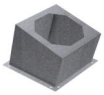
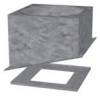
KENTALROOF-A F400

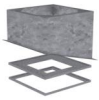
Accessories

AC

BAD


BTI


BTI+AC MP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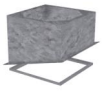
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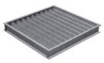

CMP-HUT

INT

KV KENTALROOF

SFC

SIL-C / SIL-CN

ROOF FAN WITH FOLDING SYSTEM AND ALUMINIUM COWL F400

MANUFACTURING FEATURES:

- Protection cowl made of anticorrosive treated aluminum easily removable for motor and impeller maintenance thanks to the integrated folding system.
- 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 of 230V50Hz for single phase motors, 230/400V50Hz & 400/690V 50Hz for three-phase 1 speed motors and 400V50Hz 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.

UNDER REQUEST

- Special contruction for moving air at 120ºC

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

Three-phase motor / 6 poles

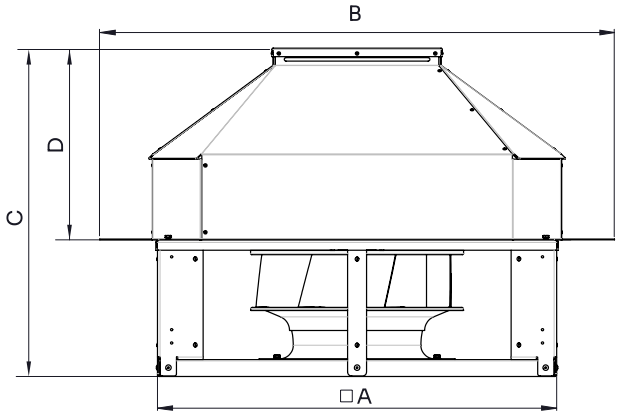
Code	Model	R.P.M.	Rated I. A		Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
			230V	400V					
27950680AL	KENTALROOF-A 500 T6 0,55kW F400	900	3,00	1,8	0,55	6.850	-	95	2
27956690AL	KENTALROOF-A 560 T6 1,1kW F400	925	4,83	2,78	1,10	10.020	-	103	2
279634100AL	KENTALROOF-A 630 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
27931471AL2V	KENTALROOF-A 315 T4/T8 0,25/0,03kW F400	1370	1,13/0,37	0,25	2.590	-	35,50	4
27935471AL2V	KENTALROOF-A 355 T4/T8 0,25/0,03kW F400	1370	1,13/0,37	0,25	3.610	-	41	4
27940480AL2V	KENTALROOF-A 400 T4/T8 0,75/0,12kW F400	1400	2,03/0,68	0,75	5.340	-	45	4
27945490AL2V	KENTALROOF-A 450 T4/T8 1,1/0,18kW F400	1400	2,67/1,08	1,10	7.870	-	85	4
27950491AL2V	KENTALROOF-A 500 T4/T8 1,5/0,25kW F400	1400	3,46/1,27	1,50	10.430	-	96	4
279564100AL2V	KENTALROOF-A 560 T4/T8 3/0,55kW F400	1430	6,53/2,33	3,00	15.040	-	104	4
279634132AL2V	KENTALROOF-A 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

