

KUVIO EEC



HIGH EFFICIENCY EC IN-LINE MIXED FLOW FAN MADE OF FIRE RESISTANT PLASTIC RESIN

MANUFACTURING FEATURES

- High efficiency in-line fan with motor supports, inlet and mixed-flow impeller made of fire-resistant plastic resin. The side cones incorporate the fan anchor supports on the surface in order to guarantee a quick and safe installation. Designed to allow the assembly or disassembly of the fans without manipulating the ducts.
- High efficiency EC (brushless) motors that are continuously adjustable (0-10 V signal) or configurable in the installation for 2-speed operation (to be configured in the installation in a pre-established range). Single-phase motor with disconnection due to thermal overload and axes that activate ball bearings to guarantee continuous long-term work (at least 40,000 hours at maximum plate temperature). Standard voltages 220-240V 50Hz and 60Hz. Adjustable speed with accessories.
- Maximum continuous working temperature: 50°C.
- IP44 protection degree. IMQ Safety certificate to guarantee electromagnetic compatibility.

| APPLICATIONS

Their small radial dimensions make them an efficient and effective solution to save space in the ventilation of low visual impact of residential, commercial or industrial premises. Designed for duct supply and exhaust ventilation systems that require excellent response in terms of high pressure and air flow, while keeping noise under control. Equipped with EC motor which reduces power consumption.

It can be used in many small and medium ventilation installations for air renewal such as:

- Bathrooms and changing rooms.
- Commercial offices.
- Extraction in domestic kitchens after the extraction hood.
- Schools.
- Waiting room.
- Commercial premises, laundries, shops, bars, restaurants, etc.

Accessories



BDC



REGC



**SIL-C
MINI**



VISC

Technical data

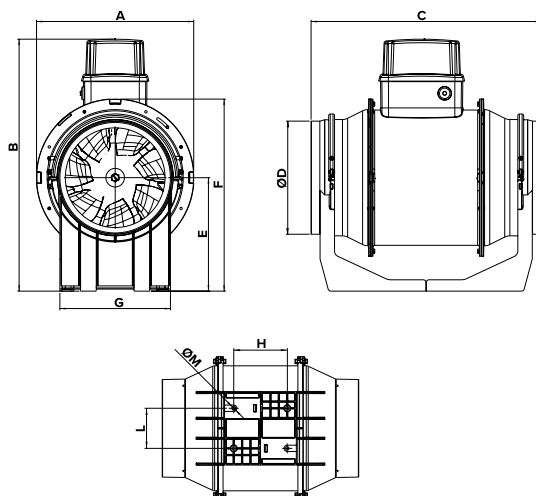
2 speed motor

Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weig ht kg	Connect. diagram
KUV100EEC	KUVIO 100 EEC	2300	0,2	0,02	305	56	2,60	1
KUV125EEC	KUVIO 125 EEC	2350	0,25	0,03	380	55	2,50	1
KUV150EEC	KUVIO 150 EEC	2550	0,5	0,06	590	61	2,90	1
KUV160EEC	KUVIO 160 EEC	2650	0,55	0,06	640	61	3	1
KUV200EEC	KUVIO 200 EEC	2680	0,8	0,09	1.100	63	3,50	2
KUV250EEC	KUVIO 250 EEC	2690	1,00	0,13	1.480	62	8,72	2
KUV315EEC	KUVIO 315 EEC	2370	1,75	0,23	2.630	66	13,50	3

Notes:

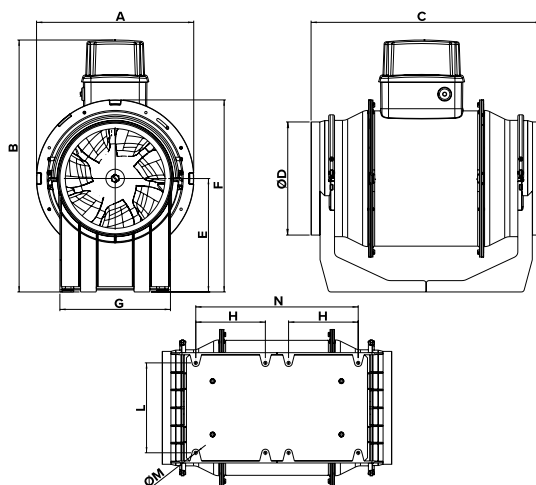
** Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

Dimensions



Model	A	B	C	D	E	F	G	H	L
KUVIO 100 EEC	188.5	240	303	96	101.5	189	90	60	80
KUVIO 125 EEC	188.5	240	258	122	101,5	189	90	60	80
KUVIO 150 EEC	214.5	265	294	146	112.5	212	110	60	80
KUVIO 160 EEC	214.5	265	272.5	156	112.5	212	110	60	80

Model	M
KUVIO 100 EEC	5,5
KUVIO 125 EEC	5,5
KUVIO 150 EEC	5,5
KUVIO 160 EEC	5,5

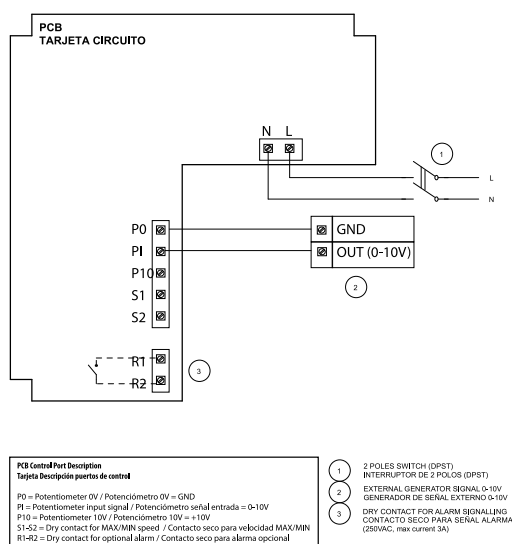


Model	A	B	C	D	E	F	G	H	L
KUVIO 200 EEC	270	372.5	396	194.5	195	330	190	120	155
KUVIO 250 EEC	300	377.5	322	243	190	329	200	70	170
KUVIO 315 EEC	373	506	420	307	224	398	309	110	255

