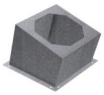
KENTALROOF F400

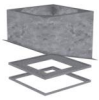
Accessories

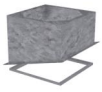
AC

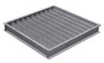
BAD


BTI

BTI+AC MP


BTI+AC MP+A MC


BTI+A MC


CMP-H UT

INT

KV KENTA LROOF

SFC

SIL-C / SIL-CN

ROOF FAN WITH HINGED SYSTEM AND ABS COWL F400

MANUFACTURING FEATURES:

- ABS protection cowl easily removable for access to motor and impeller thanks to the integrated folding system. The ABS cowl is characterized by its toughness, resistance to impacts and is able to withstand extreme ambient temperatures. 100% of the ABS used in the this cowl is recycled.
- The design of the cowl with a **rounded shape** is specific to minimize the risk of water ingress due to rain.
- Equipped with a **hinged system** to open the motor-impeller set. This system allows easy maintenance and cleaning of the set without the need to disassemble the entire structure. The opening is possible in 2 inclinations: approximately 45º and 90º, as required by the intervention.
- Structure in anticorrosive galvanized steel or Magnelis® steel, a metallic coating with high corrosion resistance, equivalent to a C5 finish. Support frame for adaptation to the roof with anti-bird protection grid included.
- High-performance, backward-curved blade (reaction) impellers designed to work without scroll. Self-cleaning system, built in galvanized steel treated with anti-corrosion.
- Standard asynchronous squirrel cage motor with IP-55 protection and Class F insulation. Standard voltages 230V 50Hz for single phase motors, 230/400V 50Hzfor three phase motors up to 4kW & 400/690V 50Hz for higher powers and 400V 50Hz for 2 speed motors.

APPLICATIONS

Designed for deck or roof mounting, they are indicated for:

- Smoke extraction.
- Air renewal in all types of buildings and industries.
- Maximum continuous working temperature: transported air 80ºC, ambient 60ºC to -25ºC in three-phase motors.

Official homologation by the European laboratory APPLUS according to EN 12101-3:2015
Certification Nr: 0370-CPR-7343

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
27931471PAM	KENTALROOF 315 M4 0,25kW F400	1410	1,6	0,25	2.590	-	35,50	1
27935471PAM	KENTALROOF 355 M4 0,25kW F400	1410	1,6	0,25	3.610	-	41	1
27940480PAM	KENTALROOF 400 M4 0,55kW F400	1400	3,98	0,55	5.340	-	45	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					
27931290PA	KENTALROOF 315 T2 1,5kW F400	2865	5,83	3,14	1,50	5.260	-	36	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					
27931471PA	KENTALROOF 315 T4 0,25kW F400	1400	1,38	0,79	0,25	2.590	-	35,50	2
27935471PA	KENTALROOF 355 T4 0,25kW F400	1400	1,38	0,79	0,25	3.610	-	41	2
27940480PA	KENTALROOF 400 T4 0,55kW F400	1440	2,57	1,49	0,55	5.340	-	45	2
27945490PA	KENTALROOF 450 T4 1,1kW F400	1450	4,33	2,49	1,10	7.870	-	85	2
27950491PA	KENTALROOF 500 T4 1,5kW F400	1450	5,67	3,26	1,50	10.430	-	96	2
279564100PA	KENTALROOF 560 T4 3kW F400	1420	10,7	6,17	3,00	15.040	-	104	2
279634132PA	KENTALROOF 630 T4 5,5kW F400	1460	-	10,5	5,50	22.550	-	140	3

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					
27950680PA	KENTALROOF 500 T6 0,55kW F400	900	3,00	1,8	0,55	6.850	-	95	2
27956690PA	KENTALROOF 560 T6 1,1kW F400	925	4,83	2,78	1,10	10.020	-	103	2

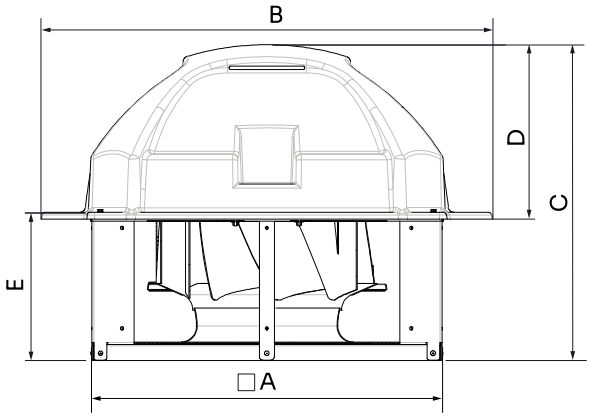
Code	Model	R.P.M.	Rated I. A		Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
			230V	400V					
279634100PA	KENTALROOF 630 T6 1,5kW F400	940	6,45	3,71	1,50	14.820	-	130	2

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)**	Weight kg	Connect. diagram
27931471PA2V	KENTALROOF 315 T4/T8 0,25/0, 03kW F400	1370	1,13/0,37	0,25	2.590	-	35,50	4
27935471PA2V	KENTALROOF 355 T4/T8 0,25/0, 03kW F400	1370	1,13/0,37	0,25	3.610	-	41	4
27940480PA2V	KENTALROOF 400 T4/T8 0,75/0, 12kW F400	1400	2,03/0,68	0,75	5.340	-	45	4
27945490PA2V	KENTALROOF 450 T4/T8 1,1/0, 18kW F400	1400	2,67/1,08	1,10	7.870	-	85	4
27950491PA2V	KENTALROOF 500 T4/T8 1,5/0, 25kW F400	1400	3,46/1,27	1,50	10.430	-	96	4
279564100PA2V	KENTALROOF 560 T4/T8 3/0,55kW F400	1430	6,53/2,33	3,00	15.040	-	104	4
279634132PA2V	KENTALROOF 630 T4/T8 5,5/1,1kW F400	1450	10,73/3,82	5,50	22.550	-	140	4

