

KENTALCOOK



VENTILATION BOX WITH REACTION IMPELLER

MANUFACTURING CHARACTERISTICS:

- Watertight ventilation box with very high efficiency and low noise level with 30 mm aluminum profile structure, nylon corners and galvanized steel sandwich panel with internal rock wool insulation 25 mm thick class A1 (non-combustible) and 90 kg/m3 density. All panels have a "fastening system" for easy assembly and disassembly whenever required, whether for cleaning, maintenance or panel exchange.
- Centrifugal fan with motor coupled directly to the coil type plug fan with motor outside the air flow
- Circular inlet to facilitate the connection of ducts. open outlet.
- Models with AC motor isolated from the air flow, which allows working stably with contaminated flow at temperatures higher than ambient. Standard asynchronous squirrel cage motor with IP-55 protection and Class F insulation. Standard voltages 230V 50Hz for single phase motors, 230/400V 50Hz for three phase motors up to 4kW and 400/690V 50Hz for higher powers 1 speed and 400V for 2 speed motors.
- High-performance single-aspiration turbine with backward curved blades (reaction) with self-cleaning system built in steel. Statically and dynamically balanced at origin.
- With stainless steel drainage purge for escape route of the fluid load.
- Built-in safety switch.
- Interchangeable drive panels.
- Registration panel accessible by handle

APPLICATIONS:

Designed for 90° entry-exit installation, they are suitable for:

- Air renewal in buildings and industries.
- Smoke extraction.
- Kitchen extraction.
- Designed to deal with environments with oily load.
- Maximum continuous working temperature: transported air 120°C, ambient 60°C to -25°C in three-phase motors and 50°C to -25°C in single-phase motors.

Accessories



**BOX
FILTER**



CFF



CFGF



CHEF



SFC



**TBIC
KENTA
LBOX
PLUS**



**TEJ
KENTA
LBOX
PLUS**



**TIC
KENTA
LBOX
PLUS**

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
249314103Q	KENTALCOOK 315 M4 0,25kW	1410	1,6	0,25	2.540	-	37	1
249354103Q	KENTALCOOK 355 M4 0,25kW	1410	1,6	0,25	3.540	-	44	1
249404103Q	KENTALCOOK 400 M4 0,55kW	1400	3,98	0,55	5.240	-	59	1

Three-phase motor / 2 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					
249312106Q	KENTALCOOK 315 T2 1,5kW	2865	5,83	3,14	1,50	5.160	-	38	2

Three-phase motor / 4 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					
249314106Q	KENTALCOOK 315 T4 0,25kW	1400	1,38	0,79	0,25	2.540	-	37	2
249354106Q	KENTALCOOK 355 T4 0,25kW	1400	1,38	0,79	0,25	3.540	-	44	2
249404106Q	KENTALCOOK 400 T4 0,55kW	1440	2,57	1,49	0,55	5.240	-	59	2
249454106Q	KENTALCOOK 450 T4 1,1kW	1450	4,33	2,49	1,10	7.720	-	80	2
249504106Q	KENTALCOOK 500 T4 1,5kW	1450	5,67	3,26	1,50	10.230	-	105	2
249564106Q	KENTALCOOK 560 T4 3kW	1420	10,7	6,17	3,00	14.740	-	122	2
249634106Q	KENTALCOOK 630 T4 5,5kW	1460	-	10,5	5,50	22.100	-	151	2

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					
249506106Q	KENTALCOOK 500 T6 0,55kW	900	3,00	1,8	0,55	6.720	-	102	2
249566106Q	KENTALCOOK 560 T6 1,1kW	925	4,83	2,78	1,10	9.820	-	120	2
249636106Q	KENTALCOOK 630 T6 1,5kW	940	6,45	3,71	1,50	14.530	-	151	2

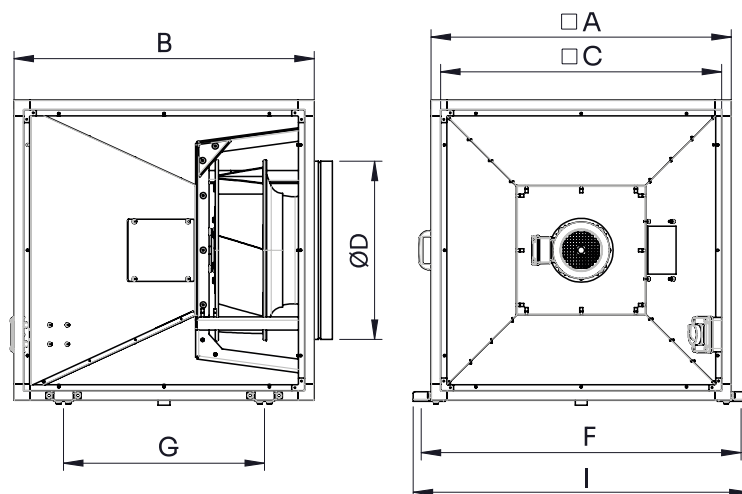
2 speed motor / 4/8 poles

Code	Model	R.P.M.	Rated I. A 400V	Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weig ht kg	Connect. diagram
2493141062VQ	KENTALCOOK 315 T4/T8 0,25/0,03kW	1370	1,13/0,37	0,25	2.540	-	37	3
2493541062VQ	KENTALCOOK 355 T4/T8 0,25/0,03kW	1370	1,13/0,37	0,25	3.540	-	44	3
2494041062VQ	KENTALCOOK 400 T4/T8 0,75/0,12kW	1400	2,03/0,68	0,75	5.240	-	59	3
2494541062VQ	KENTALCOOK 450 T4/T8 1,1/0,18kW	1400	2,67/1,08	1,10	7.720	-	80	3
2495041062VQ	KENTALCOOK 500 T4/T8 1,5/0,25kW	1400	3,46/1,27	1,50	10.230	-	105	3
2495641062VQ	KENTALCOOK 560 T4/T8 3/0,55kW	1430	6,53/2,33	3,00	14.740	-	122	3
2496341062VQ	KENTALCOOK 630 T4/T8 5,5/1,1kW	1450	10,73/3,82	5,50	22.100	-	151	3

