

## MB12/5-20/8



### MEDIUM PRESSURE CENTRIFUGAL FAN WITH FORWARD IMPELLER

#### MANUFACTURING FEATURES:

- Rolling steel sheet housing.
- Completely joined or welded housing.
- Galvanised steel sheet simple inlet forward curved impeller.
- Polyester powder finishing coat.
- Standard asynchronous squirrel-cage motor with IP-55 protection and Class F insulation. Manufactured with standard voltages: 230V 50Hz in single phase motors and 230/400V 50Hz in three phase motors.

- Available positions (to be indicated in case of order): LG270, LG0, LG45, LG90, LG135, LG180, LG225, LG315, RD0, RD45, RD90, RD135, RD180, RD225, RD270, RD315.
- The indicated codes correspond to the model in position LG270

## Accessories



**AB**

**AC**

**BA-400**

**EI**



**INT**

**JE 45**

**RA**

**RBS**



**SFC**

#### APPLICATIONS:

Designed for inline installation, they are suitable for:

- Industrial applications, extraction or injection of air.
- Cooling of machines and parts.
- Suitable for transporting totally clean air without dust.
- Maximum working temperature: carried air: 130°C, environment single phase 50°C, three phase 60°C.

#### UNDER REQUEST:

- Special voltages.
- 2 speed motors (three phase motors).
- Fan for air working temperatures up to 250°C.
- Fans provided with cooling disk for high temperature.
- Option with support for models where it is not included, and without support for models where it is included.

## Technical data

### Single-phase motor / 2 poles

Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m <sup>3</sup> /h	Sound db (A)**	Weight kg	Connect. diagram
253100103	MB 14/5 M2 0,25kW	2790	1,77	0,25	840	58	7	1
253110103	MB 16/6 M2 0,37kW	2760	2,47	0,37	1.080	60	9,50	1
253170103	MB 18/7 M2 0,75kW	2810	4,49	0,75	1.470	63	15	1
253240103	MB 20/6 M2 0,37kW	2760	2,47	0,37	785	61	14	1
253190103	MB 20/8 M2 1,1kW	2800	6,71	1,10	1.960	65	19	1

### Single-phase motor / 4 poles

Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m <sup>3</sup> /h	Sound db (A)**	Weight kg	Connect. diagram
253080103	MB 12/5 M4 0,08kW	1370	0,9	0,08	250	46	5	1
253090103	MB 14/5 M4 0,08kW	1370	0,9	0,08	414	46	6	1
253150103	MB 16/6 M4 0,08kW	1370	0,9	0,08	600	53	7,50	1

### Three-phase motor / 2 poles

Code	Model	R.P.M.	Rated I. A		Rated power kW	Max. Airflow m <sup>3</sup> /h	Sound db (A)**	Weight kg	Connect. diagram
			230V	400V					
253100106	MB 14/5 T2 0,25kW	2800	1,12	0,65	0,25	840	58	7	2
253110106	MB 16/6 T2 0,37kW	2800	1,58	0,91	0,37	1.080	60	9,50	2
253170106	MB 18/7 T2 0,75kW	2800	2,75	1,58	0,75	1.470	63	15	2
253240106	MB 20/6 T2 0,37kW	2800	1,58	0,91	0,37	785	61	14	2
253190106	MB 20/8 T2 1,1kW	2800	4,05	2,33	1,10	1.960	65	19	2

