

# IGNÉO



## MEDIUM PRESSURE FAN WITH BACKWARD IMPELLER 400°C/2H CERTIFIED INSIDE THE HAZARDOUS AREA

### MANUFACTURING FEATURES

- Medium pressure centrifugal fan with direct coupling.
- Reinforced housing made of carbon laminated steel, protected against corrosion by powder coating polyester resin RAL 5010. Finish C3.
- Casing fully latched and adjustable.
- Self-cleaning turbine and reinforced impeller with high-performance backward (reaction) blades made of carbon laminated steel dynamically balanced to minimize noise and vibrations. Graffiti black RAL 9005.
- Motor with S1 service class for continuous operation and approved 400°C / 2h for service class S2. IEC standardized asynchronous squirrel-cage motor with IP-55 protection and electrical insulation class H. Standard voltages 230/400V 230/400V 50Hz in three phase motors up to 3kW and 400 50Hz for higher powers.
- Motor with foot (B3) supported on motor support foot.
- Models of size 500 and above are supplied with a front support foot, for the other models the front support foot is optional.
- Inspection door to facilitate maintenance and cleaning.
- Available in the following orientations (to be indicated in case of order): LG0, LG45, LG90, LG135, LG180; LG225, LG270, LG315, RD0, RD45, RD90, RD135, RD180; RD225, RD270, RD315.
- Maximum working temperature in continuous: air transported: 130°C (service S1) and 400°C/2h (service S2), and maximum environment temperature: 60°C.

## Accessories



### APPLICATIONS

Installation in conduit for the impulsion or aspiration of clean and dusty air in:

- Big buildings
- Malls
- Factories / Industrial buildings
- Warehouses
- Parking lots
- Catering / Hospitality
- Extraction of smoke
- Boilers and ovens
- Manufacture and treatment of chemical products.
- Tunnels, underground stations.

### UNDER REQUEST

- Fans to work at 60Hz and special voltages.
- 2 speed motor.
- C4-C5
- Hot dip galvanized
- Fully welded housing (watertight)
- Drain plug

Official homologation by the European laboratory APPLUS according to EN 12101-3:2015

## Technical data

### Three-phase motor / 4 poles

Code	Model	R.P.M.	Rated I. A 400V	Rated power kW	Max. Airflow m <sup>3</sup> /h	Sound db (A)**	Weight kg	Connect. diagram
IG311480	IGNÉO 311 T4 0,55kW	1398	1,42	0,55	2.490	43	43	1
IG351480	IGNÉO 351 T4 0,55kW	1398	1,42	0,55	3.560	47	65	1
IG401480	IGNÉO 401 T4 0,55kW	1398	1,42	0,55	5.080	51	75	1
IG451490	IGNÉO 451 T4 1,1kW	1392	2,7	1,10	7.240	54	94	1
IG501490	IGNÉO 501 T4 1,5kW	1410	3,6	1,50	9.930	57	130	1
IG5614100	IGNÉO 561 T4 3kW	1420	6,12	3,00	13.940	61	158	1
IG6314132	IGNÉO 631 T4 5,5kW	1450	10,58	5,50	19.850	65	214	1
IG7114132	IGNÉO 711 T4 7,5kW	1453	14,46	7,50	28.410	68	315	1

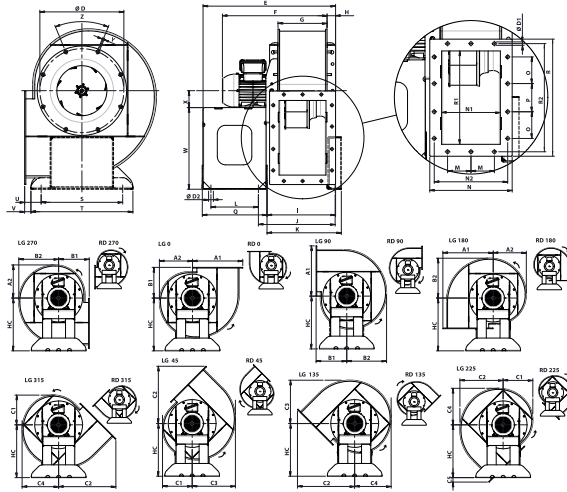
### Three-phase motor / 6 poles

Code	Model	R.P.M.	Rated I. A 400V	Rated power kW	Max. Airflow m <sup>3</sup> /h	Sound db (A)**	Weight kg	Connect. diagram
IG501680	IGNÉO 501 T6 0,55kW	910	1,49	0,55	6.620	49	117	1
IG561690	IGNÉO 561 T6 0,75kW	925	1,95	0,75	9.300	52	145	1
IG6316100	IGNÉO 631 T6 1,5kW	940	3,71	1,50	13.240	56	180	1
IG7116132	IGNÉO 711 T6 3kW	960	7,3	3,00	18.940	59	276	1