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

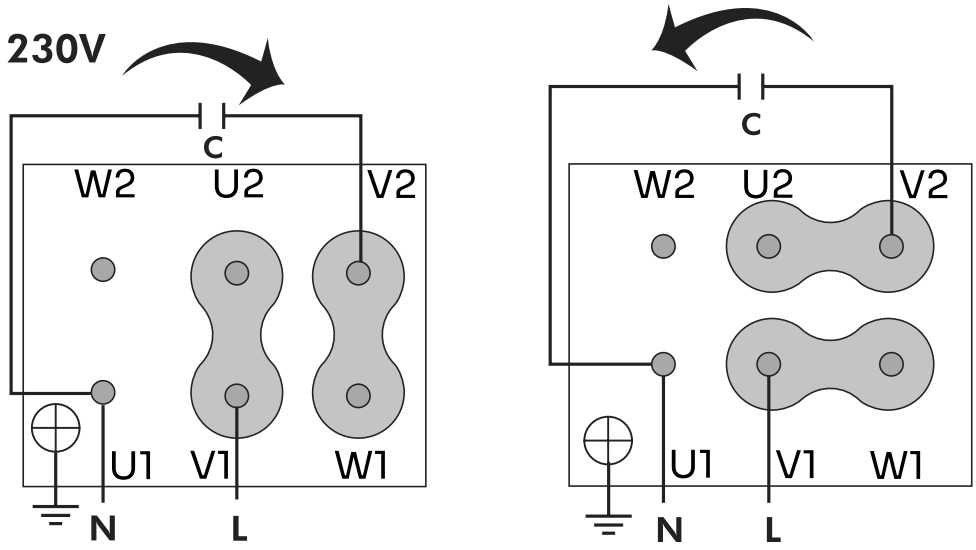
Dimensions



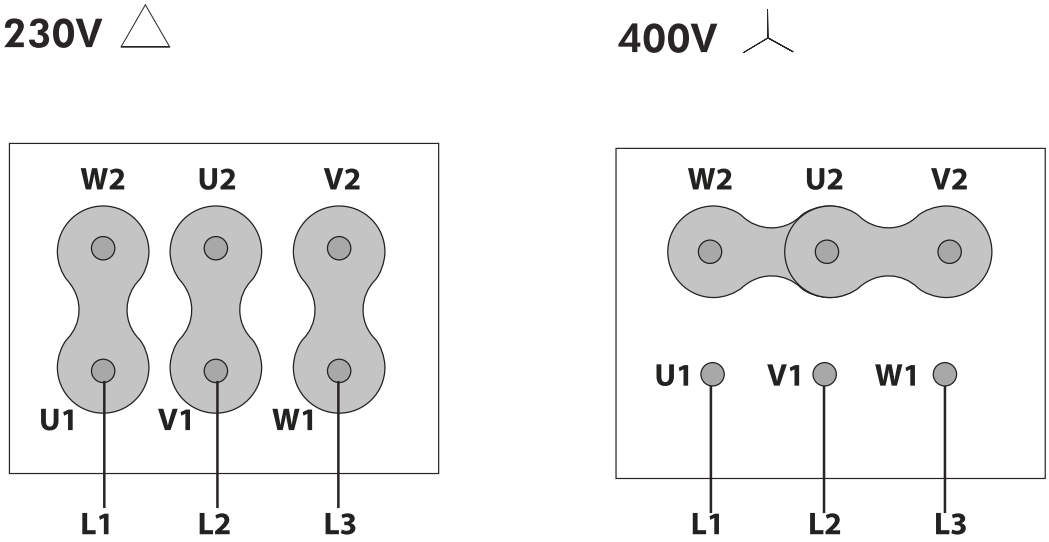
Model	A (int)	B	C	D	E	Ø duct	Øinlet
KENTALROOF 315 M4 0,25kW F400	592	765	601	365	249	-	-
KENTALROOF 315 T2 1,5kW F400	592	765	601	365	249	-	-
KENTALROOF 315 T4 0,25kW F400	592	765	601	365	249	315	218
KENTALROOF 315 T4/T8 0,25/0,03kW F400	592	765	601	365	249	315	218
KENTALROOF 355 M4 0,25kW F400	662	865.3	624.5	365	272.5	-	-
KENTALROOF 355 T4 0,25kW F400	662	865.3	624.5	365	272.5	355	246
KENTALROOF 355 T4/T8 0,25/0,03kW F400	662	865.3	624.5	365	272.5	355	246
KENTALROOF 400 M4 0,55kW F400	662	865.3	647.5	365	295.5	-	-
KENTALROOF 400 T4 0,55kW F400	662	865.3	647.5	365	295.5	400	278
KENTALROOF 400 T4/T8 0,75/0,12kW F400	662	865.3	647.5	365	295.5	400	278
KENTALROOF 450 T4 1,1kW F400	936	1227	775.8	470	323.8	450	312
KENTALROOF 450 T4/T8 1,1/0,18kW F400	936	1227	775.8	470	323.8	450	312
KENTALROOF 500 T4 1,5kW F400	936	1227	812	470	360	500	346.5
KENTALROOF 500 T6 0,55kW F400	936	1227	812	470	360	500	346.5
KENTALROOF 500 T4/T8 1,5/0,25kW F400	936	1227	812	470	360	500	346.5
KENTALROOF 560 T4 3kW F400	936	1227	849.6	470	397.6	560	388.1
KENTALROOF 560 T6 1,1kW F400	936	1227	849.6	470	397.6	560	388.1
KENTALROOF 560 T4/T8 3/0,55kW F400	936	1227	849.6	470	397.6	560	388.1
KENTALROOF 630 T4 5,5kW F400	1035	1339	942.5	520	440.5	630	437
KENTALROOF 630 T6 1,5kW F400	1035	1339	942.5	520	440.5	630	437
KENTALROOF 630 T4/T8 5,5/1,1kW F400	1035	1339	942.5	520	440.5	630	437