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

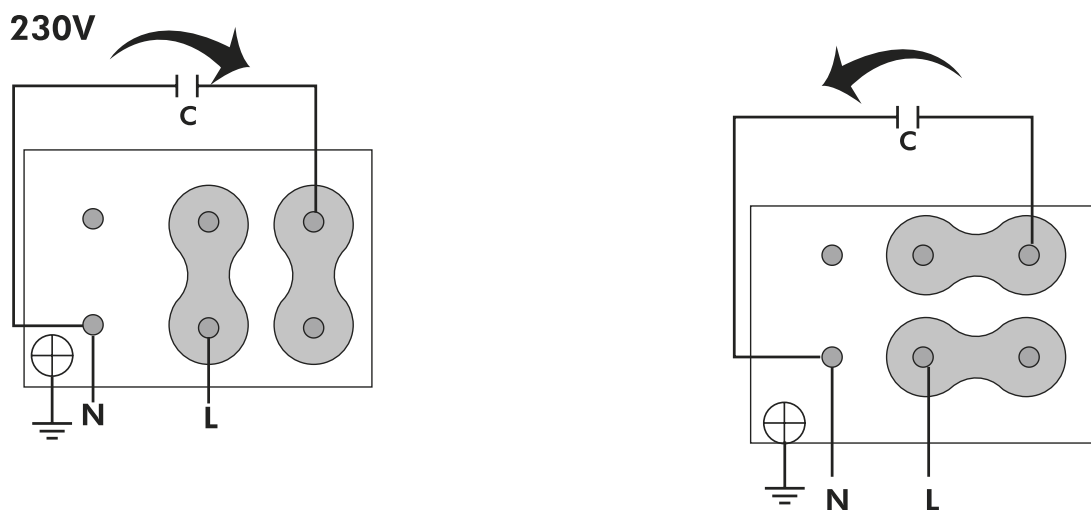
Dimensions



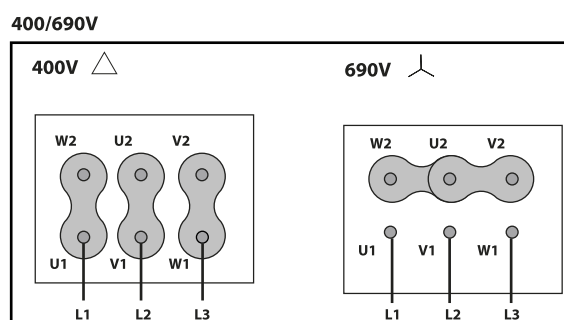
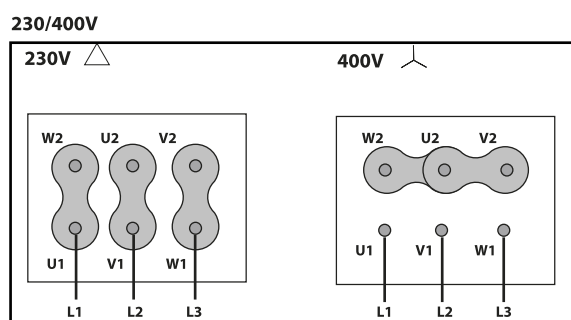
Model	A	B	C	D	F	G	I
KENTALCOOK 315 M4 0,25kW	585	585	525	353	647	275	697
KENTALCOOK 315 T2 1,5kW	585	585	525	353	647	275	697
KENTALCOOK 315 T4 0,25kW	585	585	525	353	647	275	697
KENTALCOOK 315 T4/T8 0,25/0,03kW	585	585	525	353	647	275	697
KENTALCOOK 355 M4 0,25kW	650	650	590	398	712	340	762
KENTALCOOK 355 T4 0,25kW	650	650	590	398	712	340	762
KENTALCOOK 355 T4/T8 0,25/0,03kW	650	650	590	398	712	340	762
KENTALCOOK 400 M4 0,55kW	730	730	670	448	792	420	842
KENTALCOOK 400 T4 0,55kW	730	730	670	448	792	420	842
KENTALCOOK 400 T4/T8 0,75/0,12kW	730	730	670	448	792	420	842
KENTALCOOK 450 T4 1,1kW	880	880	820	498	942	570	992
KENTALCOOK 450 T4/T8 1,1/0,18kW	880	880	820	498	942	570	992
KENTALCOOK 500 T4 1,5kW	940	940	880	558	1002	630	1052
KENTALCOOK 500 T6 0,55kW	940	940	880	558	1002	630	1052
KENTALCOOK 500 T4/T8 1,5/0,25kW	940	940	880	558	1002	630	1052
KENTALCOOK 560 T4 3kW	1030	1030	970	628	1092	720	1142
KENTALCOOK 560 T6 1,1kW	1030	1030	970	628	1092	720	1142
KENTALCOOK 560 T4/T8 3/0,55kW	1030	1030	970	628	1092	720	1142
KENTALCOOK 630 T4 5,5kW	1120	1120	1060	708	1182	810	1232
KENTALCOOK 630 T6 1,5kW	1120	1120	1060	708	1182	810	1232
KENTALCOOK 630 T4/T8 5,5/1,1kW	1120	1120	1060	708	1182	810	1232