**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	A1	A2	B1	B2	C1	C2	C3	C4	C5
IGNÉO 311 T4 0,55kW	396	260.7	241.3	314. 1000000 0000002	234	450.6	340.8	287. 3999999 9999998	35
IGNÉO 351 T4 0,55kW	441.8	292. 3999999 9999998	266.2	352.6	262.3	500.6	382.7	322.5	40
IGNÉO 401 T4 0,55kW	493	328.2	294.3	396.1	294.3	556. 7000000 0000005	430.1	362.2	46.1
IGNÉO 451 T4 1,1kW	549. 2999999 9999995	367.7	325. 3999999 9999998	444	329.6	618.5	482.2	405.9	47.9

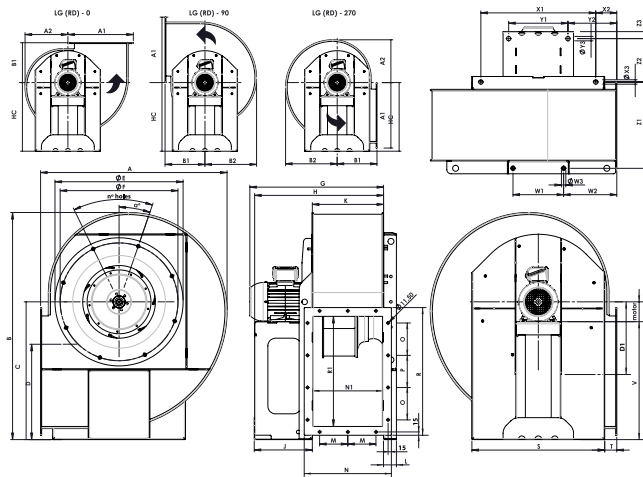
Model	D	D1	D2	E	F	G	H	HC	I
IGNÉO 311 T4 0,55kW	354.5	11.5	20	558.9	441.5	207	35.5	415.6	289
IGNÉO 351 T4 0,55kW	394.5	11.5	20	594. 7999999 9999995	468	233	35.5	460.6	352.4
IGNÉO 401 T4 0,55kW	438	11.5	20	622. 7999999 9999995	515	261	35.5	510.6	380.4
IGNÉO 451 T4 1,1kW	485	11.5	20	668	595.5	293	48.5	570.6	437.6

Model	J	K	L	M	N	N1	N2	O	P
IGNÉO 311 T4 0,55kW	324	313.5	200	79	278	198	248	90	95
IGNÉO 351 T4 0,55kW	314. 8999999 9999998	339.4	205	92	304	224	274	105	105
IGNÉO 401 T4 0,55kW	342.9	367.4	205	106	332	252	302	120	120

Model	J	K	L	M	N	N1	N2	O	P
IGNÉO 451 T4 1,1kW	394.4	428.9	185	112	364	284	334	130	130

Model	Q	R	R1	R2	S	T	U	V	W
IGNÉO 311 T4 0,55kW	272. 8999999 9999998	395	315	365	344	430	69.3	26.3	344.6
IGNÉO 351 T4 0,55kW	282. 8999999 9999998	435	355	405	397	473	67.7	29.7	389.6
IGNÉO 401 T4 0,55kW	282. 8999999 9999998	480	400	450	397	473	95.8	57.8	430.6
IGNÉO 451 T4 1,1kW	264. 6000000 0000002	530	450	500	487	563	126.9	43.9	480.6

Model	X	Y	Z
IGNÉO 311 T4 0,55kW	71	M8	8holes x45°
IGNÉO 351 T4 0,55kW	71	M8	8holes x45°
IGNÉO 401 T4 0,55kW	80	M8	8holes x45°
IGNÉO 451 T4 1,1kW	90	M8	8holes x45°