Wiring diagram

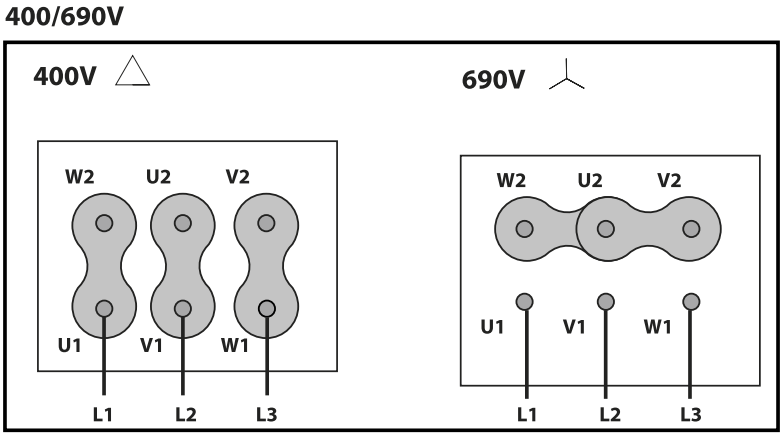
Wiring diagram Nº 1



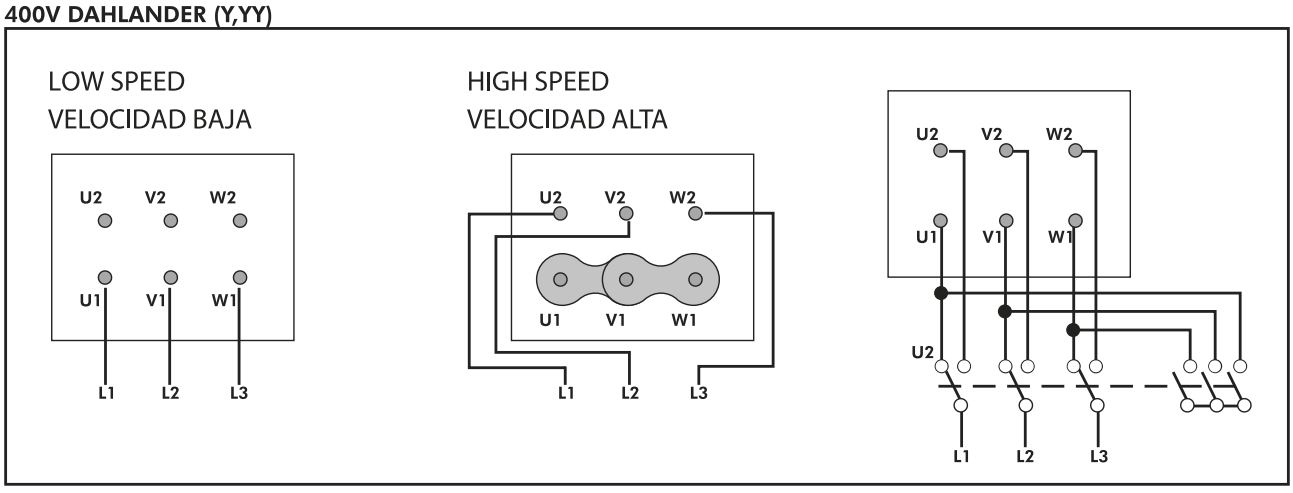
Wiring diagram Nº 2



Wiring diagram Nº 3



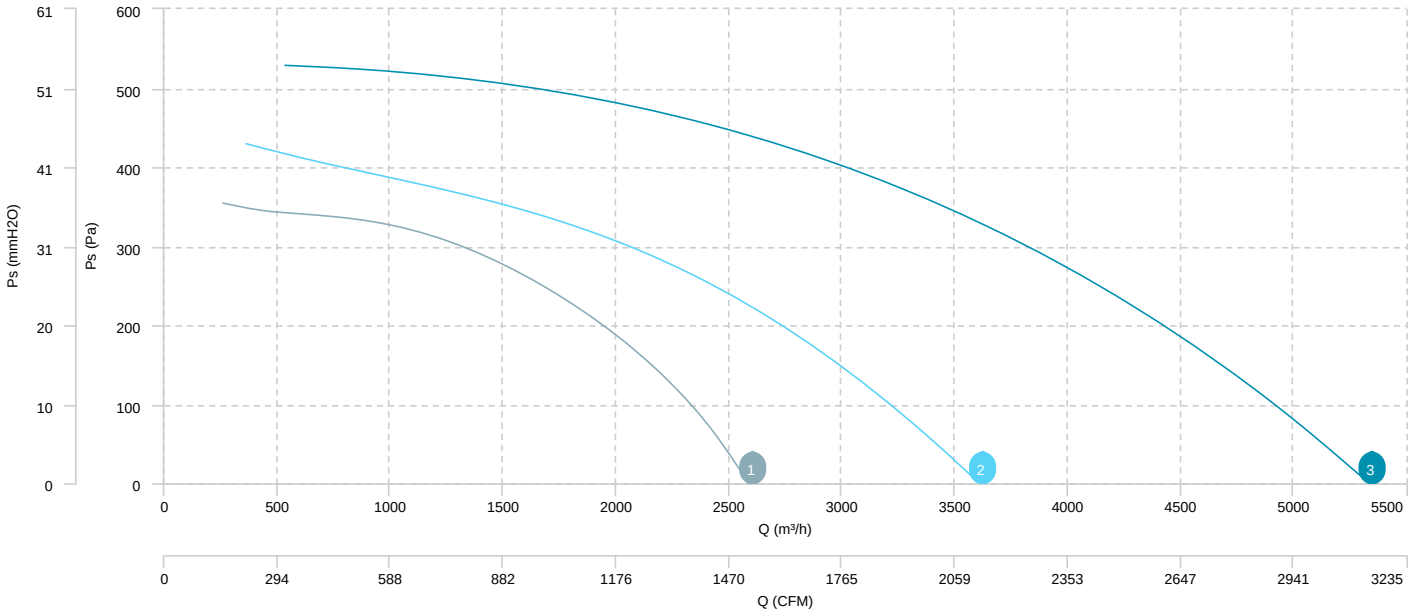
Wiring diagram Nº 4



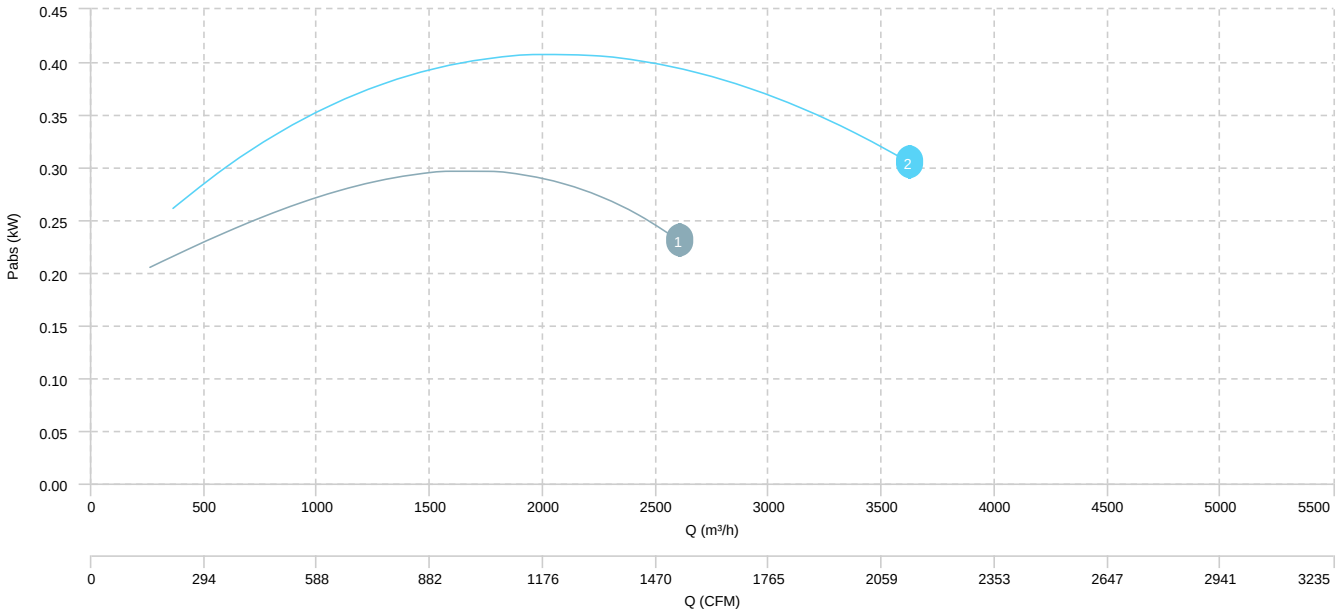
CHARACTERISCTIC CURVE