Wiring diagram

Wiring diagram N° 1

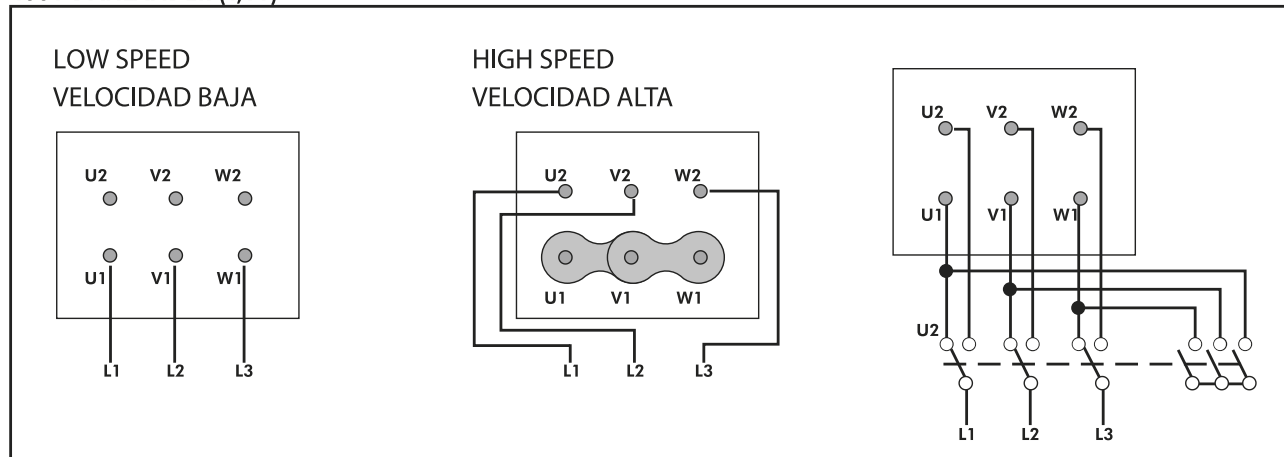


Wiring diagram N° 2



Wiring diagram Nº 3

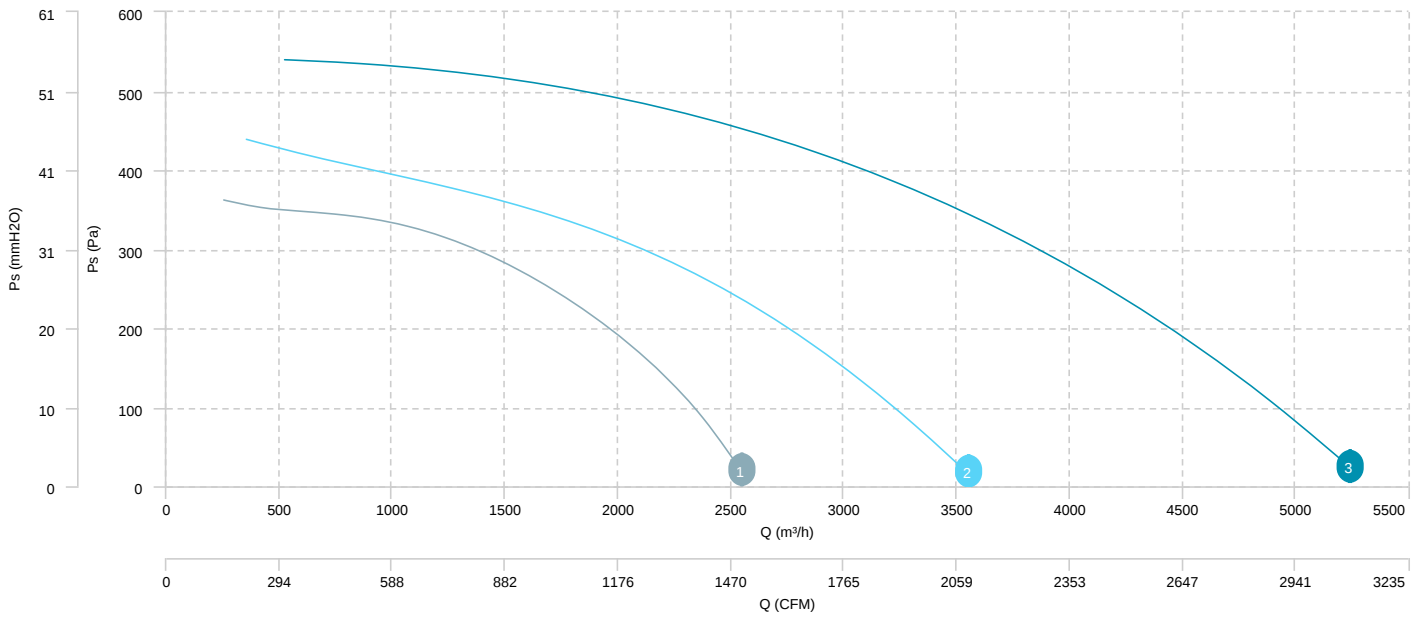
400V DAHLANDER (Y,YY)