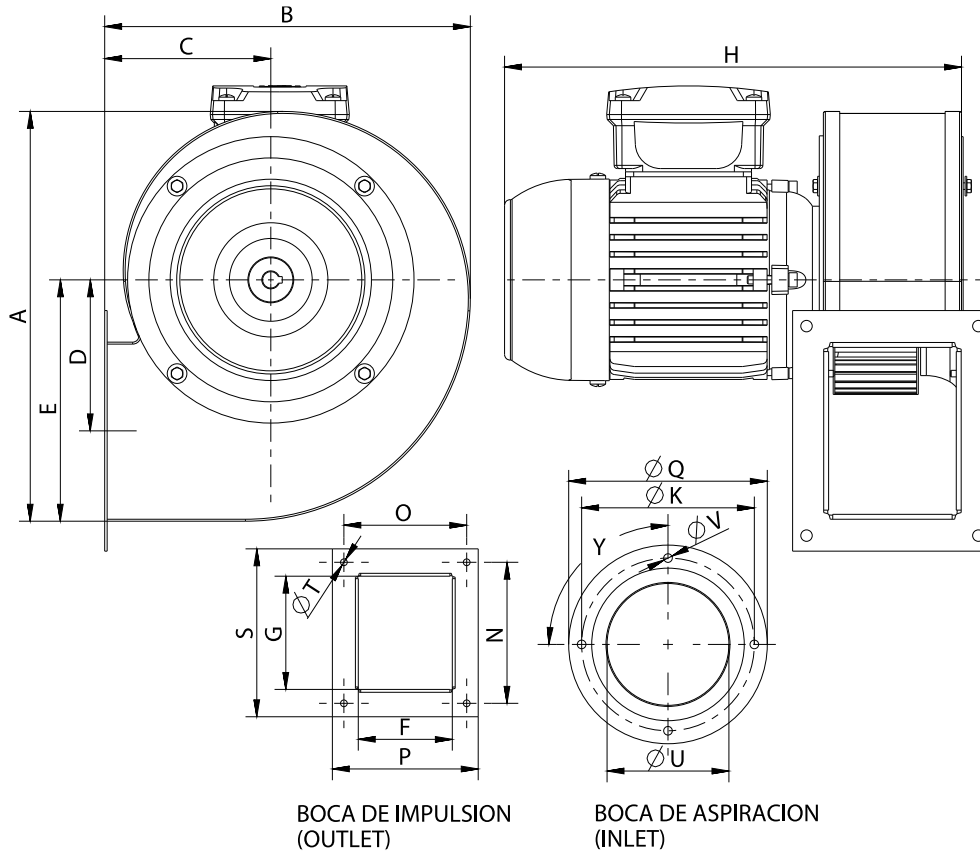
### Three-phase motor / 4 poles

Code	Model	R.P.M.	Rated I. A		Rated power kW	Max. Airflow m <sup>3</sup> /h	Sound db (A)**	Weight kg	Connect. diagram
			230V	400V					
253080106	MB 12/5 T4 0,08kW	1400	0,47	0,27	0,08	250	46	5	2
253090106	MB 14/5 T4 0,08kW	1400	0,47	0,27	0,08	414	46	6	2
253150106	MB 16/6 T4 0,08kW	1400	0,47	0,27	0,08	600	53	7,50	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

