KUVIO EEC

HIGH EFFICIENCY EC IN-LINE MIXED FLOW FAN CONSTRUCTED IN SELF-EXTINGUISHING PLASTIC RESIN AND RESISTANT TO AGGRESSIVE CHEMICAL AGENTS.

MANUFACTURING FEATURES:

High efficiency In-line mixed flow fan with motor-holder enclosures, end cones and mixed flow impellers constructed in self-extinguishing plastic resin with a mineral-based additive to ensure dimensional stability. The side cones incorporate the fan's anchoring brackets onto the target surface for safe, quick installation. Designed to allow the assembly or disassembly of the fans without manipulating the ducts.
High efficiency EC (brushless) motors that are continuously adjustable (0-10V signal) or are settable at installation for 2-speed operation. Monophasic motor with thermal overload cut-out and shafts turning on ball bearings to guarantee long life continuous work (at least 40.000 hours at the maximum plate temperature. Standard voltages 220-240V 50Hz and 60 Hz.
Maximum working temperature in continuous: 50ºC
IP44 protection. IMQ Safety certificate to guaranty the electromechanical compatibility.

APPLICATIONS:

Their small radial dimensions make them an effective, effective space-saving solution for low-visual impact ventilation 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 ...
- Laboratories

Accessories

SIL-C MINI

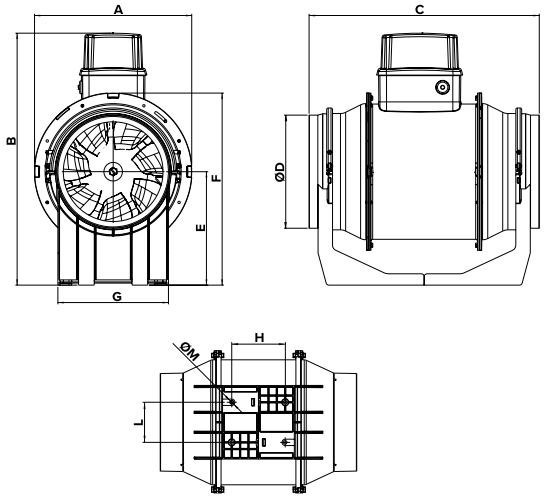
Technical data

2 speed motor

Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
KUV100EEC	KUVIO 100 EEC	2300	0,2	0,02	280	56	1,90	1
KUV125EEC	KUVIO 125 EEC	2350	0,25	0,03	380	55	1,90	1
KUV150EEC	KUVIO 150 EEC	2550	0,5	0,06	620	61	2,20	1
KUV160EEC	KUVIO 160 EEC	2650	0,55	0,06	640	61	2,20	1
KUV200EEC	KUVIO 200 EEC	2680	0,8	0,90	1.100	63	4,60	2
KUV250EEC	KUVIO 250 EEC	2690	1,00	0,13	1.480	62	5	2
KUV315EEC	KUVIO 315 EEC	2370	1,75	0,23	2.630	66	9,20	3

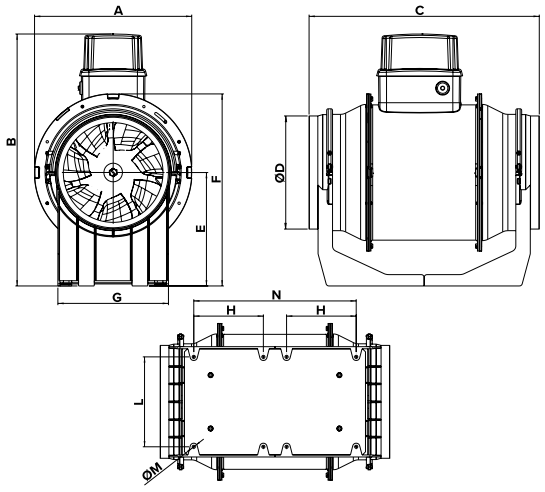
Notes:
** Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

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

DIAGRAM Nº 1

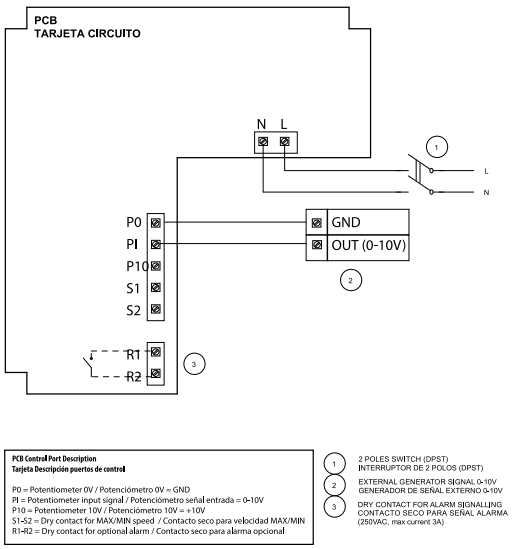
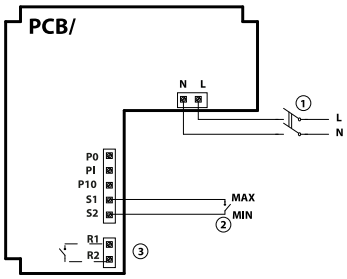


DIAGRAM Nº 2

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

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

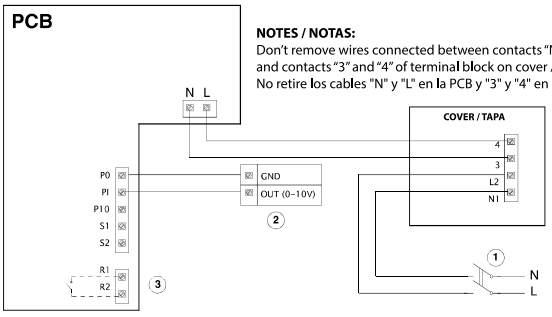
P0: Potentiometer 0V= GND/
Potenciómetro 0V = GND
PI: Potentiometer input signal 0V= 0-10V
Señal de entrada del potenciómetro 0V = 0-10V
P10: Potentiometer 10V = +10V
Potenciómetro 10V = + 10V
S1-S2: dry contact for max/min speed
Contacto seco para velocidad máx/mín
R1-R2: dry contact for optional alarm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