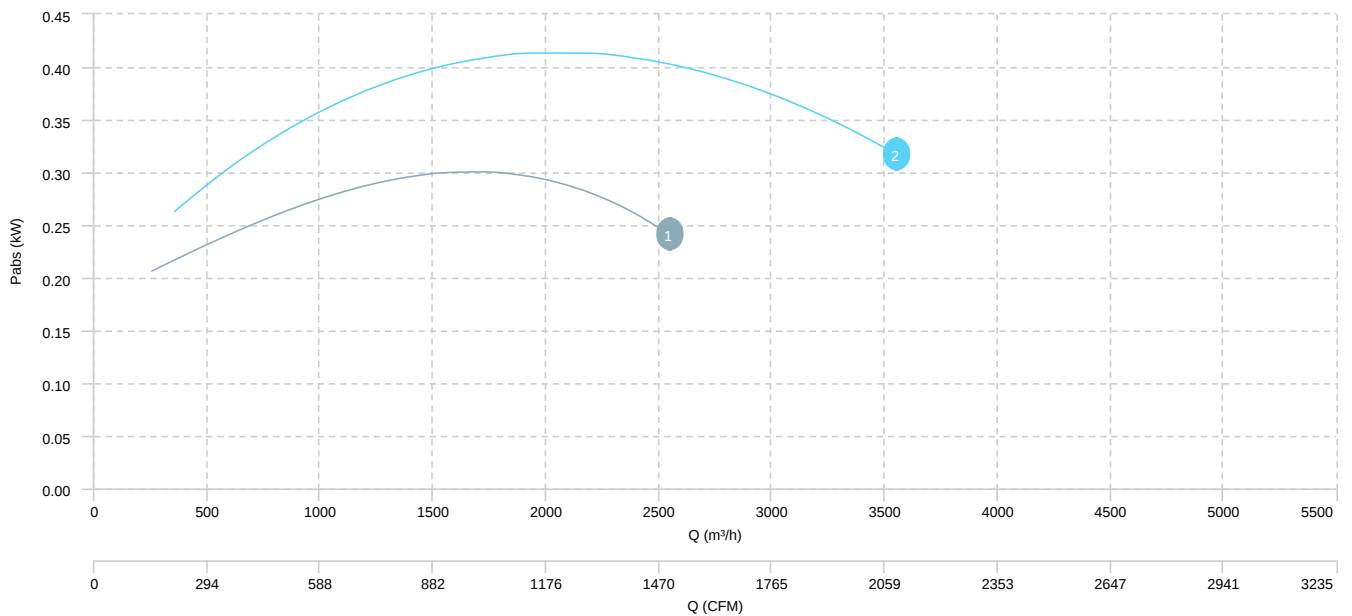
CHARACTERISCTIC CURVE

- 1 KENTALCOOK 315 M4 0, 25kW
- 2 KENTALCOOK 355 M4 0, 25kW
- 3 KENTALCOOK 400 M4 0, 55kW

AIR FLOW - PRESSURE

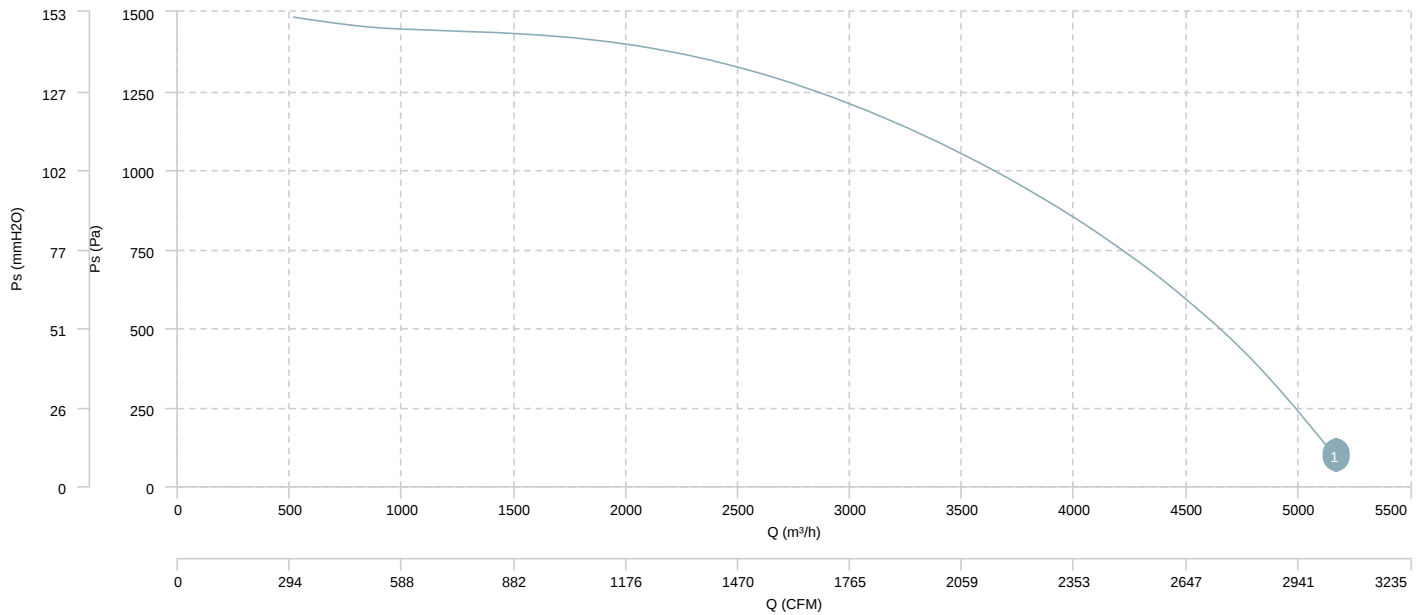


AIR FLOW - ABSORBED POWER

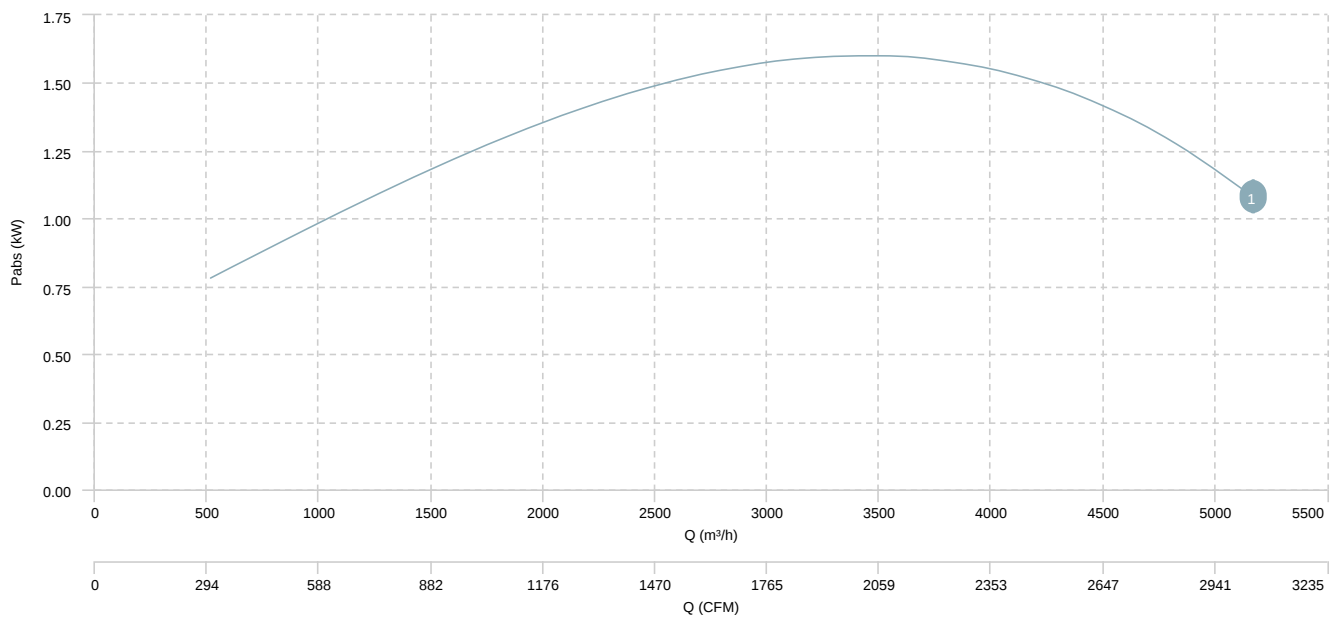


1 KENTALCOOK 315 T2 1,
5kW