1	KENTALROOF 315 M4 0, 25kW F400
2	KENTALROOF 355 M4 0, 25kW F400
3	KENTALROOF 400 M4 0, 55kW F400

AIR FLOW - PRESSURE

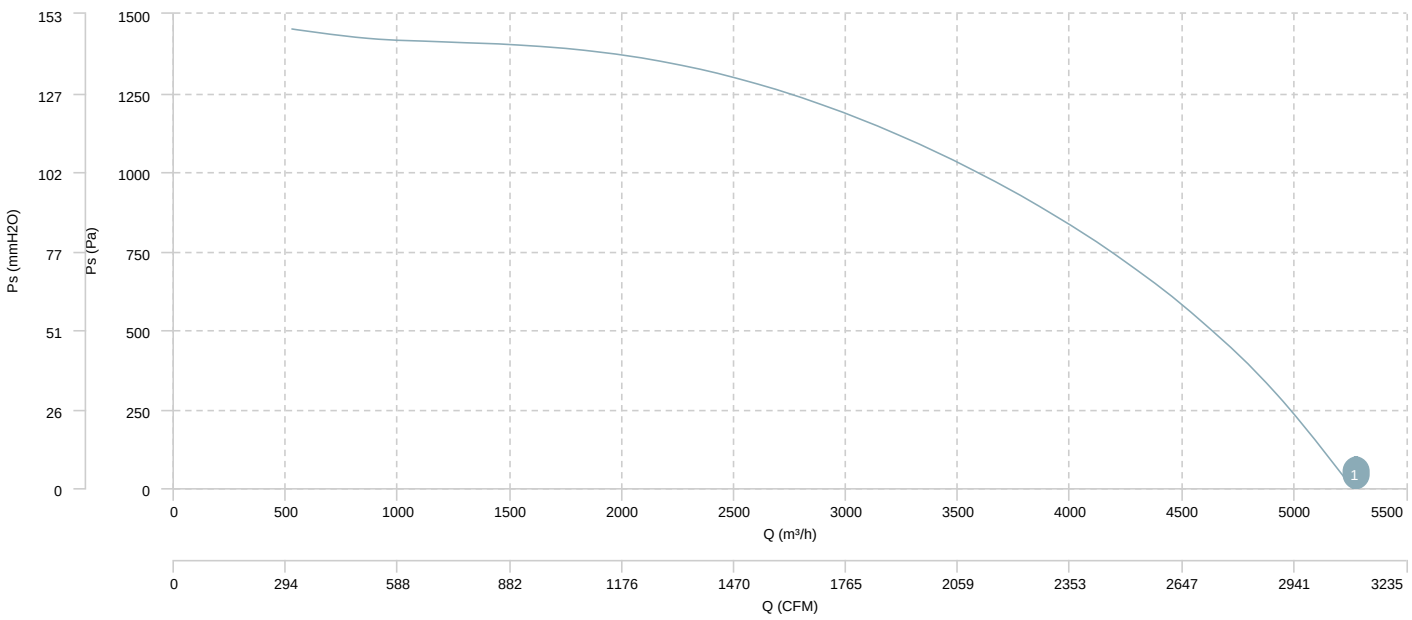


AIR FLOW - ABSORBED POWER

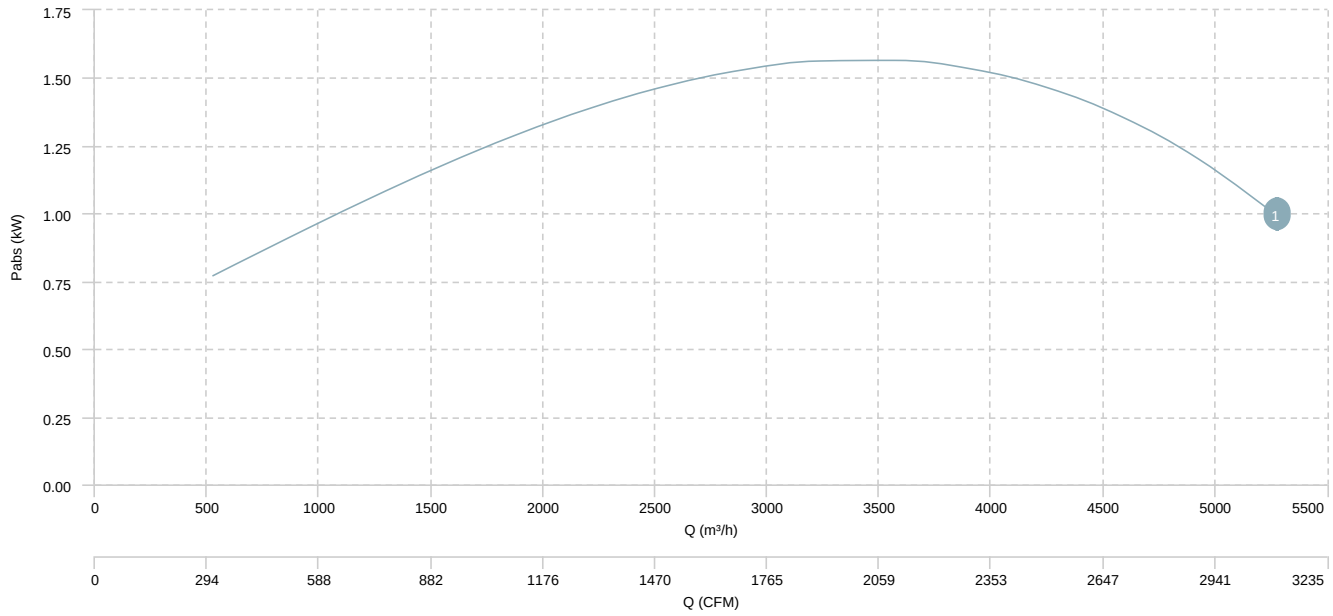


1 KENTALROOF 315 T2 1, 5kW F400

AIR FLOW - PRESSURE

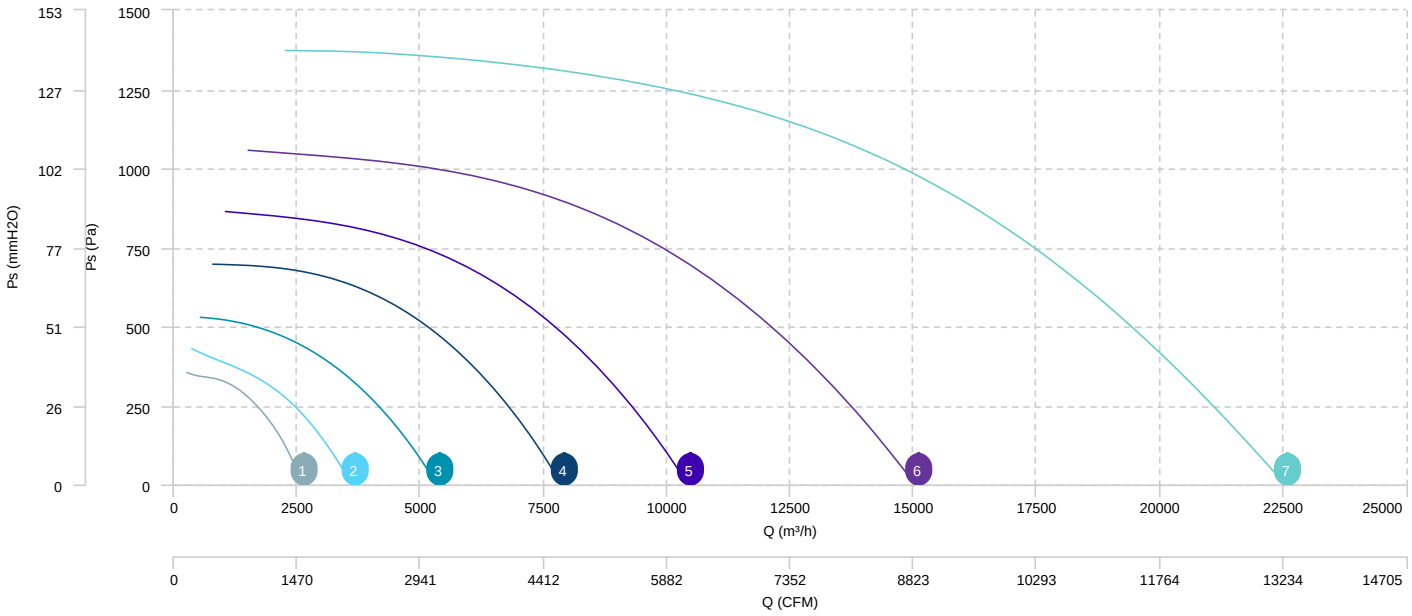