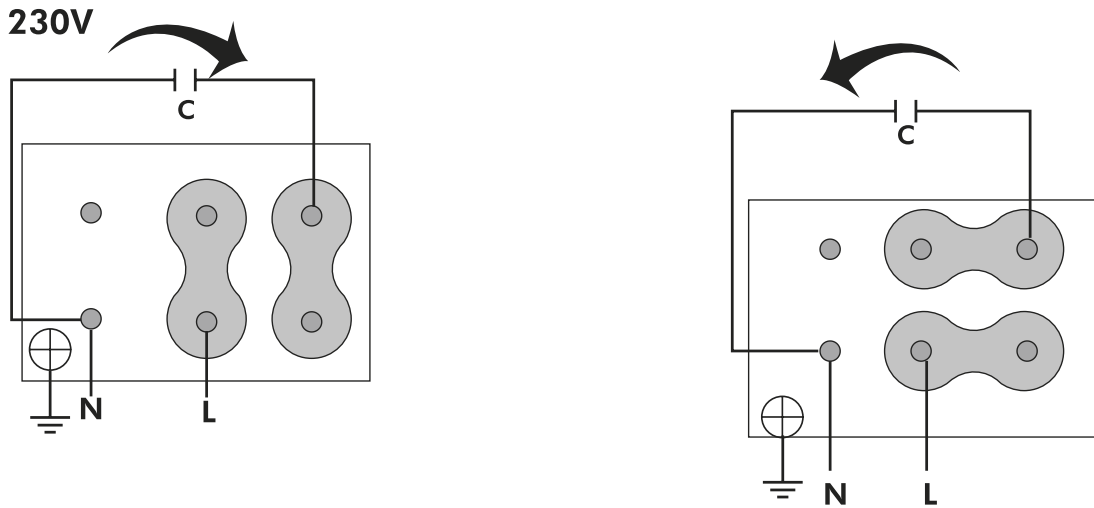


Model	A	B	C	D	E	F	G	H	K
MB 12/5 M4 0,08kW	205,5	187	87	71,5	117	72	81,7	251	135
MB 12/5 T4 0,08kW	205,5	187	87	71,5	117	72	81,7	251	135
MB 14/5 M2 0,25kW	250,5	223	102	93	147,5	78	102	278	162
MB 14/5 M4 0,08kW	250,5	223	102	93	147,5	78	102	278	162
MB 14/5 T2 0,25kW	250,5	223	102	93	147,5	78	102	278	162
MB 14/5 T4 0,08kW	250,5	223	102	93	147,5	78	102	278	162
MB 16/6 M2 0,37kW	295	266	119	108,5	171,5	98	118	325	180
MB 16/6 M4 0,08kW	295	266	119	108,5	171,5	98	118	298	180
MB 16/6 T2 0,37kW	295	266	119	108,5	171,5	98	118	325	180
MB 16/6 T4 0,08kW	295	266	119	108,5	171,5	98	118	298	180
MB 18/7 M2 0,75kW	365	321	139	141,5	213	115	141,5	360	214
MB 18/7 T2 0,75kW	365	321	139	141,5	213	115	141,5	360	214
MB 20/6 M2 0,37kW	364	321	141	142	210	105	101,5	333	230
MB 20/6 T2 0,37kW	364	321	141	142	210	105	101,5	333	230
MB 20/8 M2 1,1kW	392	331	140	142	230	130	161,5	374	230
MB 20/8 T2 1,1kW	392	331	140	142	230	130	161,5	374	230

