

KENTALFAN



PLUG FAN WITH IEC MOTOR

Medium size plug fan available from Ø315mm to Ø630mm.

It offers flows up to 22.300m³/h and pressures up to 1.200Pa.

MANUFACTURING FEATURES

Latest generation impeller made of galvanized sheet metal with built-in diffuser to increase efficiency. Self-cleaning impeller with backward curved (reaction) blades, high performance and single inlet, direct driven. Dynamically balanced to minimize noise and vibration.

Galvanized sheet metal structure for small sizes up to Ø400mm, and the rest of the models in pickled sheet metal painted with black epoxy polyester.

IEC standard asynchronous squirrel cage motor with IP-55 protection and class F electrical 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.

Accessories



INT



SFC

APPLICATIONS

Ideal to integrate in air conditioners, plenums, compressors, dryers, booths, photovoltaic inverters.

Maximum continuous working temperature: 60°C.

System prepared to comply with future European efficiency regulations (ErP).

UNDER REQUEST

Other possible fabrications up to 100°C and up to IP66.

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
248314103	KENTALFAN 315 M4 0,25kW	1410	1,6	0,25	2.590	-	15	1
248354103	KENTALFAN 355 M4 0,25kW	1410	1,6	0,25	3.610	-	17	1
248404103	KENTALFAN 400 M4 0,55kW	1400	3,98	0,55	5.340	-	26	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					
248312106	KENTALFAN 315 T2 1,5kW	2865	5,83	3,14	1,50	5.260	-	16	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					
248314106	KENTALFAN 315 T4 0,25kW	1400	1,38	0,79	0,25	2.590	-	15	2
248354106	KENTALFAN 355 T4 0,25kW	1400	1,38	0,79	0,25	3.610	-	17	2
248404106	KENTALFAN 400 T4 0,55kW	1440	2,57	1,49	0,55	5.340	-	26	2
248454106	KENTALFAN 450 T4 1,1kW	1450	4,33	2,49	1,10	7.870	-	33	2
248504106	KENTALFAN 500 T4 1,5kW	1450	5,67	3,26	1,50	10.430	-	52	2
248564106	KENTALFAN 560 T4 3kW	1420	10,7	6,17	3,00	15.040	-	62	2
248634106	KENTALFAN 630 T4 5,5kW	1460	-	10,5	5,50	22.550	-	82	2

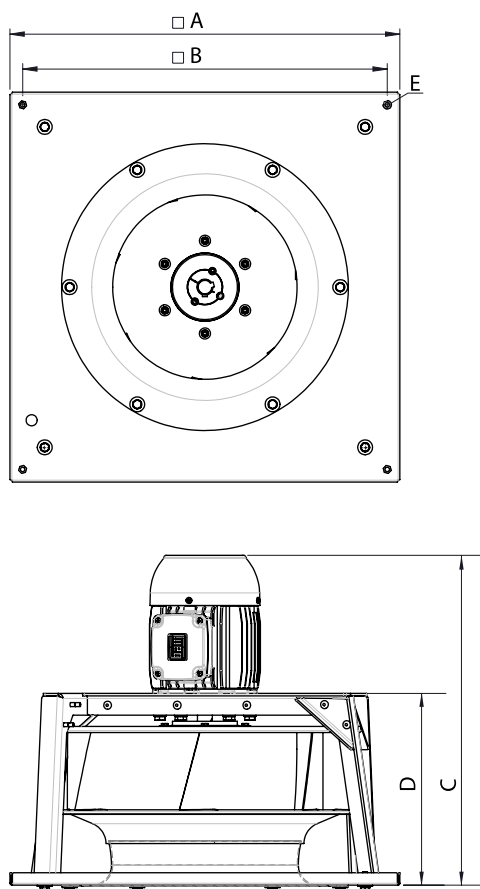
Three-phase motor / 6 poles

Code	Model	R.P.M.	Rated I. A		Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
			230V	400V					
248506106	KENTALFAN 500 T6 0,55kW	900	3,00	1,8	0,55	6.850	-	50	2
248566106	KENTALFAN 560 T6 1,1kW	925	4,83	2,78	1,10	10.020	-	60	2
248636106	KENTALFAN 630 T6 1,5kW	940	6,45	3,71	1,50	14.820	-	71	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