Model	A	A1	A2	B	B1	B2	C	D	D1
IGNÉO 501 T4 1,5kW	847.3	606	405.9	1031.52	356.6	490.7	625.62	309.62	316
IGNÉO 501 T6 0,55kW	847.3	606	405.9	1031.52	356.6	490.7	625.62	309.62	316

Model	A	A1	A2	B	B1	B2	C	D	D1
IGNÉO 561 T4 3kW	942.5	674	453.5	1148. 5999999 999999	394	548.5	695.1	341.1	354
IGNÉO 561 T6 0,75kW	942.5	674	453.5	1148. 5999999 999999	394	548.5	695.1	341.1	354
IGNÉO 631 T4 5,5kW	1053.5	753.3	509	1284. 0999999 999999	437.6	615.9	775.1	376.8	398
IGNÉO 631 T6 1,5kW	1053.5	753.3	509	1284. 0999999 999999	437.6	615.9	775.1	376.8	398
IGNÉO 711 T4 7,5kW	1180.3	843.7	572.4	1437.5	487.5	692.8	865.1	416.4	449
IGNÉO 711 T6 3kW	1180.3	843.7	572.4	1437.5	487.5	692.8	865.1	416.4	449

Model	E	F	G (±)	H	HC	J	K	L	M
IGNÉO 501 T4 1,5kW	582	535	615.5	585.51	625.6	264	323	59	128
IGNÉO 501 T6 0,55kW	582	535	567.5	551.51	625.6	234	323	59	128
IGNÉO 561 T4 3kW	650	608	694.5	684.91	695.1	326. 4100000 0000003	361	59	147
IGNÉO 561 T6 0,75kW	650	608	654.4	624.5	695.1	266	361	59	147
IGNÉO 631 T4 5,5kW	710	675	835.2	797.91	775.1	395.41	405	59	169
IGNÉO 631 T6 1,5kW	710	675	723.8	728.91	775.1	326. 4100000 0000003	405	59	169
IGNÉO 711 T4 7,5kW	826	755	875.9	848.91	865.1	395.41	456	59	184.5
IGNÉO 711 T6 3kW	826	755	875.9	848.91	865.1	395.41	456	59	184.5

Model	N	N1	O	P	R	R1	S	T	V
IGNÉO 501 T4 1,5kW	396	316	147	146	580	500	603.23	54.98	535.62
IGNÉO 501 T6 0,55kW	396	316	147	146	580	500	603.23	54.98	545.62
IGNÉO 561 T4 3kW	434	354	165	170	640	560	673.4	57.3	595.1
IGNÉO 561 T6 0,75kW	434	354	165	170	640	560	673.4	57.3	605.1
IGNÉO 631 T4 5,5kW	478	398	190	190	710	630	754.4	60.4	643.1
IGNÉO 631 T6 1,5kW	478	398	190	190	710	630	754.4	60.4	675.1
IGNÉO 711 T4 7,5kW	529	449	210	210	790	710	847.4	63.8	733.1
IGNÉO 711 T6 3kW	529	449	210	210	790	710	847.4	63.8	733.1

Model	W1	W2	W3	X1	X2	X3	Y1	Y2	Y3
IGNÉO 501 T4 1,5kW	230	241.6	20	522	95.6	20	269.2	222	20
IGNÉO 501 T6 0,55kW	230	241.6	20	522	95.6	20	269.2	222	20
IGNÉO 561 T4 3kW	250	269	20	592	98	20	339.8	224.1	20

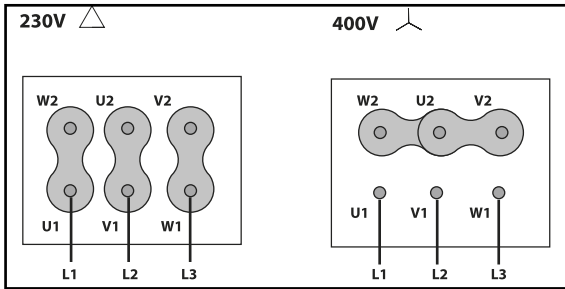
Model	W1	W2	W3	X1	X2	X3	Y1	Y2	Y3
IGNÉO 561 T6 0,75kW	250	269	20	592	98	20	269.2	259. 3999999 9999998	20
IGNÉO 631 T4 5,5kW	330	272. 6000000 0000002	20	673	101.1	20	369.8	252.7	20
IGNÉO 631 T6 1,5kW	330	272. 6000000 0000002	20	673	101.1	20	339.8	267.7	20
IGNÉO 711 T4 7,5kW	350	312.5	20	766	104.5	20	369.8	302. 6000000 0000002	20
IGNÉO 711 T6 3kW	350	312.5	20	766	104.5	20	369.8	302. 6000000 0000002	20