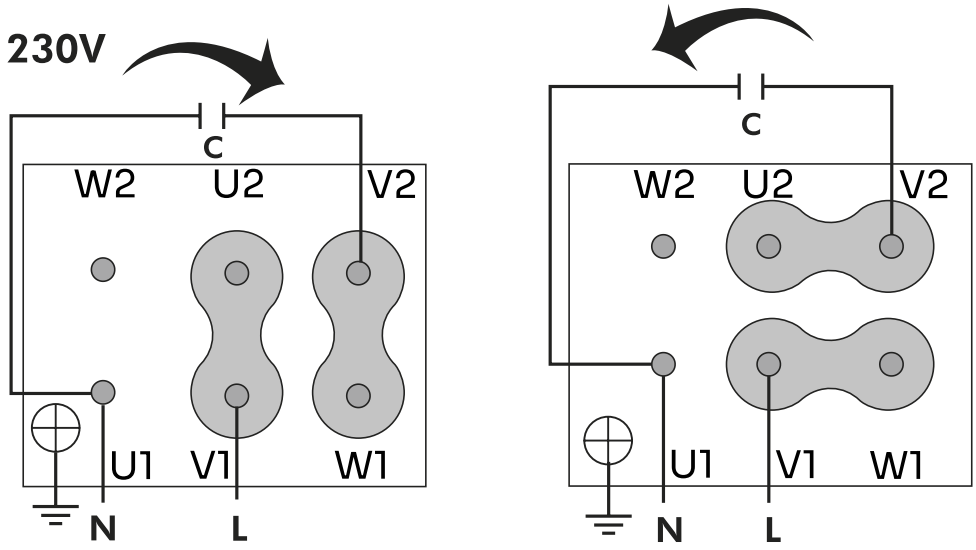
Dimensions



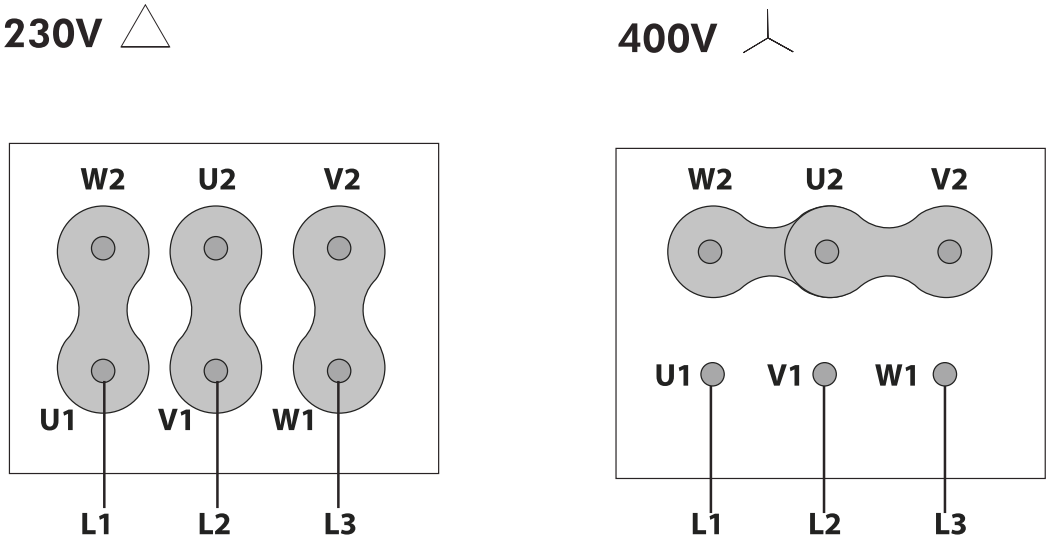
Model	A (int)	B	C	D	Ø duct	Øinlet
KENTALROOF-A 315 M4 0,25kW F400	592	760	601	365	-	-
KENTALROOF-A 315 T2 1,5kW F400	592	760	601	365	-	-
KENTALROOF-A 315 T4 0,25kW F400	592	760	601	365	315	218
KENTALROOF-A 315 T4/T8 0,25/0,03kW F400	592	760	601	365	315	218
KENTALROOF-A 355 M4 0,25kW F400	662	860	624.5	365	-	-
KENTALROOF-A 355 T4 0,25kW F400	662	860	624.5	365	355	246
KENTALROOF-A 355 T4/T8 0,25/0,03kW F400	662	860	624.5	365	355	246
KENTALROOF-A 400 M4 0,55kW F400	662	860	647.5	365	-	-
KENTALROOF-A 400 T4 0,55kW F400	662	860	647.5	365	400	278
KENTALROOF-A 400 T4/T8 0,75/0,12kW F400	662	860	647.5	365	400	278
KENTALROOF-A 450 T4 1,1kW F400	936	1220	775.8	470	450	312
KENTALROOF-A 450 T4/T8 1,1/0,18kW F400	936	1220	775.8	470	450	312
KENTALROOF-A 500 T4 1,5kW F400	936	1220	812	470	500	346.5
KENTALROOF-A 500 T6 0,55kW F400	936	1220	812	470	500	346.5
KENTALROOF-A 500 T4/T8 1,5/0,25kW F400	936	1220	812	470	500	346.5
KENTALROOF-A 560 T4 3kW F400	936	1220	849.6	470	560	388.1
KENTALROOF-A 560 T6 1,1kW F400	936	1220	849.6	470	560	388.1
KENTALROOF-A 560 T4/T8 3/0,55kW F400	936	1220	849.6	470	560	388.1
KENTALROOF-A 630 T4 5,5kW F400	1035	1340	942.5	520	630	437
KENTALROOF-A 630 T6 1,5kW F400	1035	1340	942.5	520	630	437
KENTALROOF-A 630 T4/T8 5,5/1,1kW F400	1035	1340	942.5	520	630	437