AIR FLOW - PRESSURE

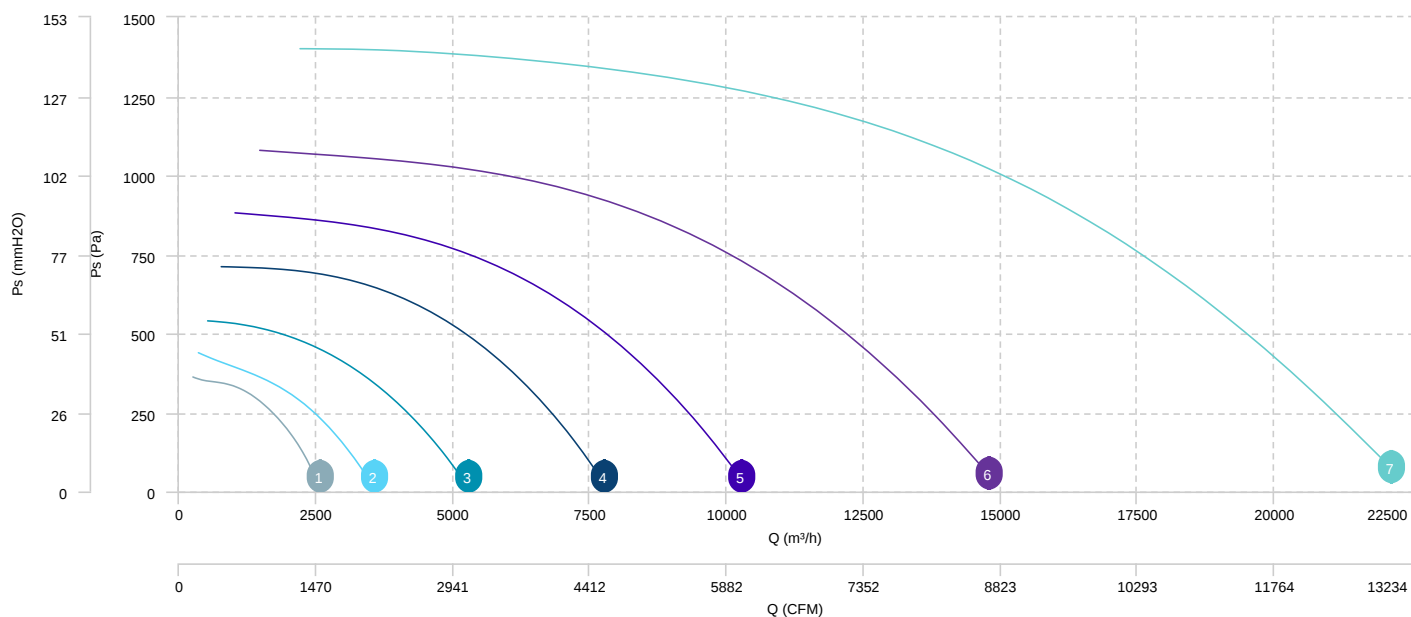


AIR FLOW - ABSORBED POWER

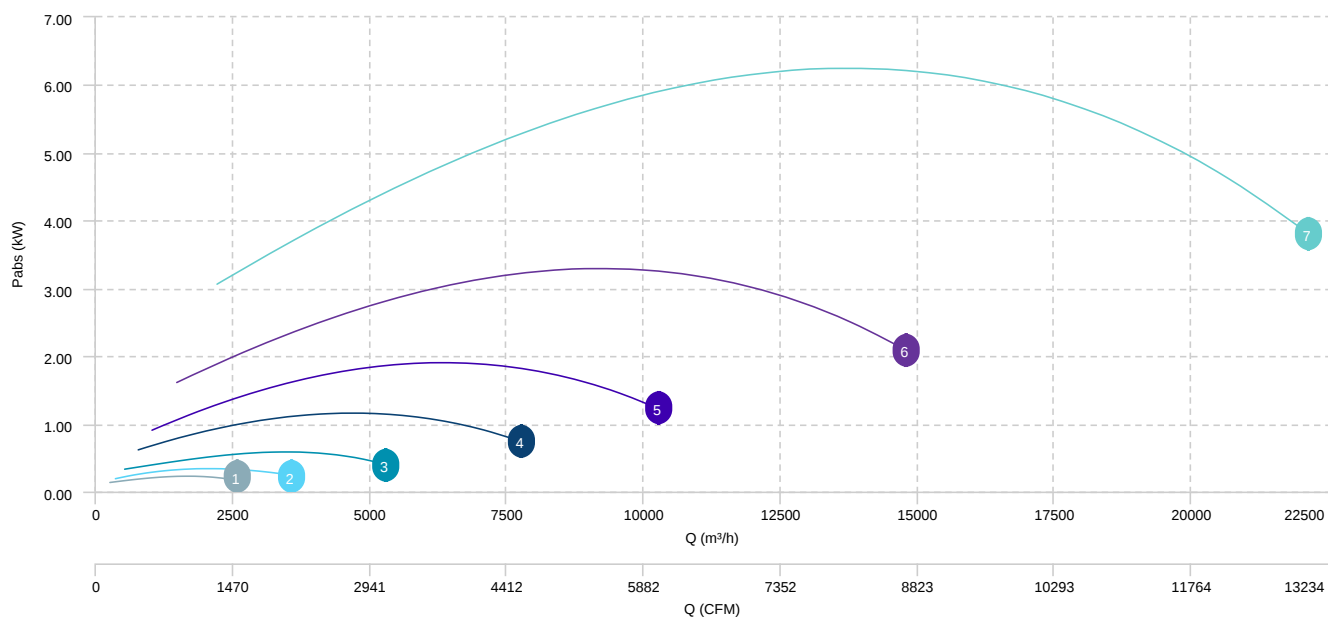


1	KENTALCOOK 315 T4 0, 25kW	2	KENTALCOOK 355 T4 0, 25kW	3	KENTALCOOK 400 T4 0, 55kW	4	KENTALCOOK 450 T4 1, 1kW
5	KENTALCOOK 500 T4 1, 5kW	6	KENTALCOOK 560 T4 3kW	7	KENTALCOOK 630 T4 5, 5kW		