1. **2 poles switch (DPST)/**
Interruptor de 2 polos (DPST)
2. **Low-high speed switch SPST/**
interruptor de baja - alta velocidad SPST
3. **Dry contact for alarm signalling**
(250VAC, max current 2 3A)/
Contacto seco para señalización de alarmas
(250 VCA, corriente máxima 2 3A)

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)**

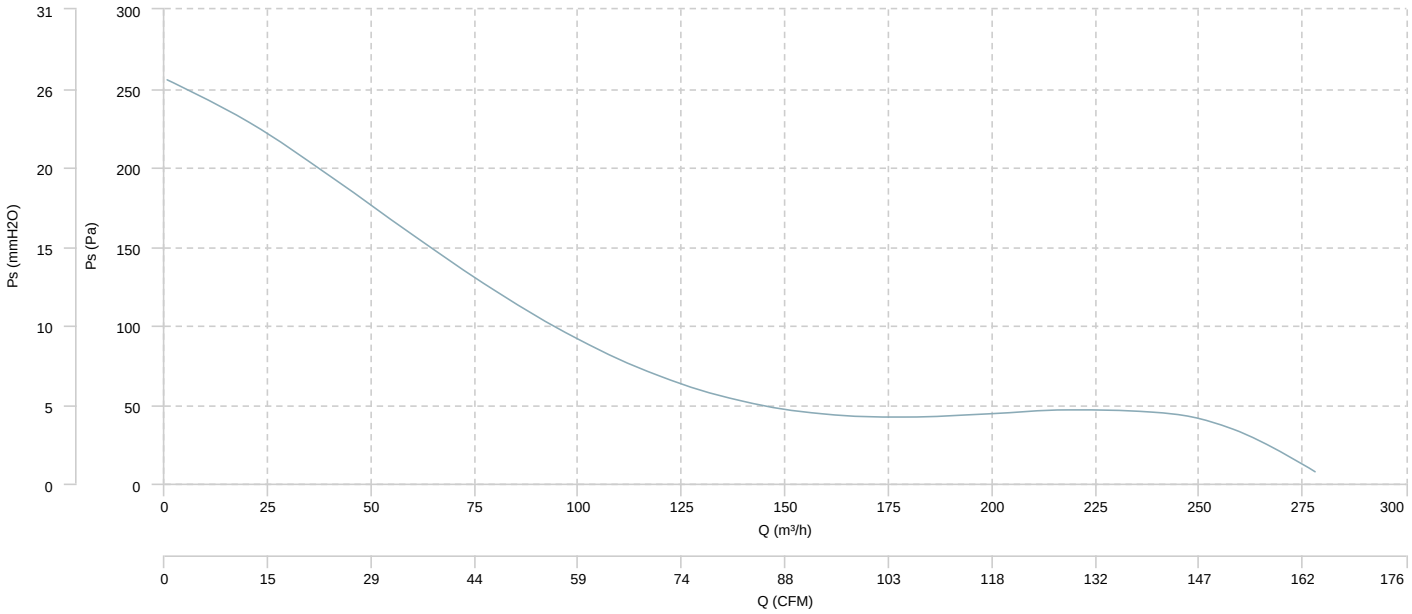
PCB Control Port Description / Descripción del puerto de control de PCB

P0: Potentiometer 0V= GND/
Potenciómetro 0V = GND
PI: 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