Wiring diagram

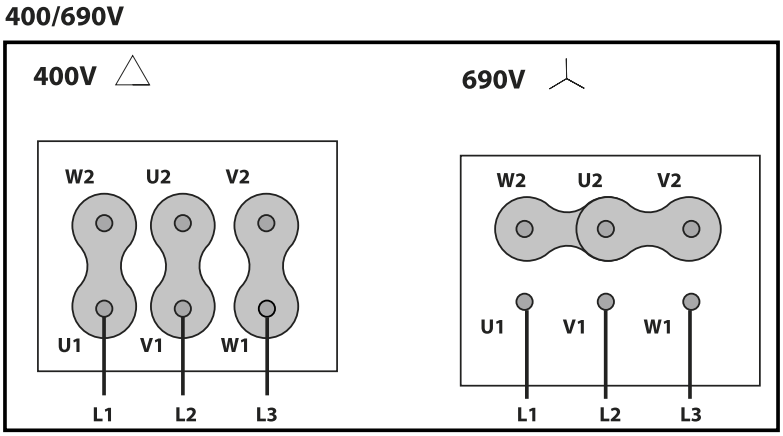
Wiring diagram Nº 1



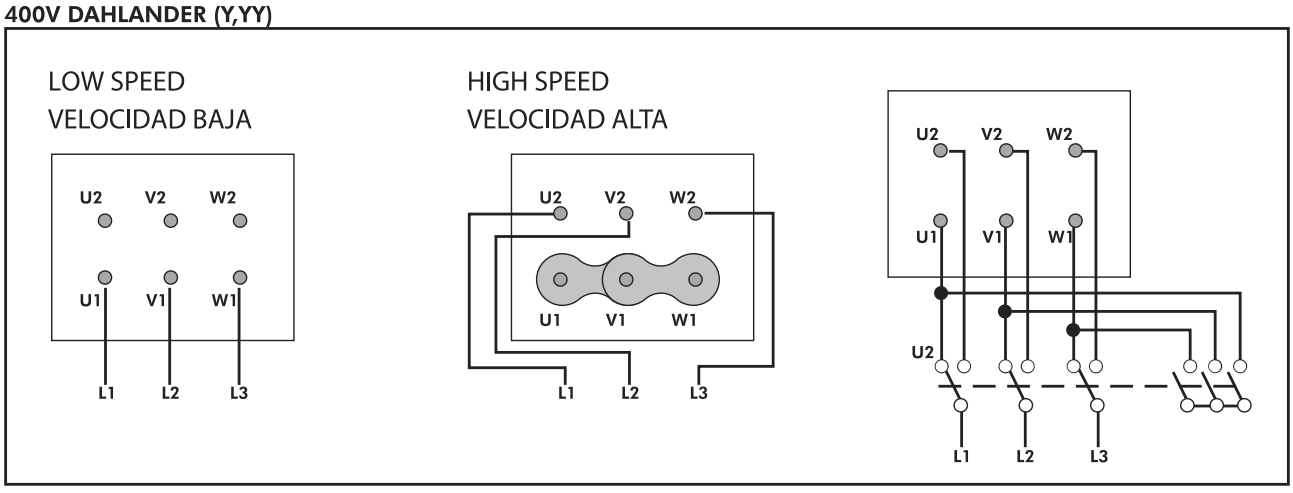
Wiring diagram Nº 2



Wiring diagram Nº 3



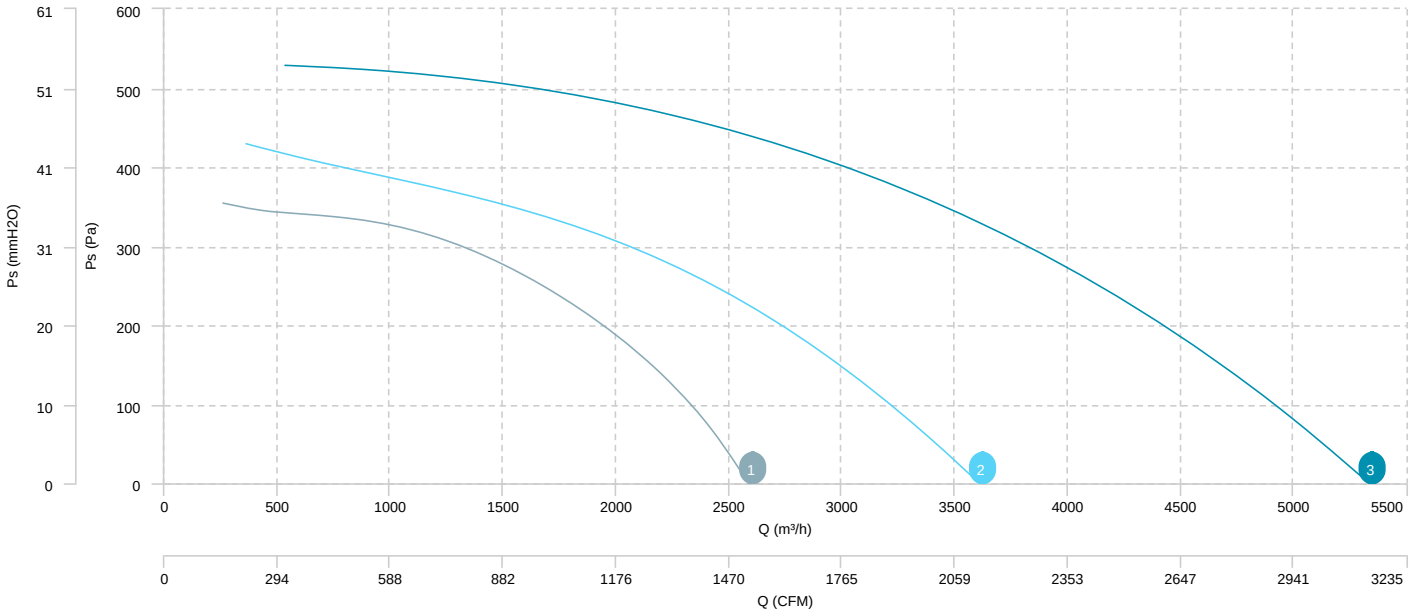
Wiring diagram Nº 4



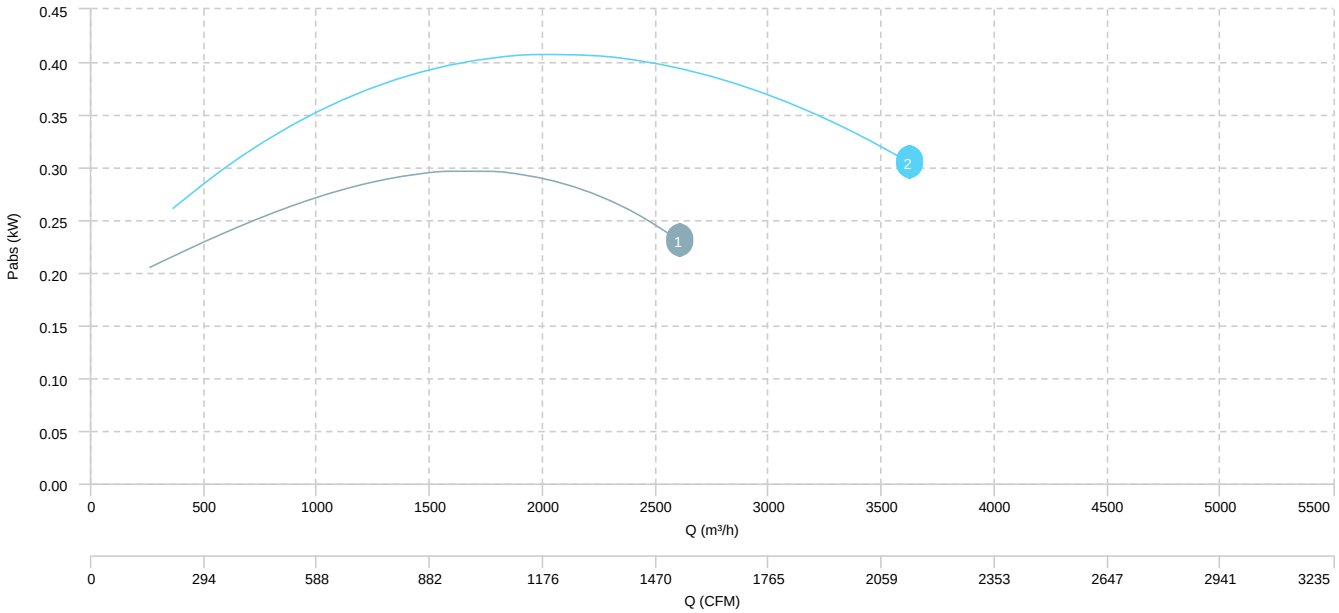
CHARACTERISCTIC CURVE