AIR FLOW - PRESSURE



AIR FLOW - ABSORBED POWER

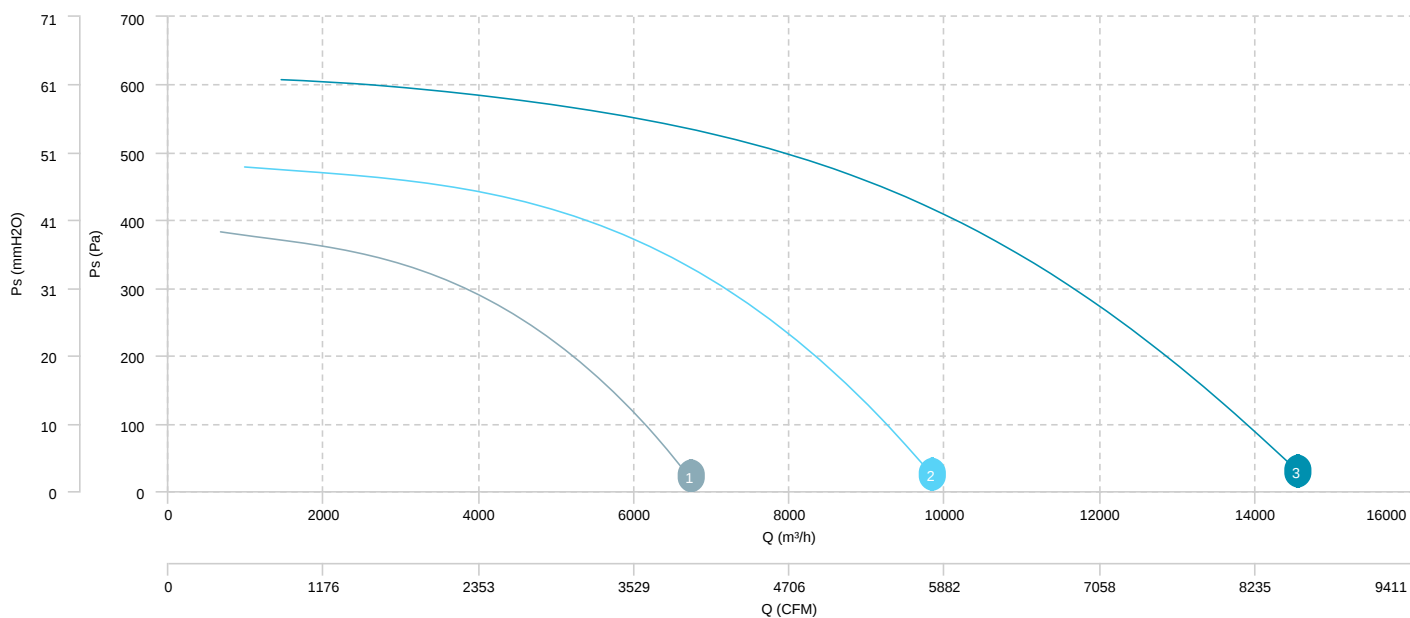


1 KENTALCOOK 500 T6 0,
55kW

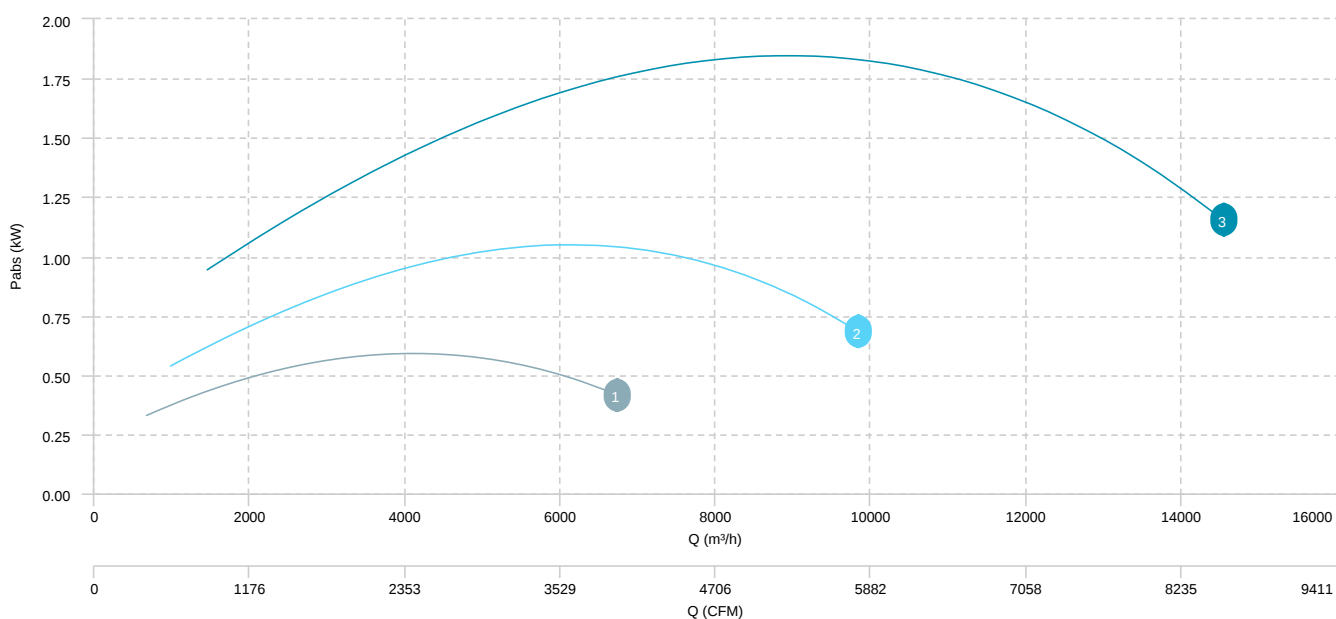
2 KENTALCOOK 560 T6 1,
1kW

3 KENTALCOOK 630 T6 1,
5kW

AIR FLOW - PRESSURE

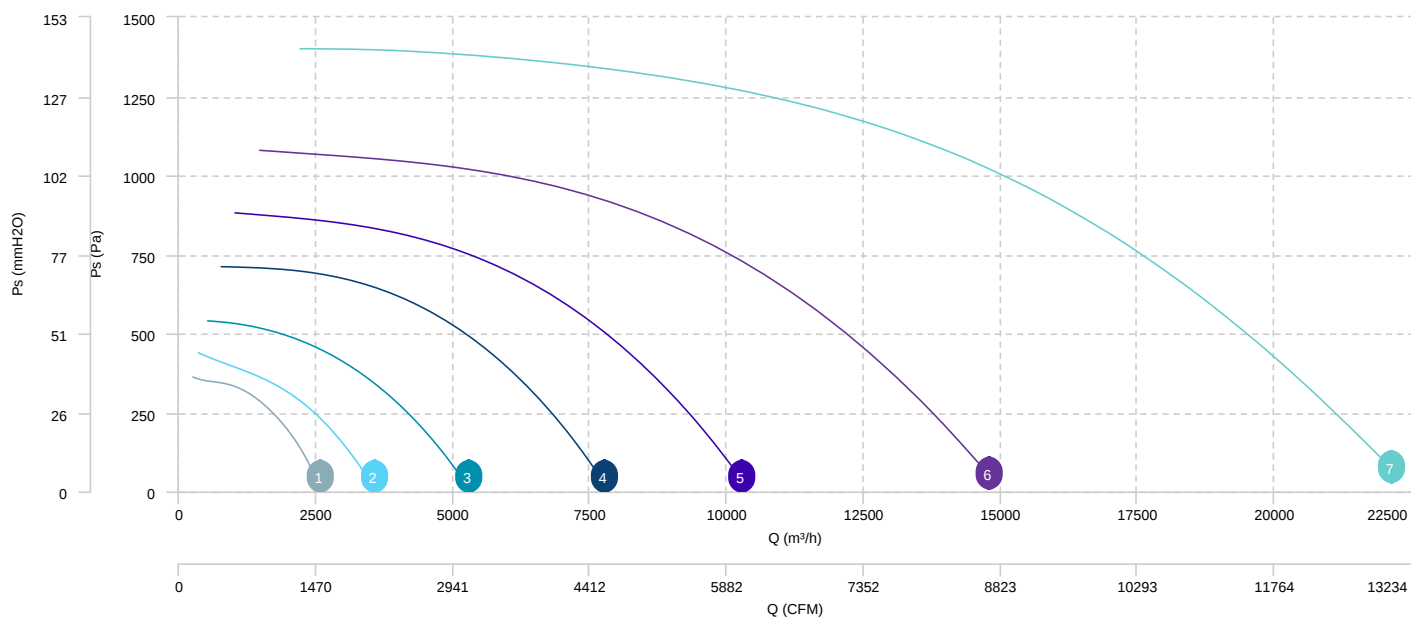


AIR FLOW - ABSORBED POWER



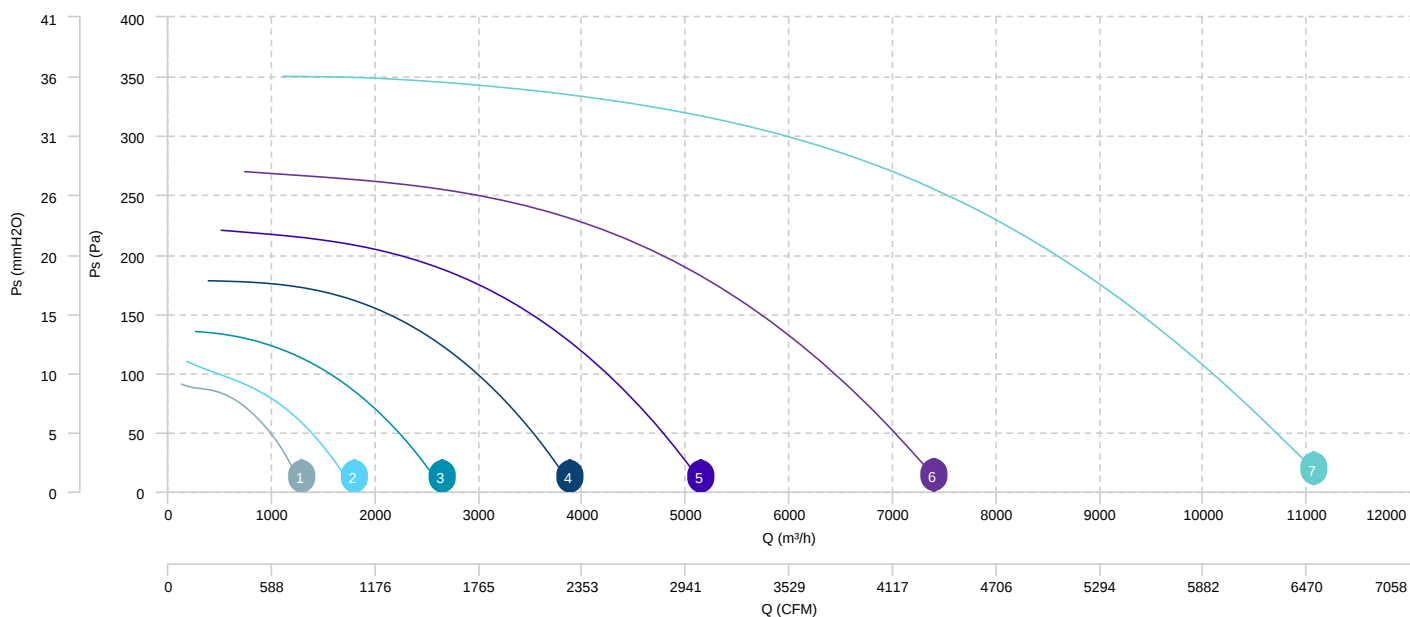
1	KENTALCOOK 315 T4/T8 0,25/0,03kW	2	KENTALCOOK 355 T4/T8 0,25/0,03kW	3	KENTALCOOK 400 T4/T8 0,75/0,12kW	4	KENTALCOOK 450 T4/T8 1,1/0,18kW
5	KENTALCOOK 500 T4/T8 1,5/0,25kW	6	KENTALCOOK 560 T4/T8 3/0,55kW	7	KENTALCOOK 630 T4/T8 5,5/1,1kW		

AIR FLOW - PRESSURE (4 poles)



1	KENTALCOOK 315 T4/T8 0,25/0,03kW	2	KENTALCOOK 355 T4/T8 0,25/0,03kW	3	KENTALCOOK 400 T4/T8 0,75/0,12kW	4	KENTALCOOK 450 T4/T8 1,1/0,18kW
5	KENTALCOOK 500 T4/T8 1,5/0,25kW	6	KENTALCOOK 560 T4/T8 3/0,55kW	7	KENTALCOOK 630 T4/T8 5,5/1,1kW		

AIR FLOW - PRESSURE (8 poles)