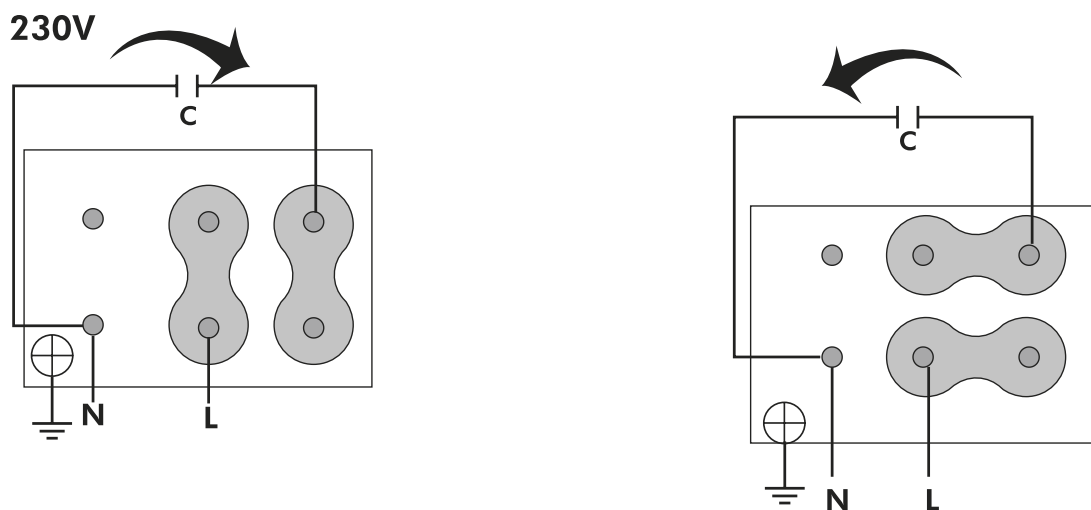
Dimensions



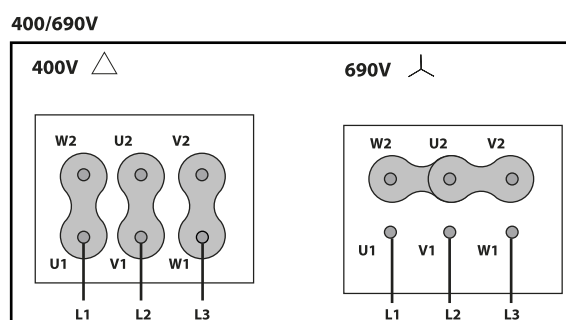
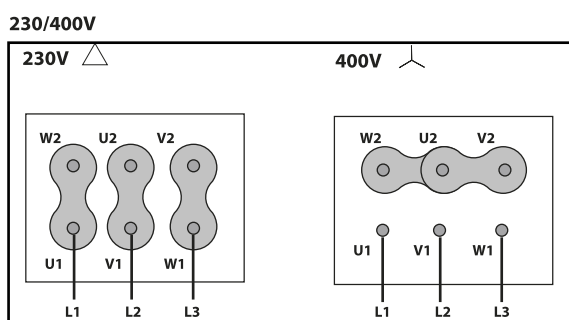
Model	A	B	D	E	±C
KENTALFAN 315 M4 0,25kW	450	410	227.4	M8	422.4
KENTALFAN 315 T2 1,5kW	450	410	227.4	M8	448.2
KENTALFAN 315 T4 0,25kW	450	410	227.4	M8	422.4
KENTALFAN 355 M4 0,25kW	500	460	250.8	M8	445.8
KENTALFAN 355 T4 0,25kW	500	460	250.8	M8	445.8
KENTALFAN 400 M4 0,55kW	560	520	282.55	M8	506.65
KENTALFAN 400 T4 0,55kW	560	520	282.55	M8	506.65
KENTALFAN 450 T4 1,1kW	631	590	310.05	M8	533.05
KENTALFAN 500 T4 1,5kW	711	670	346.25	M10	566.95
KENTALFAN 500 T6 0,55kW	711	670	346.25	M10	520
KENTALFAN 560 T4 3kW	801	760	386.85	M10	667.55
KENTALFAN 560 T6 1,1kW	801	760	386.85	M10	620
KENTALFAN 630 T4 5,5kW	901	860	421.55	M10	794.35
KENTALFAN 630 T6 1,5kW	901	860	421.55	M10	700.65