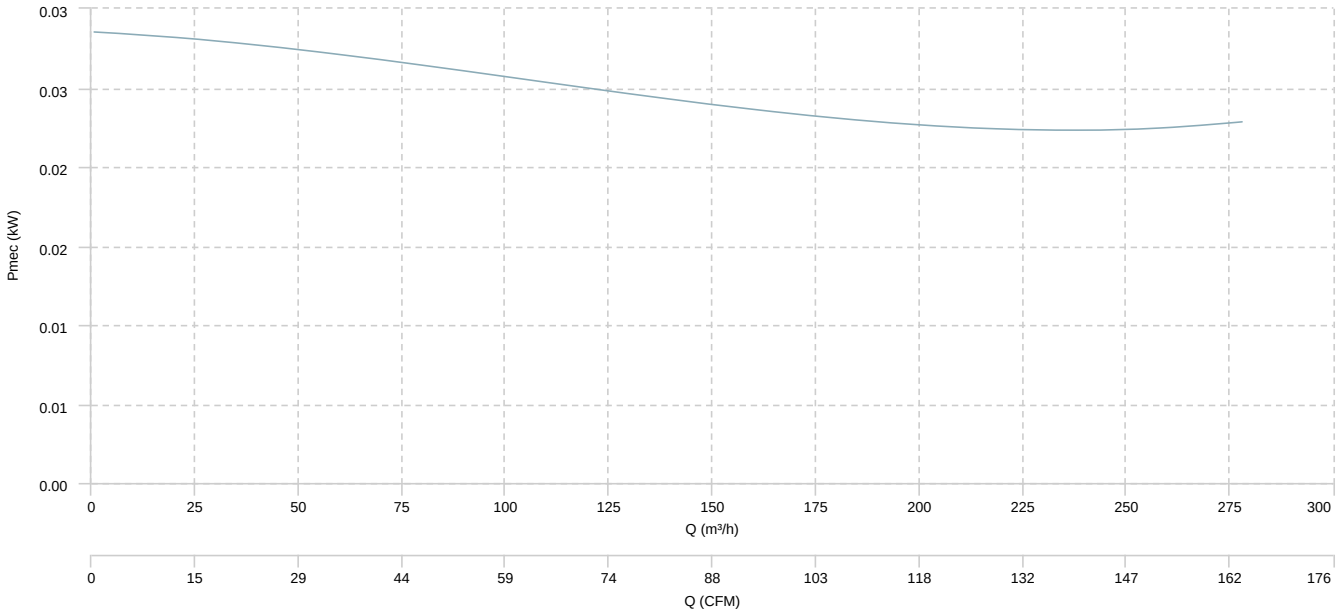
CHARACTERISCTIC CURVE

KUVIO 100 EEC

AIR FLOW - PRESSURE

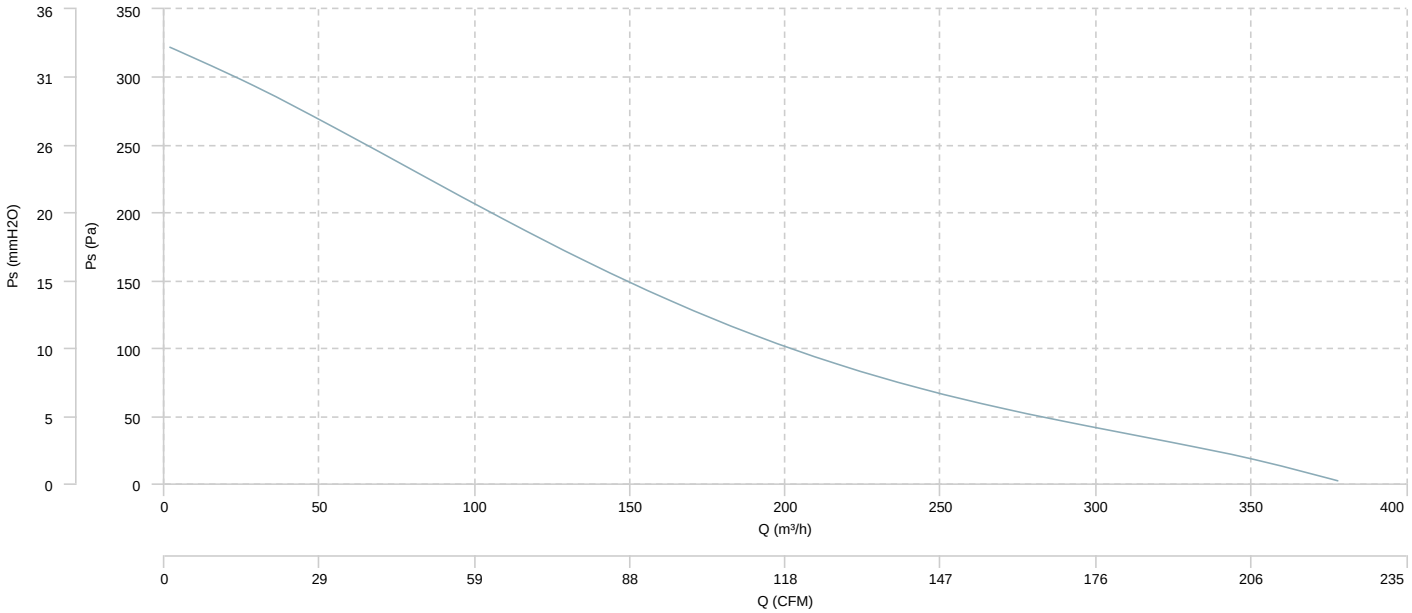


AIR FLOW - MECHANICAL POWER

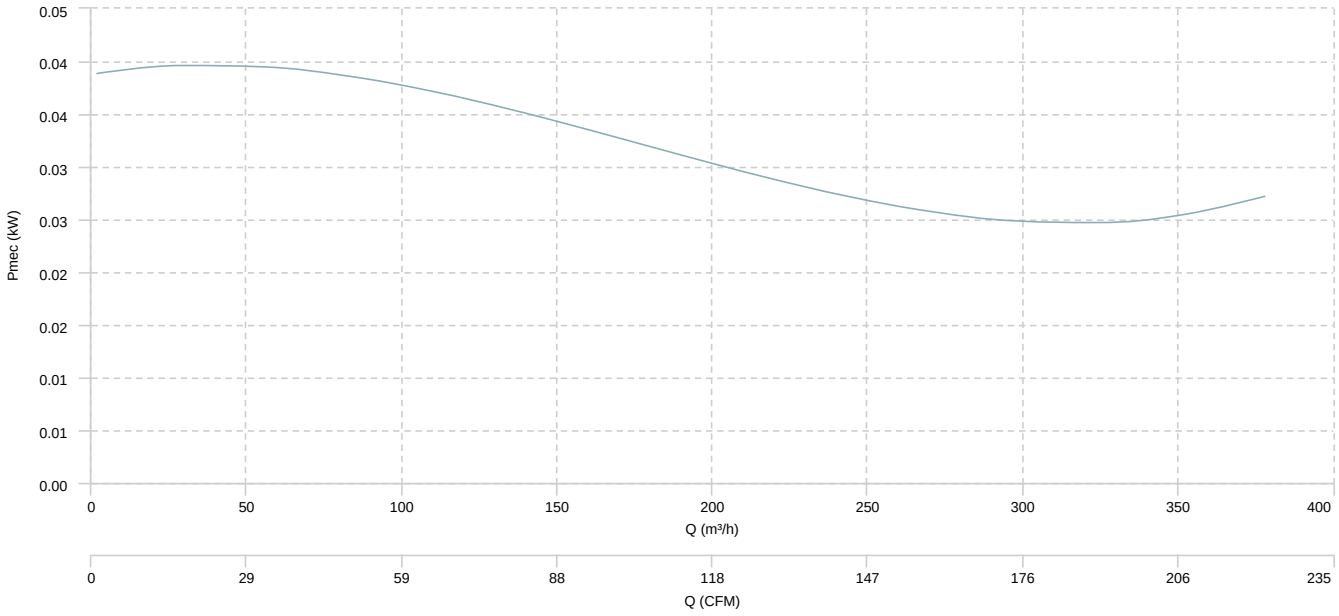


KUVIO 125 EEC

AIR FLOW - PRESSURE

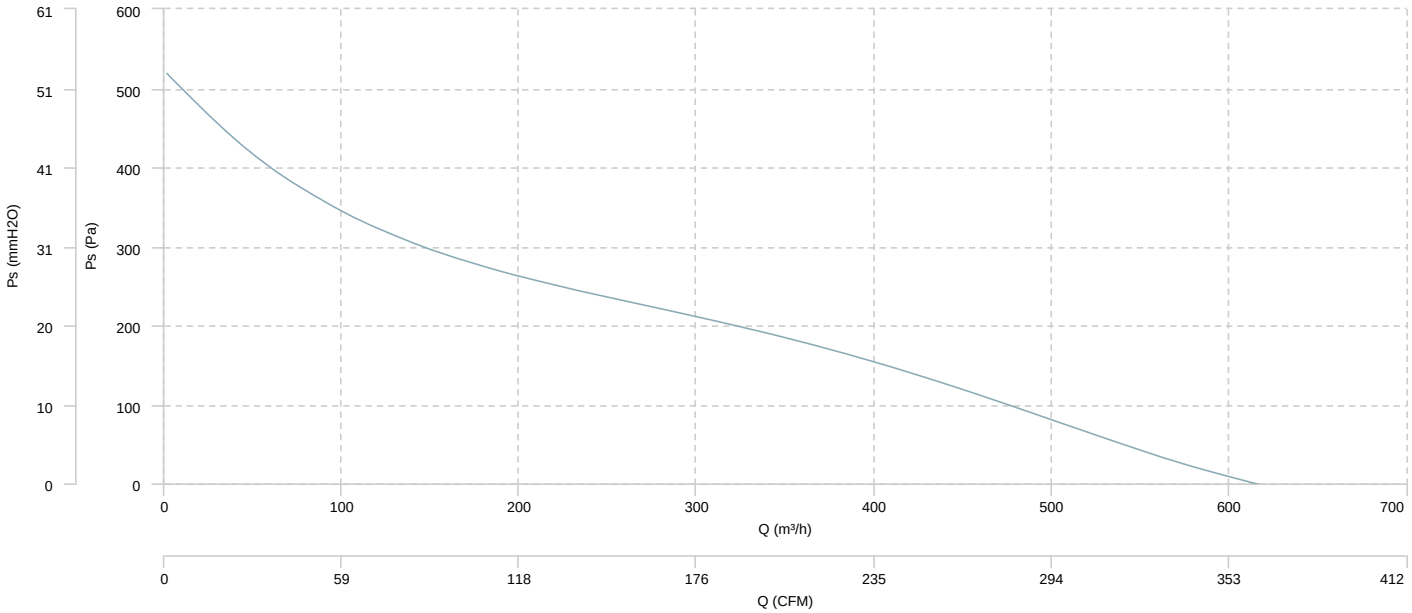