Model	M	N
KUVIO 200 EEC	5.5	280
KUVIO 250 EEC	6.5	174.5
KUVIO 315 EEC	8.5	259.5

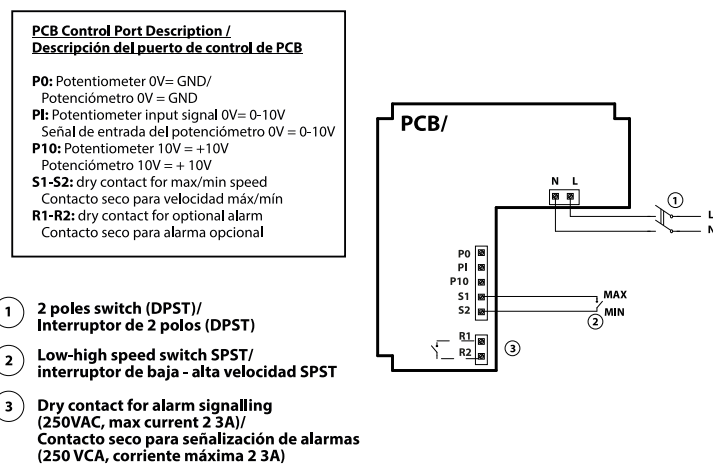
Wiring diagram

Wiring diagram N° 1



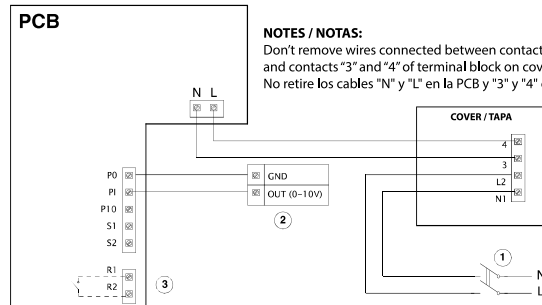
Wiring diagram N° 2

WIRING TO AN EXTERNAL LOW/ HIGH SPEED SWITCH / CABLEADO A UN INTERRUPTOR EXTERNO DE BAJA / ALTA VELOCIDAD



Wiring diagram Nº 3

WIRING TO THE EXTERNAL GENERATOR SIGNAL 0-10V/
CONEXIÓN CON GENERADOR DE SEÑAL EXTERNO 0-10V



NOTES / NOTAS:

Don't remove wires connected between contacts "N" and "L" of PCB and contacts "3" and "4" of terminal block on cover /
No retire los cables "N" y "L" en la PCB y "3" y "4" en la tapa

- ① 2 poles switch (DPST)/
Interruptor de 2 polos (DPST)
- ② External generator signal 0-10V/
Señal de generador externo 0-10 V
- ③ Dry contact for alarm signalling
(250VAC, max current 2 3A)/
Contacto seco para señalización de alarmas
(250 VCA, corriente máxima 2 3A)

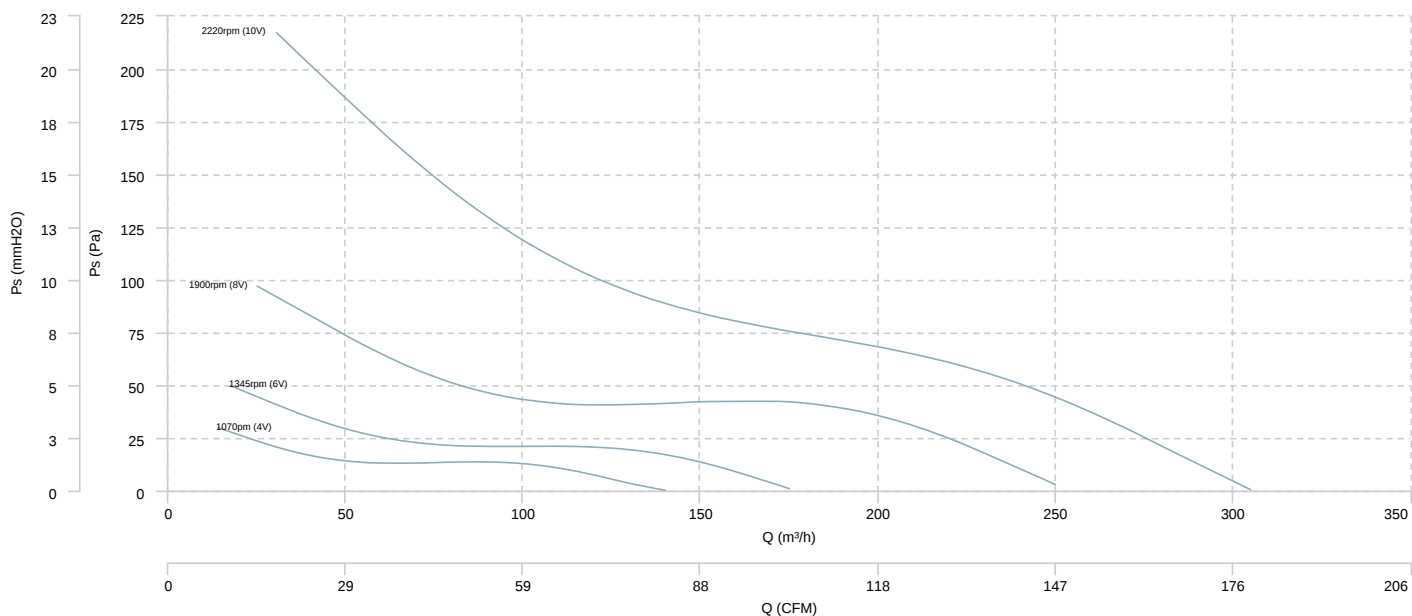
PCB Control Port Description /
Descripción del puerto de control de PCB

P0: Potentiometer 0V = GND/
Potenciómetro 0V = GND
P1: Potentiometer input signal 0V = 0-10V
Señal de entrada del potenciómetro 0V = 0-10V
P10: Potentiometer 10V = +10V
Potenciómetro 10V = +10V
S1-S2: dry contact for max/min speed
Contacto seco para velocidad máx/min
R1-R2: dry contact for optional alarm
Contacto seco para alarma opcional