Wiring diagram

Wiring diagram N° 1



Wiring diagram N° 2



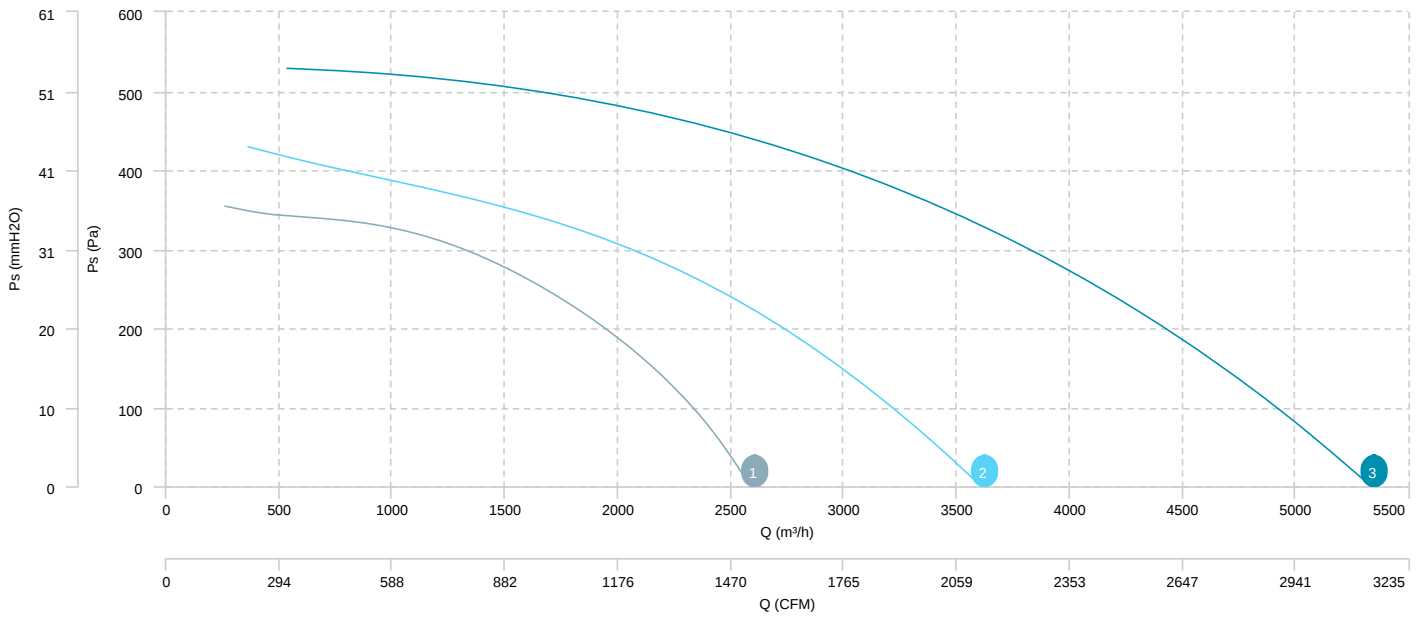
CHARACTERISCTIC CURVE

1 KENTALFAN 315 M4 0,
25kW

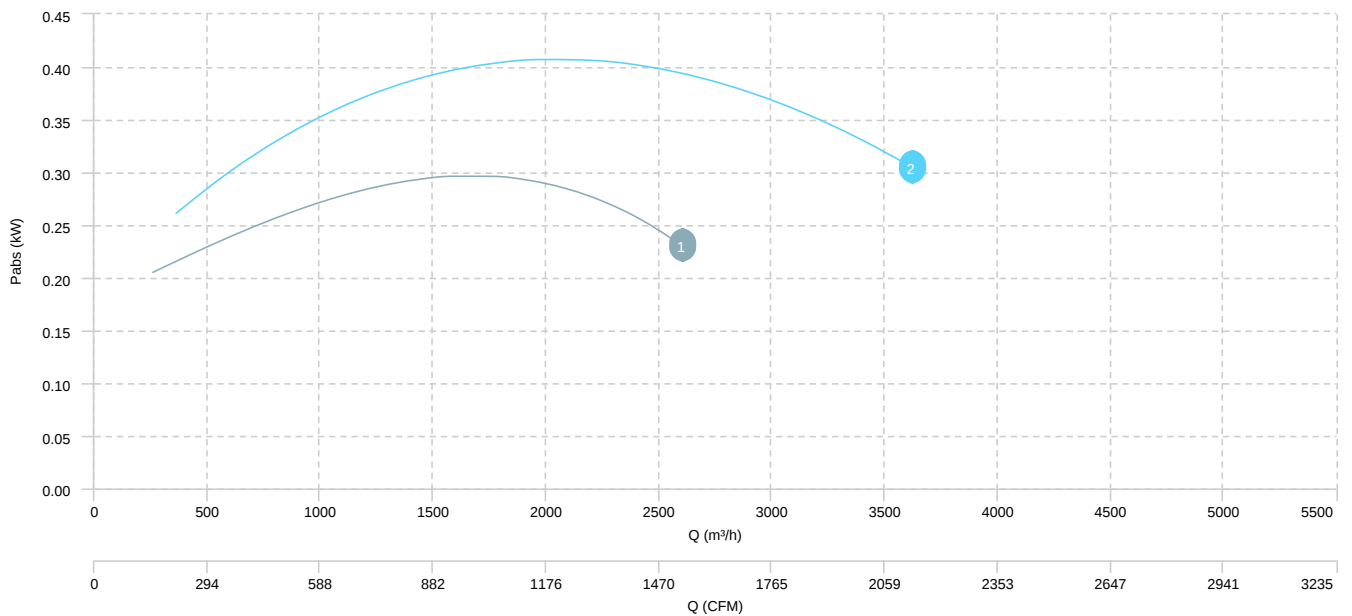