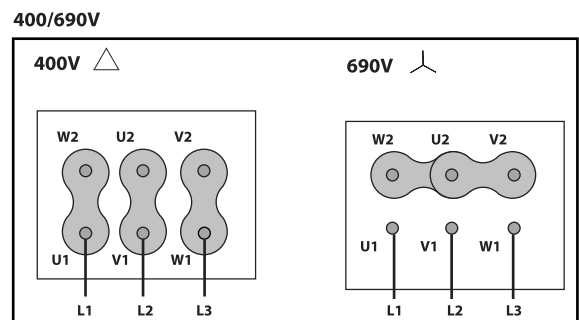
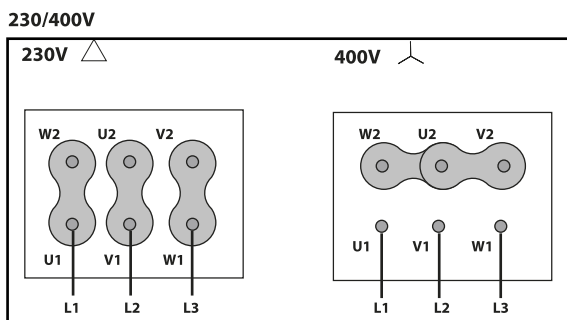
Model	N	O	P	Q	S	TØ	UØ	VØ	Y
MB 12/5 M4 0,08kW	105	93	106	150	118	7	92,5	7	4x90º
MB 12/5 T4 0,08kW	105	93	106	150	118	7	92,5	7	4x90º
MB 14/5 M2 0,25kW	128	105	122	175	147	7	115	7	4x90º
MB 14/5 M4 0,08kW	128	105	122	175	147	7	115	7	4x90º
MB 14/5 T2 0,25kW	128	105	122	175	147	7	115	7	4x90º
MB 14/5 T4 0,08kW	128	105	122	175	147	7	115	7	4x90º
MB 16/6 M2 0,37kW	147	128	152	207	175	7	127	9	4x90º
MB 16/6 M4 0,08kW	147	128	152	207	175	7	127	9	4x90º
MB 16/6 T2 0,37kW	147	128	152	207	175	7	127	9	4x90º
MB 16/6 T4 0,08kW	147	128	152	207	175	7	127	9	4x90º
MB 18/7 M2 0,75kW	169	146	169	237	192	9	143	9	4x90º
MB 18/7 T2 0,75kW	169	146	169	237	192	9	143	9	4x90º
MB 20/6 M2 0,37kW	128	134	159	255	153	9	161	9	8x45º
MB 20/6 T2 0,37kW	128	134	159	255	153	9	161	9	8x45º
MB 20/8 M2 1,1kW	189	160	184	255	213	9	161	9	8x45º
MB 20/8 T2 1,1kW	189	160	184	255	213	9	161	9	8x45º