AIR FLOW - MECHANICAL POWER

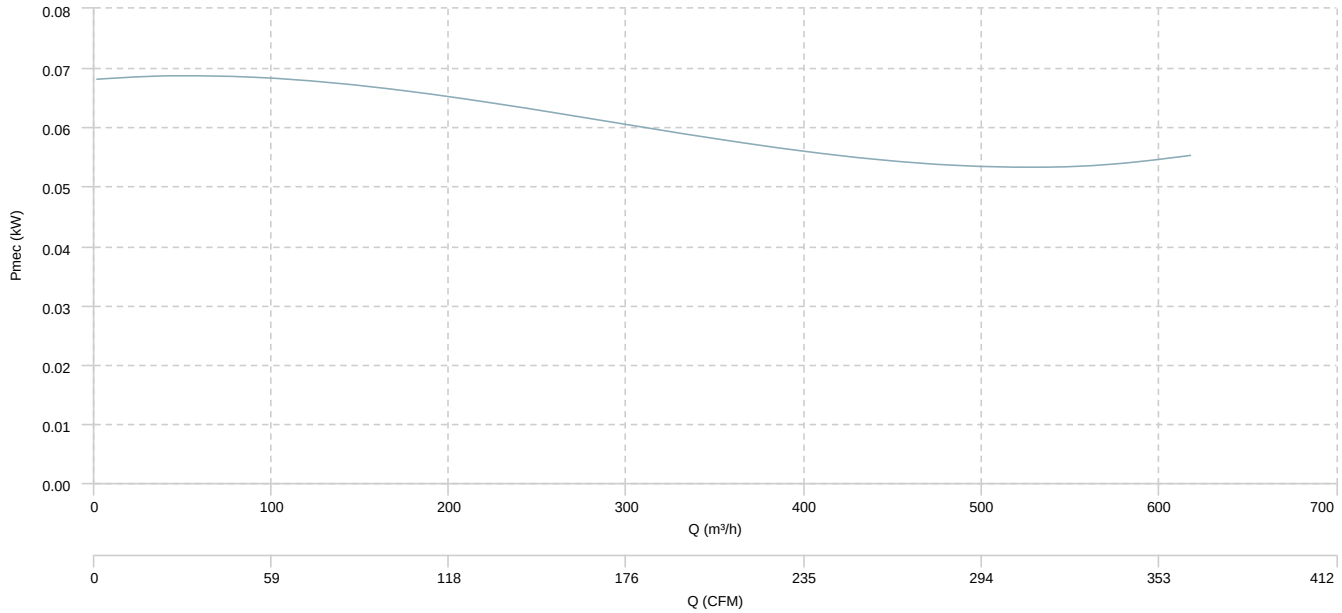


KUVIO 150 EEC

AIR FLOW - PRESSURE

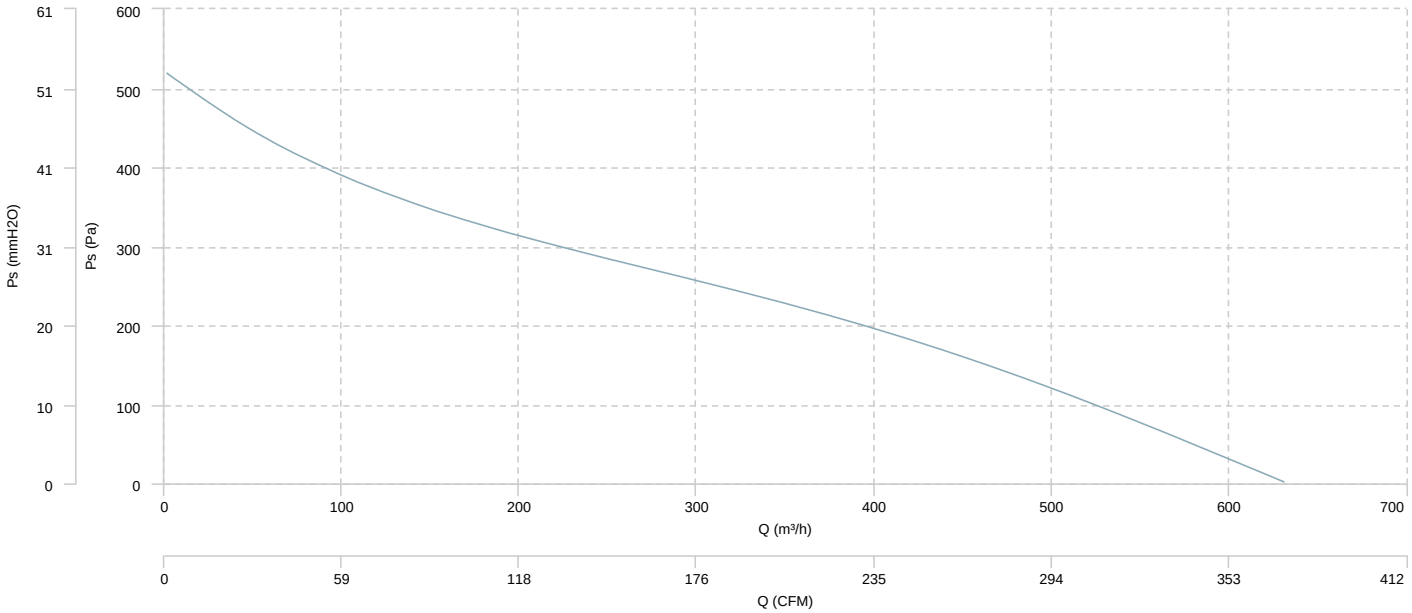


AIR FLOW - MECHANICAL POWER

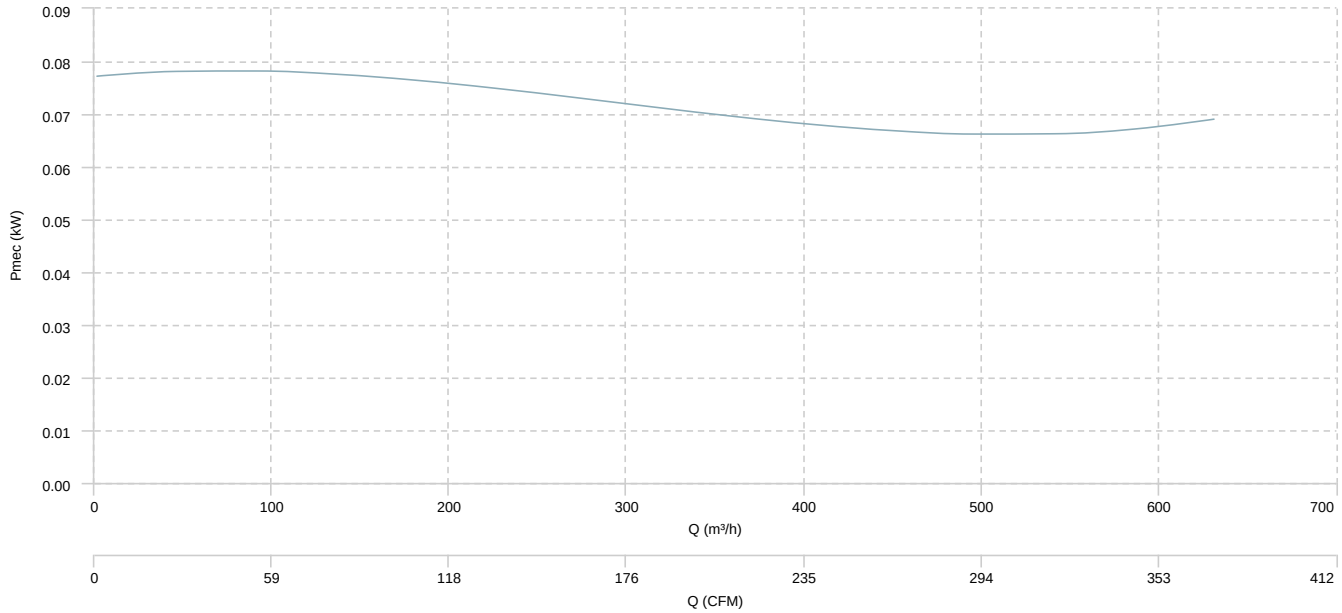


KUVIO 160 EEC

AIR FLOW - PRESSURE

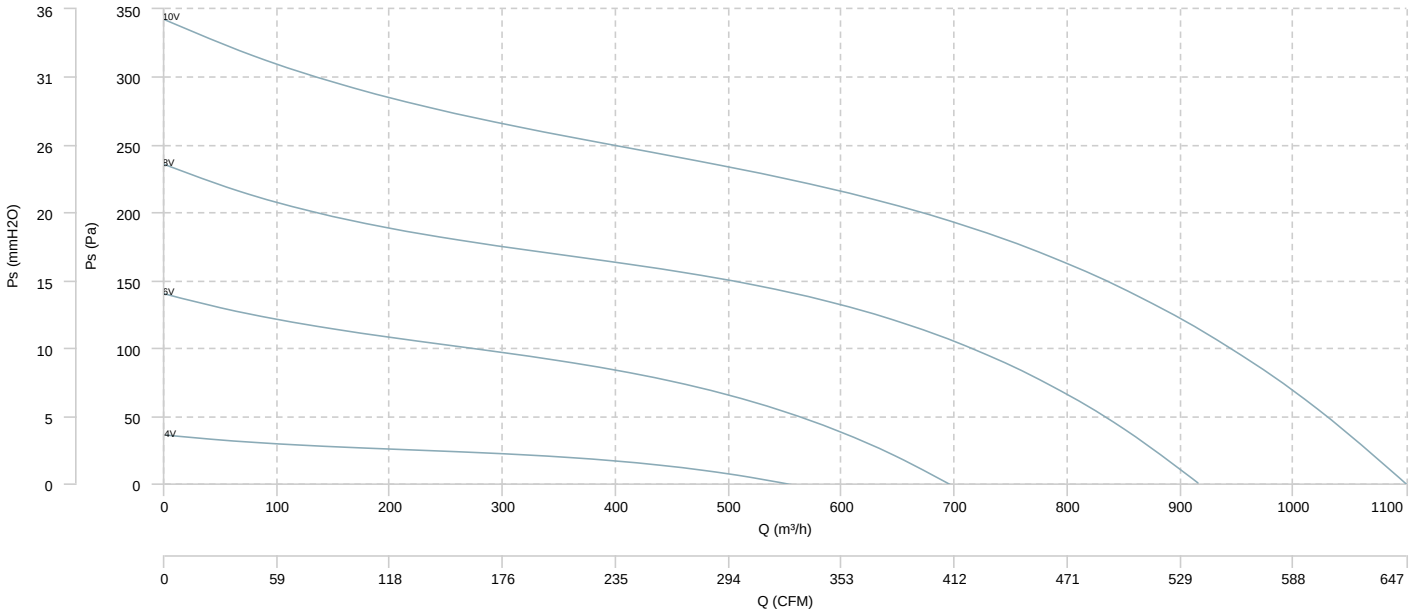