2 KENTALFAN 355 M4 0,
25kW

3 KENTALFAN 400 M4 0,
55kW

AIR FLOW - PRESSURE

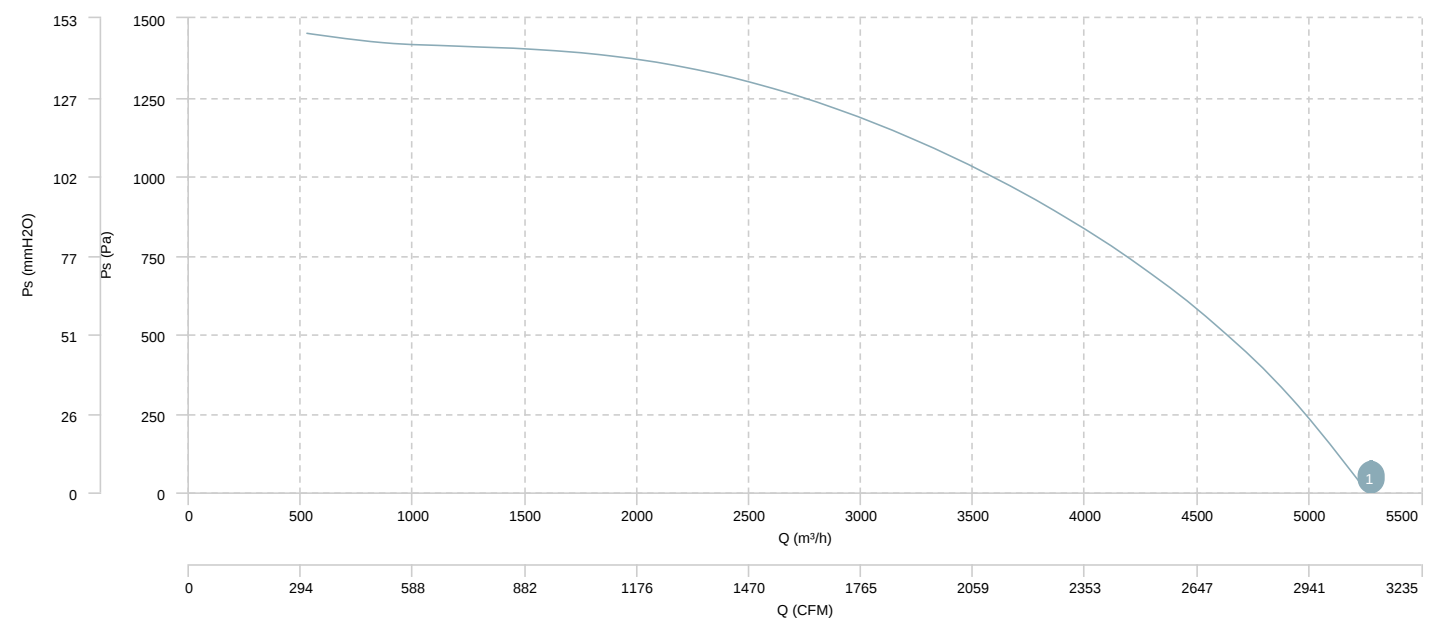


AIR FLOW - ABSORBED POWER