## Wiring diagram

Wiring diagram Nº 1



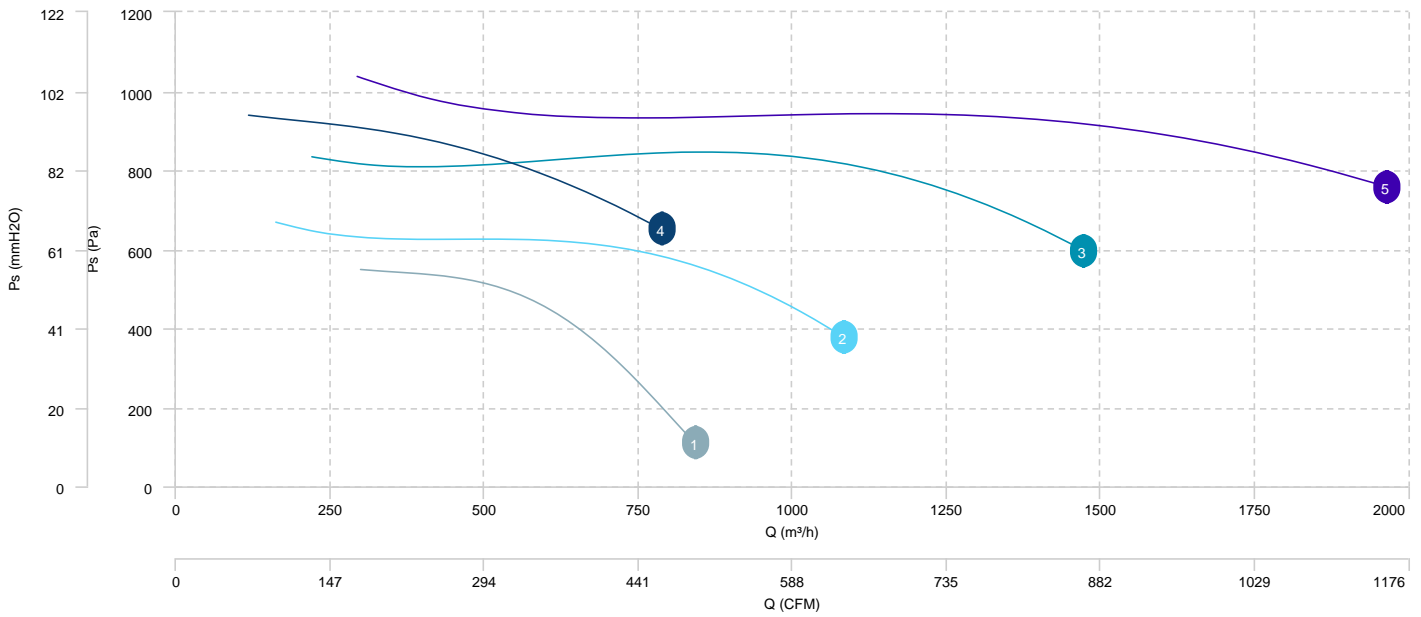
Wiring diagram Nº 2



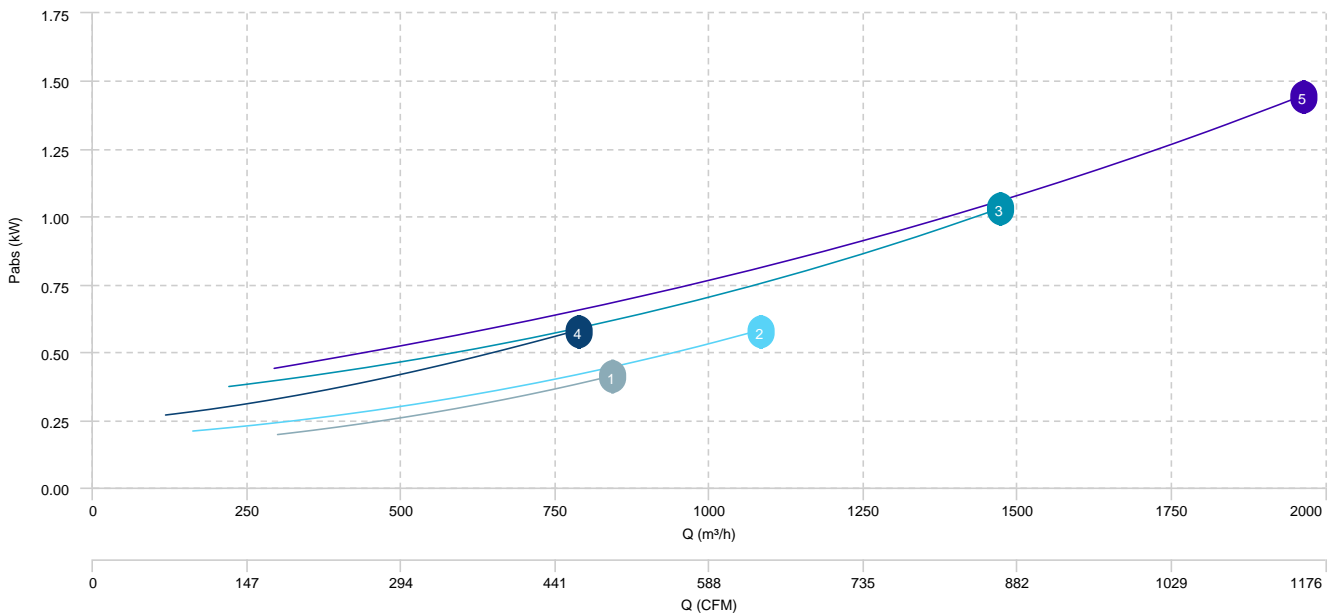
## CHARACTERISTIC CURVE

- |   |                   |   |                   |   |                   |   |                   |
|---|-------------------|---|-------------------|---|-------------------|---|-------------------|
| 1 | MB 14/5 M2 0,25kW | 2 | MB 16/6 M2 0,37kW | 3 | MB 18/7 M2 0,75kW | 4 | MB 20/6 M2 0,37kW |
| 5 | MB 20/8 M2 1,1kW  |   |                   |   |                   |   |                   |