Model	Z1	Z2	Z3	aº	motor	nºholes
IGNÉO 501 T4 1,5kW	392.02	197	31.99	19º	90	8x45º
IGNÉO 501 T6 0,55kW	392.02	167	31.99	19º	80	8x45º
IGNÉO 561 T4 3kW	430.7	257	33. 7000000 0000000 3	15º	100	12x30º
IGNÉO 561 T6 0,75kW	430.7	197	33. 2999999 9999999 7	15º	90	12x30º
IGNÉO 631 T4 5,5kW	474.7	327	32.71	0º	132	12x30º
IGNÉO 631 T6 1,5kW	474.7	257	33. 7000000 0000000 3	0º	100	12x30º
IGNÉO 711 T4 7,5kW	525. 7000000 0000005	327	32.71	5º	132	16x22,5º
IGNÉO 711 T6 3kW	525. 7000000 0000005	327	32.71	5º	132	16x22,5º

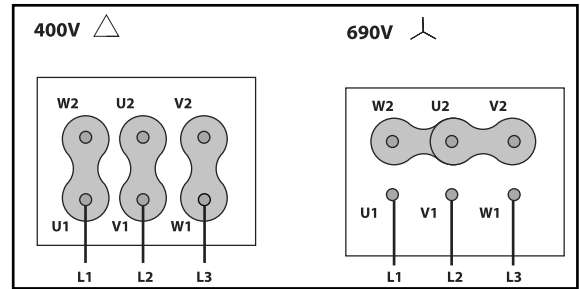
# Wiring diagram

DIAGRAM N° 1

230/400V



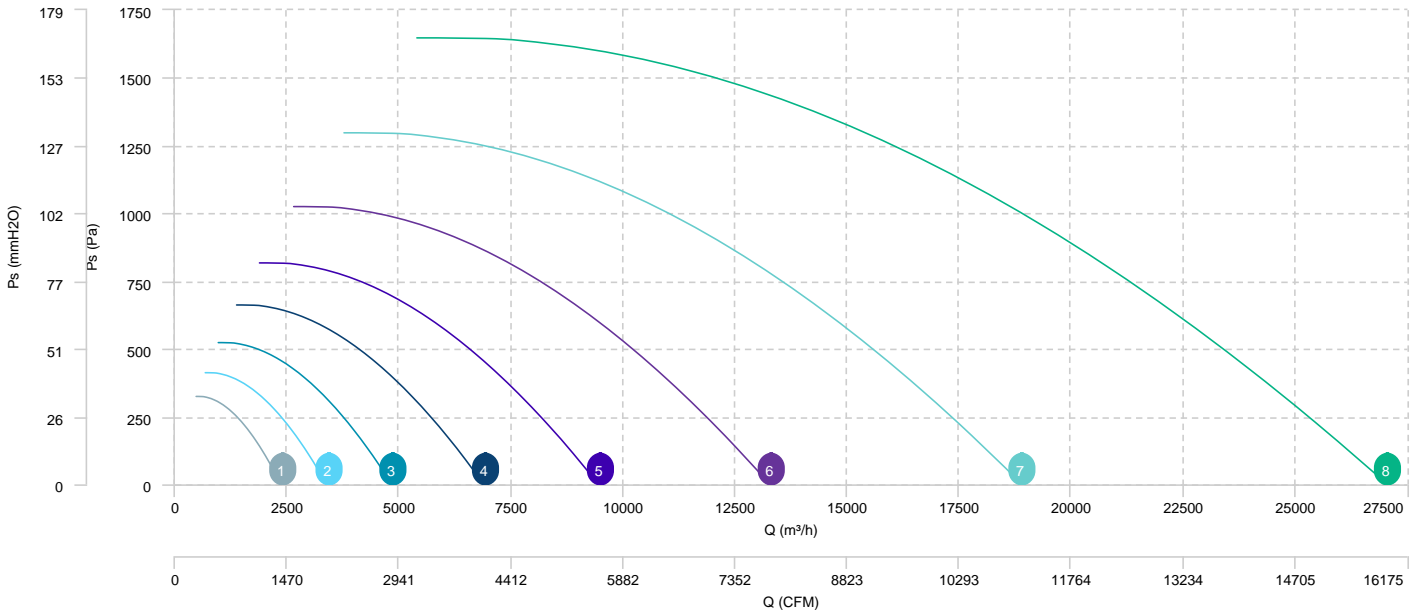
400/690V



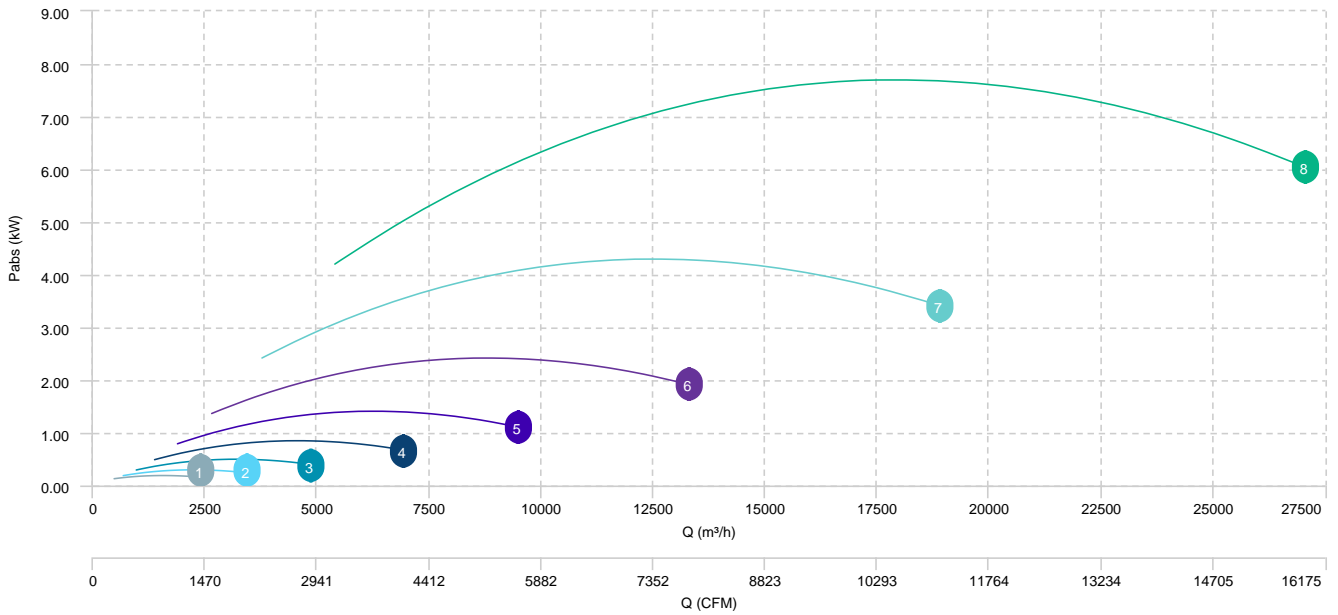
# CHARACTERISTIC CURVE

1	IGNÉO 311 T4 0,55kW	2	IGNÉO 351 T4 0,55kW	3	IGNÉO 401 T4 0,55kW	4	IGNÉO 451 T4 1,1kW
5	IGNÉO 501 T4 1,5kW	6	IGNÉO 561 T4 3kW	7	IGNÉO 631 T4 5,5kW	8	IGNÉO 711 T4 7,5kW