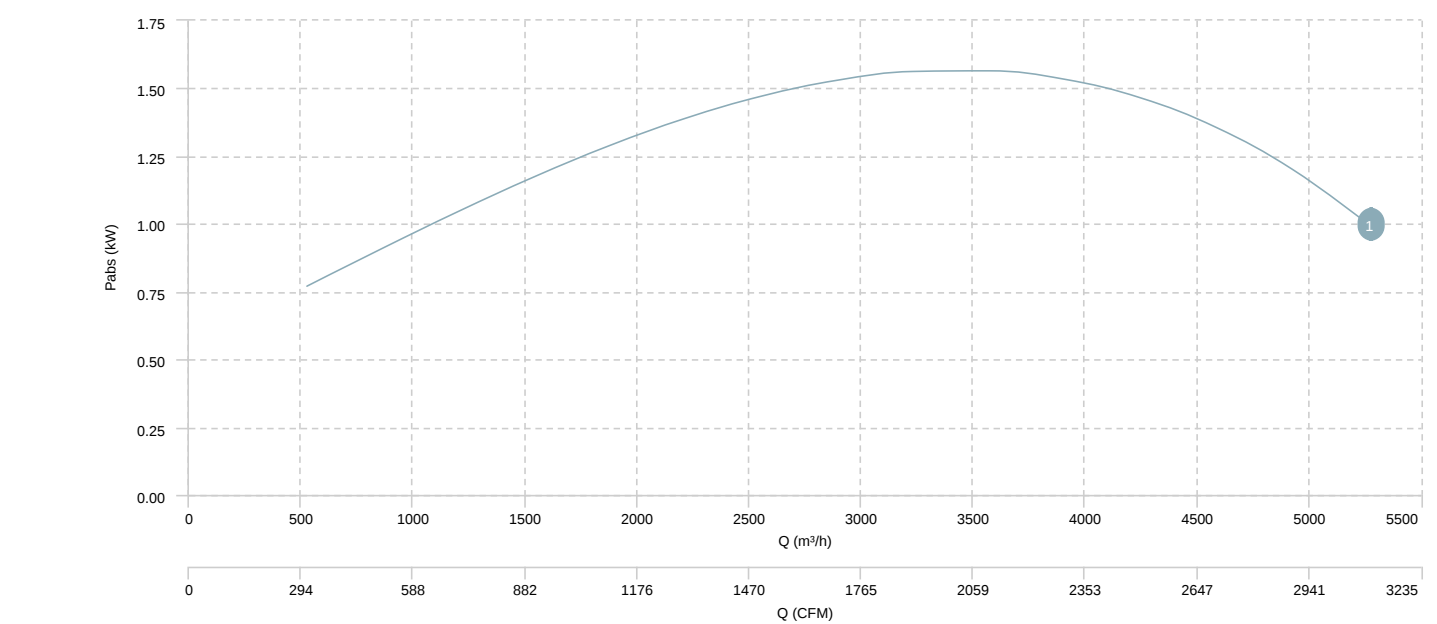


1 KENTALFAN 315 T2 1,5kW

AIR FLOW - PRESSURE

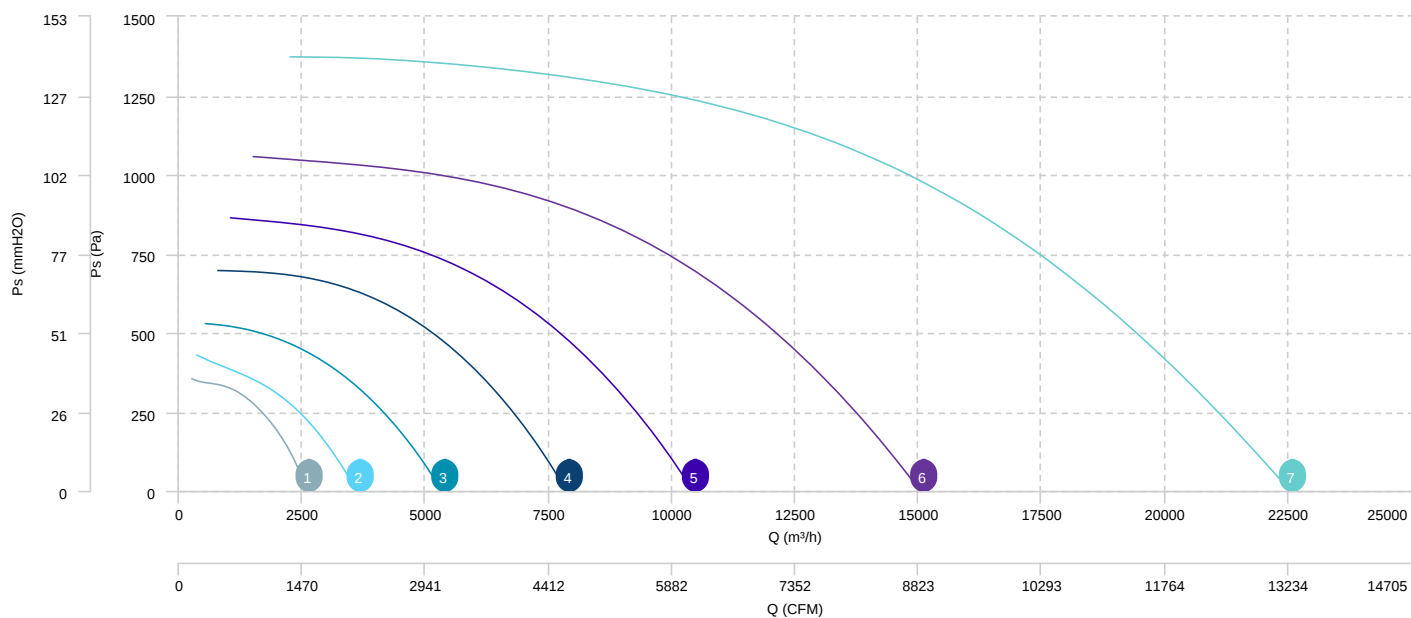


AIR FLOW - ABSORBED POWER

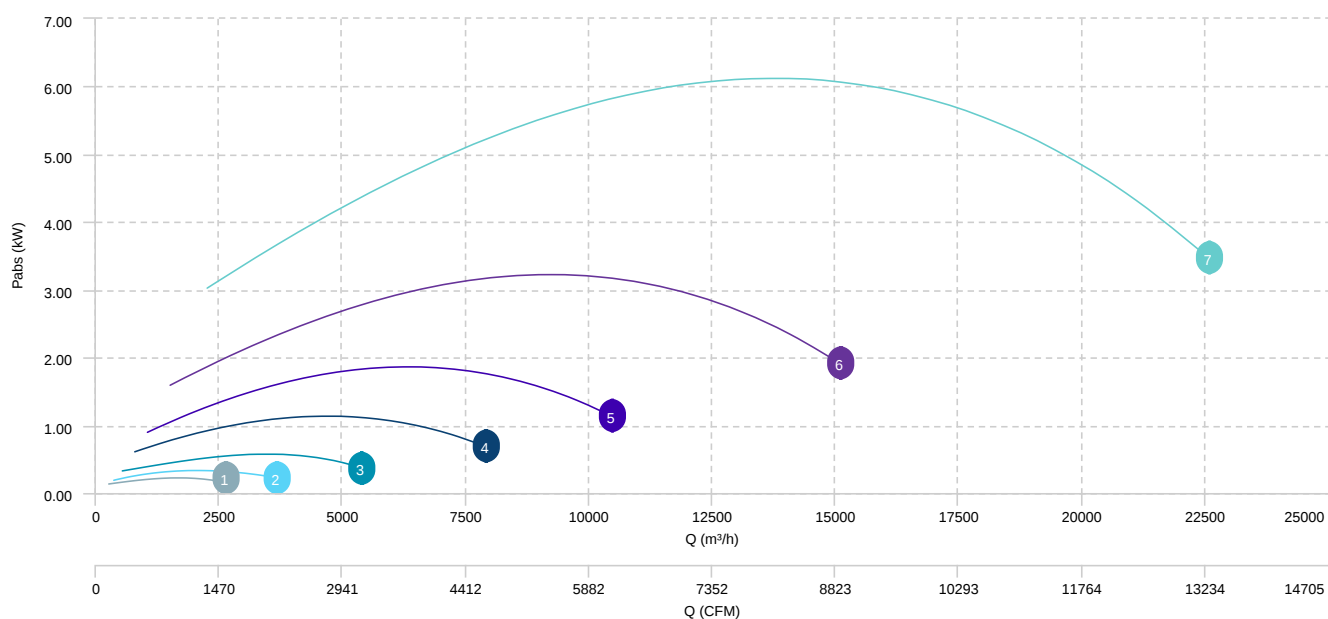


1	KENTALFAN 315 T4 0, 25kW	2	KENTALFAN 355 T4 0, 25kW	3	KENTALFAN 400 T4 0, 55kW	4	KENTALFAN 450 T4 1,1kW
5	KENTALFAN 500 T4 1,5kW	6	KENTALFAN 560 T4 3kW	7	KENTALFAN 630 T4 5,5kW		

