBX 40/16 T4 5,5kW	796	652	295	271	499	250	320	595	240
MBX 40/16 T4 7,5kW	796	652	295	271	499	250	320	595	240
MBX 40/16 T6 2,2kW	796	652	295	271	499	250	320	595	240
MBX 45/18 T4 5,5kW	887	730	329	305	553	280	360	791	250
MBX 45/18 T4 7,5kW	887	730	329	305	553	280	360	791	250
MBX 45/18 T4 11kW	887	730	329	305	553	280	360	791	250
MBX 45/18 T6 2,2kW	887	730	329	305	553	280	360	791	250

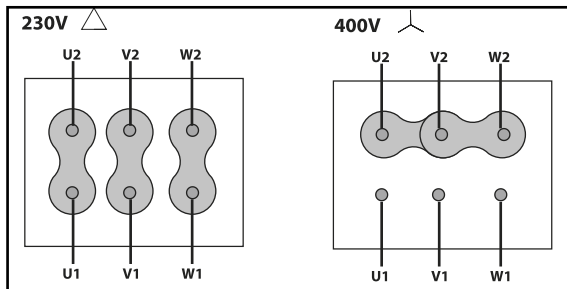
Model	J	K	L	M	N	O	P	Q	R
MBX 31/12 T4 3kW	290	354,5	457	482	360	240	274	382	171
MBX 31/12 T4 4kW	290	354,5	457	482	360	240	274	382	171
MBX 35/14 T4 3kW	290	394,5	449	474	318	266	300	422	184
MBX 35/14 T4 5,5kW	290	394,5	449	474	318	266	300	422	184
MBX 40/16 T4 5,5kW	290	438	560	590	370	300	336	464	202
MBX 40/16 T4 7,5kW	290	438	560	590	370	300	336	464	202
MBX 40/16 T6 2,2kW	290	438	560	590	370	300	336	464	202
MBX 45/18 T4 5,5kW	300	485	602	632	404	328	356	515	207
MBX 45/18 T4 7,5kW	300	485	602	632	404	328	356	515	207
MBX 45/18 T4 11kW	300	485	602	632	404	328	356	515	207
MBX 45/18 T6 2,2kW	300	485	602	632	404	328	356	515	207

Model	S	TØ	UØ	VØ	X	Y	Z	Z1
MBX 31/12 T4 3kW	395	11	203	11	-	539,5	-	13
MBX 31/12 T4 4kW	395	11	203	11	-	554,5	-	13
MBX 35/14 T4 3kW	356	11	228	11	-	565,75	-	13
MBX 35/14 T4 5,5kW	356	11	228	11	-	635,75	-	13
MBX 40/16 T4 5,5kW	406	11	257	11	400	667,75	200	13
MBX 40/16 T4 7,5kW	406	11	257	11	400	707,75	200	13
MBX 40/16 T6 2,2kW	406	11	257	11	400	612,75	200	13
MBX 45/18 T4 5,5kW	436	11	289	11	415	689,75	200	13
MBX 45/18 T4 7,5kW	436	11	289	11	415	726,75	200	13
MBX 45/18 T4 11kW	436	11	289	11	415	802,75	200	13
MBX 45/18 T6 2,2kW	436	11	289	11	415	631,75	200	13