## AIR FLOW - PRESSURE



## AIR FLOW - ABSORBED POWER





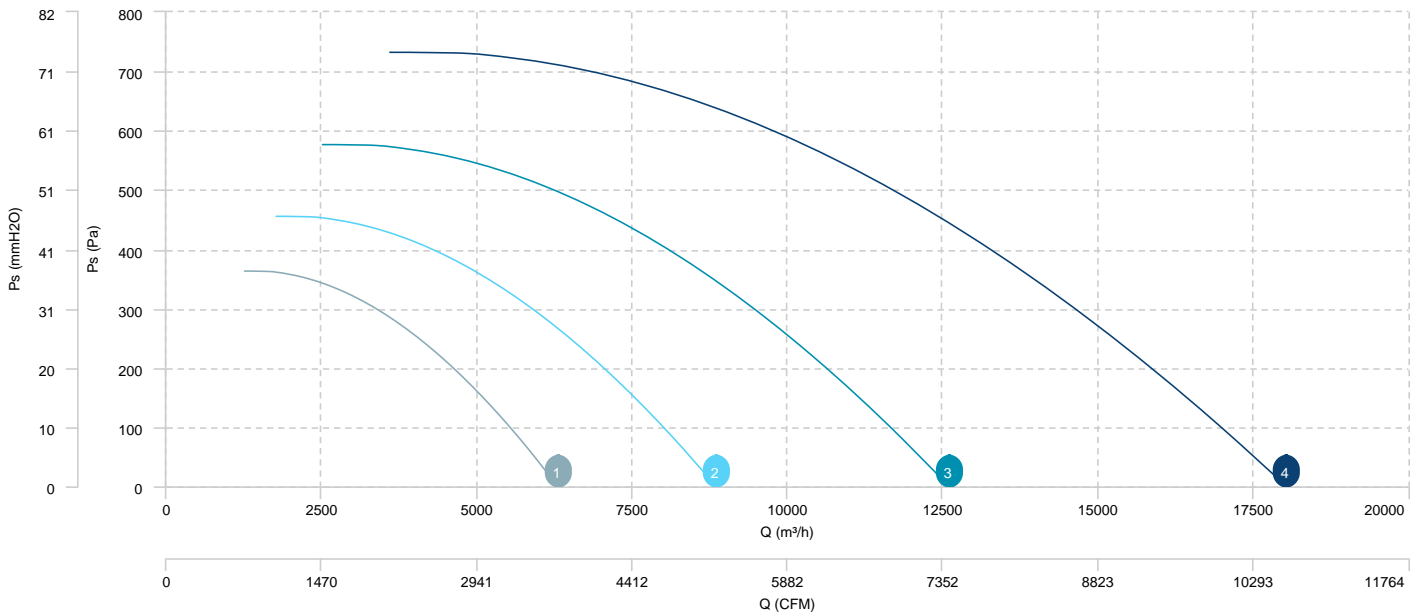
1 IGNÉO 501 T6 0,55kW

2 IGNÉO 561 T6 0,75kW

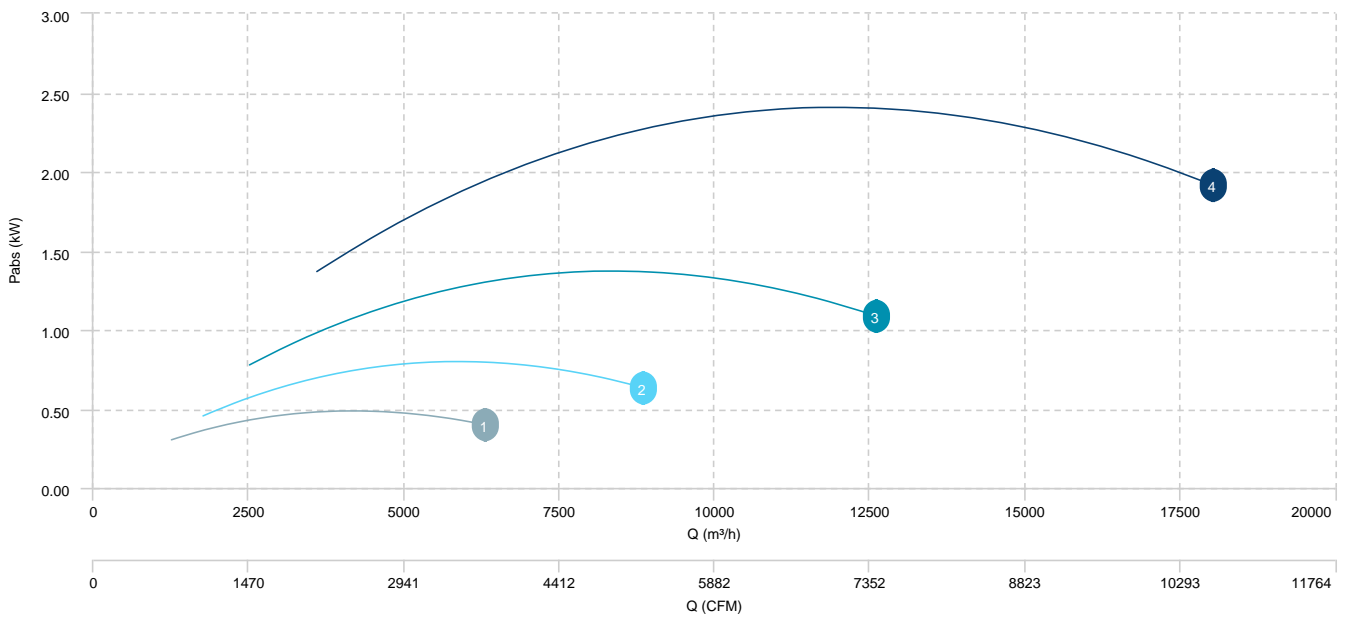
3 IGNÉO 631 T6 1,5kW

4 IGNÉO 711 T6 3kW

**AIR FLOW - PRESSURE**



**AIR FLOW - ABSORBED POWER**



## Sound data

### 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
IGNÉO 311 T4 0,55kW	Inlet	65	63	60	58	56	53	50	47	69
IGNÉO 351 T4 0,55kW	Inlet	69	67	64	62	60	57	54	51	73
IGNÉO 401 T4 0,55kW	Inlet	73	71	68	66	64	61	58	55	77
IGNÉO 451 T4 1,1kW	Inlet	76	74	71	69	67	64	61	58	80
IGNÉO 501 T4 1,5kW	Inlet	79	77	74	72	70	67	64	61	83
IGNÉO 561 T4 3kW	Inlet	83	81	78	76	74	71	68	65	87
IGNÉO 631 T4 5,5kW	Inlet	87	85	82	80	78	75	72	69	91
IGNÉO 711 T4 7,5kW	Inlet	90	88	85	83	81	78	75	72	94

### 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
IGNÉO 501 T6 0,55kW	Inlet	71	69	66	64	62	59	56	53	75
IGNÉO 561 T6 0,75kW	Inlet	74	72	69	67	65	62	59	56	78
IGNÉO 631 T6 1,5kW	Inlet	78	76	73	71	69	66	63	60	82
IGNÉO 711 T6 3kW	Inlet	81	79	76	74	72	69	66	63	85

## erp data

ERP	