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

AIR FLOW - PRESSURE

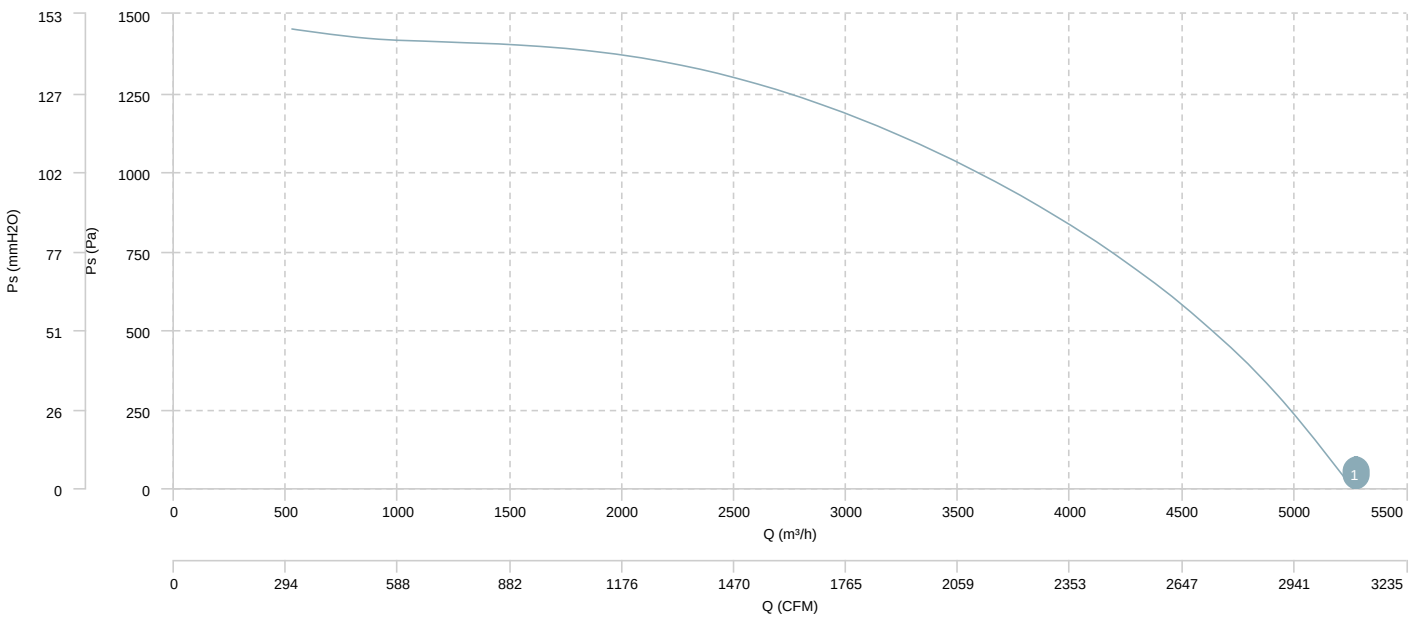


AIR FLOW - ABSORBED POWER

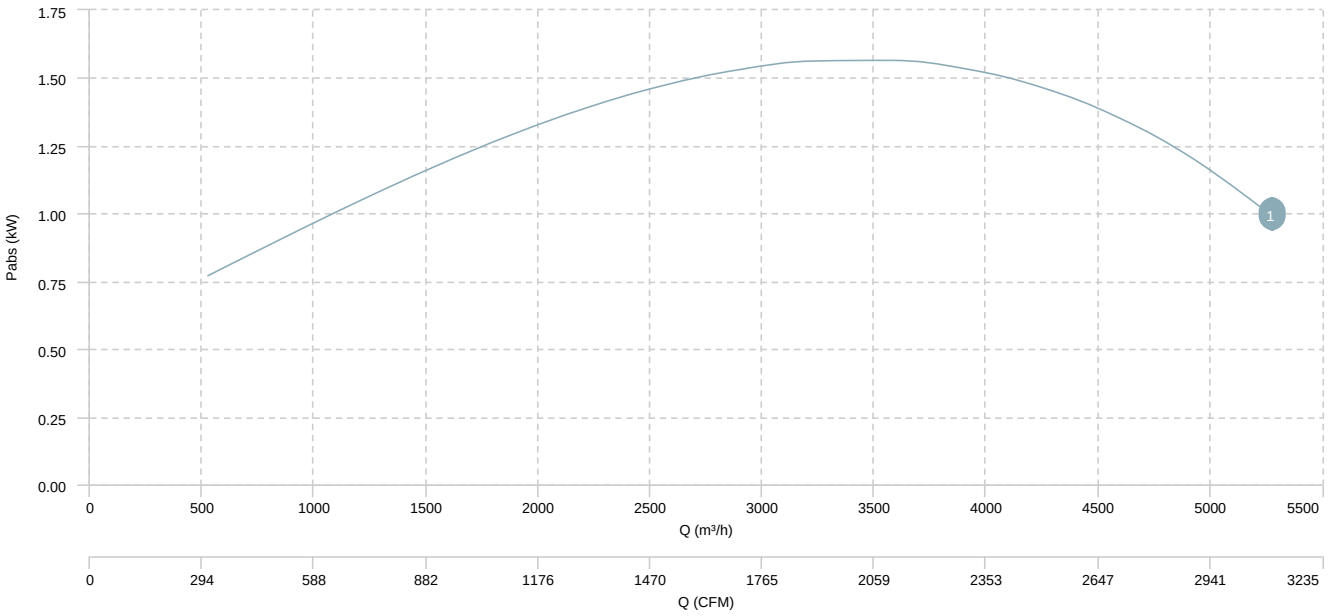


1 KENTALROOF-A 315 T2 1, 5kW F400

AIR FLOW - PRESSURE

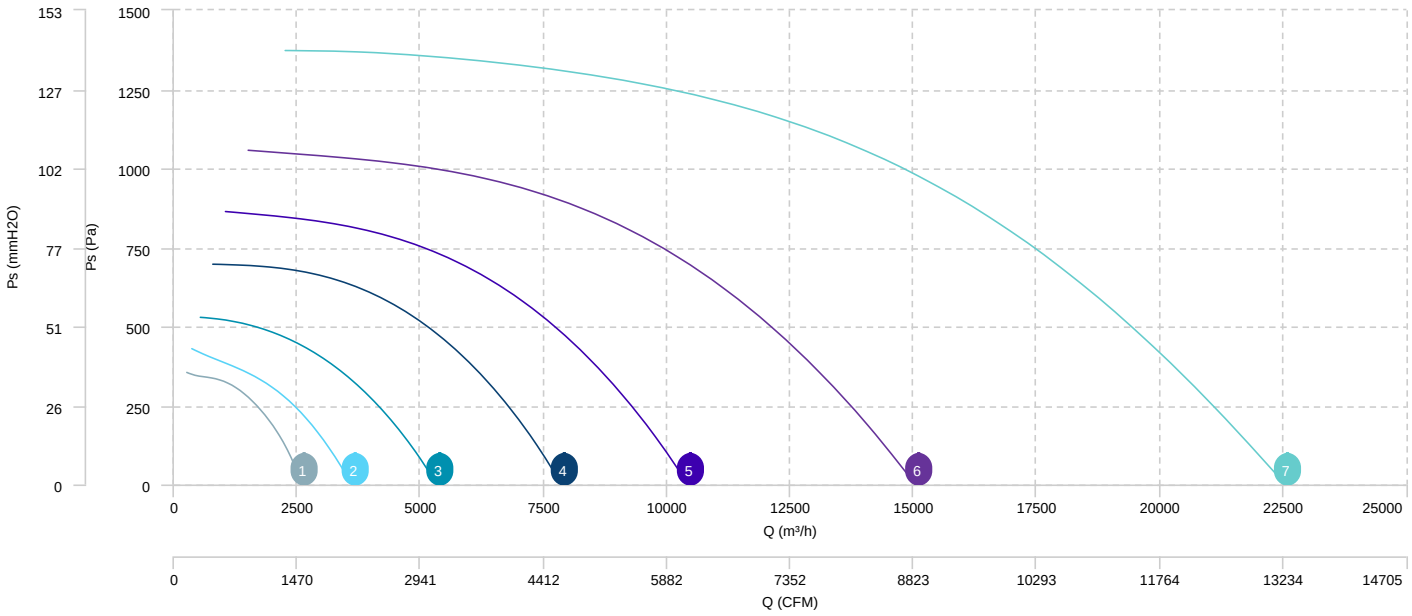