AIR FLOW - MECHANICAL POWER

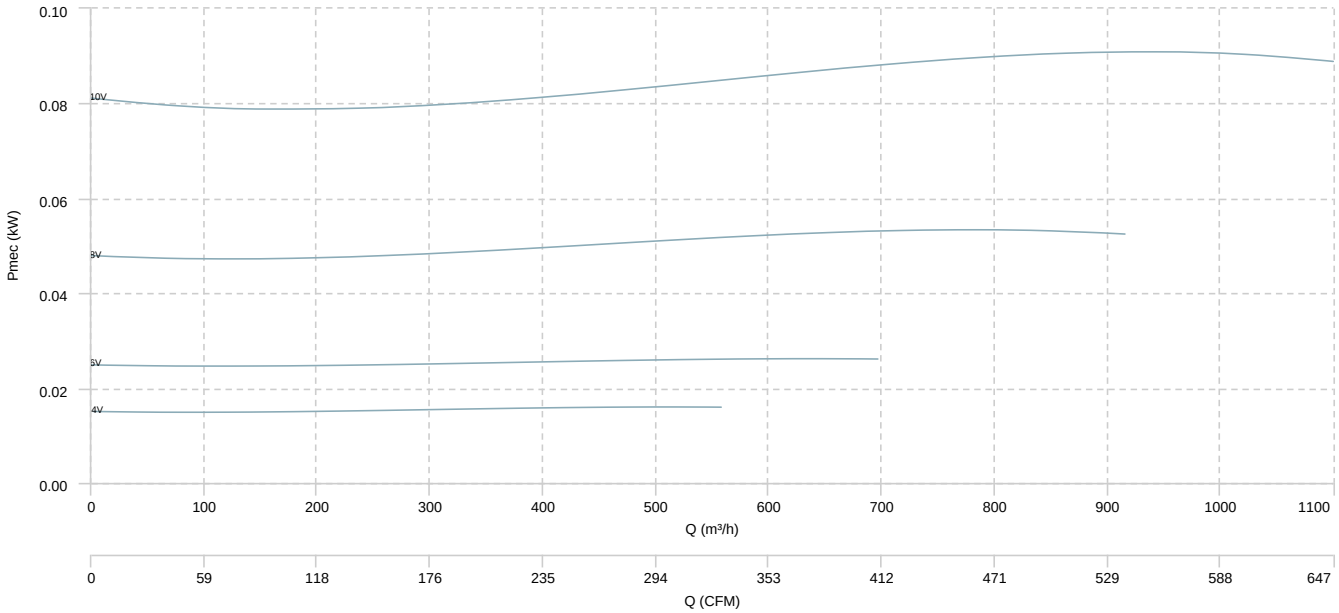


KUVIO 200 EEC

AIR FLOW - PRESSURE

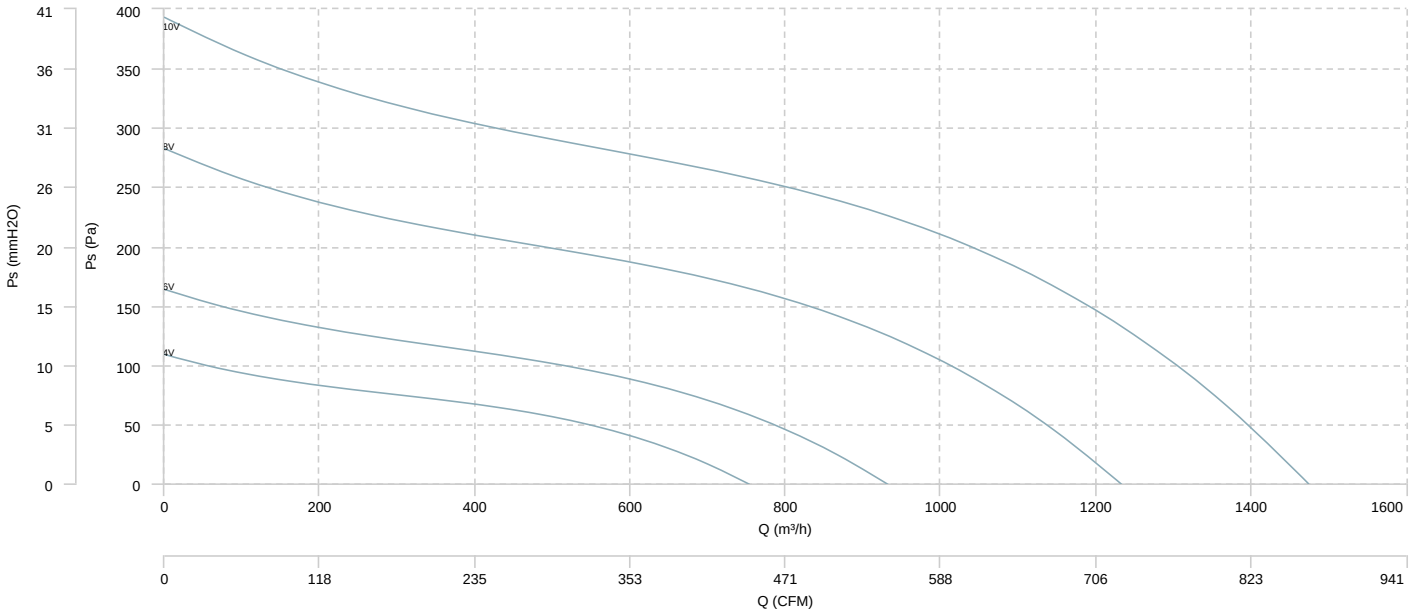


AIR FLOW - MECHANICAL POWER

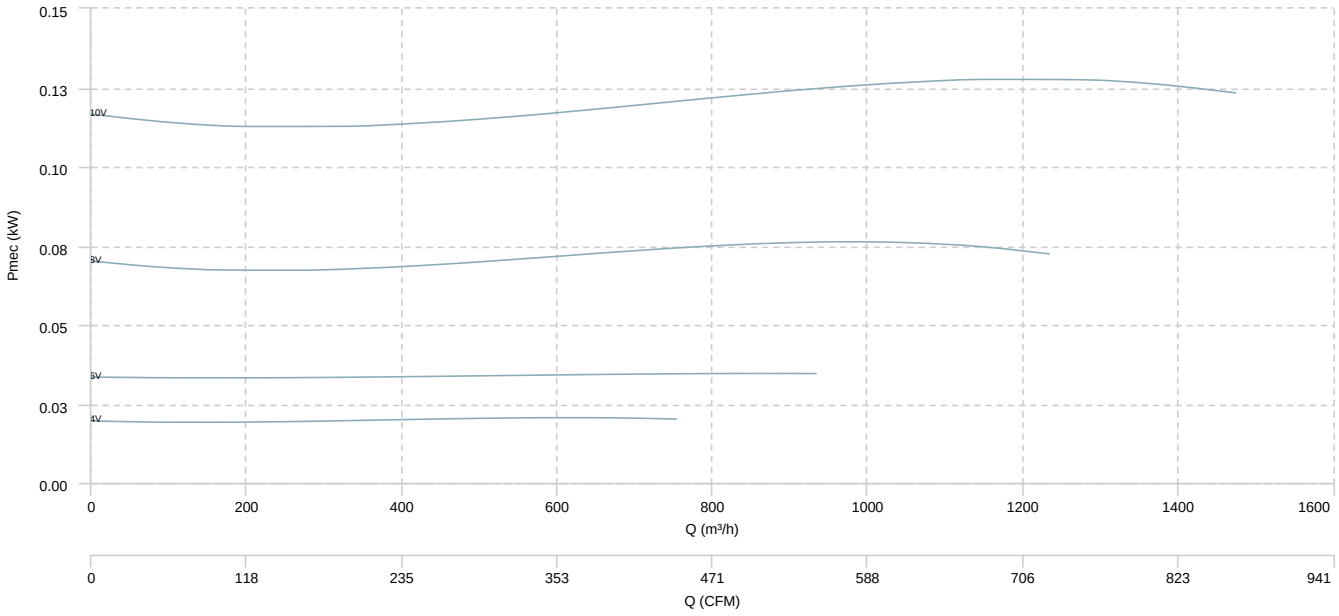


KUVIO 250 EEC

AIR FLOW - PRESSURE

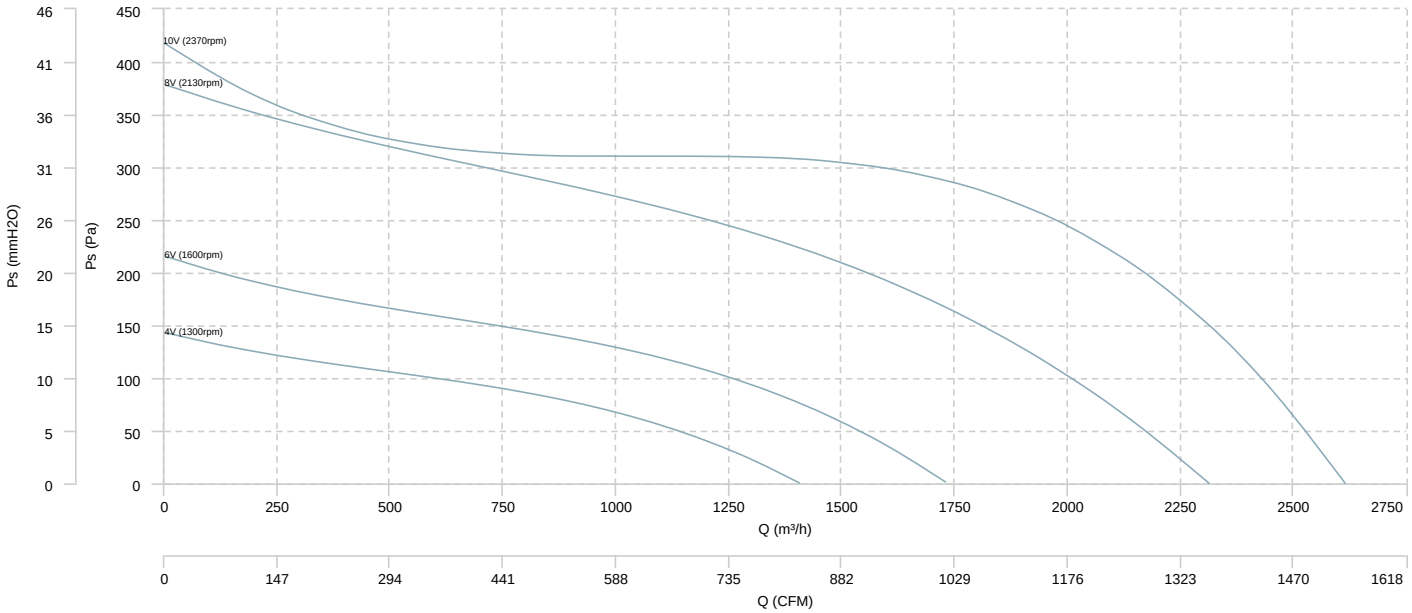