AIR FLOW - ABSORBED POWER

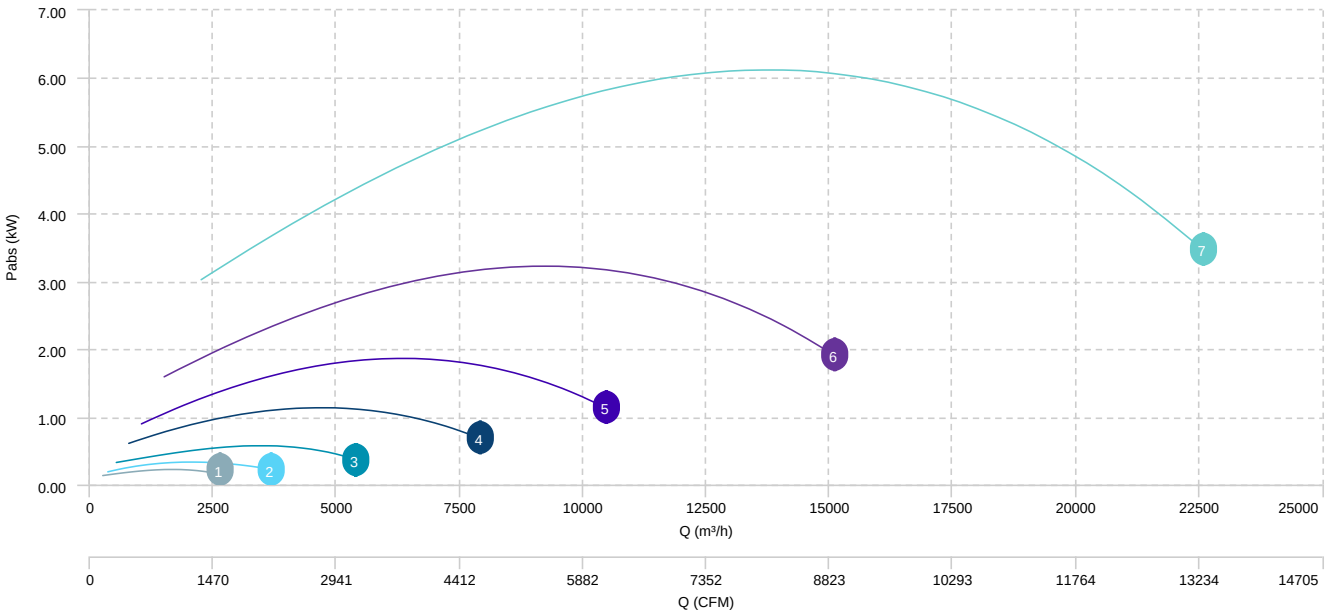


1	KENTALROOF 315 T4 0, 25kW F400	2	KENTALROOF 355 T4 0, 25kW F400	3	KENTALROOF 400 T4 0, 55kW F400	4	KENTALROOF 450 T4 1, 1kW F400
5	KENTALROOF 500 T4 1, 5kW F400	6	KENTALROOF 560 T4 3kW F400	7	KENTALROOF 630 T4 5, 5kW F400		