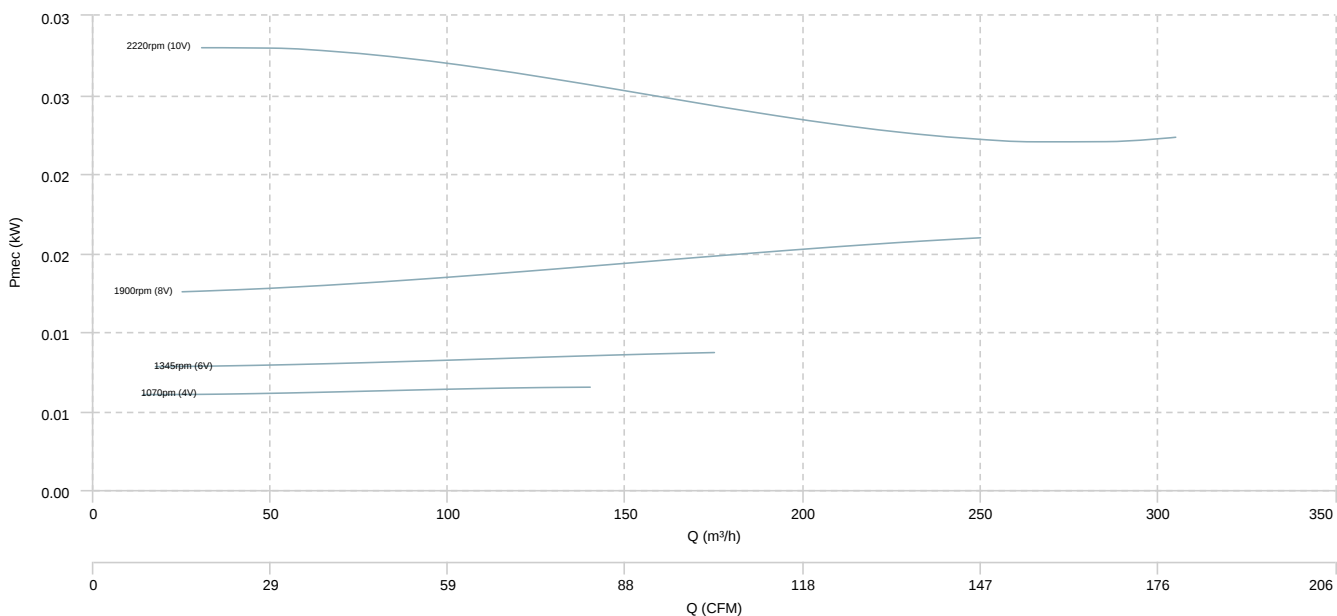
CHARACTERISCTIC CURVE

KUVIO 100 EEC

AIR FLOW - PRESSURE

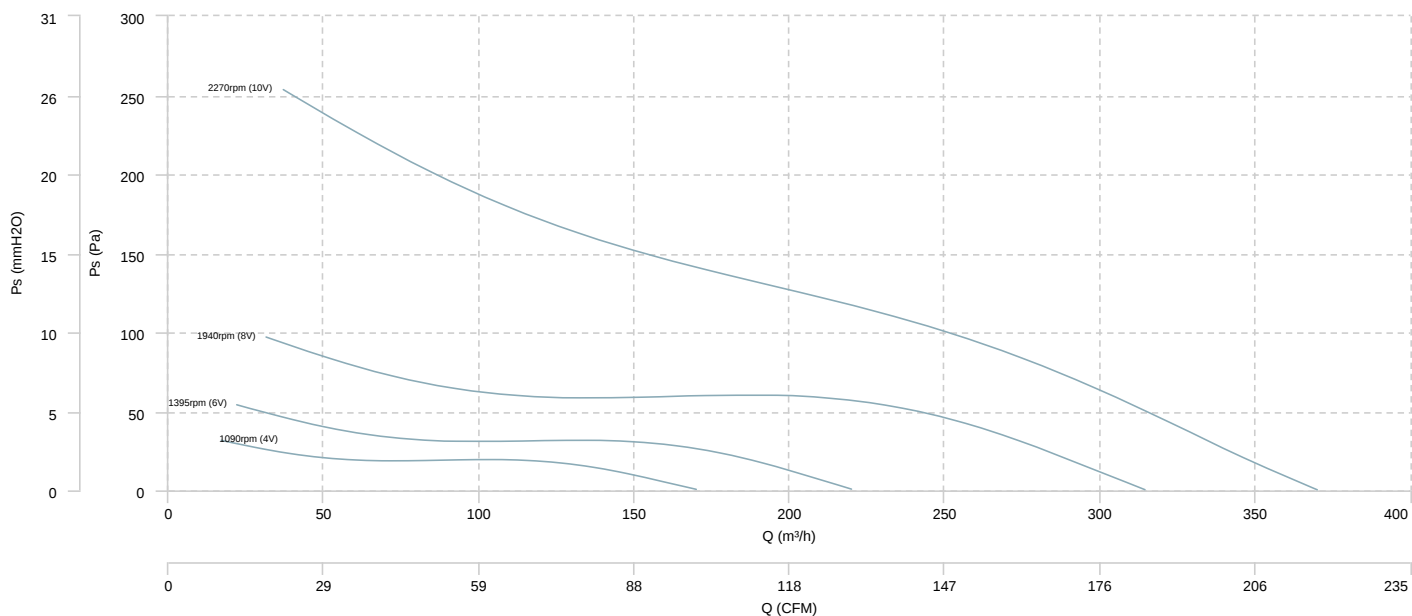


AIR FLOW - MECHANICAL POWER

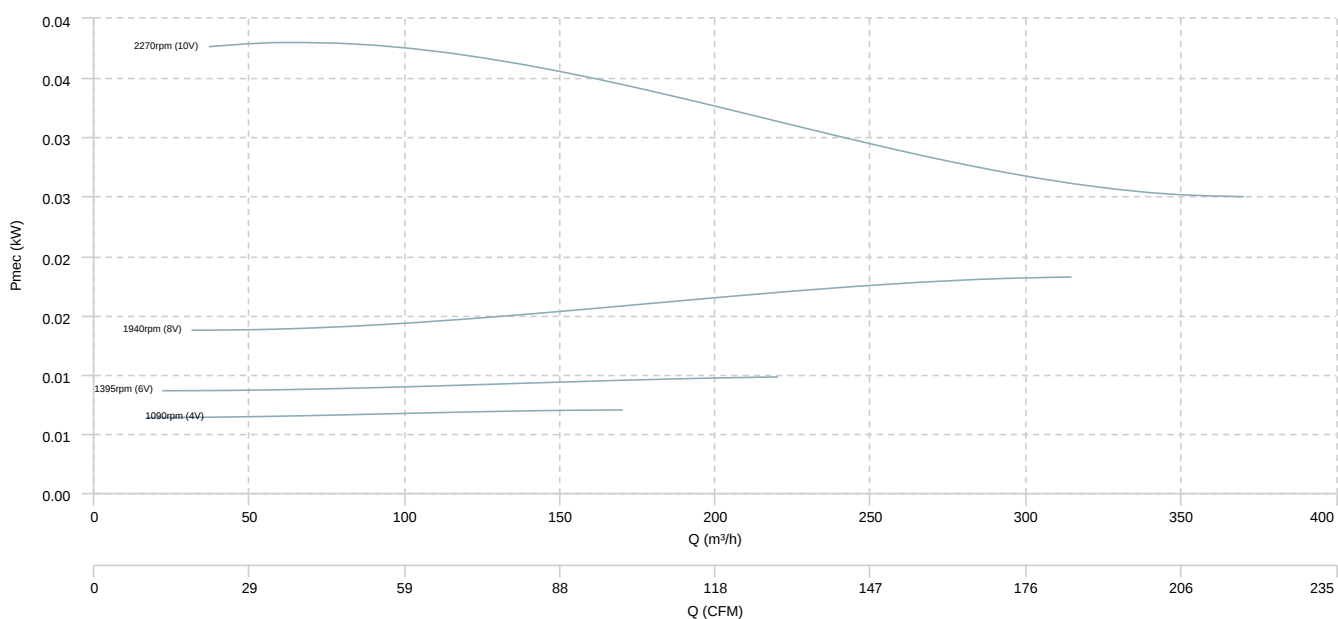


KUVIO 125 EEC

AIR FLOW - PRESSURE

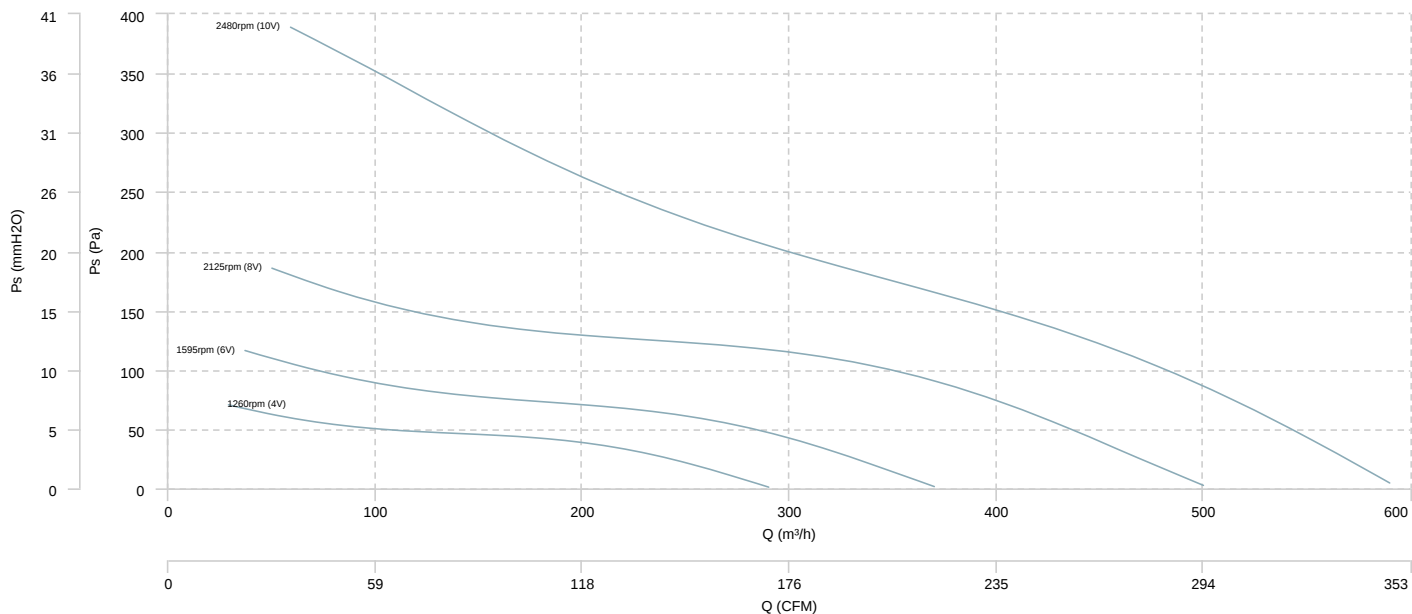


AIR FLOW - MECHANICAL POWER

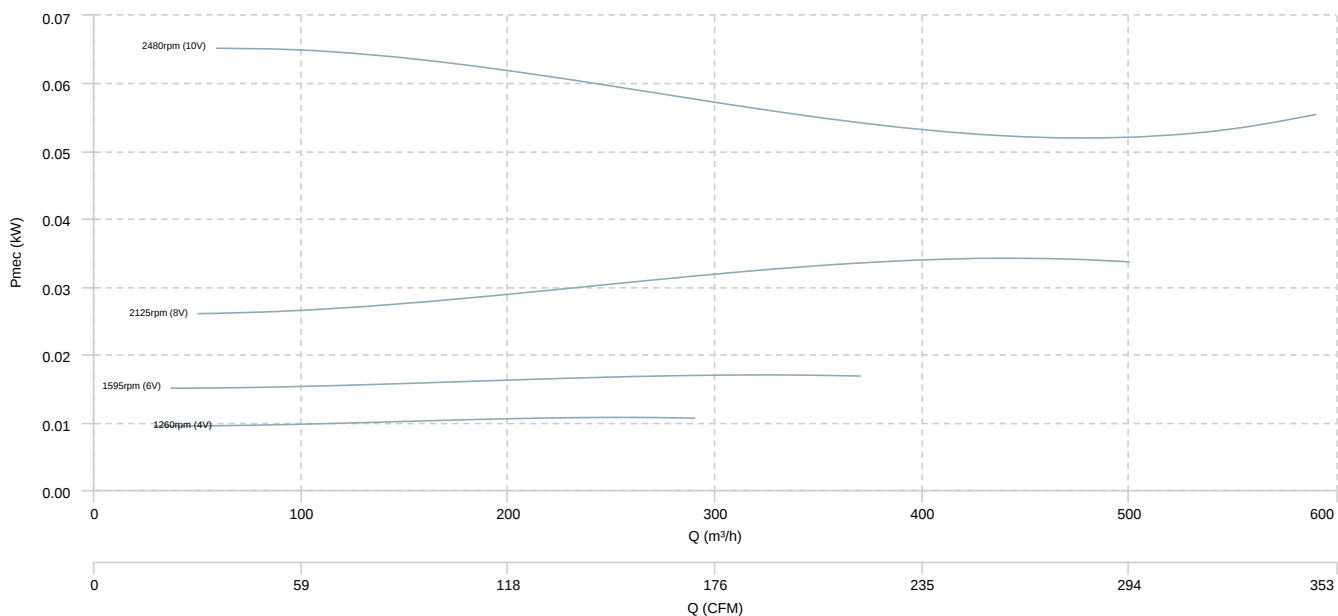