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
KENTALCOOK 315 T2 1,5kW	Radiated	68	72	82	79	76	79	80	65	85

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
KENTALCOOK 315 M4 0,25kW	Radiated	52	56	66	63	59	63	63	48	69
KENTALCOOK 315 T4 0,25kW	Radiated	52	56	66	63	59	63	63	48	69
KENTALCOOK 355 M4 0,25kW	Radiated	56	66	64	64	62	69	56	50	71
KENTALCOOK 355 T4 0,25kW	Radiated	56	66	64	64	62	69	56	50	71
KENTALCOOK 400 M4 0,55kW	Radiated	59	70	68	67	66	72	59	54	74
KENTALCOOK 400 T4 0,55kW	Radiated	59	70	68	67	66	72	59	54	74
KENTALCOOK 450 T4 1,1kW	Radiated	63	71	70	71	70	76	62	56	78
KENTALCOOK 500 T4 1,5kW	Radiated	67	74	74	75	73	79	66	60	81
KENTALCOOK 560 T4 3kW	Radiated	87	81	81	80	80	75	64	62	81
KENTALCOOK 630 T4 5,5kW	Radiated	91	85	84	84	83	80	67	65	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
KENTALCOOK 500 T6 0,55kW	Radiated	58	65	64	65	64	70	57	50	72
KENTALCOOK 560 T6 1,1kW	Radiated	81	75	75	74	74	70	58	56	75