AIR FLOW - PRESSURE

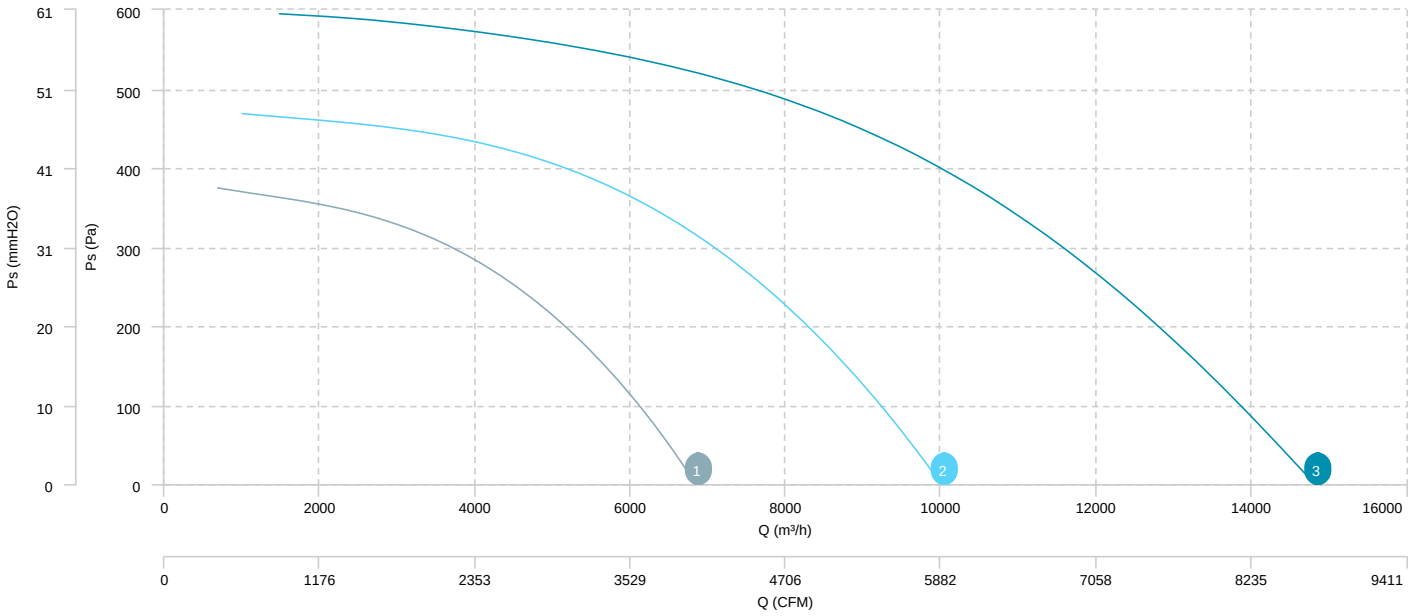


AIR FLOW - ABSORBED POWER

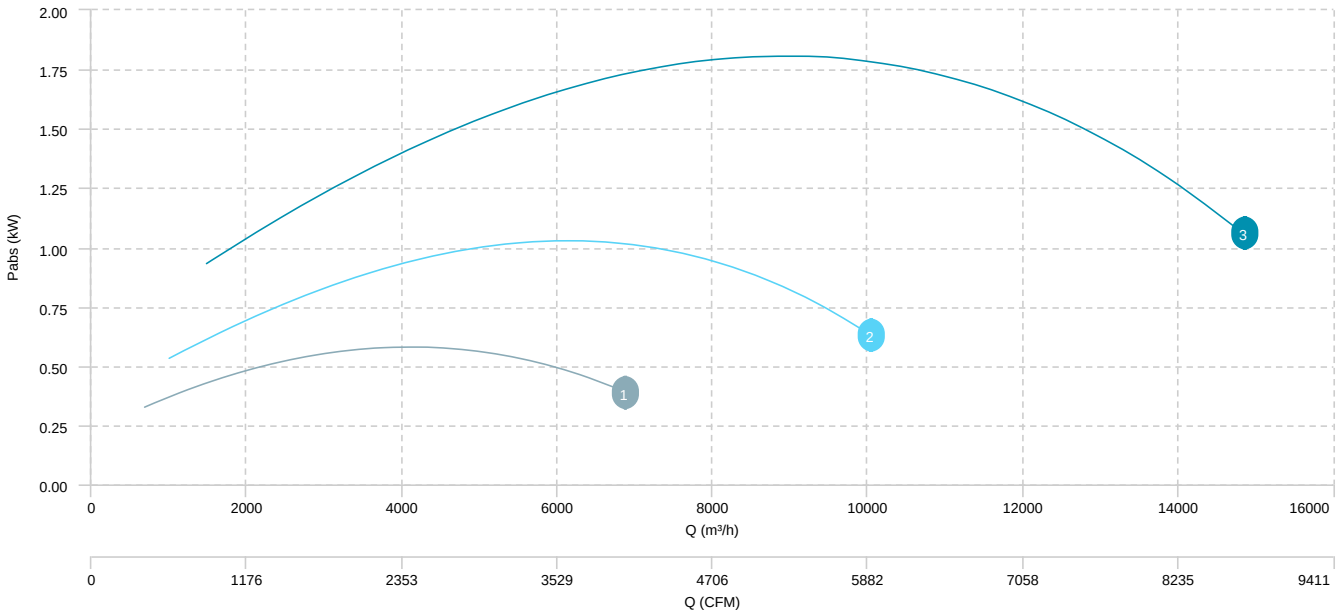


1	KENTALROOF 500 T6 0, 55kW F400
2	KENTALROOF 560 T6 1, 1kW F400
3	KENTALROOF 630 T6 1, 5kW F400

AIR FLOW - PRESSURE

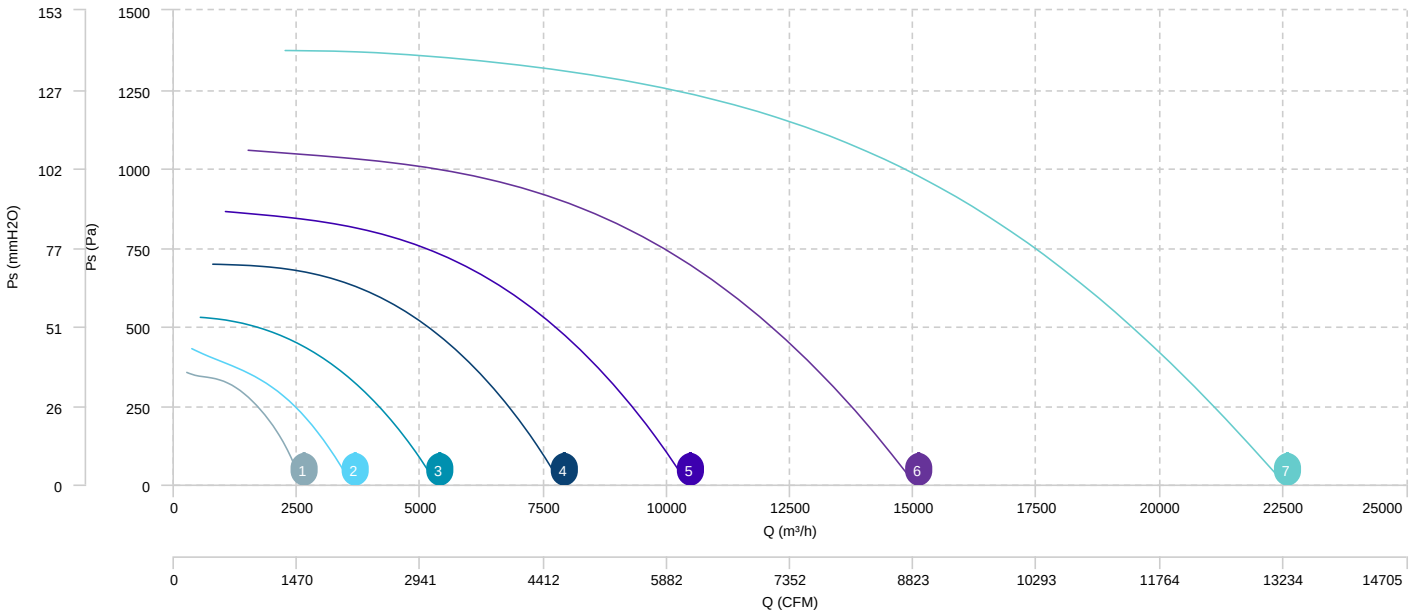


AIR FLOW - ABSORBED POWER



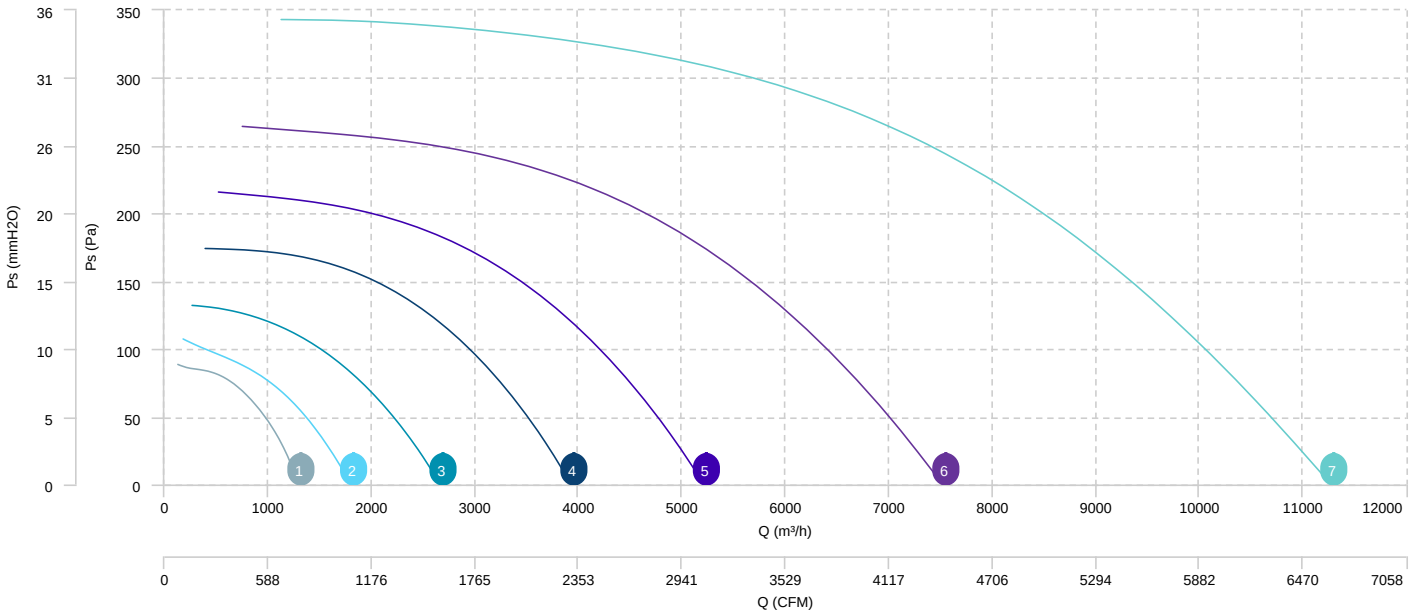
1 KENTALROOF 315 T4/T8 0,25/0,03kW F400	2 KENTALROOF 355 T4/T8 0,25/0,03kW F400	3 KENTALROOF 400 T4/T8 0,75/0,12kW F400	4 KENTALROOF 450 T4/T8 1,1/0,18kW F400
5 KENTALROOF 500 T4/T8 1,5/0,25kW F400	6 KENTALROOF 560 T4/T8 3/0,55kW F400	7 KENTALROOF 630 T4/T8 5,5/1,1kW F400	

AIR FLOW - PRESSURE (4 poles)



1 KENTALROOF 315 T4/T8 0,25/0,03kW F400	2 KENTALROOF 355 T4/T8 0,25/0,03kW F400	3 KENTALROOF 400 T4/T8 0,75/0,12kW F400	4 KENTALROOF 450 T4/T8 1,1/0,18kW F400
5 KENTALROOF 500 T4/T8 1,5/0,25kW F400	6 KENTALROOF 560 T4/T8 3/0,55kW F400	7 KENTALROOF 630 T4/T8 5,5/1,1kW F400	