### AIR FLOW - PRESSURE



### AIR FLOW - ABSORBED POWER

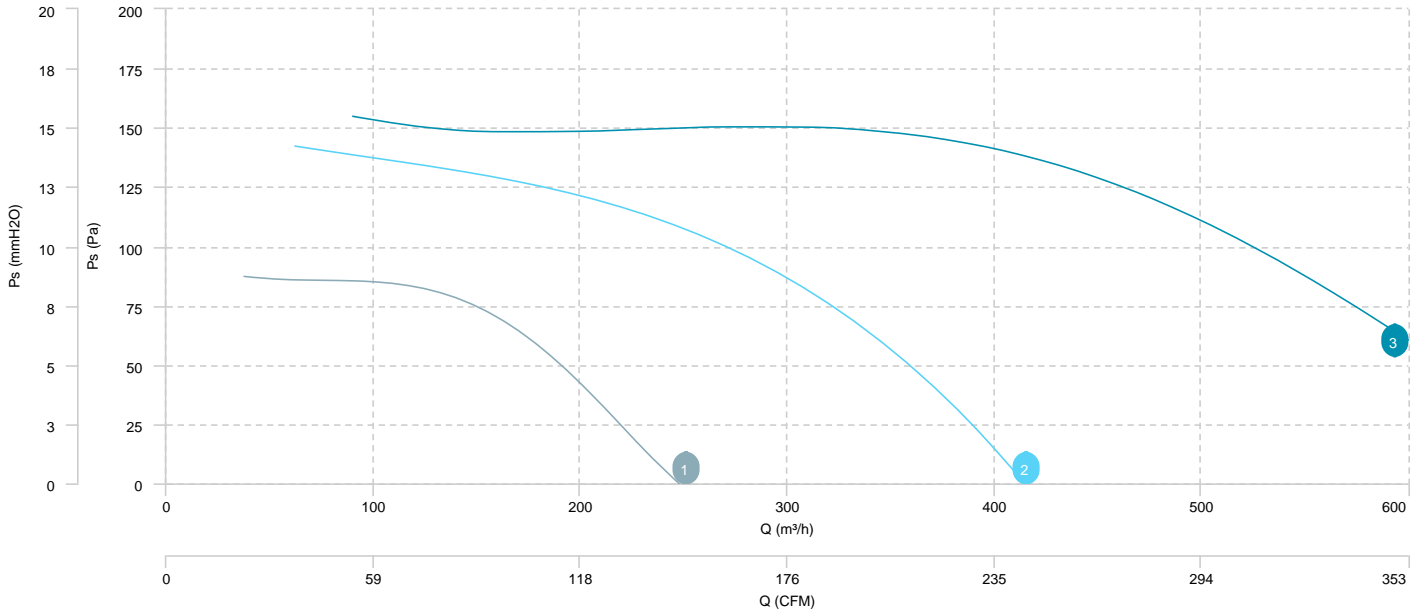


**1** MB 12/5 M4 0,08kW

**2** MB 14/5 M4 0,08kW

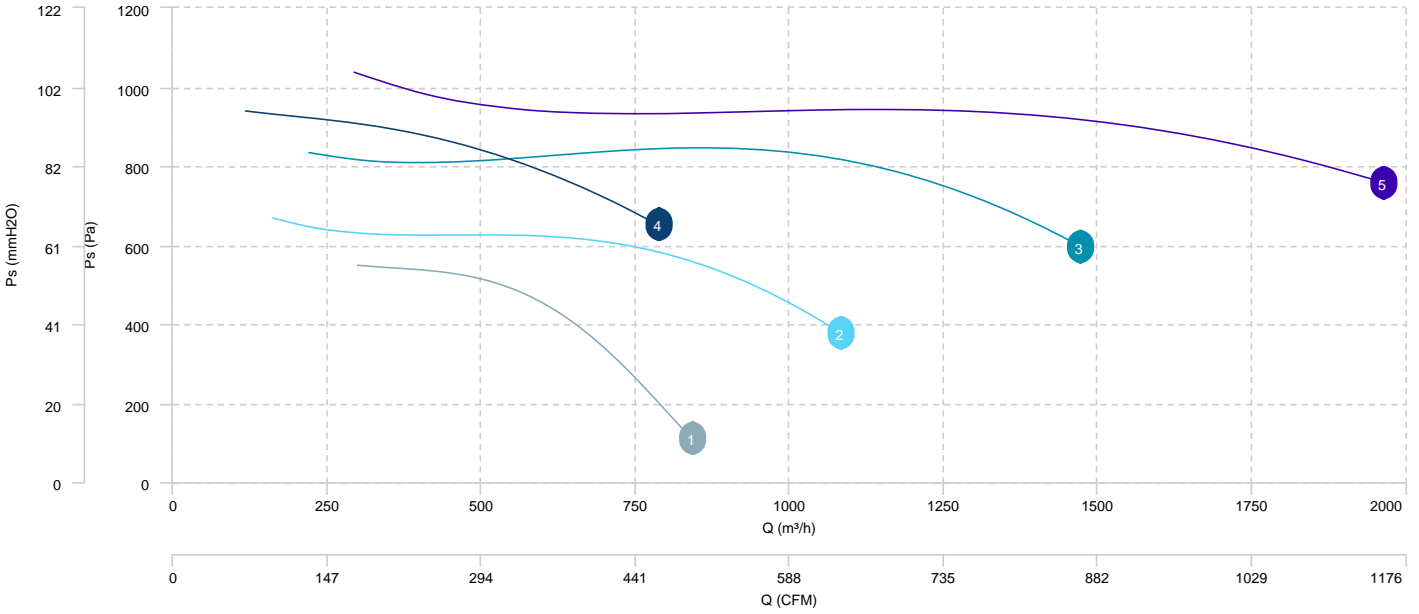