KUVIO 150 EEC

AIR FLOW - PRESSURE

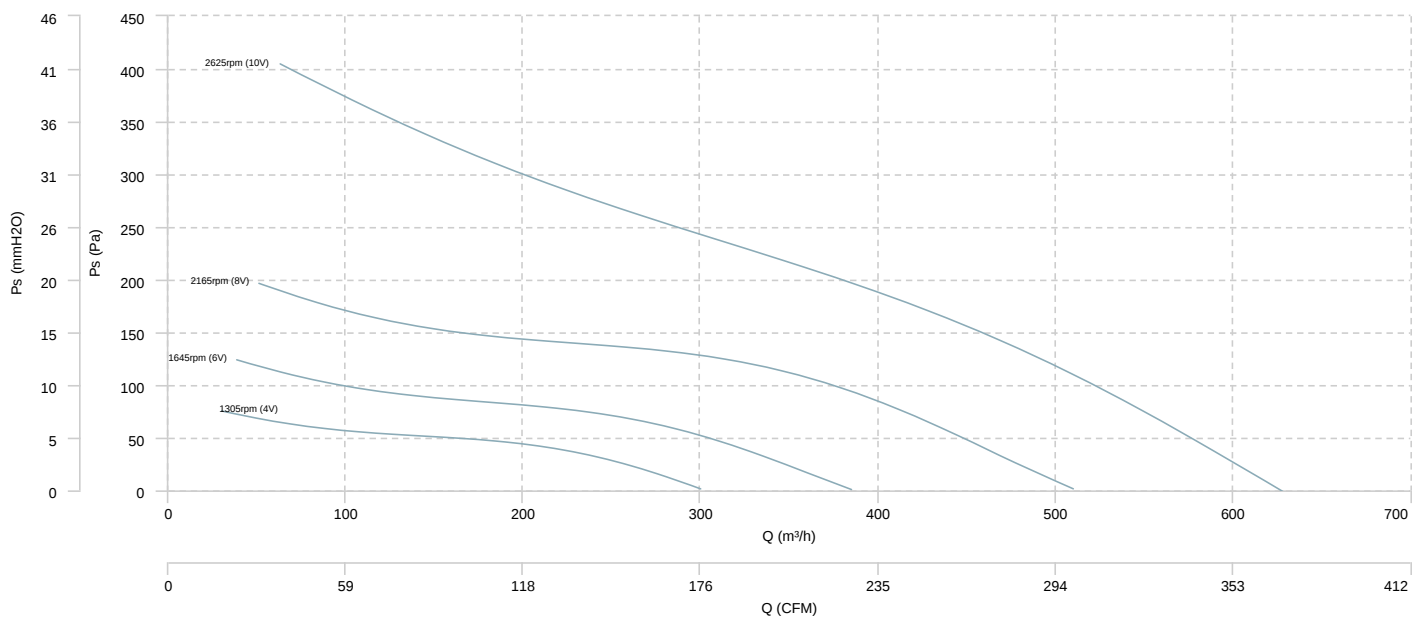


AIR FLOW - MECHANICAL POWER

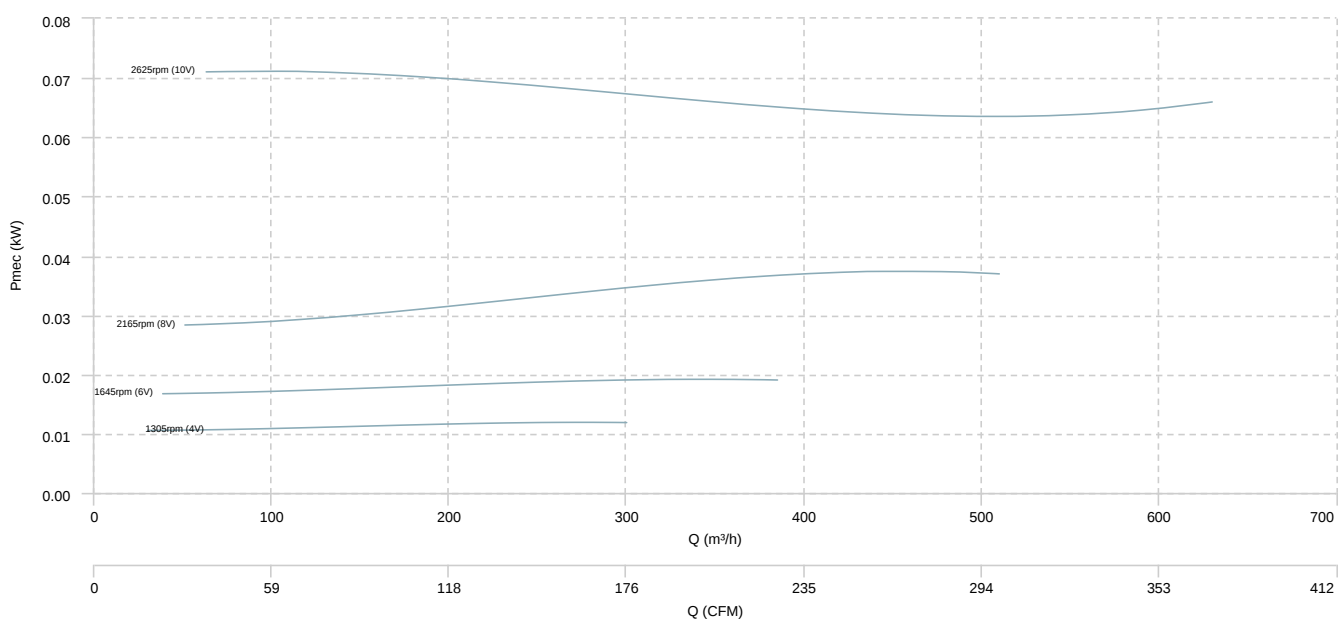


KUVIO 160 EEC

AIR FLOW - PRESSURE

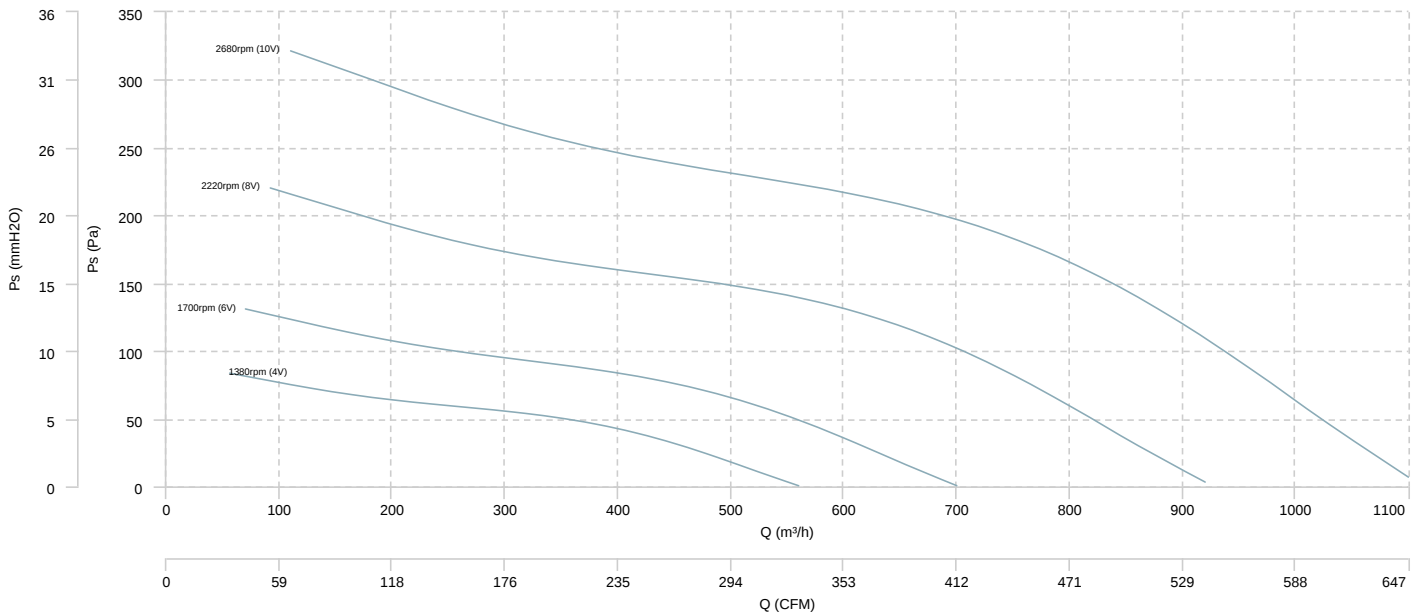


AIR FLOW - MECHANICAL POWER

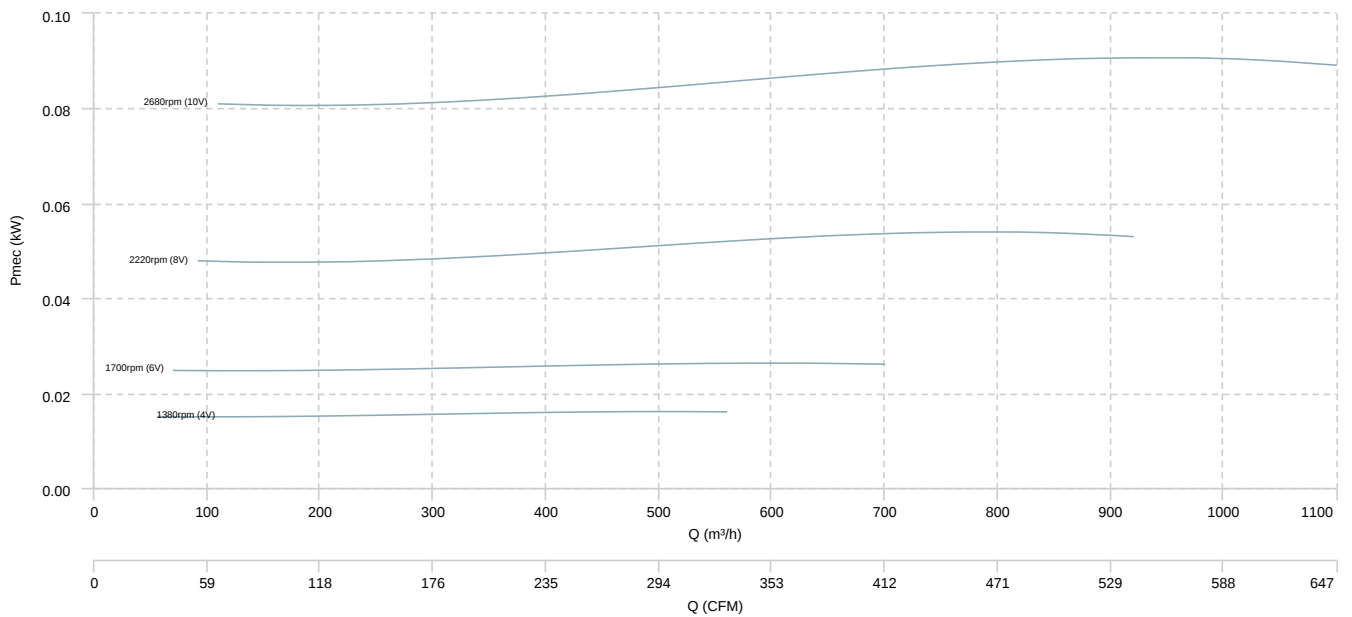


KUVIO 200 EEC

AIR FLOW - PRESSURE