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
KENTALROOF 315 T2 1,5kW F400 ()	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
KENTALROOF 315 M4 0,25kW F400 ()	Radiated	52	56	66	63	59	63	63	48	69
KENTALROOF 315 T4 0,25kW F400 ()	Radiated	52	56	66	63	59	63	63	48	69
KENTALROOF 355 M4 0,25kW F400 ()	Radiated	56	66	64	64	62	69	56	50	71
KENTALROOF 355 T4 0,25kW F400 ()	Radiated	56	66	64	64	62	69	56	50	71
KENTALROOF 400 M4 0,55kW F400 ()	Radiated	59	70	68	67	66	72	59	54	74
KENTALROOF 400 T4 0,55kW F400 ()	Radiated	59	70	68	67	66	72	59	54	74
KENTALROOF 450 T4 1,1kW F400 ()	Radiated	63	71	70	71	70	76	62	56	78
KENTALROOF 500 T4 1,5kW F400 ()	Radiated	67	74	74	75	73	79	66	60	81
KENTALROOF 560 T4 3kW F400 ()	Radiated	87	81	81	80	80	75	64	62	81
KENTALROOF 630 T4 5,5kW F400 ()	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
KENTALROOF 500 T6 0,55kW F400 ()	Radiated	58	65	64	65	64	70	57	50	72
KENTALROOF 560 T6 1,1kW F400 ()	Radiated	81	75	75	74	74	70	58	56	75
KENTALROOF 630 T6 1,5kW F400 ()	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
KENTALROOF 315 T4/T8 0,25/0, 03kW F400 (8p -)	Radiated	36	40	50	47	44	47	47	33	53
KENTALROOF 315 T4/T8 0,25/0, 03kW F400 (4p -)	Radiated	52	56	66	63	59	63	63	48	69
KENTALROOF 355 T4/T8 0,25/0, 03kW F400 (8p -)	Radiated	40	50	48	48	47	53	40	34	55
KENTALROOF 355 T4/T8 0,25/0, 03kW F400 (4p -)	Radiated	56	66	64	64	62	69	56	50	71
KENTALROOF 400 T4/T8 0,75/0, 12kW F400 (8p -)	Radiated	43	54	52	51	50	56	43	38	59
KENTALROOF 400 T4/T8 0,75/0, 12kW F400 (4p -)	Radiated	59	70	68	67	66	72	59	54	74
KENTALROOF 450 T4/T8 1,1/0, 18kW F400 (8p -)	Radiated	48	55	55	56	54	60	47	41	62
KENTALROOF 450 T4/T8 1,1/0, 18kW F400 (4p -)	Radiated	63	71	70	71	70	76	62	56	78
KENTALROOF 500 T4/T8 1,5/0, 25kW F400 (8p -)	Radiated	51	58	58	59	57	63	50	44	66
KENTALROOF 500 T4/T8 1,5/0, 25kW F400 (4p -)	Radiated	67	74	74	75	73	79	66	60	81
KENTALROOF 560 T4/T8 3/0, 55kW F400 (8p -)	Radiated	71	65	65	64	64	60	48	46	66
KENTALROOF 560 T4/T8 3/0, 55kW F400 (4p -)	Radiated	87	81	81	80	80	75	64	62	81
KENTALROOF 630 T4/T8 5,5/1, 1kW F400 (8p -)	Radiated	75	69	69	68	67	64	52	49	70
KENTALROOF 630 T4/T8 5,5/1, 1kW F400 (4p -)	Radiated	91	85	84	84	83	80	67	65	86

erp data

ERP	
Fan type	Unit for non-residential ventilation (LOT 6)
Typology	Unidirectional
Others	None
Type of driver	-

ERP / 2 poles

		Maximum efficiency point data						
Model	Motor power (kW)	Eff.Heat recovery (%)	Max. efficiency (%)	Pabs (kW)	Air Flow (m³/h)	Ps (Pa)	Speed (m/s)	SFP (W/m3/s)
KENTALROOF 315 T2 1,5kW F400 ()	1,5	-	68,42	1,56	3.218,58	1.121,74	11.47	1.746,92

ERP / 4 poles

		Maximum efficiency point data						
Model	Motor power (kW)	Eff.Heat recovery (%)	Max. efficiency (%)	Pabs (kW)	Air Flow (m³/h)	Ps (Pa)	Speed (m/s)	SFP (W/m3/s)
KENTALROOF 315 M4 0,25kW F400 ()	0,25	-	41,13	0,30	1.596,30	262,70	5.69	668,29
KENTALROOF 315 T4 0,25kW F400 ()	0,25	-	55,27	0,22	1.586,47	264,22	5.65	504,29
KENTALROOF 355 M4 0,25kW F400 ()	0,25	-	43,83	0,41	2.194,76	283,31	6.16	666,64
KENTALROOF 355 T4 0,25kW F400 ()	0,25	-	54,14	0,33	2.202,75	282,28	6.18	540,56
KENTALROOF 400 T4 0,55kW F400 ()	0,55	-	62,16	0,57	3.096,61	391,83	6.85	659,86
KENTALROOF 450 T4 1,1kW F400 ()	1,10	-	66,59	1,13	4.906,11	525,85	8.57	830,68
KENTALROOF 500 T4 1,5kW F400 ()	1,50	-	65,27	1,86	6.464,83	642,69	9.15	1.036,33
KENTALROOF 560 T4 3kW F400 ()	3	-	67,58	3,22	9.324,54	798,80	10.52	1.244,36
KENTALROOF 630 T4 5,5kW F400 ()	5,50	-	70,94	6,12	14.099,99	1.050,76	12.56	1.561,64

ERP / 6 poles

		Maximum efficiency point data						
Model	Motor power (kW)	Eff.Heat recovery (%)	Max. efficiency (%)	Pabs (kW)	Air Flow (m³/h)	Ps (Pa)	Speed (m/s)	SFP (W/m3/s)
KENTALROOF 500 T6 0,55kW F400 ()	0,55	-	57,20	0,58	4.213,44	271,10	5.96	494,79
KENTALROOF 560 T6 1,1kW F400 ()	1,1	-	62,31	1,03	6.202,70	353,72	7	596,31
KENTALROOF 630 T6 1,5kW F400 ()	1,50	-	65,34	1,81	9.191,60	440,02	8.19	707,07