**3** MB 16/6 M4 0,08kW

**AIR FLOW - PRESSURE**

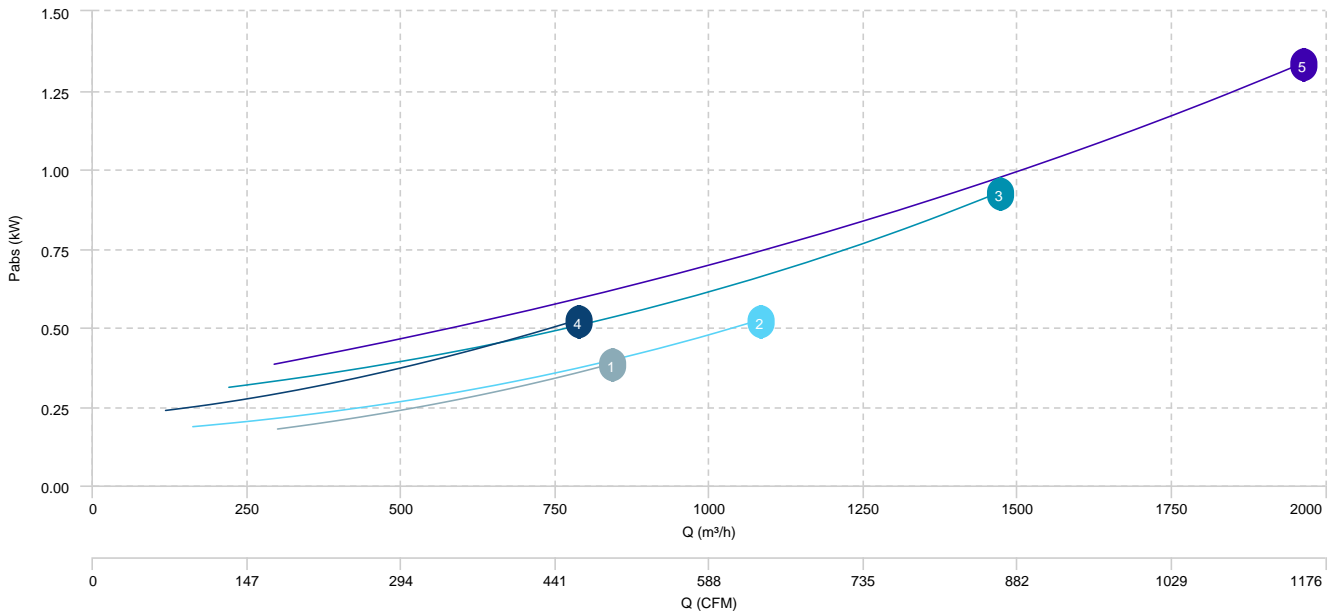


- 1 MB 14/5 T2 0,25kW
- 2 MB 16/6 T2 0,37kW
- 3 MB 18/7 T2 0,75kW
- 4 MB 20/6 T2 0,37kW
- 5 MB 20/8 T2 1,1kW