AIR FLOW - ABSORBED POWER

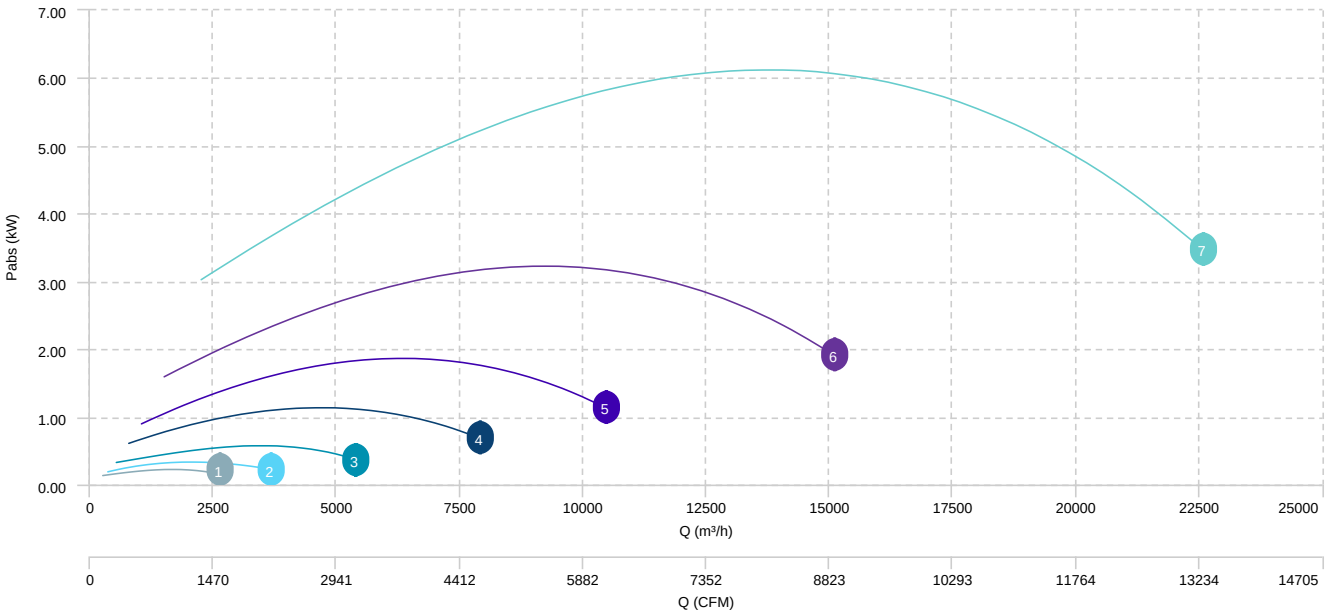


1	KENTALROOF-A 315 T4 0, 25kW F400	2	KENTALROOF-A 355 T4 0, 25kW F400	3	KENTALROOF-A 400 T4 0, 55kW F400	4	KENTALROOF-A 450 T4 1, 1kW F400
5	KENTALROOF-A 500 T4 1, 5kW F400	6	KENTALROOF-A 560 T4 3kW F400	7	KENTALROOF-A 630 T4 5, 5kW F400		