KENTALCOOK 630 T6 1,5kW	Radiated	82	75	75	74	74	71	58	56	76

Sound / 4/8 poles

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
KENTALCOOK 315 T4/T8 0,25/0,03kW (8p)	Radiated	36	40	50	47	44	47	47	33	53
KENTALCOOK 355 T4/T8 0,25/0,03kW (8p)	Radiated	40	50	48	48	47	53	40	34	55

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
KENTALCOOK 400 T4/T8 0,75/0, 12kW (8p)	Radiated	43	54	52	51	50	56	43	38	59
KENTALCOOK 450 T4/T8 1,1/0, 18kW (8p)	Radiated	48	55	55	56	54	60	47	41	62
KENTALCOOK 500 T4/T8 1,5/0, 25kW (8p)	Radiated	51	58	58	59	57	63	50	44	66
KENTALCOOK 560 T4/T8 3/0, 55kW (8p)	Radiated	71	65	65	64	64	60	48	46	66
KENTALCOOK 630 T4/T8 5,5/1, 1kW (8p)	Radiated	75	69	69	68	67	64	52	49	70

Notes:

* To calculate the sound power level at different rpm from those indicated above, use the following formula:

$$Lw \text{ dB(A)}_{rpmA} = Lw \text{ dB(A)}_{rpmB} + 52.5 \cdot \log_{10} \frac{rpmA}{rpmB}$$