Fan type	Centrifugal fan backward blades with casing
Installation category	A
Efficiency category	Static
The fan has to be installed with FSC	No

### 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
IGNÉO 311 T4 0,55kW	0,55	51,84	69,99	1.358,01	253,31	0,19	1398	1,00
IGNÉO 351 T4 0,55kW	0,55	60,10	76,19	1.930,56	323,68	0,29	1398	1,00
IGNÉO 401 T4 0,55kW	0,55	65,22	78,97	2.741,55	413,55	0,49	1398	1,00
IGNÉO 451 T4 1,1kW	1,10	69,01	80,34	3.894,70	524,40	0,83	1392	1,01
IGNÉO 501 T4 1,5kW	1,50	70,53	79,55	5.325,57	649,13	1,38	1410	1,01
IGNÉO 561 T4 3kW	3	72,38	78,93	7.490,42	813,51	2,37	1420	1,01
IGNÉO 631 T4 5,5kW	5,50	73,40	77,33	10.668,60	1.029,32	4,22	1450	1,01
IGNÉO 711 T4 7,5kW	7,50	74,57	75,86	15.211,03	1.311,61	7,54	1453	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
IGNÉO 501 T6 0,55kW	0,55	60,29	74,14	3.589,08	285,85	0,48	910	1,00
IGNÉO 561 T6 0,75kW	0,75	64,96	76,57	4.990,44	361,75	0,78	925	1,00
IGNÉO 631 T6 1,5kW	1,50	68,18	77,33	7.106,14	457,81	1,35	940	1,00
IGNÉO 711 T6 3kW	3	70,59	77,17	10.180,78	581,02	2,36	960	1,01