AIR FLOW - PRESSURE

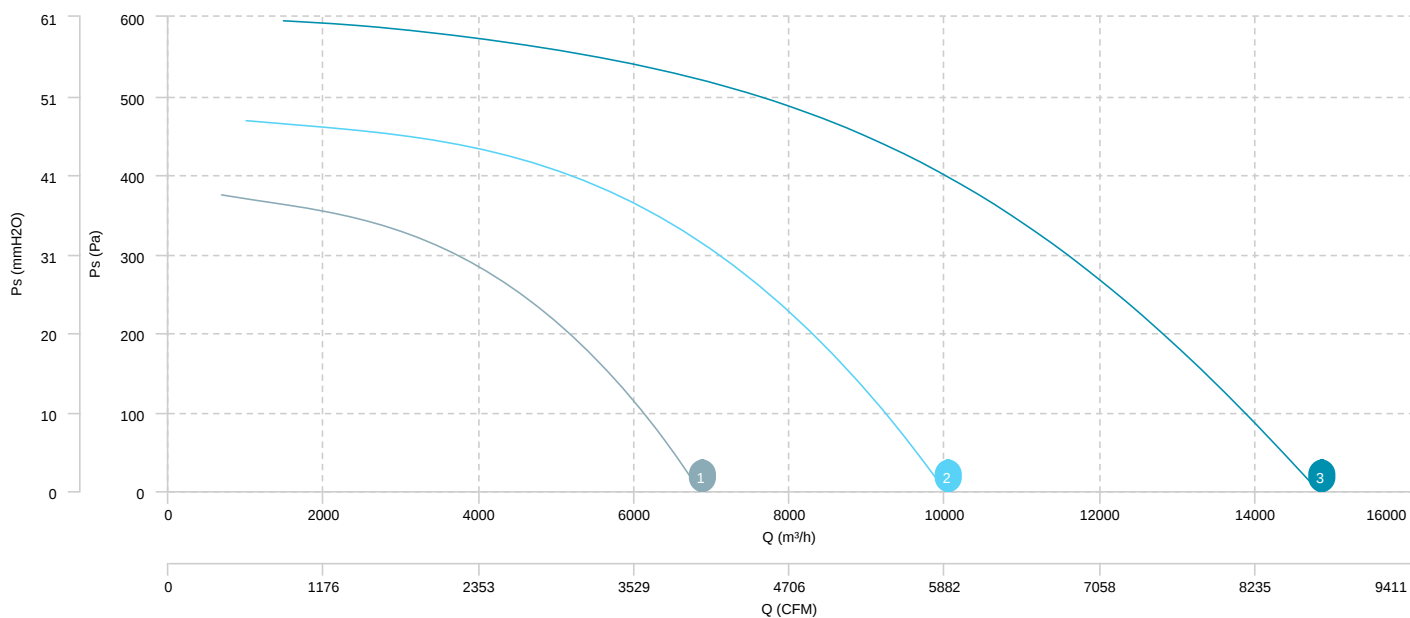


AIR FLOW - ABSORBED POWER

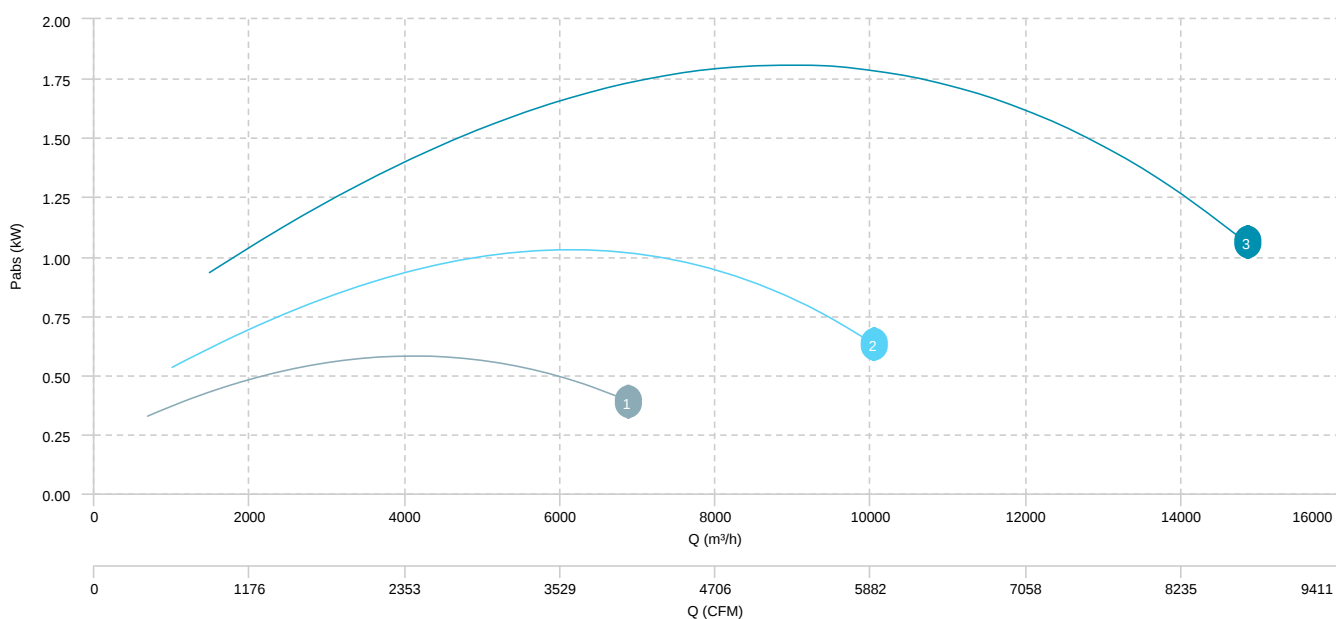


- 1 KENTLFAN 500 T6 0,55kW
- 2 KENTLFAN 560 T6 1,1kW
- 3 KENTLFAN 630 T6 1,5kW

AIR FLOW - PRESSURE



AIR FLOW - ABSORBED POWER



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

erp data

ERP	
Fan type	Centrifugal fan backward blades without casing
Installation category	A
Efficiency category	Static
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)	Ps (Pa)	Pabs (kW)	speed (rpm)	Specific ratio
KENTALFAN 315 T2 1,5kW	1,5	68,42	76,89	3.218,58	1.121,74	1,56	2865	1,01

ERP / 4 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
KENTALFAN 315 T4 0,25kW	0,25	55,27	72,63	1.586,47	264,22	0,22	1400	1,00
KENTALFAN 355 T4 0,25kW	0,25	54,14	69,69	2.202,75	282,28	0,33	1400	1,00
KENTALFAN 400 T4 0,55kW	0,55	62,16	75,25	3.096,61	391,83	0,57	1440	1,00
KENTALFAN 450 T4 1,1kW	1,10	66,59	76,52	4.906,11	525,85	1,13	1450	1,01
KENTALFAN 500 T4 1,5kW	1,50	65,27	72,94	6.464,83	642,69	1,86	1450	1,01
KENTALFAN 560 T4 3kW	3	67,58	72,74	9.324,54	798,80	3,22	1420	1,01
KENTALFAN 630 T4 5,5kW	5,50	70,94	73,19	14.099,99	1.050,76	6,12	1460	1,01

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
KENTALFAN 500 T6 0,55kW	0,55	57,20	70,19	4.213,44	271,10	0,58	900	1,00
KENTALFAN 560 T6 1,1kW	1,1	62,31	72,69	6.202,70	353,72	1,03	925	1,00
KENTALFAN 630 T6 1,5kW	1,50	65,34	73,15	9.191,60	440,02	1,81	940	1,00