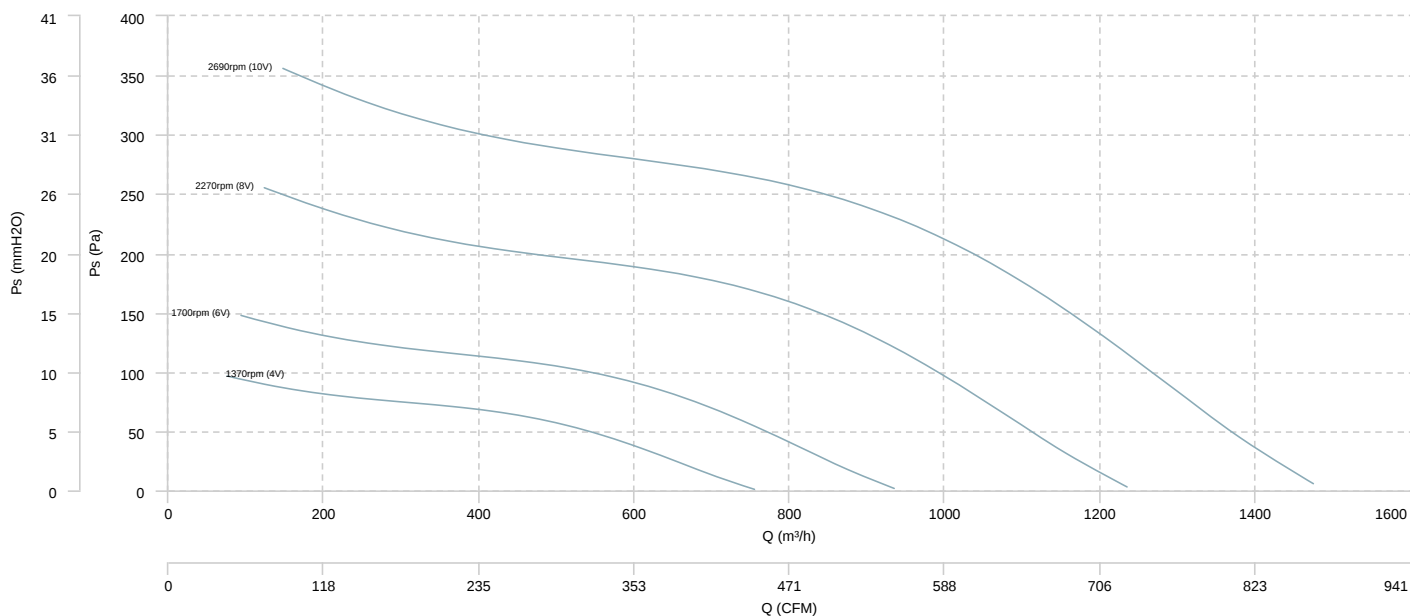


AIR FLOW - MECHANICAL POWER

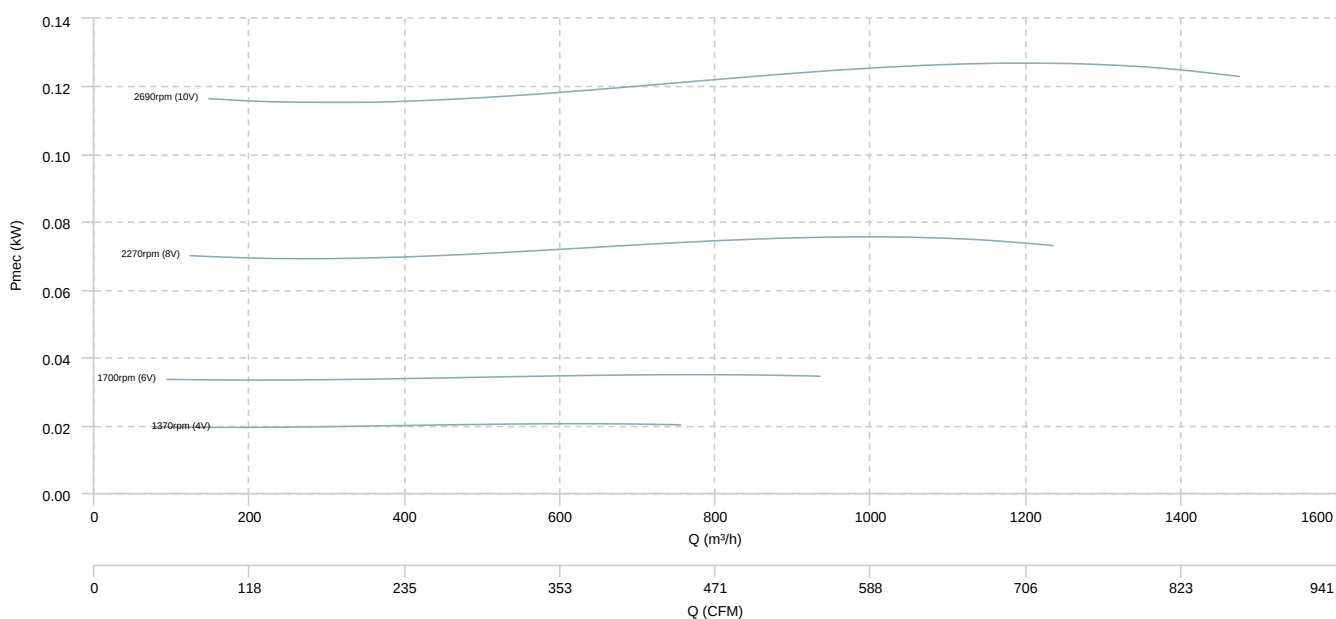


KUVIO 250 EEC

AIR FLOW - PRESSURE

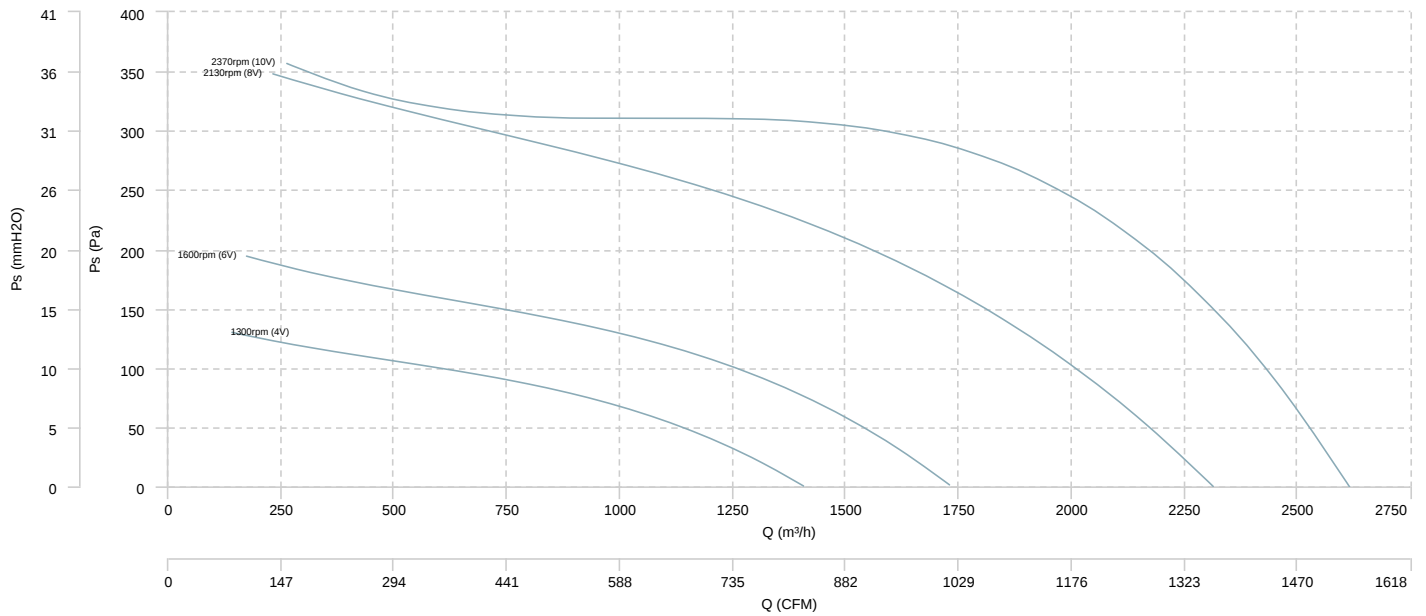


AIR FLOW - MECHANICAL POWER

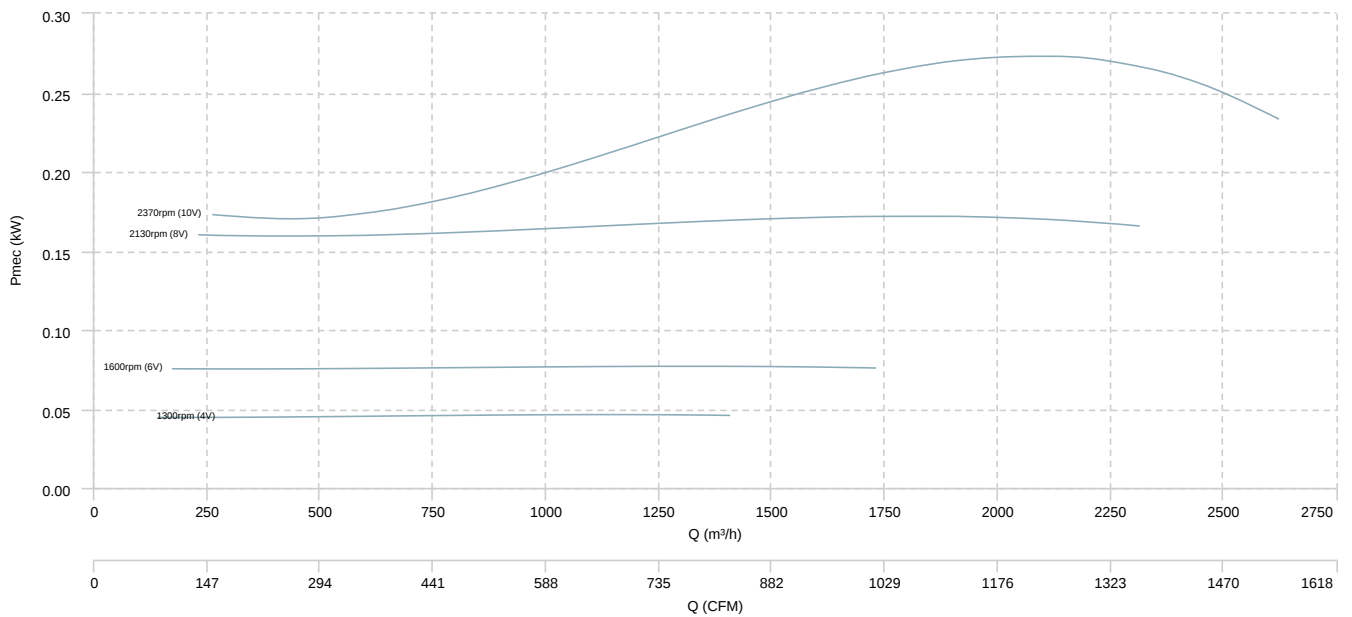


KUVIO 315 EEC

AIR FLOW - PRESSURE



AIR FLOW - MECHANICAL POWER



Sound data