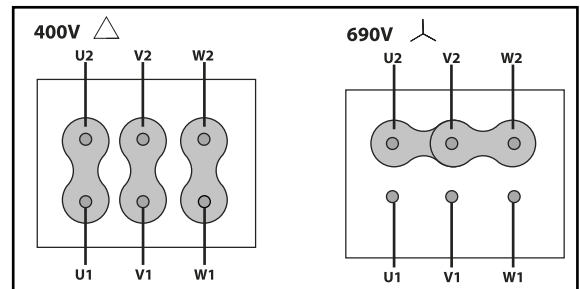
# WIRING DIAGRAM

DIAGRAM Nº 1

230/400V



400/690V

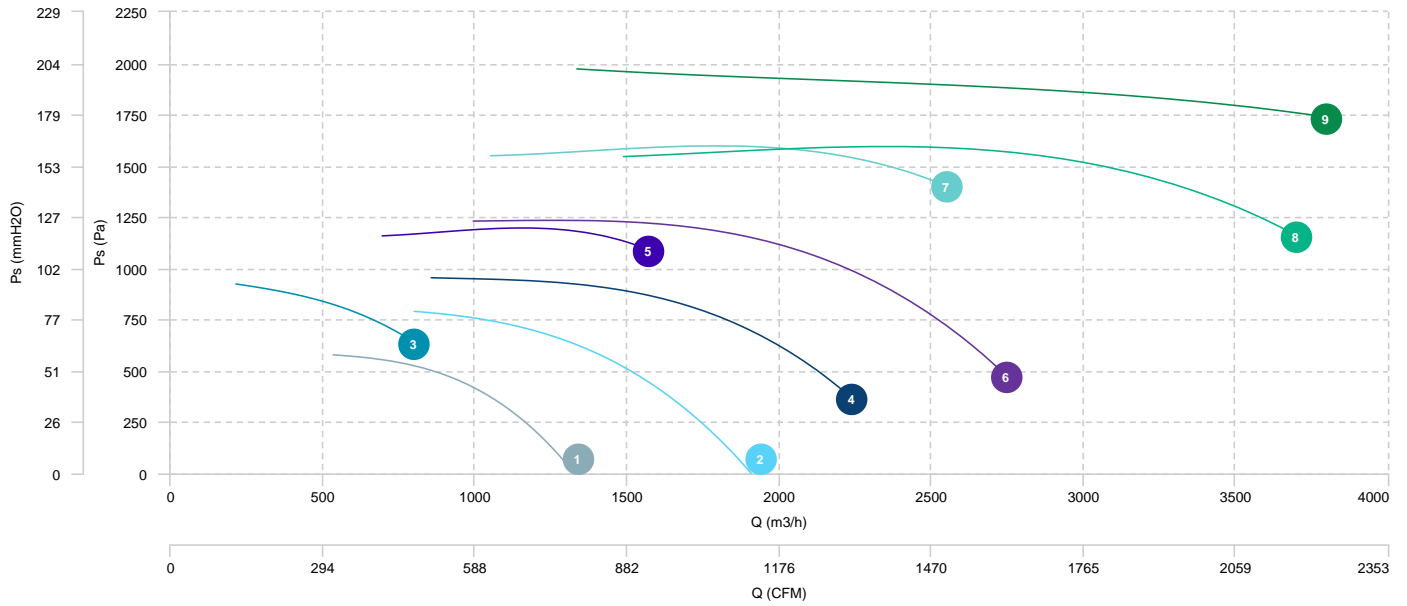




## CHARACTERISCTIC CURVE

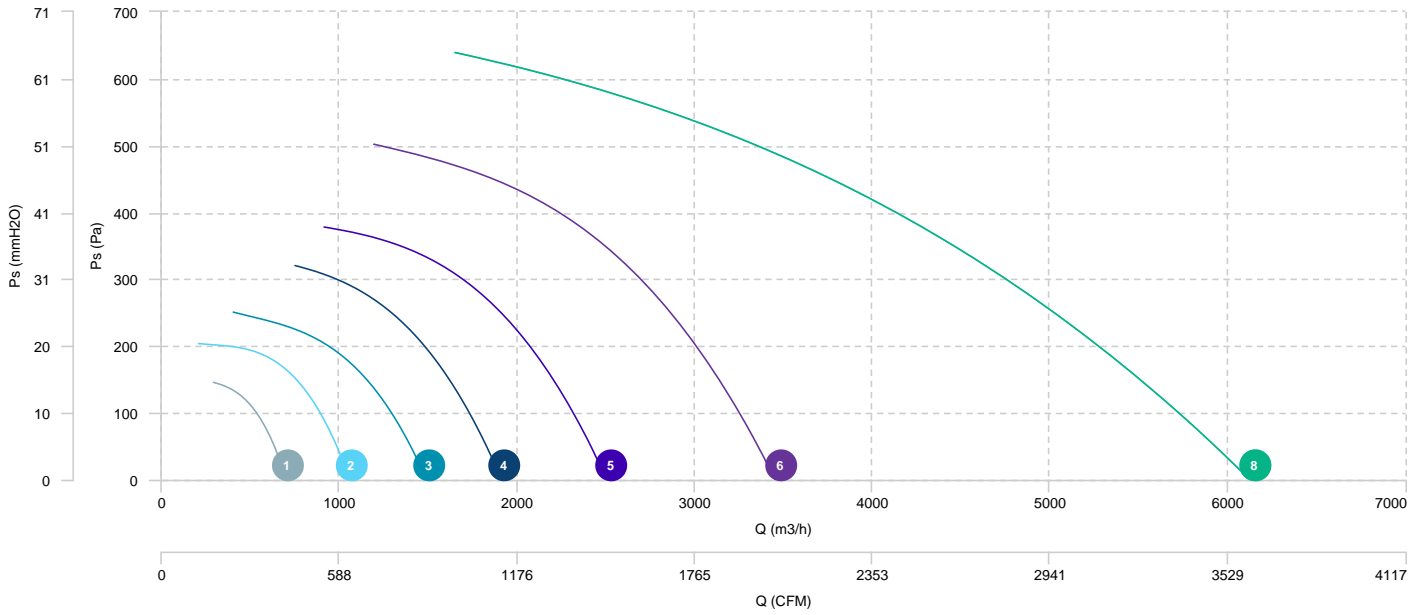
1	MBX 16/6 T2 0,37kW	2	MBX 18/7 T2 0,75kW	3	MBX 20/6 T2 0,37kW	4	MBX 20/8 T2 1,1kW
5	MBX 22/9 T2 1,1kW	6	MBX 22/9 T2 2,2kW	7	MBX 25/10 T2 2,2kW	8	MBX 25/10 T2 3kW
9	MBX 28/11 T2 4kW						

### AIR FLOW - PRESSURE



1	MBX 16/6 T4 0,18kW	2	MBX 18/7 T4 0,25kW	3	MBX 20/8 T4 0,37kW	4	MBX 22/9 T4 0,55kW
5	MBX 25/10 T4 1,1kW	6	MBX 28/11 T4 2,2kW	7	MBX 31/12 T4 3kW	8	MBX 31/12 T4 4kW

## AIR FLOW - PRESSURE



1	MBX 35/14 T4 3kW	2	MBX 35/14 T4 5,5kW	3	MBX 40/16 T4 5,5kW	4	MBX 40/16 T4 7,5kW
5	MBX 45/18 T4 5,5kW	6	MBX 45/18 T4 7,5kW	7	MBX 45/18 T4 11kW		