AIR FLOW - PRESSURE

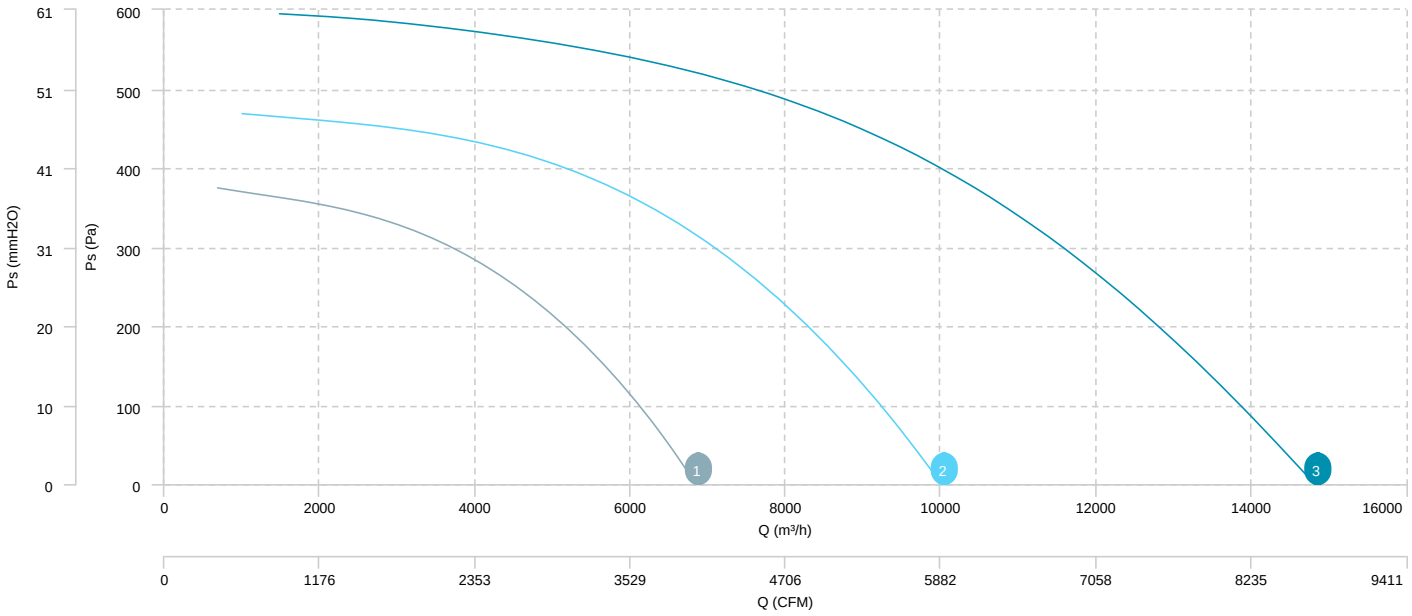


AIR FLOW - ABSORBED POWER

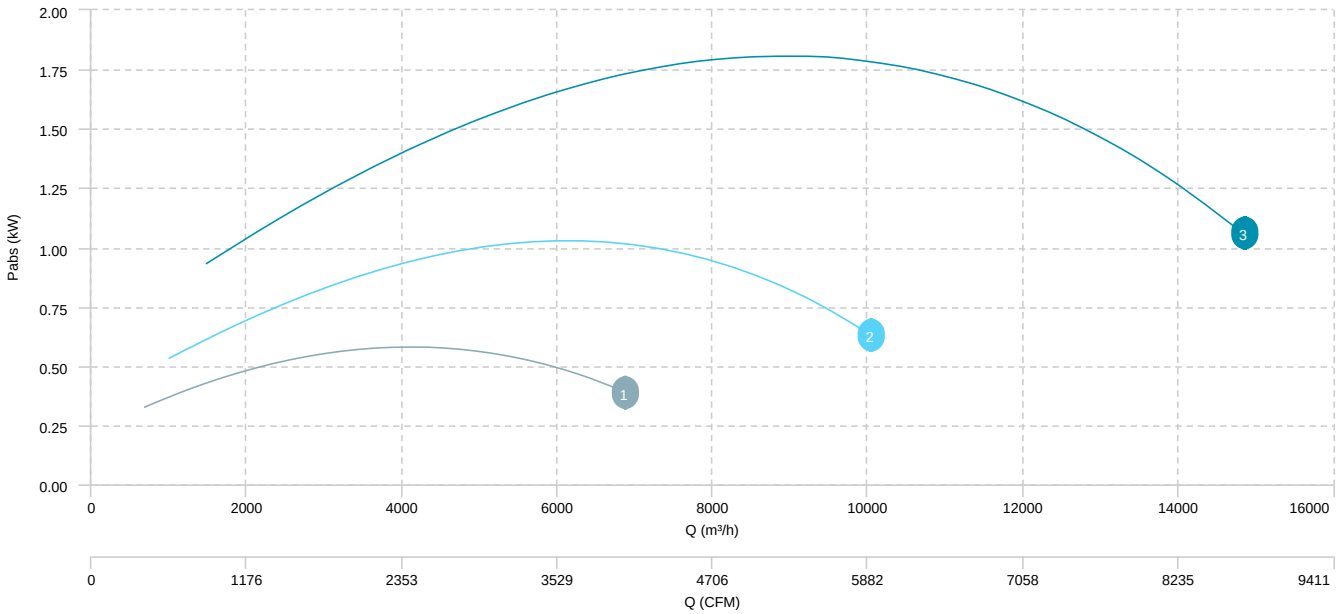


1	KENTALROOF-A 500 T6 0, 55kW F400
2	KENTALROOF-A 560 T6 1, 1kW F400
3	KENTALROOF-A 630 T6 1, 5kW F400

AIR FLOW - PRESSURE

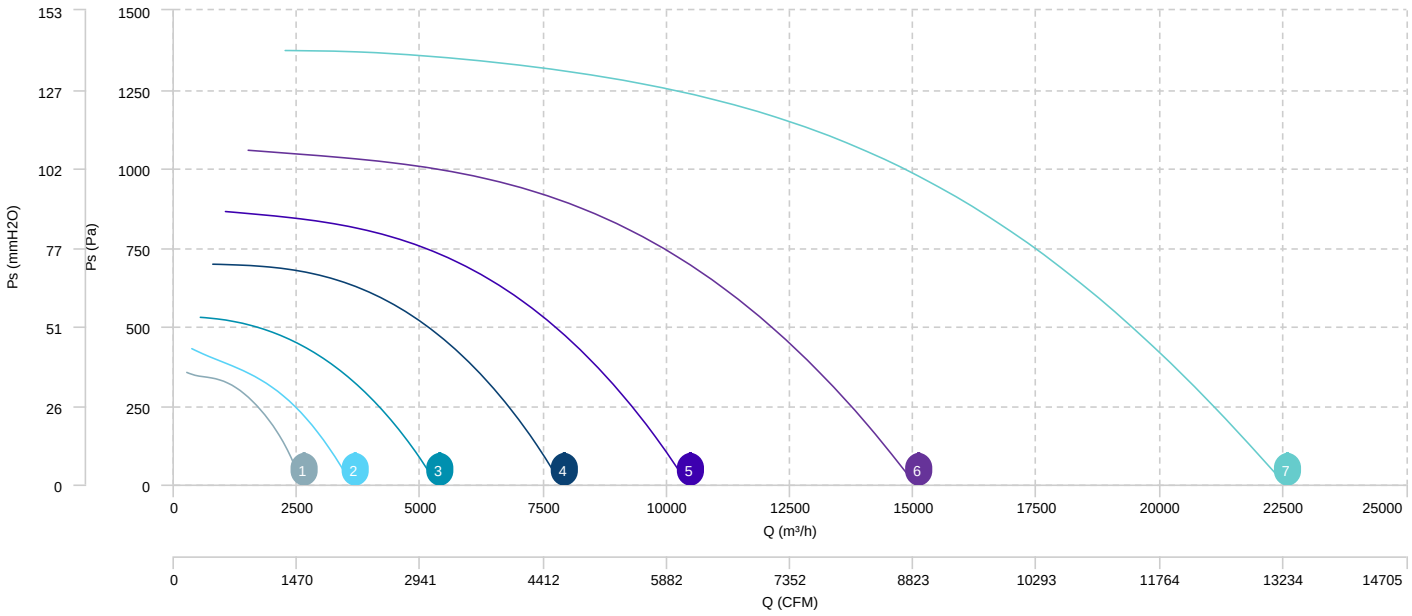


AIR FLOW - ABSORBED POWER