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
KUVIO 100 EEC (1070rpm (4V))	Inlet	-	54	58	58	55	50	36	41	63
	Outlet	-	52	56	57	56	48	37	39	62
	Radiated	-	30	32	28	22	7	7	8	35
KUVIO 125 EEC (1090rpm (4V))	Inlet	-	59	56	58	55	52	38	42	64
	Outlet	-	58	55	57	57	50	38	41	63
	Radiated	-	29	32	30	26	26	7	8	36
KUVIO 150 EEC (1260rpm (4V))	Inlet	-	54	58	61	62	62	49	47	67
	Outlet	-	54	60	63	65	62	52	49	69
	Radiated	-	32	31	32	34	37	29	8	41
KUVIO 160 EEC (1305rpm (4V))	Inlet	-	53	57	61	62	64	50	47	68
	Outlet	-	53	58	62	65	61	52	50	69
	Radiated	-	30	31	31	35	39	31	8	42
KUVIO 200 EEC (1380rpm (4V))	Inlet	-	62	70	72	71	71	69	64	78
	Outlet	-	62	70	72	70	69	68	61	77
	Radiated	-	35	50	47	49	48	44	30	55
KUVIO 250 EEC (1370rpm (4V))	Inlet	-	57	62	64	67	66	62	54	74
	Outlet	-	58	62	63	66	66	59	51	71
	Radiated	-	30	39	40	44	43	32	8	48
KUVIO 315 EEC (1300rpm (4V))	Inlet	-	62	70	82	72	67	68	57	83
	Outlet	-	65	69	79	71	68	63	54	80
	Radiated	-	-	-	-	-	-	-	-	63

Notes:

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

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