## AIR FLOW - PRESSURE

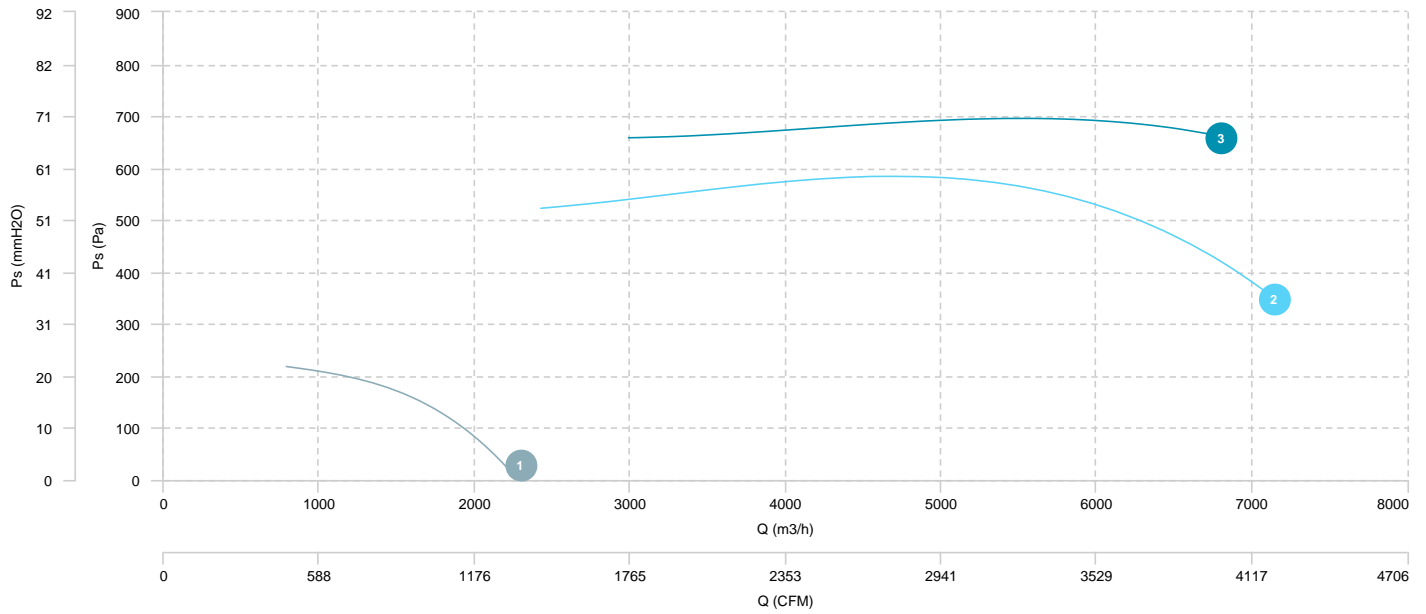


1 MBX 28/11 T6 0,75kW

2 MBX 40/16 T6 2,2kW

3 MBX 45/18 T6 2,2kW

## AIR FLOW - PRESSURE



## SOUND DATA

### SOUND / 2 poles

SOUND POWER Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
MBX 16/6 T2 0,37kW	Inlet	51	63	74	77	79	83	78	76	86
MBX 18/7 T2 0,75kW	Inlet	54	65	76	79	81	85	81	79	89
MBX 20/6 T2 0,37kW	Inlet	52	63	74	77	79	83	79	77	87
MBX 20/8 T2 1,1kW	Inlet	56	68	79	82	84	88	83	82	91
MBX 22/9 T2 1,1kW	Inlet	46	57	68	71	73	77	73	71	81
MBX 22/9 T2 2,2kW	Inlet	56	67	78	81	83	87	83	81	91
MBX 25/10 T2 2,2kW	Inlet	53	64	75	78	80	84	80	78	88
MBX 25/10 T2 3kW	Inlet	57	68	79	83	85	88	84	82	92
MBX 28/11 T2 4kW	Inlet	61	72	83	86	88	92	88	86	96

### 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
MBX 16/6 T4 0,18kW	Inlet	49	62	68	69	74	75	71	68	79
MBX 18/7 T4 0,25kW	Inlet	51	64	70	71	76	77	73	70	81
MBX 20/8 T4 0,37kW	Inlet	54	67	73	74	79	80	76	73	84
MBX 22/9 T4 0,55kW	Inlet	54	66	73	74	79	80	76	72	85
MBX 25/10 T4 1,1kW	Inlet	54	67	73	74	79	80	76	73	85
MBX 28/11 T4 2,2kW	Inlet	60	73	79	80	85	86	82	79	91
MBX 31/12 T4 3kW	Inlet	58	71	77	78	83	84	80	77	89
MBX 31/12 T4 4kW	Inlet	58	71	77	78	83	84	80	77	89
MBX 35/14 T4 3kW	Inlet	60	73	79	80	85	86	82	79	91
MBX 35/14 T4 5,5kW	Inlet	59	72	78	79	84	85	81	78	90
MBX 40/16 T4 5,5kW	Inlet	63	76	82	83	88	89	85	82	94
MBX 40/16 T4 7,5kW	Inlet	72	85	91	92	97	98	94	91	103
MBX 45/18 T4 5,5kW	Inlet	75	88	94	95	100	101	97	94	105
MBX 45/18 T4 7,5kW	Inlet	76	89	95	96	101	102	98	95	106
MBX 45/18 T4 11kW	Inlet	71	84	90	91	96	97	93	90	102

### 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
MBX 28/11 T6 0,75kW	Inlet	53	66	72	73	78	79	75	72	84

SOUND POWER Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
MBX 40/16 T6 2,2kW	Inlet	56	68	71	79	79	80	76	72	85
MBX 45/18 T6 2,2kW	Inlet	60	73	76	84	84	85	80	76	90