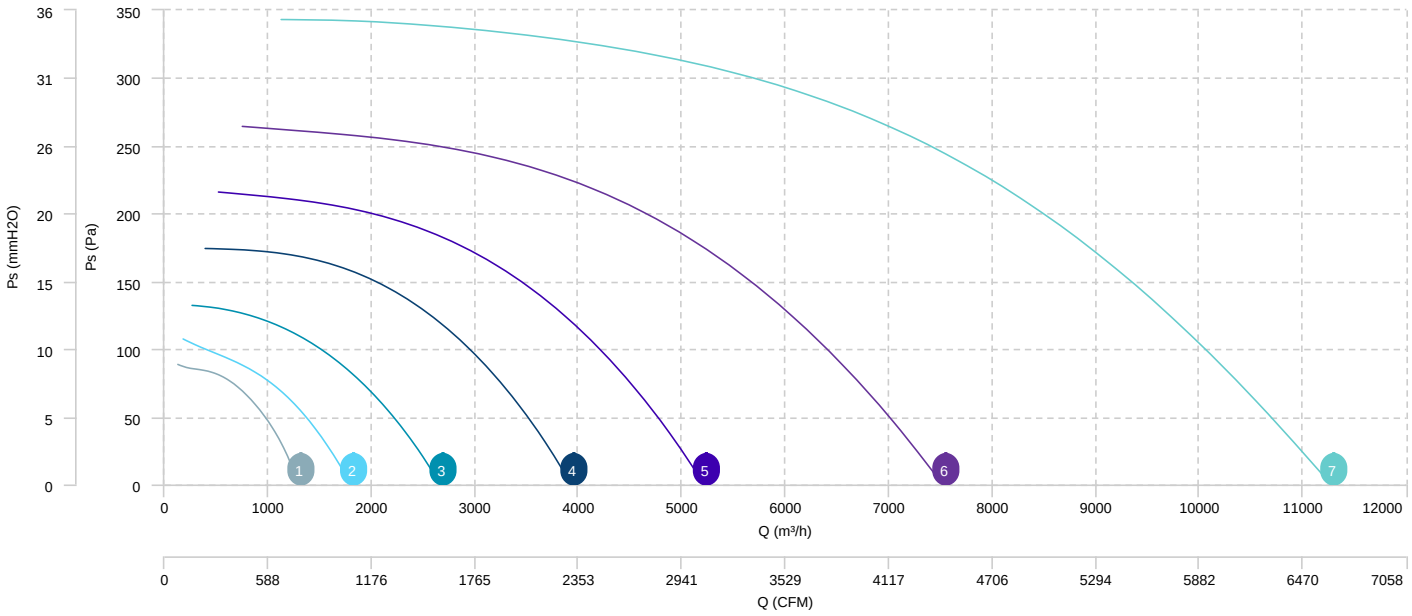
1 KENTALROOF-A 315 T4/T8 0,25/0,03kW F400	2 KENTALROOF-A 355 T4/T8 0,25/0,03kW F400	3 KENTALROOF-A 400 T4/T8 0,75/0,12kW F400	4 KENTALROOF-A 450 T4/T8 1,1/0,18kW F400
5 KENTALROOF-A 500 T4/T8 1,5/0,25kW F400	6 KENTALROOF-A 560 T4/T8 3/0,55kW F400	7 KENTALROOF-A 630 T4/T8 5,5/1,1kW F400	