AIR FLOW - MECHANICAL POWER

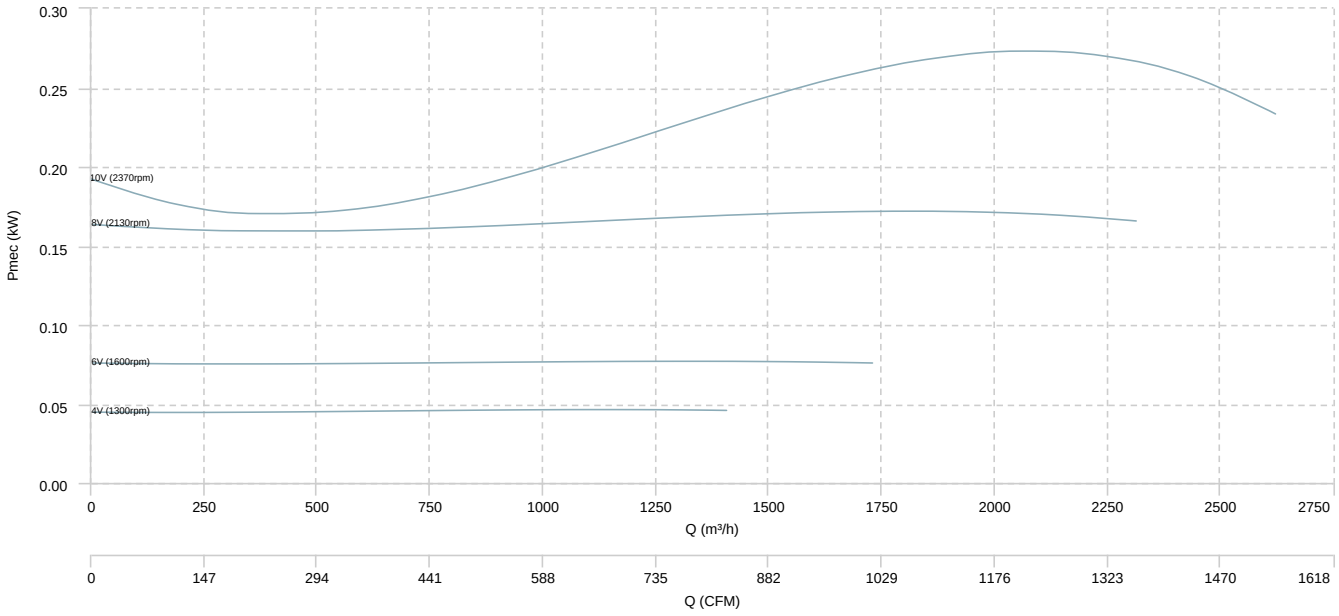


KUVIO 315 EEC

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	Inlet	-	67	77	78	75	72	62	63	82
	Outlet	-	64	75	77	76	71	63	62	82
	Radiated	-	33	46	46	43	45	40	34	52
KUVIO 125 EEC	Inlet	-	62	75	74	75	75	63	64	81
	Outlet	-	62	74	73	77	74	64	65	81
	Radiated	-	31	41	43	43	48	44	32	52
KUVIO 150 EEC	Inlet	-	63	79	78	79	85	74	72	87
	Outlet	-	66	75	77	81	81	76	72	86
	Radiated	-	34	52	48	51	60	53	35	62
KUVIO 160 EEC	Inlet	-	63	73	77	80	84	75	73	87
	Outlet	-	67	77	79	81	81	76	74	86
	Radiated	-	35	53	53	52	58	54	38	62
KUVIO 200 EEC	Inlet	-	-	-	-	-	-	-	-	89
	Outlet	-	-	-	-	-	-	-	-	88
	Radiated	-	-	-	-	-	-	-	-	65
KUVIO 250 EEC	Inlet	-	-	-	-	-	-	-	-	88
	Outlet	-	-	-	-	-	-	-	-	88
	Radiated	-	-	-	-	-	-	-	-	64
KUVIO 315 EEC	Inlet	-	-	-	-	-	-	-	-	92
	Outlet	-	-	-	-	-	-	-	-	90
	Radiated	-	-	-	-	-	-	-	-	68