**AIR FLOW - PRESSURE**



**AIR FLOW - ABSORBED POWER**



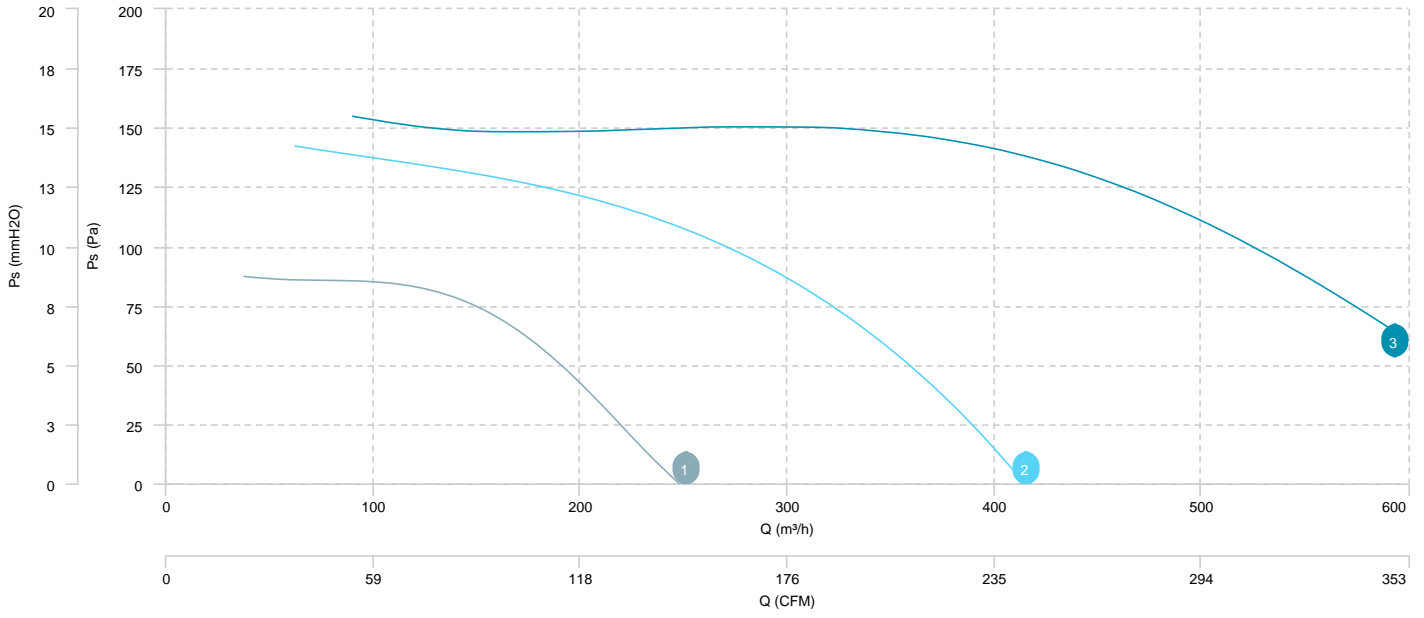


**1** MB 12/5 T4 0,08kW

**2** MB 14/5 T4 0,08kW

**3** MB 16/6 T4 0,08kW

**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
MB 14/5 M2 0,25kW	Inlet	49	60	71	74	76	80	76	74	84
MB 14/5 T2 0,25kW	Inlet	49	60	71	74	76	80	76	74	84
MB 16/6 M2 0,37kW	Inlet	51	63	74	77	79	83	78	76	86
MB 16/6 T2 0,37kW	Inlet	51	63	74	77	79	83	78	76	86
MB 18/7 M2 0,75kW	Inlet	54	65	76	79	81	85	81	79	89
MB 18/7 T2 0,75kW	Inlet	54	65	76	79	81	85	81	79	89
MB 20/6 M2 0,37kW	Inlet	52	63	74	77	79	83	79	77	87
MB 20/6 T2 0,37kW	Inlet	52	63	74	77	79	83	79	77	87
MB 20/8 M2 1,1kW	Inlet	56	68	79	82	84	88	83	82	91
MB 20/8 T2 1,1kW	Inlet	56	68	79	82	84	88	83	82	91

### 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
MB 12/5 M4 0,08kW	Inlet	42	55	61	62	67	68	64	61	72
MB 12/5 T4 0,08kW	Inlet	42	55	61	62	67	68	64	61	72
MB 14/5 M4 0,08kW	Inlet	42	55	61	62	67	68	64	61	72
MB 14/5 T4 0,08kW	Inlet	42	55	61	62	67	68	64	61	72
MB 16/6 M4 0,08kW	Inlet	49	62	68	69	74	75	71	68	79
MB 16/6 T4 0,08kW	Inlet	49	62	68	69	74	75	71	68	79

## erp data

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

## ERP / 2 poles

Model	Motor power (kW)	Maximum efficiency point data						
		Max. efficiency (%)	Efficiency grade (N) (N)	Air Flow (m³/h)	Pt (Pa)	Pabs (kW)	speed (rpm)	Specific ratio
MB 14/5 T2 0,25kW	0,25	40,62	50,44	612,14	672,24	0,28	2800	1,00
MB 16/6 M2 0,37kW	0,37	41,56	49,96	890,25	787,11	0,47	2760	1,00
MB 16/6 T2 0,37kW	0,37	46,55	55,30	878,63	787,31	0,41	2800	1,00
MB 18/7 T2 0,75kW	0,75	47,11	54,34	1.179,73	1.031,87	0,72	2800	1,00
MB 20/8 M2 1,1kW	1,10	45,21	50,97	1.705,45	1.172,26	1,23	2800	1,00
MB 20/8 T2 1,1kW	1,10	48,95	54,94	1.698,07	1.171,90	1,13	2800	1,00