AIR FLOW - PRESSURE (4 poles)



1 KENTALROOF-A 315 T4/T8 0,25/0,03kW F400	2 KENTALROOF-A 355 T4/T8 0,25/0,03kW F400	3 KENTALROOF-A 400 T4/T8 0,75/0,12kW F400	4 KENTALROOF-A 450 T4/T8 1,1/0,18kW F400
5 KENTALROOF-A 500 T4/T8 1,5/0,25kW F400	6 KENTALROOF-A 560 T4/T8 3/0,55kW F400	7 KENTALROOF-A 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-A 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-A 315 M4 0,25kW F400 ()	Radiated	52	56	66	63	59	63	63	48	69
KENTALROOF-A 315 T4 0,25kW F400 ()	Radiated	52	56	66	63	59	63	63	48	69
KENTALROOF-A 355 M4 0,25kW F400 ()	Radiated	56	66	64	64	62	69	56	50	71
KENTALROOF-A 355 T4 0,25kW F400 ()	Radiated	56	66	64	64	62	69	56	50	71
KENTALROOF-A 400 M4 0,55kW F400 ()	Radiated	59	70	68	67	66	72	59	54	74
KENTALROOF-A 400 T4 0,55kW F400 ()	Radiated	59	70	68	67	66	72	59	54	74
KENTALROOF-A 450 T4 1,1kW F400 ()	Radiated	63	71	70	71	70	76	62	56	78
KENTALROOF-A 500 T4 1,5kW F400 ()	Radiated	67	74	74	75	73	79	66	60	81
KENTALROOF-A 560 T4 3kW F400 ()	Radiated	87	81	81	80	80	75	64	62	81
KENTALROOF-A 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-A 500 T6 0,55kW F400 ()	Radiated	58	65	64	65	64	70	57	50	72
KENTALROOF-A 560 T6 1,1kW F400 ()	Radiated	81	75	75	74	74	70	58	56	75
KENTALROOF-A 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-A 315 T4/T8 0,25/0,03kW F400 (8p -)	Radiated	36	40	50	47	44	47	47	33	53
KENTALROOF-A 315 T4/T8 0,25/0,03kW F400 (4p -)	Radiated	52	56	66	63	59	63	63	48	69
KENTALROOF-A 355 T4/T8 0,25/0,03kW F400 (8p -)	Radiated	40	50	48	48	47	53	40	34	55
KENTALROOF-A 355 T4/T8 0,25/0,03kW F400 (4p -)	Radiated	56	66	64	64	62	69	56	50	71
KENTALROOF-A 400 T4/T8 0,75/0,12kW F400 (8p -)	Radiated	43	54	52	51	50	56	43	38	59
KENTALROOF-A 400 T4/T8 0,75/0,12kW F400 (4p -)	Radiated	59	70	68	67	66	72	59	54	74
KENTALROOF-A 450 T4/T8 1,1/0,18kW F400 (8p -)	Radiated	48	55	55	56	54	60	47	41	62
KENTALROOF-A 450 T4/T8 1,1/0,18kW F400 (4p -)	Radiated	63	71	70	71	70	76	62	56	78
KENTALROOF-A 500 T4/T8 1,5/0,25kW F400 (8p -)	Radiated	51	58	58	59	57	63	50	44	66
KENTALROOF-A 500 T4/T8 1,5/0,25kW F400 (4p -)	Radiated	67	74	74	75	73	79	66	60	81
KENTALROOF-A 560 T4/T8 3/0,55kW F400 (8p -)	Radiated	71	65	65	64	64	60	48	46	66
KENTALROOF-A 560 T4/T8 3/0,55kW F400 (4p -)	Radiated	87	81	81	80	80	75	64	62	81
KENTALROOF-A 630 T4/T8 5,5/1,1kW F400 (8p -)	Radiated	75	69	69	68	67	64	52	49	70
KENTALROOF-A 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-A 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-A 315 M4 0,25kW F400 ()	0,25	-	41,13	0,30	1.596,30	262,70	5.69	668,29
KENTALROOF-A 315 T4 0,25kW F400 ()	0,25	-	55,27	0,22	1.586,47	264,22	5.65	504,29
KENTALROOF-A 355 M4 0,25kW F400 ()	0,25	-	43,83	0,41	2.194,76	283,31	6.16	666,64
KENTALROOF-A 355 T4 0,25kW F400 ()	0,25	-	54,14	0,33	2.202,75	282,28	6.18	540,56
KENTALROOF-A 400 T4 0,55kW F400 ()	0,55	-	62,16	0,57	3.096,61	391,83	6.85	659,86
KENTALROOF-A 450 T4 1,1kW F400 ()	1,10	-	66,59	1,13	4.906,11	525,85	8.57	830,68
KENTALROOF-A 500 T4 1,5kW F400 ()	1,50	-	65,27	1,86	6.464,83	642,69	9.15	1.036,33
KENTALROOF-A 560 T4 3kW F400 ()	3	-	67,58	3,22	9.324,54	798,80	10.52	1.244,36
KENTALROOF-A 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-A 500 T6 0,55kW F400 ()	0,55	-	57,20	0,58	4.213,44	271,10	5.96	494,79
KENTALROOF-A 560 T6 1,1kW F400 ()	1,1	-	62,31	1,03	6.202,70	353,72	7	596,31
KENTALROOF-A 630 T6 1,5kW F400 ()	1,50	-	65,34	1,81	9.191,60	440,02	8.19	707,07